Appendix R

Water Treatment and Discharge Requests to NYSDEC – September 5, 2018, March 15, 2019 and April 12, 2019

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090
September 5, 2018

REPLY TO
ATTENTION OF

Programs and Project Management Division

New York State Department of Environmental Conservation
Division of Water, Region 9
c/o Mr. Richard A. Rink, P.E.
270 Michigan Avenue
Buffalo, New York 14203-2915

RE: AMENDED REQUEST FOR SILO WATER DISCHARGE TO CAZENOVIA CREEK,
FORMER NIAGARA FALLS-BUFFALO DEFENSE NIKE BATTERY BU-34/35,
LAUNCH AREA, TOWN OF AURORA, ERIE COUNTY, NEW YORK
[FORMERLY USED DEFENSE SITE PROPERTY No. C02NY0077]

Dear Mr. Rink:

We are continuing to perform silo closure activities at the former Nike Battery Launch Area in the Town of Aurora, New York. The property is located at 601 Willardshire Road, near Davis Road. We had previously treated and discharged waters contained in silos 1 through 5, conforming with the specifications identified in your letter of October 20, 2017, which indicated the required sampling and conditions of discharge.

We have received funding to also perform closure activities at silo 6. Therefore, we are requesting to treat and discharge water contained in silo 6 to the Cazenovia Creek. A treatment plan proposal is attached. We have performed an analysis of silo 6 water, also attached. We expect to treat up to 250,000 gallons of water, and the design capacity of the proposed system is estimated to be a minimum of 300,000 gallons. The treatment system will be a batch operation, with the water staged in two frac tanks prior to treatment. The maximum design flow rate for this system is 100 gallons per minute (GPM) and would be discharged to the same hay bale structure used for discharge of the water from the other 5 silos. The lower flow rate, 100 GPM vs. 300 GPM, is expected to have minimal impact to the Cazenovia Creek.

We would like to mobilize the treatment system to the site and start treating and discharging water as early as September 12.

Please advise us as to your approval of this amended treatment and discharge plan, so that we may continue our efforts to complete this project. Further, please identify if any changes to the water sampling plan and discharge limitations identified in your October 20, 2017 letter.

Thank you in advance for your cooperation. A site visit can be arranged, once the treatment system is operational.

Please contact me at (917) 790-8235, should you have any questions regarding this matter.

Sincerely,

GOEPFERT.GREGORY.J.1228701331

Digitally signed by GOEPFERT.GREGORY.J.1228701331
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=GOEPFERT.GREGORY.J.1228701331
Date: 2018.09.05 13:05:23 -04'00'

Gregory J. Goepfert
Project Manager

cc:

State of New York, Department of Environmental Conservation,
Division of Environmental Remediation, Region 9 (Mr. Jaspal Walia)

State of New York, Department of Health (Ms. Jacquelyn Nealon)

LCS Inc.

U. S. Army Corps of Engineer, CENAN-CO-D (Mr. Joseph Salvatore)

U. S. Army Corps of Engineers, CENAE-EP-G (Ms. Penny Reddy)

Tantara Corp. (Mr. Mark Lovejoy)

Tidewater, Inc. (Mr. Keith Fields)

To:	Mark Lovejoy	From:	Chris Villella
Company:	Tantara Corp	Date:	24 August 2018
Phone #:	508.752.5599	Page:	1 OF 3
E-mail:	mlovejoy@tantara.com	Quote #:	TAN - 08242018CV

Dear Mark,

Operational Overview

United Rentals Fluid Solutions (URFS) is pleased to provide the following proposal for the upcoming Nike Missile Silo Dewatering Project located in East Aurora, NY. The following narrative outlines the proposed process flow and scope of work as understood by URFS. URFS will procure, mobilize, operate and demobilize, a dewatering and water treatment system designed for the removal and treatment of impacted water from an excavation stemming from decommissioning of Silo 6 at the former Nike Missile site in East Aurora, NY. Water is confirmed to be impacted by hydrocarbons and TSS, which will be the target of treatment efforts. Dewatering system is designed with a target flow rate of 100gpm. This is expected to be a "batch" operation, during excavation activitied. Water will be stored in (2) 500BBL Frac Tanks Prior to Treatment.

Process Flow

A 4" hydraulic submersible pumped will be lowered into the excavation, via excavator or telehandler (provided by others). The pump will be fitted with a screen to prevent large solids from being removed from the silo. The pump head should be fully submerges, but kept suspended from the bottom of the excavation to prevent excess solids from impacting the system. As excavation deepens, the pump depth will need to be adjusted. Water from this pump will discharge through a 4" hose to the (2) 500BBL Storage Tanks.

From the silo, the water will be pumped into (2) 21Kgal Frac Tanks. These tanks will be plumbed in a series, and will act as a stillwell and assist in separation of settable and floating solids. Water will be stored in these tanks prior to deployment of the filtration system. An evaluation of this water may influence additions or reductions in the amount of "treatment" required to meet environmental parameters. From the frac tanks, the water will be pumped via sound 4" diesel pump, capable of maintaining a rate of 100gpm at the required pressure to overcome estimated dynamic head of the rest of the system. This pump will be URFS Pump model BP44LS – SA or similar.

First step in the filtration/treatment process will be removal of unsettlable, fine particles via series bag filtration.. These housings will be configured in a Lead-Lag fashion (1) 5-plex bag filter housings will be used in the lead

position with 25 micron Oil Absorbent bags. The lag position will be filled with (2) duplex skids each containing 5 micron bag.

Once particles are removed, water will be pumped through a series of Specialty Media Vessels, each containing a Modified Zeolite/Granular Activated Carbon Organoclay Blend (Z200). This media has the ability to absorb up to 70% of its total weight in free oil, other organic and hydrocarbons, as well as some metals. (2) URFS Kleen.Water 2000 High Pressure Vessels will be utilized in a lead-lag configuration to accommodate this process. Media volumes prescribed are calculated for a total contact time of ~10 minutes @ 100gpm

After treatment, water will be metered via mechanical style flowmeter as it is pumped to the discharge point. 4" layflat hose will be utilized for the discharge. The exact point is yet to be demined, but general area puts location at an estimated 500' from the treatment system in the South west corner of the site. All reasonable efforts will be made to control discharge to prevent erosion at the discharge point. It is expected that a vinyl splash liner and a hay bale diffusion structure will be utilized to disperse energy. An example of such structure has been provided in the appendix.

Optional Inclusions

Dewatering Roll-off Box Package

As needed, URFS can offer equipment to assist in managing dewatering of solids removed from the excavation. URFS Dewatering boxes can contain up to 25cu.ft depending on weight of solids. Drainage channels within the boxes allow for free liquids to drain from solid materials in order to cut down on disposal waste. Once dewatered, the boxes can be hauled directly for disposal. Due to weight restrictions, these boxes are typically emptied at 15cu.yds damp soil. An AOD Pump will be utilized for pump drainage water from boxes to the storage tanks.

Semi-Passive Bio-Polymer System

If required settling time is not adequate for settling of TSS, a semi-passible polymer dosing system can be offered. This system uses two types of 100% biodegradable polymers, DBP2101 and Gelfloc Chitosan Lactate. These dry-form polymers are contained in fabric "socks" that are hung in-line in as spool pipe housing installed prior to the storage tanks. As water passes over the socks, the polymers dissolve at a slow and steady rate into the water. The polymers work together and bid smaller particulates into larger particles that can settle faster, resulting in a cleaner effluent. Details and SDS sheets are included.

Serialized Equipment List

- 1 - 4" Hydraulic Submersible Pump with Poser Unit
- 2 - 21Kgal Fixed Axle Frac Tank
- 1 – BP44LS Sound Attenuated Diesel Pump
- 1 – 6" 5-Plex Bag Filter Housing
- 2 – 3" Duplex Bag Filter Skids

- 2 – KW 2000HPV Specialty Media Vessel
- 4" Layflat hose will be utilized from Hydraulic Pump to Frac tanks and from end of treatment system to discharge point.
- 4" Rigid hose will be utilized for remainder of treatment system
- All fittings will be steel flange or aluminum QD
- Flow meter will be mechanical propeller style with totalizer

Process Flow Diagram and Spec Sheets can be found in the appendix

In addition to our standard rental Terms and Conditions, the contractor shall be responsible for the following:

- *To have adequate lifting equipment on site to load and unload equipment during the set up, break down, and relocating equipment*
- *Chains or cables with enough capacity to handle the weight of the vessels during the loading and unloading of equipment on site.*
- *Cleaning of the tanks, pumps, bag filters and hoses from water and silt debris.*
- *All Media sales are final, unused Media cannot be returned for refund.*
- *Removal, Characterization, and Disposing of spent Media.*
- *All equipment must be free from any material prior to release and pick up.*
- *The customer is responsible to provide an insurance certificate showing BakerCorp as an additional insured and loss payee for the rental equipment.*
- *All labor and equipment to unload and load flatbed trailer.*
- *Fuel*
- *Sampling and Reporting*
- *Permitting*

Lead Time

This system can be Mobilized within (10) business days of receipt of PO. PO required to source equipment and consumables that may not be in stock at the servicing Branch Location.

All Filtration Medias are based off of analytical provided, previous project experience and treatment objections. System is designed for hydrocarbon removal in the form of Free Oil and Grease, TPH, VOCs and SVOCs. If metals or biological contaminants become a concern, other methods of treatment may need to be evaluated.

No sales tax has been added to the prices quoted. 1.5% Environmental Recovery Fee and Fuel Surcharge may apply. **All rental pricing is based on a 1 month rental period.** All standard terms & conditions for URFS will apply. Thank you for the opportunity to work together and let me know when I can be of further assistance with this or any other odor control or filtration project.

Best regards,
BakerCorp

Chris Villella

Chris Villella
Product Manager – Filtration and Water Treatment Technology
cvillella@ur.com

CONFIDENTIAL

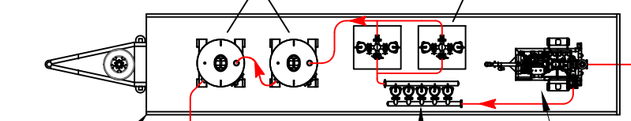
PROPRIETARY

2000 HPV MEDIA VESSEL	
Flow Rate:	100 gpm (Max)
Capacity:	68 cu. ft.
Dimensions:	4' Dia. x 8' Tall

QTY: 2 - EACH W/ Z200 / REACT 8x 30 (ORGANOCLAY) BLEND

DUAL BAG FILTER SYSTEM	
Equipment:	L88303FA41523F4DF
Flow:	200 gpm
Dimensions:	4'x4'x5'

QTY: 2 - EACH W/ 5µ BAGS



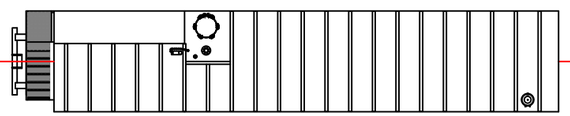
TRAILER

DISCHARGE

TO CUSTOMERS DESIGNATED DISCHARGE LOCATION

5-PLEX BAG FILTER SYSTEM W/ 25µ OIL ABSORBENT BAGS

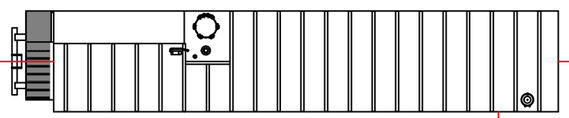
4" DIESEL PUMP



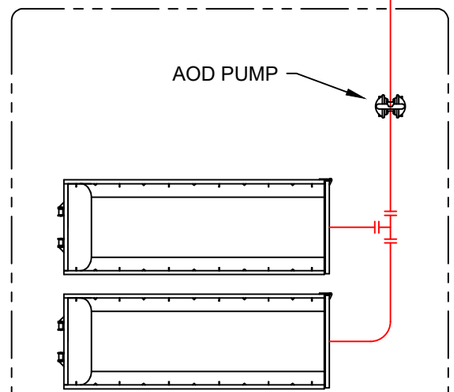
500 BBL FIXED AXLE TANK	
Equipment:	Recessed Stairway Fixed Axle
Capacity:	500 BBL (21,000 Gal)
Dimensions:	47' x 8.5' x 11'

NOTE: FIXED AXLE TANK MAY DIFFER FROM ONE SHOWN

QTY: 2



OPTIONAL
POLYMER INJECTION POINT

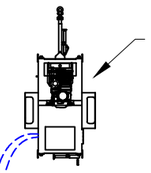


AOD PUMP

DEWATERING BOX	
Equipment:	Roll Off Dewatering Box
Capacity:	25 Yard³ (5,000 Gal)
Description:	23' x 8' x 5'

QTY: 2

OPTIONAL
DEWATERING PACKAGE



HYDRAULIC POWER UNIT

4" HYDRAULIC SUB-PUMP

EXCAVATION SITE

The information presented on this drawing is for informational purposes only. Use of this drawing is not a replacement for a professional engineering evaluation of the application. This drawing is intended to show preliminary equipment requirements and arrangement and is in no way a replacement for a thorough engineering review of the application at hand. A representative of the customer or end user should always conduct the final evaluation of the application. That representative, and not BakerCorp Inc., or its employees and representatives, is responsible for the final engineering design and performance of the application.

No warranty is provided or implied, including any warranty of fitness for a particular purpose. As such, the customer agrees that by using the suggestions shown on this drawing, you assume the risk of all loss or injury resulting from any information found within. In no event shall BakerCorp, or any representative or agent thereof, be liable under any theory based in contract, negligence or strict liability or any other legal or equitable theory to any party for any amounts including, without limitation, lost revenues, lost profits, lost business or indirect, consequential, incidental, special or punitive damages. This disclaimer shall survive any and all notices advising of the possibility that any user may suffer harm from any inaccuracies contained herein.

The designs, information and data contained herein is proprietary and is submitted in confidence and shall not be disclosed, used or duplicated in whole or in part for any purposes whatsoever without prior written permission from Baker Corp. This document shall be returned to Baker Corp. on its demand. Receipt of this document shall be deemed to be an acceptance of the conditions specified herein.

BAKERCORP™ 7800 N. DALLAS PARKWAY, SUITE 500 PLANO, TX 75024-4087

TITLE: **SILO 6 DEWATERING 100 GPM TREATMENT SYSTEM PROCESS FLOW DIAGRAM**

SHEET SIZE: B 11" x 17"	MATERIAL:	CUSTOMER: TANTARA CORP			BRANCH: WPT
		DWG BY: M. BROOKS	DATE: 08-23-18	SCALE: -	SHEET: 1 OF: 1
	FINISH:	CKD BY: K. TURBESSI	DATE: 08-23-18	DWG No: SKF4374	REV: -

PRODUCT DATA SHEET
April, 2012

4" HYDRAULIC SUBMERSIBLE PUMP MODEL S4VHL

GENERAL INFORMATION

This type of pump is submerged in the liquid being pumped and is powered by circulating hydraulic fluid. Designed to pass through 20' diameter manholes. Suction lift and priming are not considerations. This pump can run dry without damage. CAUTION: HYDRAULIC FLUID IS UNDER HIGH PRESSURE.

PERFORMANCE DATA

» Flow (min/max):	700 gpm max (1)
» Shutoff Head:	210' (90 psi) (1) (2)
» Hydraulic Input:	14 – 25 gpm
» Maximum Temperature:	120° F (4)
» Maximum Solids Size:	3"

PUMP SPECIFICATIONS

» Weight:	295 lbs.
» Height:	33"
» Width:	19.75" (at widest point)
» Discharge Size:	4" FNPT
» Inlet Flange:	4" 125# ANSI
» Hose Ports:	1" (-16) SAE

MATERIAL SPECIFICATIONS

» Pump Body:	Ductile Iron
» Impeller:	Stainless steel
» Wear Ring & Wear Plate:	Stainless steel
» Shaft:	Stainless Steel
» Shaft Seal:	Carbon/Ceramic
» Elastomers:	Buna N

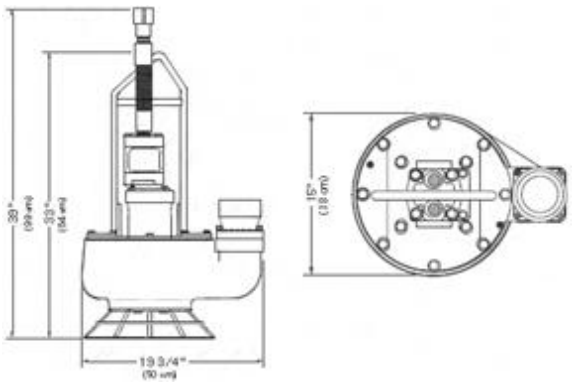
Notes:

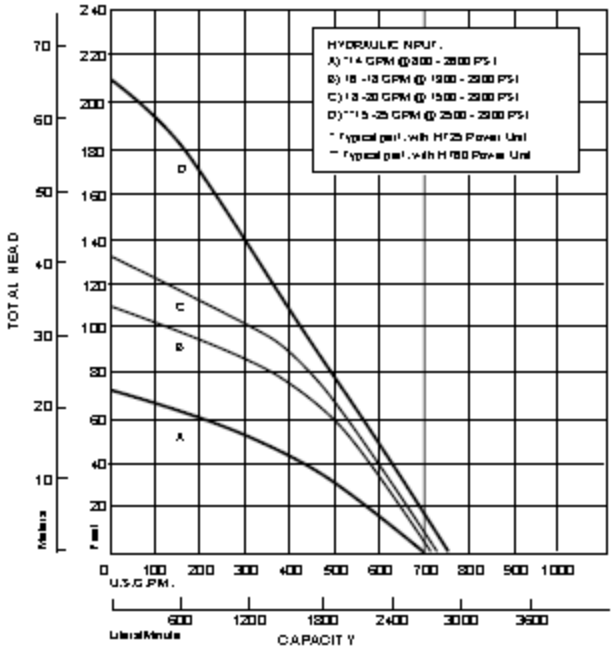
(1) Typical performance with the HSPU66 hydraulic power unit.

(2) Based on 1.0 specific gravity

(3) Includes weight of trailer, hydraulic oil tank and engine

(4) Hydraulic oil temperature is the limiting factor. The pumps can be used for higher temperature liquids if an additional hydraulic oil cooler is installed. Also, the standard seals and O rings in the pump are good for temps to about 170°F.





BAKERCORP™

To the best of our knowledge the technical data contained herein are true and accurate at the date of issuance and are subject to change without prior notice. No guarantee of accuracy is given or implied because variations can and do exist. NO WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY BAKERCORP, EITHER EXPRESSED OR IMPLIED.

3020 Old Ranch Parkway • Suite 220 • Seal Beach, CA • 562-430-6262

PRODUCT DATA SHEET

January, 2007

MODERN FIXED AXLE TANK

("V" BOTTOM VERSION)

GENERAL INFORMATION

This tank has a smooth interior wall and "V" shaped bottom for easy cleaning.

WEIGHTS AND MEASURES

» Capacity:	500 BBL (21,000 gallons)
» Height:	10'-9" (grade to top of tank)
» Width :	8'-5"
» Length:	44'-10" (overall)
» Weight:	25,500 lbs.

STRUCTURAL DESIGN

» Floor:	¼"thick ASTM A36 carbon steel "V" bottom sloping from each side into the center
» Sides/Ends:	¼" thick ASTM A36 carbon steel
» Roof Deck:	¼" thick ASTM A36 carbon steel
» Wall Frame:	¼" thick ASTM A36 carbon steel channels (on exterior side of walls)
» Roof Frame:	¼" thick ASTM A36 carbon steel channels (on exterior side of walls)

FEATURES

» Valves:	2-Front &1-Rear: 4"- wafer butterfly valve. Cast iron body, Buna-N seat & seals, 316 SS stem, Nylon 11 coated ductile iron disk w/ plug and chain. Remote operation handle for rear valve.
» Relief Valve:	16 oz./in^2 pressure setting, 0.4 oz./in^2 vacuum setting; Buna-N seal
» Rear Drain:	4"-150# tank-side weld neck flange mated to valve and 150# FPT flange
» Front Drain:	4"-150# tank-side weld neck flange mated to valve and 150# FPT flange
» Top Fill Line:	3" pipe, top of tank, with cap and chain

FEATURES – cont.

» Top Vapor Connection:	4"-150# weld neck flange with blind flange (chained) and Buna N gasket
» Top Manway:	22" I.D., slotted hinges and 5 - ¾" T or eye bolt with wing nut fasteners, hinged to side of tank, ½" flat plate or 3/8" if domed ASTM A36 steel. Buna N formed gasket, thermally fused.
» Front Manway:	22" I.D., slotted hinges and 5 - ¾" T or eye bolt with wing nut fasteners, hinged away from stairs, ½" flat plate or 3/8" if domed ASTM A36 steel. Buna N formed gasket, thermally fused.
» Side Manway:	22" I.D., slotted hinges and 5 - ¾" T or eye bolt with wing nut fasteners, mounted on passenger side and hinged to front of tank, ½" flat plate or 3/8" if domed ASTM A36 steel. Buna N formed gasket, thermally fused.
» Stairway:	Non-slip with handrails and guardrails; OSHA compliant
» Level Gauge:	Ball style with 2-8" 304 SS floats. Floor supports hold floats ½" off floor.
» Tires:	11.00 x 22.5 (nylon tubeless)
» Axles:	Standard 22,500#, Rockwell automatic slack adjusters, cast drum and hub, 30 service chambers, outboard drums

SURFACE DETAILS

» Exterior Coating:	High gloss polyurethane paint
» Interior Coating:	Chemical resistant lining
» Safety Paint:	Safety yellow – handrails, hatch covers and trip hazard surfaces
» Decal Mounts:	Removable 10-gauge steel, 48"x48", both sides of tank at top rear. Secured with nylock nuts or bolts with lock washers.

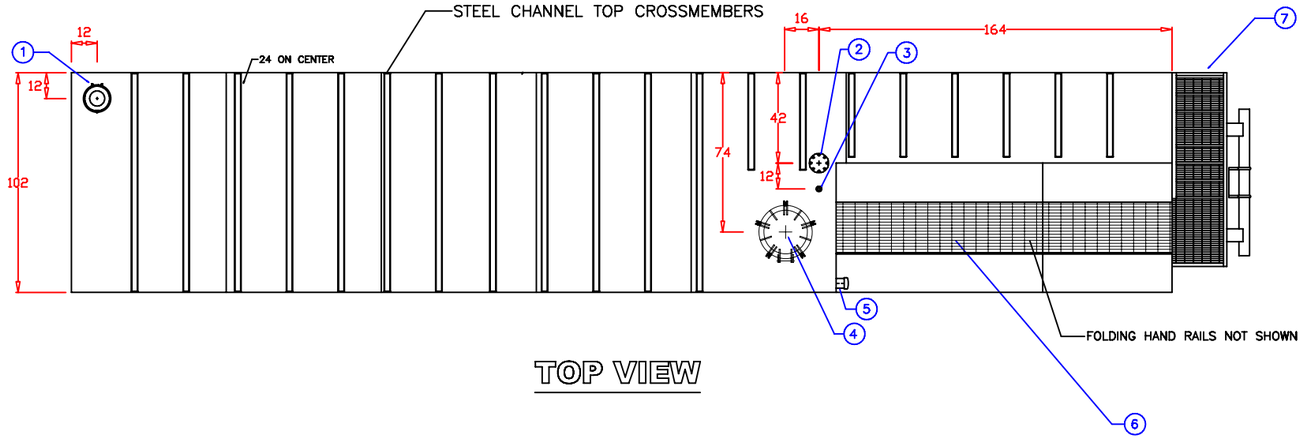
TESTS/CERTIFICATIONS

» Test Performed:	100% water tested to full capacity, 3 psi – 20 min test; Level I, II and III inspections on a scheduled basis

BAKERCORP™

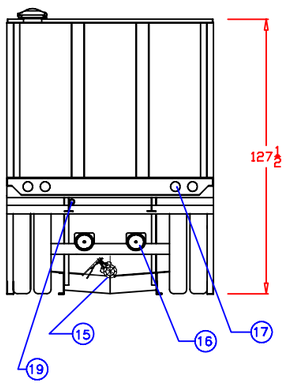
To the best of our knowledge the technical data contained herein are true and accurate at the date of issuance and are subject to change without prior notice. No guarantee of accuracy is given or implied because variations can and do exist. NO WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY BAKERCORP™, EITHER EXPRESSED OR IMPLIED.

3020 OLD RANCH PARKWAY • SUITE 220 • SEAL BEACH, CA • 562-430-6262

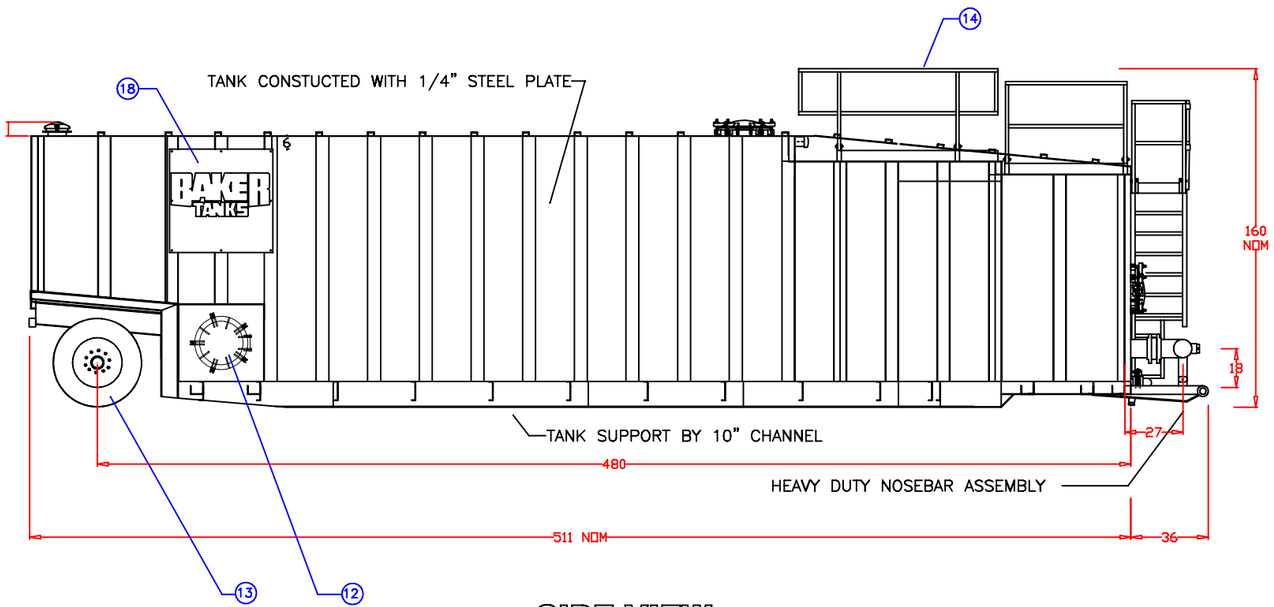


TOP VIEW

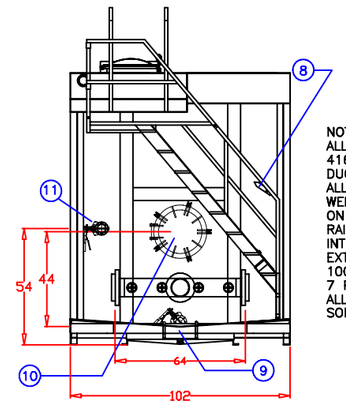
1) FLANGE MOUNT BLAYLOCK LL10 P/V VENT 16OZ SETTING, BAKER SPEC
2) 4" FLANGE WITH BLIND CAP AND CHAIN
3) 1 1/2" COUPLING WITH PLUG
4) MANWAY WITH INTERNAL BARS, 21 1/2"ID, DOMED LID
5) 3" NIPPLE WITH CAP AND CHAIN
6) SAFETY WALK WAY
7) ACCESS STAIRS
8) LEVEL GAUGE W/2-8" STAINLESS STEEL BALL "Y" SUPPORT HOLDS BALLS 1/2" OFF FLOOR
9) FRONT DRAIN W/VALVE, BULL PLUG, CHAIN
10) MANWAY, 21 1/2"ID, DOMED LID
11) 4" FLANGE, VALVE, THREADED FLANGE, BULL PLUG, CHAIN
12) MANWAY, 21 1/2" ID, DOMED LID
13) 11.00 X 22.5 TUBLESS TIRE ON 10 HOLE STEEL WHEEL
14) FOLDING HAND RAILS
15) 4" FLANGE, VALVE, THREADED FLANGE, BULL PLUG, CHAIN REMOTE OPERATION HANDLE
16) 25K AXLE, AUTOMATIC SLACK ADJUSTERS, TOP MOUNTED 30 SERVICE CHANBERS, OUTBOARD DRUMS, HUTCH 9700 SUSPENSION, 3 LEAF HIGH ARCH SPRINGS
17) DOT TAIL LIGHTS AND LOWER MARKER LIGHTS, NO TOP LIGHTS
18) 48X48 BOLTED PLATE
19) 1" X 6" PIPE W/WELDED CAP & THREADED CAP



REAR VIEW



SIDE VIEW



NOTE:
ALL VALVES BRAY SERIES 30, CAST IRON BODY, 416SS STEM, BUNA-N SEAT, NYLON 11 COATED DUCTILE IRON DISC, HANDLES AS SHOWN.
ALL WALL AND ROOF RIBS TO BE CONTINUOUSLY WELDED, ALL TANK SHELL SEAMS TO BE WELDED ON BOTH SIDES.
RAILINGS, STAIRS & WALKWAY TO MEET OSHA STDS
INTERIOR COATED PER BAKER SPEC 8.2
EXTERIOR COATED PER BAKER SPEC 7.6
100% CAPACITY WATER TEST
7 PIN ROUND LIGHT PLUG
ALL SHELL 1/4" A-36 STEEL, V-BOTTOM
SOME ITEMS MAY NOT BE SHOWN IN ALL VIEWS

NOTES:
8" INSIDE CONNECTION WITH FLANGED 90 DEG TURN DOWN, 2" OFF FLOOR, MITERED
UPPER 4" FITTED INSIDE WITH FLANGED STEEL GEL LINE
GEL LINE U-BOLTED TO PIPE SUPPORTS
STAIRS FITTED WITH LOWER 1/2 WIDTH SECTION
REMOVABLE TO REPLACE WITH FULL WIDTH STEP OPTION

FRONT VIEW

SPECIFICATIONS:
1) Tank Capacity: 21,000 gallons (500 BBL)
2) Tank Weight: 25,500 lbs. (empty)

NOTES:
1. This drawing is a baseline representation for this model of tank. Variations between this drawing and the actual equipment in the field can and do exist, primarily with appurtenance locations, sizes and quantities. Consult your local BakerCorp representative if specific needs exist.
2. THIS TANK IS *NOT DESIGNED FOR TRANSPORTING LIQUIDS*. It should be moved only when empty.
3. Tanks of this type have an internal lining (coating) on the wetted surfaces.
4. This tank is equipped with a pressure/vacuum relief valve set at 1.0 1bs/sq. in. pressure and 0.4 oz/sq.in. vacuum.

The information contained herein is proprietary to BakerCorp and shall not be reproduced or disclosed in whole or in part, or used for any design or manufacture except when user obtains direct written authorization from BakerCorp.

REV.	DESCRIPTION	DATE	BY
G			
F			
E			
D			
C			
B			
A	Fixed lineweight and text	7/12/05	ZER

BAKERCORP™ 3020 OLD RANCH PARKWAY SEAL BEACH, CA 90740-2751

SCALE: Do Not Scale	SIZE B	ORIGINAL DWG. DATE 10SEP02
DRAWN BY: P.J.B.	APPROVED BY: –	CAT/CLASS ––
TITLE: MODERN MFG. "V" BOTTOM FIXED AXLE TANK		SHEET 1 OF 1
DRAWING NO. S-2-M0007-1-		REV. A

PRODUCT DATA SHEET

January, 2007

3" DUPLEX BAG FILTER SYSTEM

GENERAL INFORMATION

Two independent filter housings are skid-mounted and piped such that one filter unit is active while the other is out of service. Inlet and outlet connections are provided on each end of the skid. Use for filtering a wide range of industrial and commercial process fluids, groundwater discharge from construction sites, stormwater or urban runoff.

WEIGHTS AND MEASURES

» Capacity:	Up to 140 gpm per filter when clean (depends on filter media micron rating)
» Design Press:	150 psi
» Design Temp:	140°F max.*
» Height:	5'-0" (overall)
» Width :	3'-8"
» Length:	5'-0"
» Weight:	540 lbs. (approx.)

SKID DESIGN

» Outer Frame:	6 x 8.2 A36 carbon steel channel
» Inter. Frame:	3"x2 "x3/8" A36 carbon steel angle
» Filter Housing Pad:	¼" thk. Steel plate supported by 3x2x3/8 angle iron
» Forklift Pockets:	Through front and rear framing channels
» Cover:	Expanded metal grating
» Lifting Eyes:	All four corners

*Practical limit for the PVC header piping. Unit could be used up to 225°F if carbon steel piping is used instead.

FILTER DESIGN

» Filter Housing	Rosedale model 8-30-3F-2-150-C-B-S-PB
» Top Cover:	Three eyenuts; hinged for easy access
» Piping:	3" schedule 80 PVC (inlet and outlet headers)
» Inlet & Outlet:	3" 150# ANSI flanges
» Cover Seal:	Buna N (Nitrile) o-ring
» Housing Material:	Carbon Steel
» Filter Basket:	30" deep, 6.7" diameter, 4.4 sq. ft. surface area, 1000 cu. in. volume, 9/64" dia holes (51% open)
» Filter Media:	Filter bags, size #2. Wide range of micron ratings is available, down to 1.0.
» Vent Valves:	1/4" ball valve on top cover
» Drain Valves:	1" brass ball valve on the bottom of each housing

SURFACE DETAILS

» Exterior Coating:	High gloss polyurethane

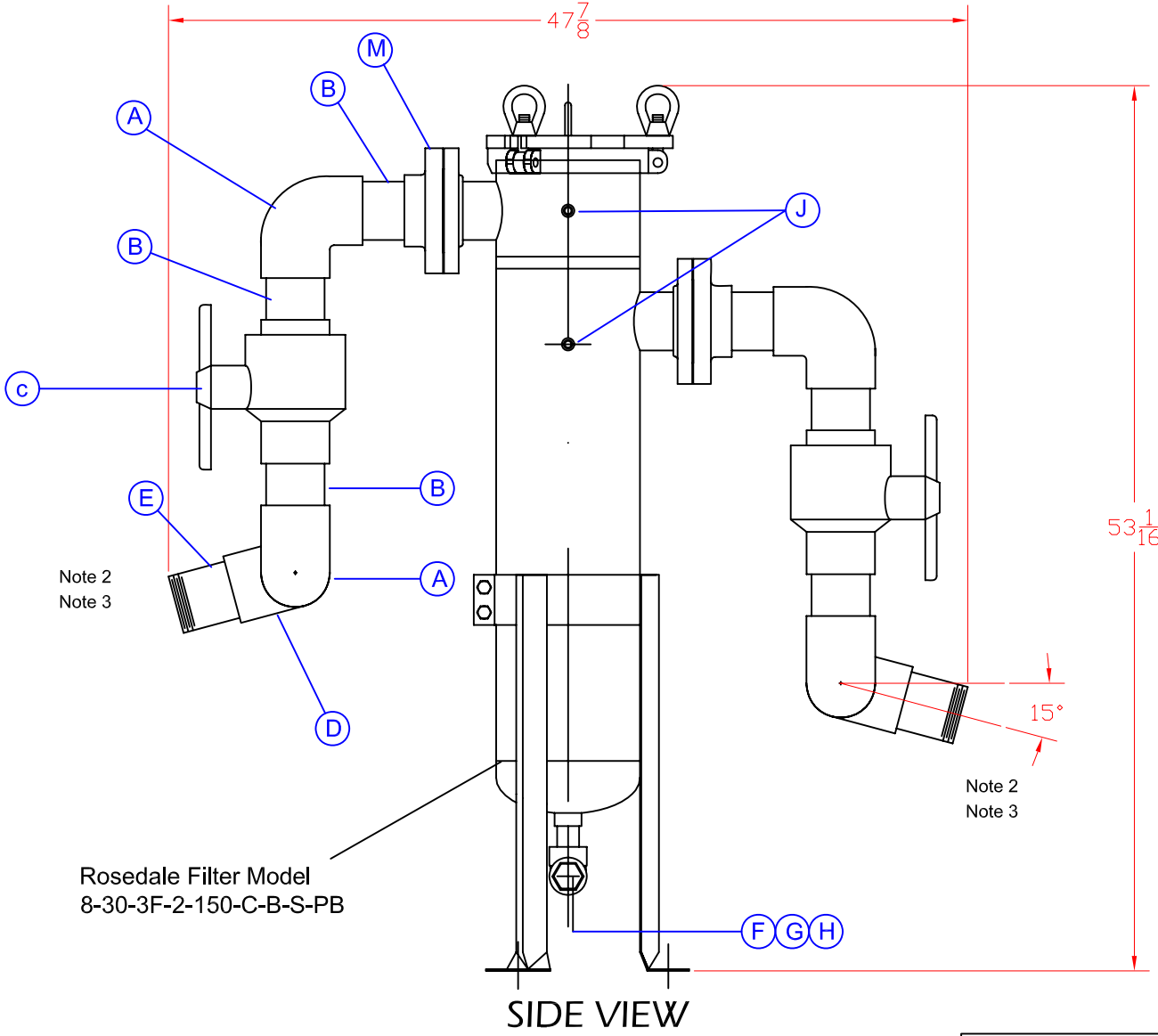
TESTS / CERTIFICATIONS

» Test Performed:	Scheduled QMS inspections

BAKERCORP™

To the best of our knowledge the technical data contained herein are true and accurate at the date of issuance and are subject to change without prior notice. No guarantee of accuracy is given or implied because variations can and do exist. NO WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY BAKERCORP, EITHER EXPRESSED OR IMPLIED.

3020 Old Ranch Parkway • Suite 220 • Seal Beach, CA • 562-430-6262



ITEM	DESCRIPTION
A	Elbow, 90 deg, 3" sch. 80 PVC, socket x socket, Spears 806-030
B	Pipe, 3", sch. 80, PVC, 6-1/4" long
C	Ball valve, 3" PVC, non-shock; Spears 2622-030
D	Tee, 3"x3"x3", sch. 80 PVC, socket ends; Spears 801-030
E	Adapter, 3" PVC, PE x MPT,YARDNEY 126553040
F	1" sch. 80 M.I. MNPTxMNPT pipe nipple, 2" long
G	1" 90 deg. elbow, NPTxNPT
H	1" brass ball valve, FNPTxFNPT; Parker Hannifin XV500P-16
J	Pressure gauge, 0-100 psi oil-filled, 2-1/2" dial
K	NOT USED
L	1/4" 600# WOG brass ball valve; Parker Hannifin XV500P-4
M	Flange, 3" sch. 80 PVC, socket; Spears 851-030

Notes:
1. This is a general layout drawing only.
2. Tee should be rotated downward at an angle of 15-60 degrees to prevent strain on the piping when hose is connected to it.
3. A 3" female camlock fitting (not shown) will be attached to the adapter.

The Information contained herein is proprietary to BakerCorp and shall not be reproduced or disclosed in whole or in part, or used for any design or manufacture except when user obtainsdirect written authorization from BakerCorp.

REV.	DESCRIPTION	DATE	BY
G			
F			
E			
D			
C			
B			
A			

BAKERCORP™ 3020 OLD RANCH PARKWAY SEAL BEACH, CA 90740-2751

SCALE: –	SIZE A	ORIGINAL DWG. DATE 18FEB05
DRAWN BY: P.J.B.	APPROVED BY: –	CAT/CLASS NA
TITLE: 3" BAG FILTER UNIT		SHEET 1 OF 1
DRAWING NO. S-9-M0018-1-		REV. 0

BAKERCORP®
PEOPLE. EQUIPMENT. SOLUTIONS.

Revolutionary Oil Absorbing Bag

XOAM

BakerCorp Filtration introduces a new cost effective filter bag for absolute filtration applications. This new revolutionary high capacity oil absorbing filter bag called XOAM is uniquely designed to produce one of the highest capacity oil absorbing filter bags in the industry. The different layers of micro-fibers not only retain oil, but increase overall efficiency to 95% or greater on microns ranging from 5 to 100. This bag is also designed to fit into any standard size 1 or size 2 liquid housing and is available in our 7 in. steel or stainless steel ring and our 7 in. plastic flange which creates a more positive seal and is 100% recyclable.

Construction

Our new XOAM bag is made from 100% pure polypropylene micro-fibers combined with other proprietary oil retaining fibers. The overall construction of this filter bag has 30 plus square foot of media and can retain 10.7 or more pounds of oil depending on the micron.



APPLICATIONS

Food Processing
Hydraulic Systems
Gelatinous Contaminants
Cutting Oil
Vacuum Pump
Parts Washing
Engine Oil/Transmission Oil
Natural Gas Sweetening
Natural Gas Dehydration
Lubricating Oil

PRODUCT DATA SHEET

January, 2007

KLEEN.WATER 1000HPV & 2000HPV

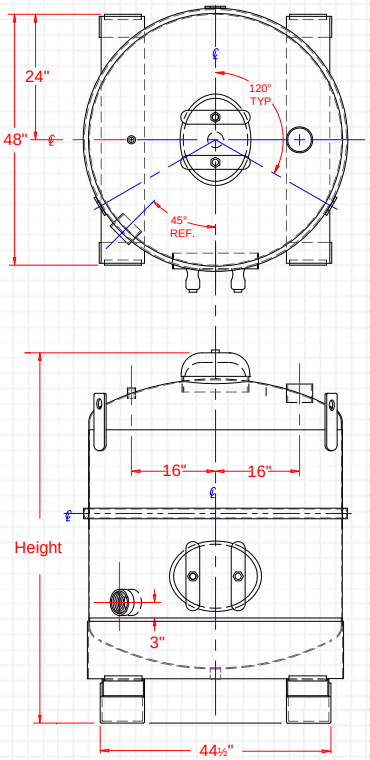
GENERAL INFORMATION

These units are designed for the efficient purification of contaminated water or liquid streams. These filters have the ability to remove contaminants to non-detectable levels. The vessels are constructed of heavy-duty mild steel and are lined with a double-layer epoxy coating.

WEIGHTS AND MEASURES

» **Max. Flowrate:**	*1000HPV:* 80 gpm *2000HPV:* 100 gpm
» **Max. Pressure:**	75 psi
» **Max. Temp:**	150°F
» **Height:**	*1000HPV:* 70″ *2000HPV:* 96″
» **Diameter:**	48″
» **Shipping Wt*: (drum + media)** *(*Media dependent)*	1000HPV: 2050 lbs. – 3050 lbs. 2000HPV: 3100 lbs. – 5100 lbs.

Downflow operation is recommended



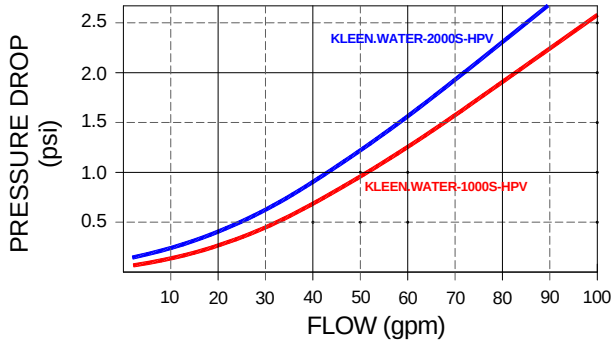
FILTER MEDIA

» **Types:**	▪Activated Carbon ▪Organoclay ▪Ion Exchange Resin ▪Specialty Media
» **Volume:**	*1000HPV:* 34 cu. ft. *2000HPV:* 68 cu. ft.
» **Weight*:** *(*Media dependent)*	*1000HPV:* 1000 lbs. – 2000 lbs. *2000HPV:* 2000 lbs. – 4000 lbs.

MISCELLANEOUS

» **Inlet:**	4″ FNPT
» **Outlet:**	4″ FNPT
» **Interior Coating:**	Double-layered epoxy coating
» **Internals:**	PVC underdrain
» **Media Access:**	Top & side 12″x16″ manways (neoprene gaskets)

PRESSURE DROP DATA



NOTE:

1. Wet activated carbon preferentially removes oxygen from air. In closed or partially closed containers and vessels, oxygen depletion may reach hazardous levels. If workers are to enter a vessel containing carbon, appropriate procedures for potentially low oxygen spaces must be followed, including all federal and state requirements.

BAKERCORP™

To the best of our knowledge the technical data contained herein are true and accurate at the date of issuance and are subject to change without prior notice. No guarantee of accuracy is given or implied because variations can and do exist. NO WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY BAKERCORP, EITHER EXPRESSED OR IMPLIED.

3020 Old Ranch Parkway • Suite 220 • Seal Beach, CA • 562-430-6262

Z-200

BakerCorp's Z-200 media is a naturally occurring rock type media modified (impregnated) with hexadecyl trimethylammonium chloride and has various commercial applications. Z-200 is a specific grade of zeolite with unique properties which include: high cation exchange capacity, high surface area, the ability to adsorb/desorb water without any chemical or physical change in structure, and the ability to selectively adsorb gas molecules without affecting the inherent zeolite structure. Applications for Z-200 include: ammonium and heavy metals removal, oily water filtration and as an absorbent for waste spills.

PHYSICAL PROPERTIES:

Base Chemical Composition:	Natural Zeolite
Impregnate:	Hexadecyl trimethylammonium chloride
Apparent Density (lbs./cu.ft.):	57 - 59
Hardness (Mohs Scale):	3.5 - 5.1
Pore Size / Volume:	4.0A
Crushing Strength:	2500 lbs./sq. in.
Specific Surface Area:	40 sq. m/g
Thermal Stability:	1202F (650C)

Information herein is accurate to the best of our knowledge. Suggestions are made without warranty or guarantee of results. These specifications represent general parameters and are subject to change. Please consult with BakerCorp before proceeding with your applications.

4306 W. 190th Street, Torrance, California 90504
Phone: 310.303.3700 ♦ Fax: 310.406.3001

Hydrosil International LTD.
125 Prairie Lake Road - East Dundee, IL 60118
Phone: 847-844-0680
Emergency Phone: 847-844-0680
Fax: 847-844-0799

Z-200 Safety Data Sheet

Revision date : 2014

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 - Product Identifier

Product Names: Z-200, HS-200

1.2 - Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Filtration

1.3 - Details of the supplier of the safety data sheet

Hydrosil International Ltd.
125 Prairie Lake Rd
East Dundee, IL 60118

T 847-844-0680 - F 847-844-0799
www.hydrosilintl.com

1.4 - Emergency telephone number

Emergency number : 1-847-844-0680

Section 2: Hazards Identification

2.1 - Classification of the substance or mixture

GHS-US classification
Eye Dam. 1 H318
STOT SE 3 H335

2.2 - Label Elements

GHS-US labeling
Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger
Hazard statements (GHS-US) :

H318 - Causes serious eye damage
H335 - May cause respiratory irritation

Precautionary statements (GHS-US) :

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER/doctor/…
P312 - Call a POISON CENTER/doctor/…/if you feel unwell
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container to ...

2.3 - Other Hazards

No additional information available

2.4 - Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixture

Name	Product Identifier	%	GHS-US Classification
Zeolite	(CAS No.) 1318-02-1	85.2 - 86.2	STOT SE 3, H335
Water	(CAS No.) 7732-18-5	8.4 - 11.4	Not classified
N,N,N-Trimethyl-1-hexadecanaminium chloride	(CAS No.) 112-02-7	3.4 - 5.4	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400

SECTION 4: First aid measures

4.1 - Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air. If not breathing, administer CPR or artificial respiration. Get immediate medical attention.
First-aid measures after skin contact : If skin reddening or irritation develops, seek medical attention.
First-aid measures after eye contact : Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists get medical attention.
First-aid measures after ingestion : If the material is swallowed, get immediate medical attention or advice. DO NOT induce vomiting unless directed to do so by medical personnel.

4.2 - Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory irritation.
Symptoms/injuries after skin contact : Causes skin irritation.
Symptoms/injuries after eye contact : Causes serious eye irritation.
Symptoms/injuries after ingestion : May be harmful if swallowed.

4.3 - Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1 - Extinguishing media

Suitable extinguishing media : If involved with fire, flood with plenty of water.
Unsuitable extinguishing media : None.

5.2 - Special hazards arising from the substance or mixture

Fire hazard : None known.
Explosion hazard : None known.

5.3 - Advice for firefighters

Protection during firefighting : Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with the skin and the eyes.
For non-emergency personnel : No additional information available
For emergency responders : No additional information available

6.2 - Environmental precautions

None.

6.3 - Methods and material for containment and cleaning up

For containment : If possible, stop flow of product.
Methods for cleaning up : Shovel or sweep up and put in a closed container for disposal.

6.4 - Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Precautions for safe handling : Wet carbon/coal removes oxygen from air causing a severe hazard to workers inside carbon vessels or confined spaces.

7.2 - Conditions for safe storage, including any incompatibilities

Storage conditions : Protect containers from physical damage. Store in dry, cool, well-ventilated area.

7.3 - Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

No additional information available

8.2 - Exposure controls

Appropriate engineering controls : Local exhaust and general ventilation must be adequate to meet exposure standards.
Hand protection : Use impervious gloves.
Eye protection : Safety glasses.
Skin and body protection : Wear suitable working clothes.
Respiratory protection : If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

Physical state : Solid
Appearance : Irregular shaped.
Color : White
Odor : No data available
Odor threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Self ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : 57-59 lb/ft3
Solubility : No data available
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematics : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.1 - Other information

No additional information available

SECTION 10: Stability and Reactivity

10.1 - Reactivity

No additional information available

10.2 - Chemical stability

Stable under normal conditions.

10.3 - Possibility of hazardous reactions

Will not occur

10.4 - Conditions to avoid

None

10.5 - Incompatible materials

Strong oxidizing and reducing agents.

10.6 - Hazardous decomposition products

Organic chlorides, amines, hydrogen chloride may be produced.

SECTION 11: Toxicological information

11.1 - Information on toxicological effects

Acute toxicity : Not classified

Zeolite (1318-02-1)	
LD50 oral rat	5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	2.4 mg/l (Exposure time: 1 h)
ATE (oral)	5000 mg/kg

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye damage.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Zeolite (1318-02-1)	
IARC group	3

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : May cause respiratory irritation.
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1 - Toxicity

Zeolite (1318-02-1)	
LC50 fishes 1	1800 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])
EC50 Daphnia 1	1000 - 1800 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	18 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)
LC50 fish 2	3200 - 5600 mg/l (Exposure time: 96 h - Species: Oryzias latipes [semi-static])

12.2 - Persistence and degradability

No additional information available

12.3 - Bioaccumulative potential

No additional information available

12.4 - Mobility in soil

No additional information available

12.5 - Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

In accordance with DOT / ADR / RID / ADNR / IMDG / ICAO / IATA

14.1 - UN number

Not applicable

14.2 - UN proper shipping name

Not applicable

SECTION 15: Regulatory information

15.1 - US Federal regulations

15.2 - US State regulations

No additional information available

SECTION 16: Other information

Full text of H-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation
H400	Very toxic to aquatic life

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt
medical attention is given.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

R 8x30 Activated Carbon

R 8x30 mesh activated carbon is a reactivated bituminous coal and coconut shell blended carbon ideal for liquid filtration applications including groundwater and process water.

PHYSICAL PROPERTIES:

Carbon Tetrachloride Activity (CTC):	60%
Apparent Density (lbs./cu.ft.):	30 average
Total Ash Content:	8% maximum
Hardness (ball abrasion):	90 average
Iodine Number:	800 minimum
Mesh Sizes*:	8x30

*Custom sizing available

Standard Packaging: 1000 lb. super sacks. Other packaging available upon request.

These specifications represent general parameters and are subject to change. Please consult with BakerCorp before processing with your applications.

4306 W. 190th Street, Torrance, California 90504
Phone: 310.303.3700 ♦ Fax: 310.406.3001

Safety Data Sheet

SECTION I	Identity

PRODUCT IDENTIFICATION: Activated Carbon, GAC, R, VCC, VCCAW, VCO, VCOAW, VP, PAC

PRODUCT USE: Use in accordance with manufacturer recommendations

MANUFACTURER:

BakerCorp

3020 Old Ranch Parkway
Suite 220
Seal Beach, CA 90740

TELEPHONE: **(562) 430-6262**
EMERGENCIES: **(562) 430-6262**

Date Prepared: 7/15/2015

SECTION II	Hazard(s) Identification

Hazard Classification: GHS-US

Eye Irritation	2B	H320
Respiratory Irritation	3	H335

Signal Word: Irritant

Hazard Statement: Contact may cause eye irritation: Dust may cause respiratory irritation.

Hazard Pictogram:



Precautionary statements:

P261	Avoid Breathing: dust/fume/gas/mist/vapor/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protections/face protection
P304/P340	If inhaled/Remove to fresh air
P305/P351/P338	If in eyes/rinse cautiously with water/ remove contact lenses if easy/continue rinsing
P337/P313	If eye irritation persist: get medical attention
P403/P233	Store in well ventilated place. Keep container tightly closed
P405	Store locked up
P501	Dispose container to appropriate receptacle

Other Hazards: No additional information

Acute Toxicity: No data available

SECTION III Composition/Information on Ingredients

Chemical Name	CAS#	%	Impurities
Carbon	7440-44-0	100	None

SECTION IV First-Aid Measures

Route(s) of Exposure	Symptoms	First Aid
Inhalation	Dust may cause mild respiratory irritation	Remove to fresh air. Seek medical attention if irritation persists
Skin	Dust may cause mild irritation/reddening	Wash with soap & water; seek medical attention if irritation persists.
Eye	Dust may cause eye irritation and redness.	Flush with lukewarm water for at least 15 minutes. If irritation persists seek medical attention.
Ingestion	May cause digestive track irritation.	Drink plenty of water and seek medical attention.

SECTION V Fire Fighting Measures

Suitable Extinguishing Media: Flood with plenty of water, use media suitable for surrounding the fire.

Unsuitable Media: None known.

Unusual fire & explosion hazards: Contact with strong oxidizers may cause rapid combustion.

Special Firefighting procedures: Exercise caution when responding to any chemical fire. Firefighters should wear full protective gear.

SECTION VI Accidental Release Measures

Personal Precautions: Wear protective equipment, keep unnecessary personnel away.

General precautions: Avoid contact with skin and eyes.

Environmental Precautions: None

Containment & Clean Up: Sweep up and discard in protected refuse container.

Other Information: Not applicable

SECTION VII Handling and Storage

Safe Handling: Avoid prolonged contact with eyes and skin. Use in well ventilated areas.

Safe Storage: Store in a cool, dry and well ventilated area. Protect containers from physical damage. Keep away from oxidizers, heat and flame.

SECTION VIII Exposure Controls/Personal Protection

Component	OSHA PEL	ACGIH-TLV	Other Limits
Activated Carbon	Not Available	Not Available	

Engineering Guidelines	Local exhaust and general ventilation to meet exposure standards. Wet activated carbon depletes oxygen from the air creating a severe hazard to workers in enclosed or confined spaces. Sampling and work procedures for low oxygen levels should be taken whenever workers entering carbon vessels, enclosed or confined spaces. If risk of overexposure exists, wear and approved respirator.
Personal Protective Equipment	Use NIOSH approved respirator if dust generated exceeds exposure limits. Gloves, safety glasses, work clothes as determined appropriate
General Hygiene	Keep away from food and beverages, remove contaminated clothing: wash hands before eating.

SECTION IX Physical & Chemical Properties

Physical State	Solid	**Boiling point**	NA
Appearance	Granular/powder	**Flash Point**	NA
Color	Black	**Evaporation Rate**	NA
Odor	None	**Flammability (solid/gas) C**	No Data Available
Odor Threshold	None	**UEL**	NA
Vapor Pressure	0	**LEL**	NA
pH	NA	**Vapor Density**	Solid
Relative Density	28 – 33 lbs/cubic ft	**Partition Coefficient:**	NA
Melting Point	NA	**Auto ignition Temperature**	No data available
Freezing Point	NA	**Decomposition Temperature**	NA
Solubility	None	**Viscosity**	NA

SECTION X Stability & Reactivity

Incompatibility: Strong oxidizers such as ozone or liquid oxygen, and chlorine

Chemical Stability: Stable

Conditions to Avoid: None

Materials to Avoid: Strong oxidizers such as ozone or liquid oxygen, and chlorine

Hazardous Decomposition Products: Carbon Monoxide and carbon dioxide may be generated during combustion.

SECTION XI Toxicological Information

Acute Effects	
Oral LD50	Not Determined
Dermal LD 50	Not Determined
Inhalation	See Section IV
Ingestion	See Section IV
Eye Irritation	See Section IV
Skin Irritation	See Section IV
Sensitization	Not Determined
Signs and Symptoms of Exposure	Irritation and redness of eyes and skin. Dust may cause respiratory irritation

Chronic Effects:	
Carcinogenicity	Not Determined
Mutagenicity	Not Determined
Reproduction Effects	Not Determined
Developmental Factors	Not Determined

SECTION XII Ecological Information

Ecotoxicity	Not Determined
Persistence/Degradability	Not Determined
Bioaccumulation Potential	Not Determined
Mobility in Soil	Not Determined
Other Adverse Effects	Not Determined

SECTION XIII Disposal Concerns

Vacuum or shovel material in a closed container. Dispose of in accordance with all applicable local, state and federal and international regulations.

SECTION XIV Transport Information

UN Number: Not applicable
UN Name: Not applicable

Ship in accordance with
DOT/ADR/RID/ADNR/IMDP/ICAO/IATA

SECTION XV Regulatory Information

SARA Title III 302	Product not listed
SARA Title III 313	Product not listed
TSCA	Product is listed
Canadian – WHMIS	Product is listed
DSL #	Product is Listed

SECTION XVI Other Information

The information and recommendations listed are believed to be true and accurate to the best of our knowledge as of the prepared date below. BakerCorp makes no warranty with respect to same and disclaims all liability for reliance therein.

Date Prepared: May 25, 2015

PRODUCT DATA SHEET

January, 2007

SPECTRUM DEWATERING BOX (PHASE SEPARATOR)

GENERAL INFORMATION

These units use a disposable filter media (filter cloth) which enhances dewatering efficiency. Box can be cleaned without removing any components or filter panels due to the space between the support screens and walls/floor. The Turbo Model increases surface area approximately 35%, which decreases dewatering time significantly.

WEIGHTS AND MEASURES

» **Capacity:**	20 yd^3 : 16 yd^3 filled to top 30 yd^3 : 26 yd^3 filled to top
» **Height:**	20 yd^3 : 5'-2" 30 yd^3 : 7'-2"
» **Width :**	20 yd^3 : 8'-2" 30 yd^3 : 8'-2"
» **Length:**	20 yd^3 : 23'-9" 30 yd^3 : 23'-9"
» **Dewatering Surface Area***	20 yd^3 : approx. 290 sq. ft. 20 yd^3 Turbo: approx. 370 sq. ft. 30 yd^3 : 360 sq. ft. 30 yd^3 Turbo: 520 sq. ft.
» **Empty Weight:**	20 yd^3 : 9,200 – 9,700 lbs. 30 yd^3 : 10,500 – 11,000 lbs.

* Includes sides, floor, dividing wall (Turbo), front wall and container door

STRUCTURAL DESIGN

» **Side Walls:**	3/16″ A36 carbon steel plate
» **Floor:**	1/4″ A36 carbon steel
» **Rear Door:**	3/16″ A36 carbon steel
» **Rails:**	(2)- 6x2x3/8 outer rail design cable hoist

FEATURES

» **Drains:**	Two 3″ drains with male camlocks and caps located on bottom of door. All liquid drains through door.
» **Hinges:**	20 yd^3 - (2) 30 yd^3 - (3)
» **Front Rollers:**	(2) – 4" x 6"
» **Bottom Slope:**	Three inch slope from front to rear door
» **Filter Hooks:**	Filter cloth support hooks – (6) on each side, (4) on front panel and (4) on door
» **Cleanout: Space**	Three inches along side walls and five inches above floor.
» **Filter Basket:**	38W – 1″ x 3/16″ galvanized bar grating welded to container (78% open area)
» **Screen:**	150-micron filter cloth (consumable), non-woven polypropylene, or a 30x40 mesh woven polypropylene custom sewn to fit contour of box.
» **Filter Support:**	5-mesh 304 stainless steel wire (58.5% open area) riveted with 304 SS rivets to a 304 SS strip welded to the bar grating.
» **Tarps:**	Optional – uses the same fitted tarp as currently used on Roll-Off's and Intermodals.

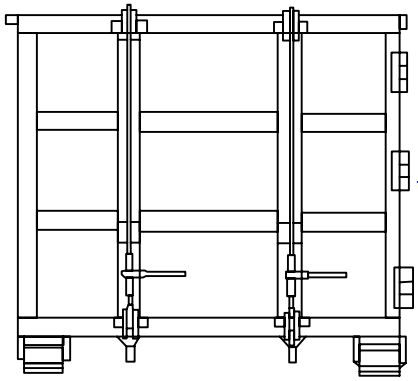
TURBO MODEL DETAILS

» **Wall:**	Dividing wall is located down the center of the long axis of the tank
» **Material:**	Dividing wall is 38W 4 – 1″ x 3/16″ bar grating
» **Filter Support:**	5-mesh 304 stainless steel wire (58.5% open area) riveted with 304 SS rivets to a 304 SS strip welded to the bar grating.
» **Drainage:**	Dividing wall drains to the floor

BAKERCORP™

To the best of our knowledge the technical data contained herein are true and accurate at the date of issuance and are subject to change without prior notice. No guarantee of accuracy is given or implied because variations can and do exist. NO WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY BAKERCORP, EITHER EXPRESSED OR IMPLIED.

3020 OLD RANCH PARKWAY • SUITE 220 • SEAL BEACH, CA • 562-430-6262

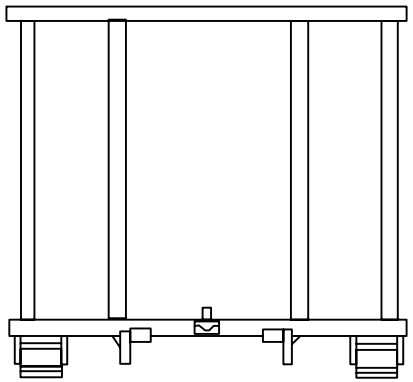


REAR VIEW

WEIGHTS AND MEASURES

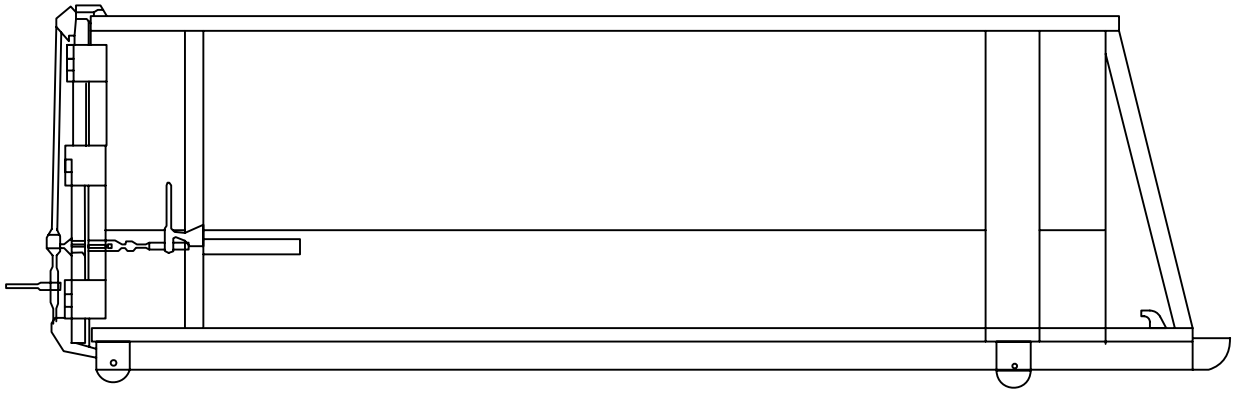
Capacity:	20 yd^3 : 16 yd^3 filled to top 30 yd^3 : 26 yd^3 filled to top
Height:	20 yd^3 : 5'-2" 30 yd^3 : 7'-2"
Width:	20 yd^3 : 8'-2" 30 yd^3 : 8'-2"
Length:	20 yd^3 : 23'-9" 30 yd^3 : 23'-9"
Legal Road Payload:	20 yd^3 : 12-14 yd^3 (depends on material density)
Dewatering Surface Area*	20 yd^3 : approx. 290 sq. ft. 20 yd^3 Turbo: approx. 370 sq. ft. 30 yd^3 : 360 sq. ft. 30 yd^3 Turbo: 520 sq. ft.
Empty Weight:	20 yd^3 : 9,200 – 9,700 lbs. 30 yd^3 : 10,500 – 11,000 lbs.

* Includes sides, floor, dividing wall (Turbo), front wall and container door



FRONT VIEW

Open top



SIDE VIEW

NOTES:
1. This drawing is a general representation for this class of equipment. Refer to the Product Data Sheet for more detailed information.
2. Some units are available with a Turbocharge panel which increases the surface area by one third.

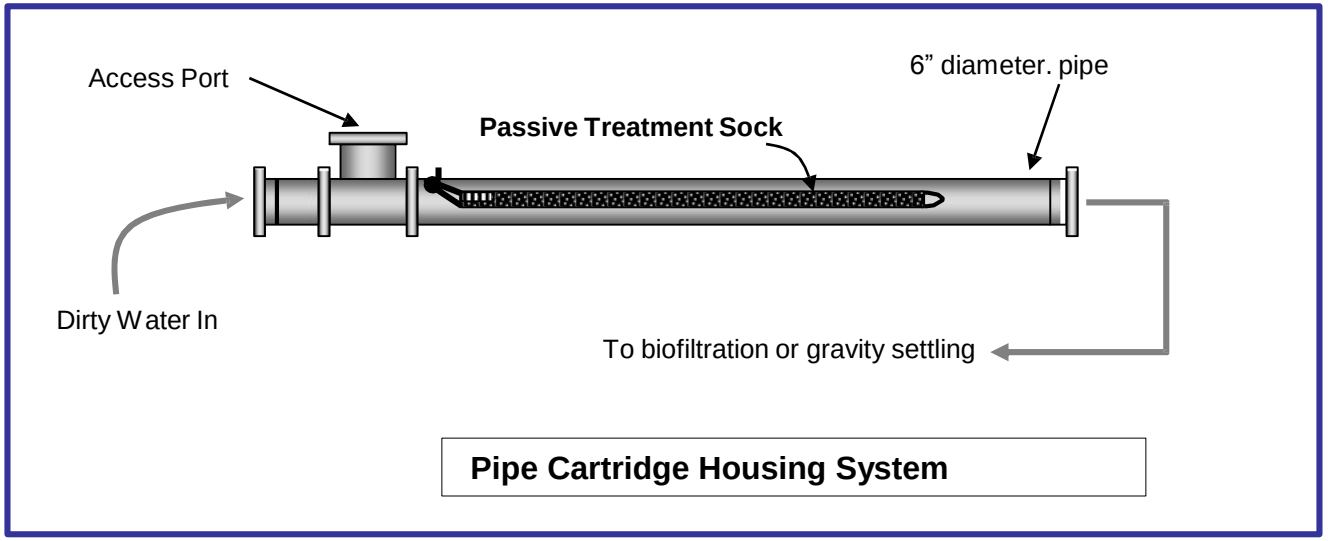
The Information contained herein is proprietary to BakerCorp and shall not be reproduced or disclosed in whole or in part, or used for any design or manufacture except when user obtains direct written authorization from BakerCorp.

REV.	DESCRIPTION	DATE	BY
G			
F			
E			
D			
C			
B			
A			

BAKERCORP™ 3020 OLD RANCH PARKWAY SEAL BEACH, CA 90740-2751

SCALE: N.T.S.	SIZE: A	ORIGINAL DWG. DATE: 26JAN06
DRAWN BY: P.J.B.	APPROVED BY: –	CAT/CLASS: NA
TITLE: SPECTRUM PHASE SEPARATOR		SHEET: 1 OF 1
DRAWING NO.: S-5-M0021-1-		REV.: 0

How to Use the Passive Treatment Sock



Passive Treatment Sock 1-lb.

Specifications:

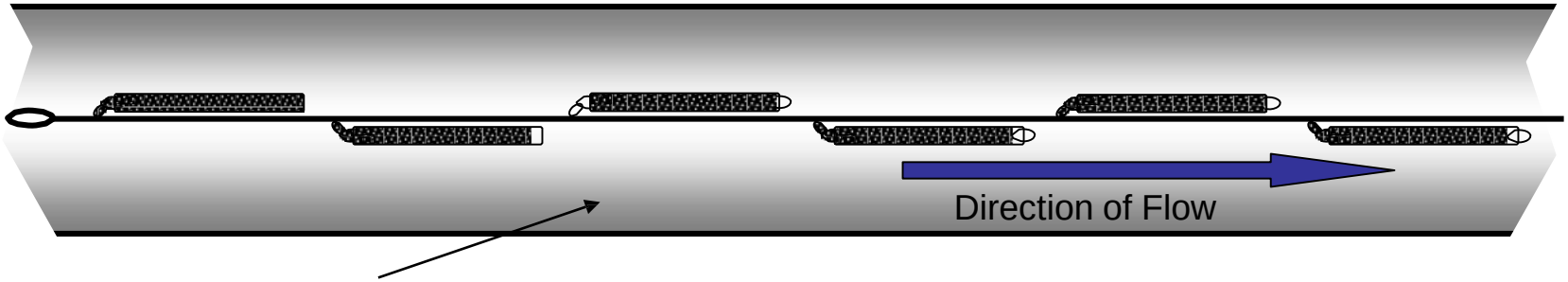
Length	36 Inches
Width:	5 in. diameter
Fabric:	Woven polypropylene
Chitosan:	1.0 lb (dry weight)
Treatment:	100,000 gal. @ 1 mg/L

Passive Treatment Sock 2-lb.

Specifications:

Length	72 Inches
Width:	5 in. diameter
Fabric:	Woven polypropylene
Chitosan:	2.0 lb (dry weight)
Treatment:	200,000 gal. @ 1 mg/L

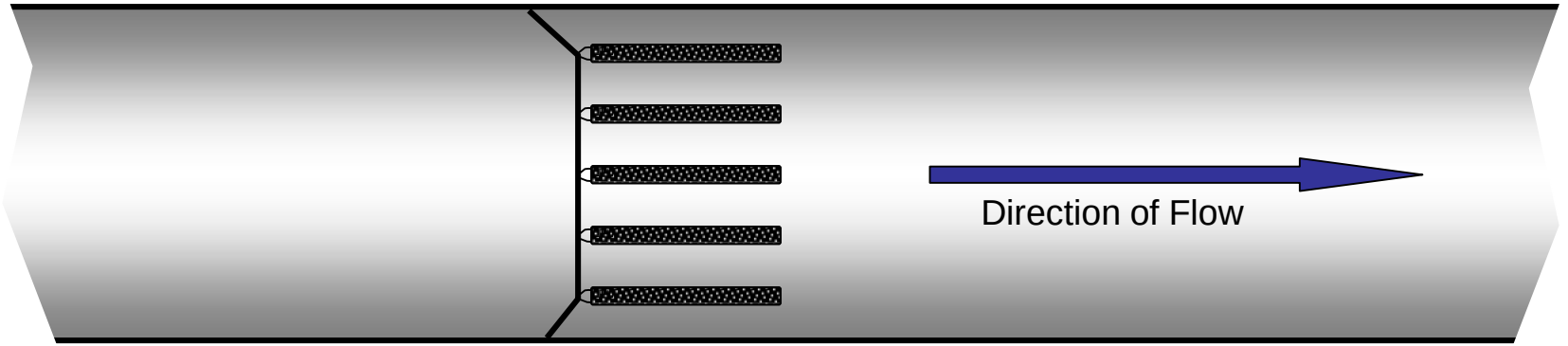
Passive Treatment Socks Connected to a Common Rope Tether in Series



Trough, Conveyance Channel or Pipe

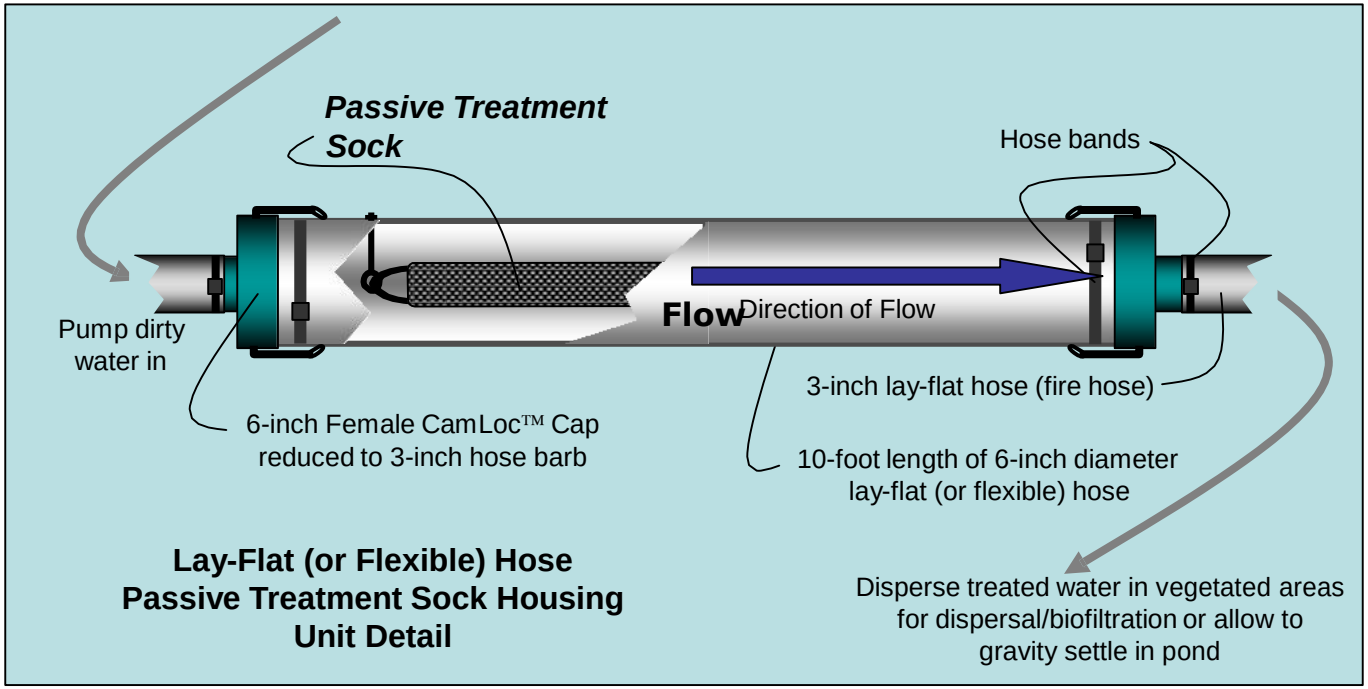
For applications where more than one Sock is needed simply connect them to a common rope

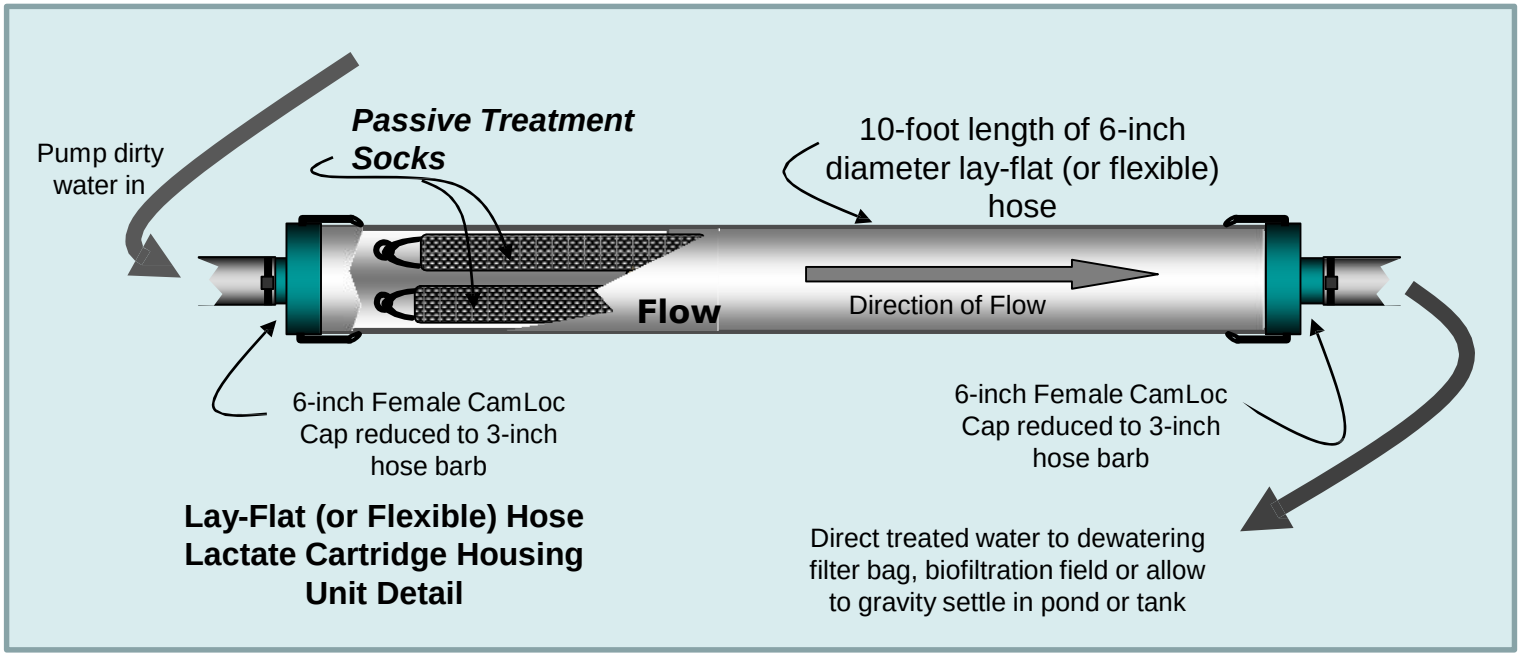
Passive Treatment Socks Connected to a Common Rope Tether in Parallel



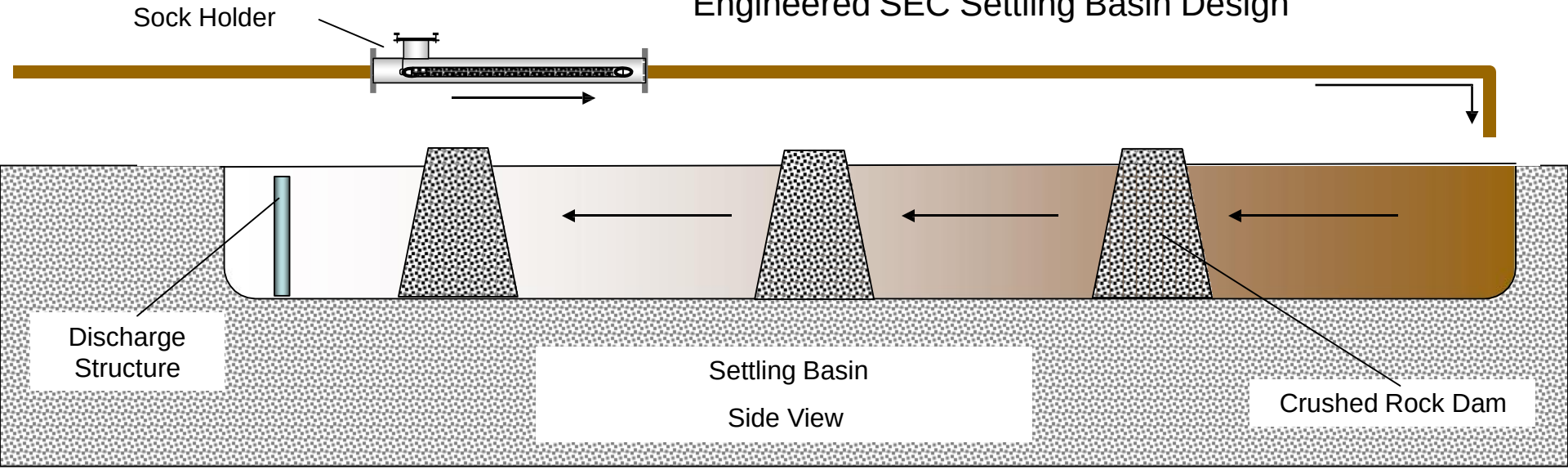
Trough, Conveyance Channel or Pipe

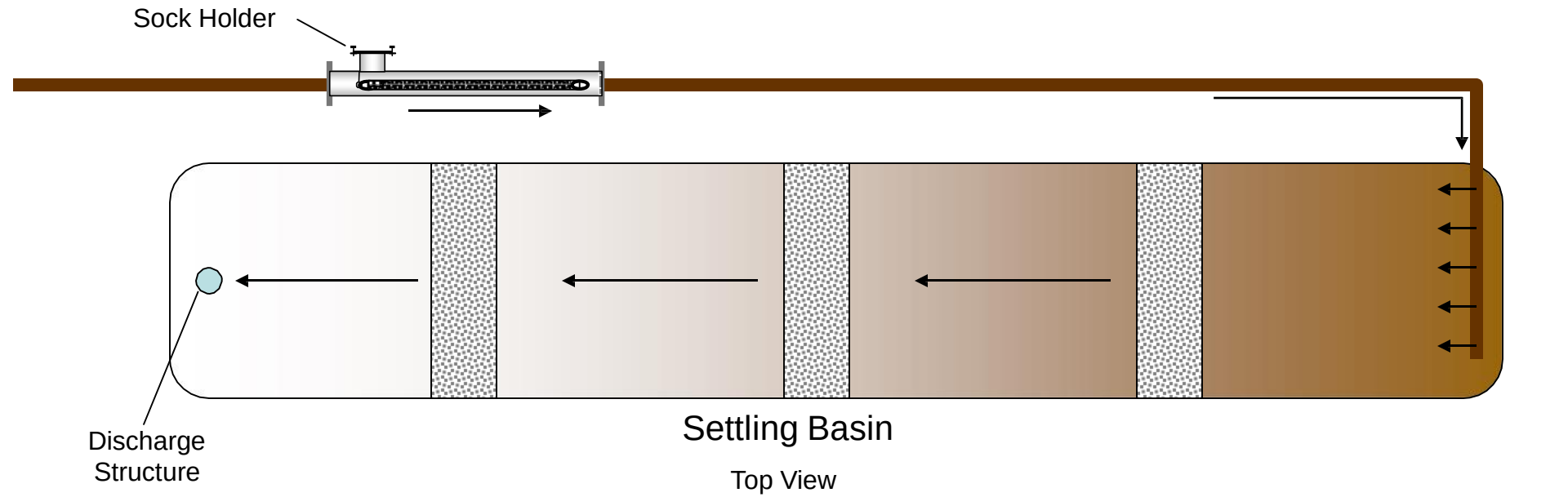
For wide channel installation simply connect Socks in parallel

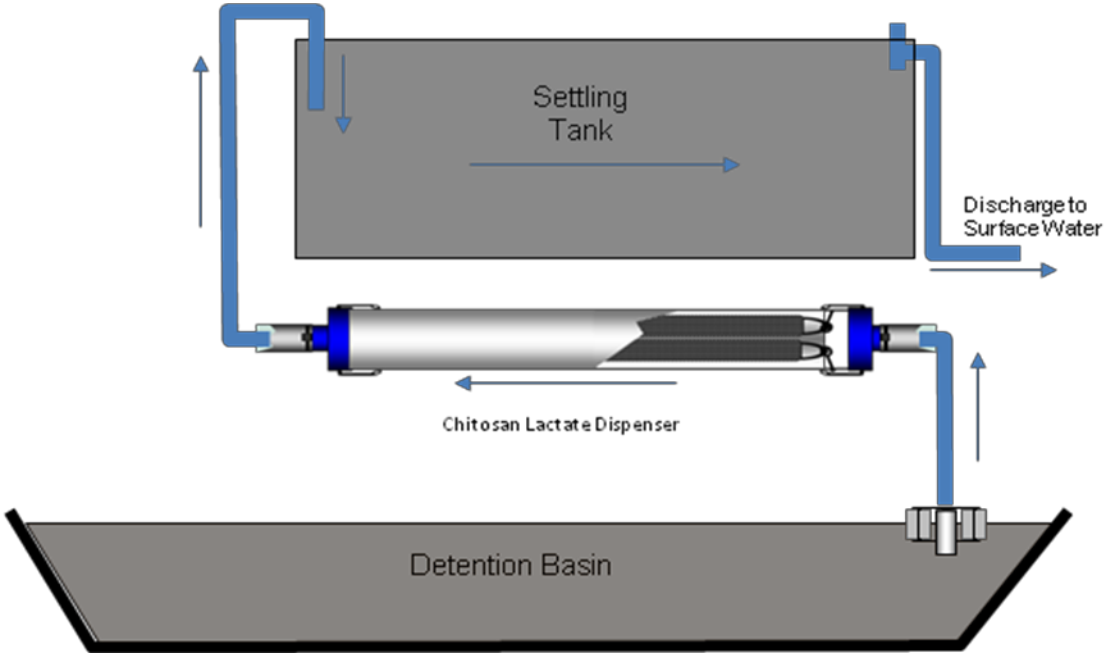

Passive Treatment Sock
Hose bands
Pump dirty water in
Flow
Direction of Flow
3-inch lay-flat hose (fire hose)
6-inch Female CamLoc™ Cap reduced to 3-inch hose barb
10-foot length of 6-inch diameter lay-flat (or flexible) hose
Lay-Flat (or Flexible) Hose Passive Treatment Sock Housing Unit Detail
Disperse treated water in vegetated areas for dispersal/biofiltration or allow to gravity settle in pond

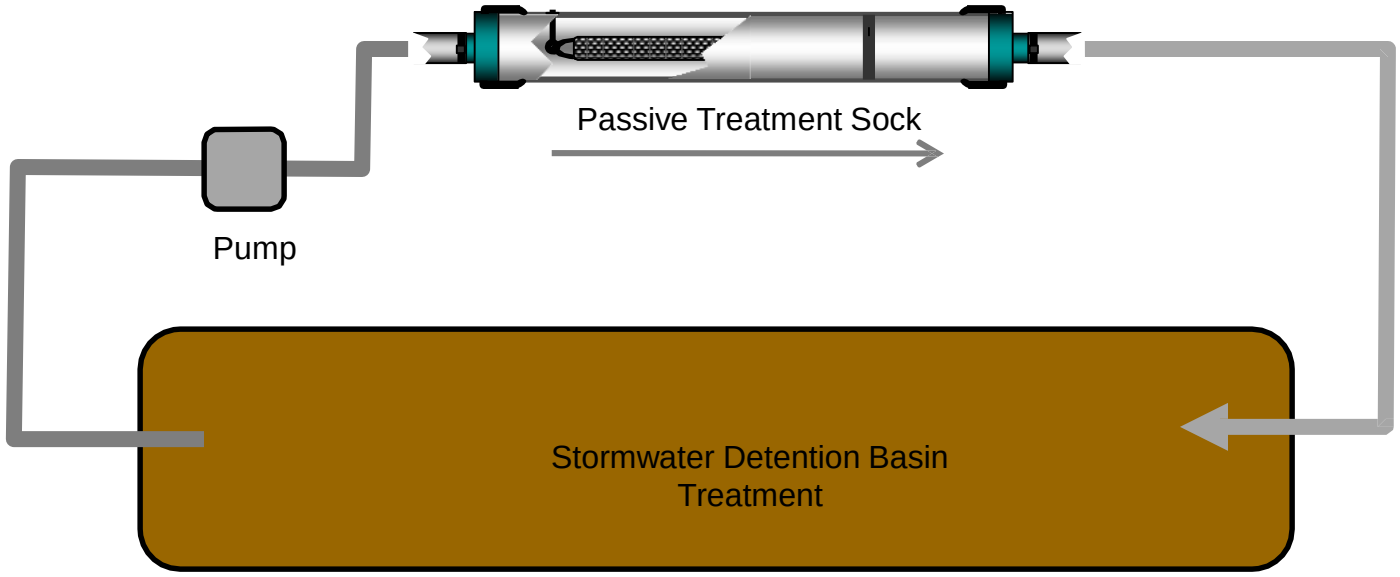

Pump dirty water in
Passive Treatment Socks
10-foot length of 6-inch diameter lay-flat (or flexible) hose
Flow
Direction of Flow
6-inch Female CamLoc Cap reduced to 3-inch hose barb
6-inch Female CamLoc Cap reduced to 3-inch hose barb
Lay-Flat (or Flexible) Hose Lactate Cartridge Housing Unit Detail
Direct treated water to dewatering filter bag, biofiltration field or allow to gravity settle in pond or tank

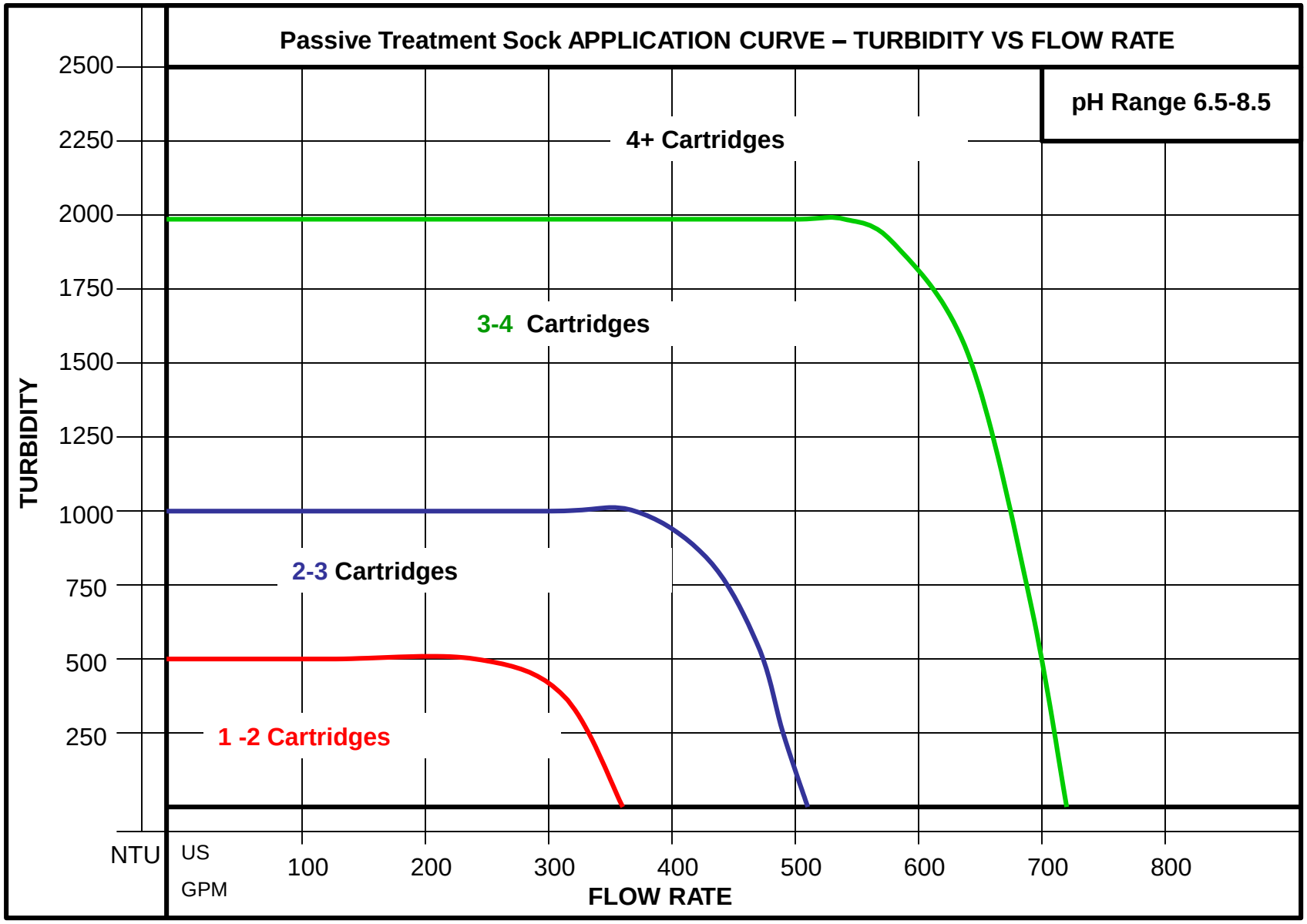
Engineered SEC Settling Basin Design






Settling
Tank
Discharge to
Surface Water
Chitosan Lactate Dispenser
Detention Basin


Passive Treatment Sock
Pump
Stormwater Detention Basin
Treatment


Passive Treatment Sock APPLICATION CURVE – TURBIDITY VS FLOW RATE
pH Range 6.5-8.5
4+ Cartridges
3-4 Cartridges
2-3 Cartridges
1 -2 Cartridges
TURBIDITY
NTU
2500
2250
2000
1750
1500
1250
1000
750
500
250
US GPM
100
200
300
400
500
600
700
800
FLOW RATE

BakerCorp Water Treatment Technology

Product Description (Dual Polymer Passive Treatment System)

DBP-2100 FS (Green product, very low toxicity) is a dry product most effective when used in conjunction with (***PTS****)* chitosan lactate as part of a Dual Polymer System (DPS) to maximize floc size. This natural biopolymer is 100 percent biodegradable through simple natural enzymatic activity, leaving you no bioaccumulation concern. Currently being used in active, passive treatment systems. ***(Dose & mix DBP-2100 first then add Chitosan lactate powder)***

Gel-Floc PTS Our Passive Treatment Sock product is an organic water clarifier made from high quality chitosan lactate flake and placed within a permeable fabric. It slowly dissolves as the water flows over and through the cartridge. Once in solution, the chitosan flocculates suspended sediment particles which settle and can be filtered out. This natural biopolymer is 100 percent biodegradable through simple natural enzymatic activity, leaving no bioaccumulation concern. Currently being used in construction, industrial, municipal, and log yard water treatment systems.

HaloKlear®

PRODUCT FACTS

DUAL PRODUCT SYSTEM

WE'VE NEVER KILLED A FISH!



Clean Water.
Naturally.

Description

HaloKlear's All-Natural Water Treatment System

The **Dual Product System (DPS)** is quickly gaining national and international recognition as the premier all-natural stormwater treatment solution, providing unparalleled performance and reliable results in an array of projects across the globe. **HaloKlear DPS** uses biodegradable, natural flocculants that perform on a wide array of soil types and pH ranges. In contrast to other products on the market, the HaloKlear Dual Product System creates dense flocs with great shear strength and a low water content that settle very quickly. Solids can be efficiently removed from the water column – increasing performance and productivity while keeping costs low. In addition, **HaloKlear DPS** is extremely flexible with a successful track record in active, passive, and semi-passive deployment.

GREEN FOR LESS

Don't just clean the water, clean the environment

Our chemistries are less toxic when water is returned to its natural environment. All of HaloKlear's products exhibit exceptionally low toxicity, and the **Dual Product System** has been proven to have zero toxicity.* No bioaccumulation concerns exist when and where HaloKlear products are used, and our products are 100% biodegradable through enzymatic activity.

* Third-party toxicity testing concluded that no fish were killed by the Dual Product System (DPS) when both parts were used in combination of following Best Management Practices.

Product Benefits

- **Biodegradable natural flocculants**
- **Effective on a wide range of pH conditions and soil types**
- **Functions in active, semi-passive and passive applications**
- **Effective in fresh water and salt water**
- **Works with existing equipment of a part of a customized product**
- **Capable of trapping hydrocarbons, metals and nutrients**
- **Increases performance and productivity while keeping costs low**

Part One

LBP-2101 = Liquid
DBP-2100 = Dry socks
DBP-2100 MB = Loose, dry
DPS DC-1 = Dry concentrate for making down into liquid**

Part Two

LiquiFloc = Liquid
GelFloc = Dry socks
GelFloc MB = Loose, dry
DPS DC-2 = Dry concentrate for making down into liquid**

**Not available in the North American market

For additional information contact Dober at:
(800) 323-4983
info@dober.com
www.dober.com/water_treatment

DOBER

©2016 | All rights reserved | HK_01960-3

SOUND ENVIRONMENTAL CONCEPTS

Safety Data Sheet

acc. to OSHA HCS

1 IDENTIFICATION

· **Product identifier**

Product form	: Substance
Product name	: HaloKlear DBP-2100 Socks
Chemical name	: Xanthan Gum
CAS No	: 11138-66-2
Product code	: 210014

· **Relevant identified uses of the substance or mixture and uses advised against**

Uses of the substance/mixture : Flocculant

· **Manufacturer/Supplier:**

Sound Environmental Concepts
22726 102nd Ave SE, Woodinville, WA 98077
1 (206) 730 - 5376
ray@soundenvirocon.com

· **Information department:** Product safety department

· **Telephone number:**
+ 1 (206) 730 – 5376

· Information department: Product safety department

· Emergency telephone number: +1 (800) 424-9300 (24 Hours)
During normal opening times: +1 (425) 881-6464
CHEMTREC (Domestic, North America) +1-703-527-3887 CHEMTREC (International, collect calls accepted)

2 HAZARD(S) IDENTIFICATION

· **Classification of the substance or mixture**
GHS-US Classification
Not classified

Safety Data Sheet

Trade Name: HaloKlear DBP-2100 Socks

2 HAZARD(S) IDENTIFICATION CONTD.

· **Label Elements**
GHS-US Labelling
No labeling applicable
· **Other hazards**
Other hazards not contributing to the classification : *May form combustible dust concentrations in air. May cause eye irritation.*
· **Unknown acute toxicity (GHS-US)**
Not applicable

3 COMPOSITION/INFORMATION ON INGREDIENTS

· **Substance**
Substance type : *Mono-constituent*
Name : *HaloKlear DBP-2100 Socks*
CAS No : *11138-66-2*
Fulltext of H-statements: see section 16
· **Mixture**
Not applicable

4 FIRST AID MEASURES

· **Description of first aid measures**
First-aid measures general : *Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).*
First-aid measures after inhalation : *Allow breathing of fresh air. Allow the victim to rest.*
First-aid measures after skin contact : *Removed affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.*
First-aid measures after eye contact : *Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.*
First-aid measures after ingestion : *Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.*

Safety Data Sheet

Trade Name: HaloKlear DBP-2100 Socks

4 FIRST AID MEASURES

· **Most important symptoms and effects, both acute and delayed**
Symptoms/Injuries after eye contact : Not expected to present a significant hazard under anticipated conditions of normal use.

· **Indication of any immediate medical attention and special treatment needed**
No additional information available

5 FIRE-FIGHTING MEASURES

· **Extinguishing media**
Suitable extinguished media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

· **Special hazards arising from the substance or mixture**
Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

· **Advice for firefighters**
Firefighting instructions : Exercise caution when fighting any chemical fire. Eliminate all ignition sources if safe to do so. Use water spray of fog for cooling exposed containers.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
Other information : Spills produce extremely slippery surfaces. Avoid dust formation.

6 ACCIDENTAL RELEASE MEASURES

· **Personal precautions, protective equipment and emergency procedures**

· **For non-emergency personnel**
Emergency procedures : Evacuate unnecessary personnel.

· **For emergency responders**
Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area

· **Environmental precautions**
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Safety Data Sheet

Trade Name: HaloKlear DBP-2100 Socks

6 ACCIDENTAL RELEASE MEASURES

· **Personal precautions, protective equipment and emergency procedures**
General measures : *Use special care to avoid static electric charges.*
· **For non-emergency personnel**
Emergency procedures : *Evacuate unnecessary personnel.*
· **For emergency responders**
Protective equipment : *Equip cleanup crew with proper protection.*
Emergency procedures : *Ventilate area.*
· **Environmental precautions**
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.
· **Methods and material for containment and cleaning up**
Methods of cleaning up : *On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.*
· **Reference to other sections**
See Section 8. Exposure controls and personal protection.

7 HANDLING AND STORAGE

· **Precautions for safe handling**
Precautions for safe handling : *Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and leaving work. Provide good ventilation in process area to prevent formation of vapor. No smoking.*
· **Conditions for safe storage, including and incompatibles**
Storage conditions : *Keep only in the original container in a cool, well-ventilated place. Keep container closed when not in use.*
Incompatible products : *Oxidizing agent.*
Incompatible materials : *Sources of ignition.*
· **Specific end use(s)**
No additional information available

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

· **Control parameters**
HaloKlear DBP-2100 Socks
ACGIH : *Not applicable*
OSHA : *Not applicable*

Safety Data Sheet

Trade Name: HaloKlear DBP-2100 Socks

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

· **Exposure controls**

Personal protective equipment	*: Avoid all unnecessary exposure.*
Hand protection	*: Wear protective gloves/protective clothing/eye protection/face protection protective gloves.*
Eye protection	*: Chemical goggles or safety glasses.*
Respiratory protection	*: Use a property fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.*
Other information	*: Do not eat, drink or smoke during use.*

9 PHYSICAL AND CHEMICAL PROPERTIES

· **Information on basic physical and chemical properties**

Physical state	*: Solid*
Color	*: White to tan*
Odor	*: odorless*
Odour threshold	*: No data available*
pH	*: approximately neutral (1% solution)*
Relative evaporation rate	*: No data available*
Melting point	*: No data available*
Freezing point	*: No data available*
Boiling point	*: No data available*
Flash point	*: No data available*
Auto-ignition temperature	*: No data available*
Decomposition temperature	*: No data available*
Flammability (solid, gas)	*: No data available*
Vapor pressure	*: No data available*
Relative vapor density	*: No data available*
Relative density	*: No data available*
Solubility	*: Water: 100 %*
Log Pow	*: No data available*
Log Kow	*: No data available*
Viscosity, kinematic	*: No data available*

Safety Data Sheet

Trade Name: HaloKlear DBP-2100 Socks

9 PHYSICAL AND CHEMICAL PROPERTIES

Viscosity, dynamic	*: No data available*
Explosive properties	*: No data available*
Oxidizing properties	*: No data available*
Explosive limits	*: No data available*

· **Other Information**

No additional information available

10 STABILITY AND REACTIVITY

· **Reactivity**

The product is non-reactive under normal conditions of use, storage and transport.

· **Chemical stability**

Stable under normal conditions.

· **Possibility of hazardous reactions**

No dangerous reactions known under normal conditions of use.

· **Conditions to avoid**

Avoid dust formation.

· **Incompatible materials**

Oxidizing agent.

· **Hazardous decomposition products**

Thermal decomposition generates: Carbon dioxide. Carbon monoxide. Fume.

11 TOXICOLOGICAL INFORMATION

· **Information on toxicological effects**

Acute toxicity	*: Not classified*
Skin corrosion/irritation	*: Not classified* *pH: approximately neutral (1% solution)*
Serious eye damage/irritation	*: Not classified* *pH: approximately neutral (1% solution)*
Respiratory or skin sensitization	*: Not classified*
Germ cell mutagenicity	*: Not classified*
Carcinogenicity	*: Not classified*
Reproductive toxicity	*: Not classified*
Specific target organ toxicity (single exposure)	*: Not classified*

Safety Data Sheet

Trade Name: HaloKlear DBP-2100 Socks

11 TOXICOLOGICAL INFORMATION

Specific target organ toxicity (repeated exposure)	*: Not classified*
Aspiration hazard	*: Not classified*
Potential adverse human health effects and symptoms	*: Based on available data, the classification criteria are not met.*

12 ECOLOGICAL INFORMATION

· **Toxicity**
HaloKlear DBP-2100 Socks (11138-66-2)
LC50 fish 1 *491 mg/l Rainbow Trout; 96 hour*

· **Persistence and degradability**
HaloKlear DBP-2100 Socks (11138-66-2)
Persistence and degradability *The product is biodegradable*

· **Bioaccumulative potential**
HaloKlear DBP-2100 Socks (11138-66-2)
Bioaccumulative potential *Inherently biodegradable*

· **Mobility in soil**
HaloKlear DBP-2100 Socks (11138-66-2)
Mobility in soil *Not available*

· **Other adverse effects**

Effect on Global warming	*: No known ecological damaged caused by this product.*
Other information	*: No other effects known.*

13 DISPOSAL CONSIDERATIONS

· **Waste treatment methods**

Waste disposal recommendations	*: Dispose of contents/container in accordance with Licensed collector's sorting instructions.*
Ecology – waste materials	*: None known.*

Safety Data Sheet

Trade Name: HaloKlear DBP-2100 Socks

14 TRANSPORT INFORMATION

UN-No.(DOT): *: Non Regulated*
UN-No. (IMDG): *: Non Regulated*
UN-No. (IATA): *: Non Regulated*

· **UN proper shipping name**
Proper Shipping Name (DOT): *: Not applicable*
Proper Shipping Name (IMDG): *: Not applicable*
Proper Shipping Name (IATA): *: Not applicable*

· **Transport hazard class(es)**
Transport hazard class(es) (DOT): *: Not applicable*
Transport hazard class(es) (IMDG): *: Not applicable*
Transport hazard class(es) (IATA): *: Not applicable*

· **Packing group**
Packing group (DOT): *: Not applicable*
Packing group (IMDG): *: Not applicable*
Packing group (IATA): *: Not applicable*

· **Environmental hazards**
Marine pollutant(IMDG): *: No*
Marine pollutant(IATA): *: No*

15 REGULATORY INFORMATION

· **US Federal regulations**
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency ToxicSubstances Control Act (TSCA) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

· **International Regulations**
Canada
Aluminum chloride hydroxide sulfate (39290-78-3)
No additional information available

Safety Data Sheet

Trade Name: HaloKlear DBP-2100 Socks

15 REGULATORY INFORMATION

· **US State regulations**
California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm.

16 OTHER INFORMATION

Other information:	*: None*
NFPA health hazard	*: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.*
NFPA fire hazard	*: 0 - Materials that will not burn.*
NFPA reactivity	*: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.*
NFPA specific hazard	*: NA - Not Applicable*
HMIS III Rating	
Health	*: 0 - No significant risk to health*
Flammability	*: 0*
Physical	*: 0*
Personal Protection	*: B*

SOUND ENVIRONMENTAL CONCEPTS

Safety Data Sheet

acc. to OSHA HCS

1 IDENTIFICATION

· **Product identifier**

· **Trade name:** HaloKlear: Gel-Floc

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**
Sound Environmental Concepts
22726 102nd Ave SE, Woodinville, WA 98077
1 (206) 730 - 5376
ray@soundenvirocon.com

· **Information department:** Product safety department

· **Telephone number:**
+ 1 (206) 730 – 5376

· Information department: Product safety department

· Emergency telephone number: +1 (800) 424-9300 (24 Hours)
During normal opening times: +1 (425) 881-6464
CHEMTREC (Domestic, North America) +1-703-527-3887 CHEMTREC (International, collect calls accepted)

2 HAZARD(S) IDENTIFICATION

· **Classification of the substance or mixture**
The product is not classified according to the Globally Harmonized System (GHS).

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** *Not applicable.*
Information concerning particular hazards for human and environment:
The product does not have to be labeled due to the calculation procedure of international guidelines
Classification system:
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Safety Data Sheet

Trade Name: HaloKlear: Gel-Floc

2 HAZARD(S) IDENTIFICATION CONTD.

· **Label elements**
· **Labelling according to EU guidelines:**
Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations according to directives on hazardous materials.

· **Classification System**
· **NFPA ratings (scale 0 - 4)**
· *Health = 0*
· *Fire = 0*
· *Reactivity = 0*

· **HMIS-ratings (scale 0 - 4)**
· *Health = 0*
· *Fire = 0*
· *Reactivity = 0*

· *Other hazards*
· *Results of PBT and vPvB assessment*
· *PBT: Not applicable*
· *vPvB: Not applicable*

3 COMPOSITION/INFORMATION ON INGREDIENTS

· **Chemical characterization:** *Mixtures*
· **Description:** *Mixture of the substances listed below with nonhazardous additions.*
· **Dangerous components:** *Void*

4 FIRST-AID MEASURES

· **Description of first aid measures**
· **General information:** *No special measures required.*
· **After inhalation:** *Supply fresh air; consult doctor in case of complaints.*
· **After skin contact:** *Generally the product does not irritate the skin.*
· **After eye contact:** *Rinse opened eye for several minutes under running water.*
· **After swallowing:** *If symptoms persist consult doctor.*

Safety Data Sheet

Trade Name: HaloKlear: Gel-Floc

4 FIRST AID MEASURES CONTD.

· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available

5 FIRE-FIGHTING MEASURES

· **Extinguishing media**
· **Suitable extinguishing agents:** *CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.*
· **Special hazards arising from the substance or mixture** *No further relevant information available.*
· **Advice for firefighters**
· **Protective equipment:** *No special measures required.*

6 ACCIDENTAL RELEASE MEASURES

· **Personal precautions, protective equipment and emergency procedures** *Not required.*
· **Environmental precautions:** *Do not allow to enter sewers/ surface or ground*
· **Methods and material for containment and cleaning up:** *Pick up mechanically*
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 HANDLING AND STORAGE

· **Handling:**
· **Precautions for safe handling** *No special measures required.*
· **Information about protection against explosions and fires:** *No special measures required.*
· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** *No special requirements.*
· **Information about storage in one common storage facility:** *Not required.*
· **Further information about storage conditions:** *None.*
· **Specific end use(s)** *Water flocculent*

Safety Data Sheet

Trade Name: HaloKlear: Gel-Floc

8 EXPOSURE CONTROLS/PERSONAL PROTECTION CONTD.

· **Additional information about design of technical systems:** *No further data; see item 7.*
· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **Additional information:** *The lists that were valid during the creation were used a basis.*
· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
· **Breathing equipment:** *Not required.*
· **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can't be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** *Not required.*

9 PHYSICAL AND CHEMICAL PROPERTIES

· **Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**
· **Form:** *Powder*
· **Color:** *Whitish*
· **Odor:** *Product specific*
· **Odour threshold:** *Not determined*

---

pH-value at 20 °C (68 °F): *Not applicable*

Safety Data Sheet

Trade Name: HaloKlear: Gel-Floc

9 PHYSICAL AND CHEMICAL PROPERTIES CONTD.

· **Change in condition**	
· **Melting point/Melting range:**	*Undetermined*
· **Boiling point/Boiling range:**	*> 999 °C (> 1830 °F)*
· **Flash point:**	*Not applicable*
· **Flammability (solid, gaseous):**	*Not determined*
· **Ignition temperature:**	
· **Decomposition temperature:**	*Not determined*
· **Auto igniting:**	*Product is not selfigniting*
· **Danger of explosion:**	*Product does not present an explosion hazard.*
· **Explosion limits:**	
Lower:	*Not determined*
Upper:	*Not determined*
· **Vapor pressure at 20 °C (68 °F):**	*Not applicable*
· **Density at 20 °C (68 °F):**	*Not determined*
· **Relative density**	*Not determined*
· **Vapour density**	*Not applicable*
· **Evaporation rate**	*Not applicable*
· **Solubility in / Miscibility with**	
Water:	*Insoluble*
· **Partition coefficient (n-octanol/water):**	*Not determined*
· **Viscosity:**	
Dynamic:	*Not applicable*
Kinematic:	*Not applicable*

Safety Data Sheet

Trade Name: HaloKlear: Gel-Floc

9 PHYSICAL AND CHEMICAL PROPERTIES CONTD.

· **Solvent content:**
Organic solvents: *0.0 %*
Solids content: 100.0%
· **Other information** *No further relevant information available.*

10 STABILITY AND REACTIVITY

· **Reactivity**
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
· **Possibility of hazardous reactions** *No dangerous reactions known.*
· **Conditions to avoid** *No further relevant information available.*
· **Incompatible materials:** *No further relevant information available.*
· **Hazardous decomposition products:** *No dangerous decomposition products known.*

11 TOXICOLOGICAL INFORMATION

· **Information on toxicological effects**
· **Acute toxicity:**
· **Primary irritant effect:**
· **on the skin:** *No irritant effect.*
· **on the eye:** *No irritating effect.*
· **Sensitization:** *No sensitizing effects known.*
· **Additional toxicological information:**
The product is not subject to classification according to internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

Safety Data Sheet

Trade Name: HaloKlear: Gel-Floc

11 TOXICOLOGICAL INFORMATION CONTD.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

12 ECOLOGICAL INFORMATION

· **Toxicity**
· **Aquatic toxicity:** *No further relevant information available.*
· **Persistence and degradability** *No further relevant information available.*
· **Behavior in environmental systems:**
· **Bioaccumulative potential** *No further relevant information available.*
· **Mobility in soil** *No further relevant information available.*
· **Additional ecological information:**
· **General notes:** *Water hazard class 1 (self-assessment): Slightly hazardous for water.*
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **Results of PBT and vPvB assessment**
· **PBT:** *Not applicable.*
· **vPvB:** *Not applicable.*
· **Other adverse effects** *No further relevant information available.*

13 DISPOSAL CONSIDERATIONS

· **Waste treatment methods**
· **Recommendation:** *Smaller quantities can be disposed of with household waste.*
· **Uncleaned packaging:**
· **Recommendation:** *Disposal must be made according to official regulations.*

14 TRANSPORT INFORMATION

· **UN-Number**
· **DOT, IMDG, IATA** *Not regulated*

· **UN proper shipping name**
· **DOT, IMDG, IATA** *Not regulated*

Safety Data Sheet

Trade Name: HaloKlear: Gel-Floc

14 TRANSPORT INFORMATION CONTD.

· **Transport hazard class(es)**
· **DOT, IMDG, IATA**
· **Class** *Not regulated*

· **Packing group**
· **DOT, IMDG, IATA** *Not regulated*

· **Special precautions for user** *Not applicable*

· **Transport in bulk according to Annex II of**
· **MARPOL73/78 and the IBC Code** *Not applicable*

· **UN "Model Regulation":** -

15 REGULATORY INFORMATION

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

· **Section 355 (extremely hazardous substances):**
None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**
None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act):**
All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**
None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients are listed.

Safety Data Sheet

Trade Name: HaloKlear: Gel-Floc

15 REGULATORY INFORMATION CONTD.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients are listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
None of the ingredients are listed.

· **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients are listed.

· **Product related hazard informations:**
Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations according to directives on hazardous materials.
· **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

16 OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** *Environment protection department.*
· **Contact: Mrs. Jackson**
Date of preparation / last revision 02/09/2015 / - Present
· **Abbreviations and acronyms:**
ADR: *Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International*
Carriage of Dangerous Goods by Road)
IMDG: *International Maritime Code for Dangerous Goods*
DOT: US Department of Transportation
IATA: *International Air Transport Association*
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: *European List of Notified Chemical Substances*

Safety Data Sheet

Trade Name: HaloKlear: Gel-Floc

16 OTHER INFORMATION CONTD.

CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: *National Fire Protection Association (USA)*
HMIS: *Hazardous Materials Identification System (USA)*

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report



Technical Report for

Tantara Corporation

USACE Buffalo Nike Missle UST, East Aurora, NY

16-299

SGS Job Number: JC71604

Sampling Date: 08/08/18

Report to:

Tantara Corporation
54 Mason Street
Worcester, MA 01610
mlovejoy@tantaracorp.com

ATTN: Mark Lovejoy

Total number of pages in report: **1294**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A. Paul Ioannidis
General Manager

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

SGS is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

Please share your ideas about how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Table of Contents

Section 1: Sample Summary 4
Section 2: Case Narrative/Conformance Summary 5
Section 3: Summary of Hits 8
Section 4: Sample Results 9
4.1: JC71604-1: SILO 6 WATERR 10
Section 5: Misc. Forms 19
5.1: Chain of Custody 20
5.2: Sample Tracking Chronicle 22
5.3: Internal Chain of Custody 23
Section 6: MS Volatiles - QC Data Summaries 25
6.1: Method Blank Summary 26
6.2: Blank Spike Summary 29
6.3: Matrix Spike/Matrix Spike Duplicate Summary 31
6.4: Instrument Performance Checks (BFB) 33
6.5: Internal Standard Area Summaries 36
6.6: Surrogate Recovery Summaries 37
6.7: Initial and Continuing Calibration Summaries 38
Section 7: MS Volatiles - Raw Data 55
7.1: Samples 56
7.2: Method Blanks 58
7.3: Blank Spikes 61
7.4: Matrix Spike/Matrix Spike Duplicates 65
7.5: Instrument Performance Checks (BFB) 73
7.6: Initial and Continuing Calibrations 79
7.7: Instrument Run Logs 126
Section 8: MS Semi-volatiles - QC Data Summaries 130
8.1: Method Blank Summary 131
8.2: Blank Spike/Blank Spike Duplicate Summary 137
8.3: Instrument Performance Checks (DFTPP) 143
8.4: Internal Standard Area Summaries 153
8.5: Surrogate Recovery Summaries 155
8.6: Initial and Continuing Calibration Summaries 156
Section 9: MS Semi-volatiles - Raw Data 199
9.1: Samples 200
9.2: Method Blanks 202
9.3: Blank Spike/Blank Spike Duplicates 210
9.4: Instrument Performance Checks (DFTPP) 226
9.5: Initial and Continuing Calibrations 289
9.6: Instrument Run Logs 536
9.7: Prep Logs 553
Section 10: GC/LC Semi-volatiles - QC Data Summaries 559
10.1: Method Blank Summary 560

Table of Contents

10.2: Blank Spike/Blank Spike Duplicate Summary 561
10.3: GC Identification Summaries (Hits) 562
10.4: Surrogate Recovery Summaries 564
10.5: GC Surrogate Retention Time Summaries 565
10.6: Initial and Continuing Calibration Summaries 566
Section 11: GC/LC Semi-volatiles - Raw Data 599
11.1: Samples 600
11.2: Method Blanks 602
11.3: Blank Spike/Blank Spike Duplicates 604
11.4: Initial and Continuing Calibrations 630
11.5: Instrument Run Logs 861
11.6: Prep Logs 866
Section 12: Metals Analysis - QC Data Summaries 870
12.1: Inst QC MA45052: Hg 871
12.2: Inst QC MA45064: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag 886
12.3: Inst QC MA45074: Al,Se 912
12.4: Prep QC MP8567: Hg 934
12.5: Prep QC MP8578: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag 938
12.6: IDL and Linear Range Summaries 943
Section 13: Metals Analysis - Raw Data 949
13.1: Raw Data MA45052 950
13.2: Raw Data MA45064 953
13.3: Raw Data MA45074 1096
13.4: Prep Logs 1215
Section 14: General Chemistry - QC Data Summaries 1222
14.1: Method Blank and Spike Results Summary 1223
14.2: Duplicate Results Summary 1224
14.3: Matrix Spike Results Summary 1225
14.4: Matrix Spike Duplicate Results Summary 1226
14.5: Inst QC GN84249: Total Organic Carbon 1227
Section 15: General Chemistry - Raw Data 1231
15.1: Raw Data GN84085: Solids, Total Suspended 1232
15.2: Raw Data GN84202: HEM Oil and Grease 1235
15.3: Raw Data GN84249: Total Organic Carbon 1239
15.4: Raw Data GN84281: Chemical Oxygen Demand 1291

SGS North America Inc.

Sample Summary

Tantara Corporation

Job No: JC71604

USACE Buffalo Nike Missle UST, East Aurora, NY
Project No: 16-299

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JC71604-1	08/08/18	08:00	MH	08/09/18	AQ	Ground Water	SILO 6 WATERR

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Tantara Corporation	**Job No**	JC71604
Site:	USACE Buffalo Nike Missle UST, East Aurora, NY	**Report Date**	8/16/2018 4:49:53 PM

On 08/09/2018, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.7 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC71604 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** V4D3878

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC71603-3MS, JC71603-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC71604-1 for Dichlorodifluoromethane: Associated CCV outside of control limits low.

MS Semi-volatiles By Method SW846 8270D

Matrix: AQ **Batch ID:** OP14177

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JC71604-1 for 4-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- OP14177-BSD for Benzidine: Outside of in house control limits.
- JC71604-1 for 2-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JC71604-1 for Benzidine: Associated CCV outside of control limits high, sample was ND.
- JC71604-1 for Benzoic Acid: Associated CCV outside of control limits high, sample was ND.
- JC71604-1 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JC71604-1 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JC71604-1 for Hexachlorocyclopentadiene: Associated CCV outside of control limits high, sample was ND.
- OP14177-BSD for Benzidine: Analytical precision exceeds in-house control limits.
- JC71604-1 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.

GC/LC Semi-volatiles By Method SW846 8082A

Matrix: AQ **Batch ID:** OP14250

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Metals Analysis By Method SW846 6020B

Matrix: AQ **Batch ID:** MP8578

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC71649-3MS, JC71649-3MSD, JC71649-3SDL, JC71649-3FSDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Aluminum, Arsenic, Cadmium, Copper, Iron, Lead, Selenium, Silver, Aluminum are outside control limits for sample MP8578-SD1, MP8578-SD2. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Samples(s) JC71604-1: New York does not offer 3010A certification for antimony and silver. The laboratory is certified for method 3010A (Acid Digestion for Total Metals) for all other metals and is certified for the associated analytical methods of 6010C (ICP Analysis) and 6020A (ICP-MS Analysis). New York does certify for method 3005A (Acid Digestion for Total Recoverable or Dissolved Metals) for antimony and silver and the laboratory holds that certification, but that provides total recoverable rather than total metals results.
- MP8578-SD1 for Chromium: Serial dilution indicates possible matrix interference.
- MP8578-SD2 for Chromium: Serial dilution indicates possible matrix interference.

Metals Analysis By Method SW846 7470A

Matrix: AQ **Batch ID:** MP8567

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC71534-1MS, JC71534-1MSD were used as the QC samples for metals.

General Chemistry By Method EPA 1664A

Matrix: AQ **Batch ID:** GP15240

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC71381-6MS, JC71500-1DUP were used as the QC samples for HEM Oil and Grease.

General Chemistry By Method SM2540 D-11

Matrix: AQ **Batch ID:** GN84085

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC71638-2DUP were used as the QC samples for Solids, Total Suspended.

General Chemistry By Method SM4500H+ B-11

Matrix: AQ **Batch ID:** R172093

- The data for SM4500H+ B-11 meets quality control requirements.
- JC71604-1 for pH: Sample received out of holding time for pH analysis.

General Chemistry By Method SM5220 C-11,HACH8000

Matrix: AQ **Batch ID:** GP15280

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC71604-1DUP, JC71604-1MS were used as the QC samples for Chemical Oxygen Demand.

General Chemistry By Method SM5310 B-11

Matrix:	AQ	Batch ID:	GP15279

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC71131-2MS, JC71131-2MSD were used as the QC samples for Total Organic Carbon.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JC71604
Account: Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Collected: 08/08/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC71604-1	**SILO 6 WATERR**					
Aluminum		207	50		ug/l	SW846 6020B
Arsenic		4.9	1.0		ug/l	SW846 6020B
Barium		42.5	2.0		ug/l	SW846 6020B
Iron		278	50		ug/l	SW846 6020B
Chemical Oxygen Demand		25.3	20		mg/l	SM5220 C-11,HACH8000
Solids, Total Suspended		11.8	4.0		mg/l	SM2540 D-11
Total Organic Carbon		7.3	1.0		mg/l	SM5310 B-11
pH [a]		7.39			su	SM4500H + B-11

(a) Sample received out of holding time for pH analysis.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	SILO 6 WATERR		
Lab Sample ID:	JC71604-1	**Date Sampled:**	08/08/18
Matrix:	AQ - Ground Water	**Date Received:**	08/09/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D89157.D	1	08/11/18 16:48	EH	n/a	n/a	V4D3878
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [a]	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SILO 6 WATERR		
Lab Sample ID:	JC71604-1	**Date Sampled:**	08/08/18
Matrix:	AQ - Ground Water	**Date Received:**	08/09/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	90%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	98%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SILO 6 WATERR		
Lab Sample ID:	JC71604-1	**Date Sampled:**	08/08/18
Matrix:	AQ - Ground Water	**Date Received:**	08/09/18
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	SILO 6 WATERR		
Lab Sample ID:	JC71604-1	**Date Sampled:**	08/08/18
Matrix:	AQ - Ground Water	**Date Received:**	08/09/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2P81787.D	1	08/15/18 15:17	AR	08/10/18 06:40	OP14177	E2P3603
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid [a]	ND	20	2.0	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol [a]	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol [a]	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine [a]	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate [a]	ND	2.0	0.46	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.27	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SILO 6 WATERR		
Lab Sample ID:	JC71604-1	**Date Sampled:**	08/08/18
Matrix:	AQ - Ground Water	**Date Received:**	08/09/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate [a]	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene [a]	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SILO 6 WATERR		
Lab Sample ID:	JC71604-1	**Date Sampled:**	08/08/18
Matrix:	AQ - Ground Water	**Date Received:**	08/09/18
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	39%		10-110%
4165-62-2	Phenol-d5	28%		10-110%
118-79-6	2,4,6-Tribromophenol	80%		36-151%
4165-60-0	Nitrobenzene-d5	70%		34-128%
321-60-8	2-Fluorobiphenyl	69%		38-119%
1718-51-0	Terphenyl-d14	78%		26-129%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	SILO 6 WATERR		
Lab Sample ID:	JC71604-1	**Date Sampled:**	08/08/18
Matrix:	AQ - Ground Water	**Date Received:**	08/09/18
Method:	SW846 8082A SW846 3510C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX233813.D	1	08/15/18 05:26	SK	08/14/18 08:45	OP14250	GXX6439
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.098	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.21	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.063	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.21	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.076	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	0.087	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	0.097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	111%		11-166%
877-09-8	Tetrachloro-m-xylene	108%		11-166%
2051-24-3	Decachlorobiphenyl	105%		10-150%
2051-24-3	Decachlorobiphenyl	109%		10-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SILO 6 WATERR		
Lab Sample ID:	JC71604-1	**Date Sampled:**	08/08/18
Matrix:	AQ - Ground Water	**Date Received:**	08/09/18
		Percent Solids:	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	207	50	ug/l	2	08/11/18	08/13/18	MS	SW846 6020B [3]	SW846 3010A [5]
Arsenic	4.9	1.0	ug/l	2	08/11/18	08/12/18	ZC	SW846 6020B [2]	SW846 3010A [5]
Barium	42.5	2.0	ug/l	2	08/11/18	08/12/18	ZC	SW846 6020B [2]	SW846 3010A [5]
Cadmium	< 1.0	1.0	ug/l	2	08/11/18	08/12/18	ZC	SW846 6020B [2]	SW846 3010A [5]
Chromium	< 2.0	2.0	ug/l	2	08/11/18	08/12/18	ZC	SW846 6020B [2]	SW846 3010A [5]
Copper	< 4.0	4.0	ug/l	2	08/11/18	08/12/18	ZC	SW846 6020B [2]	SW846 3010A [5]
Iron	278	50	ug/l	2	08/11/18	08/12/18	ZC	SW846 6020B [2]	SW846 3010A [5]
Lead	< 1.0	1.0	ug/l	2	08/11/18	08/12/18	ZC	SW846 6020B [2]	SW846 3010A [5]
Mercury	< 0.20	0.20	ug/l	1	08/10/18	08/10/18	EAL	SW846 7470A [1]	SW846 7470A [4]
Selenium	< 2.5	2.5	ug/l	5	08/11/18	08/13/18	MS	SW846 6020B [3]	SW846 3010A [5]
Silver	< 1.0	1.0	ug/l	2	08/11/18	08/12/18	ZC	SW846 6020B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA45052
(2) Instrument QC Batch: MA45064
(3) Instrument QC Batch: MA45074
(4) Prep QC Batch: MP8567
(5) Prep QC Batch: MP8578

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SILO 6 WATERR		
Lab Sample ID:	JC71604-1	**Date Sampled:**	08/08/18
Matrix:	AQ - Ground Water	**Date Received:**	08/09/18
		Percent Solids:	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chemical Oxygen Demand	25.3	20	mg/l	1	08/15/18 09:43	MP	SM5220 C-11,HACH8000
HEM Oil and Grease	< 5.0	5.0	mg/l	1	08/13/18 16:00	TM	EPA 1664A
Solids, Total Suspended	11.8	4.0	mg/l	1	08/10/18 10:54	RC	SM2540 D-11
Total Organic Carbon	7.3	1.0	mg/l	1	08/15/18 05:44	CD	SM5310 B-11
pH [a]	7.39		su	1	08/09/18 15:30	SUB	SM4500H+ B-11

(a) Sample received out of holding time for pH analysis.

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

GW

JC71604

PAGE 1 OF 1

SGS ACCUTEST — CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # 455763494419 | Bottle Order Control # 25-08218-98 | SGS Accutest Quote # | SGS Accutest Job # JC71604

Client / Reporting Information

Company Name: TANTARA Corp.
Street Address: 54 Mason St.
City State Zip: Worcester, MA 01610
Project Contact: Mark Lovejoy | E-mail: mlovejoy@tantara.com
Phone #: 508-752-5599 | Fax #:
Sampler(s) Name(s): Matt Herbert | Phone #:

Project Information

Project Name: Buffalo N. Ln
Street:
City State: E. Aurora, NY
Project #:
Client Purchase Order #: 16-299
Project Manager: M. Lovejoy

Billing Information (If different from Report to)

Company Name: TANTARA
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOCs 8260	SVOCs 8270	Metals RCRA 8+Fe,Al,Mn	PCBs 8082	O&G 1664	TSS 2540	COD 5220	pH	TOC	LAB USE ONLY
1	SILO 6 WATER		8-8-18	0800	MH	GW	15		✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	L29 E103 A17 MS 19K1 V36

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [X] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

INITIAL ASESSMENT JR 7A
LABEL VERIFICATION
Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Matt Herbert	8-8-18 0900	1 FX	2 FX	8/9/18 9:45	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp.
5		5				✓	2.8

5.1 5

SGS Sample Receipt Summary

Job Number: JC71604 **Client:** TANTARA CORPORATION **Project:** USACE BUFFALO NIKE MISSLE UST, EAST AU

Date / Time Received: 8/9/2018 9:45:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.8);

Cooler Temps (Corrected) °C: Cooler 1: (2.7);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

Internal Sample Tracking Chronicle

Tantara Corporation

Job No: JC71604

USACE Buffalo Nike Missle UST, East Aurora, NY
Project No: 16-299

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC71604-1	Collected: 08-AUG-18 08:00 By: MH		Received: 09-AUG-18 By: AS			
SILO 6 WATERR						
JC71604-1	SM4500H+ B-11	09-AUG-18 15:30	SUB			PH
JC71604-1	SM2540 D-11	10-AUG-18 10:54	RC			TSS
JC71604-1	SW846 7470A	10-AUG-18 17:06	EAL	10-AUG-18	EAL	HG
JC71604-1	SW846 8260C	11-AUG-18 16:48	EH			V8260STD
JC71604-1	SW846 6020B	12-AUG-18 18:12	ZC	11-AUG-18	BP	AGMS,ASMS,BAMS,CDMS,CRMS, CUMS,FEMS,PBMS
JC71604-1	EPA 1664A	13-AUG-18 16:00	TM	13-AUG-18	TM	OG1664
JC71604-1	SW846 6020B	13-AUG-18 16:32	MS	11-AUG-18	BP	SEMS
JC71604-1	SW846 6020B	13-AUG-18 16:37	MS	11-AUG-18	BP	ALMS
JC71604-1	SW846 8082A	15-AUG-18 05:26	SK	14-AUG-18	JS	P8082PCB11
JC71604-1	SM5310 B-11	15-AUG-18 05:44	CD	14-AUG-18	CD	TOC
JC71604-1	SM5220 C-11,HACH8000	15-AUG-18 09:43	MP	14-AUG-18	ST	COD
JC71604-1	SW846 8270D	15-AUG-18 15:17	AR	10-AUG-18	BJ	AB8270STD

SGS Internal Chain of Custody

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Received: 08/09/18

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC71604-1.1	Secured Storage	Matthew Robbins	08/10/18 16:59	Retrieve from Storage
JC71604-1.1	Matthew Robbins	Secured Staging Area	08/10/18 16:59	Return to Storage
JC71604-1.1	Secured Storage	Sahara Feliciano	08/12/18 14:29	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC71604-1.1	Sahara Feliciano	Secured Staging Area	08/12/18 14:29	Return to Storage
JC71604-1.1	Secured Staging Area	Tharun Murali	08/13/18 08:25	Retrieve from Storage
JC71604-1.1	Tharun Murali		08/13/18 12:50	Depleted
JC71604-1.2	Secured Storage	Matthew Robbins	08/10/18 16:59	Retrieve from Storage
JC71604-1.2	Matthew Robbins	Secured Staging Area	08/10/18 16:59	Return to Storage
JC71604-1.2	Secured Staging Area	Todd Shoemaker	08/13/18 11:40	Retrieve from Storage
JC71604-1.2	Todd Shoemaker	Secured Storage	08/13/18 11:41	Return to Storage
JC71604-1.2	Secured Storage	Todd Shoemaker	08/13/18 13:57	Retrieve from Storage
JC71604-1.2	Todd Shoemaker	Secured Staging Area	08/13/18 13:57	Return to Storage
JC71604-1.2	Secured Staging Area	Tharun Murali	08/13/18 14:02	Retrieve from Storage
JC71604-1.2	Tharun Murali	Secured Storage	08/13/18 15:23	Return to Storage
JC71604-1.3	Secured Storage	Matthew Robbins	08/13/18 20:12	Retrieve from Storage
JC71604-1.3	Matthew Robbins	Secured Staging Area	08/13/18 20:12	Return to Storage
JC71604-1.3	Secured Staging Area	Jonathan Stanley	08/14/18 07:44	Retrieve from Storage
JC71604-1.3	Jonathan Stanley		08/14/18 16:55	Depleted
JC71604-1.3.1	Jonathan Stanley	Organics Prep	08/14/18 07:47	Extract from JC71604-1.3
JC71604-1.3.1	Organics Prep	Jonathan Stanley	08/14/18 16:50	Extract from JC71604-1.3
JC71604-1.3.1	Jonathan Stanley	Extract Storage	08/14/18 16:50	Return to Storage
JC71604-1.3.1	Extract Storage	Christine Phillips	08/15/18 04:32	Retrieve from Storage
JC71604-1.3.1	Christine Phillips	GCXX	08/15/18 04:33	Load on Instrument
JC71604-1.3.1	GCXX	Summer Kotb	08/16/18 11:57	Unload from Instrument
JC71604-1.3.1	Summer Kotb	Extract Freezer	08/16/18 11:59	Return to Storage
JC71604-1.3.2	Jonathan Stanley	Organics Prep	08/14/18 07:47	Extract from JC71604-1.3
JC71604-1.3.2	Organics Prep	Jonathan Stanley	08/14/18 16:49	Extract from JC71604-1.3
JC71604-1.3.2	Jonathan Stanley	Extract Storage	08/14/18 16:49	Return to Storage
JC71604-1.4	Secured Storage	Christopher Hall	08/09/18 22:21	Retrieve from Storage
JC71604-1.4	Christopher Hall	Secured Staging Area	08/09/18 22:21	Return to Storage
JC71604-1.4	Secured Staging Area	Lionel (Tiger) Thomas	08/10/18 04:25	Retrieve from Storage
JC71604-1.4	Lionel (Tiger) Thomas		08/10/18 13:49	Depleted
JC71604-1.4.1	Lionel (Tiger) Thomas	Organics Prep	08/10/18 04:27	Extract from JC71604-1.4
JC71604-1.4.1	Organics Prep	Vikas Parikh	08/10/18 15:09	Extract from JC71604-1.4
JC71604-1.4.1	Vikas Parikh	Extract Storage	08/10/18 15:09	Return to Storage
JC71604-1.4.1	Extract Storage	Christopher Sowa	08/11/18 00:24	Retrieve from Storage
JC71604-1.4.1	Christopher Sowa	GCMSP	08/11/18 00:24	Load on Instrument

SGS Internal Chain of Custody

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Received: 08/09/18

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC71604-1.4.1	GCMSP	Christine Change	08/14/18 16:27	Unload from Instrument
JC71604-1.4.1	Christine Change	Extract Freezer	08/14/18 16:27	Return to Storage
JC71604-1.4.1	Extract Freezer	Angela Rastelli	08/15/18 12:00	Retrieve from Storage
JC71604-1.4.1	Angela Rastelli	GCMS2P	08/15/18 12:00	Load on Instrument
JC71604-1.4.1	GCMS2P	Christine Change	08/16/18 16:37	Unload from Instrument
JC71604-1.4.1	Christine Change	Extract Freezer	08/16/18 16:37	Return to Storage
JC71604-1.7	Secured Storage	Todd Shoemaker	08/10/18 09:14	Retrieve from Storage
JC71604-1.7	Todd Shoemaker	Secured Staging Area	08/10/18 09:14	Return to Storage
JC71604-1.7	Secured Staging Area	Edouard Adrian Lee	08/10/18 09:19	Retrieve from Storage
JC71604-1.7	Edouard Adrian Lee	Secured Storage	08/10/18 11:57	Return to Storage
JC71604-1.7	Secured Storage	Matthew Robbins	08/10/18 15:44	Retrieve from Storage
JC71604-1.7	Matthew Robbins	Secured Staging Area	08/10/18 15:45	Return to Storage
JC71604-1.7	Secured Staging Area	Bhooma Patel	08/11/18 07:01	Retrieve from Storage
JC71604-1.7	Bhooma Patel	Secured Storage	08/11/18 08:37	Return to Storage
JC71604-1.7.1	Bhooma Patel	Metals Digestion	08/11/18 08:33	Digestate from JC71604-1.7
JC71604-1.7.1	Metals Digestion	Bhooma Patel	08/11/18 08:34	Digestate from JC71604-1.7
JC71604-1.7.1	Wei Zhou	Metals Digestate Storage	08/13/18 07:31	Return to Storage
Analyst unavailable for custody transfer.				
JC71604-1.7.2	Bhooma Patel	Metals Digestion	08/11/18 08:36	Digestate from JC71604-1.7
JC71604-1.7.2	Metals Digestion	Bhooma Patel	08/11/18 08:37	Digestate from JC71604-1.7
JC71604-1.7.2	Bhooma Patel	Metals Digestate Storage	08/11/18 08:37	Return to Storage
JC71604-1.9	Secured Storage	Todd Shoemaker	08/10/18 07:52	Retrieve from Storage
JC71604-1.9	Todd Shoemaker	Secured Staging Area	08/10/18 07:52	Return to Storage
JC71604-1.9	Secured Staging Area	Ruchitaben Chauhan	08/10/18 08:36	Retrieve from Storage
JC71604-1.9	Ruchitaben Chauhan		08/10/18 15:58	Depleted
JC71604-1.10	Secured Storage	Benjamin Gaines	08/13/18 16:37	Retrieve from Storage
JC71604-1.10	Benjamin Gaines	Secured Staging Area	08/13/18 16:37	Return to Storage
JC71604-1.10	Secured Staging Area	Sarvadaman Tripathi	08/14/18 08:16	Retrieve from Storage
JC71604-1.10	Sarvadaman Tripathi	Secured Storage	08/14/18 17:05	Return to Storage
JC71604-1.12	Secured Storage	Todd Shoemaker	08/14/18 08:40	Retrieve from Storage
JC71604-1.12	Todd Shoemaker	Secured Staging Area	08/14/18 08:40	Return to Storage
JC71604-1.12	Secured Staging Area	John Oborne	08/14/18 11:08	Retrieve from Storage
JC71604-1.12	John Oborne	Secured Storage	08/14/18 18:53	Return to Storage
JC71604-1.13	Secured Storage	Payal Rana	08/11/18 10:38	Retrieve from Storage
JC71604-1.13	Payal Rana	GCMS4D	08/11/18 10:38	Load on Instrument
JC71604-1.13	GCMS4D	Robert Szot	08/13/18 14:57	Unload from Instrument
JC71604-1.13	Robert Szot	Secured Storage	08/13/18 14:57	Return to Storage

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D3878-MB	4D89146.D	1	08/11/18	EH	n/a	n/a	V4D3878

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC71604-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	

Method Blank Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D3878-MB	4D89146.D	1	08/11/18	EH	n/a	n/a	V4D3878

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC71604-1

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	97%	80-120%
17060-07-0	1,2-Dichloroethane-D4	93%	81-124%
2037-26-5	Toluene-D8	103%	80-120%
460-00-4	4-Bromofluorobenzene	98%	80-120%

Method Blank Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D3878-MB	4D89146.D	1	08/11/18	EH	n/a	n/a	V4D3878

The QC reported here applies to the following samples: **Method:**

JC71604-1

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D3878-BS	4D89144.D	1	08/11/18	EH	n/a	n/a	V4D3878

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC71604-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	202	101	42-150
71-43-2	Benzene	50	54.0	108	80-120
108-86-1	Bromobenzene	50	51.9	104	82-118
74-97-5	Bromochloromethane	50	54.9	110	84-121
75-27-4	Bromodichloromethane	50	48.8	98	83-120
75-25-2	Bromoform	50	51.9	104	76-129
74-83-9	Bromomethane	50	68.8	138	57-138
78-93-3	2-Butanone (MEK)	200	231	116	64-137
104-51-8	n-Butylbenzene	50	50.0	100	81-123
135-98-8	sec-Butylbenzene	50	49.9	100	84-121
98-06-6	tert-Butylbenzene	50	50.8	102	83-122
56-23-5	Carbon tetrachloride	50	48.7	97	75-135
108-90-7	Chlorobenzene	50	51.2	102	84-117
75-00-3	Chloroethane	50	63.5	127	63-132
67-66-3	Chloroform	50	50.9	102	80-119
74-87-3	Chloromethane	50	56.9	114	46-136
95-49-8	o-Chlorotoluene	50	50.3	101	84-118
106-43-4	p-Chlorotoluene	50	49.7	99	83-116
96-12-8	1,2-Dibromo-3-chloropropane	50	46.9	94	72-127
124-48-1	Dibromochloromethane	50	52.6	105	80-123
106-93-4	1,2-Dibromoethane	50	52.6	105	84-117
95-50-1	1,2-Dichlorobenzene	50	51.2	102	84-119
541-73-1	1,3-Dichlorobenzene	50	51.2	102	81-117
106-46-7	1,4-Dichlorobenzene	50	50.5	101	82-117
75-71-8	Dichlorodifluoromethane	50	49.0	98	36-149
75-34-3	1,1-Dichloroethane	50	55.2	110	79-120
107-06-2	1,2-Dichloroethane	50	46.0	92	78-126
75-35-4	1,1-Dichloroethene	50	55.6	111	69-126
156-59-2	cis-1,2-Dichloroethene	50	54.8	110	80-120
156-60-5	trans-1,2-Dichloroethene	50	55.7	111	76-120
78-87-5	1,2-Dichloropropane	50	52.4	105	82-121
142-28-9	1,3-Dichloropropane	50	50.4	101	83-115
594-20-7	2,2-Dichloropropane	50	54.5	109	65-133
563-58-6	1,1-Dichloropropene	50	52.1	104	80-121
10061-01-5	cis-1,3-Dichloropropene	50	51.8	104	83-120
10061-02-6	trans-1,3-Dichloropropene	50	53.5	107	82-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D3878-BS	4D89144.D	1	08/11/18	EH	n/a	n/a	V4D3878

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC71604-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	51.4	103	80-120
87-68-3	Hexachlorobutadiene	50	51.7	103	75-129
98-82-8	Isopropylbenzene	50	51.3	103	83-120
99-87-6	p-Isopropyltoluene	50	51.8	104	83-122
1634-04-4	Methyl Tert Butyl Ether	50	55.0	110	80-119
108-10-1	4-Methyl-2-pentanone(MIBK)	200	198	99	71-131
74-95-3	Methylene bromide	50	49.9	100	85-120
75-09-2	Methylene chloride	50	57.2	114	77-120
91-20-3	Naphthalene	50	48.5	97	73-131
103-65-1	n-Propylbenzene	50	50.3	101	82-119
100-42-5	Styrene	50	53.3	107	82-122
630-20-6	1,1,1,2-Tetrachloroethane	50	52.0	104	82-121
79-34-5	1,1,2,2-Tetrachloroethane	50	49.2	98	76-119
127-18-4	Tetrachloroethene	50	52.8	106	70-131
108-88-3	Toluene	50	53.2	106	80-120
87-61-6	1,2,3-Trichlorobenzene	50	50.7	101	76-134
120-82-1	1,2,4-Trichlorobenzene	50	51.6	103	79-132
71-55-6	1,1,1-Trichloroethane	50	49.2	98	81-128
79-00-5	1,1,2-Trichloroethane	50	52.6	105	83-118
79-01-6	Trichloroethene	50	51.6	103	80-120
75-69-4	Trichlorofluoromethane	50	49.4	99	64-136
96-18-4	1,2,3-Trichloropropane	50	50.7	101	79-120
95-63-6	1,2,4-Trimethylbenzene	50	51.5	103	84-120
108-67-8	1,3,5-Trimethylbenzene	50	51.4	103	83-119
75-01-4	Vinyl chloride	50	59.7	119	51-135
	m,p-Xylene	100	106	106	80-120
95-47-6	o-Xylene	50	52.1	104	80-120
1330-20-7	Xylene (total)	150	158	105	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	80-120%
17060-07-0	1,2-Dichloroethane-D4	91%	81-124%
2037-26-5	Toluene-D8	101%	80-120%
460-00-4	4-Bromofluorobenzene	98%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC71603-3MS	4D89149.D	5	08/11/18	EH	n/a	n/a	V4D3878
JC71603-3MSD	4D89150.D	5	08/11/18	EH	n/a	n/a	V4D3878
JC71603-3	4D89147.D	5	08/11/18	EH	n/a	n/a	V4D3878

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC71604-1

CAS No.	Compound	JC71603-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		1000	972	97	1000	987	99	2	34-149/17
71-43-2	Benzene	ND		250	249	100	250	258	103	4	54-136/10
108-86-1	Bromobenzene	ND		250	248	99	250	257	103	4	78-122/11
74-97-5	Bromochloromethane	ND		250	256	102	250	258	103	1	79-124/11
75-27-4	Bromodichloromethane	ND		250	235	94	250	238	95	1	79-124/11
75-25-2	Bromoform	ND		250	243	97	250	253	101	4	71-130/11
74-83-9	Bromomethane	ND		250	291	116	250	333	133	13	53-142/14
78-93-3	2-Butanone (MEK)	ND		1000	1130	113	1000	1140	114	1	54-142/15
104-51-8	n-Butylbenzene	ND		250	230	92	250	245	98	6	73-133/12
135-98-8	sec-Butylbenzene	ND		250	230	92	250	246	98	7	76-132/12
98-06-6	tert-Butylbenzene	ND		250	233	93	250	248	99	6	76-131/12
56-23-5	Carbon tetrachloride	ND		250	222	89	250	232	93	4	70-143/12
108-90-7	Chlorobenzene	ND		250	240	96	250	251	100	4	78-123/10
75-00-3	Chloroethane	ND		250	288	115	250	292	117	1	57-141/14
67-66-3	Chloroform	ND		250	235	94	250	241	96	3	76-123/11
74-87-3	Chloromethane	ND		250	257	103	250	260	104	1	43-141/16
95-49-8	o-Chlorotoluene	ND		250	234	94	250	246	98	5	78-124/11
106-43-4	p-Chlorotoluene	ND		250	235	94	250	248	99	5	77-122/11
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	228	91	250	239	96	5	66-130/13
124-48-1	Dibromochloromethane	ND		250	251	100	250	259	104	3	76-125/11
106-93-4	1,2-Dibromoethane	ND		250	255	102	250	265	106	4	78-119/11
95-50-1	1,2-Dichlorobenzene	ND		250	247	99	250	255	102	3	77-123/11
541-73-1	1,3-Dichlorobenzene	ND		250	241	96	250	253	101	5	76-122/11
106-46-7	1,4-Dichlorobenzene	ND		250	239	96	250	251	100	5	76-122/11
75-71-8	Dichlorodifluoromethane	ND		250	229	92	250	230	92	0	31-159/16
75-34-3	1,1-Dichloroethane	ND		250	253	101	250	262	105	3	73-126/11
107-06-2	1,2-Dichloroethane	ND		250	218	87	250	224	90	3	72-131/11
75-35-4	1,1-Dichloroethene	ND		250	252	101	250	264	106	5	63-136/14
156-59-2	cis-1,2-Dichloroethene	ND		250	256	102	250	263	105	3	60-136/11
156-60-5	trans-1,2-Dichloroethene	ND		250	255	102	250	267	107	5	70-126/11
78-87-5	1,2-Dichloropropane	ND		250	248	99	250	253	101	2	78-124/10
142-28-9	1,3-Dichloropropane	ND		250	240	96	250	250	100	4	78-118/11
594-20-7	2,2-Dichloropropane	ND		250	235	94	250	242	97	3	59-141/14
563-58-6	1,1-Dichloropropene	ND		250	236	94	250	246	98	4	75-130/11
10061-01-5	cis-1,3-Dichloropropene	ND		250	249	100	250	255	102	2	79-123/11
10061-02-6	trans-1,3-Dichloropropene	ND		250	248	99	250	261	104	5	77-123/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC71603-3MS	4D89149.D	5	08/11/18	EH	n/a	n/a	V4D3878
JC71603-3MSD	4D89150.D	5	08/11/18	EH	n/a	n/a	V4D3878
JC71603-3	4D89147.D	5	08/11/18	EH	n/a	n/a	V4D3878

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC71604-1

CAS No.	Compound	JC71603-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	ND		250	239	96	250	251	100	5	51-140/20
87-68-3	Hexachlorobutadiene	ND		250	237	95	250	253	101	7	64-141/14
98-82-8	Isopropylbenzene	ND		250	237	95	250	247	99	4	75-129/11
99-87-6	p-Isopropyltoluene	ND		250	240	96	250	254	102	6	76-131/12
1634-04-4	Methyl Tert Butyl Ether	ND		250	260	104	250	265	106	2	72-123/11
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	994	99	1000	1000	100	1	66-136/13
74-95-3	Methylene bromide	ND		250	241	96	250	243	97	1	81-121/11
75-09-2	Methylene chloride	ND		250	266	106	250	271	108	2	73-125/13
91-20-3	Naphthalene	ND		250	230	92	250	244	98	6	62-141/13
103-65-1	n-Propylbenzene	ND		250	232	93	250	245	98	5	68-133/11
100-42-5	Styrene	ND		250	251	100	250	260	104	4	75-129/11
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	248	99	250	258	103	4	77-124/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	242	97	250	248	99	2	71-122/11
127-18-4	Tetrachloroethene	504		250	656	61	250	693	76	5	61-139/11
108-88-3	Toluene	ND		250	244	98	250	261	104	7	60-135/10
87-61-6	1,2,3-Trichlorobenzene	ND		250	236	94	250	251	100	6	70-138/13
120-82-1	1,2,4-Trichlorobenzene	ND		250	240	96	250	254	102	6	72-137/13
71-55-6	1,1,1-Trichloroethane	ND		250	225	90	250	232	93	3	74-138/12
79-00-5	1,1,2-Trichloroethane	ND		250	252	101	250	262	105	4	78-121/11
79-01-6	Trichloroethene	34.3		250	267	93	250	274	96	3	62-141/10
75-69-4	Trichlorofluoromethane	ND		250	230	92	250	239	96	4	57-149/14
96-18-4	1,2,3-Trichloropropane	ND		250	250	100	250	254	102	2	74-122/11
95-63-6	1,2,4-Trimethylbenzene	ND		250	237	95	250	252	101	6	54-143/10
108-67-8	1,3,5-Trimethylbenzene	ND		250	241	96	250	254	102	5	67-133/11
75-01-4	Vinyl chloride	ND		250	265	106	250	270	108	2	43-146/15
	m,p-Xylene	ND		500	490	98	500	512	102	4	50-144/20
95-47-6	o-Xylene	ND		250	246	98	250	254	102	3	63-134/10
1330-20-7	Xylene (total)	ND		750	736	98	750	766	102	4	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JC71603-3	Limits
1868-53-7	Dibromofluoromethane	100%	98%	96%	80-120%
17060-07-0	1,2-Dichloroethane-D4	93%	90%	89%	81-124%
2037-26-5	Toluene-D8	98%	103%	104%	80-120%
460-00-4	4-Bromofluorobenzene	99%	98%	99%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	V4D3846-BFB	**Injection Date:**	07/17/18
Lab File ID:	4D88510.D	**Injection Time:**	20:12
Instrument ID:	GCMS4D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	12255	17.6		Pass
75	30.0 - 60.0% of mass 95	31939	45.8		Pass
95	Base peak, 100% relative abundance	69672	100.0		Pass
96	5.0 - 9.0% of mass 95	4812	6.91		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	56720	81.4		Pass
175	5.0 - 9.0% of mass 174	4359	6.26	(7.69) [a]	Pass
176	95.0 - 101.0% of mass 174	55459	79.6	(97.8) [a]	Pass
177	5.0 - 9.0% of mass 176	3716	5.33	(6.70) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V4D3846-IC3846	4D88511.D	07/17/18	20:41	00:29	Initial cal 0.5
V4D3846-IC3846	4D88512.D	07/17/18	21:10	00:58	Initial cal 1
V4D3846-IC3846	4D88513.D	07/17/18	21:39	01:27	Initial cal 2
V4D3846-IC3846	4D88514.D	07/17/18	22:08	01:56	Initial cal 5
V4D3846-IC3846	4D88515.D	07/17/18	22:37	02:25	Initial cal 10
V4D3846-IC3846	4D88516.D	07/17/18	23:06	02:54	Initial cal 20
V4D3846-ICC3846	4D88517.D	07/17/18	23:34	03:22	Initial cal 50
V4D3846-IC3846	4D88518.D	07/18/18	00:03	03:51	Initial cal 100
V4D3846-IC3846	4D88519.D	07/18/18	00:32	04:20	Initial cal 200
V4D3846-ICV3846	4D88522.D	07/18/18	01:59	05:47	Initial cal verification 50
V4D3846-ICV3846	4D88523.D	07/18/18	02:28	06:16	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	V4D3846-BFB2	**Injection Date:**	07/19/18
Lab File ID:	4D88527.D	**Injection Time:**	09:58
Instrument ID:	GCMS4D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	13084	16.8		Pass
75	30.0 - 60.0% of mass 95	35147	45.3		Pass
95	Base peak, 100% relative abundance	77672	100.0		Pass
96	5.0 - 9.0% of mass 95	5299	6.82		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	64771	83.4		Pass
175	5.0 - 9.0% of mass 174	4969	6.40	(7.67) [a]	Pass
176	95.0 - 101.0% of mass 174	62379	80.3	(96.3) [a]	Pass
177	5.0 - 9.0% of mass 176	4204	5.41	(6.74) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V4D3846-ICV3846	4D88528.D	07/19/18	10:59	01:01	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	V4D3878-BFB	**Injection Date:**	08/11/18
Lab File ID:	4D89142.D	**Injection Time:**	08:31
Instrument ID:	GCMS4D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	10474	15.2		Pass
75	30.0 - 60.0% of mass 95	29893	43.3		Pass
95	Base peak, 100% relative abundance	68992	100.0		Pass
96	5.0 - 9.0% of mass 95	4598	6.66		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	60048	87.0		Pass
175	5.0 - 9.0% of mass 174	4684	6.79	(7.80) [a]	Pass
176	95.0 - 101.0% of mass 174	58365	84.6	(97.2) [a]	Pass
177	5.0 - 9.0% of mass 176	3831	5.55	(6.56) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V4D3878-CC3846	4D89142.D	08/11/18	08:31	00:00	Continuing cal 20
V4D3878-BS	4D89144.D	08/11/18	10:32	02:01	Blank Spike
V4D3878-MB	4D89146.D	08/11/18	11:31	03:00	Method Blank
JC71603-3	4D89147.D	08/11/18	12:00	03:29	(used for QC only; not part of job JC71604)
ZZZZZZ	4D89148.D	08/11/18	12:29	03:58	(unrelated sample)
JC71603-3MS	4D89149.D	08/11/18	12:58	04:27	Matrix Spike
JC71603-3MSD	4D89150.D	08/11/18	13:27	04:56	Matrix Spike Duplicate
ZZZZZZ	4D89152.D	08/11/18	14:24	05:53	(unrelated sample)
ZZZZZZ	4D89153.D	08/11/18	14:53	06:22	(unrelated sample)
ZZZZZZ	4D89154.D	08/11/18	15:22	06:51	(unrelated sample)
ZZZZZZ	4D89155.D	08/11/18	15:51	07:20	(unrelated sample)
ZZZZZZ	4D89156.D	08/11/18	16:19	07:48	(unrelated sample)
JC71604-1	4D89157.D	08/11/18	16:48	08:17	SILO 6 WATERR
ZZZZZZ	4D89158.D	08/11/18	17:17	08:46	(unrelated sample)
ZZZZZZ	4D89164.D	08/11/18	20:09	11:38	(unrelated sample)
ZZZZZZ	4D89165.D	08/11/18	20:38	12:07	(unrelated sample)

Internal Standard Area Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Check Std:	V4D3878-CC3846	**Injection Date:**	08/11/18
Lab File ID:	4D89142.D	**Injection Time:**	08:31
Instrument ID:	GCMS4D	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	171799	8.82	227302	11.30	318955	12.19	255129	15.07	119278	17.17
Upper Limit [a]	343598	9.32	454604	11.80	637910	12.69	510258	15.57	238556	17.67
Lower Limit [b]	85900	8.32	113651	10.80	159478	11.69	127565	14.57	59639	16.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V4D3878-BS	167846	8.83	216283	11.30	303429	12.19	243837	15.07	113847	17.17
V4D3878-MB	181641	8.82	251840	11.31	350367	12.19	275857	15.07	126088	17.17
JC71603-3	165966	8.83	248452	11.31	348727	12.19	268997	15.07	122778	17.17
ZZZZZZ	175680	8.83	242251	11.31	340666	12.20	266287	15.07	122876	17.17
JC71603-3MS	173875	8.83	222460	11.31	316861	12.19	267110	15.07	125230	17.17
JC71603-3MSD	181191	8.83	234539	11.31	328134	12.19	263304	15.07	121915	17.17
ZZZZZZ	174665	8.82	251577	11.31	352579	12.19	273680	15.07	126157	17.17
ZZZZZZ	178742	8.82	251975	11.31	352506	12.19	275378	15.07	124559	17.17
ZZZZZZ	175271	8.83	245027	11.31	342082	12.19	268853	15.07	125177	17.17
ZZZZZZ	173713	8.83	240795	11.31	334363	12.19	260220	15.07	119904	17.17
ZZZZZZ	167448	8.82	240512	11.31	335374	12.19	259640	15.07	119848	17.17
JC71604-1	166145	8.82	237155	11.31	334236	12.19	259336	15.07	119168	17.17
ZZZZZZ	169665	8.83	238757	11.31	336868	12.19	263367	15.07	123456	17.17
ZZZZZZ	155460	8.83	224423	11.31	312695	12.20	244766	15.07	111844	17.17
ZZZZZZ	154636	8.83	227612	11.31	318613	12.20	247969	15.07	114857	17.17

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC71604-1	4D89157.D	95	90	103	98
JC71603-3MS	4D89149.D	100	93	98	99
JC71603-3MSD	4D89150.D	98	90	103	98
V4D3878-BS	4D89144.D	99	91	101	98
V4D3878-MB	4D89146.D	97	93	103	98

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	81-124%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

Initial Calibration Summary

Job Number: JC71604 **Sample:** V4D3846-ICC3846
Account: TCMAW Tantara Corporation **Lab FileID:** 4D88517.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Response Factor Report MS4D

Method : C:\MSDCHEM\1\METHODS\M4D3846.M (RTE Integrator)
Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

Calibration Files
1 =4D88512.D 0.5 =4D88511.D 100 =4D88518.D 50 =4D88517.D
20 =4D88516.D 200 =4D88519.D 5 =4D88514.D 2 =4D88513.D
10 =4D88515.D =

Compound	1	0.5	100	50	20	200	5	2	10	Avg	%RSD
1) tert butyl alcohol-d9 ----------ISTD----------											
2) tertiary butyl alcohol	1.187	1.280	1.322	1.342	1.310	1.224	1.144	1.279		1.261	5.53
3) ethanol	0.114	0.092	0.130	0.136	0.138	0.131	0.123	0.110	0.132	0.123	12.19
4) 1,4-dioxane	0.097	0.115	0.128	0.127	0.112	0.116	0.106	0.122		0.116	9.10
5) I pentafluorobenzene ----------ISTD----------											
6) chlorodifluoromethane	0.485	0.427	0.533	0.554	0.521	0.523	0.510	0.474	0.529	0.506	7.59
7) dichlorodifluoromethane	0.612	0.705	0.711	0.687	0.708	0.632	0.649	0.688		0.674	5.63
8) Freon 142b										0.000	-1.00
9) chloromethane	0.548	0.570	0.535	0.559	0.556	0.531	0.533	0.569	0.566	0.552	2.84
10) vinyl chloride	0.515	0.456	0.604	0.610	0.592	0.598	0.546	0.572	0.589	0.565	8.97
11) 1,3-butadiene---The compound does not meet initial criteria.	0.381	0.361	0.467	0.491	0.459	0.461	0.406	0.429	0.452	0.434	9.97
12) bromomethane		0.229	0.213	0.179		0.159	0.149	0.177		0.184	16.79
13) chloroethane	0.231	0.309	0.311	0.303	0.307	0.275	0.266	0.298		0.287	9.84
14) trichlorofluoromethane	0.642	0.582	0.762	0.752	0.730	0.763	0.662	0.705	0.733	0.704	8.88
15) vinyl bromide---The compound does not meet initial criteria.	0.341	0.455	0.447	0.428	0.464	0.393	0.397	0.420		0.418	9.60
16) ethyl ether		0.242	0.240	0.222	0.239	0.201	0.173	0.214		0.219	11.58
17) acrolein		0.102	0.102	0.094	0.099	0.071		0.083		0.092	13.42
18) freon 113	0.275	0.334	0.340	0.322	0.322	0.305	0.274	0.321		0.312	8.04
19) 1,1-dichloroethene	0.361	0.305	0.411	0.416	0.390	0.403	0.380	0.343	0.384	0.377	9.46
20) acetone	0.151	0.184	0.187	0.180	0.172	0.169	0.150	0.176		0.171	8.13
21) acetonitrile	0.068	0.080	0.082	0.079	0.076	0.075	0.067	0.078		0.076	7.10
22) iodomethane----The compound does not meet initial criteria.		0.279	0.258	0.193	0.276	0.099	0.068	0.140		0.188	46.27
----- Linear regression ----- Coefficient = 0.9993											

Response Ratio = -0.02108 + 0.28212 *A

23)	carbon disulfide											
	0.950	0.920	0.985	1.007	0.958	0.967	0.925	0.849	0.954	0.946	4.78
24)	methylene chloride											
	0.410	0.348	0.432	0.441	0.423	0.422	0.420	0.379	0.423	0.411	7.06
25)	methyl acetate											
		0.426	0.438	0.401	0.412	0.370		0.387		0.405	6.20
26)	methyl tert butyl ether											
	1.193	1.049	1.253	1.268	1.198	1.235	1.158	1.086	1.193	1.181	6.23
27)	trans-1,2-dichloroethene											
	0.399	0.336	0.419	0.428	0.406	0.409	0.389	0.366	0.405	0.395	7.22
28)	di-isopropyl ether											
	1.139	1.053	1.212	1.243	1.180	1.179	1.153	1.035	1.178	1.153	5.96
29)	2-butanone											
		0.077	0.076	0.073	0.074	0.066	0.057	0.070		0.071	9.92
30)	1,1-dichloroethane											
	0.724	0.625	0.758	0.770	0.737	0.740	0.726	0.666	0.740	0.721	6.41
31)	chloroprene											
	0.532	0.481	0.629	0.641	0.606	0.604	0.565	0.498	0.592	0.572	9.99
32)	acrylonitrile											
		0.191	0.191	0.179	0.188	0.158		0.174		0.180	7.12
33)	hexane											
		0.256	0.261	0.243	0.242	0.233	0.202	0.242		0.240	8.08
34)	vinyl acetate											
		0.093	0.091	0.082	0.093	0.065		0.074		0.083	13.84
35)	ethyl tert-butyl ether											
	1.170	1.052	1.252	1.265	1.197	1.232	1.167	1.071	1.198	1.178	6.31
36)	ethyl acetate											
		0.080	0.080	0.077	0.085	0.067		0.077		0.078	7.83
37)	2,2-dichloropropane											
	0.598	0.568	0.596	0.624	0.609	0.574	0.605	0.558	0.614	0.594	3.76
38)	cis-1,2-dichloroethene											
	0.437	0.391	0.469	0.481	0.460	0.459	0.441	0.411	0.456	0.445	6.46
39)	methyl acrylate											
		0.091	0.094	0.085	0.090	0.071		0.078		0.085	10.49
40)	propionitrile											
	0.089	0.078	0.103	0.105	0.100	0.098	0.095	0.087	0.098	0.095	9.15
41)	bromochloromethane											
	0.184		0.218	0.227	0.216	0.213	0.214	0.187	0.216	0.209	7.36
42)	tetrahydrofuran											
		0.088	0.089	0.083	0.086	0.079		0.083		0.085	4.30
43)	chloroform											
	0.484	0.460	0.489	0.506	0.489	0.478	0.483	0.454	0.488	0.481	3.29
44)	t-butyl formate											
		0.342	0.352	0.328	0.340	0.303	0.265	0.315		0.321	9.25
45)	dibromofluoromethane (s)											
	0.444	0.440	0.440	0.440	0.427	0.435	0.438	0.437	0.431	0.437	1.20
46)	methacrylonitrile											
		0.224	0.226	0.213	0.220	0.191		0.207		0.213	6.08
47)	1,1,1-trichloroethane											
	0.637	0.591	0.668	0.691	0.657	0.656	0.649	0.604	0.661	0.646	4.84
48)	cyclohexane											
	0.607	0.423	0.558	0.588	0.552	0.530	0.507	0.541	0.553	0.540	9.77
49)	1,1-dichloropropene											
	0.545	0.473	0.580	0.602	0.574	0.564	0.557	0.510	0.573	0.553	7.12
50)	isobutyl alcohol											
										0.000	-1.00
51)	carbon tetrachloride											
	0.546	0.478	0.589	0.616	0.584	0.575	0.565	0.506	0.587	0.561	7.80

52) tert amyl alcohol
0.025 0.032 0.033 0.032 0.030 0.031 0.026 0.031 0.030 10.07

53) I 1,4-difluorobenzene ----------ISTD----------
54) 1,2-dichloroethane-d4 (s)
0.324 0.324 0.313 0.311 0.310 0.304 0.323 0.318 0.316 0.316 2.25
55) n-butyl alcohol
0.017 0.018 0.017 0.016 0.015 0.013 0.016 0.016 10.19
56) 2,2,4-trimethylpentane
0.727 0.668 0.760 0.788 0.745 0.724 0.732 0.657 0.760 0.729 5.87
57) benzene
1.114 1.045 1.110 1.142 1.115 1.080 1.095 1.032 1.121 1.095 3.30
58) tert-amyl methyl ether
0.162 0.200 0.206 0.196 0.198 0.186 0.163 0.193 0.188 8.98
59) heptane
0.142 0.176 0.179 0.167 0.167 0.159 0.142 0.165 0.162 8.59
60) isopropyl acetate
0.080 0.080 0.075 0.078 0.067 0.072 0.075 6.65
61) 1,2-dichloroethane
0.424 0.385 0.413 0.430 0.418 0.400 0.413 0.377 0.421 0.409 4.40
62) trichloroethene
0.300 0.246 0.314 0.325 0.306 0.305 0.295 0.263 0.306 0.296 8.47
63) ethyl acrylate
0.374 0.487 0.488 0.452 0.477 0.413 0.367 0.439 0.437 11.02
64) 2-nitropropane
0.110 0.114 0.106 0.105 0.099 0.094 0.104 0.105 6.26
65) 2-chloroethyl vinyl ether
0.189 0.168 0.217 0.228 0.210 0.212 0.196 0.176 0.206 0.200 9.81
66) methyl methacrylate
0.102 0.103 0.094 0.101 0.081 0.091 0.095 8.95
67) 1,2-dichloropropane
0.279 0.231 0.301 0.311 0.297 0.299 0.289 0.265 0.297 0.285 8.54
68) dibromomethane
0.194 0.169 0.206 0.216 0.202 0.201 0.197 0.179 0.201 0.196 7.18
69) methylcyclohexane
0.425 0.383 0.473 0.492 0.456 0.454 0.439 0.393 0.460 0.442 8.11
70) bromodichloromethane
0.382 0.359 0.410 0.427 0.397 0.406 0.390 0.364 0.400 0.393 5.52
71) epichlorohydrin
0.037 0.048 0.050 0.046 0.046 0.043 0.040 0.045 0.044 9.58
72) cis-1,3-dichloropropene
0.430 0.390 0.487 0.509 0.466 0.480 0.456 0.411 0.468 0.455 8.39
73) 4-methyl-2-pentanone
0.140 0.166 0.176 0.161 0.161 0.154 0.139 0.157 0.157 7.87
74) 3-methyl-1-butanol
0.021 0.028 0.029 0.026 0.026 0.024 0.021 0.025 0.025 12.58

75) I chlorobenzene-d5 ----------ISTD----------
76) toluene-d8 (s)
1.280 1.273 1.248 1.273 1.292 1.270 1.290 1.294 1.292 1.279 1.17
77) toluene
0.796 0.741 0.796 0.829 0.810 0.789 0.802 0.736 0.816 0.790 4.02
78) trans-1,3-dichloropropene
0.470 0.412 0.515 0.529 0.511 0.515 0.487 0.438 0.500 0.486 8.07
79) ethyl methacrylate
0.496 0.505 0.478 0.496 0.426 0.373 0.458 0.462 10.31
80) 1,1,2-trichloroethane
0.266 0.244 0.275 0.285 0.278 0.276 0.267 0.253 0.276 0.269 4.77
81) tetrachloroethene
0.270 0.236 0.273 0.285 0.281 0.266 0.272 0.256 0.285 0.269 5.83

Initial Calibration Summary

Job Number: JC71604 **Sample:** V4D3846-ICC3846
Account: TCMAW Tantara Corporation **Lab FileID:** 4D88517.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

82) 1,3-dichloropropane
0.502 0.479 0.516 0.538 0.530 0.512 0.513 0.475 0.524 0.510 4.20
83) 2-hexanone
0.163 0.202 0.207 0.198 0.197 0.183 0.161 0.191 0.188 9.23
84) butyl acetate
0.276 0.285 0.274 0.273 0.245 0.212 0.265 0.262 9.61
85) dibromochloromethane
0.339 0.295 0.375 0.383 0.369 0.379 0.348 0.326 0.363 0.353 8.24
86) 1,2-dibromoethane
0.344 0.303 0.379 0.388 0.376 0.376 0.357 0.339 0.376 0.360 7.53
87) n-butyl ether
1.246 1.136 1.400 1.453 1.381 1.382 1.289 1.168 1.352 1.312 8.33
88) chlorobenzene
0.884 0.823 0.878 0.915 0.886 0.866 0.871 0.825 0.887 0.871 3.42
89) 1,1,1,2-tetrachloroethane
0.317 0.246 0.323 0.335 0.325 0.322 0.310 0.290 0.318 0.310 8.71
90) ethylbenzene
1.435 1.328 1.491 1.550 1.506 1.463 1.460 1.341 1.513 1.454 5.21
91) m,p-xylene
0.530 0.480 0.561 0.590 0.578 0.546 0.554 0.499 0.574 0.546 6.73
92) o-xylene
0.516 0.467 0.556 0.581 0.563 0.535 0.537 0.483 0.555 0.532 7.09
93) styrene
0.797 0.959 0.990 0.938 0.932 0.863 0.757 0.907 0.893 9.06
94) bromoform
0.234 0.284 0.285 0.269 0.287 0.250 0.223 0.264 0.262 9.33
95) butyl acrylate
0.517 0.745 0.755 0.707 0.734 0.616 0.516 0.673 0.658 14.86
96) isopropylbenzene
1.324 1.227 1.410 1.472 1.416 1.392 1.342 1.223 1.400 1.356 6.32
97) cis-1,4-dichloro-2-butene
0.137 0.186 0.188 0.174 0.185 0.154 0.136 0.165 0.166 12.96

98) I 1,4-dichlorobenzene-d ----------ISTD----------
99) 4-bromofluorobenzene (s)
0.964 0.962 0.969 0.964 0.975 0.983 0.954 0.968 0.960 0.967 0.88
100) bromobenzene
0.760 0.666 0.803 0.831 0.812 0.801 0.763 0.742 0.807 0.776 6.49
101) 1,1,2,2-tetrachloroethane
1.104 1.010 1.116 1.151 1.147 1.126 1.088 1.029 1.126 1.100 4.50
102) trans-1,4-dichloro-2-butene
0.279 0.282 0.269 0.282 0.241 0.203 0.260 0.260 11.20
103) 1,2,3-trichloropropane
0.228 0.288 0.295 0.297 0.289 0.279 0.243 0.286 0.275 9.30
104) n-propylbenzene
3.396 3.225 3.576 3.713 3.684 3.514 3.433 3.190 3.641 3.486 5.47
105) 2-chlorotoluene
0.713 0.739 0.772 0.766 0.725 0.723 0.657 0.751 0.731 4.99
106) 4-chlorotoluene
2.043 1.859 2.139 2.223 2.220 2.139 2.070 1.908 2.182 2.087 6.27
107) 1,3,5-trimethylbenzene
2.279 2.046 2.468 2.571 2.527 2.415 2.327 2.118 2.501 2.361 7.81
108) tert-butylbenzene
0.386 0.452 0.468 0.454 0.453 0.415 0.367 0.447 0.430 8.55
109) 1,2,4-trimethylbenzene
2.244 2.005 2.446 2.526 2.504 2.431 2.315 2.105 2.460 2.337 7.90
110) sec-butylbenzene
2.745 2.544 2.984 3.102 3.049 2.958 2.786 2.585 2.975 2.859 7.07
111) 1,3-dichlorobenzene
1.327 1.274 1.401 1.449 1.434 1.379 1.338 1.250 1.413 1.363 5.13

Initial Calibration Summary

Job Number: JC71604 **Sample:** V4D3846-ICC3846
Account: TCMAW Tantara Corporation **Lab FileID:** 4D88517.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

```
112)  p-isopropyltoluene
           2.151 1.917 2.452 2.535 2.484 2.429 2.255 2.025 2.422   2.297    9.62
113)  1,4-dichlorobenzene
           1.412 1.295 1.419 1.465 1.456 1.420 1.383 1.322 1.452   1.403    4.24
114)  benzyl chloride
           1.495 1.374 1.715 1.761 1.716 1.709 1.547 1.453 1.653   1.602    8.64
115)  1,2-dichlorobenzene
           1.257 1.120 1.352 1.402 1.373 1.353 1.293 1.182 1.359   1.299    7.35
116)  n-butylbenzene
           0.963       1.210 1.244 1.204 1.224 1.086 0.945 1.155   1.129   10.51
117)  1,2-dibromo-3-chloropropane
                       0.248 0.250 0.239 0.249 0.216 0.182 0.233   0.231   10.69
118)  1,3,5-trichlorobenzene
           0.842       0.955 0.963 0.932 0.972 0.848 0.781 0.900   0.899    7.69
119)  2-ethylhexyl acrylate
                       0.553 0.509 0.417 0.613 0.301       0.355   0.458   26.33
            ----- Linear regression -----  Coefficient =  0.9952
              Response Ratio = -0.01298 + 0.59669 *A

120)  1,2,4-trichlorobenzene
           0.685       0.858 0.857 0.826 0.889 0.733 0.667 0.798   0.789   10.66
121)  hexachlorobutadiene
           0.280       0.347 0.344 0.332 0.355 0.304 0.263 0.334   0.320   10.56
122)  naphthalene
           2.101       2.435 2.440 2.398 2.514 2.160 1.989 2.295   2.292    8.22
123)  1,2,3-trichlorobenzene
           0.677       0.813 0.816 0.788 0.838 0.712 0.626 0.756   0.753   10.00
124)  hexachloroethane
           0.349       0.422 0.429 0.401 0.436 0.374 0.328 0.390   0.391    9.92
125)  2-methylnaphthalene
                       1.217 1.245 1.164 1.098 0.972       1.060   1.126    9.14
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4D3846.M         Thu Jul 19 16:38:44 2018   RPT1
```

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: V4D3846-ICV3846
Lab FileID: 4D88522.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V4D3846\4D88522.D Vial: 14
Acq On : 18 Jul 2018 1:59 am Operator: juntaep
Sample : ICV3846-50 Inst : MS4D
Misc : MS27734,V4D3846,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D3846.M (RTE Integrator)
Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Wed Jul 18 18:24:09 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	104	0.00	8.83
2	M	tertiary butyl alcohol	1.261	1.281	-1.6	100	0.00	8.97
3		ethanol	0.123	0.129	-4.9	98	0.00	7.36
4	M	1,4-dioxane	0.116	0.129	-11.2	104	0.00	12.85
5	I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	11.31
6	M	chlorodifluoromethane	0.506	0.555	-9.7	109	0.00	4.76
7	M	dichlorodifluoromethane	0.674	0.576	14.5	88	0.00	4.72
8		Freon 142b		----------NA----------				
9	M	chloromethane	0.552	0.551	0.2	107	0.00	5.23
10	M	vinyl chloride	0.565	0.532	5.8	95	0.00	5.50
11		1,3-butadiene		----------NA----------				
12	M	bromomethane	0.184	0.264	-43.5#	135	0.01	6.30
13	M	chloroethane	0.287	0.279	2.8	97	0.01	6.55
14	M	trichlorofluoromethane	0.704	0.651	7.5	94	0.00	7.13
15		vinyl bromide	0.418	0.584	-39.7#	142	0.00	6.97
16	M	ethyl ether	0.219	0.216	1.4	98	0.00	7.66
17	M	acrolein	0.092	0.097	-5.4	104	0.00	7.87
18		freon 113	0.312	0.345	-10.6	110	0.00	8.12
19	M	1,1-dichloroethene	0.377	0.354	6.1	93	0.00	8.13
20	M	acetone	0.171	0.181	-5.8	105	0.00	8.13
21	M	acetonitrile	0.076	0.073	3.9	97	0.00	8.58
		----------	True	Calc.	% Drift	----------		
22	M	iodomethane	50.000	44.765	10.5	98	0.00	8.42
		----------	AvgRF	CCRF	% Dev	----------		
23	M	carbon disulfide	0.946	1.037	-9.6	112	0.00	8.58
24	M	methylene chloride	0.411	0.395	3.9	97	0.00	8.90
25	M	methyl acetate	0.405	0.400	1.2	99	0.00	8.70
26	M	methyl tert butyl ether	1.181	1.190	-0.8	102	0.00	9.33
27	M	trans-1,2-dichloroethene	0.395	0.387	2.0	98	0.00	9.36
28	M	di-isopropyl ether	1.153	1.157	-0.3	101	0.00	10.02
29	M	2-butanone	0.071	0.073	-2.8	104	0.00	10.70
30	M	1,1-dichloroethane	0.721	0.693	3.9	98	0.00	9.97
31	M	chloroprene	0.572	0.612	-7.0	104	0.00	10.11
32	M	acrylonitrile	0.180	0.181	-0.6	103	0.00	9.23
33		hexane	0.240	0.179	25.4	75	0.00	9.78
34	M	vinyl acetate	0.083	0.087	-4.8	104	0.00	9.96
35	M	ethyl tert-butyl ether	1.178	1.173	0.4	101	0.00	10.51
36	M	ethyl acetate	0.078	0.075	3.8	101	0.00	10.75
37	M	2,2-dichloropropane	0.594	0.556	6.4	97	0.00	10.78

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: V4D3846-ICV3846
Lab FileID: 4D88522.D

38	M	cis-1,2-dichloroethene	0.445	0.452	-1.6	102	0.00	10.75
39		methyl acrylate	0.085	0.088	-3.5	102	0.00	10.83
40	M	propionitrile	0.095	0.098	-3.2	102	0.00	10.76
41	M	bromochloromethane	0.209	0.215	-2.9	103	0.00	11.06
42	M	tetrahydrofuran	0.085	0.082	3.5	100	0.00	11.13
43	M	chloroform	0.481	0.478	0.6	103	0.00	11.13
44	M	t-butyl formate	0.321	0.306	4.7	94	0.00	11.20
45	S	dibromofluoromethane (s)	0.437	0.431	1.4	106	0.00	11.32
46	M	methacrylonitrile	0.213	0.212	0.5	102	0.00	10.98
47	M	1,1,1-trichloroethane	0.646	0.637	1.4	100	0.00	11.42
48		cyclohexane	0.540	0.591	-9.4	109	0.00	11.54
49		1,1-dichloropropene	0.553	0.564	-2.0	102	0.00	11.61
50		isobutyl alcohol		----------NA----------				
51		carbon tetrachloride	0.561	0.582	-3.7	103	0.00	11.64
52		tert amyl alcohol	0.030	0.032	-6.7	105	0.00	11.69
53	I	1,4-difluorobenzene	1.000	1.000	0.0	108	0.00	12.20
54	S	1,2-dichloroethane-d4 (s)	0.316	0.305	3.5	106	0.00	11.74
55	M	n-butyl alcohol	0.016	0.017	-6.3	103	0.00	12.26
56		2,2,4-trimethylpentane	0.729	0.701	3.8	96	0.00	11.92
57	M	benzene	1.095	1.078	1.6	102	0.00	11.85
58	M	tert-amyl methyl ether	0.188	0.199	-5.9	104	0.00	11.91
59	M	heptane	0.162	0.178	-9.9	108	0.00	12.08
60	M	isopropyl acetate	0.075	0.079	-5.3	107	0.00	11.78
61	M	1,2-dichloroethane	0.409	0.404	1.2	102	0.00	11.83
62	M	trichloroethene	0.296	0.310	-4.7	103	0.00	12.53
63		ethyl acrylate	0.437	0.459	-5.0	102	0.00	12.51
64	M	2-nitropropane	0.105	0.114	-8.6	108	0.00	13.18
65	M	2-chloroethyl vinyl ether	0.200	0.232	-16.0	110	0.00	13.22
66	M	methyl methacrylate	0.095	0.100	-5.3	105	0.00	12.76
67	M	1,2-dichloropropane	0.285	0.284	0.4	99	0.00	12.75
68	M	dibromomethane	0.196	0.205	-4.6	103	0.00	12.88
69	M	methylcyclohexane	0.442	0.430	2.7	95	0.00	12.78
70	M	bromodichloromethane	0.393	0.392	0.3	99	0.00	12.99
71		epichlorohydrin	0.044	0.046	-4.5	99	0.00	13.31
72	M	cis-1,3-dichloropropene	0.455	0.467	-2.6	100	0.00	13.42
73	M	4-methyl-2-pentanone	0.157	0.159	-1.3	98	0.00	13.52
74	M	3-methyl-1-butanol	0.025	0.027	-8.0	98	0.00	13.50
75	I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	15.07
76	S	toluene-d8 (s)	1.279	1.258	1.6	103	0.00	13.72
77		toluene	0.790	0.799	-1.1	100	0.00	13.78
78		trans-1,3-dichloropropene	0.486	0.479	1.4	94	0.00	13.91
79		ethyl methacrylate	0.462	0.463	-0.2	95	0.00	13.94
80		1,1,2-trichloroethane	0.269	0.270	-0.4	99	0.00	14.11
81	M	tetrachloroethene	0.269	0.321	-19.3	117	0.00	14.32
82	M	1,3-dichloropropane	0.510	0.521	-2.2	101	0.00	14.28
83		2-hexanone	0.188	0.195	-3.7	98	0.00	14.28
84	M	butyl acetate	0.262	0.286	-9.2	104	0.00	14.36
85	M	dibromochloromethane	0.353	0.381	-7.9	103	0.00	14.52
86	M	1,2-dibromoethane	0.360	0.385	-6.9	103	0.00	14.66
87		n-butyl ether	1.312	1.355	3.3	98	0.00	15.04
88	M	chlorobenzene	0.871	0.892	-2.4	102	0.00	15.10
89	M	1,1,1,2-tetrachloroethane	0.310	0.331	-6.8	103	0.00	15.14
90	M	ethylbenzene	1.454	1.513	-4.1	102	0.00	15.16
91	M	m,p-xylene	0.546	0.581	-6.4	103	0.00	15.26
92	M	o-xylene	0.532	0.565	-6.2	101	0.00	15.63
93	M	styrene	0.893	0.972	-8.8	102	0.00	15.63
94	M	bromoform	0.262	0.293	-11.8	107	0.00	15.84
95		butyl acrylate	0.658	0.725	-10.2	101	0.00	15.45

Initial Calibration Verification

Job Number: JC71604 **Sample:** V4D3846-ICV3846
Account: TCMAW Tantara Corporation **Lab FileID:** 4D88522.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

96		isopropylbenzene	1.356	1.423	-4.9	101	0.00	15.94
97		cis-1,4-dichloro-2-butene	0.166	0.176	-6.0	98	0.00	15.96
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	17.17
99	S	4-bromofluorobenzene (s)	0.967	0.955	1.2	103	0.00	16.11
100	M	bromobenzene	0.776	0.814	-4.9	101	0.00	16.29
101	M	1,1,2,2-tetrachloroethane	1.100	1.079	1.9	97	0.00	16.16
102	M	trans-1,4-dichloro-2-bute	0.260	0.291	-11.9	107	0.00	16.20
103	M	1,2,3-trichloropropane	0.275	0.287	-4.4	101	0.00	16.24
104	M	n-propylbenzene	3.486	3.602	-3.3	101	0.00	16.31
105	M	2-chlorotoluene	0.731	0.742	-1.5	100	0.00	16.44
106	M	4-chlorotoluene	2.087	2.215	-6.1	103	0.00	16.53
107	M	1,3,5-trimethylbenzene	2.361	2.494	-5.6	101	0.00	16.45
108	M	tert-butylbenzene	0.430	0.459	-6.7	102	0.00	16.77
109	M	1,2,4-trimethylbenzene	2.337	2.515	-7.6	103	0.00	16.80
110	M	sec-butylbenzene	2.859	3.012	-5.4	101	0.00	16.97
111	M	1,3-dichlorobenzene	1.363	1.412	-3.6	101	0.00	17.12
112	M	p-isopropyltoluene	2.297	2.496	-8.7	102	0.00	17.08
113	M	1,4-dichlorobenzene	1.403	1.444	-2.9	102	0.00	17.20
114		benzyl chloride	1.602	1.333	16.8	78	0.00	17.29
115	M	1,2-dichlorobenzene	1.299	1.369	-5.4	101	0.00	17.56
116	M	n-butylbenzene	1.129	1.197	-6.0	100	0.00	17.45
117	M	1,2-dibromo-3-chloropropa	0.231	0.234	-1.3	97	0.00	18.26
118		1,3,5-trichlorobenzene	0.899	0.974	-8.3	105	0.00	18.48
			True	Calc.	% Drift			
119		2-ethylhexyl acrylate	15.000	14.616	2.6	105	0.00	19.05
			AvgRF	CCRF	% Dev			
120	M	1,2,4-trichlorobenzene	0.789	0.834	-5.7	101	0.00	19.07
121	M	hexachlorobutadiene	0.320	0.331	-3.4	99	0.00	19.20
122	M	naphthalene	2.292	2.413	-5.3	102	0.00	19.33
123	M	1,2,3-trichlorobenzene	0.753	0.781	-3.7	99	0.00	19.56
124	m	hexachloroethane	0.391	0.425	-8.7	103	0.00	17.83
125		2-methylnaphthalene	1.126	1.176	-4.4	98	0.00	20.42

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4D88517.D M4D3846.M Wed Jul 18 18:27:52 2018 RPT1

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: V4D3846-ICV3846
Lab FileID: 4D88523.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V4D3846\4D88523.D Vial: 15
Acq On : 18 Jul 2018 2:28 am Operator: juntaep
Sample : ICV3846-50 Inst : MS4D
Misc : MS27734,V4D3846,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D3846.M (RTE Integrator)
Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Wed Jul 18 18:24:09 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	100	0.00	8.83
2	M	tertiary butyl alcohol		----------NA----------				
3		ethanol		----------NA----------				
4	M	1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	113	0.00	11.31
6	M	chlorodifluoromethane		----------NA----------				
7	M	dichlorodifluoromethane		----------NA----------				
8		Freon 142b		----------NA----------				
9	M	chloromethane		----------NA----------				
10	M	vinyl chloride		----------NA----------				
11		1,3-butadiene		----------NA----------				
12	M	bromomethane		----------NA----------				
13	M	chloroethane		----------NA----------				
14	M	trichlorofluoromethane		----------NA----------				
15		vinyl bromide		----------NA----------				
16	M	ethyl ether		----------NA----------				
17	M	acrolein		----------NA----------				
18		freon 113		----------NA----------				
19	M	1,1-dichloroethene		----------NA----------				
20	M	acetone		----------NA----------				
21	M	acetonitrile	0.076	0.068	10.5	94	0.00	8.57
		----------	True	Calc.	% Drift	----------		
22	M	iodomethane		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
23	M	carbon disulfide		----------NA----------				
24	M	methylene chloride		----------NA----------				
25	M	methyl acetate		----------NA----------				
26	M	methyl tert butyl ether		----------NA----------				
27	M	trans-1,2-dichloroethene		----------NA----------				
28	M	di-isopropyl ether		----------NA----------				
29	M	2-butanone		----------NA----------				
30	M	1,1-dichloroethane		----------NA----------				
31	M	chloroprene		----------NA----------				
32	M	acrylonitrile		----------NA----------				
33		hexane		----------NA----------				
34	M	vinyl acetate		----------NA----------				
35	M	ethyl tert-butyl ether		----------NA----------				
36	M	ethyl acetate		----------NA----------				
37	M	2,2-dichloropropane		----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: V4D3846-ICV3846
Lab FileID: 4D88523.D

38	M	cis-1,2-dichloroethene		----------NA----------					
39		methyl acrylate		----------NA----------					
40	M	propionitrile		----------NA----------					
41	M	bromochloromethane		----------NA----------					
42	M	tetrahydrofuran		----------NA----------					
43	M	chloroform		----------NA----------					
44	M	t-butyl formate		----------NA----------					
45	S	dibromofluoromethane (s)	0.437	0.421	3.7	108	0.00	11.32	
46	M	methacrylonitrile		----------NA----------					
47	M	1,1,1-trichloroethane		----------NA----------					
48		cyclohexane		----------NA----------					
49		1,1-dichloropropene		----------NA----------					
50		isobutyl alcohol		----------NA----------					
51		carbon tetrachloride		----------NA----------					
52		tert amyl alcohol		----------NA----------					
53	I	1,4-difluorobenzene	1.000	1.000	0.0	110	0.00	12.19	
54	S	1,2-dichloroethane-d4 (s)	0.316	0.301	4.7	107	0.00	11.74	
55	M	n-butyl alcohol		----------NA----------					
56		2,2,4-trimethylpentane		----------NA----------					
57	M	benzene		----------NA----------					
58	M	tert-amyl methyl ether		----------NA----------					
59	M	heptane		----------NA----------					
60	M	isopropyl acetate		----------NA----------					
61	M	1,2-dichloroethane		----------NA----------					
62	M	trichloroethene		----------NA----------					
63		ethyl acrylate		----------NA----------					
64	M	2-nitropropane		----------NA----------					
65	M	2-chloroethyl vinyl ether		----------NA----------					
66	M	methyl methacrylate		----------NA----------					
67	M	1,2-dichloropropane		----------NA----------					
68	M	dibromomethane		----------NA----------					
69	M	methylcyclohexane		----------NA----------					
70	M	bromodichloromethane		----------NA----------					
71		epichlorohydrin		----------NA----------					
72	M	cis-1,3-dichloropropene		----------NA----------					
73	M	4-methyl-2-pentanone		----------NA----------					
74	M	3-methyl-1-butanol		----------NA----------					
75	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	15.07	
76	S	toluene-d8 (s)	1.279	1.288	-0.7	105	0.00	13.72	
77		toluene		----------NA----------					
78		trans-1,3-dichloropropene		----------NA----------					
79		ethyl methacrylate		----------NA----------					
80		1,1,2-trichloroethane		----------NA----------					
81	M	tetrachloroethene	0.269	0.269	0.0	98	0.00	14.32	
82	M	1,3-dichloropropane		----------NA----------					
83		2-hexanone		----------NA----------					
84	M	butyl acetate		----------NA----------					
85	M	dibromochloromethane		----------NA----------					
86	M	1,2-dibromoethane		----------NA----------					
87		n-butyl ether		----------NA----------					
88	M	chlorobenzene		----------NA----------					
89	M	1,1,1,2-tetrachloroethane		----------NA----------					
90	M	ethylbenzene		----------NA----------					
91	M	m,p-xylene		----------NA----------					
92	M	o-xylene		----------NA----------					
93	M	styrene		----------NA----------					
94	M	bromoform		----------NA----------					
95		butyl acrylate		----------NA----------					

Initial Calibration Verification

Job Number: JC71604 **Sample:** V4D3846-ICV3846
Account: TCMAW Tantara Corporation **Lab FileID:** 4D88523.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

96		isopropylbenzene		----------NA----------				
97		cis-1,4-dichloro-2-butene		----------NA----------				
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	17.17
99	S	4-bromofluorobenzene (s)	0.967	0.958	0.9	101	0.00	16.11
100	M	bromobenzene		----------NA----------				
101	M	1,1,2,2-tetrachloroethane		----------NA----------				
102	M	trans-1,4-dichloro-2-bute		----------NA----------				
103	M	1,2,3-trichloropropane		----------NA----------				
104	M	n-propylbenzene		----------NA----------				
105	M	2-chlorotoluene		----------NA----------				
106	M	4-chlorotoluene		----------NA----------				
107	M	1,3,5-trimethylbenzene		----------NA----------				
108	M	tert-butylbenzene		----------NA----------				
109	M	1,2,4-trimethylbenzene		----------NA----------				
110	M	sec-butylbenzene		----------NA----------				
111	M	1,3-dichlorobenzene		----------NA----------				
112	M	p-isopropyltoluene		----------NA----------				
113	M	1,4-dichlorobenzene		----------NA----------				
114		benzyl chloride		----------NA----------				
115	M	1,2-dichlorobenzene		----------NA----------				
116	M	n-butylbenzene		----------NA----------				
117	M	1,2-dibromo-3-chloropropa		----------NA----------				
118		1,3,5-trichlorobenzene		----------NA----------				
		----------	True	Calc.	% Drift	----------		
119		2-ethylhexyl acrylate		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
120	M	1,2,4-trichlorobenzene		----------NA----------				
121	M	hexachlorobutadiene		----------NA----------				
122	M	naphthalene		----------NA----------				
123	M	1,2,3-trichlorobenzene		----------NA----------				
124	m	hexachloroethane		----------NA----------				
125		2-methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4D88517.D M4D3846.M Wed Jul 18 18:27:54 2018 RPT1

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: V4D3846-ICV3846
Lab FileID: 4D88528.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V4D3846\4D88528.D Vial: 4
Acq On : 19 Jul 2018 10:59 am Operator: juntaep
Sample : icv3846-50 Inst : MS4D
Misc : MS27734,V4D3846,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D3846.M (RTE Integrator)
Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Wed Jul 18 18:24:09 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	102	0.00	8.83
2	M	tertiary butyl alcohol		----------NA----------				
3		ethanol		----------NA----------				
4	M	1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	117	0.00	11.31
6	M	chlorodifluoromethane		----------NA----------				
7	M	dichlorodifluoromethane	0.674	0.605	10.2	100	0.00	4.73
8		Freon 142b		----------NA----------				
9	M	chloromethane	0.552	0.535	3.1	112	-0.01	5.22
10	M	vinyl chloride	0.565	0.517	8.5	99	0.00	5.51
11		1,3-butadiene		----------NA----------				
12	M	bromomethane	0.184	0.207	-12.5	114	0.03	6.32
13	M	chloroethane	0.287	0.264	8.0	99	0.02	6.55
14	M	trichlorofluoromethane	0.704	0.622	11.6	97	0.00	7.13
15		vinyl bromide	0.418	0.544	-30.1#	143	0.00	6.98
16	M	ethyl ether		----------NA----------				
17	M	acrolein		----------NA----------				
18		freon 113		----------NA----------				
19	M	1,1-dichloroethene		----------NA----------				
20	M	acetone		----------NA----------				
21	M	acetonitrile		----------NA----------				
		----------	True	Calc.	% Drift	----------		
22	M	iodomethane		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
23	M	carbon disulfide		----------NA----------				
24	M	methylene chloride		----------NA----------				
25	M	methyl acetate		----------NA----------				
26	M	methyl tert butyl ether		----------NA----------				
27	M	trans-1,2-dichloroethene		----------NA----------				
28	M	di-isopropyl ether		----------NA----------				
29	M	2-butanone		----------NA----------				
30	M	1,1-dichloroethane		----------NA----------				
31	M	chloroprene		----------NA----------				
32	M	acrylonitrile		----------NA----------				
33		hexane		----------NA----------				
34	M	vinyl acetate		----------NA----------				
35	M	ethyl tert-butyl ether		----------NA----------				
36	M	ethyl acetate		----------NA----------				
37	M	2,2-dichloropropane		----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: V4D3846-ICV3846
Lab FileID: 4D88528.D

38	M	cis-1,2-dichloroethene		----------NA----------					
39		methyl acrylate		----------NA----------					
40	M	propionitrile		----------NA----------					
41	M	bromochloromethane		----------NA----------					
42	M	tetrahydrofuran		----------NA----------					
43	M	chloroform		----------NA----------					
44	M	t-butyl formate		----------NA----------					
45	S	dibromofluoromethane (s)	0.437	0.416	4.8	111	0.00	11.31	
46	M	methacrylonitrile		----------NA----------					
47	M	1,1,1-trichloroethane		----------NA----------					
48		cyclohexane		----------NA----------					
49		1,1-dichloropropene		----------NA----------					
50		isobutyl alcohol		----------NA----------					
51		carbon tetrachloride		----------NA----------					
52		tert amyl alcohol		----------NA----------					
53	I	1,4-difluorobenzene	1.000	1.000	0.0	114	0.00	12.19	
54	S	1,2-dichloroethane-d4 (s)	0.316	0.299	5.4	110	0.00	11.74	
55	M	n-butyl alcohol		----------NA----------					
56		2,2,4-trimethylpentane		----------NA----------					
57	M	benzene		----------NA----------					
58	M	tert-amyl methyl ether		----------NA----------					
59	M	heptane		----------NA----------					
60	M	isopropyl acetate		----------NA----------					
61	M	1,2-dichloroethane		----------NA----------					
62	M	trichloroethene		----------NA----------					
63		ethyl acrylate		----------NA----------					
64	M	2-nitropropane		----------NA----------					
65	M	2-chloroethyl vinyl ether		----------NA----------					
66	M	methyl methacrylate		----------NA----------					
67	M	1,2-dichloropropane		----------NA----------					
68	M	dibromomethane		----------NA----------					
69	M	methylcyclohexane		----------NA----------					
70	M	bromodichloromethane		----------NA----------					
71		epichlorohydrin		----------NA----------					
72	M	cis-1,3-dichloropropene		----------NA----------					
73	M	4-methyl-2-pentanone		----------NA----------					
74	M	3-methyl-1-butanol		----------NA----------					
75	I	chlorobenzene-d5	1.000	1.000	0.0	106	0.00	15.07	
76	S	toluene-d8 (s)	1.279	1.300	-1.6	108	0.00	13.72	
77		toluene		----------NA----------					
78		trans-1,3-dichloropropene		----------NA----------					
79		ethyl methacrylate		----------NA----------					
80		1,1,2-trichloroethane		----------NA----------					
81	M	tetrachloroethene		----------NA----------					
82	M	1,3-dichloropropane		----------NA----------					
83		2-hexanone		----------NA----------					
84	M	butyl acetate		----------NA----------					
85	M	dibromochloromethane		----------NA----------					
86	M	1,2-dibromoethane		----------NA----------					
87		n-butyl ether		----------NA----------					
88	M	chlorobenzene		----------NA----------					
89	M	1,1,1,2-tetrachloroethane		----------NA----------					
90	M	ethylbenzene		----------NA----------					
91	M	m,p-xylene		----------NA----------					
92	M	o-xylene		----------NA----------					
93	M	styrene		----------NA----------					
94	M	bromoform		----------NA----------					
95		butyl acrylate		----------NA----------					

Initial Calibration Verification

Job Number: JC71604 **Sample:** V4D3846-ICV3846
Account: TCMAW Tantara Corporation **Lab FileID:** 4D88528.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

96		isopropylbenzene			----------NA----------			
97		cis-1,4-dichloro-2-butene			----------NA----------			
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	17.17
99	S	4-bromofluorobenzene (s)	0.967	0.945	2.3	103	0.00	16.11
100	M	bromobenzene			----------NA----------			
101	M	1,1,2,2-tetrachloroethane			----------NA----------			
102	M	trans-1,4-dichloro-2-bute			----------NA----------			
103	M	1,2,3-trichloropropane			----------NA----------			
104	M	n-propylbenzene			----------NA----------			
105	M	2-chlorotoluene			----------NA----------			
106	M	4-chlorotoluene			----------NA----------			
107	M	1,3,5-trimethylbenzene			----------NA----------			
108	M	tert-butylbenzene			----------NA----------			
109	M	1,2,4-trimethylbenzene			----------NA----------			
110	M	sec-butylbenzene			----------NA----------			
111	M	1,3-dichlorobenzene			----------NA----------			
112	M	p-isopropyltoluene			----------NA----------			
113	M	1,4-dichlorobenzene			----------NA----------			
114		benzyl chloride			----------NA----------			
115	M	1,2-dichlorobenzene			----------NA----------			
116	M	n-butylbenzene			----------NA----------			
117	M	1,2-dibromo-3-chloropropa			----------NA----------			
118		1,3,5-trichlorobenzene			----------NA----------			
		----------	True	Calc.	% Drift	----------		
119		2-ethylhexyl acrylate			----------NA----------			
		----------	AvgRF	CCRF	% Dev	----------		
120	M	1,2,4-trichlorobenzene			----------NA----------			
121	M	hexachlorobutadiene			----------NA----------			
122	M	naphthalene			----------NA----------			
123	M	1,2,3-trichlorobenzene			----------NA----------			
124	m	hexachloroethane			----------NA----------			
125		2-methylnaphthalene			----------NA----------			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4D88517.D M4D3846.M Thu Jul 19 16:41:42 2018 RPT1

Continuing Calibration Summary

Job Number: JC71604 **Sample:** V4D3878-CC3846
Account: TCMAW Tantara Corporation **Lab FileID:** 4D89142.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\michellc\v4d3878\4d89142.d Vial: 75
Acq On : 11 Aug 2018 8:31 am Operator: EddieH
Sample : cc3846-20 Inst : MS4D
Misc : MS28459,V4D3878,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D3846.M (RTE Integrator)
Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Wed Jul 18 18:24:09 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	118	-0.01	8.82
2	M	tertiary butyl alcohol	1.261	1.372	-8.8	120	-0.02	8.95
3		ethanol		----------NA----------				
4	M	1,4-dioxane	0.116	0.122	-5.2	113	0.00	12.84
5	I	pentafluorobenzene	1.000	1.000	0.0	108	0.00	11.30
6	M	chlorodifluoromethane	0.506	0.409	19.2	85	0.00	4.75
7	M	dichlorodifluoromethane	0.674	0.523	22.4#	82	0.00	4.72
8		Freon 142b		----------NA----------				
9	M	chloromethane	0.552	0.519	6.0	101	-0.01	5.22
10	M	vinyl chloride	0.565	0.543	3.9	99	0.00	5.50
11		1,3-butadiene	0.434	0.090	79.3#	21#	0.00	5.61
12	M	bromomethane	0.184	0.208	-13.0	125	0.02	6.31
13	M	chloroethane	0.287	0.311	-8.4	111	0.01	6.55
14	M	trichlorofluoromethane	0.704	0.586	16.8	87	0.00	7.13
15		vinyl bromide	0.418	0.362	13.4	91	0.00	6.97
16	M	ethyl ether	0.219	0.263	-20.1#	128	0.00	7.65
17	M	acrolein	0.092	0.098	-6.5	113	0.00	7.87
18		freon 113	0.312	0.280	10.3	94	0.00	8.12
19	M	1,1-dichloroethene	0.377	0.381	-1.1	106	0.00	8.13
20	M	acetone	0.171	0.180	-5.3	108	0.00	8.12
21	M	acetonitrile	0.076	0.095	-25.0#	130	0.00	8.57
		----------	True	Calc.	% Drift	----------		
22	M	iodomethane	20.000	12.828	35.9#	72	0.00	8.41
		----------	AvgRF	CCRF	% Dev	----------		
23	M	carbon disulfide	0.946	0.974	-3.0	110	0.00	8.58
24	M	methylene chloride	0.411	0.465	-13.1	119	0.00	8.90
25	M	methyl acetate	0.405	0.485	-19.8	131	0.00	8.69
26	M	methyl tert butyl ether	1.181	1.336	-13.1	120	0.00	9.33
27	M	trans-1,2-dichloroethene	0.395	0.410	-3.8	109	0.00	9.36
28	M	di-isopropyl ether	1.153	1.328	-15.2	121	0.00	10.01
29	M	2-butanone	0.071	0.083	-16.9	124	0.00	10.70
30	M	1,1-dichloroethane	0.721	0.768	-6.5	113	0.00	9.96
31	M	chloroprene	0.572	0.579	-1.2	103	0.00	10.11
32	M	acrylonitrile	0.180	0.221	-22.8#	133	0.00	9.23
33		hexane	0.240	0.239	0.4	107	0.00	9.77
34	M	vinyl acetate	0.083	0.100	-20.5#	131	0.00	9.96
35	M	ethyl tert-butyl ether	1.178	1.325	-12.5	120	0.00	10.51
36	M	ethyl acetate	0.078	0.088	-12.8	123	0.00	10.75
37	M	2,2-dichloropropane	0.594	0.605	-1.9	107	0.00	10.77

Continuing Calibration Summary

Job Number: JC71604 **Sample:** V4D3878-CC3846
Account: TCMAW Tantara Corporation **Lab FileID:** 4D89142.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

38	M	cis-1,2-dichloroethene	0.445	0.477	-7.2	112	0.00	10.75
39		methyl acrylate	0.085	0.097	-14.1	124	0.00	10.83
40	M	propionitrile		----------NA----------				
41	M	bromochloromethane	0.209	0.235	-12.4	118	0.00	11.06
42	M	tetrahydrofuran	0.085	0.096	-12.9	124	0.00	11.13
43	M	chloroform	0.481	0.484	-0.6	107	0.00	11.12
44	M	t-butyl formate	0.321	0.302	5.9	99	0.00	11.19
45	S	dibromofluoromethane (s)	0.437	0.428	2.1	108	0.00	11.31
46	M	methacrylonitrile	0.213	0.253	-18.8	128	0.00	10.98
47	M	1,1,1-trichloroethane	0.646	0.602	6.8	99	0.00	11.42
48		cyclohexane	0.540	0.424	21.5#	83	0.00	11.53
49		1,1-dichloropropene	0.553	0.541	2.2	102	0.00	11.60
50		isobutyl alcohol		----------NA----------				
51		carbon tetrachloride	0.561	0.512	8.7	95	0.00	11.64
52		tert amyl alcohol		----------NA----------				
53	I	1,4-difluorobenzene	1.000	1.000	0.0	107	0.00	12.19
54	S	1,2-dichloroethane-d4 (s)	0.316	0.286	9.5	98	0.00	11.73
55	M	n-butyl alcohol	0.016	0.018	-12.5	118	0.00	12.25
56		2,2,4-trimethylpentane	0.729	0.662	9.2	95	0.00	11.92
57	M	benzene	1.095	1.159	-5.8	111	0.00	11.85
58	M	tert-amyl methyl ether	0.188	0.211	-12.2	115	0.00	11.91
59	M	heptane	0.162	0.161	0.6	103	0.00	12.07
60	M	isopropyl acetate	0.075	0.085	-13.3	122	0.00	11.77
61	M	1,2-dichloroethane	0.409	0.391	4.4	100	0.00	11.82
62	M	trichloroethene	0.296	0.293	1.0	102	0.00	12.52
63		ethyl acrylate		----------NA----------				
64	M	2-nitropropane	0.105	0.090	14.3	91	0.00	13.17
65	M	2-chloroethyl vinyl ether	0.200	0.208	-4.0	106	0.00	13.22
66	M	methyl methacrylate	0.095	0.100	-5.3	112	0.00	12.76
67	M	1,2-dichloropropane	0.285	0.303	-6.3	109	0.00	12.75
68	M	dibromomethane	0.196	0.204	-4.1	108	0.00	12.87
69	M	methylcyclohexane	0.442	0.369	16.5	86	0.00	12.77
70	M	bromodichloromethane	0.393	0.386	1.8	104	0.00	12.99
71		epichlorohydrin	0.044	0.048	-9.1	112	0.00	13.31
72	M	cis-1,3-dichloropropene	0.455	0.480	-5.5	110	0.00	13.42
73	M	4-methyl-2-pentanone	0.157	0.165	-5.1	109	0.00	13.51
74	M	3-methyl-1-butanol	0.025	0.027	-8.0	109	0.00	13.50
75	I	chlorobenzene-d5	1.000	1.000	0.0	101	0.00	15.07
76	S	toluene-d8 (s)	1.279	1.300	-1.6	102	0.00	13.72
77		toluene	0.790	0.824	-4.3	103	0.00	13.78
78		trans-1,3-dichloropropene	0.486	0.531	-9.3	105	0.00	13.91
79		ethyl methacrylate	0.462	0.509	-10.2	108	0.00	13.93
80		1,1,2-trichloroethane	0.269	0.294	-9.3	107	0.00	14.11
81	M	tetrachloroethene	0.269	0.275	-2.2	99	0.00	14.32
82	M	1,3-dichloropropane	0.510	0.536	-5.1	103	0.00	14.28
83		2-hexanone	0.188	0.205	-9.0	105	0.00	14.28
84	M	butyl acetate	0.262	0.295	-12.6	109	0.00	14.35
85	M	dibromochloromethane	0.353	0.375	-6.2	103	0.00	14.52
86	M	1,2-dibromoethane	0.360	0.393	-9.2	106	0.00	14.66
87		n-butyl ether		----------NA----------				
88	M	chlorobenzene	0.871	0.890	-2.2	102	0.00	15.10
89	M	1,1,1,2-tetrachloroethane	0.310	0.323	-4.2	101	0.00	15.14
90	M	ethylbenzene	1.454	1.468	-1.0	99	0.00	15.16
91	M	m,p-xylene	0.546	0.567	-3.8	100	0.00	15.25
92	M	o-xylene	0.532	0.552	-3.8	100	0.00	15.63
93	M	styrene	0.893	0.942	-5.5	102	0.00	15.63
94	M	bromoform	0.262	0.270	-3.1	102	0.00	15.84
95		butyl acrylate		----------NA----------				

Continuing Calibration Summary

Job Number: JC71604 **Sample:** V4D3878-CC3846
Account: TCMAW Tantara Corporation **Lab FileID:** 4D89142.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

96		isopropylbenzene	1.356	1.336	1.5	96	0.00	15.94
97		cis-1,4-dichloro-2-butene		----------NA----------				
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	17.17
99	S	4-bromofluorobenzene (s)	0.967	0.937	3.1	100	0.00	16.11
100	M	bromobenzene	0.776	0.818	-5.4	105	0.00	16.29
101	M	1,1,2,2-tetrachloroethane	1.100	1.134	-3.1	103	0.00	16.16
102	M	trans-1,4-dichloro-2-bute	0.260	0.210	19.2	81	0.00	16.20
103	M	1,2,3-trichloropropane	0.275	0.296	-7.6	104	0.00	16.24
104	M	n-propylbenzene	3.486	3.405	2.3	96	0.00	16.31
105	M	2-chlorotoluene	0.731	0.715	2.2	97	0.00	16.44
106	M	4-chlorotoluene	2.087	2.070	0.8	97	0.00	16.53
107	M	1,3,5-trimethylbenzene	2.361	2.384	-1.0	98	0.00	16.44
108	M	tert-butylbenzene	0.430	0.420	2.3	96	0.00	16.77
109	M	1,2,4-trimethylbenzene	2.337	2.354	-0.7	98	0.00	16.80
110	M	sec-butylbenzene	2.859	2.739	4.2	94	0.00	16.97
111	M	1,3-dichlorobenzene	1.363	1.403	-2.9	102	0.00	17.12
112	M	p-isopropyltoluene	2.297	2.290	0.3	96	0.00	17.07
113	M	1,4-dichlorobenzene	1.403	1.444	-2.9	103	0.00	17.19
114		benzyl chloride	1.602	1.932	-20.6#	117	0.00	17.29
115	M	1,2-dichlorobenzene	1.299	1.366	-5.2	104	0.00	17.56
116	M	n-butylbenzene	1.129	1.074	4.9	93	0.00	17.45
117	M	1,2-dibromo-3-chloropropa	0.231	0.224	3.0	98	0.00	18.26
118		1,3,5-trichlorobenzene	0.899	0.884	1.7	99	0.00	18.47
		----------	True	Calc.	% Drift	----------		
119		2-ethylhexyl acrylate	6.000	3.428	42.9#	58	0.00	19.05
		----------	AvgRF	CCRF	% Dev	----------		
120	M	1,2,4-trichlorobenzene	0.789	0.792	-0.4	100	0.00	19.07
121	M	hexachlorobutadiene	0.320	0.306	4.4	96	0.00	19.20
122	M	naphthalene	2.292	2.276	0.7	99	0.00	19.33
123	M	1,2,3-trichlorobenzene	0.753	0.754	-0.1	100	0.00	19.56
124	m	hexachloroethane	0.391	0.371	5.1	96	0.00	17.83
125		2-methylnaphthalene	1.126	1.114	1.1	100	0.00	20.42

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4D88516.D M4D3846.M Mon Aug 13 23:19:15 2018

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89157.d
Acq On : 11 Aug 2018 4:48 pm
Operator : EddieH
Sample : JC71604-1 Inst : MS4D
Misc : MS28483,V4D3878,5,,,,1
ALS Vial : 90 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:35:56 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

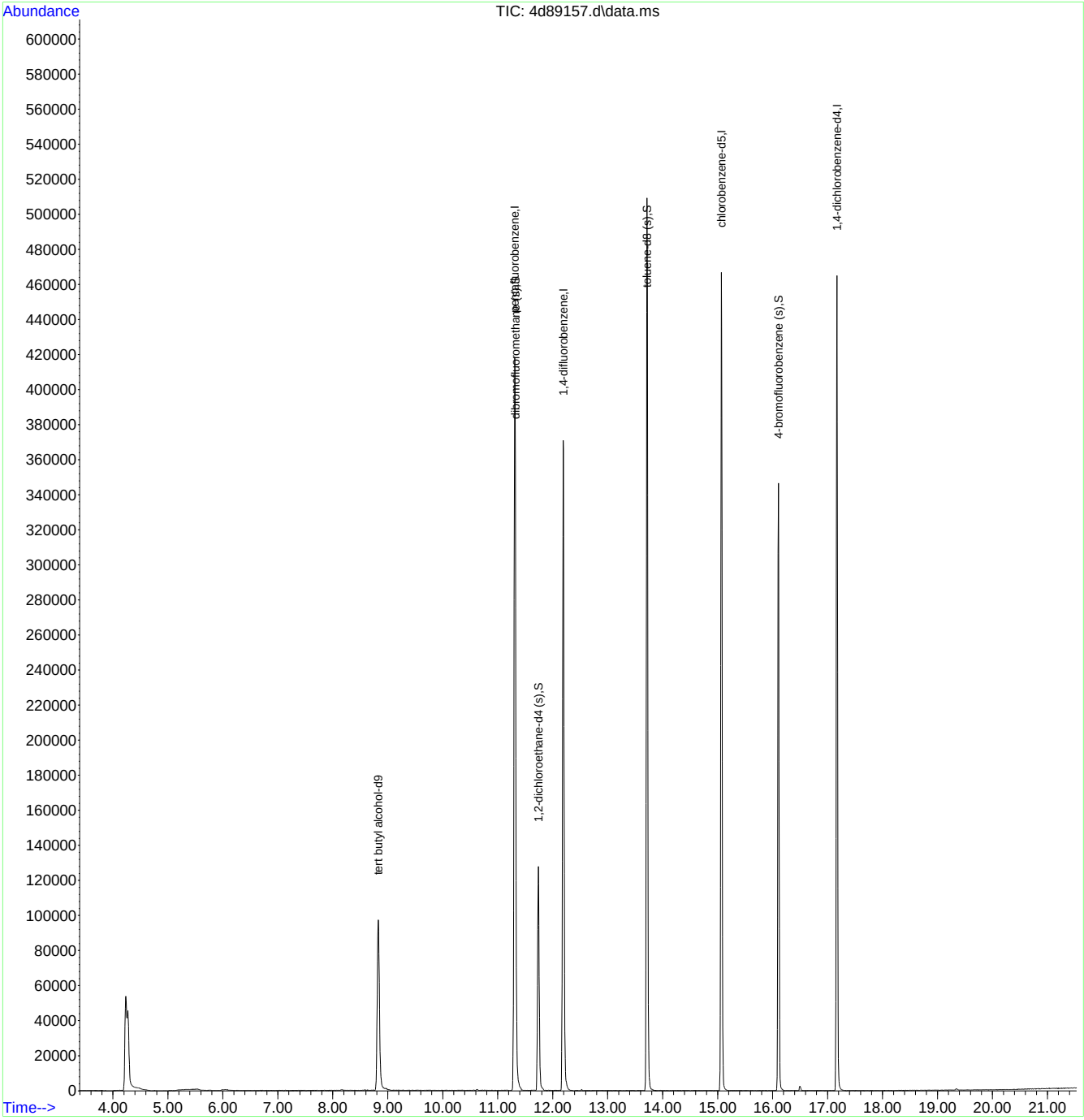
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.824	65	166145	500.00	ug/L	-0.01
5) pentafluorobenzene	11.309	168	237155	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.190	114	334236	50.00	ug/L	0.00
75) chlorobenzene-d5	15.068	117	259336	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	119168	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.320	113	98899	47.73	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.46%			
54) 1,2-dichloroethane-d4 (s)	11.739	65	94517	44.77	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 89.54%			
76) toluene-d8 (s)	13.716	98	341983	51.55	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.10%			
99) 4-bromofluorobenzene (s)	16.106	95	112971	49.04	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.08%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89157.d
Acq On : 11 Aug 2018 4:48 pm
Operator : EddieH
Sample : JC71604-1 Inst : MS4D
Misc : MS28483,V4D3878,5,,,,1
ALS Vial : 90 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:35:56 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89146.d
Acq On : 11 Aug 2018 11:31 am
Operator : EddieH
Sample : mb Inst : MS4D
Misc : MS28459,V4D3878,5,,,,1
ALS Vial : 79 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:24:31 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

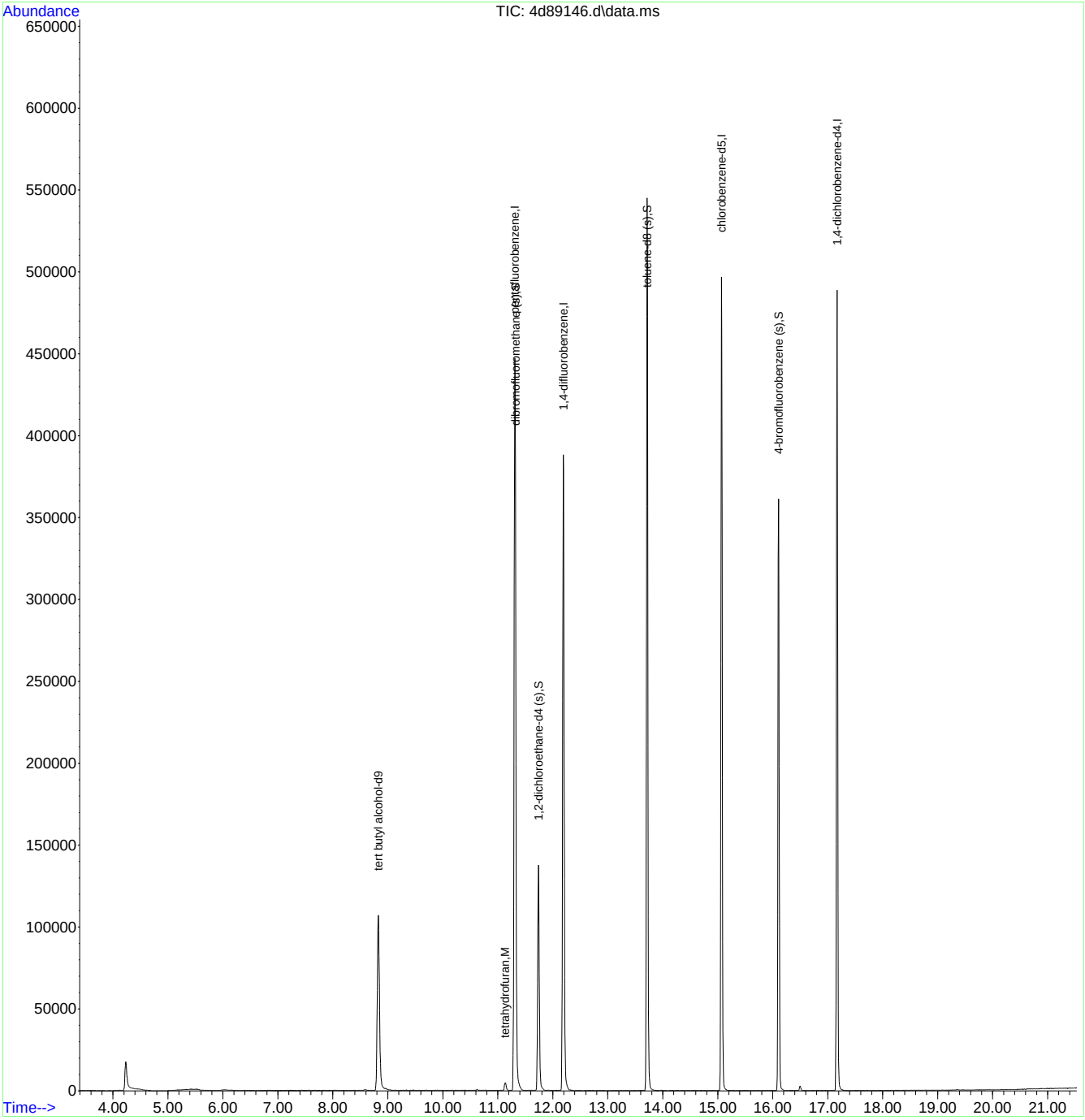
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.824	65	181641	500.00	ug/L	-0.01
5) pentafluorobenzene	11.309	168	251840	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.190	114	350367	50.00	ug/L	0.00
75) chlorobenzene-d5	15.068	117	275857	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	126088	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.320	113	106946	48.60	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.20%			
54) 1,2-dichloroethane-d4 (s)	11.739	65	102359	46.26	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 92.52%			
76) toluene-d8 (s)	13.716	98	363197	51.47	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.94%			
99) 4-bromofluorobenzene (s)	16.107	95	119739	49.13	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.26%			
Target Compounds						Qvalue
42) tetrahydrofuran	11.131	72	1530	3.59	ug/L	89

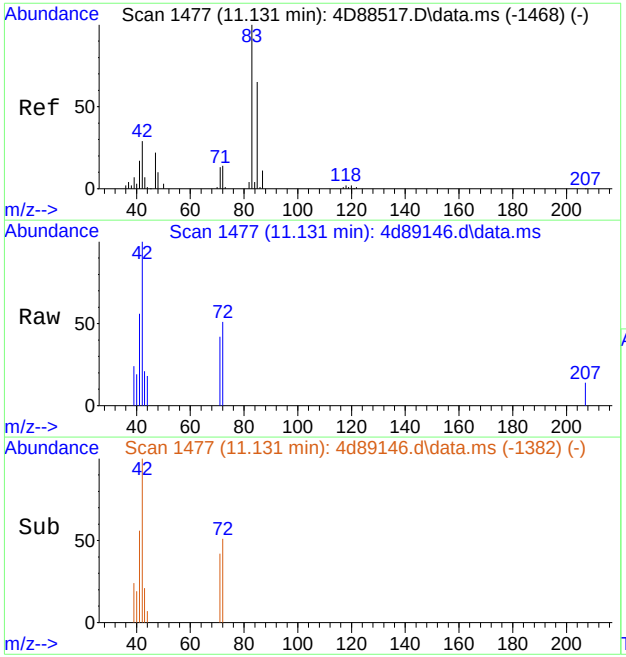
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89146.d
Acq On : 11 Aug 2018 11:31 am
Operator : EddieH
Sample : mb Inst : MS4D
Misc : MS28459,V4D3878,5,,,,1
ALS Vial : 79 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:24:31 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

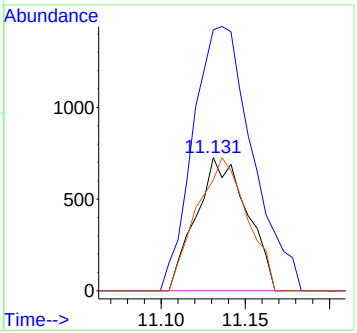




#42
tetrahydrofuran
Concen: 3.59 ug/L
RT: 11.131 min Scan# 1477
Delta R.T. 0.000 min
Lab File: 4d89146.d
Acq: 11 Aug 2018 11:31 am

Tgt Ion: 72 Resp: 1530

Ion	Ratio	Lower	Upper
72	100		
42	196.0	183.2	243.2
71	83.2	65.6	125.6



7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89144.d
Acq On : 11 Aug 2018 10:32 am
Operator : EddieH
Sample : bs Inst : MS4D
Misc : MS28459,V4D3878,5,,,,1
ALS Vial : 77 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:14:20 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.829	65	167846	500.00	ug/L	0.00
5) pentafluorobenzene	11.304	168	216283	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.190	114	303429	50.00	ug/L	0.00
75) chlorobenzene-d5	15.068	117	243837	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	113847	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.314	113	93201	49.32	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.64%			
54) 1,2-dichloroethane-d4 (s)	11.734	65	86993	45.39	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 90.78%			
76) toluene-d8 (s)	13.716	98	314940	50.49	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.98%			
99) 4-bromofluorobenzene (s)	16.106	95	107613	48.90	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.80%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.960	59	110218	260.39	ug/L	96
4) 1,4-dioxane	12.840	88	48130	1240.85	ug/L	95
6) chlorodifluoromethane	4.745	51	101568	46.38	ug/L	97
7) dichlorodifluoromethane	4.719	85	142897	49.03	ug/L	99
9) chloromethane	5.211	50	135846	56.89	ug/L	99
10) vinyl chloride	5.500	62	145720	59.65	ug/L	99
11) 1,3-butadiene	5.599	54	14766	7.86	ug/L	98
12) bromomethane	6.291	94	54886	68.84	ug/L	97
13) chloroethane	6.538	64	78970	63.51	ug/L	97
14) trichlorofluoromethane	7.115	101	150426	49.43	ug/L	99
15) vinyl bromide	6.968	106	95262	52.70	ug/L	96
16) ethyl ether	7.649	74	57021	60.27	ug/L	98
17) acrolein	7.870	56	24280	61.22	ug/L	96
18) freon 113	8.111	151	68547	50.85	ug/L	98
19) 1,1-dichloroethene	8.121	96	90704	55.63	ug/L	95
20) acetone	8.121	43	149363	201.60	ug/L	91
21) acetonitrile	8.567	41	195233	595.24	ug/L	97
22) iodomethane	8.410	142	43417	39.31	ug/L	94
23) carbon disulfide	8.572	76	231513	56.58	ug/L	97
24) methylene chloride	8.897	84	101686	57.20	ug/L	96
25) methyl acetate	8.688	43	100401	57.25	ug/L	99
26) methyl tert butyl ether	9.327	73	281301	55.05	ug/L	98
27) trans-1,2-dichloroethene	9.353	96	95275	55.71	ug/L	98
28) di-isopropyl ether	10.009	45	285249	57.22	ug/L	95
29) 2-butanone	10.696	72	70437	230.90	ug/L	89
30) 1,1-dichloroethane	9.962	63	172187	55.24	ug/L	99
31) chloroprene	10.103	53	135184	54.64	ug/L	95
32) acrylonitrile	9.222	53	46646	59.81	ug/L	96
33) hexane	9.773	56	58709	56.60	ug/L	97
34) vinyl acetate	9.956	86	21246	59.11	ug/L #	86
35) ethyl tert-butyl ether	10.507	59	281846	55.30	ug/L	99
36) ethyl acetate	10.748	45	18324	54.54	ug/L	96
37) 2,2-dichloropropane	10.774	77	140132	54.54	ug/L	92
38) cis-1,2-dichloroethene	10.743	96	105527	54.81	ug/L	98
39) methyl acrylate	10.821	85	20791	56.76	ug/L	97
41) bromochloromethane	11.052	128	49634	54.86	ug/L	97
42) tetrahydrofuran	11.126	72	20011	54.62	ug/L	99
43) chloroform	11.115	85	106003	50.92	ug/L	98
44) t-butyl formate	11.194	59	64205	46.27	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89144.d
Acq On : 11 Aug 2018 10:32 am
Operator : EddieH
Sample : bs Inst : MS4D
Misc : MS28459,V4D3878,5,,,,1
ALS Vial : 77 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:14:20 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	methacrylonitrile	10.979	67	52577	56.97	ug/L		87
47)	1,1,1-trichloroethane	11.419	97	137614	49.24	ug/L		97
48)	cyclohexane	11.529	84	114485	49.03	ug/L	#	85
49)	1,1-dichloropropene	11.603	75	124683	52.13	ug/L		99
51)	carbon tetrachloride	11.639	117	118136	48.71	ug/L		98
55)	n-butyl alcohol	12.253	56	271344	2801.59	ug/L		94
56)	2,2,4-trimethylpentane	11.922	57	219140	49.53	ug/L		91
57)	benzene	11.849	78	359113	54.04	ug/L		100
58)	tert-amyl methyl ether	11.907	87	62251	54.58	ug/L		98
59)	heptane	12.075	71	53685	54.62	ug/L		98
60)	isopropyl acetate	11.770	87	25439	55.53	ug/L	#	88
61)	1,2-dichloroethane	11.823	62	114089	45.96	ug/L		96
62)	trichloroethene	12.520	130	92610	51.63	ug/L		99
64)	2-nitropropane	13.170	41	26760	42.18	ug/L		99
65)	2-chloroethyl vinyl ether	13.218	63	301843	248.40	ug/L		99
66)	methyl methacrylate	12.751	100	30020	51.93	ug/L	#	80
67)	1,2-dichloropropane	12.746	63	90809	52.44	ug/L		99
68)	dibromomethane	12.871	93	59445	49.94	ug/L		98
69)	methylcyclohexane	12.772	83	122527	45.72	ug/L		99
70)	bromodichloromethane	12.992	83	116352	48.82	ug/L		100
71)	epichlorohydrin	13.307	57	70423	261.59	ug/L		95
72)	cis-1,3-dichloropropene	13.417	75	143202	51.83	ug/L		94
73)	4-methyl-2-pentanone	13.511	58	188594	198.29	ug/L		90
74)	3-methyl-1-butanol	13.495	55	158781	1053.28	ug/L		96
77)	toluene	13.779	92	205084	53.20	ug/L		99
78)	trans-1,3-dichloropropene	13.910	75	126810	53.49	ug/L		100
79)	ethyl methacrylate	13.931	69	121981	54.19	ug/L		97
80)	1,1,2-trichloroethane	14.109	83	68990	52.61	ug/L		97
81)	tetrachloroethene	14.319	164	69323	52.78	ug/L		99
82)	1,3-dichloropropane	14.277	76	125367	50.42	ug/L		96
83)	2-hexanone	14.271	58	192926	210.50	ug/L		94
84)	butyl acetate	14.350	56	68785	53.93	ug/L		93
85)	dibromochloromethane	14.513	129	90561	52.60	ug/L		99
86)	1,2-dibromoethane	14.659	107	92330	52.61	ug/L		100
88)	chlorobenzene	15.095	112	217347	51.20	ug/L		99
89)	1,1,1,2-tetrachloroethane	15.142	131	78594	52.02	ug/L		98
90)	ethylbenzene	15.157	91	364156	51.36	ug/L		99
91)	m,p-xylene	15.252	106	281613	105.78	ug/L		100
92)	o-xylene	15.629	106	135349	52.12	ug/L		98
93)	styrene	15.629	104	232101	53.30	ug/L		96
94)	bromoform	15.839	173	66270	51.89	ug/L		99
96)	isopropylbenzene	15.944	105	339670	51.35	ug/L		98
100)	bromobenzene	16.290	156	91771	51.93	ug/L		94
101)	1,1,2,2-tetrachloroethane	16.159	83	123153	49.18	ug/L		98
102)	trans-1,4-dichloro-2-b...	16.201	53	24957	42.23	ug/L		94
103)	1,2,3-trichloropropane	16.238	110	31811	50.72	ug/L		99
104)	n-propylbenzene	16.311	91	398908	50.26	ug/L		98
105)	2-chlorotoluene	16.437	126	83738	50.32	ug/L		97
106)	4-chlorotoluene	16.521	91	236367	49.74	ug/L		99
107)	1,3,5-trimethylbenzene	16.442	105	276610	51.45	ug/L		99
108)	tert-butylbenzene	16.772	134	49755	50.77	ug/L		94
109)	1,2,4-trimethylbenzene	16.804	105	273920	51.47	ug/L		98
110)	sec-butylbenzene	16.966	105	324967	49.92	ug/L		99
111)	1,3-dichlorobenzene	17.118	146	158908	51.21	ug/L		99
112)	p-isopropyltoluene	17.071	119	270983	51.82	ug/L		99
113)	1,4-dichlorobenzene	17.192	146	161410	50.54	ug/L		100
114)	benzyl chloride	17.286	91	223196	61.17	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89144.d
Acq On : 11 Aug 2018 10:32 am
Operator : EddieH
Sample : bs Inst : MS4D
Misc : MS28459,V4D3878,5,,,,1
ALS Vial : 77 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:14:20 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

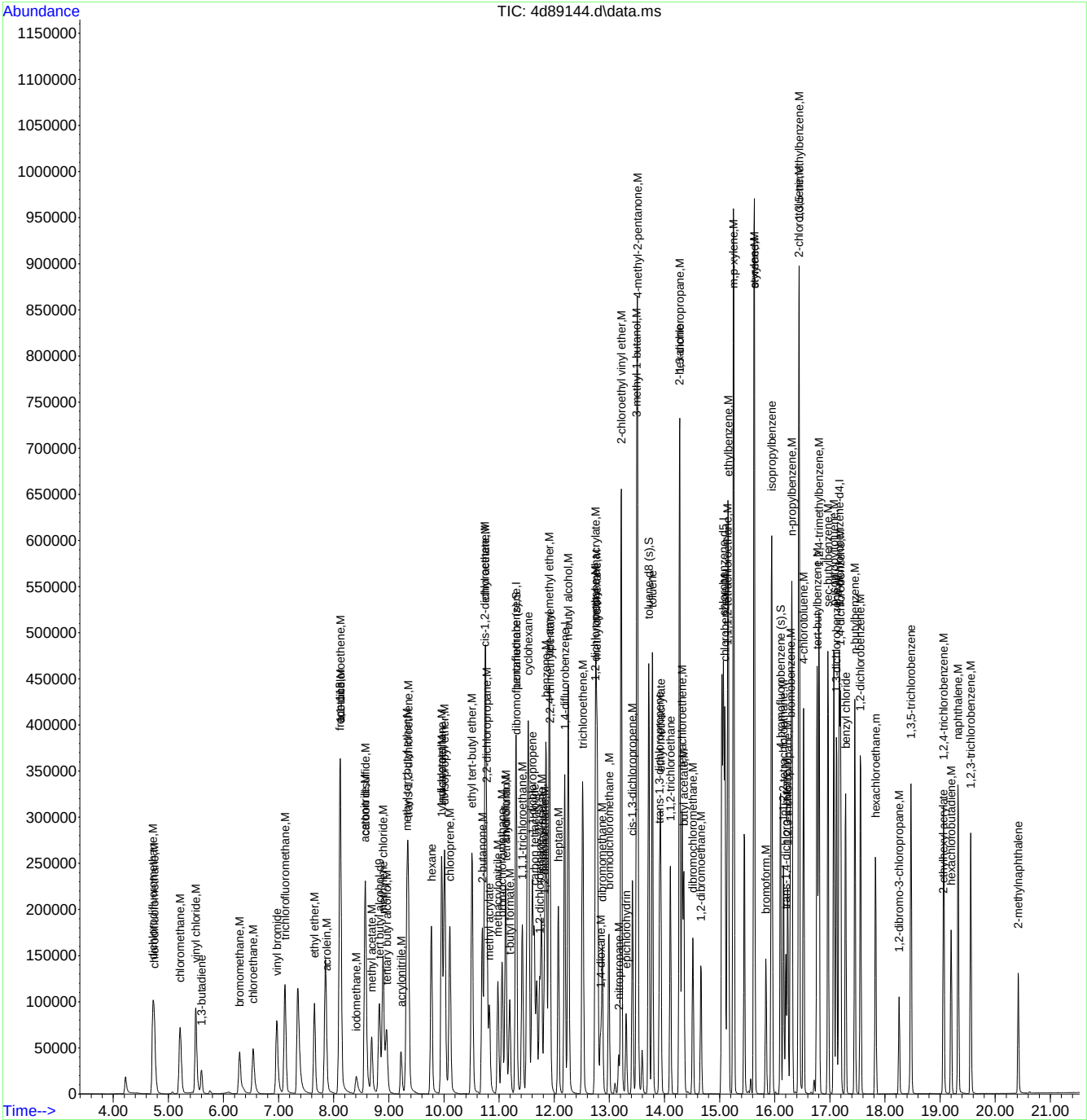
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
115) 1,2-dichlorobenzene	17.554	146	151322	51.16	ug/L	99
116) n-butylbenzene	17.454	92	128442	49.97	ug/L	98
117) 1,2-dibromo-3-chloropr...	18.256	75	24671	46.92	ug/L	90
118) 1,3,5-trichlorobenzene	18.471	180	105008	51.29	ug/L	99
119) 2-ethylhexyl acrylate	19.053	70	8786	7.55	ug/L	96
120) 1,2,4-trichlorobenzene	19.064	180	92706	51.59	ug/L	98
121) hexachlorobutadiene	19.200	225	37618	51.65	ug/L	98
122) naphthalene	19.326	128	253148	48.52	ug/L	100
123) 1,2,3-trichlorobenzene	19.556	180	86941	50.69	ug/L	100
124) hexachloroethane	17.831	201	45328	50.91	ug/L	99
125) 2-methylnaphthalene	20.416	142	62713	24.47	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89144.d
Acq On : 11 Aug 2018 10:32 am
Operator : EddieH
Sample : bs Inst : MS4D
Misc : MS28459,V4D3878,5,,,,1
ALS Vial : 77 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:14:20 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89149.d
Acq On : 11 Aug 2018 12:58 pm
Operator : EddieH
Sample : JC71603-3MS Inst : MS4D
Misc : MS28483,V4D3878,5,,,,5
ALS Vial : 82 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:17:22 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.834	65	173875	500.00	ug/L	0.00
5) pentafluorobenzene	11.309	168	222460	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.190	114	316861	50.00	ug/L	0.00
75) chlorobenzene-d5	15.068	117	267110	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	125230	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.320	113	96891	49.85	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.70%			
54) 1,2-dichloroethane-d4 (s)	11.739	65	92621	46.28	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 92.56%			
76) toluene-d8 (s)	13.716	98	335958	49.17	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.34%			
99) 4-bromofluorobenzene (s)	16.106	95	119656	49.43	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.86%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.965	59	111065	253.29	ug/L	96
4) 1,4-dioxane	12.845	88	48400	1204.55	ug/L	96
6) chlorodifluoromethane	4.755	51	107478	47.72	ug/L	96
7) dichlorodifluoromethane	4.724	85	137070	45.72	ug/L	100
9) chloromethane	5.227	50	126353	51.44	ug/L	99
10) vinyl chloride	5.505	62	133177	53.01	ug/L	99
11) 1,3-butadiene	5.610	54	24228	12.54	ug/L	97
12) bromomethane	6.297	94	47667	58.12	ug/L	96
13) chloroethane	6.543	64	73659	57.59	ug/L	97
14) trichlorofluoromethane	7.125	101	144304	46.10	ug/L	98
15) vinyl bromide	6.973	106	108776	58.50	ug/L	96
16) ethyl ether	7.655	74	54582	56.09	ug/L	98
17) acrolein	7.875	56	22495	55.14	ug/L	99
18) freon 113	8.116	151	63214	45.59	ug/L	98
19) 1,1-dichloroethene	8.127	96	84682	50.49	ug/L	95
20) acetone	8.127	43	148200	194.47	ug/L	93
21) acetonitrile	8.572	41	189234	560.93	ug/L	98
22) iodomethane	8.415	142	32197	29.39	ug/L	97
23) carbon disulfide	8.583	76	210662	50.05	ug/L	96
24) methylene chloride	8.902	84	97172	53.14	ug/L	96
25) methyl acetate	8.693	43	101306	56.17	ug/L	99
26) methyl tert butyl ether	9.332	73	273779	52.09	ug/L	97
27) trans-1,2-dichloroethene	9.359	96	89861	51.09	ug/L	99
28) di-isopropyl ether	10.014	45	269062	52.47	ug/L	97
29) 2-butanone	10.701	72	70803	225.65	ug/L	89
30) 1,1-dichloroethane	9.962	63	162437	50.67	ug/L	99
31) chloroprene	10.114	53	123262	48.44	ug/L	93
32) acrylonitrile	9.228	53	45996	57.34	ug/L	95
33) hexane	9.778	56	55818	52.32	ug/L	96
34) vinyl acetate	9.962	86	18752	50.72	ug/L #	89
35) ethyl tert-butyl ether	10.512	59	276596	52.76	ug/L	98
36) ethyl acetate	10.753	45	17625	51.00	ug/L #	91
37) 2,2-dichloropropane	10.780	77	124294	47.03	ug/L	91
38) cis-1,2-dichloroethene	10.748	96	101494	51.25	ug/L	98
39) methyl acrylate	10.832	85	20273	53.81	ug/L	100
41) bromochloromethane	11.057	128	47581	51.13	ug/L	97
42) tetrahydrofuran	11.131	72	20191	53.58	ug/L	97
43) chloroform	11.120	85	100487	46.93	ug/L	98
44) t-butyl formate	11.199	59	39916	27.96	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89149.d
Acq On : 11 Aug 2018 12:58 pm
Operator : EddieH
Sample : JC71603-3MS Inst : MS4D
Misc : MS28483,V4D3878,5,,,,5
ALS Vial : 82 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:17:22 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	methacrylonitrile	10.984	67	51494	54.24	ug/L		89
47)	1,1,1-trichloroethane	11.424	97	129101	44.91	ug/L		98
48)	cyclohexane	11.535	84	115448	48.07	ug/L	#	90
49)	1,1-dichloropropene	11.608	75	116356	47.30	ug/L		99
51)	carbon tetrachloride	11.639	117	110499	44.30	ug/L		98
55)	n-butyl alcohol	12.258	56	269970	2669.24	ug/L		94
56)	2,2,4-trimethylpentane	11.922	57	221213	47.88	ug/L		94
57)	benzene	11.854	78	345089	49.73	ug/L		99
58)	tert-amyl methyl ether	11.912	87	61334	51.50	ug/L		99
59)	heptane	12.080	71	51549	50.22	ug/L		98
60)	isopropyl acetate	11.770	87	24719	51.67	ug/L	#	88
61)	1,2-dichloroethane	11.823	62	113261	43.70	ug/L		96
62)	trichloroethene	12.520	130	100037	53.41	ug/L		99
64)	2-nitropropane	13.170	41	27131	40.95	ug/L		97
66)	methyl methacrylate	12.756	100	30598	50.68	ug/L	#	78
67)	1,2-dichloropropane	12.751	63	89596	49.55	ug/L		100
68)	dibromomethane	12.871	93	59901	48.19	ug/L		97
69)	methylcyclohexane	12.777	83	127613	45.60	ug/L		96
70)	bromodichloromethane	12.992	83	116722	46.90	ug/L		99
71)	epichlorohydrin	13.307	57	66345	236.00	ug/L		96
72)	cis-1,3-dichloropropene	13.422	75	143583	49.77	ug/L		93
73)	4-methyl-2-pentanone	13.511	58	197541	198.89	ug/L		90
74)	3-methyl-1-butanol	13.495	55	158815	1008.85	ug/L		95
77)	toluene	13.784	92	206255	48.84	ug/L		98
78)	trans-1,3-dichloropropene	13.915	75	128994	49.67	ug/L		99
79)	ethyl methacrylate	13.931	69	127116	51.55	ug/L		96
80)	1,1,2-trichloroethane	14.109	83	72364	50.37	ug/L		96
81)	tetrachloroethene	14.324	164	188649	131.11	ug/L		98
82)	1,3-dichloropropane	14.277	76	130565	47.93	ug/L		98
83)	2-hexanone	14.277	58	205043	204.23	ug/L		92
84)	butyl acetate	14.350	56	71327	51.05	ug/L		94
85)	dibromochloromethane	14.518	129	94498	50.11	ug/L		99
86)	1,2-dibromoethane	14.665	107	97907	50.93	ug/L		99
88)	chlorobenzene	15.100	112	223034	47.96	ug/L		98
89)	1,1,1,2-tetrachloroethane	15.142	131	81954	49.52	ug/L		99
90)	ethylbenzene	15.157	91	371629	47.84	ug/L		99
91)	m,p-xylene	15.252	106	285667	97.96	ug/L		100
92)	o-xylene	15.629	106	140094	49.25	ug/L		96
93)	styrene	15.629	104	239270	50.16	ug/L		96
94)	bromoform	15.839	173	68127	48.69	ug/L		99
96)	isopropylbenzene	15.944	105	343482	47.40	ug/L		99
100)	bromobenzene	16.290	156	96316	49.55	ug/L		95
101)	1,1,2,2-tetrachloroethane	16.159	83	133411	48.44	ug/L		99
102)	trans-1,4-dichloro-2-b...	16.201	53	26546	40.84	ug/L		97
103)	1,2,3-trichloropropane	16.238	110	34471	49.96	ug/L		98
104)	n-propylbenzene	16.311	91	404756	46.36	ug/L		98
105)	2-chlorotoluene	16.437	126	85659	46.79	ug/L		98
106)	4-chlorotoluene	16.526	91	245356	46.94	ug/L		99
107)	1,3,5-trimethylbenzene	16.442	105	284547	48.12	ug/L		99
108)	tert-butylbenzene	16.767	134	50194	46.56	ug/L		94
109)	1,2,4-trimethylbenzene	16.804	105	277411	47.39	ug/L		99
110)	sec-butylbenzene	16.966	105	329855	46.07	ug/L		99
111)	1,3-dichlorobenzene	17.118	146	164284	48.13	ug/L		100
112)	p-isopropyltoluene	17.071	119	275760	47.94	ug/L		99
113)	1,4-dichlorobenzene	17.192	146	168162	47.87	ug/L		99
114)	benzyl chloride	17.286	91	219821	54.77	ug/L		98
115)	1,2-dichlorobenzene	17.554	146	160776	49.42	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89149.d
Acq On : 11 Aug 2018 12:58 pm
Operator : EddieH
Sample : JC71603-3MS Inst : MS4D
Misc : MS28483,V4D3878,5,,,,5
ALS Vial : 82 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:17:22 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

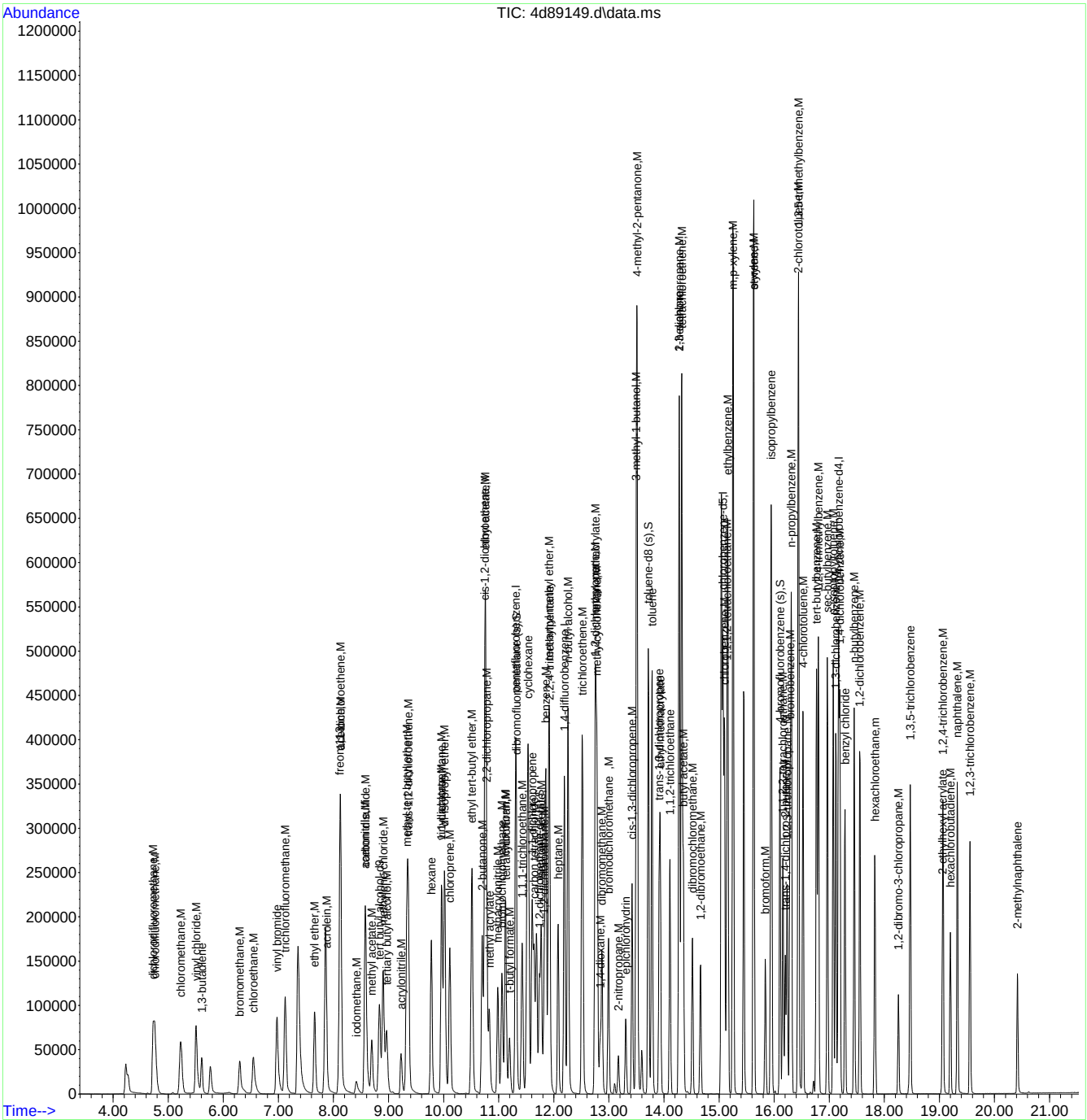
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116) n-butylbenzene	17.454	92	130093	46.01	ug/L	97
117) 1,2-dibromo-3-chloropr...	18.256	75	26356	45.57	ug/L	88
118) 1,3,5-trichlorobenzene	18.471	180	107804	47.87	ug/L	99
119) 2-ethylhexyl acrylate	19.053	70	14413	10.73	ug/L	99
120) 1,2,4-trichlorobenzene	19.064	180	94684	47.90	ug/L	99
121) hexachlorobutadiene	19.200	225	37926	47.34	ug/L	97
122) naphthalene	19.326	128	263888	45.98	ug/L	100
123) 1,2,3-trichlorobenzene	19.556	180	88959	47.15	ug/L	98
124) hexachloroethane	17.831	201	46254	47.22	ug/L	99
125) 2-methylnaphthalene	20.416	142	65718	23.31	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89149.d
Acq On : 11 Aug 2018 12:58 pm
Operator : EddieH
Sample : JC71603-3MS Inst : MS4D
Misc : MS28483,V4D3878,5,,,,5
ALS Vial : 82 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:17:22 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89150.d
Acq On : 11 Aug 2018 1:27 pm
Operator : EddieH
Sample : JC71603-3MSD Inst : MS4D
Misc : MS28483,V4D3878,5,,,,5
ALS Vial : 83 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:18:19 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.834	65	181191	500.00	ug/L	0.00
5) pentafluorobenzene	11.309	168	234539	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.190	114	328134	50.00	ug/L	0.00
75) chlorobenzene-d5	15.068	117	263304	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	121915	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.314	113	100735	49.16	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.32%			
54) 1,2-dichloroethane-d4 (s)	11.739	65	93504	45.12	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 90.24%			
76) toluene-d8 (s)	13.715	98	345248	51.26	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.52%			
99) 4-bromofluorobenzene (s)	16.106	95	115685	49.09	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.18%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.965	59	120854	264.48	ug/L	95
4) 1,4-dioxane	12.840	88	50730	1211.56	ug/L	100
6) chlorodifluoromethane	4.755	51	112867	47.53	ug/L	96
7) dichlorodifluoromethane	4.724	85	145685	46.09	ug/L	100
9) chloromethane	5.227	50	134506	51.94	ug/L	99
10) vinyl chloride	5.505	62	142922	53.95	ug/L	99
11) 1,3-butadiene	5.610	54	24429	12.00	ug/L	97
12) bromomethane	6.297	94	57564	66.58	ug/L	96
13) chloroethane	6.543	64	78733	58.39	ug/L	98
14) trichlorofluoromethane	7.125	101	157818	47.82	ug/L	98
15) vinyl bromide	6.973	106	118865	60.64	ug/L	96
16) ethyl ether	7.660	74	58077	56.61	ug/L	98
17) acrolein	7.869	56	23236	54.03	ug/L	97
18) freon 113	8.116	151	69536	47.57	ug/L	99
19) 1,1-dichloroethene	8.126	96	93392	52.82	ug/L	97
20) acetone	8.126	43	158600	197.40	ug/L	93
21) acetonitrile	8.577	41	200776	564.50	ug/L	98
22) iodomethane	8.415	142	44701	37.51	ug/L	97
23) carbon disulfide	8.583	76	231396	52.15	ug/L	96
24) methylene chloride	8.902	84	104518	54.21	ug/L	96
25) methyl acetate	8.693	43	107611	56.59	ug/L	99
26) methyl tert butyl ether	9.332	73	294057	53.07	ug/L	98
27) trans-1,2-dichloroethene	9.358	96	98898	53.33	ug/L	99
28) di-isopropyl ether	10.014	45	288949	53.45	ug/L	95
29) 2-butanone	10.701	72	75435	228.03	ug/L	91
30) 1,1-dichloroethane	9.967	63	176949	52.35	ug/L	99
31) chloroprene	10.114	53	136345	50.82	ug/L	94
32) acrylonitrile	9.227	53	49508	58.54	ug/L	95
33) hexane	9.778	56	61243	54.45	ug/L	94
34) vinyl acetate	9.967	86	19789	50.77	ug/L #	77
35) ethyl tert-butyl ether	10.512	59	295902	53.54	ug/L	99
36) ethyl acetate	10.753	45	18223	50.02	ug/L	96
37) 2,2-dichloropropane	10.779	77	134841	48.40	ug/L	91
38) cis-1,2-dichloroethene	10.748	96	109672	52.53	ug/L	98
39) methyl acrylate	10.832	85	21352	53.75	ug/L	95
41) bromochloromethane	11.062	128	50678	51.65	ug/L	98
42) tetrahydrofuran	11.131	72	21334	53.70	ug/L	96
43) chloroform	11.120	85	108632	48.12	ug/L	97
44) t-butyl formate	11.199	59	38532	25.60	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89150.d
Acq On : 11 Aug 2018 1:27 pm
Operator : EddieH
Sample : JC71603-3MSD Inst : MS4D
Misc : MS28483,V4D3878,5,,,,5
ALS Vial : 83 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:18:19 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	methacrylonitrile	10.984	67	55590	55.54	ug/L		88
47)	1,1,1-trichloroethane	11.424	97	140878	46.48	ug/L		98
48)	cyclohexane	11.534	84	126776	50.07	ug/L		90
49)	1,1-dichloropropene	11.608	75	127370	49.11	ug/L		99
51)	carbon tetrachloride	11.639	117	121901	46.35	ug/L		99
55)	n-butyl alcohol	12.258	56	287624	2746.09	ug/L		94
56)	2,2,4-trimethylpentane	11.922	57	237354	49.60	ug/L		94
57)	benzene	11.854	78	370562	51.57	ug/L		99
58)	tert-amyl methyl ether	11.912	87	65254	52.90	ug/L		97
59)	heptane	12.080	71	55640	52.34	ug/L		98
60)	isopropyl acetate	11.770	87	26282	53.05	ug/L	#	91
61)	1,2-dichloroethane	11.823	62	120443	44.87	ug/L		96
62)	trichloroethene	12.525	130	106425	54.87	ug/L		99
64)	2-nitropropane	13.170	41	28456	41.48	ug/L		98
66)	methyl methacrylate	12.756	100	32173	51.46	ug/L	#	78
67)	1,2-dichloropropane	12.751	63	94753	50.60	ug/L		99
68)	dibromomethane	12.871	93	62439	48.50	ug/L		97
69)	methylcyclohexane	12.777	83	137713	47.52	ug/L		97
70)	bromodichloromethane	12.992	83	122610	47.58	ug/L		99
71)	epichlorohydrin	13.307	57	68109	233.95	ug/L		97
72)	cis-1,3-dichloropropene	13.422	75	152098	50.91	ug/L		94
73)	4-methyl-2-pentanone	13.511	58	206625	200.89	ug/L		91
74)	3-methyl-1-butanol	13.495	55	168603	1034.23	ug/L		95
77)	toluene	13.784	92	217325	52.21	ug/L		96
78)	trans-1,3-dichloropropene	13.915	75	133788	52.26	ug/L		99
79)	ethyl methacrylate	13.936	69	131617	54.15	ug/L		95
80)	1,1,2-trichloroethane	14.109	83	74209	52.41	ug/L		97
81)	tetrachloroethene	14.324	164	196573	138.59	ug/L		98
82)	1,3-dichloropropane	14.276	76	134438	50.07	ug/L		99
83)	2-hexanone	14.276	58	212639	214.85	ug/L		90
84)	butyl acetate	14.350	56	72908	52.94	ug/L		95
85)	dibromochloromethane	14.518	129	96160	51.73	ug/L		99
86)	1,2-dibromoethane	14.664	107	100370	52.96	ug/L		99
88)	chlorobenzene	15.100	112	229714	50.11	ug/L		98
89)	1,1,1,2-tetrachloroethane	15.142	131	84194	51.61	ug/L		98
90)	ethylbenzene	15.157	91	385004	50.28	ug/L		99
91)	m,p-xylene	15.257	106	294305	102.38	ug/L		97
92)	o-xylene	15.629	106	142707	50.89	ug/L		98
93)	styrene	15.629	104	244388	51.97	ug/L		97
94)	bromoform	15.839	173	69871	50.66	ug/L		99
96)	isopropylbenzene	15.944	105	353103	49.43	ug/L		98
100)	bromobenzene	16.290	156	97402	51.47	ug/L		96
101)	1,1,2,2-tetrachloroethane	16.159	83	133036	49.62	ug/L		98
102)	trans-1,4-dichloro-2-b...	16.201	53	26774	42.31	ug/L		95
103)	1,2,3-trichloropropane	16.237	110	34138	50.83	ug/L		98
104)	n-propylbenzene	16.311	91	416762	49.04	ug/L		98
105)	2-chlorotoluene	16.437	126	87773	49.25	ug/L		99
106)	4-chlorotoluene	16.526	91	252218	49.57	ug/L		98
107)	1,3,5-trimethylbenzene	16.442	105	292531	50.81	ug/L		100
108)	tert-butylbenzene	16.772	134	52025	49.57	ug/L		95
109)	1,2,4-trimethylbenzene	16.804	105	287147	50.38	ug/L		98
110)	sec-butylbenzene	16.966	105	342748	49.17	ug/L		99
111)	1,3-dichlorobenzene	17.123	146	168141	50.60	ug/L		98
112)	p-isopropyltoluene	17.071	119	284872	50.87	ug/L		99
113)	1,4-dichlorobenzene	17.192	146	171875	50.26	ug/L		99
114)	benzyl chloride	17.286	91	221026	56.57	ug/L		99
115)	1,2-dichlorobenzene	17.559	146	161764	51.07	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89150.d
Acq On : 11 Aug 2018 1:27 pm
Operator : EddieH
Sample : JC71603-3MSD Inst : MS4D
Misc : MS28483,V4D3878,5,,,,5
ALS Vial : 83 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:18:19 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

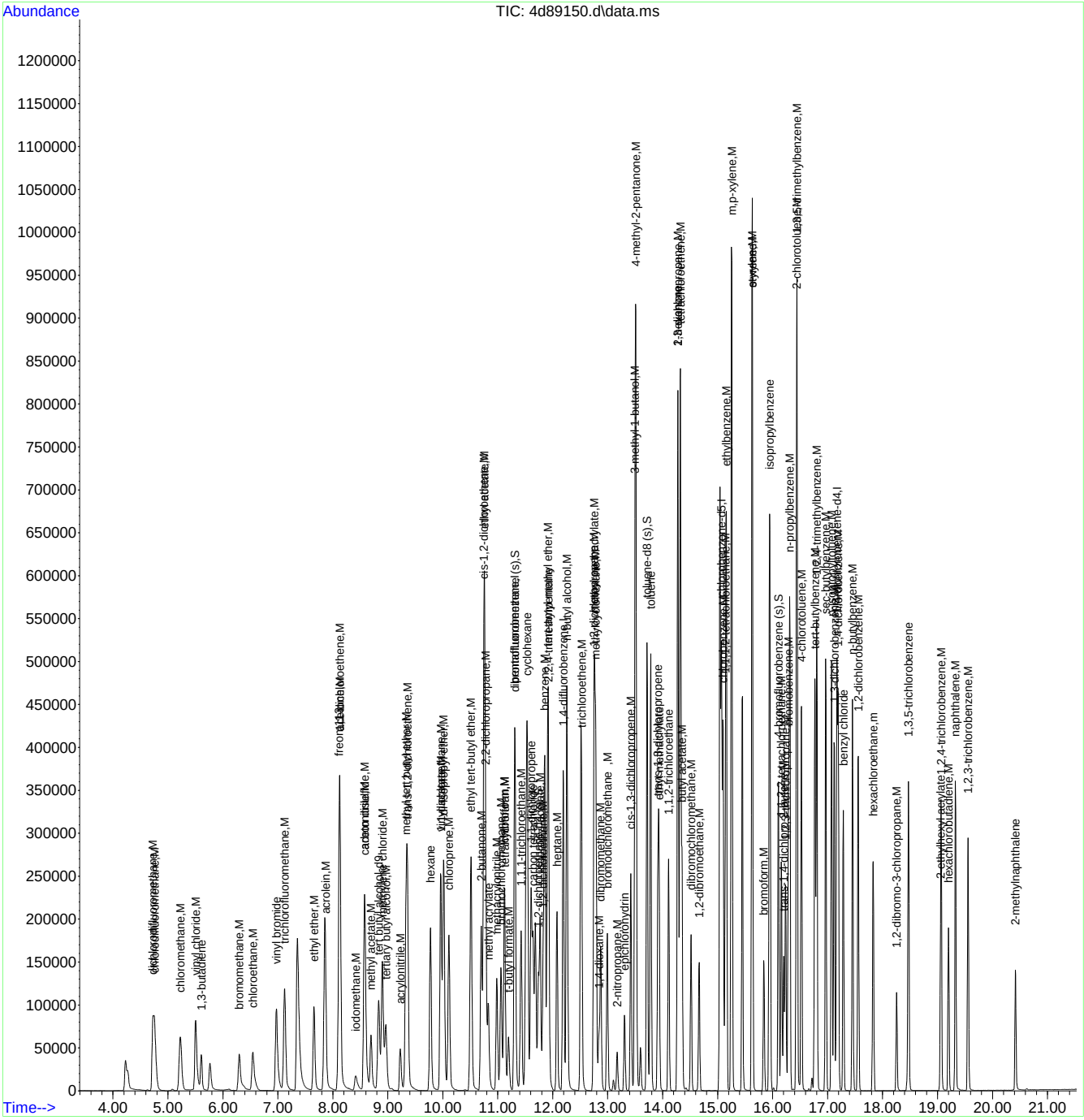
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
116) n-butylbenzene	17.454	92	134798	48.98	ug/L	99
117) 1,2-dibromo-3-chloropr...	18.256	75	26921	47.81	ug/L	90
118) 1,3,5-trichlorobenzene	18.471	180	111295	50.77	ug/L	99
119) 2-ethylhexyl acrylate	19.053	70	15448	11.71	ug/L	95
120) 1,2,4-trichlorobenzene	19.069	180	97634	50.74	ug/L	99
121) hexachlorobutadiene	19.200	225	39429	50.56	ug/L	99
122) naphthalene	19.326	128	272402	48.75	ug/L	99
123) 1,2,3-trichlorobenzene	19.556	180	92312	50.26	ug/L	100
124) hexachloroethane	17.831	201	47026	49.32	ug/L	98
125) 2-methylnaphthalene	20.416	142	68784	25.06	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89150.d
Acq On : 11 Aug 2018 1:27 pm
Operator : EddieH
Sample : JC71603-3MSD Inst : MS4D
Misc : MS28483,V4D3878,5,,,,5
ALS Vial : 83 Sample Multiplier: 1

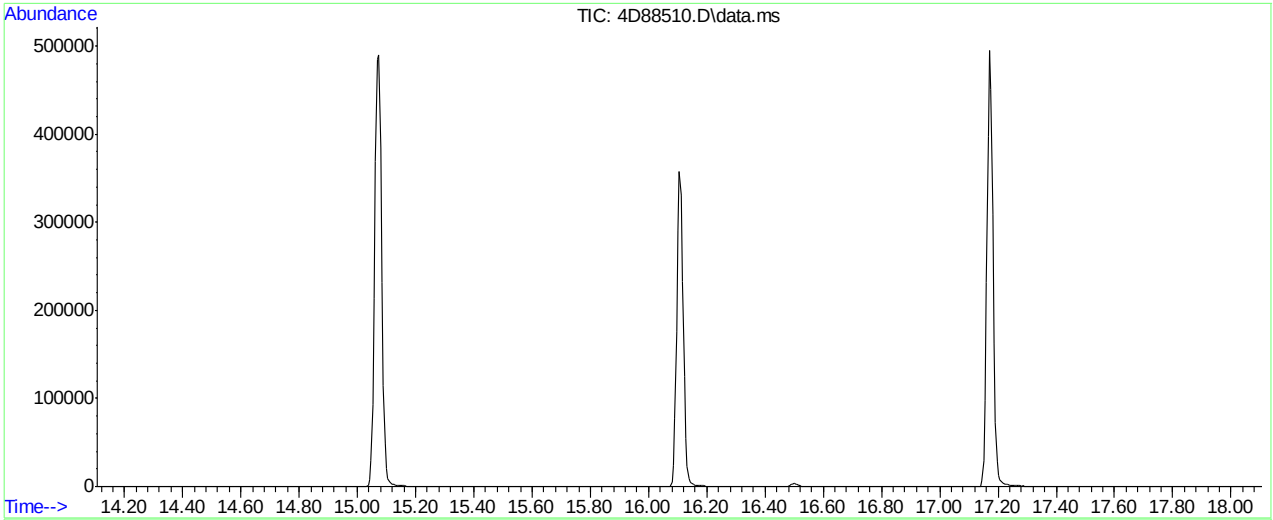
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:18:19 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

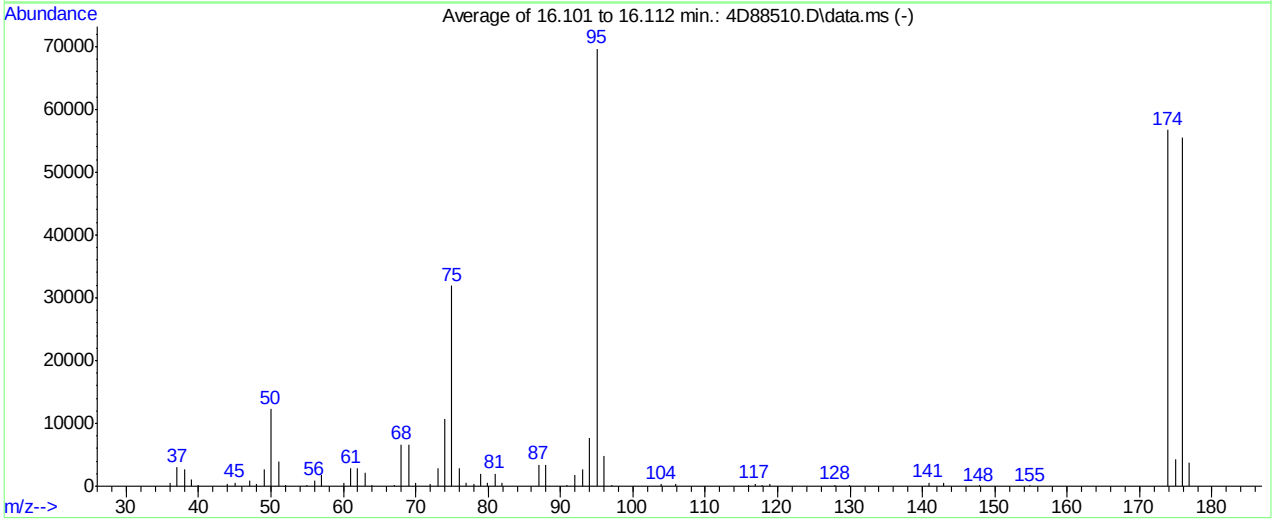


SW-846 Method 8260

Data File : C:\msdchem\1\data\V4D3846\4D88510.D Vial: 2
Acq On : 17 Jul 2018 8:12 pm Operator: juntaep
Sample : bfb Inst : MS4D
Misc : MS27734,V4D3846,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D3846.M (RTE Integrator)
Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um





AutoFind: Scans 2425, 2426, 2427; Background Corrected with Scan 2417

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	12255	PASS
75	95	30	60	45.8	31939	PASS
95	95	100	100	100.0	69672	PASS
96	95	5	9	6.9	4812	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	81.4	56720	PASS
175	174	5	9	7.7	4359	PASS
176	174	95	101	97.8	55459	PASS
177	176	5	9	6.7	3716	PASS

4D88510.D M4D3846.M Wed Jul 18 18:31:24 2018 RPT1

Average of 16.101 to 16.112 min.: 4D88510.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	568	51.05	3849	68.00	6633	79.90	586
37.00	3094	52.00	167	69.00	6606	80.90	2017
38.05	2706	55.00	121	70.00	538	81.90	503
39.05	1073	56.00	950	72.00	350	87.00	3474
40.00	118	57.00	1727	73.00	2873	88.00	3331
44.00	362	60.00	616	74.00	10693	90.95	254
45.00	555	61.00	2946	75.00	31939	92.00	1745
47.00	926	62.00	2892	76.00	2833	93.00	2628
48.00	374	63.00	2092	76.95	457	94.00	7650
49.00	2675	64.00	210	78.00	384	95.00	69672
50.00	12255	67.05	171	78.90	2002	96.00	4812

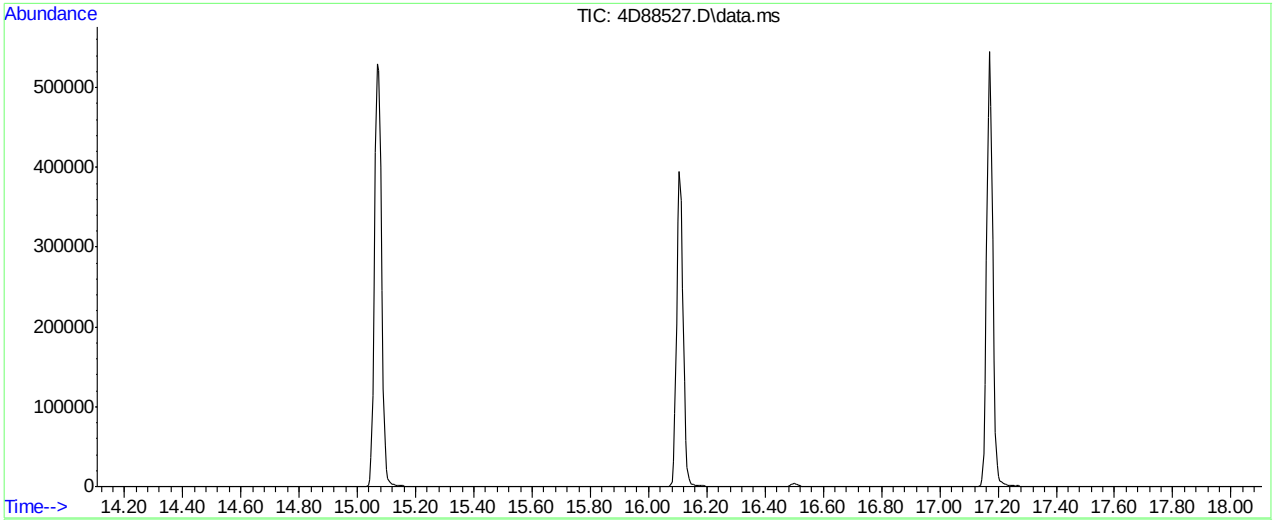
Average of 16.101 to 16.112 min.: 4D88510.D\data.ms
bfb
Modified:subtracted

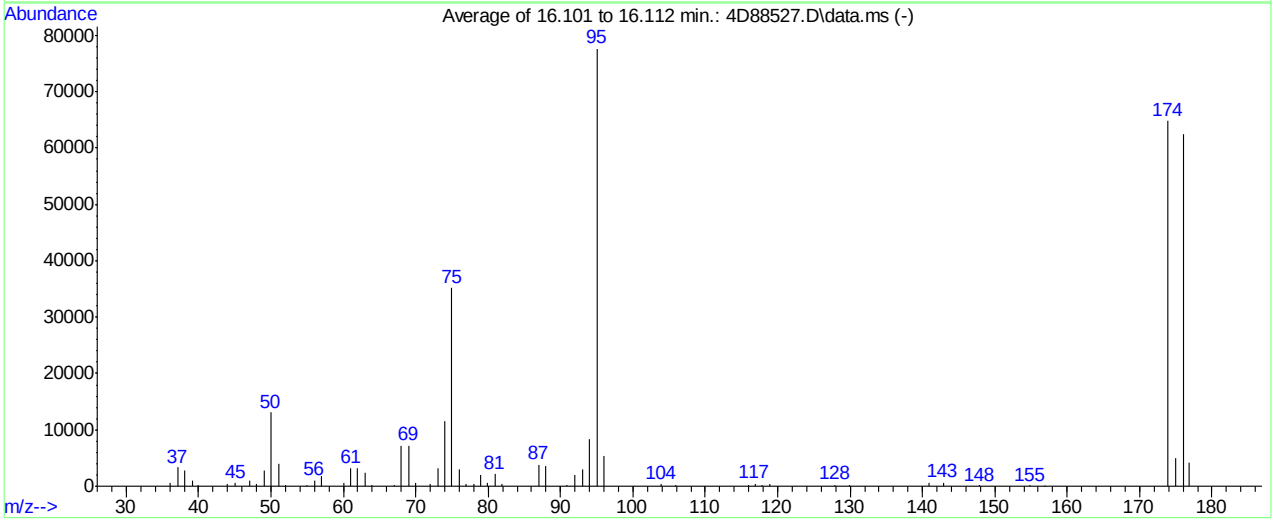
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.00	107	147.85	106				
103.90	299	154.90	117				
105.90	278	173.90	56720				
115.95	194	175.00	4359				
116.90	383	175.90	55459				
117.90	221	176.90	3716				
118.90	349						
127.90	236						
129.90	234						
140.90	578						
142.90	567						

SW-846 Method 8260

Data File : C:\msdchem\1\data\V4D3846\4D88527.D Vial: 3
Acq On : 19 Jul 2018 9:58 am Operator: juntaep
Sample : bfb2 Inst : MS4D
Misc : MS27734,V4D3846,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D3846.M (RTE Integrator)
Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um





AutoFind: Scans 2425, 2426, 2427; Background Corrected with Scan 2417

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.8	13084	PASS
75	95	30	60	45.3	35147	PASS
95	95	100	100	100.0	77672	PASS
96	95	5	9	6.8	5299	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	83.4	64771	PASS
175	174	5	9	7.7	4969	PASS
176	174	95	101	96.3	62379	PASS
177	176	5	9	6.7	4204	PASS

4D88527.D M4D3846.M Thu Jul 19 16:36:58 2018 RPT1

Average of 16.101 to 16.112 min.: 4D88527.D\data.ms
bfb2
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	609	51.05	3974	68.00	7160	79.95	617
37.10	3322	52.00	182	69.00	7261	80.90	2150
38.10	2862	55.00	197	70.00	561	81.90	499
39.10	1103	56.00	1006	72.00	354	87.00	3802
40.00	170	57.00	1747	73.00	3114	88.00	3608
44.00	369	60.00	677	74.00	11462	90.95	250
45.05	599	61.00	3184	75.00	35147	92.00	1899
47.05	935	62.00	3169	76.00	3018	93.00	2911
48.00	413	63.00	2313	77.00	469	94.00	8286
49.05	2760	64.00	218	78.00	353	95.00	77672
50.00	13084	67.05	182	78.90	2082	96.00	5299

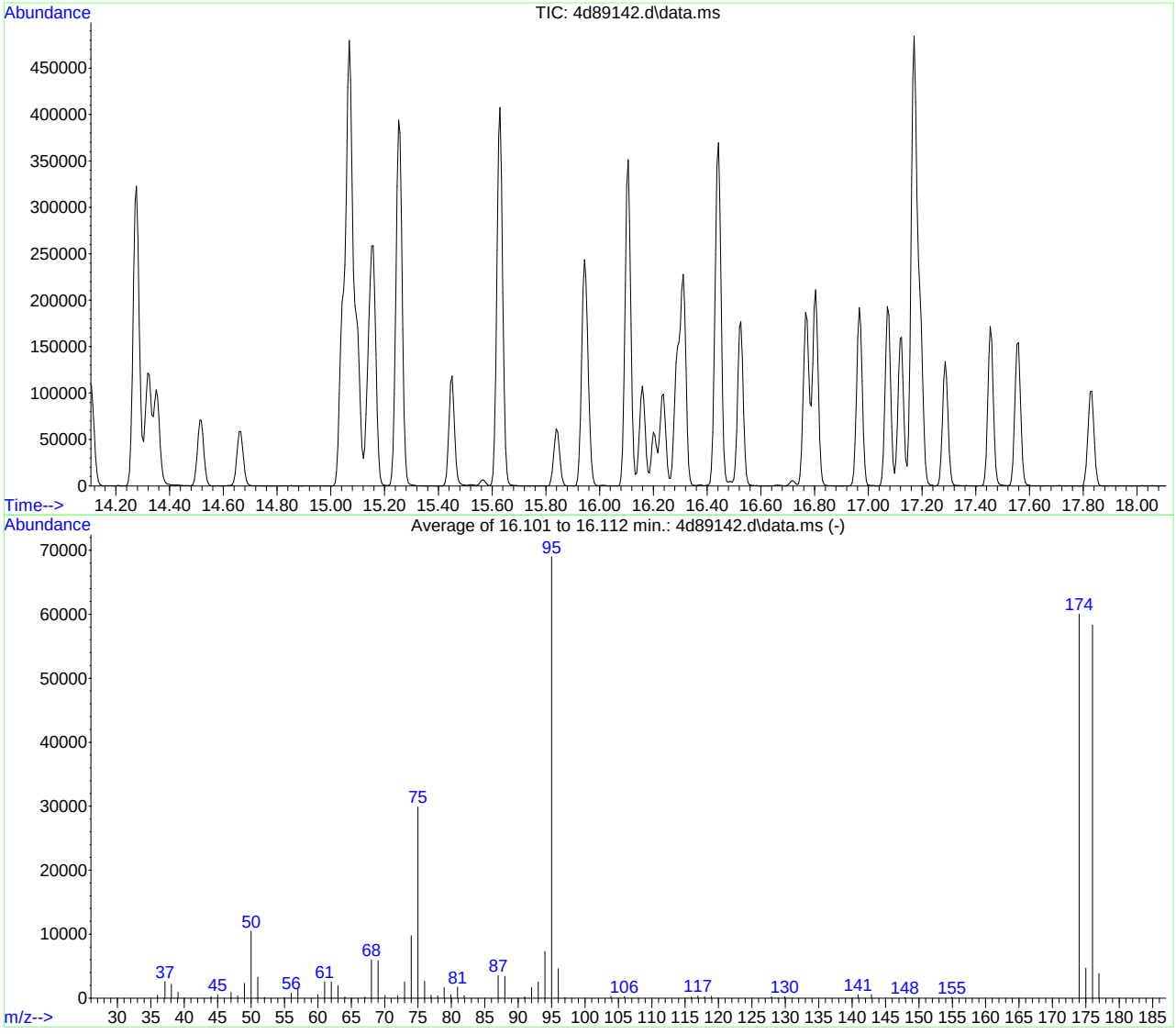
Average of 16.101 to 16.112 min.: 4D88527.D\data.ms
bfb2
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
103.90	313	154.85	194				
105.90	295	156.90	60				
115.90	259	173.95	64771				
116.90	452	175.00	4969				
117.90	258	176.00	62379				
118.90	364	176.90	4204				
127.90	261						
129.90	255						
140.90	622						
142.90	683						
147.90	192						

SW-846 Method 8260

Data File : C:\msdchem\1\data\michellc\v4d3878\4d89142.d Vial: 75
Acq On : 11 Aug 2018 8:31 am Operator: EddieH
Sample : bfb Inst : MS4D
Misc : MS28459,V4D3878,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D3846.M (RTE Integrator)
Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um



AutoFind: Scans 2425, 2426, 2427; Background Corrected with Scan 2417

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.2	10474	PASS
75	95	30	60	43.3	29893	PASS
95	95	100	100	100.0	68992	PASS
96	95	5	9	6.7	4598	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	87.0	60048	PASS
175	174	5	9	7.8	4684	PASS
176	174	95	101	97.2	58365	PASS
177	176	5	9	6.6	3831	PASS

4d89142.d M4D3846.M Mon Aug 13 23:09:51 2018

Average of 16.101 to 16.112 min.: 4d89142.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	468	52.00	111	69.00	5848	80.90	1727
37.10	2536	55.00	52	70.05	417	81.90	393
38.05	2163	56.00	801	71.95	335	87.00	3478
39.05	899	57.00	1525	73.00	2573	88.00	3404
44.00	240	60.00	541	74.00	9760	90.95	212
45.00	485	61.00	2547	75.00	29893	92.00	1661
47.00	925	62.00	2523	76.00	2632	93.00	2497
48.00	332	63.00	1934	76.95	445	94.00	7286
49.00	2319	64.05	191	77.95	332	95.00	68992
50.00	10474	67.05	183	78.90	1668	96.00	4598
51.00	3266	68.00	5974	79.90	507	97.00	103

Average of 16.101 to 16.112 min.: 4d89142.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
103.90	250	154.95	162				
105.90	266	174.00	60048				
115.90	197	175.00	4684				
116.90	358	176.00	58365				
117.90	221	176.95	3831				
118.90	311						
127.90	210						
129.90	237						
140.90	564						
142.90	535						
147.90	53						

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88511.D
Acq On : 17 Jul 2018 8:41 pm
Operator : juntaep
Sample : IC3846-0.5
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 18 18:07:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.829	65	160289	500.00	ug/L		0.00
5) pentafluorobenzene	11.309	168	218683	50.00	ug/L		0.00
53) 1,4-difluorobenzene	12.195	114	316527	50.00	ug/L		0.00
75) chlorobenzene-d5	15.074	117	268530	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.171	152	123425	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	11.320	113	96260	50.38	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.76%				
54) 1,2-dichloroethane-d4 (s)	11.739	65	102539	51.29	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.58%				
76) toluene-d8 (s)	13.716	98	341886	49.77	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.54%				
99) 4-bromofluorobenzene (s)	16.106	95	118713	49.76	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.52%				
Target Compounds							Qvalue
3) ethanol	7.372	45	2202	37.27	ug/L		96
6) chlorodifluoromethane	4.761	51	934	0.42	ug/L		63
9) chloromethane	5.217	50	1247	0.52	ug/L	#	49
10) vinyl chloride	5.505	62	998	0.40	ug/L		89
11) 1,3-butadiene	5.610	54	789	0.42	ug/L	#	79
14) trichlorofluoromethane	7.136	101	1273	0.41	ug/L		91
19) 1,1-dichloroethene	8.132	96	666	0.40	ug/L		85
23) carbon disulfide	8.577	76	2012	0.49	ug/L		81
24) methylene chloride	8.908	84	762	0.42	ug/L		98
26) methyl tert butyl ether	9.338	73	2293	0.44	ug/L		99
27) trans-1,2-dichloroethene	9.364	96	734	0.42	ug/L		88
28) di-isopropyl ether	10.019	45	2302	0.46	ug/L		80
30) 1,1-dichloroethane	9.967	63	1367	0.43	ug/L		88
31) chloroprene	10.114	53	1052	0.42	ug/L		83
35) ethyl tert-butyl ether	10.512	59	2300	0.45	ug/L		97
37) 2,2-dichloropropane	10.785	77	1242	0.48	ug/L		82
38) cis-1,2-dichloroethene	10.759	96	855	0.44	ug/L		83
40) propionitrile	10.769	54	2548	4.10	ug/L		89
43) chloroform	11.131	85	1006	0.48	ug/L	#	76
47) 1,1,1-trichloroethane	11.430	97	1293	0.46	ug/L		84
48) cyclohexane	11.535	84	926	0.39	ug/L	#	67
49) 1,1-dichloropropene	11.613	75	1034	0.43	ug/L	#	67
51) carbon tetrachloride	11.650	117	1046	0.43	ug/L	#	88
56) 2,2,4-trimethylpentane	11.923	57	2114	0.46	ug/L		92
57) benzene	11.860	78	3309	0.48	ug/L		97
61) 1,2-dichloroethane	11.833	62	1219	0.47	ug/L		89
62) trichloroethene	12.525	130	779	0.42	ug/L		95
65) 2-chloroethyl vinyl ether	13.228	63	2655	2.09	ug/L		97
67) 1,2-dichloropropane	12.756	63	731	0.40	ug/L		96
68) dibromomethane	12.872	93	536	0.43	ug/L		88
69) methylcyclohexane	12.777	83	1212	0.43	ug/L		96
70) bromodichloromethane	12.997	83	1136	0.46	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88511.D
Acq On : 17 Jul 2018 8:41 pm
Operator : juntaep
Sample : IC3846-0.5
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 18 18:07:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

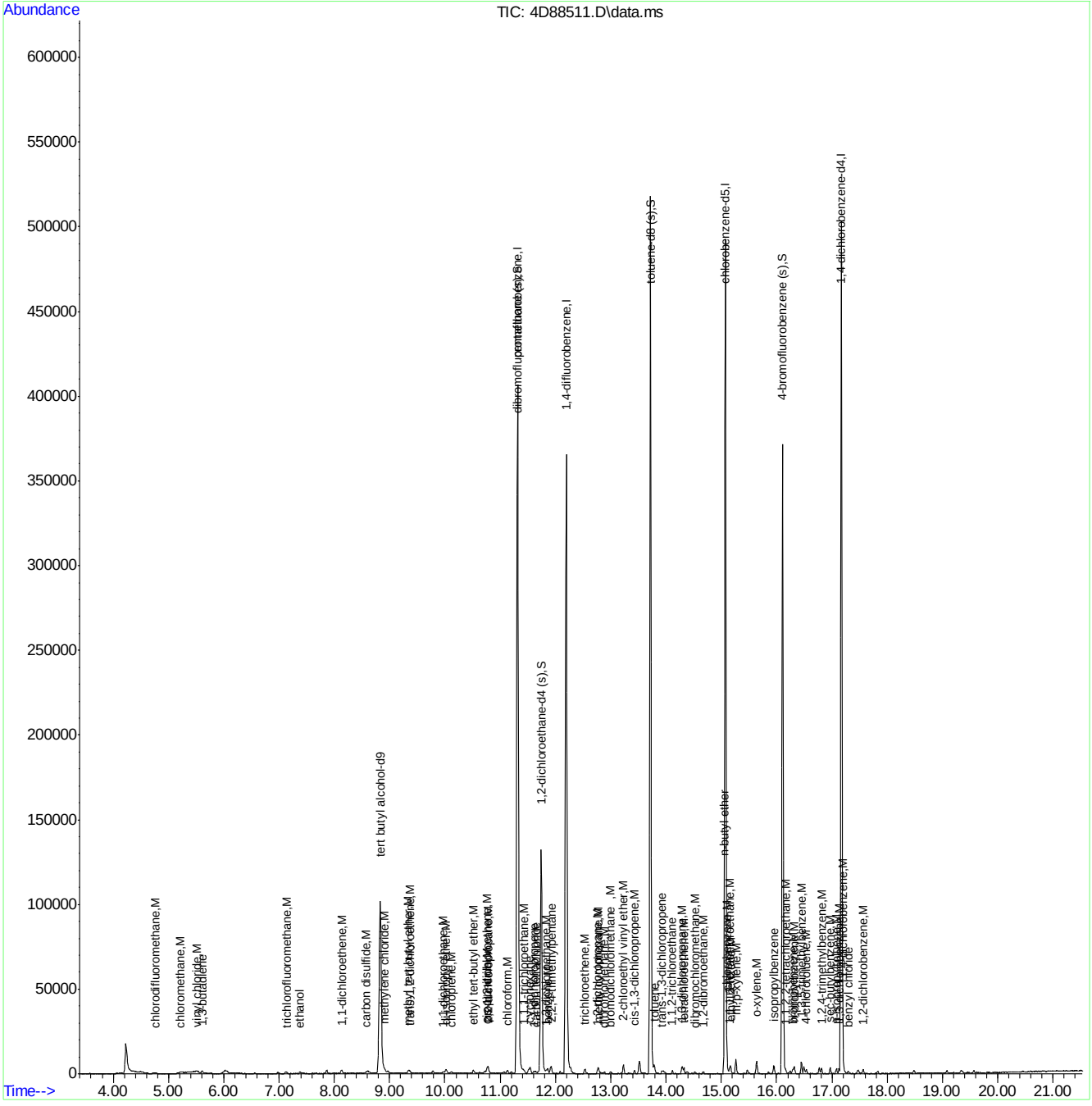
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
72)	cis-1,3-dichloropropene	13.427	75	1235	0.43	ug/L		94
77)	toluene	13.789	92	1990	0.47	ug/L		95
78)	trans-1,3-dichloropropene	13.925	75	1107	0.42	ug/L		97
80)	1,1,2-trichloroethane	14.114	83	656	0.45	ug/L		97
81)	tetrachloroethene	14.324	164	633	0.44	ug/L		93
82)	1,3-dichloropropane	14.287	76	1287	0.47	ug/L		90
85)	dibromochloromethane	14.523	129	792	0.42	ug/L		85
86)	1,2-dibromoethane	14.670	107	814	0.42	ug/L		92
87)	n-butyl ether	15.053	57	4575	0.43	ug/L		81
88)	chlorobenzene	15.100	112	2209	0.47	ug/L		86
89)	1,1,1,2-tetrachloroethane	15.147	131	660	0.40	ug/L	#	74
90)	ethylbenzene	15.163	91	3566	0.46	ug/L		96
91)	m,p-xylene	15.262	106	2579	0.88	ug/L		98
92)	o-xylene	15.635	106	1253	0.44	ug/L		87
96)	isopropylbenzene	15.944	105	3294	0.45	ug/L		98
100)	bromobenzene	16.295	156	822	0.43	ug/L		85
101)	1,1,2,2-tetrachloroethane	16.164	83	1247	0.46	ug/L		92
104)	n-propylbenzene	16.316	91	3980	0.46	ug/L		99
106)	4-chlorotoluene	16.536	91	2294	0.45	ug/L		97
107)	1,3,5-trimethylbenzene	16.447	105	2525	0.43	ug/L		96
109)	1,2,4-trimethylbenzene	16.809	105	2475	0.43	ug/L		98
110)	sec-butylbenzene	16.972	105	3140	0.44	ug/L		96
111)	1,3-dichlorobenzene	17.124	146	1573	0.47	ug/L		99
112)	p-isopropyltoluene	17.082	119	2366	0.42	ug/L		95
113)	1,4-dichlorobenzene	17.197	146	1598	0.46	ug/L		90
114)	benzyl chloride	17.297	91	1696	0.43	ug/L		91
115)	1,2-dichlorobenzene	17.564	146	1382	0.43	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88511.D
Acq On : 17 Jul 2018 8:41 pm
Operator : juntaep
Sample : IC3846-0.5
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 18 18:07:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88512.D
Acq On : 17 Jul 2018 9:10 pm
Operator : juntaep
Sample : IC3846-1
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 18 18:10:27 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.829	65	156895	500.00	ug/L		0.00
5) pentafluorobenzene	11.309	168	221610	50.00	ug/L		0.00
53) 1,4-difluorobenzene	12.195	114	320607	50.00	ug/L		0.00
75) chlorobenzene-d5	15.074	117	270371	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.171	152	124220	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	11.320	113	98365	50.80	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.60%				
54) 1,2-dichloroethane-d4 (s)	11.739	65	103931	51.33	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.66%				
76) toluene-d8 (s)	13.716	98	345955	50.02	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.04%				
99) 4-bromofluorobenzene (s)	16.107	95	119691	49.84	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.68%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	8.966	59	1862	4.84	ug/L		79
3) ethanol	7.366	45	5370	92.86	ug/L		97
4) 1,4-dioxane	12.845	88	763	22.06	ug/L		92
6) chlorodifluoromethane	4.761	51	2149	0.96	ug/L		63
7) dichlorodifluoromethane	4.724	85	2712	0.94	ug/L		92
9) chloromethane	5.227	50	2431	0.99	ug/L		83
10) vinyl chloride	5.505	62	2284	0.91	ug/L		91
11) 1,3-butadiene	5.605	54	1689	0.88	ug/L		97
13) chloroethane	6.564	64	1022	0.84	ug/L	#	44
14) trichlorofluoromethane	7.125	101	2846	0.91	ug/L		90
15) vinyl bromide	6.984	106	1513	0.84	ug/L		81
18) freon 113	8.116	151	1218	0.92	ug/L		88
19) 1,1-dichloroethene	8.137	96	1602	0.96	ug/L		92
20) acetone	8.153	43	2684	3.63	ug/L		93
21) acetonitrile	8.604	41	3022	9.27	ug/L		94
23) carbon disulfide	8.588	76	4209	1.00	ug/L		96
24) methylene chloride	8.903	84	1819	1.00	ug/L		93
26) methyl tert butyl ether	9.338	73	5287	1.01	ug/L		98
27) trans-1,2-dichloroethene	9.364	96	1768	1.01	ug/L		91
28) di-isopropyl ether	10.019	45	5048	0.99	ug/L		89
30) 1,1-dichloroethane	9.967	63	3207	1.00	ug/L		87
31) chloroprene	10.119	53	2357	0.93	ug/L		94
35) ethyl tert-butyl ether	10.512	59	5185	0.99	ug/L		97
37) 2,2-dichloropropane	10.785	77	2651	1.01	ug/L		97
38) cis-1,2-dichloroethene	10.753	96	1938	0.98	ug/L		89
40) propionitrile	10.769	54	5941	9.44	ug/L		96
41) bromochloromethane	11.057	128	814	0.93	ug/L		97
43) chloroform	11.126	85	2147	1.01	ug/L		93
47) 1,1,1-trichloroethane	11.430	97	2825	0.99	ug/L		92
48) cyclohexane	11.540	84	2691	1.12	ug/L		85
49) 1,1-dichloropropene	11.613	75	2414	0.99	ug/L		93
51) carbon tetrachloride	11.645	117	2418	0.97	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88512.D
Acq On : 17 Jul 2018 9:10 pm
Operator : juntaep
Sample : IC3846-1
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 18 18:10:27 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
52) tert amyl alcohol	11.692	55	837	4.39	ug/L		89
56) 2,2,4-trimethylpentane	11.923	57	4660	1.00	ug/L		94
57) benzene	11.860	78	7143	1.02	ug/L		98
58) tert-amyl methyl ether	11.912	87	1037	0.88	ug/L		89
59) heptane	12.080	71	908	0.90	ug/L		96
61) 1,2-dichloroethane	11.828	62	2719	1.04	ug/L		93
62) trichloroethene	12.531	130	1923	1.01	ug/L		96
63) ethyl acrylate	12.526	55	3602	0.89	ug/L		88
65) 2-chloroethyl vinyl ether	13.223	63	6066	4.72	ug/L		99
67) 1,2-dichloropropane	12.756	63	1786	0.98	ug/L		96
68) dibromomethane	12.882	93	1245	0.99	ug/L		97
69) methylcyclohexane	12.777	83	2727	0.96	ug/L		99
70) bromodichloromethane	12.997	83	2450	0.97	ug/L		94
71) epichlorohydrin	13.312	57	1189	4.37	ug/L		81
72) cis-1,3-dichloropropene	13.427	75	2758	0.94	ug/L		97
73) 4-methyl-2-pentanone	13.516	58	3598	3.67	ug/L		96
74) 3-methyl-1-butanol	13.506	55	2648	17.33	ug/L		91
77) toluene	13.784	92	4302	1.01	ug/L		97
78) trans-1,3-dichloropropene	13.920	75	2539	0.97	ug/L		98
80) 1,1,2-trichloroethane	14.114	83	1441	0.99	ug/L		93
81) tetrachloroethene	14.324	164	1462	1.00	ug/L		92
82) 1,3-dichloropropane	14.282	76	2712	0.98	ug/L		98
83) 2-hexanone	14.287	58	3532	3.60	ug/L	#	88
85) dibromochloromethane	14.518	129	1835	0.96	ug/L		95
86) 1,2-dibromoethane	14.665	107	1862	0.96	ug/L		96
87) n-butyl ether	15.047	57	10105	0.95	ug/L		97
88) chlorobenzene	15.100	112	4781	1.02	ug/L		96
89) 1,1,1,2-tetrachloroethane	15.142	131	1716	1.02	ug/L		96
90) ethylbenzene	15.163	91	7758	0.99	ug/L		99
91) m,p-xylene	15.257	106	5737	1.94	ug/L		99
92) o-xylene	15.635	106	2788	0.97	ug/L		96
93) styrene	15.640	104	4312	0.92	ug/L		96
94) bromoform	15.844	173	1265	0.92	ug/L		95
95) butyl acrylate	15.462	55	4195	0.82	ug/L	#	98
96) isopropylbenzene	15.944	105	7160	0.98	ug/L		97
97) cis-1,4-dichloro-2-butene	15.960	88	1109	0.87	ug/L		96
100) bromobenzene	16.295	156	1888	0.98	ug/L		95
101) 1,1,2,2-tetrachloroethane	16.164	83	2743	1.00	ug/L		96
103) 1,2,3-trichloropropane	16.238	110	566	0.87	ug/L		91
104) n-propylbenzene	16.316	91	8438	0.97	ug/L		98
105) 2-chlorotoluene	16.442	126	1772	1.00	ug/L		89
106) 4-chlorotoluene	16.531	91	5076	0.98	ug/L		98
107) 1,3,5-trimethylbenzene	16.447	105	5661	0.97	ug/L		94
108) tert-butylbenzene	16.772	134	960	0.92	ug/L		94
109) 1,2,4-trimethylbenzene	16.809	105	5575	0.96	ug/L		97
110) sec-butylbenzene	16.972	105	6820	0.96	ug/L		98
111) 1,3-dichlorobenzene	17.129	146	3297	0.97	ug/L		93
112) p-isopropyltoluene	17.076	119	5343	0.94	ug/L		98
113) 1,4-dichlorobenzene	17.197	146	3509	1.01	ug/L		97
114) benzyl chloride	17.297	91	3714	0.93	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88512.D
Acq On : 17 Jul 2018 9:10 pm
Operator : juntaep
Sample : IC3846-1
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 18 18:10:27 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

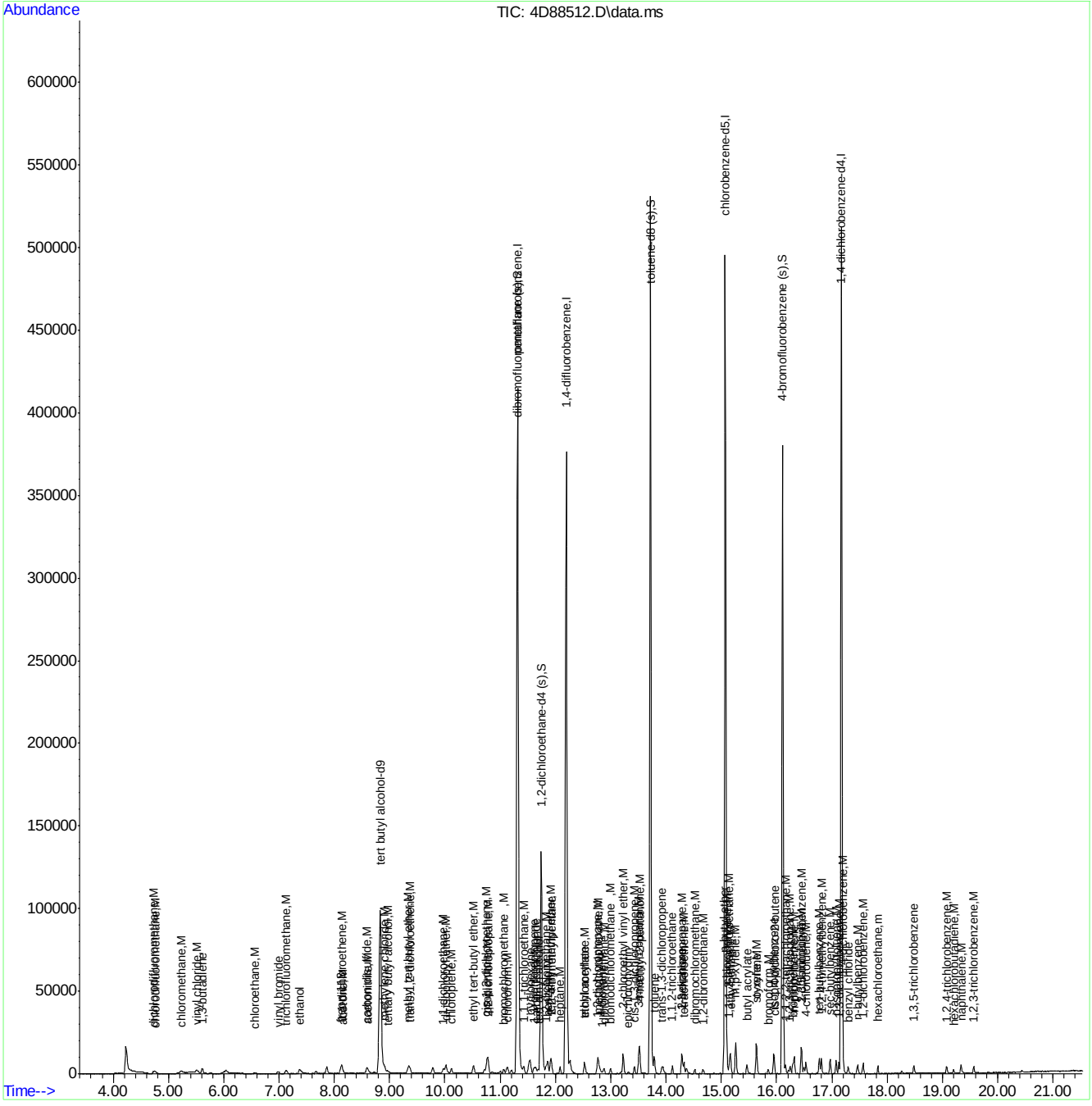
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
115) 1,2-dichlorobenzene	17.564	146	3124	0.97	ug/L	96
116) n-butylbenzene	17.464	92	2392	0.88	ug/L	92
118) 1,3,5-trichlorobenzene	18.482	180	2092	0.96	ug/L	96
120) 1,2,4-trichlorobenzene	19.079	180	1702	0.89	ug/L	91
121) hexachlorobutadiene	19.205	225	696	0.91	ug/L	95
122) naphthalene	19.336	128	5219	0.94	ug/L	98
123) 1,2,3-trichlorobenzene	19.567	180	1682	0.92	ug/L	96
124) hexachloroethane	17.831	201	867	0.92	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88512.D
Acq On : 17 Jul 2018 9:10 pm
Operator : juntaep
Sample : IC3846-1
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 18 18:10:27 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88513.D
Acq On : 17 Jul 2018 9:39 pm
Operator : juntaep
Sample : IC3846-2
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 18 18:11:33 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.829	65	153208	500.00	ug/L		0.00
5) pentafluorobenzene	11.309	168	218671	50.00	ug/L		0.00
53) 1,4-difluorobenzene	12.195	114	313596	50.00	ug/L		0.00
75) chlorobenzene-d5	15.074	117	265011	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.171	152	121457	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	11.320	113	95546	50.01	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.02%				
54) 1,2-dichloroethane-d4 (s)	11.739	65	99780	50.38	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.76%				
76) toluene-d8 (s)	13.716	98	342811	50.57	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.14%				
99) 4-bromofluorobenzene (s)	16.106	95	117566	50.07	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.14%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	8.960	59	3504	9.32	ug/L		94
3) ethanol	7.366	45	10150	179.74	ug/L		99
4) 1,4-dioxane	12.851	88	1628	48.19	ug/L		95
6) chlorodifluoromethane	4.755	51	4146	1.87	ug/L		97
7) dichlorodifluoromethane	4.729	85	5680	2.00	ug/L		98
9) chloromethane	5.222	50	4976	2.06	ug/L		99
10) vinyl chloride	5.505	62	5001	2.02	ug/L		95
11) 1,3-butadiene	5.605	54	3751	1.98	ug/L		99
12) bromomethane	6.328	94	1307	1.62	ug/L		93
13) chloroethane	6.559	64	2330	1.95	ug/L		89
14) trichlorofluoromethane	7.125	101	6166	2.00	ug/L		96
15) vinyl bromide	6.984	106	3472	1.97	ug/L		96
16) ethyl ether	7.665	74	1513	1.63	ug/L		95
18) freon 113	8.116	151	2398	1.83	ug/L		90
19) 1,1-dichloroethene	8.132	96	3004	1.82	ug/L		99
20) acetone	8.148	43	5256	7.20	ug/L		95
21) acetonitrile	8.593	41	5904	18.35	ug/L		90
22) iodomethane	8.425	142	599	4.22	ug/L	#	41
23) carbon disulfide	8.583	76	7428	1.80	ug/L		98
24) methylene chloride	8.902	84	3317	1.85	ug/L		99
26) methyl tert butyl ether	9.338	73	9498	1.84	ug/L		98
27) trans-1,2-dichloroethene	9.364	96	3205	1.85	ug/L		96
28) di-isopropyl ether	10.019	45	9056	1.80	ug/L		93
29) 2-butanone	10.711	72	1990	7.04	ug/L		91
30) 1,1-dichloroethane	9.967	63	5824	1.85	ug/L		97
31) chloroprene	10.114	53	4353	1.74	ug/L		97
33) hexane	9.783	56	1764	1.83	ug/L		95
35) ethyl tert-butyl ether	10.517	59	9372	1.82	ug/L		98
37) 2,2-dichloropropane	10.785	77	4882	1.88	ug/L		97
38) cis-1,2-dichloroethene	10.753	96	3592	1.85	ug/L		95
40) propionitrile	10.764	54	11362	18.30	ug/L		97
41) bromochloromethane	11.068	128	1633	1.88	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88513.D
Acq On : 17 Jul 2018 9:39 pm
Operator : juntaep
Sample : IC3846-2
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 18 18:11:33 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) chloroform	11.126	85	3971	1.89	ug/L	99
44) t-butyl formate	11.199	59	2321	1.75	ug/L	90
47) 1,1,1-trichloroethane	11.430	97	5282	1.87	ug/L	94
48) cyclohexane	11.540	84	4735	2.01	ug/L	94
49) 1,1-dichloropropene	11.608	75	4464	1.85	ug/L	98
51) carbon tetrachloride	11.639	117	4426	1.81	ug/L	92
52) tert amyl alcohol	11.687	55	1678	8.92	ug/L	90
55) n-butyl alcohol	12.263	56	8189	86.95	ug/L	96
56) 2,2,4-trimethylpentane	11.922	57	8243	1.80	ug/L	96
57) benzene	11.854	78	12951	1.89	ug/L	99
58) tert-amyl methyl ether	11.917	87	2042	1.78	ug/L	91
59) heptane	12.080	71	1779	1.81	ug/L	95
61) 1,2-dichloroethane	11.828	62	4729	1.84	ug/L	99
62) trichloroethene	12.531	130	3302	1.78	ug/L	99
63) ethyl acrylate	12.520	55	6909	1.74	ug/L	95
64) 2-nitropropane	13.176	41	1180	1.95	ug/L	97
65) 2-chloroethyl vinyl ether	13.223	63	11049	8.80	ug/L	99
67) 1,2-dichloropropane	12.751	63	3330	1.86	ug/L	94
68) dibromomethane	12.877	93	2247	1.83	ug/L	94
69) methylcyclohexane	12.777	83	4928	1.78	ug/L	94
70) bromodichloromethane	12.992	83	4571	1.86	ug/L	97
71) epichlorohydrin	13.317	57	2489	9.36	ug/L	95
72) cis-1,3-dichloropropene	13.427	75	5150	1.80	ug/L	97
73) 4-methyl-2-pentanone	13.516	58	6981	7.28	ug/L	99
74) 3-methyl-1-butanol	13.501	55	5143	34.40	ug/L	94
77) toluene	13.784	92	7802	1.86	ug/L	99
78) trans-1,3-dichloropropene	13.920	75	4640	1.80	ug/L	98
79) ethyl methacrylate	13.941	69	3957	1.72	ug/L	99
80) 1,1,2-trichloroethane	14.109	83	2685	1.88	ug/L	97
81) tetrachloroethene	14.324	164	2709	1.90	ug/L	96
82) 1,3-dichloropropane	14.282	76	5035	1.86	ug/L	97
83) 2-hexanone	14.282	58	6840	7.11	ug/L	96
84) butyl acetate	14.361	56	2248	1.75	ug/L	94
85) dibromochloromethane	14.518	129	3454	1.85	ug/L	96
86) 1,2-dibromoethane	14.665	107	3593	1.88	ug/L	99
87) n-butyl ether	15.047	57	18570	1.78	ug/L	98
88) chlorobenzene	15.100	112	8745	1.90	ug/L	96
89) 1,1,1,2-tetrachloroethane	15.147	131	3079	1.88	ug/L	95
90) ethylbenzene	15.163	91	14213	1.84	ug/L	97
91) m,p-xylene	15.257	106	10587	3.66	ug/L	99
92) o-xylene	15.635	106	5124	1.82	ug/L	93
93) styrene	15.635	104	8029	1.74	ug/L	92
94) bromoform	15.844	173	2362	1.75	ug/L	95
95) butyl acrylate	15.456	55	8212	1.64	ug/L	99
96) isopropylbenzene	15.944	105	12969	1.80	ug/L	99
97) cis-1,4-dichloro-2-butene	15.960	88	2165	1.73	ug/L	98
100) bromobenzene	16.290	156	3604	1.91	ug/L	98
101) 1,1,2,2-tetrachloroethane	16.164	83	5000	1.87	ug/L	98
102) trans-1,4-dichloro-2-b...	16.206	53	985	1.61	ug/L	88
103) 1,2,3-trichloropropane	16.243	110	1181	1.85	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88513.D
Acq On : 17 Jul 2018 9:39 pm
Operator : juntaep
Sample : IC3846-2
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 18 18:11:33 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

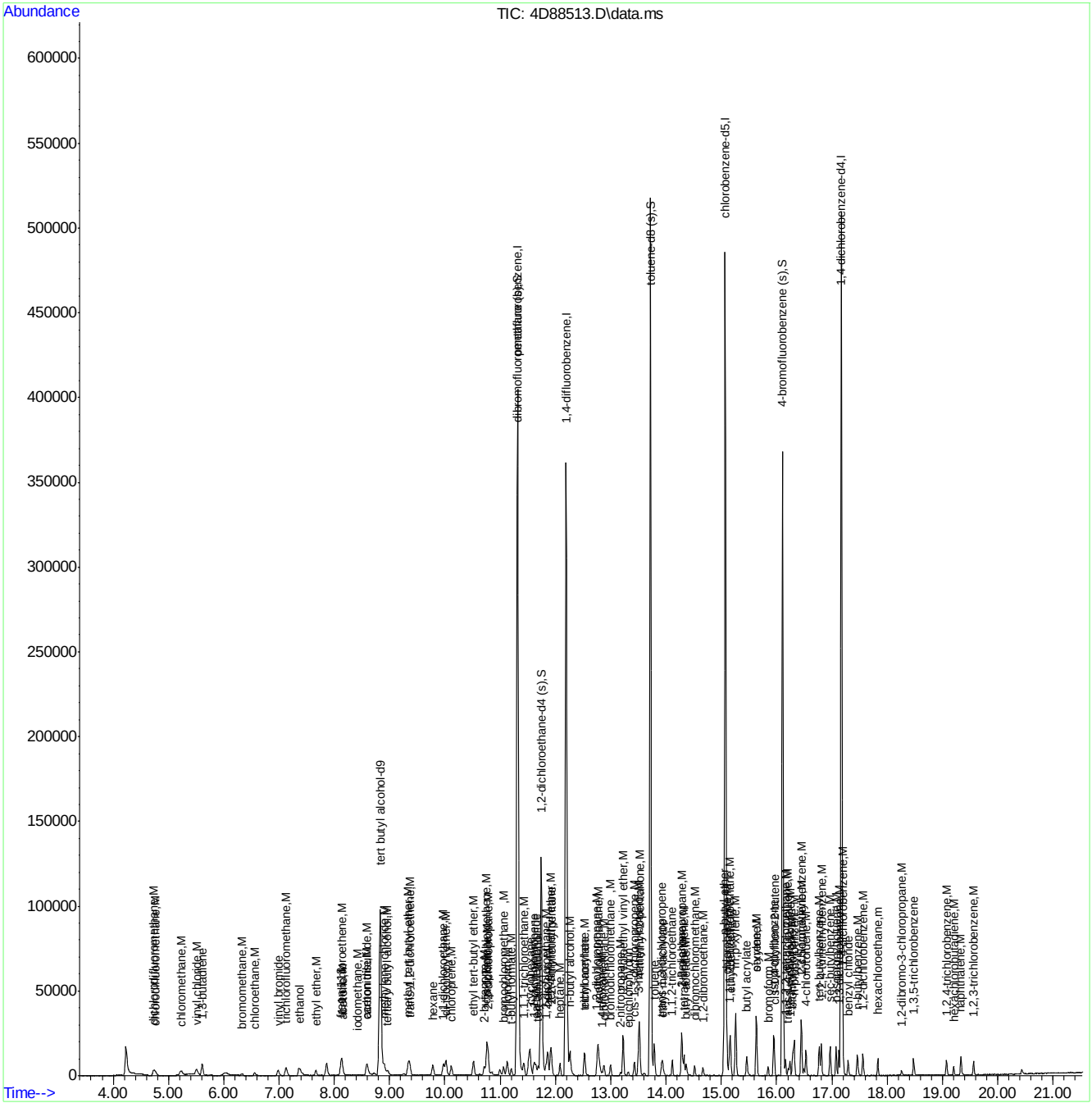
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) n-propylbenzene	16.316	91	15496	1.83	ug/L	99
105) 2-chlorotoluene	16.442	126	3192	1.84	ug/L	94
106) 4-chlorotoluene	16.531	91	9270	1.83	ug/L	98
107) 1,3,5-trimethylbenzene	16.447	105	10288	1.79	ug/L	99
108) tert-butylbenzene	16.772	134	1782	1.74	ug/L	97
109) 1,2,4-trimethylbenzene	16.809	105	10226	1.80	ug/L	97
110) sec-butylbenzene	16.972	105	12561	1.81	ug/L	98
111) 1,3-dichlorobenzene	17.124	146	6074	1.83	ug/L	98
112) p-isopropyltoluene	17.076	119	9836	1.76	ug/L	98
113) 1,4-dichlorobenzene	17.197	146	6423	1.89	ug/L	98
114) benzyl chloride	17.291	91	7060	1.81	ug/L	97
115) 1,2-dichlorobenzene	17.564	146	5744	1.82	ug/L	99
116) n-butylbenzene	17.459	92	4589	1.72	ug/L	96
117) 1,2-dibromo-3-chloropr...	18.256	75	884	1.63	ug/L	82
118) 1,3,5-trichlorobenzene	18.482	180	3794	1.78	ug/L	96
120) 1,2,4-trichlorobenzene	19.074	180	3242	1.74	ug/L	95
121) hexachlorobutadiene	19.205	225	1276	1.70	ug/L	94
122) naphthalene	19.331	128	9663	1.77	ug/L	99
123) 1,2,3-trichlorobenzene	19.562	180	3040	1.70	ug/L	98
124) hexachloroethane	17.831	201	1592	1.73	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88513.D
Acq On : 17 Jul 2018 9:39 pm
Operator : juntaep
Sample : IC3846-2
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 18 18:11:33 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88514.D
Acq On : 17 Jul 2018 10:08 pm
Operator : juntaep
Sample : IC3846-5
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 18 18:24:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.829	65	155819	500.00	ug/L	0.00
5) pentafluorobenzene	11.309	168	217953	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.195	114	311799	50.00	ug/L	0.00
75) chlorobenzene-d5	15.074	117	262844	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	121581	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.320	113	95497	50.15	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.30%			
54) 1,2-dichloroethane-d4 (s)	11.739	65	100640	51.10	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.20%			
76) toluene-d8 (s)	13.716	98	339174	50.44	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.88%			
99) 4-bromofluorobenzene (s)	16.106	95	116039	49.37	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.74%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.965	59	9535	24.95	ug/L	95
3) ethanol	7.356	45	28830	501.97	ug/L	95
4) 1,4-dioxane	12.845	88	4531	131.88	ug/L	100
6) chlorodifluoromethane	4.755	51	11115	5.04	ug/L	97
7) dichlorodifluoromethane	4.724	85	13764	4.87	ug/L	98
9) chloromethane	5.227	50	11621	4.83	ug/L	98
10) vinyl chloride	5.505	62	11910	4.84	ug/L	100
11) 1,3-butadiene	5.610	54	8857	4.68	ug/L	96
12) bromomethane	6.323	94	3461	4.31	ug/L	98
13) chloroethane	6.559	64	5987	5.02	ug/L	98
14) trichlorofluoromethane	7.130	101	14424	4.70	ug/L	99
15) vinyl bromide	6.984	106	8563	4.86	ug/L	93
16) ethyl ether	7.665	74	4382	4.74	ug/L	94
17) acrolein	7.891	56	1556	4.24	ug/L	94
18) freon 113	8.121	151	6654	5.08	ug/L	97
19) 1,1-dichloroethene	8.132	96	8272	5.03	ug/L	99
20) acetone	8.137	43	14726	20.23	ug/L	98
21) acetonitrile	8.588	41	16407	51.16	ug/L	98
22) iodomethane	8.420	142	2166	5.50	ug/L	87
23) carbon disulfide	8.588	76	20153	4.89	ug/L	98
24) methylene chloride	8.908	84	9162	5.11	ug/L	98
25) methyl acetate	8.709	43	8058	5.01	ug/L	96
26) methyl tert butyl ether	9.338	73	25237	4.90	ug/L	100
27) trans-1,2-dichloroethene	9.364	96	8487	4.92	ug/L	97
28) di-isopropyl ether	10.019	45	25137	5.00	ug/L	97
29) 2-butanone	10.706	72	5796	20.58	ug/L	99
30) 1,1-dichloroethane	9.967	63	15814	5.03	ug/L	98
31) chloroprene	10.114	53	12313	4.94	ug/L	98
32) acrylonitrile	9.243	53	3443	4.99	ug/L	96
33) hexane	9.783	56	5070	5.28	ug/L	95
34) vinyl acetate	9.972	86	1422	4.34	ug/L	94
35) ethyl tert-butyl ether	10.512	59	25435	4.95	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88514.D
Acq On : 17 Jul 2018 10:08 pm
Operator : juntaep
Sample : IC3846-5
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 18 18:24:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) ethyl acetate	10.764	45	1455	4.57	ug/L	#	67
37) 2,2-dichloropropane	10.780	77	13180	5.09	ug/L		98
38) cis-1,2-dichloroethene	10.753	96	9616	4.96	ug/L		95
39) methyl acrylate	10.837	85	1541	4.49	ug/L	#	83
40) propionitrile	10.764	54	30900	49.93	ug/L		99
41) bromochloromethane	11.057	128	4664	5.40	ug/L		98
42) tetrahydrofuran	11.131	72	1730	5.28	ug/L		84
43) chloroform	11.126	85	10532	5.02	ug/L		97
44) t-butyl formate	11.199	59	6599	5.00	ug/L		93
46) methacrylonitrile	10.989	67	4162	4.82	ug/L		97
47) 1,1,1-trichloroethane	11.424	97	14152	5.02	ug/L		98
48) cyclohexane	11.540	84	11040	4.69	ug/L		95
49) 1,1-dichloropropene	11.608	75	12131	5.03	ug/L		98
51) carbon tetrachloride	11.645	117	12323	5.04	ug/L		99
52) tert amyl alcohol	11.687	55	5015	26.75	ug/L		92
55) n-butyl alcohol	12.258	56	23146	247.18	ug/L		93
56) 2,2,4-trimethylpentane	11.923	57	22832	5.02	ug/L		97
57) benzene	11.860	78	34146	5.00	ug/L		99
58) tert-amyl methyl ether	11.912	87	5801	5.08	ug/L		96
59) heptane	12.080	71	4959	5.08	ug/L		98
60) isopropyl acetate	11.770	87	2100	4.36	ug/L	#	76
61) 1,2-dichloroethane	11.828	62	12876	5.05	ug/L		99
62) trichloroethene	12.525	130	9199	4.99	ug/L		99
63) ethyl acrylate	12.515	55	19318	4.90	ug/L		97
64) 2-nitropropane	13.176	41	3089	5.12	ug/L		92
65) 2-chloroethyl vinyl ether	13.218	63	30628	24.53	ug/L		98
66) methyl methacrylate	12.761	100	2517	4.65	ug/L	#	89
67) 1,2-dichloropropane	12.751	63	9008	5.06	ug/L		99
68) dibromomethane	12.877	93	6131	5.01	ug/L		96
69) methylcyclohexane	12.777	83	13689	4.97	ug/L		98
70) bromodichloromethane	12.992	83	12151	4.96	ug/L		99
71) epichlorohydrin	13.312	57	6677	25.26	ug/L		95
72) cis-1,3-dichloropropene	13.427	75	14211	5.01	ug/L		97
73) 4-methyl-2-pentanone	13.516	58	19208	20.16	ug/L		94
74) 3-methyl-1-butanol	13.501	55	14780	99.43	ug/L		98
77) toluene	13.784	92	21092	5.08	ug/L		99
78) trans-1,3-dichloropropene	13.920	75	12806	5.01	ug/L		99
79) ethyl methacrylate	13.936	69	11185	4.89	ug/L		97
80) 1,1,2-trichloroethane	14.109	83	7017	4.96	ug/L		94
81) tetrachloroethene	14.324	164	7145	5.05	ug/L		98
82) 1,3-dichloropropane	14.282	76	13482	5.03	ug/L		95
83) 2-hexanone	14.277	58	19290	20.22	ug/L		96
84) butyl acetate	14.355	56	6450	5.05	ug/L		99
85) dibromochloromethane	14.518	129	9136	4.92	ug/L		98
86) 1,2-dibromoethane	14.665	107	9376	4.96	ug/L		98
87) n-butyl ether	15.042	57	50806	4.91	ug/L		99
88) chlorobenzene	15.100	112	22900	5.00	ug/L		95
89) 1,1,1,2-tetrachloroethane	15.147	131	8154	5.01	ug/L		94
90) ethylbenzene	15.163	91	38377	5.02	ug/L		100
91) m,p-xylene	15.257	106	29123	10.15	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88514.D
Acq On : 17 Jul 2018 10:08 pm
Operator : juntaep
Sample : IC3846-5
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 18 18:24:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

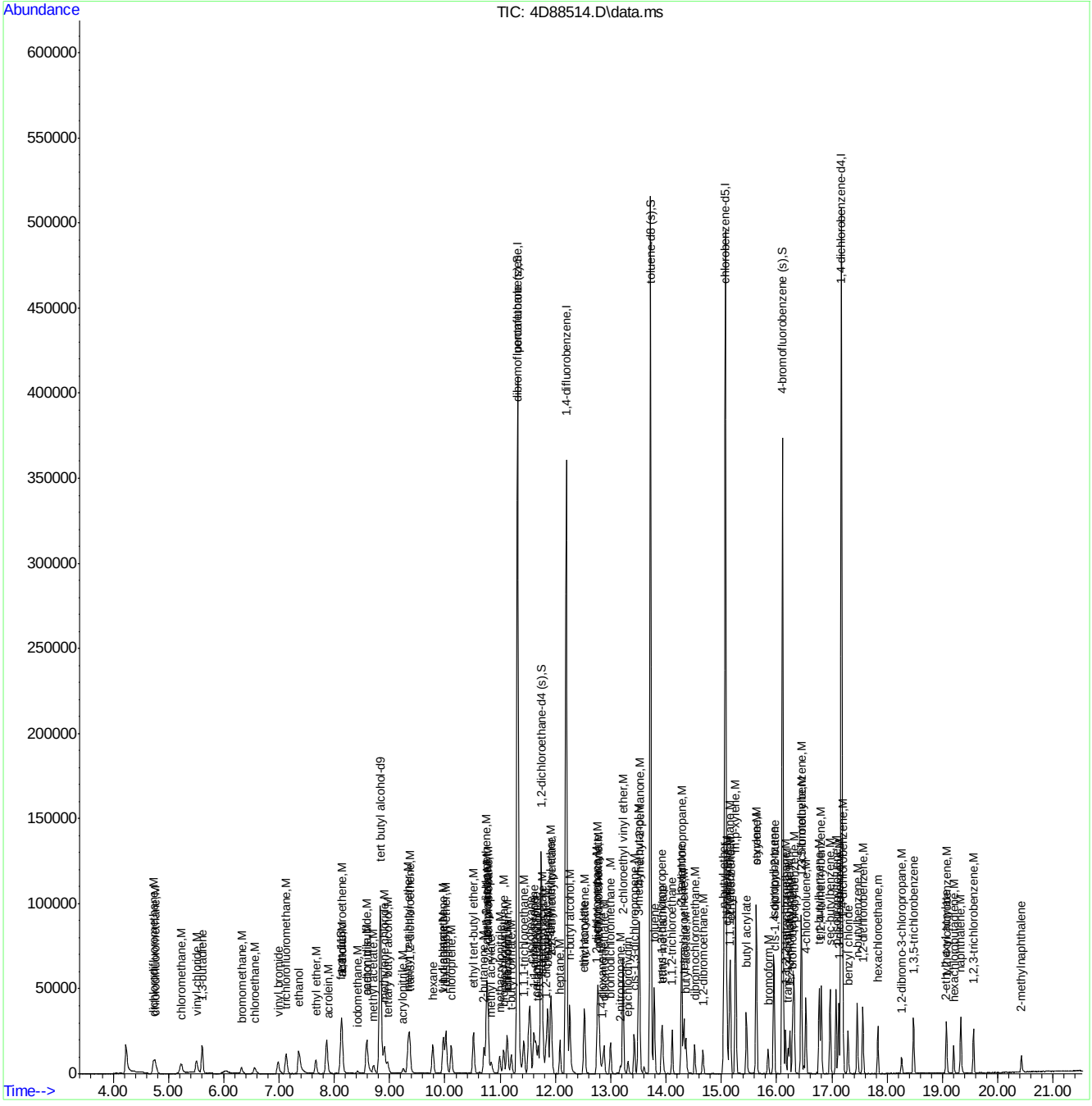
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92)	o-xylene	15.635	106	14121	5.04	ug/L	93
93)	styrene	15.635	104	22694	4.95	ug/L	99
94)	bromoform	15.844	173	6558	4.91	ug/L	98
95)	butyl acrylate	15.456	55	24286	4.90	ug/L	99
96)	isopropylbenzene	15.944	105	35283	4.95	ug/L	100
97)	cis-1,4-dichloro-2-butene	15.960	88	6072	4.89	ug/L	97
100)	bromobenzene	16.290	156	9282	4.92	ug/L	95
101)	1,1,2,2-tetrachloroethane	16.164	83	13230	4.95	ug/L	98
102)	trans-1,4-dichloro-2-b...	16.206	53	2933	4.78	ug/L	91
103)	1,2,3-trichloropropane	16.238	110	3387	5.31	ug/L	92
104)	n-propylbenzene	16.316	91	41737	4.92	ug/L	99
105)	2-chlorotoluene	16.442	126	8793	5.07	ug/L	97
106)	4-chlorotoluene	16.526	91	25164	4.96	ug/L	99
107)	1,3,5-trimethylbenzene	16.447	105	28293	4.93	ug/L	99
108)	tert-butylbenzene	16.772	134	5049	4.94	ug/L	98
109)	1,2,4-trimethylbenzene	16.804	105	28147	4.95	ug/L	100
110)	sec-butylbenzene	16.966	105	33868	4.87	ug/L	99
111)	1,3-dichlorobenzene	17.124	146	16268	4.91	ug/L	98
112)	p-isopropyltoluene	17.076	119	27422	4.91	ug/L	99
113)	1,4-dichlorobenzene	17.197	146	16814	4.93	ug/L	99
114)	benzyl chloride	17.291	91	18810	4.83	ug/L	97
115)	1,2-dichlorobenzene	17.559	146	15723	4.98	ug/L	99
116)	n-butylbenzene	17.459	92	13205	4.96	ug/L	97
117)	1,2-dibromo-3-chloropr...	18.261	75	2626	4.83	ug/L	98
118)	1,3,5-trichlorobenzene	18.476	180	10308	4.84	ug/L	95
119)	2-ethylhexyl acrylate	19.058	70	1098	0.98	ug/L	88
120)	1,2,4-trichlorobenzene	19.069	180	8915	4.78	ug/L	99
121)	hexachlorobutadiene	19.205	225	3699	4.91	ug/L	94
122)	naphthalene	19.331	128	26266	4.82	ug/L	100
123)	1,2,3-trichlorobenzene	19.562	180	8660	4.85	ug/L	99
124)	hexachloroethane	17.831	201	4548	4.94	ug/L	95
125)	2-methylnaphthalene	20.427	142	5907	2.49	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88514.D
Acq On : 17 Jul 2018 10:08 pm
Operator : juntaep
Sample : IC3846-5
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 18 18:24:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88515.D
Acq On : 17 Jul 2018 10:37 pm
Operator : juntaep
Sample : IC3846-10
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 18 18:24:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.829	65	148381	500.00	ug/L	0.00
5) pentafluorobenzene	11.309	168	211353	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.195	114	300611	50.00	ug/L	0.00
75) chlorobenzene-d5	15.068	117	252806	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	116374	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.320	113	91116	49.34	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.68%			
54) 1,2-dichloroethane-d4 (s)	11.739	65	95034	50.05	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.10%			
76) toluene-d8 (s)	13.716	98	326715	50.52	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.04%			
99) 4-bromofluorobenzene (s)	16.107	95	111717	49.66	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.32%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.966	59	18983	52.16	ug/L	96
3) ethanol	7.356	45	58928	1077.45	ug/L	98
4) 1,4-dioxane	12.845	88	9077	277.43	ug/L	100
6) chlorodifluoromethane	4.761	51	22366	10.45	ug/L	99
7) dichlorodifluoromethane	4.724	85	29080	10.62	ug/L	98
9) chloromethane	5.227	50	23935	10.26	ug/L	100
10) vinyl chloride	5.505	62	24914	10.44	ug/L	98
11) 1,3-butadiene	5.610	54	19092	10.40	ug/L	99
12) bromomethane	6.318	94	7463	9.58	ug/L	97
13) chloroethane	6.554	64	12593	10.88	ug/L	97
14) trichlorofluoromethane	7.130	101	30987	10.42	ug/L	98
15) vinyl bromide	6.978	106	17738	10.39	ug/L	98
16) ethyl ether	7.660	74	9028	10.06	ug/L	99
17) acrolein	7.880	56	3489	9.81	ug/L	88
18) freon 113	8.121	151	13554	10.68	ug/L	100
19) 1,1-dichloroethene	8.132	96	16230	10.19	ug/L	97
20) acetone	8.132	43	29839	42.27	ug/L	98
21) acetonitrile	8.583	41	32986	106.07	ug/L	100
22) iodomethane	8.420	142	5926	8.71	ug/L	96
23) carbon disulfide	8.583	76	40329	10.09	ug/L	99
24) methylene chloride	8.908	84	17874	10.29	ug/L	99
25) methyl acetate	8.703	43	16344	10.48	ug/L	98
26) methyl tert butyl ether	9.333	73	50409	10.09	ug/L	100
27) trans-1,2-dichloroethene	9.364	96	17130	10.25	ug/L	99
28) di-isopropyl ether	10.019	45	49800	10.22	ug/L	97
29) 2-butanone	10.701	72	11889	43.54	ug/L	97
30) 1,1-dichloroethane	9.967	63	31297	10.27	ug/L	100
31) chloroprene	10.114	53	25007	10.34	ug/L	99
32) acrylonitrile	9.238	53	7370	11.01	ug/L	97
33) hexane	9.778	56	10219	10.97	ug/L	99
34) vinyl acetate	9.967	86	3126	9.84	ug/L	98
35) ethyl tert-butyl ether	10.517	59	50641	10.17	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88515.D
Acq On : 17 Jul 2018 10:37 pm
Operator : juntaep
Sample : IC3846-10
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 18 18:24:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) ethyl acetate	10.759	45	3243	10.51	ug/L	#	69
37) 2,2-dichloropropane	10.780	77	25957	10.34	ug/L		97
38) cis-1,2-dichloroethene	10.748	96	19294	10.26	ug/L		98
39) methyl acrylate	10.837	85	3289	9.89	ug/L		94
40) propionitrile	10.759	54	61986	103.29	ug/L		99
41) bromochloromethane	11.063	128	9111	10.88	ug/L		92
42) tetrahydrofuran	11.136	72	3502	11.02	ug/L		99
43) chloroform	11.126	85	20616	10.13	ug/L		98
44) t-butyl formate	11.199	59	13322	10.40	ug/L		97
46) methacrylonitrile	10.984	67	8743	10.44	ug/L		99
47) 1,1,1-trichloroethane	11.430	97	27962	10.24	ug/L		99
48) cyclohexane	11.540	84	23364	10.24	ug/L		96
49) 1,1-dichloropropene	11.608	75	24209	10.36	ug/L		99
51) carbon tetrachloride	11.645	117	24805	10.47	ug/L		100
52) tert amyl alcohol	11.687	55	9802	53.92	ug/L		91
55) n-butyl alcohol	12.258	56	47465	525.76	ug/L		99
56) 2,2,4-trimethylpentane	11.923	57	45715	10.43	ug/L		98
57) benzene	11.854	78	67384	10.24	ug/L		100
58) tert-amyl methyl ether	11.912	87	11584	10.53	ug/L		95
59) heptane	12.080	71	9947	10.57	ug/L		98
60) isopropyl acetate	11.776	87	4351	9.37	ug/L	#	91
61) 1,2-dichloroethane	11.828	62	25323	10.30	ug/L		100
62) trichloroethene	12.526	130	18411	10.36	ug/L		99
63) ethyl acrylate	12.510	55	39600	10.41	ug/L		100
64) 2-nitropropane	13.176	41	6258	10.77	ug/L		95
65) 2-chloroethyl vinyl ether	13.218	63	61792	51.33	ug/L		100
66) methyl methacrylate	12.761	100	5464	10.47	ug/L		98
67) 1,2-dichloropropane	12.751	63	17830	10.39	ug/L		97
68) dibromomethane	12.877	93	12101	10.26	ug/L		96
69) methylcyclohexane	12.777	83	27656	10.42	ug/L		98
70) bromodichloromethane	12.992	83	24057	10.19	ug/L		99
71) epichlorohydrin	13.307	57	13572	53.25	ug/L		98
72) cis-1,3-dichloropropene	13.422	75	28138	10.28	ug/L		97
73) 4-methyl-2-pentanone	13.511	58	37754	41.10	ug/L		98
74) 3-methyl-1-butanol	13.496	55	29923	208.80	ug/L		98
77) toluene	13.784	92	41249	10.32	ug/L		97
78) trans-1,3-dichloropropene	13.915	75	25273	10.28	ug/L		99
79) ethyl methacrylate	13.936	69	23147	10.52	ug/L		98
80) 1,1,2-trichloroethane	14.109	83	13932	10.25	ug/L		98
81) tetrachloroethene	14.324	164	14406	10.58	ug/L		97
82) 1,3-dichloropropane	14.282	76	26504	10.28	ug/L		98
83) 2-hexanone	14.277	58	38626	42.10	ug/L		99
84) butyl acetate	14.355	56	13392	10.91	ug/L		97
85) dibromochloromethane	14.518	129	18352	10.28	ug/L		100
86) 1,2-dibromoethane	14.665	107	19031	10.46	ug/L		100
87) n-butyl ether	15.042	57	102571	10.31	ug/L		100
88) chlorobenzene	15.100	112	44851	10.19	ug/L		99
89) 1,1,1,2-tetrachloroethane	15.147	131	16098	10.28	ug/L		97
90) ethylbenzene	15.163	91	76474	10.40	ug/L		98
91) m,p-xylene	15.257	106	58093	21.05	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88515.D
Acq On : 17 Jul 2018 10:37 pm
Operator : juntaep
Sample : IC3846-10
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 18 18:24:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

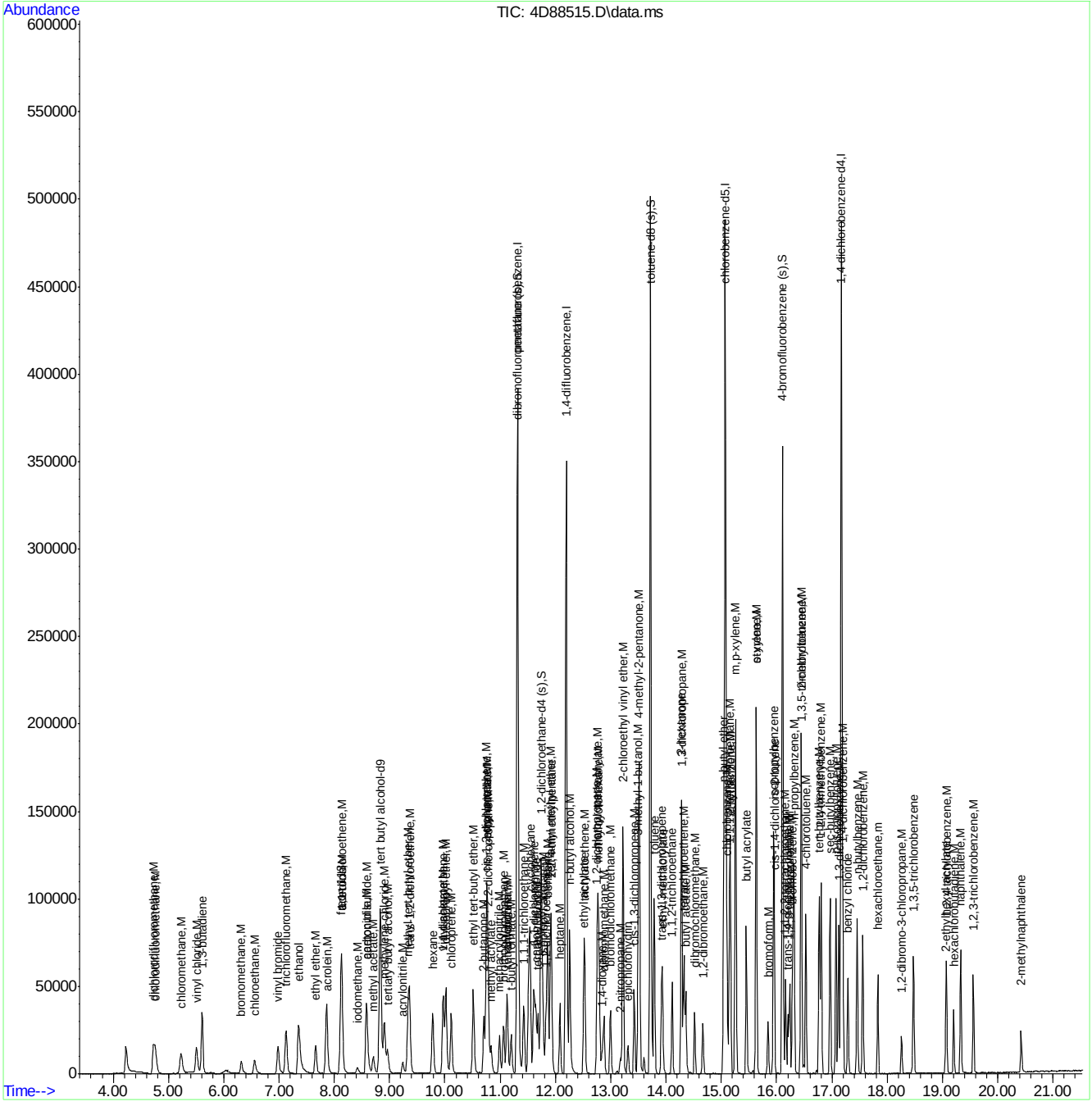
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92)	o-xylene	15.629	106	28059	10.42	ug/L	98
93)	styrene	15.629	104	45875	10.41	ug/L	97
94)	bromoform	15.844	173	13338	10.38	ug/L	99
95)	butyl acrylate	15.451	55	51052	10.70	ug/L	97
96)	isopropylbenzene	15.944	105	70804	10.32	ug/L	99
97)	cis-1,4-dichloro-2-butene	15.960	88	12532	10.49	ug/L	97
100)	bromobenzene	16.290	156	18790	10.40	ug/L	96
101)	1,1,2,2-tetrachloroethane	16.159	83	26198	10.24	ug/L	100
102)	trans-1,4-dichloro-2-b...	16.206	53	6050	10.30	ug/L	95
103)	1,2,3-trichloropropane	16.238	110	6654	10.90	ug/L	99
104)	n-propylbenzene	16.311	91	84732	10.44	ug/L	100
105)	2-chlorotoluene	16.442	126	17484	10.53	ug/L	99
106)	4-chlorotoluene	16.526	91	50785	10.46	ug/L	100
107)	1,3,5-trimethylbenzene	16.447	105	58199	10.59	ug/L	98
108)	tert-butylbenzene	16.772	134	10395	10.62	ug/L	97
109)	1,2,4-trimethylbenzene	16.804	105	57263	10.53	ug/L	99
110)	sec-butylbenzene	16.966	105	69246	10.41	ug/L	100
111)	1,3-dichlorobenzene	17.124	146	32881	10.37	ug/L	99
112)	p-isopropyltoluene	17.076	119	56366	10.55	ug/L	99
113)	1,4-dichlorobenzene	17.197	146	33787	10.35	ug/L	99
114)	benzyl chloride	17.286	91	38462	10.31	ug/L	99
115)	1,2-dichlorobenzene	17.559	146	31619	10.46	ug/L	99
116)	n-butylbenzene	17.459	92	26894	10.55	ug/L	99
117)	1,2-dibromo-3-chloropr...	18.256	75	5432	10.44	ug/L	93
118)	1,3,5-trichlorobenzene	18.476	180	20952	10.28	ug/L	98
119)	2-ethylhexyl acrylate	19.058	70	2478	1.68	ug/L	98
120)	1,2,4-trichlorobenzene	19.069	180	18571	10.40	ug/L	100
121)	hexachlorobutadiene	19.205	225	7772	10.79	ug/L	98
122)	naphthalene	19.331	128	53424	10.24	ug/L	99
123)	1,2,3-trichlorobenzene	19.556	180	17592	10.30	ug/L	97
124)	hexachloroethane	17.831	201	9076	10.29	ug/L	94
125)	2-methylnaphthalene	20.422	142	12331	5.44	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88515.D
Acq On : 17 Jul 2018 10:37 pm
Operator : juntaep
Sample : IC3846-10
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 18 18:24:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88516.D
Acq On : 17 Jul 2018 11:06 pm
Operator : juntaep
Sample : IC3846-20
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 18 18:24:59 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.829	65	146029	500.00	ug/L		0.00
5) pentafluorobenzene	11.309	168	210564	50.00	ug/L		0.00
53) 1,4-difluorobenzene	12.195	114	299457	50.00	ug/L		0.00
75) chlorobenzene-d5	15.073	117	251507	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	17.171	152	114505	50.00	ug/L		0.00
System Monitoring Compounds							
45) dibromofluoromethane (s)	11.319	113	89894	48.86	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.72%				
54) 1,2-dichloroethane-d4 (s)	11.739	65	92757	49.04	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.08%				
76) toluene-d8 (s)	13.716	98	324928	50.50	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.00%				
99) 4-bromofluorobenzene (s)	16.106	95	111591	50.41	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.82%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	8.965	59	39186	109.41	ug/L		97
3) ethanol	7.356	45	120498	2238.68	ug/L		99
4) 1,4-dioxane	12.845	88	18565	576.57	ug/L		98
6) chlorodifluoromethane	4.760	51	43873	20.58	ug/L		99
7) dichlorodifluoromethane	4.729	85	57823	21.19	ug/L		98
9) chloromethane	5.227	50	46830	20.14	ug/L		98
10) vinyl chloride	5.505	62	49869	20.97	ug/L		99
11) 1,3-butadiene	5.610	54	38654	21.14	ug/L		99
12) bromomethane	6.312	94	15094	19.45	ug/L		99
13) chloroethane	6.559	64	25527	22.14	ug/L		99
14) trichlorofluoromethane	7.125	101	61519	20.76	ug/L		99
15) vinyl bromide	6.978	106	36034	21.18	ug/L		96
16) ethyl ether	7.660	74	18734	20.96	ug/L		98
17) acrolein	7.880	56	7877	22.23	ug/L		100
18) freon 113	8.116	151	27109	21.44	ug/L		97
19) 1,1-dichloroethene	8.132	96	32821	20.68	ug/L		98
20) acetone	8.132	43	60784	86.44	ug/L		99
21) acetonitrile	8.577	41	66810	215.63	ug/L		98
22) iodomethane	8.415	142	16291	17.45	ug/L		98
23) carbon disulfide	8.583	76	80652	20.25	ug/L		98
24) methylene chloride	8.902	84	35656	20.60	ug/L		98
25) methyl acetate	8.698	43	33742	21.71	ug/L		95
26) methyl tert butyl ether	9.338	73	100920	20.29	ug/L		100
27) trans-1,2-dichloroethene	9.364	96	34174	20.53	ug/L		98
28) di-isopropyl ether	10.019	45	99404	20.48	ug/L		97
29) 2-butanone	10.701	72	24520	90.14	ug/L		98
30) 1,1-dichloroethane	9.967	63	62034	20.44	ug/L		99
31) chloroprene	10.114	53	51067	21.20	ug/L		99
32) acrylonitrile	9.233	53	15104	22.65	ug/L		97
33) hexane	9.778	56	20425	22.02	ug/L		99
34) vinyl acetate	9.967	86	6933	21.90	ug/L	#	90
35) ethyl tert-butyl ether	10.512	59	100823	20.32	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88516.D
Acq On : 17 Jul 2018 11:06 pm
Operator : juntaep
Sample : IC3846-20
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 18 18:24:59 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) ethyl acetate	10.753	45	6491	21.12	ug/L	#	95
37) 2,2-dichloropropane	10.779	77	51289	20.50	ug/L		100
38) cis-1,2-dichloroethene	10.753	96	38765	20.68	ug/L		100
39) methyl acrylate	10.832	85	7134	21.53	ug/L		94
40) propionitrile	10.758	54	126334	211.30	ug/L		99
41) bromochloromethane	11.063	128	18213	21.83	ug/L		96
42) tetrahydrofuran	11.131	72	6996	22.09	ug/L		99
43) chloroform	11.125	85	41196	20.33	ug/L		99
44) t-butyl formate	11.199	59	27657	21.67	ug/L		99
46) methacrylonitrile	10.989	67	17972	21.55	ug/L		96
47) 1,1,1-trichloroethane	11.424	97	55350	20.34	ug/L		98
48) cyclohexane	11.540	84	46451	20.43	ug/L		98
49) 1,1-dichloropropene	11.608	75	48322	20.75	ug/L		99
51) carbon tetrachloride	11.645	117	49179	20.83	ug/L		100
52) tert amyl alcohol	11.686	55	20240	111.75	ug/L		99
55) n-butyl alcohol	12.258	56	98867	1099.35	ug/L		98
56) 2,2,4-trimethylpentane	11.922	57	89297	20.45	ug/L		99
57) benzene	11.854	78	133585	20.37	ug/L		99
58) tert-amyl methyl ether	11.912	87	23486	21.43	ug/L		99
59) heptane	12.080	71	19958	21.29	ug/L		99
60) isopropyl acetate	11.770	87	8958	19.36	ug/L		98
61) 1,2-dichloroethane	11.828	62	50012	20.42	ug/L		100
62) trichloroethene	12.525	130	36611	20.68	ug/L		100
63) ethyl acrylate	12.510	55	81160	21.43	ug/L		100
64) 2-nitropropane	13.175	41	12642	21.84	ug/L		98
65) 2-chloroethyl vinyl ether	13.217	63	125533	104.68	ug/L		100
66) methyl methacrylate	12.761	100	11314	21.77	ug/L		97
67) 1,2-dichloropropane	12.751	63	35539	20.80	ug/L		100
68) dibromomethane	12.877	93	24158	20.56	ug/L		98
69) methylcyclohexane	12.777	83	54582	20.64	ug/L		99
70) bromodichloromethane	12.992	83	47515	20.20	ug/L		99
71) epichlorohydrin	13.307	57	27726	109.20	ug/L		97
72) cis-1,3-dichloropropene	13.422	75	55848	20.48	ug/L		99
73) 4-methyl-2-pentanone	13.511	58	77153	84.31	ug/L		99
74) 3-methyl-1-butanol	13.495	55	62845	440.22	ug/L		97
77) toluene	13.784	92	81500	20.50	ug/L		99
78) trans-1,3-dichloropropene	13.915	75	51407	21.02	ug/L		99
79) ethyl methacrylate	13.936	69	48101	21.98	ug/L		98
80) 1,1,2-trichloroethane	14.109	83	27943	20.66	ug/L		99
81) tetrachloroethene	14.324	164	28250	20.85	ug/L		98
82) 1,3-dichloropropane	14.282	76	53302	20.78	ug/L		99
83) 2-hexanone	14.277	58	79690	87.31	ug/L		99
84) butyl acetate	14.355	56	27577	22.57	ug/L		100
85) dibromochloromethane	14.518	129	37100	20.89	ug/L		98
86) 1,2-dibromoethane	14.665	107	37848	20.91	ug/L		99
87) n-butyl ether	15.042	57	208356	21.05	ug/L		100
88) chlorobenzene	15.100	112	89139	20.36	ug/L		99
89) 1,1,1,2-tetrachloroethane	15.147	131	32695	20.98	ug/L		99
90) ethylbenzene	15.163	91	151523	20.72	ug/L		99
91) m,p-xylene	15.257	106	116257	42.34	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88516.D
Acq On : 17 Jul 2018 11:06 pm
Operator : juntaep
Sample : IC3846-20
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 18 18:24:59 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration

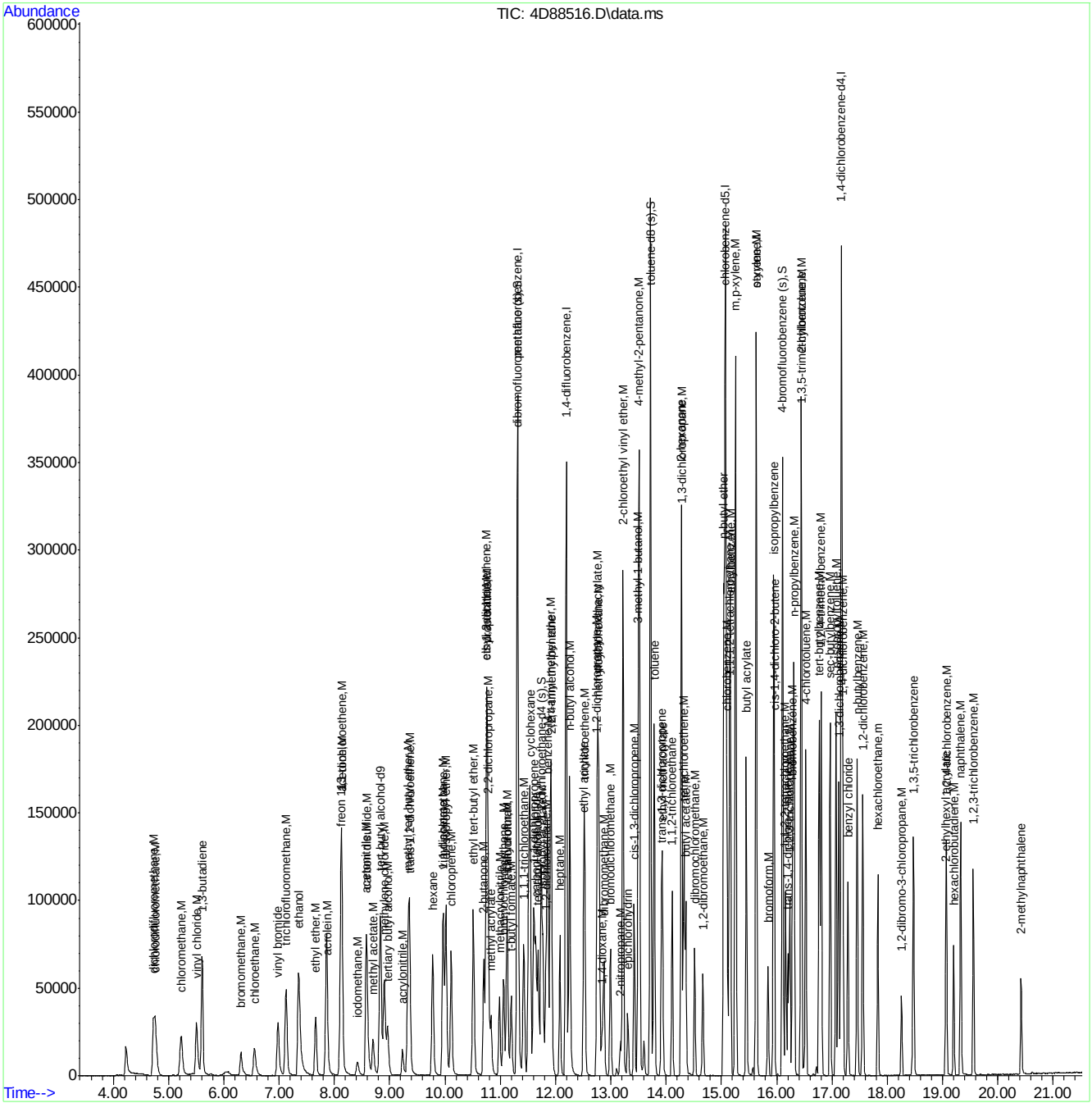
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) o-xylene	15.629	106	56609	21.13	ug/L	99
93) styrene	15.629	104	94319	21.52	ug/L	99
94) bromoform	15.844	173	27064	21.18	ug/L	98
95) butyl acrylate	15.451	55	106651	22.47	ug/L	100
96) isopropylbenzene	15.944	105	142474	20.88	ug/L	100
97) cis-1,4-dichloro-2-butene	15.960	88	26303	22.12	ug/L	99
100) bromobenzene	16.290	156	37198	20.93	ug/L	96
101) 1,1,2,2-tetrachloroethane	16.159	83	52538	20.86	ug/L	99
102) trans-1,4-dichloro-2-b...	16.206	53	12342	21.35	ug/L	96
103) 1,2,3-trichloropropane	16.237	110	13586	22.62	ug/L	98
104) n-propylbenzene	16.311	91	168717	21.14	ug/L	99
105) 2-chlorotoluene	16.442	126	35080	21.48	ug/L	99
106) 4-chlorotoluene	16.526	91	101694	21.28	ug/L	99
107) 1,3,5-trimethylbenzene	16.447	105	115738	21.40	ug/L	100
108) tert-butylbenzene	16.772	134	20807	21.59	ug/L	99
109) 1,2,4-trimethylbenzene	16.804	105	114703	21.43	ug/L	100
110) sec-butylbenzene	16.971	105	139649	21.33	ug/L	99
111) 1,3-dichlorobenzene	17.123	146	65688	21.05	ug/L	99
112) p-isopropyltoluene	17.076	119	113757	21.63	ug/L	100
113) 1,4-dichlorobenzene	17.197	146	66672	20.76	ug/L	100
114) benzyl chloride	17.291	91	78575	21.41	ug/L	97
115) 1,2-dichlorobenzene	17.559	146	62876	21.14	ug/L	99
116) n-butylbenzene	17.459	92	55153	21.98	ug/L	99
117) 1,2-dibromo-3-chloropr...	18.256	75	10925	21.34	ug/L	99
118) 1,3,5-trichlorobenzene	18.476	180	42679	21.28	ug/L	98
119) 2-ethylhexyl acrylate	19.058	70	5723	3.31	ug/L	98
120) 1,2,4-trichlorobenzene	19.069	180	37826	21.52	ug/L	99
121) hexachlorobutadiene	19.205	225	15198	21.44	ug/L	99
122) naphthalene	19.331	128	109854	21.40	ug/L	99
123) 1,2,3-trichlorobenzene	19.556	180	36071	21.46	ug/L	98
124) hexachloroethane	17.831	201	18389	21.19	ug/L	98
125) 2-methylnaphthalene	20.421	142	26654	11.94	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88516.D
Acq On : 17 Jul 2018 11:06 pm
Operator : juntaep
Sample : IC3846-20
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 18 18:24:59 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:16:11 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88517.D
Acq On : 17 Jul 2018 11:34 pm
Operator : juntaep
Sample : ICC3846-50
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 18 18:25:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:00:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.834	65	160376	500.00	ug/L	0.00
5) pentafluorobenzene	11.309	168	217275	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.195	114	314136	50.00	ug/L	0.00
75) chlorobenzene-d5	15.074	117	279569	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	131283	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.320	113	95630	29.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 59.18%#			
54) 1,2-dichloroethane-d4 (s)	11.739	65	97576	46.49	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 92.98%			
76) toluene-d8 (s)	13.716	98	355871	53.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 107.18%			
99) 4-bromofluorobenzene (s)	16.106	95	126565	50.82	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.64%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.971	59	105999	312.34	ug/L	100
3) ethanol	7.361	45	326631	9003.01	ug/L	100
4) 1,4-dioxane	12.845	88	51376	1454.01	ug/L	100
6) chlorodifluoromethane	4.755	51	120448	39.40	ug/L	100
7) dichlorodifluoromethane	4.724	85	154427	40.31	ug/L	100
9) chloromethane	5.227	50	121454	33.96	ug/L	100
10) vinyl chloride	5.505	62	132442	34.50	ug/L	100
11) 1,3-butadiene	5.610	54	106773	50.00	ug/L	100
12) bromomethane	6.292	94	46176	49.13	ug/L	100
13) chloroethane	6.538	64	67653	35.31	ug/L	100
14) trichlorofluoromethane	7.125	101	163483	37.41	ug/L	100
15) vinyl bromide	6.973	106	97015	39.58	ug/L	100
16) ethyl ether	7.660	74	52075	36.62	ug/L	100
17) acrolein	7.875	56	22118	39.93	ug/L	100
18) freon 113	8.116	151	73830	36.92	ug/L	100
19) 1,1-dichloroethene	8.127	96	90382	37.19	ug/L	100
20) acetone	8.127	43	162408	140.00	ug/L	100
21) acetonitrile	8.577	41	178372	358.44	ug/L	100
22) iodomethane	8.415	142	55973	39.22	ug/L	100
23) carbon disulfide	8.583	76	218848	36.91	ug/L	100
24) methylene chloride	8.903	84	95740	33.11	ug/L	100
25) methyl acetate	8.698	43	95094	35.82	ug/L	100
26) methyl tert butyl ether	9.332	73	275420	36.29	ug/L	100
27) trans-1,2-dichloroethene	9.359	96	93073	35.15	ug/L	100
28) di-isopropyl ether	10.019	45	270175	38.62	ug/L	100
29) 2-butanone	10.701	72	66430	136.99	ug/L	100
30) 1,1-dichloroethane	9.967	63	167346	36.88	ug/L	100
31) chloroprene	10.114	53	139328	38.23	ug/L	100
32) acrylonitrile	9.228	53	41495	35.79	ug/L	100
33) hexane	9.778	56	56763	41.87	ug/L	100
34) vinyl acetate	9.962	86	19879	36.50	ug/L	100
35) ethyl tert-butyl ether	10.512	59	274921	37.19	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88517.D
Acq On : 17 Jul 2018 11:34 pm
Operator : juntaep
Sample : ICC3846-50
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 18 18:25:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:00:54 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) ethyl acetate	10.753	45	17485	35.80	ug/L	100
37) 2,2-dichloropropane	10.780	77	135483	38.07	ug/L	100
38) cis-1,2-dichloroethene	10.748	96	104503	34.38	ug/L	100
39) methyl acrylate	10.832	85	20352	35.25	ug/L	100
40) propionitrile	10.764	54	341308	477.42	ug/L	100
41) bromochloromethane	11.063	128	49219	33.54	ug/L	100
42) tetrahydrofuran	11.131	72	19398	30.38	ug/L	100
43) chloroform	11.120	85	110040	34.86	ug/L	100
44) t-butyl formate	11.199	59	76524	33.10	ug/L	100
46) methacrylonitrile	10.984	67	49036	34.84	ug/L	100
47) 1,1,1-trichloroethane	11.424	97	150158	35.74	ug/L	100
48) cyclohexane	11.540	84	127829	38.71	ug/L	100
49) 1,1-dichloropropene	11.608	75	130853	38.20	ug/L	100
51) carbon tetrachloride	11.645	117	133899	36.55	ug/L	100
52) tert amyl alcohol	11.687	55	54536	231.17	ug/L	100
55) n-butyl alcohol	12.258	56	280547	2419.42	ug/L	100
56) 2,2,4-trimethylpentane	11.923	57	247478	58.50	ug/L	100
57) benzene	11.854	78	358717	49.51	ug/L	100
58) tert-amyl methyl ether	11.912	87	64747	50.26	ug/L	100
59) heptane	12.080	71	56123	57.42	ug/L	100
60) isopropyl acetate	11.776	87	25051	46.98	ug/L	100
61) 1,2-dichloroethane	11.828	62	135057	49.21	ug/L	100
62) trichloroethene	12.525	130	102079	47.73	ug/L	100
63) ethyl acrylate	12.510	55	229762	69.07	ug/L	100
64) 2-nitropropane	13.176	41	35696	49.99	ug/L	100
65) 2-chloroethyl vinyl ether	13.218	63	358015	244.35	ug/L	100
66) methyl methacrylate	12.756	100	32335	48.68	ug/L	100
67) 1,2-dichloropropane	12.751	63	97609	51.45	ug/L	100
68) dibromomethane	12.877	93	67866	48.62	ug/L	100
69) methylcyclohexane	12.777	83	154457	55.59	ug/L	100
70) bromodichloromethane	12.992	83	134027	48.94	ug/L	100
71) epichlorohydrin	13.307	57	78323	248.08	ug/L	100
72) cis-1,3-dichloropropene	13.422	75	159871	52.55	ug/L	100
73) 4-methyl-2-pentanone	13.511	58	220594	205.65	ug/L	100
74) 3-methyl-1-butanol	13.501	55	183436	993.24	ug/L	100
77) toluene	13.784	92	231663	57.94	ug/L	100
78) trans-1,3-dichloropropene	13.915	75	147755	60.96	ug/L	100
79) ethyl methacrylate	13.936	69	141121	58.64	ug/L	100
80) 1,1,2-trichloroethane	14.109	83	79568	56.09	ug/L	100
81) tetrachloroethene	14.324	164	79703	57.29	ug/L	100
82) 1,3-dichloropropane	14.282	76	150356	57.86	ug/L	100
83) 2-hexanone	14.277	58	231793	246.20	ug/L	100
84) butyl acetate	14.355	56	79815	59.29	ug/L	100
85) dibromochloromethane	14.518	129	107150	56.12	ug/L	100
86) 1,2-dibromoethane	14.665	107	108501	55.63	ug/L	100
87) n-butyl ether	15.042	57	609201	84.53	ug/L	100
88) chlorobenzene	15.100	112	255739	55.50	ug/L	100
89) 1,1,1,2-tetrachloroethane	15.147	131	93793	55.63	ug/L	100
90) ethylbenzene	15.158	91	433312	58.78	ug/L	100
91) m,p-xylene	15.257	106	329955	120.01	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88517.D
Acq On : 17 Jul 2018 11:34 pm
Operator : juntaep
Sample : ICC3846-50
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 18 18:25:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:00:54 2018
Response via : Initial Calibration

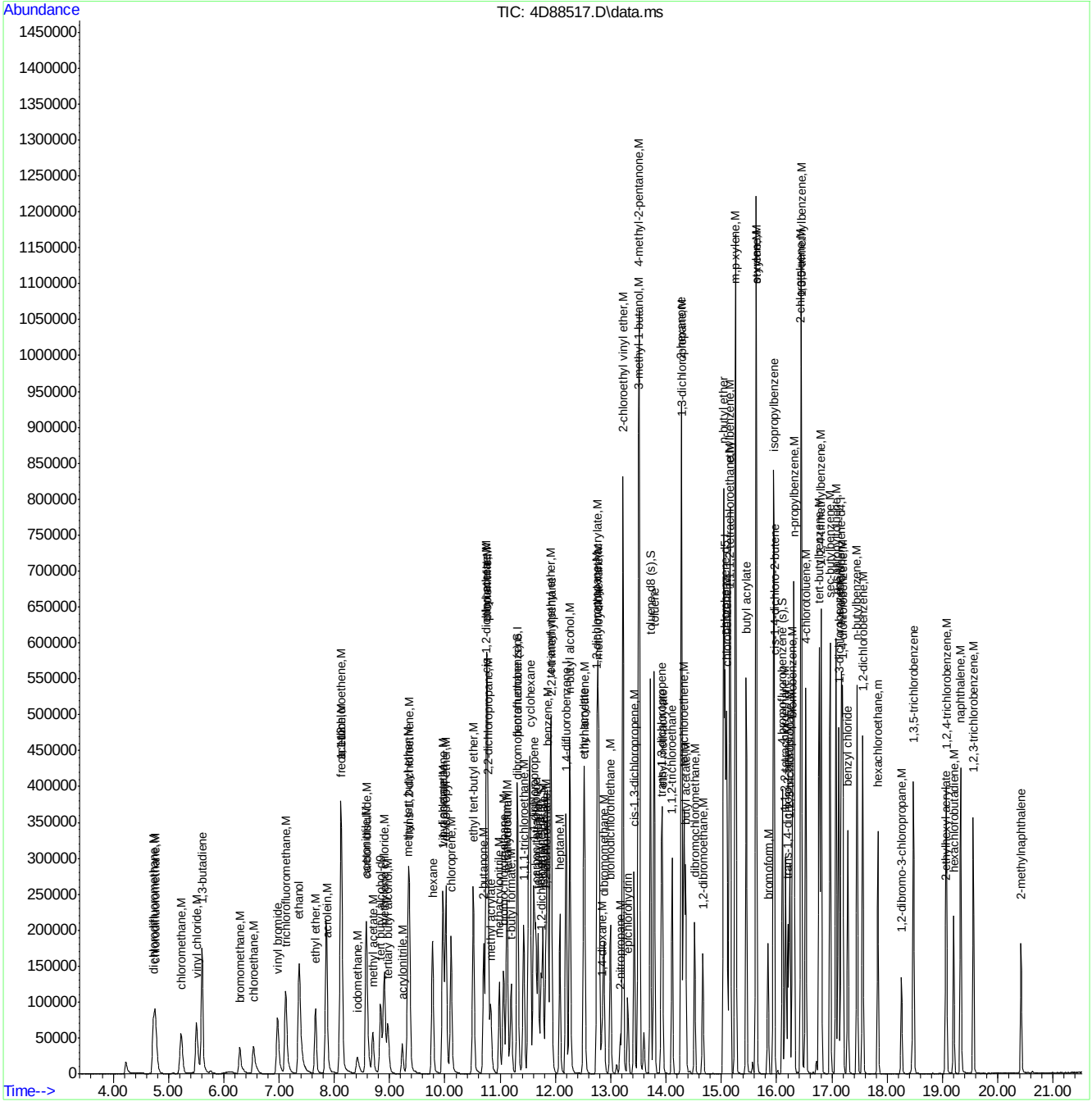
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) o-xylene	15.629	106	162457	59.92	ug/L	100
93) styrene	15.629	104	276679	59.92	ug/L	100
94) bromoform	15.844	173	79780	53.34	ug/L	100
95) butyl acrylate	15.451	55	316627	82.34	ug/L	100
96) isopropylbenzene	15.944	105	411614	61.37	ug/L	100
97) cis-1,4-dichloro-2-butene	15.960	88	78892	79.28	ug/L	100
100) bromobenzene	16.290	156	109074	58.41	ug/L	100
101) 1,1,2,2-tetrachloroethane	16.159	83	151130	58.79	ug/L	100
102) trans-1,4-dichloro-2-b...	16.206	53	37025	64.82	ug/L	100
103) 1,2,3-trichloropropane	16.238	110	38688	58.97	ug/L	100
104) n-propylbenzene	16.311	91	487485	64.20	ug/L	100
105) 2-chlorotoluene	16.437	126	101412	61.71	ug/L	100
106) 4-chlorotoluene	16.526	91	291870	61.86	ug/L	100
107) 1,3,5-trimethylbenzene	16.447	105	337547	64.68	ug/L	100
108) tert-butylbenzene	16.772	134	61478	64.00	ug/L	100
109) 1,2,4-trimethylbenzene	16.804	105	331606	64.06	ug/L	100
110) sec-butylbenzene	16.966	105	407288	65.14	ug/L	100
111) 1,3-dichlorobenzene	17.124	146	190273	58.91	ug/L	100
112) p-isopropyltoluene	17.076	119	332777	65.24	ug/L	100
113) 1,4-dichlorobenzene	17.197	146	192328	56.98	ug/L	100
114) benzyl chloride	17.286	91	231150	63.23	ug/L	100
115) 1,2-dichlorobenzene	17.559	146	184081	58.42	ug/L	100
116) n-butylbenzene	17.454	92	163271	66.76	ug/L	100
117) 1,2-dibromo-3-chloropr...	18.256	75	32839	59.22	ug/L	100
118) 1,3,5-trichlorobenzene	18.476	180	126434	56.21	ug/L	100
119) 2-ethylhexyl acrylate	19.053	70	20031	15.65	ug/L	100
120) 1,2,4-trichlorobenzene	19.069	180	112563	58.68	ug/L	100
121) hexachlorobutadiene	19.205	225	45210	58.84	ug/L	100
122) naphthalene	19.331	128	320309	59.09	ug/L	100
123) 1,2,3-trichlorobenzene	19.556	180	107101	57.43	ug/L	100
124) hexachloroethane	17.831	201	56266	59.92	ug/L	100
125) 2-methylnaphthalene	20.422	142	81736	28.73	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88517.D
Acq On : 17 Jul 2018 11:34 pm
Operator : juntaep
Sample : ICC3846-50
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 18 18:25:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:00:54 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88518.D
Acq On : 18 Jul 2018 12:03 am
Operator : juntaep
Sample : IC3846-100
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 18 18:25:19 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:01:55 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.850	65	171685	500.00	ug/L	0.02
5) pentafluorobenzene	11.309	168	225099	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.195	114	320005	50.00	ug/L	0.00
75) chlorobenzene-d5	15.074	117	280025	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	131177	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.320	113	99029	29.57	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 59.14%#			
54) 1,2-dichloroethane-d4 (s)	11.739	65	100018	46.78	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 93.56%			
76) toluene-d8 (s)	13.716	98	349506	52.55	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.10%			
99) 4-bromofluorobenzene (s)	16.107	95	127147	51.09	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.18%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.981	59	219834	605.10	ug/L	100
3) ethanol	7.382	45	669308	17233.10	ug/L	99
4) 1,4-dioxane	12.851	88	98840	2613.05	ug/L	100
6) chlorodifluoromethane	4.755	51	239861	75.73	ug/L	99
7) dichlorodifluoromethane	4.724	85	317188	79.93	ug/L	100
9) chloromethane	5.232	50	240895	65.02	ug/L	100
10) vinyl chloride	5.505	62	271718	68.32	ug/L	100
11) 1,3-butadiene	5.610	54	210355	95.08	ug/L	99
12) bromomethane	6.271	94	103291	88.75	ug/L	98
13) chloroethane	6.522	64	139133	70.09	ug/L	99
14) trichlorofluoromethane	7.115	101	343213	75.80	ug/L	99
15) vinyl bromide	6.963	106	204668	80.61	ug/L	99
16) ethyl ether	7.660	74	108945	73.96	ug/L	100
17) acrolein	7.875	56	45786	79.78	ug/L	99
18) freon 113	8.111	151	150351	72.56	ug/L	98
19) 1,1-dichloroethene	8.121	96	184819	73.41	ug/L	99
20) acetone	8.132	43	331042	275.45	ug/L	99
21) acetonitrile	8.583	41	360685	699.61	ug/L	100
22) iodomethane	8.415	142	125559	75.12	ug/L	100
23) carbon disulfide	8.578	76	443304	72.16	ug/L	100
24) methylene chloride	8.903	84	194404	64.90	ug/L	98
25) methyl acetate	8.698	43	191826	69.75	ug/L	97
26) methyl tert butyl ether	9.338	73	564180	71.76	ug/L	100
27) trans-1,2-dichloroethene	9.359	96	188755	68.81	ug/L	100
28) di-isopropyl ether	10.019	45	545510	75.27	ug/L	98
29) 2-butanone	10.706	72	138130	274.95	ug/L	96
30) 1,1-dichloroethane	9.962	63	341298	72.60	ug/L	100
31) chloroprene	10.108	53	283334	75.04	ug/L	99
32) acrylonitrile	9.228	53	85924	71.53	ug/L	98
33) hexane	9.773	56	115354	82.13	ug/L	99
34) vinyl acetate	9.962	86	41756	74.01	ug/L	97
35) ethyl tert-butyl ether	10.517	59	563682	73.60	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88518.D
Acq On : 18 Jul 2018 12:03 am
Operator : juntaep
Sample : IC3846-100
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 18 18:25:19 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:01:55 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) ethyl acetate	10.753	45	36144	71.43	ug/L	96
37) 2,2-dichloropropane	10.780	77	268397	72.80	ug/L	98
38) cis-1,2-dichloroethene	10.748	96	211309	67.09	ug/L	98
39) methyl acrylate	10.832	85	41103	68.71	ug/L	100
40) propionitrile	10.764	54	693540	936.41	ug/L	99
41) bromochloromethane	11.063	128	98050	64.50	ug/L	99
42) tetrahydrofuran	11.131	72	39532	59.75	ug/L	97
43) chloroform	11.120	85	219949	67.25	ug/L	100
44) t-butyl formate	11.199	59	153850	64.23	ug/L	99
46) methacrylonitrile	10.984	67	100700	69.07	ug/L	97
47) 1,1,1-trichloroethane	11.425	97	300780	69.10	ug/L	99
48) cyclohexane	11.535	84	251091	73.39	ug/L	90
49) 1,1-dichloropropene	11.608	75	260983	73.54	ug/L	99
51) carbon tetrachloride	11.639	117	264985	69.82	ug/L	99
52) tert amyl alcohol	11.697	55	107256	438.83	ug/L	96
55) n-butyl alcohol	12.269	56	558124	4724.96	ug/L	98
56) 2,2,4-trimethylpentane	11.923	57	486714	112.95	ug/L	99
57) benzene	11.854	78	710271	96.24	ug/L	99
58) tert-amyl methyl ether	11.912	87	128090	97.61	ug/L	99
59) heptane	12.080	71	112535	113.02	ug/L	99
60) isopropyl acetate	11.776	87	51357	94.55	ug/L	96
61) 1,2-dichloroethane	11.828	62	264306	94.53	ug/L	99
62) trichloroethene	12.526	130	200670	92.10	ug/L	100
63) ethyl acrylate	12.510	55	467489	137.95	ug/L	100
64) 2-nitropropane	13.176	41	70603	97.06	ug/L	99
65) 2-chloroethyl vinyl ether	13.218	63	695708	466.12	ug/L	99
66) methyl methacrylate	12.756	100	65081	96.18	ug/L	97
67) 1,2-dichloropropane	12.751	63	192547	99.63	ug/L	100
68) dibromomethane	12.872	93	131808	92.69	ug/L	95
69) methylcyclohexane	12.777	83	302495	106.87	ug/L	100
70) bromodichloromethane	12.992	83	262441	94.06	ug/L	100
71) epichlorohydrin	13.312	57	152556	474.34	ug/L	99
72) cis-1,3-dichloropropene	13.422	75	311788	100.60	ug/L	99
73) 4-methyl-2-pentanone	13.516	58	425663	389.55	ug/L	97
74) 3-methyl-1-butanol	13.501	55	356185	1893.24	ug/L	98
77) toluene	13.784	92	445741	111.30	ug/L	98
78) trans-1,3-dichloropropene	13.915	75	288214	118.72	ug/L	100
79) ethyl methacrylate	13.936	69	277559	115.14	ug/L	99
80) 1,1,2-trichloroethane	14.109	83	154201	108.53	ug/L	99
81) tetrachloroethene	14.324	164	153005	109.79	ug/L	99
82) 1,3-dichloropropane	14.277	76	289176	111.09	ug/L	95
83) 2-hexanone	14.277	58	452681	480.03	ug/L	97
84) butyl acetate	14.355	56	154632	114.69	ug/L	99
85) dibromochloromethane	14.518	129	210020	109.81	ug/L	100
86) 1,2-dibromoethane	14.665	107	212268	108.66	ug/L	99
87) n-butyl ether	15.042	57	1175819	162.89	ug/L	99
88) chlorobenzene	15.100	112	491770	106.55	ug/L	100
89) 1,1,1,2-tetrachloroethane	15.142	131	181126	107.26	ug/L	98
90) ethylbenzene	15.163	91	834830	113.07	ug/L	99
91) m,p-xylene	15.257	106	628319	228.16	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88518.D
Acq On : 18 Jul 2018 12:03 am
Operator : juntaep
Sample : IC3846-100
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 18 18:25:19 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:01:55 2018
Response via : Initial Calibration

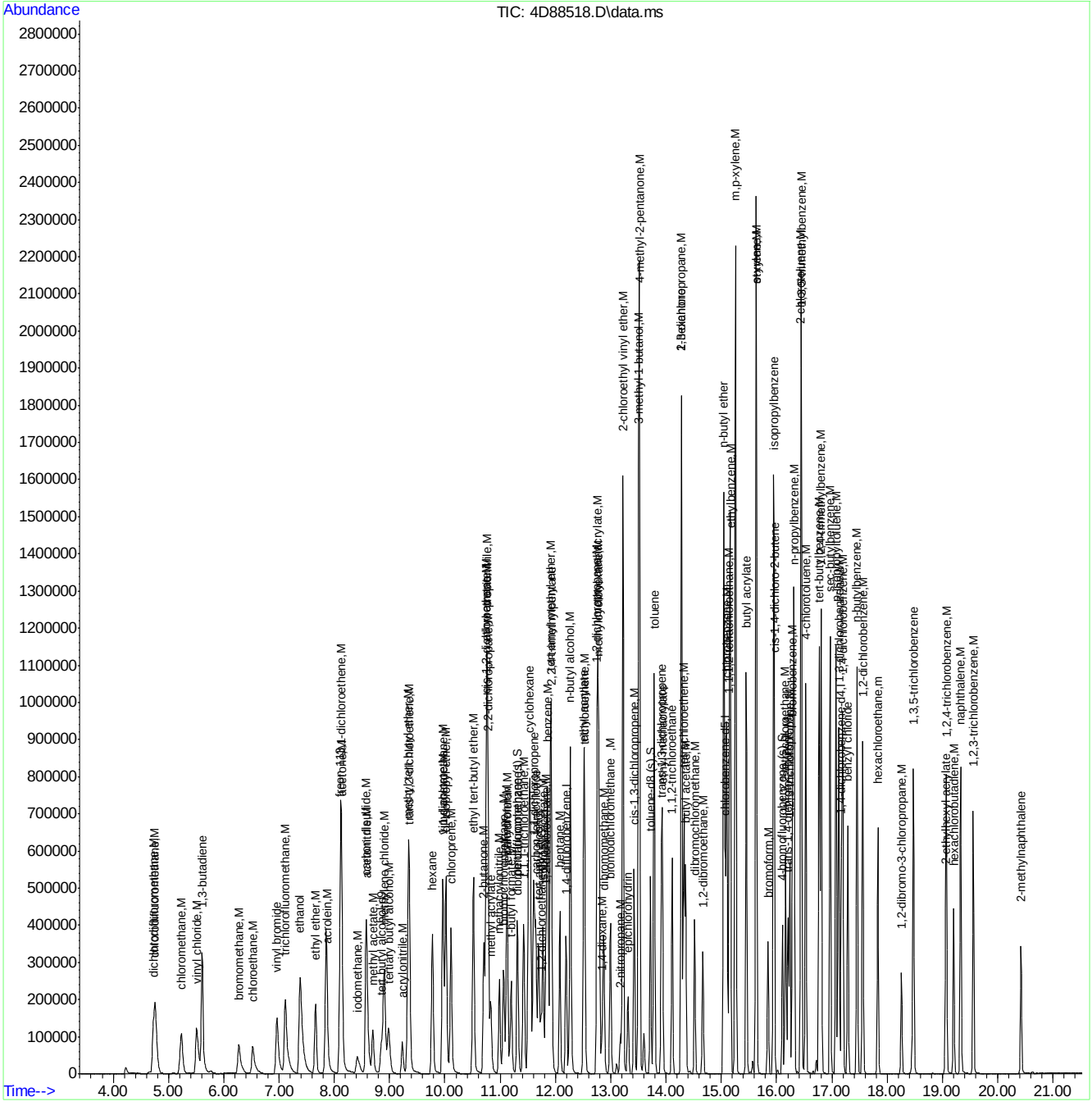
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) o-xylene	15.629	106	311273	114.62	ug/L	100
93) styrene	15.629	104	537200	116.14	ug/L	99
94) bromoform	15.844	173	159052	106.16	ug/L	100
95) butyl acrylate	15.451	55	625458	162.40	ug/L	100
96) isopropylbenzene	15.944	105	789617	117.53	ug/L	100
97) cis-1,4-dichloro-2-butene	15.960	88	156664	157.18	ug/L	100
100) bromobenzene	16.290	156	210591	112.87	ug/L	98
101) 1,1,2,2-tetrachloroethane	16.159	83	292683	113.94	ug/L	99
102) trans-1,4-dichloro-2-b...	16.206	53	73240	128.33	ug/L	98
103) 1,2,3-trichloropropane	16.238	110	75494	115.16	ug/L	100
104) n-propylbenzene	16.316	91	938129	123.66	ug/L	99
105) 2-chlorotoluene	16.437	126	193876	118.08	ug/L	98
106) 4-chlorotoluene	16.526	91	561111	119.01	ug/L	100
107) 1,3,5-trimethylbenzene	16.447	105	647409	124.15	ug/L	99
108) tert-butylbenzene	16.772	134	118687	123.66	ug/L	99
109) 1,2,4-trimethylbenzene	16.804	105	641696	124.06	ug/L	100
110) sec-butylbenzene	16.966	105	782945	125.33	ug/L	100
111) 1,3-dichlorobenzene	17.124	146	367551	113.90	ug/L	99
112) p-isopropyltoluene	17.076	119	643365	126.24	ug/L	100
113) 1,4-dichlorobenzene	17.197	146	372385	110.41	ug/L	100
114) benzyl chloride	17.286	91	449817	123.14	ug/L	99
115) 1,2-dichlorobenzene	17.559	146	354710	112.67	ug/L	99
116) n-butylbenzene	17.454	92	317453	129.90	ug/L	100
117) 1,2-dibromo-3-chloropr...	18.256	75	64977	117.28	ug/L	98
118) 1,3,5-trichlorobenzene	18.471	180	250503	111.46	ug/L	98
119) 2-ethylhexyl acrylate	19.053	70	43513	33.13	ug/L	98
120) 1,2,4-trichlorobenzene	19.069	180	224987	117.38	ug/L	98
121) hexachlorobutadiene	19.205	225	90955	118.47	ug/L	99
122) naphthalene	19.331	128	638765	117.94	ug/L	100
123) 1,2,3-trichlorobenzene	19.556	180	213424	114.54	ug/L	99
124) hexachloroethane	17.831	201	110773	118.07	ug/L	99
125) 2-methylnaphthalene	20.422	142	159600	56.14	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88518.D
Acq On : 18 Jul 2018 12:03 am
Operator : juntaep
Sample : IC3846-100
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 18 18:25:19 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:01:55 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88519.D
Acq On : 18 Jul 2018 12:32 am
Operator : juntaep
Sample : IC3846-200
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 18 18:11:48 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:01:55 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.876	65	157915	500.00	ug/L	0.04
5) pentafluorobenzene	11.309	168	223461	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.195	114	318976	50.00	ug/L	0.00
75) chlorobenzene-d5	15.073	117	277360	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	128564	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.319	113	97124	29.22	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 58.44%#			
54) 1,2-dichloroethane-d4 (s)	11.739	65	96993	45.51	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 91.02%			
76) toluene-d8 (s)	13.715	98	352199	53.46	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.92%			
99) 4-bromofluorobenzene (s)	16.106	95	126424	51.84	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.68%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	9.007	59	413719	1238.07	ug/L	98
3) ethanol	7.419	45	1238468	34668.18	ug/L	99
4) 1,4-dioxane	12.856	88	176500	5073.05	ug/L	99
6) chlorodifluoromethane	4.760	51	467287	148.63	ug/L	98
7) dichlorodifluoromethane	4.724	85	632868	160.64	ug/L	99
9) chloromethane	5.237	50	474882	129.12	ug/L	100
10) vinyl chloride	5.515	62	534430	135.37	ug/L	99
11) 1,3-butadiene	5.610	54	411710	187.46	ug/L	99
13) chloroethane	6.501	64	274039	139.05	ug/L	100
14) trichlorofluoromethane	7.104	101	681834	151.69	ug/L	100
15) vinyl bromide	6.947	106	414319	164.37	ug/L	99
16) ethyl ether	7.660	74	213939	146.30	ug/L	98
17) acrolein	7.875	56	88633	155.57	ug/L	99
18) freon 113	8.105	151	288262	140.14	ug/L	98
19) 1,1-dichloroethene	8.121	96	360663	144.31	ug/L	99
20) acetone	8.142	43	615370	515.79	ug/L	99
21) acetonitrile	8.588	41	679865	1328.38	ug/L	99
22) iodomethane	8.415	142	246375	140.25	ug/L	99
23) carbon disulfide	8.572	76	864046	141.68	ug/L	100
24) methylene chloride	8.902	84	377072	126.80	ug/L	99
25) methyl acetate	8.698	43	367978	134.79	ug/L	99
26) methyl tert butyl ether	9.338	73	1103967	141.45	ug/L	99
27) trans-1,2-dichloroethene	9.353	96	365799	134.33	ug/L	99
28) di-isopropyl ether	10.019	45	1054026	146.50	ug/L	98
29) 2-butanone	10.711	72	264803	530.96	ug/L	98
30) 1,1-dichloroethane	9.961	63	661524	141.75	ug/L	100
31) chloroprene	10.108	53	539550	143.94	ug/L	99
32) acrylonitrile	9.233	53	168274	141.12	ug/L	97
33) hexane	9.773	56	216664	155.40	ug/L	99
34) vinyl acetate	9.961	86	82961	148.12	ug/L #	93
35) ethyl tert-butyl ether	10.517	59	1101398	144.86	ug/L	99
36) ethyl acetate	10.758	45	75737	150.77	ug/L #	84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88519.D
Acq On : 18 Jul 2018 12:32 am
Operator : juntaep
Sample : IC3846-200
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 18 18:11:48 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:01:55 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 2,2-dichloropropane	10.779	77	513200	140.23	ug/L		94
38) cis-1,2-dichloroethene	10.748	96	409830	131.08	ug/L		97
39) methyl acrylate	10.832	85	80389	135.37	ug/L		96
40) propionitrile	10.774	54	1320547	1796.06	ug/L		99
41) bromochloromethane	11.062	128	190326	126.11	ug/L		99
42) tetrahydrofuran	11.136	72	76672	116.74	ug/L		96
43) chloroform	11.125	85	427269	131.60	ug/L		99
44) t-butyl formate	11.199	59	304036	127.85	ug/L		98
46) methacrylonitrile	10.989	67	196345	135.66	ug/L		97
47) 1,1,1-trichloroethane	11.424	97	585918	135.59	ug/L		99
48) cyclohexane	11.534	84	473398	139.38	ug/L	#	81
49) 1,1-dichloropropene	11.608	75	503727	142.99	ug/L		99
51) carbon tetrachloride	11.639	117	513740	136.35	ug/L		99
52) tert amyl alcohol	11.707	55	198767	819.20	ug/L		95
55) n-butyl alcohol	12.284	56	1034490	8786.02	ug/L		98
56) 2,2,4-trimethylpentane	11.922	57	923659	215.04	ug/L		98
57) benzene	11.854	78	1377654	187.27	ug/L		99
58) tert-amyl methyl ether	11.912	87	252635	193.13	ug/L		98
59) heptane	12.080	71	212754	214.36	ug/L		98
60) isopropyl acetate	11.776	87	100114	184.91	ug/L		98
61) 1,2-dichloroethane	11.828	62	510843	183.30	ug/L		99
62) trichloroethene	12.525	130	389750	179.47	ug/L		99
63) ethyl acrylate	12.515	55	912986	270.28	ug/L		98
64) 2-nitropropane	13.175	41	134011	184.82	ug/L		99
65) 2-chloroethyl vinyl ether	13.223	63	1352619	909.17	ug/L		98
66) methyl methacrylate	12.761	100	128764	190.90	ug/L		92
67) 1,2-dichloropropane	12.751	63	381922	198.26	ug/L		99
68) dibromomethane	12.877	93	256721	181.12	ug/L		98
69) methylcyclohexane	12.777	83	579782	205.50	ug/L		99
70) bromodichloromethane	12.992	83	517510	186.09	ug/L		99
71) epichlorohydrin	13.312	57	295410	921.47	ug/L		99
72) cis-1,3-dichloropropene	13.422	75	612668	198.33	ug/L		99
73) 4-methyl-2-pentanone	13.516	58	819357	752.26	ug/L		99
74) 3-methyl-1-butanol	13.511	55	656734	3502.01	ug/L		98
77) toluene	13.784	92	874856	220.54	ug/L		98
78) trans-1,3-dichloropropene	13.915	75	570843	237.40	ug/L		100
79) ethyl methacrylate	13.936	69	550192	230.42	ug/L		99
80) 1,1,2-trichloroethane	14.109	83	306038	217.46	ug/L		99
81) tetrachloroethene	14.324	164	295658	214.19	ug/L		99
82) 1,3-dichloropropane	14.282	76	567974	220.29	ug/L		98
83) 2-hexanone	14.282	58	874500	936.24	ug/L		94
84) butyl acetate	14.355	56	302482	226.50	ug/L		97
85) dibromochloromethane	14.518	129	420961	222.22	ug/L		100
86) 1,2-dibromoethane	14.664	107	417069	215.55	ug/L		99
87) n-butyl ether	15.042	57	2300489	321.75	ug/L		99
88) chlorobenzene	15.100	112	960675	210.14	ug/L		98
89) 1,1,1,2-tetrachloroethane	15.147	131	357326	213.64	ug/L		98
90) ethylbenzene	15.157	91	1623630	222.02	ug/L		100
91) m,p-xylene	15.257	106	1210550	443.82	ug/L		98
92) o-xylene	15.629	106	593675	220.70	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88519.D
Acq On : 18 Jul 2018 12:32 am
Operator : juntaep
Sample : IC3846-200
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 18 18:11:48 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:01:55 2018
Response via : Initial Calibration

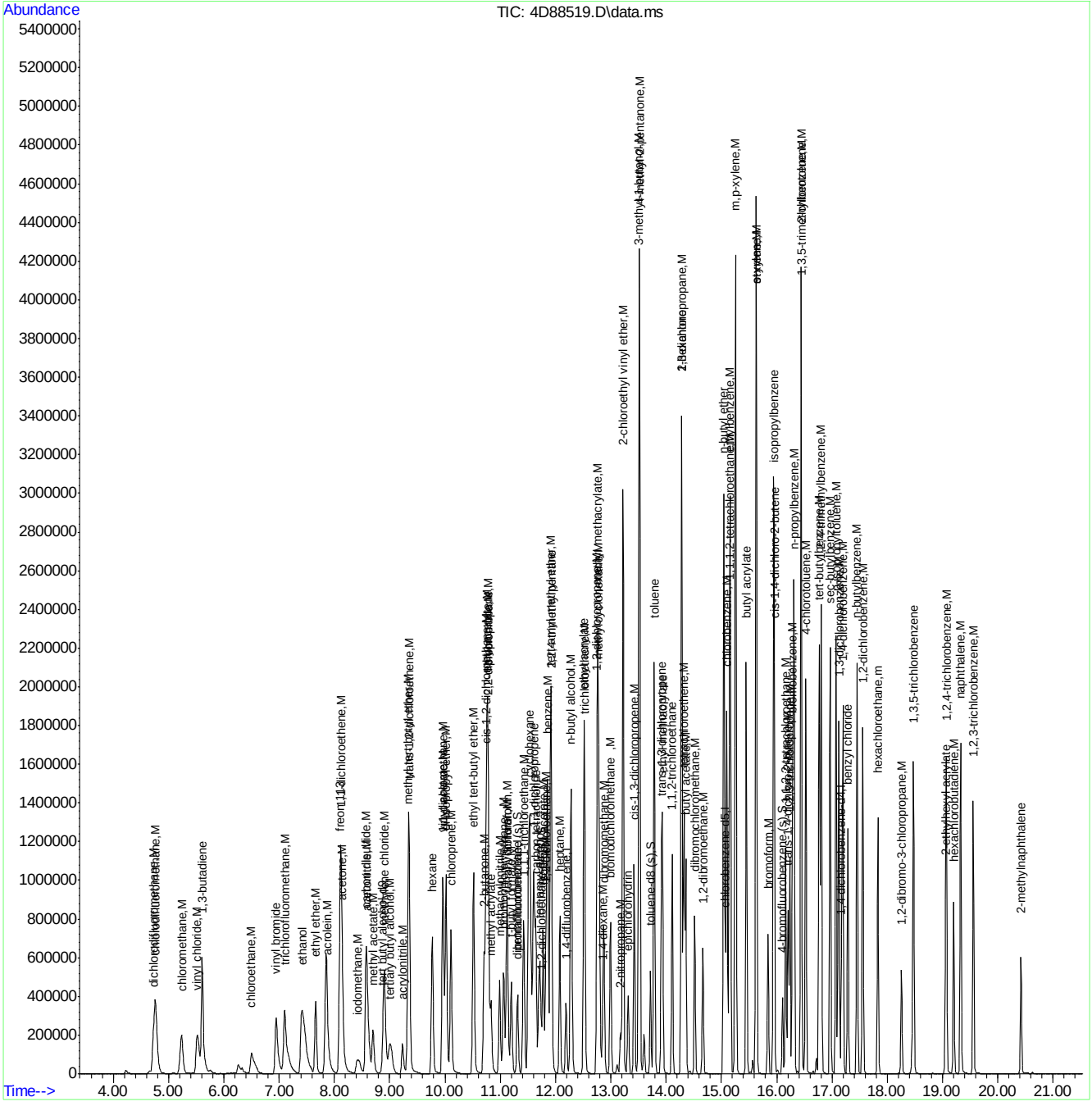
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) styrene	15.629	104	1033462	225.58	ug/L	98
94) bromoform	15.844	173	318180	214.42	ug/L	99
95) butyl acrylate	15.451	55	1221189	320.12	ug/L	99
96) isopropylbenzene	15.944	105	1544814	232.16	ug/L	99
97) cis-1,4-dichloro-2-butene	15.959	88	307928	311.91	ug/L	98
100) bromobenzene	16.290	156	412061	225.34	ug/L	97
101) 1,1,2,2-tetrachloroethane	16.164	83	578981	229.98	ug/L	100
102) trans-1,4-dichloro-2-b...	16.206	53	145151	259.50	ug/L	98
103) 1,2,3-trichloropropane	16.237	110	148720	231.47	ug/L	100
104) n-propylbenzene	16.316	91	1807062	243.03	ug/L	98
105) 2-chlorotoluene	16.442	126	372794	231.66	ug/L	95
106) 4-chlorotoluene	16.526	91	1099776	238.01	ug/L	99
107) 1,3,5-trimethylbenzene	16.447	105	1242102	243.04	ug/L	99
108) tert-butylbenzene	16.772	134	233007	247.70	ug/L	99
109) 1,2,4-trimethylbenzene	16.804	105	1250317	246.64	ug/L	100
110) sec-butylbenzene	16.971	105	1521331	248.48	ug/L	99
111) 1,3-dichlorobenzene	17.123	146	709359	224.28	ug/L	99
112) p-isopropyltoluene	17.076	119	1249126	250.08	ug/L	99
113) 1,4-dichlorobenzene	17.197	146	730005	220.84	ug/L	99
114) benzyl chloride	17.286	91	878905	245.50	ug/L	99
115) 1,2-dichlorobenzene	17.559	146	695582	225.43	ug/L	98
116) n-butylbenzene	17.454	92	629275	262.74	ug/L	99
117) 1,2-dibromo-3-chloropr...	18.256	75	128002	235.72	ug/L	98
118) 1,3,5-trichlorobenzene	18.476	180	499825	226.91	ug/L	99
119) 2-ethylhexyl acrylate	19.053	70	94606	72.59	ug/L	97
120) 1,2,4-trichlorobenzene	19.069	180	457116	243.33	ug/L	99
121) hexachlorobutadiene	19.205	225	182550	242.62	ug/L	99
122) naphthalene	19.331	128	1292650	243.52	ug/L	100
123) 1,2,3-trichlorobenzene	19.556	180	431189	236.12	ug/L	100
124) hexachloroethane	17.831	201	223988	243.59	ug/L	99
125) 2-methylnaphthalene	20.421	142	282228	101.30	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88519.D
Acq On : 18 Jul 2018 12:32 am
Operator : juntaep
Sample : IC3846-200
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 18 18:11:48 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 17:01:55 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88522.D
Acq On : 18 Jul 2018 1:59 am
Operator : juntaep
Sample : ICV3846-50
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 18 18:39:25 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.834	65	165995	500.00	ug/L	0.00
5) pentafluorobenzene	11.309	168	236150	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.195	114	340286	50.00	ug/L	0.00
75) chlorobenzene-d5	15.068	117	291125	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	136038	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.319	113	101776	49.33	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.66%			
54) 1,2-dichloroethane-d4 (s)	11.739	65	103740	48.27	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 96.54%			
76) toluene-d8 (s)	13.716	98	366347	49.19	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.38%			
99) 4-bromofluorobenzene (s)	16.106	95	129971	49.42	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.84%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.965	59	106307	253.95	ug/L	100
3) ethanol	7.356	45	213241	5227.80	ug/L	100
4) 1,4-dioxane	12.845	88	53527	1395.38	ug/L	98
6) chlorodifluoromethane	4.755	51	130991	54.79	ug/L	97
7) dichlorodifluoromethane	4.724	85	135978	42.73	ug/L	98
9) chloromethane	5.227	50	130063	49.88	ug/L	99
10) vinyl chloride	5.505	62	125517	47.06	ug/L	99
12) bromomethane	6.302	94	62255	71.51	ug/L	97
13) chloroethane	6.548	64	65913	48.55	ug/L	99
14) trichlorofluoromethane	7.125	101	153824	46.29	ug/L	100
15) vinyl bromide	6.973	106	137831	69.83	ug/L	98
16) ethyl ether	7.660	74	51110	49.48	ug/L	98
17) acrolein	7.875	56	23001	53.12	ug/L	99
18) freon 113	8.116	151	81528	55.39	ug/L	97
19) 1,1-dichloroethene	8.126	96	83681	47.00	ug/L	99
20) acetone	8.126	43	171313	211.77	ug/L	99
21) acetonitrile	8.577	41	172326	481.20	ug/L	99
22) iodomethane	8.420	142	54669	44.77	ug/L	99
23) carbon disulfide	8.583	76	244932	54.82	ug/L	99
24) methylene chloride	8.902	84	93310	48.07	ug/L	98
25) methyl acetate	8.698	43	94498	49.35	ug/L	100
26) methyl tert butyl ether	9.332	73	561772	100.69	ug/L	100
27) trans-1,2-dichloroethene	9.359	96	91326	48.91	ug/L	98
28) di-isopropyl ether	10.019	45	273243	50.20	ug/L	99
29) 2-butanone	10.701	72	68914	206.90	ug/L	98
30) 1,1-dichloroethane	9.967	63	163766	48.12	ug/L	99
31) chloroprene	10.114	53	144613	53.53	ug/L	99
32) acrylonitrile	9.227	53	42712	50.16	ug/L	98
33) hexane	9.778	56	42343	37.39	ug/L	98
34) vinyl acetate	9.961	86	20659	52.64	ug/L	94
35) ethyl tert-butyl ether	10.512	59	277086	49.79	ug/L	99
36) ethyl acetate	10.753	45	17742	48.36	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88522.D
Acq On : 18 Jul 2018 1:59 am
Operator : juntaep
Sample : ICV3846-50
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 18 18:39:25 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 2,2-dichloropropane	10.779	77	131362	46.83	ug/L	99
38) cis-1,2-dichloroethene	10.748	96	106838	50.83	ug/L	97
39) methyl acrylate	10.832	85	20777	51.95	ug/L	98
40) propionitrile	10.758	54	230702	516.09	ug/L	100
41) bromochloromethane	11.063	128	50688	51.31	ug/L	97
42) tetrahydrofuran	11.131	72	19427	48.57	ug/L	98
43) chloroform	11.125	85	112827	49.64	ug/L	99
44) t-butyl formate	11.199	59	72193	47.64	ug/L	99
46) methacrylonitrile	10.984	67	50061	49.68	ug/L	97
47) 1,1,1-trichloroethane	11.424	97	150468	49.31	ug/L	100
48) cyclohexane	11.540	84	139528	54.73	ug/L	97
49) 1,1-dichloropropene	11.608	75	133277	51.03	ug/L	100
51) carbon tetrachloride	11.645	117	137424	51.90	ug/L	99
52) tert amyl alcohol	11.686	55	37995	268.96	ug/L	99
55) n-butyl alcohol	12.258	56	288022	2651.69	ug/L	100
56) 2,2,4-trimethylpentane	11.922	57	238661	48.10	ug/L	98
57) benzene	11.854	78	366707	49.21	ug/L	100
58) tert-amyl methyl ether	11.912	87	67584	52.84	ug/L	94
59) heptane	12.080	71	60558	54.94	ug/L	99
60) isopropyl acetate	11.776	87	26714	51.99	ug/L	94
61) 1,2-dichloroethane	11.828	62	137319	49.33	ug/L	99
62) trichloroethene	12.525	130	105585	52.49	ug/L	100
63) ethyl acrylate	12.510	55	156263	52.52	ug/L	98
64) 2-nitropropane	13.175	41	38639	54.31	ug/L	99
65) 2-chloroethyl vinyl ether	13.217	63	394724	289.65	ug/L	99
66) methyl methacrylate	12.756	100	33862	52.23	ug/L	94
67) 1,2-dichloropropane	12.751	63	96482	49.68	ug/L	100
68) dibromomethane	12.877	93	69774	52.27	ug/L	96
69) methylcyclohexane	12.777	83	146439	48.72	ug/L	100
70) bromodichloromethane	12.992	83	133332	49.89	ug/L	100
71) epichlorohydrin	13.307	57	77608	257.06	ug/L	99
72) cis-1,3-dichloropropene	13.422	75	159075	51.34	ug/L	100
73) 4-methyl-2-pentanone	13.516	58	216144	202.64	ug/L	94
74) 3-methyl-1-butanol	13.495	55	180467	1067.47	ug/L	96
77) toluene	13.784	92	232502	50.52	ug/L	99
78) trans-1,3-dichloropropene	13.915	75	139307	49.22	ug/L	100
79) ethyl methacrylate	13.936	69	134682	50.11	ug/L	99
80) 1,1,2-trichloroethane	14.109	83	78734	50.29	ug/L	99
81) tetrachloroethene	14.324	164	93444	59.59	ug/L	98
82) 1,3-dichloropropane	14.282	76	151594	51.06	ug/L	97
83) 2-hexanone	14.277	58	227250	207.67	ug/L	99
84) butyl acetate	14.355	56	83252	54.67	ug/L	100
85) dibromochloromethane	14.518	129	110822	53.92	ug/L	99
86) 1,2-dibromoethane	14.665	107	112192	53.54	ug/L	99
87) n-butyl ether	15.042	57	394520	51.65	ug/L	99
88) chlorobenzene	15.100	112	259820	51.26	ug/L	98
89) 1,1,1,2-tetrachloroethane	15.142	131	96368	53.43	ug/L	98
90) ethylbenzene	15.163	91	440498	52.03	ug/L	100
91) m,p-xylene	15.257	106	338443	106.48	ug/L	99
92) o-xylene	15.629	106	164371	53.01	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88522.D
Acq On : 18 Jul 2018 1:59 am
Operator : juntaep
Sample : ICV3846-50
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 18 18:39:25 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

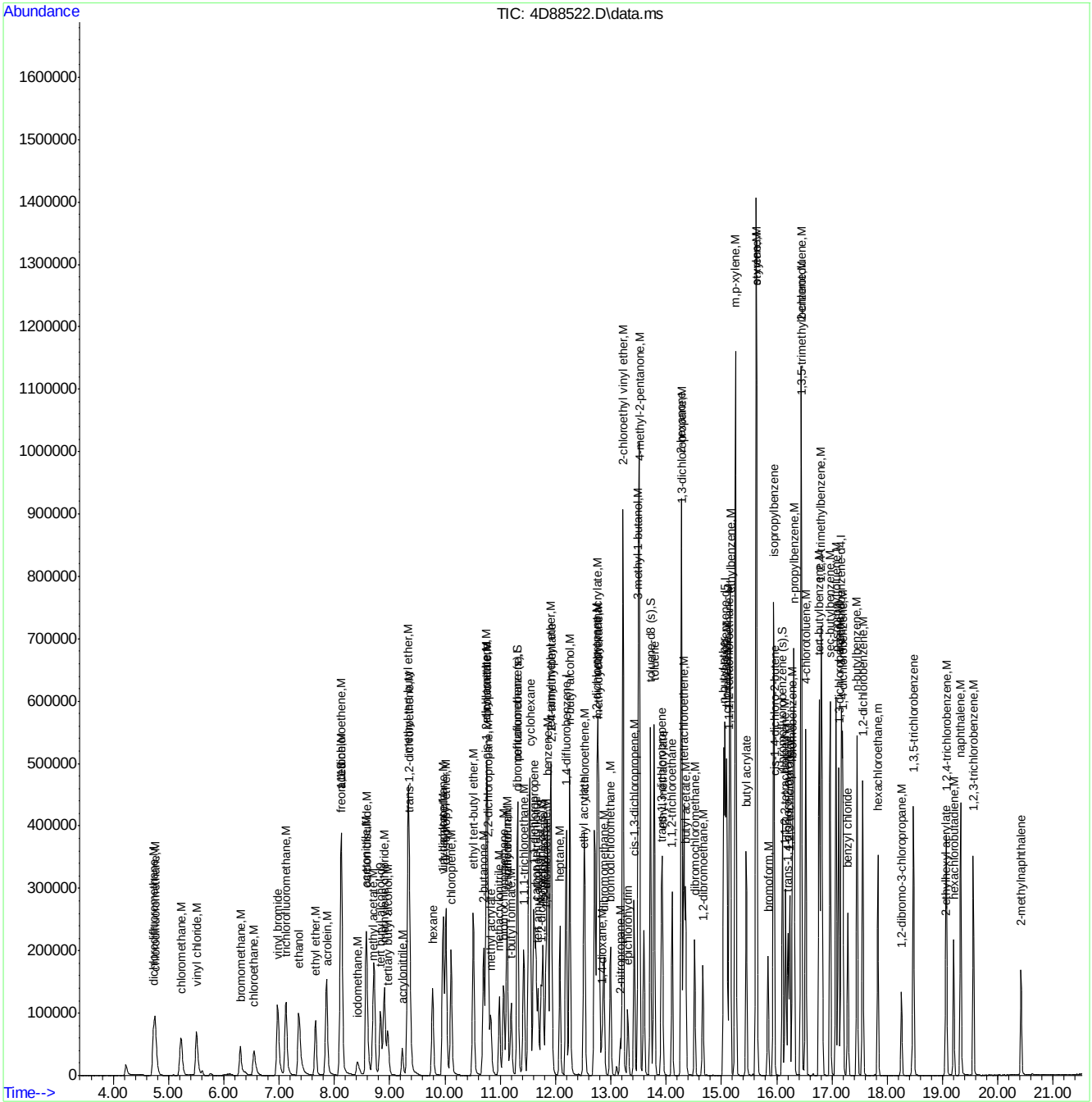
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
93) styrene	15.629	104	283061	54.44	ug/L	99
94) bromoform	15.844	173	85290	55.93	ug/L	99
95) butyl acrylate	15.451	55	211043	55.10	ug/L	99
96) isopropylbenzene	15.944	105	414363	52.47	ug/L	98
97) cis-1,4-dichloro-2-butene	15.960	88	50928	52.77	ug/L	98
100) bromobenzene	16.290	156	110688	52.42	ug/L	99
101) 1,1,2,2-tetrachloroethane	16.159	83	146778	49.06	ug/L	99
102) trans-1,4-dichloro-2-b...	16.201	53	39647	56.14	ug/L	96
103) 1,2,3-trichloropropane	16.237	110	39009	52.05	ug/L	98
104) n-propylbenzene	16.311	91	489966	51.66	ug/L	100
105) 2-chlorotoluene	16.442	126	100951	50.77	ug/L	100
106) 4-chlorotoluene	16.526	91	301284	53.06	ug/L	100
107) 1,3,5-trimethylbenzene	16.447	105	339295	52.81	ug/L	99
108) tert-butylbenzene	16.772	134	62465	53.34	ug/L	99
109) 1,2,4-trimethylbenzene	16.804	105	342142	53.80	ug/L	100
110) sec-butylbenzene	16.966	105	409765	52.68	ug/L	100
111) 1,3-dichlorobenzene	17.123	146	192112	51.81	ug/L	99
112) p-isopropyltoluene	17.076	119	339613	54.35	ug/L	99
113) 1,4-dichlorobenzene	17.197	146	196498	51.49	ug/L	100
114) benzyl chloride	17.286	91	181285	41.58	ug/L	99
115) 1,2-dichlorobenzene	17.559	146	186207	52.69	ug/L	99
116) n-butylbenzene	17.454	92	162869	53.03	ug/L	99
117) 1,2-dibromo-3-chloropr...	18.256	75	31772	50.57	ug/L	99
118) 1,3,5-trichlorobenzene	18.476	180	132466	54.15	ug/L	99
119) 2-ethylhexyl acrylate	19.053	70	14053	9.74	ug/L	97
120) 1,2,4-trichlorobenzene	19.069	180	113465	52.85	ug/L	99
121) hexachlorobutadiene	19.205	225	44968	51.67	ug/L	100
122) naphthalene	19.331	128	328304	52.66	ug/L	100
123) 1,2,3-trichlorobenzene	19.556	180	106262	51.85	ug/L	100
124) hexachloroethane	17.831	201	57755	54.28	ug/L	98
125) 2-methylnaphthalene	20.421	142	79967	26.11	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88522.D
Acq On : 18 Jul 2018 1:59 am
Operator : juntaep
Sample : ICV3846-50
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 18 18:39:25 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88523.D
Acq On : 18 Jul 2018 2:28 am
Operator : juntaep
Sample : ICV3846-50
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 18 18:27:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

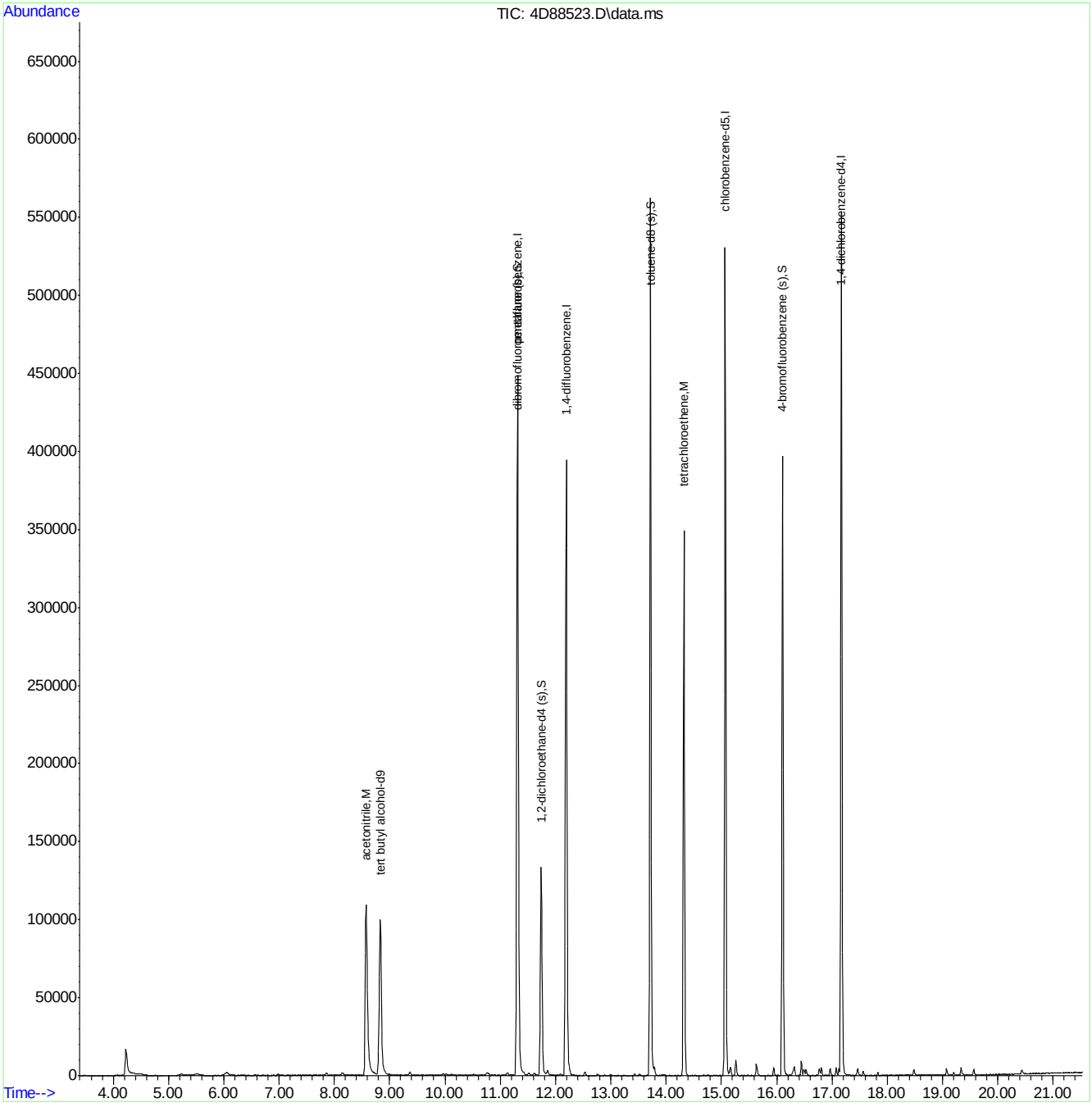
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.829	65	159880	500.00	ug/L	0.00
5) pentafluorobenzene	11.309	168	245764	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.195	114	346642	50.00	ug/L	0.00
75) chlorobenzene-d5	15.073	117	289205	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	133733	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.319	113	103472	48.19	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.38%			
54) 1,2-dichloroethane-d4 (s)	11.739	65	104386	47.68	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 95.36%			
76) toluene-d8 (s)	13.715	98	372363	50.33	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.66%			
99) 4-bromofluorobenzene (s)	16.106	95	128122	49.56	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.12%			
Target Compounds						Qvalue
21) acetonitrile	8.572	41	167581	449.65	ug/L	100
81) tetrachloroethene	14.324	164	77897	50.00	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88523.D
Acq On : 18 Jul 2018 2:28 am
Operator : juntaep
Sample : ICV3846-50
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 18 18:27:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88528.D
Acq On : 19 Jul 2018 10:59 am
Operator : juntaep
Sample : icv3846-50
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 19 16:38:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

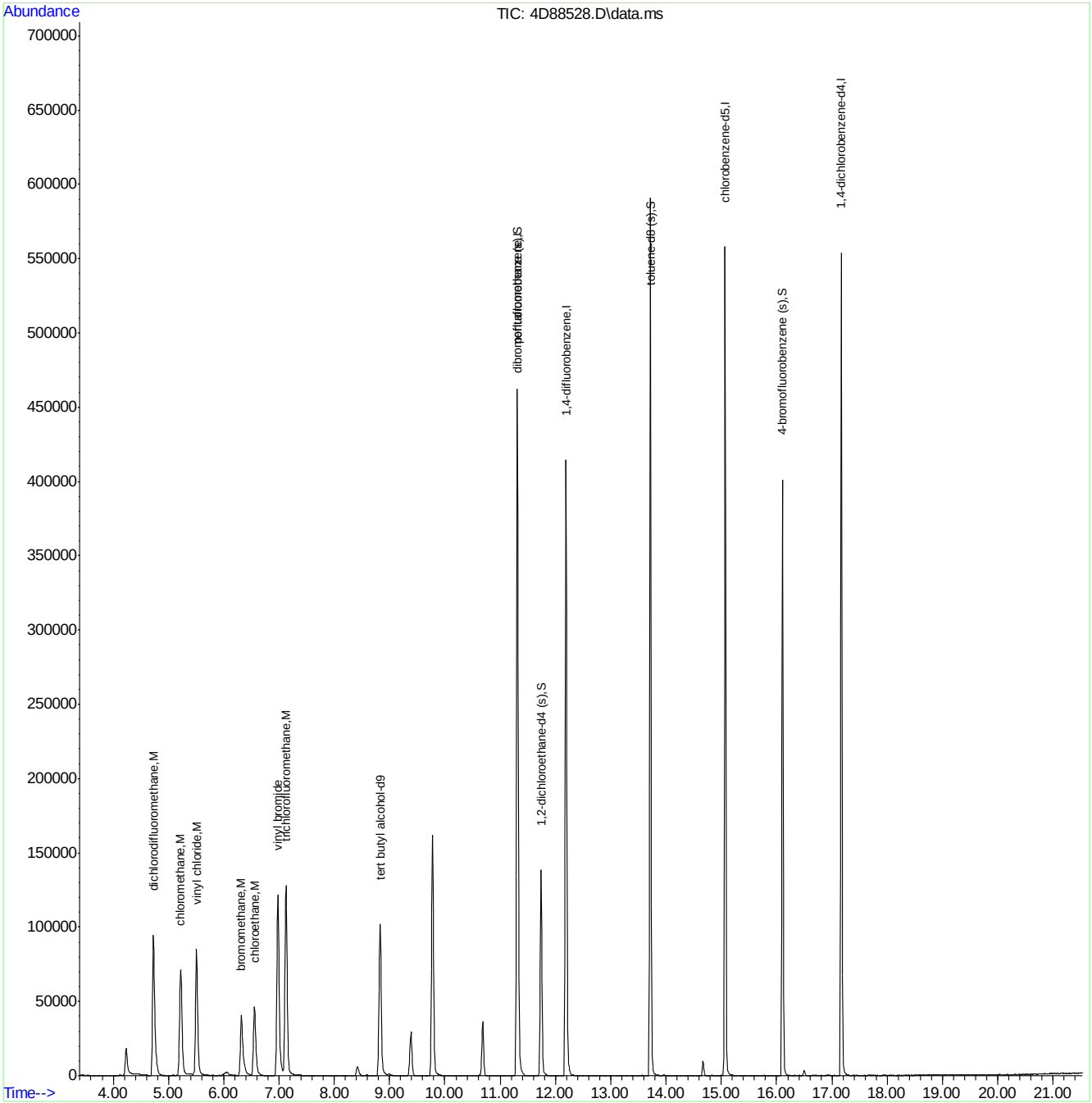
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.829	65	163540	500.00	ug/L	0.00
5) pentafluorobenzene	11.309	168	254394	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.190	114	359673	50.00	ug/L	0.00
75) chlorobenzene-d5	15.068	117	295972	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	137447	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.314	113	105705	47.56	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.12%			
54) 1,2-dichloroethane-d4 (s)	11.739	65	107394	47.27	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 94.54%			
76) toluene-d8 (s)	13.716	98	384783	50.82	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.64%			
99) 4-bromofluorobenzene (s)	16.106	95	129830	48.86	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.72%			
Target Compounds						Qvalue
7) dichlorodifluoromethane	4.729	85	153878	44.88	ug/L	98
9) chloromethane	5.217	50	136043	48.44	ug/L	100
10) vinyl chloride	5.505	62	131640	45.82	ug/L	98
12) bromomethane	6.318	94	52670	56.16	ug/L	96
13) chloroethane	6.554	64	67155	45.92	ug/L	98
14) trichlorofluoromethane	7.125	101	158157	44.18	ug/L	99
15) vinyl bromide	6.978	106	138284	65.04	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D3846\
Data File : 4D88528.D
Acq On : 19 Jul 2018 10:59 am
Operator : juntaep
Sample : icv3846-50
Misc : MS27734,V4D3846,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 19 16:38:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89142.d
Acq On : 11 Aug 2018 8:31 am
Operator : EddieH
Sample : cc3846-20 Inst : MS4D
Misc : MS28459,V4D3878,5,,,,1
ALS Vial : 75 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:12:16 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.824	65	171799	500.00	ug/L	-0.01
5) pentafluorobenzene	11.304	168	227302	50.00	ug/L	0.00
53) 1,4-difluorobenzene	12.190	114	318955	50.00	ug/L	0.00
75) chlorobenzene-d5	15.068	117	255129	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.171	152	119278	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	11.314	113	97191	48.94	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.88%			
54) 1,2-dichloroethane-d4 (s)	11.734	65	91218	45.28	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 90.56%			
76) toluene-d8 (s)	13.716	98	331562	50.80	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.60%			
99) 4-bromofluorobenzene (s)	16.106	95	111715	48.45	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.90%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.955	59	47157	108.84	ug/L	96
4) 1,4-dioxane	12.840	88	21004	529.05	ug/L	100
6) chlorodifluoromethane	4.750	51	37228	16.18	ug/L	96
7) dichlorodifluoromethane	4.724	85	47596	15.54	ug/L	99
9) chloromethane	5.217	50	47163	18.79	ug/L	97
10) vinyl chloride	5.500	62	49402	19.24	ug/L	99
11) 1,3-butadiene	5.610	54	8217	4.16	ug/L	97
12) bromomethane	6.312	94	18882	22.53	ug/L	98
13) chloroethane	6.548	64	28258	21.62	ug/L	97
14) trichlorofluoromethane	7.125	101	53270	16.66	ug/L	99
15) vinyl bromide	6.973	106	32882	17.31	ug/L	96
16) ethyl ether	7.655	74	23904	24.04	ug/L	100
17) acrolein	7.875	56	8886	21.32	ug/L	93
18) freon 113	8.116	151	25428	17.95	ug/L	98
19) 1,1-dichloroethene	8.126	96	34668	20.23	ug/L	95
20) acetone	8.121	43	65521	84.15	ug/L	94
21) acetonitrile	8.572	41	86653	251.39	ug/L	97
22) iodomethane	8.415	142	11660	12.83	ug/L	92
23) carbon disulfide	8.577	76	88586	20.60	ug/L	96
24) methylene chloride	8.897	84	42278	22.63	ug/L	98
25) methyl acetate	8.693	43	44095	23.93	ug/L	99
26) methyl tert butyl ether	9.332	73	121515	22.63	ug/L	98
27) trans-1,2-dichloroethene	9.359	96	37245	20.72	ug/L	99
28) di-isopropyl ether	10.014	45	120771	23.05	ug/L	97
29) 2-butanone	10.696	72	30355	94.68	ug/L	92
30) 1,1-dichloroethane	9.962	63	69866	21.33	ug/L	99
31) chloroprene	10.108	53	52598	20.23	ug/L	95
32) acrylonitrile	9.227	53	20112	24.54	ug/L	97
33) hexane	9.773	56	21756	19.96	ug/L	97
34) vinyl acetate	9.962	86	9085	24.05	ug/L #	92
35) ethyl tert-butyl ether	10.512	59	120514	22.50	ug/L	99
36) ethyl acetate	10.748	45	8008	22.68	ug/L	95
37) 2,2-dichloropropane	10.774	77	55014	20.37	ug/L	91
38) cis-1,2-dichloroethene	10.748	96	43401	21.45	ug/L	99
39) methyl acrylate	10.827	85	8844	22.97	ug/L	95
41) bromochloromethane	11.057	128	21407	22.51	ug/L	98
42) tetrahydrofuran	11.131	72	8692	22.58	ug/L	98
43) chloroform	11.120	85	44041	20.13	ug/L	97
44) t-butyl formate	11.194	59	27494	18.85	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89142.d
Acq On : 11 Aug 2018 8:31 am
Operator : EddieH
Sample : cc3846-20 Inst : MS4D
Misc : MS28459,V4D3878,5,,,,1
ALS Vial : 75 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:12:16 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) methacrylonitrile	10.979	67	22962	23.67	ug/L		90
47) 1,1,1-trichloroethane	11.424	97	54720	18.63	ug/L		96
48) cyclohexane	11.534	84	38513	15.69	ug/L	#	83
49) 1,1-dichloropropene	11.603	75	49149	19.55	ug/L		99
51) carbon tetrachloride	11.639	117	46567	18.27	ug/L		99
55) n-butyl alcohol	12.253	56	116746	1146.71	ug/L		95
56) 2,2,4-trimethylpentane	11.922	57	84477	18.16	ug/L		93
57) benzene	11.854	78	147875	21.17	ug/L		99
58) tert-amyl methyl ether	11.907	87	26897	22.43	ug/L		97
59) heptane	12.074	71	20495	19.84	ug/L		97
60) isopropyl acetate	11.770	87	10895	22.62	ug/L		95
61) 1,2-dichloroethane	11.823	62	49845	19.10	ug/L		95
62) trichloroethene	12.520	130	37356	19.81	ug/L		99
64) 2-nitropropane	13.170	41	11466	17.19	ug/L		99
65) 2-chloroethyl vinyl ether	13.217	63	132600	103.81	ug/L		99
66) methyl methacrylate	12.756	100	12704	20.90	ug/L	#	78
67) 1,2-dichloropropane	12.746	63	38608	21.21	ug/L		99
68) dibromomethane	12.871	93	25995	20.77	ug/L		98
69) methylcyclohexane	12.772	83	47138	16.73	ug/L		97
70) bromodichloromethane	12.992	83	49260	19.66	ug/L		99
71) epichlorohydrin	13.307	57	30927	109.29	ug/L		93
72) cis-1,3-dichloropropene	13.422	75	61243	21.09	ug/L		93
73) 4-methyl-2-pentanone	13.511	58	84054	84.07	ug/L		90
74) 3-methyl-1-butanol	13.495	55	68572	432.73	ug/L		96
77) toluene	13.784	92	84075	20.84	ug/L		98
78) trans-1,3-dichloropropene	13.915	75	54141	21.83	ug/L		99
79) ethyl methacrylate	13.931	69	51992	22.08	ug/L		97
80) 1,1,2-trichloroethane	14.109	83	29954	21.83	ug/L		97
81) tetrachloroethene	14.318	164	28101	20.45	ug/L		96
82) 1,3-dichloropropane	14.277	76	54713	21.03	ug/L		99
83) 2-hexanone	14.277	58	83839	87.43	ug/L		94
84) butyl acetate	14.350	56	30138	22.58	ug/L		94
85) dibromochloromethane	14.518	129	38249	21.23	ug/L		99
86) 1,2-dibromoethane	14.665	107	40083	21.83	ug/L		99
88) chlorobenzene	15.100	112	90843	20.45	ug/L		97
89) 1,1,1,2-tetrachloroethane	15.142	131	32956	20.85	ug/L		97
90) ethylbenzene	15.157	91	149840	20.20	ug/L		99
91) m,p-xylene	15.252	106	115742	41.55	ug/L		100
92) o-xylene	15.629	106	56371	20.75	ug/L		95
93) styrene	15.629	104	96146	21.10	ug/L		97
94) bromoform	15.839	173	27565	20.63	ug/L		99
96) isopropylbenzene	15.944	105	136356	19.70	ug/L		98
100) bromobenzene	16.290	156	39009	21.07	ug/L		95
101) 1,1,2,2-tetrachloroethane	16.159	83	54101	20.62	ug/L		99
102) trans-1,4-dichloro-2-b...	16.201	53	10031	16.20	ug/L		94
103) 1,2,3-trichloropropane	16.237	110	14109	21.47	ug/L		98
104) n-propylbenzene	16.311	91	162471	19.54	ug/L		99
105) 2-chlorotoluene	16.437	126	34096	19.56	ug/L		99
106) 4-chlorotoluene	16.526	91	98748	19.83	ug/L		99
107) 1,3,5-trimethylbenzene	16.442	105	113765	20.20	ug/L		99
108) tert-butylbenzene	16.772	134	20047	19.53	ug/L		96
109) 1,2,4-trimethylbenzene	16.804	105	112336	20.15	ug/L		98
110) sec-butylbenzene	16.966	105	130678	19.16	ug/L		99
111) 1,3-dichlorobenzene	17.124	146	66935	20.59	ug/L		98
112) p-isopropyltoluene	17.071	119	109255	19.94	ug/L		99
113) 1,4-dichlorobenzene	17.192	146	68893	20.59	ug/L		98
114) benzyl chloride	17.286	91	92164	24.11	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89142.d
Acq On : 11 Aug 2018 8:31 am
Operator : EddieH
Sample : cc3846-20 Inst : MS4D
Misc : MS28459,V4D3878,5,,,,1
ALS Vial : 75 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:12:16 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration

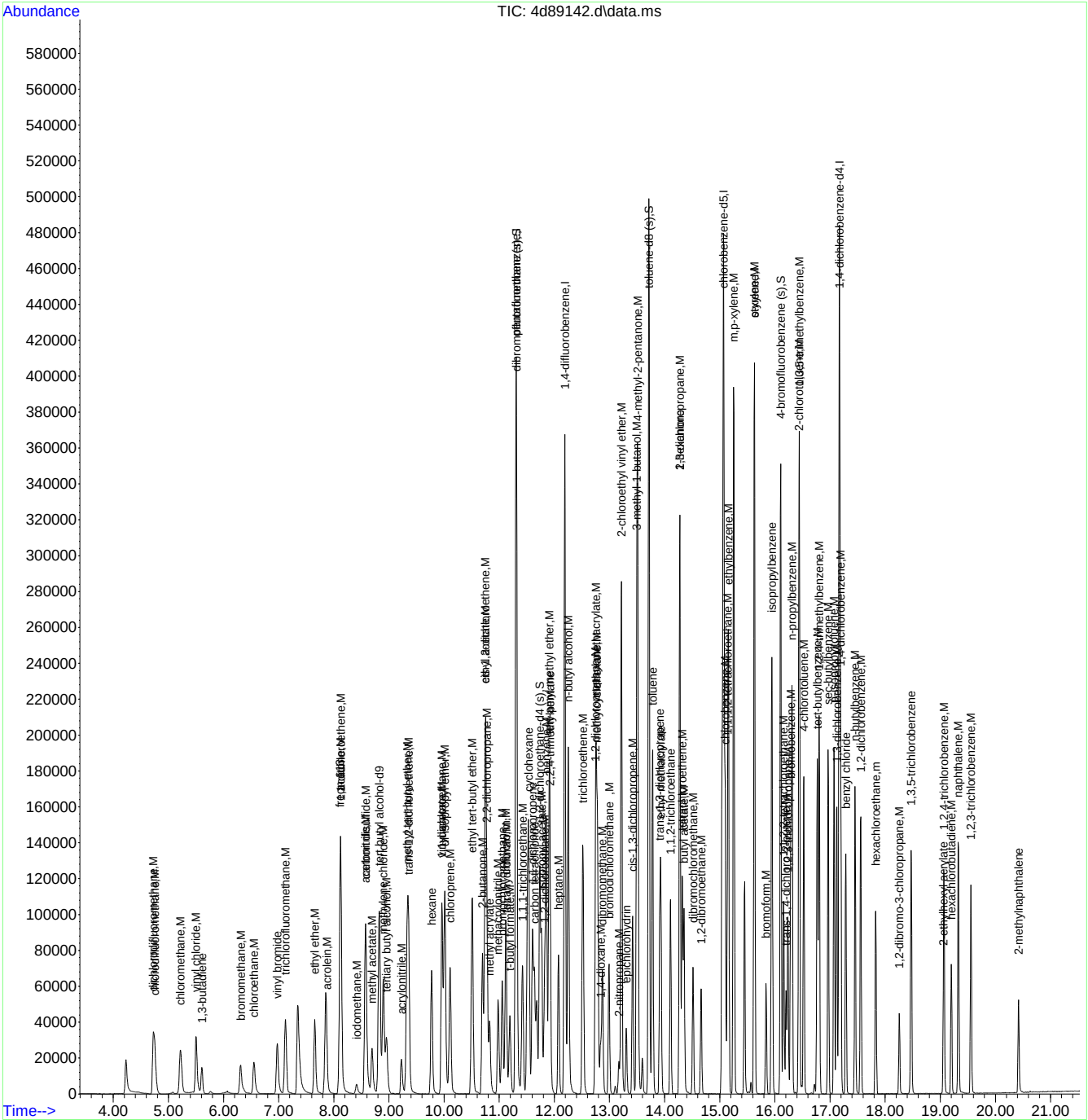
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
115) 1,2-dichlorobenzene	17.559	146	65157	21.03	ug/L	99
116) n-butylbenzene	17.454	92	51240	19.03	ug/L	97
117) 1,2-dibromo-3-chloropr...	18.256	75	10681	19.39	ug/L	92
118) 1,3,5-trichlorobenzene	18.471	180	42197	19.67	ug/L	99
119) 2-ethylhexyl acrylate	19.053	70	3331	3.43	ug/L	96
120) 1,2,4-trichlorobenzene	19.069	180	37780	20.07	ug/L	98
121) hexachlorobutadiene	19.200	225	14587	19.12	ug/L	94
122) naphthalene	19.326	128	108586	19.86	ug/L	100
123) 1,2,3-trichlorobenzene	19.556	180	35957	20.01	ug/L	99
124) hexachloroethane	17.831	201	17699	18.97	ug/L	98
125) 2-methylnaphthalene	20.421	142	26575	9.90	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\michellc\v4d3878\
Data File : 4d89142.d
Acq On : 11 Aug 2018 8:31 am
Operator : EddieH
Sample : cc3846-20 Inst : MS4D
Misc : MS28459,V4D3878,5,,,,1
ALS Vial : 75 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D3846.M
Quant Results File: M4D3846.RES
Quant Time: Aug 13 23:12:16 2018
Quant Title : SW846 8260C, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Wed Jul 18 18:24:09 2018
Response via : Initial Calibration



GCMS Volatile Run Log

Standard / Reagents	Lot #				Column	RXI624 (60m x 0.25mm x 1.4um)
Standards	ABK v018-2623-101.5	C v018-2623-95.8	E v018-2623-84.24	13Buta V018-2623-93	Method	V8260C
Standard Concentration	100 ppm - 10,000 ppm	100 ppm	100 ppm	100 ppm	Init Calib Date	7/17/18
Internal Surrogate	v0182623-88					
Internal Surrogate Concentration	50/500ppm					
EXT Standards	ABK v018-2623-67.15	C v018-2623-92.5	E v018-2623-64.7	PA v018-2623-65.5	Analysis Date	7/17/2018
Standard Concentration	100 ppm - 10,000 ppm	100 ppm	100 ppm	100 ppm	Sequence loaded by	Ho Kim
		C v018-2623-92.10			Data processed by	dong,mei.
		100ppm			Batch ID	V4D3846
					Matrix	AQ
Initial Calibration Method	M4D3846				Approved By:	OWENM
pH Paper Lot#	204518				Approved Date:	7/24/2018 4:57:58 PM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
4D	88509	IB		NA			5			51		
4D	88510	BFB		NA			5			52	ok	8:12pm
4D	88511	IC3846-0.5		NA		8260 initial cal.	5			53	ok	2.5 uL ABK, C, E, 13Buta / 500 mL DI H2O
4D	88512	IC3846-1		NA		8260 initial cal.	5			54	ok	2 uL ABK, C, E,13Buta / 200 mL DI H2O
4D	88513	IC3846-2		NA		8260 initial cal.	5			55	ok	4 uL ABK, C, E ,13Buta/ 200 mL DI H2O
4D	88514	IC3846-5		NA		8260 initial cal.	5			56	ok	2.5 uL ABK, C, E,13Buta / 50 mL DI H2O
4D	88515	IC3846-10		NA		8260 initial cal.	5			57	ok	5 uL ABK, C, E,13Buta / 50 mL DI H2O
4D	88516	IC3846-20		NA		8260 initial cal.	5			58	ok	10 uL ABK, C, E,13Buta / 50 mL DI H2O
4D	88517	ICC3846-50		NA		8260 initial cal.	5			59	ok	25 uL ABK, C, E,13Buta / 50 mL DI H2O
4D	88518	IC3846-100		NA		8260 initial cal.	5			60	ok	50 uL ABK, C, E,13Buta / 50 mL DI H2O
4D	88519	IC3846-200		NA		8260 initial cal.	5			61	ok	100 uL ABK, C, E,13Buta / 50 mL DI H2O

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
4D	88520	IB		NA			5			62	ok	
4D	88521	IB		NA			5			63	ok	
4D	88522	ICV3846-50		NA		8260 initial cal.	5			64	ok/rr	25 uL Ext ABK, Ext C, Ext E / 50 mL DI H2O for 12#
4D	88523	ICV3846-50		NA		8260 initial cal.	5			65	ok	25 uL Ext PA / 50 mL DI H2O 2:28am
4D	88524	IB		NA			5			66	ok	
4D	88525	IB		NA			5			1	ok	
4D	88526	IB		NA			5			2	ok	
4D	88527	BFB2		NA			5			3	ok	9:58am- July 19,2018.
4D	88528	ICV3846-50		NA			5			4	ok	25ul ext c/50ml
4D	88529	IB		NA			5			5	ok	

GCMS Volatile Run Log

Standard / Reagents	Lot #				Column	Rxi624(60mx0.25mmx1.4um)
Standards	ABK V018-2623-135.1	C V018-2623-130.5	E V018-2623-127.11		Method	V8260C
Standard Concentration	100-10,000ppm	100ppm	100ppm		Init Calib Date	7/17/2018
Internal Surrogate	V018-2623-113					
Internal Surrogate Concentration	50/500ppm				Rough reviewed by	Eddie Huang (8/13/18)
					Analysis Date	8/11/2018
					Sequence loaded by	Payal Rana/Jessica Potts
					Data processed by	michellc
					Batch ID	V4D3878
					Matrix	AQ
Initial Calibration Method	M4D3846				Approved By:	MEI
pH Paper Lot#	232515				Approved Date:	8/15/2018 10:36:06 AM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
4D	89141	BFB/CC3846-20		NA			5			1	NG	20uL ABK, C ,E/100mL. Failed high.
4D	89142	BFB/CC3846-20		NA			5			2	ok	8:31AM, 8/11/18. 7,48 low. 20uL ABK, C, E/100mL.
4D	89143	CC3846-2		NA			5			3	ok	2uL ABK, C ,E/100mL. For 7,48.
4D	89144	BS		NA			5			4	ok	50uL ABK, C, E/100mL.
4D	89145	IB		NA			5			5	ok	
4D	89146	MB		NA			5			6	ok	
4D	89147	JC71603-3	3	5X	MS28483	V8260TCL20+	10/50		1	7	RR	Dilution made by PR. O/D RR 1X + combine.
4D	89148	JC71603-6	3	5X	MS28483	V8260TCL20+	10/50		1	8	RR	Dilution made by PR. O/D RR 1X + combine.
4D	89149	JC71603-3MS	3	5X	MS28483	V8260TCL20+	10/50		1	9	ok	Dilution made by PR. 50uL ABK, C, E/100mL.
4D	89150	JC71603-3MSD	3	5X	MS28483	V8260TCL20+	10/50		1	10	ok	Dilution made by PR. 50uL ABK, C, E/100mL.
4D	89151	IB		NA			5			11	ok	

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
4D	89152	JC71601-6	4	NA	MS28483	V8260TCL20+	5		1	12	ok	
4D	89153	JC71601-7	3	NA	MS28483	V8260TCL20+	5		1	13	ok	
4D	89154	JC71601-8	4	NA	MS28483	V8260TCL20+	5		1	14	ok	
4D	89155	JC71603-4	3	NA	MS28483	V8260TCL20+	5		1	15	rr/DL	+4D89156.
4D	89156	JC71603-4	3	10X	MS28483	V8260TCL20+	5/50		1	16	ok	Dilution made by PR.
4D	89157	JC71604-1	13	NA	MS28483	V8260STD	5		1	17	ok	
4D	89158	JC71603-8	3	50X	MS28483	V8260TCL20+	1/50		1	18	RR	Dilution made by PR. O/D RR 2.5X + combine.
4D	89159	JC71601-1	3	50X	MS28483	V8260TCL20+	1/50		1	19	RR	Dilution made by PR. O/D RR 1X.
4D	89160	JC71601-2	6	50X	MS28483	V8260TCL20+	1/50		1	20	RR	Dilution made by PR. O/D RR 1X.
4D	89161	JC71601-3	10	50X	MS28483	V8260TCL20+	1/50		1	21	RR	Dilution made by PR. O/D RR 1X.
4D	89162	JC71601-4	6	50X	MS28483	V8260TCL20+	1/50		1	22	RR	Dilution made by PR. O/D RR 1X.
4D	89163	JC71601-5	6	50X	MS28483	V8260TCL20+	1/50		1	23	RR	Dilution made by PR. O/D RR 1X.
4D	89164	JC71626-1	6	NA	MS28483	V8260TCL20+	5		1	24	ok	
4D	89165	JC71626-2	5	NA	MS28483	V8260TCL20+	5		1	25	RR	RR 1X out of bfb time. 8:38pm, 8/11/18.

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14177-MB	P124725.D	1	08/11/18	CS	08/10/18	OP14177	EP5612

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC71604-1

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	20	2.0	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.27	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	

Method Blank Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14177-MB	P124725.D	1	08/11/18	CS	08/10/18	OP14177	EP5612

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC71604-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	2.0	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14177-MB	P124725.D	1	08/11/18	CS	08/10/18	OP14177	EP5612

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC71604-1

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	45%	10-110%
4165-62-2	Phenol-d5	29%	10-110%
118-79-6	2,4,6-Tribromophenol	97%	36-151%
4165-60-0	Nitrobenzene-d5	69%	34-128%
321-60-8	2-Fluorobiphenyl	76%	38-119%
1718-51-0	Terphenyl-d14	93%	26-129%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard for SIM Test	4.49	4.1	ug/l	J
	Internal standard for SIM Test	5.84	4.6	ug/l	J
	Internal standard for SIM Test	7.11	4.5	ug/l	J
	Internal standard for SIM Test	10.33	4.1	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14177-MB	2P81778.D	1	08/15/18	AR	08/10/18	OP14177	E2P3603

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC71604-1

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	20	2.0	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.27	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	

Method Blank Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14177-MB	2P81778.D	1	08/15/18	AR	08/10/18	OP14177	E2P3603

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC71604-1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14177-MB	2P81778.D	1	08/15/18	AR	08/10/18	OP14177	E2P3603

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC71604-1

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	51%	10-110%
4165-62-2	Phenol-d5	36%	10-110%
118-79-6	2,4,6-Tribromophenol	100%	36-151%
4165-60-0	Nitrobenzene-d5	85%	34-128%
321-60-8	2-Fluorobiphenyl	80%	38-119%
1718-51-0	Terphenyl-d14	103%	26-129%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	5.08	4.2	ug/l	J
	Internal standard added for SIM test	6.64	4.5	ug/l	J
	Internal standard added for SIM te	7.89	4.6	ug/l	J
	Internal standard added for SIM te	10.18	4.9	ug/l	J
	Internal standard added for SIM test	14.10	4.2	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14177-BS	P124726.D	1	08/11/18	CS	08/10/18	OP14177	EP5612
OP14177-BSD	P124727.D	1	08/11/18	CS	08/10/18	OP14177	EP5612

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC71604-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	50	26.2	52	21.1	42	22	10-110/39
95-57-8	2-Chlorophenol	50	33.0	66	31.5	63	5	39-106/27
59-50-7	4-Chloro-3-methyl phenol	50	42.2	84	38.3	77	10	45-118/23
120-83-2	2,4-Dichlorophenol	50	42.4	85	39.9	80	6	43-115/26
105-67-9	2,4-Dimethylphenol	50	44.2	88	40.9	82	8	38-125/23
51-28-5	2,4-Dinitrophenol	100	90.1	90	75.7	76	17	35-137/22
534-52-1	4,6-Dinitro-o-cresol	50	41.4	83	36.4	73	13	45-134/23
95-48-7	2-Methylphenol	50	33.7	67	31.4	63	7	34-106/24
	3&4-Methylphenol	50	33.8	68	30.3	61	11	31-110/25
88-75-5	2-Nitrophenol	50	43.0	86	39.8	80	8	41-118/28
100-02-7	4-Nitrophenol	50	23.3	47	19.6	39	17	10-113/31
87-86-5	Pentachlorophenol	50	46.9	94	41.5	83	12	21-134/25
108-95-2	Phenol	50	19.1	38	16.0	32	18	10-110/27
95-95-4	2,4,5-Trichlorophenol	50	41.6	83	38.0	76	9	45-117/26
88-06-2	2,4,6-Trichlorophenol	50	42.2	84	40.4	81	4	47-125/35
83-32-9	Acenaphthene	50	35.5	71	34.9	70	2	40-114/22
208-96-8	Acenaphthylene	50	35.6	71	34.6	69	3	40-109/22
62-53-3	Aniline	50	26.7	53	23.4	47	13	13-91/37
120-12-7	Anthracene	50	37.3	75	35.9	72	4	50-113/20
92-87-5	Benzidine	100	11.4	11	24.8	25	74* [a]	10-110/71
56-55-3	Benzo(a)anthracene	50	38.4	77	35.6	71	8	55-110/22
50-32-8	Benzo(a)pyrene	50	38.9	78	35.9	72	8	52-112/24
205-99-2	Benzo(b)fluoranthene	50	39.1	78	36.5	73	7	53-114/22
191-24-2	Benzo(g,h,i)perylene	50	40.3	81	37.3	75	8	46-115/28
207-08-9	Benzo(k)fluoranthene	50	36.0	72	33.8	68	6	55-115/23
101-55-3	4-Bromophenyl phenyl ether	50	39.8	80	36.8	74	8	47-122/25
85-68-7	Butyl benzyl phthalate	50	41.6	83	37.5	75	10	50-124/22
100-51-6	Benzyl Alcohol	50	33.2	66	30.9	62	7	36-104/22
91-58-7	2-Chloronaphthalene	50	31.6	63	30.9	62	2	33-112/26
106-47-8	4-Chloroaniline	50	30.4	61	26.8	54	13	17-87/39
86-74-8	Carbazole	50	41.6	83	39.5	79	5	54-118/21
218-01-9	Chrysene	50	34.5	69	32.8	66	5	52-107/21
111-91-1	bis(2-Chloroethoxy)methane	50	37.0	74	34.7	69	6	38-116/24
111-44-4	bis(2-Chloroethyl)ether	50	31.3	63	30.9	62	1	38-118/23
108-60-1	2,2'-Oxybis(1-chloropropane)	50	31.0	62	30.7	61	1	29-108/23
7005-72-3	4-Chlorophenyl phenyl ether	50	39.1	78	36.3	73	7	40-122/21

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14177-BS	P124726.D	1	08/11/18	CS	08/10/18	OP14177	EP5612
OP14177-BSD	P124727.D	1	08/11/18	CS	08/10/18	OP14177	EP5612

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC71604-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	50	26.1	52	27.3	55	4	24-110/31
122-66-7	1,2-Diphenylhydrazine	50	33.3	67	32.0	64	4	40-131/21
541-73-1	1,3-Dichlorobenzene	50	24.9	50	25.5	51	2	20-110/33
106-46-7	1,4-Dichlorobenzene	50	25.9	52	26.6	53	3	21-110/32
121-14-2	2,4-Dinitrotoluene	50	42.0	84	39.4	79	6	54-129/21
606-20-2	2,6-Dinitrotoluene	50	42.5	85	39.5	79	7	53-131/21
91-94-1	3,3'-Dichlorobenzidine	100	58.8	59	48.1	48	20	28-91/44
53-70-3	Dibenzo(a,h)anthracene	50	39.2	78	36.6	73	7	51-117/25
132-64-9	Dibenzofuran	50	36.9	74	35.0	70	5	46-118/16
84-74-2	Di-n-butyl phthalate	50	42.9	86	39.6	79	8	54-124/23
117-84-0	Di-n-octyl phthalate	50	37.5	75	33.1	66	12	41-137/22
84-66-2	Diethyl phthalate	50	38.7	77	35.8	72	8	49-122/20
131-11-3	Dimethyl phthalate	50	39.7	79	37.3	75	6	51-118/20
117-81-7	bis(2-Ethylhexyl)phthalate	50	39.8	80	34.9	70	13	47-128/36
206-44-0	Fluoranthene	50	42.2	84	39.7	79	6	54-118/23
86-73-7	Fluorene	50	38.8	78	37.3	75	4	45-116/20
118-74-1	Hexachlorobenzene	50	40.2	80	37.7	75	6	45-124/23
87-68-3	Hexachlorobutadiene	50	28.0	56	27.3	55	3	10-120/35
77-47-4	Hexachlorocyclopentadiene	100	54.0	54	49.1	49	10	10-110/43
67-72-1	Hexachloroethane	50	24.6	49	24.2	48	2	11-110/38
193-39-5	Indeno(1,2,3-cd)pyrene	50	35.5	71	33.4	67	6	45-123/30
78-59-1	Isophorone	50	36.4	73	34.7	69	5	43-115/20
90-12-0	1-Methylnaphthalene	50	32.1	64	31.4	63	2	35-106/21
91-57-6	2-Methylnaphthalene	50	34.9	70	33.1	66	5	37-111/21
88-74-4	2-Nitroaniline	50	36.5	73	34.9	70	4	40-144/18
99-09-2	3-Nitroaniline	50	33.5	67	29.0	58	14	31-104/42
100-01-6	4-Nitroaniline	50	38.4	77	36.0	72	6	48-119/20
91-20-3	Naphthalene	50	30.9	62	30.7	61	1	29-110/23
98-95-3	Nitrobenzene	50	31.0	62	30.3	61	2	35-118/21
62-75-9	n-Nitrosodimethylamine	50	15.9	32	15.0	30	6	10-110/26
621-64-7	N-Nitroso-di-n-propylamine	50	33.6	67	32.9	66	2	38-116/22
86-30-6	N-Nitrosodiphenylamine	50	36.2	72	34.1	68	6	49-114/22
85-01-8	Phenanthrene	50	36.5	73	35.4	71	3	49-116/21
129-00-0	Pyrene	50	37.1	74	34.2	68	8	51-116/21
110-86-1	Pyridine	50	12.6	25	17.3	35	31	10-110/49
120-82-1	1,2,4-Trichlorobenzene	50	28.8	58	27.7	55	4	19-110/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14177-BS	P124726.D	1	08/11/18	CS	08/10/18	OP14177	EP5612
OP14177-BSD	P124727.D	1	08/11/18	CS	08/10/18	OP14177	EP5612

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC71604-1

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	45%	40%	10-110%
4165-62-2	Phenol-d5	33%	27%	10-110%
118-79-6	2,4,6-Tribromophenol	91%	84%	36-151%
4165-60-0	Nitrobenzene-d5	63%	61%	34-128%
321-60-8	2-Fluorobiphenyl	68%	65%	38-119%
1718-51-0	Terphenyl-d14	85%	76%	26-129%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14177-BS	P124726.D	1	08/11/18	CS	08/10/18	OP14177	EP5612
OP14177-BSD	2P81782.D	1	08/15/18	AR	08/10/18	OP14177	E2P3603

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC71604-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	50	26.2	52	28.6	57	17	10-110/39
95-57-8	2-Chlorophenol	50	33.0	66	36.4	73	4	39-106/27
59-50-7	4-Chloro-3-methyl phenol	50	42.2	84	42.8	86	7	45-118/23
120-83-2	2,4-Dichlorophenol	50	42.4	85	38.9	78	5	43-115/26
105-67-9	2,4-Dimethylphenol	50	44.2	88	42.8	86	4	38-125/23
51-28-5	2,4-Dinitrophenol	100	90.1	90	93.4	93	7	35-137/22
534-52-1	4,6-Dinitro-o-cresol	50	41.4	83	44.8	90	5	45-134/23
95-48-7	2-Methylphenol	50	33.7	67	30.2	60	6	34-106/24
	3&4-Methylphenol	50	33.8	68	28.9	58	7	31-110/25
88-75-5	2-Nitrophenol	50	43.0	86	43.0	86	5	41-118/28
100-02-7	4-Nitrophenol	50	23.3	47	29.2	58	15	10-113/31
87-86-5	Pentachlorophenol	50	46.9	94	49.7	99	5	21-134/25
108-95-2	Phenol	50	19.1	38	19.8	40	12	10-110/27
95-95-4	2,4,5-Trichlorophenol	50	41.6	83	39.4	79	7	45-117/26
88-06-2	2,4,6-Trichlorophenol	50	42.2	84	41.9	84	7	47-125/35
83-32-9	Acenaphthene	50	35.5	71	35.8	72	3	40-114/22
208-96-8	Acenaphthylene	50	35.6	71	35.5	71	2	40-109/22
62-53-3	Aniline	50	26.7	53	28.8	58	9	13-91/37
120-12-7	Anthracene	50	37.3	75	36.8	74	3	50-113/20
92-87-5	Benzidine	100	11.4	11	20.1	20	127* [a]	10-110/71
56-55-3	Benzo(a)anthracene	50	38.4	77	43.2	86	8	55-110/22
50-32-8	Benzo(a)pyrene	50	38.9	78	43.5	87	8	52-112/24
205-99-2	Benzo(b)fluoranthene	50	39.1	78	45.2	90	6	53-114/22
191-24-2	Benzo(g,h,i)perylene	50	40.3	81	44.1	88	10	46-115/28
207-08-9	Benzo(k)fluoranthene	50	36.0	72	43.0	86	10	55-115/23
101-55-3	4-Bromophenyl phenyl ether	50	39.8	80	40.4	81	4	47-122/25
85-68-7	Butyl benzyl phthalate	50	41.6	83	52.8	106	7	50-124/22
100-51-6	Benzyl Alcohol	50	33.2	66	36.7	73	4	36-104/22
91-58-7	2-Chloronaphthalene	50	31.6	63	31.3	63	3	33-112/26
106-47-8	4-Chloroaniline	50	30.4	61	22.1	44	11	17-87/39
86-74-8	Carbazole	50	41.6	83	42.1	84	1	54-118/21
218-01-9	Chrysene	50	34.5	69	38.1	76	7	52-107/21
111-91-1	bis(2-Chloroethoxy)methane	50	37.0	74	39.5	79	6	38-116/24
111-44-4	bis(2-Chloroethyl)ether	50	31.3	63	39.6	79	1	38-118/23
108-60-1	2,2'-Oxybis(1-chloropropane)	50	31.0	62	33.4	67	0	29-108/23
7005-72-3	4-Chlorophenyl phenyl ether	50	39.1	78	38.4	77	4	40-122/21

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14177-BS	P124726.D	1	08/11/18	CS	08/10/18	OP14177	EP5612
OP14177-BSD	2P81782.D	1	08/15/18	AR	08/10/18	OP14177	E2P3603

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC71604-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	50	26.1	52	28.0	56	2	24-110/31
122-66-7	1,2-Diphenylhydrazine	50	33.3	67	37.9	76	4	40-131/21
541-73-1	1,3-Dichlorobenzene	50	24.9	50	27.8	56	2	20-110/33
106-46-7	1,4-Dichlorobenzene	50	25.9	52	27.5	55	2	21-110/32
121-14-2	2,4-Dinitrotoluene	50	42.0	84	43.4	87	5	54-129/21
606-20-2	2,6-Dinitrotoluene	50	42.5	85	44.3	89	5	53-131/21
91-94-1	3,3'-Dichlorobenzidine	100	58.8	59	66.1	66	11	28-91/44
53-70-3	Dibenzo(a,h)anthracene	50	39.2	78	41.9	84	10	51-117/25
132-64-9	Dibenzofuran	50	36.9	74	36.5	73	4	46-118/16
84-74-2	Di-n-butyl phthalate	50	42.9	86	46.7	93	4	54-124/23
117-84-0	Di-n-octyl phthalate	50	37.5	75	51.9	104	13	41-137/22
84-66-2	Diethyl phthalate	50	38.7	77	40.9	82	3	49-122/20
131-11-3	Dimethyl phthalate	50	39.7	79	39.6	79	4	51-118/20
117-81-7	bis(2-Ethylhexyl)phthalate	50	39.8	80	44.1	88	11	47-128/36
206-44-0	Fluoranthene	50	42.2	84	49.2	98	4	54-118/23
86-73-7	Fluorene	50	38.8	78	37.2	74	5	45-116/20
118-74-1	Hexachlorobenzene	50	40.2	80	40.9	82	5	45-124/23
87-68-3	Hexachlorobutadiene	50	28.0	56	28.0	56	5	10-120/35
77-47-4	Hexachlorocyclopentadiene	100	54.0	54	45.3	45	1	10-110/43
67-72-1	Hexachloroethane	50	24.6	49	24.3	49	0	11-110/38
193-39-5	Indeno(1,2,3-cd)pyrene	50	35.5	71	46.1	92	8	45-123/30
78-59-1	Isophorone	50	36.4	73	39.8	80	4	43-115/20
90-12-0	1-Methylnaphthalene	50	32.1	64	32.1	64	4	35-106/21
91-57-6	2-Methylnaphthalene	50	34.9	70	35.8	72	4	37-111/21
88-74-4	2-Nitroaniline	50	36.5	73	45.2	90	5	40-144/18
99-09-2	3-Nitroaniline	50	33.5	67	34.5	69	7	31-104/42
100-01-6	4-Nitroaniline	50	38.4	77	38.5	77	0	48-119/20
91-20-3	Naphthalene	50	30.9	62	31.9	64	1	29-110/23
98-95-3	Nitrobenzene	50	31.0	62	35.6	71	2	35-118/21
62-75-9	n-Nitrosodimethylamine	50	15.9	32	21.3	43	7	10-110/26
621-64-7	N-Nitroso-di-n-propylamine	50	33.6	67	34.3	69	2	38-116/22
86-30-6	N-Nitrosodiphenylamine	50	36.2	72	34.7	69	4	49-114/22
85-01-8	Phenanthrene	50	36.5	73	38.6	77	4	49-116/21
129-00-0	Pyrene	50	37.1	74	43.6	87	7	51-116/21
110-86-1	Pyridine	50	12.6	25	18.3	37	32	10-110/49
120-82-1	1,2,4-Trichlorobenzene	50	28.8	58	29.4	59	3	19-110/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14177-BS	P124726.D	1	08/11/18	CS	08/10/18	OP14177	EP5612
OP14177-BSD	2P81782.D	1	08/15/18	AR	08/10/18	OP14177	E2P3603

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC71604-1

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	45%	54%	10-110%
4165-62-2	Phenol-d5	33%	37%	10-110%
118-79-6	2,4,6-Tribromophenol	91%	85%	36-151%
4165-60-0	Nitrobenzene-d5	63%	72%	34-128%
321-60-8	2-Fluorobiphenyl	68%	65%	38-119%
1718-51-0	Terphenyl-d14	85%	93%	26-129%

(a) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: E2P3595-DFTPP
Lab File ID: 2P81615.D
Instrument ID: GCMS2P
Injection Date: 08/09/18
Injection Time: 14:38

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	79445	39.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	105341	52.4		Pass
70	Less than 2.0% of mass 69	543	0.27	(0.52) [a]	Pass
127	40.0 - 60.0% of mass 198	108587	54.0		Pass
197	Less than 1.04% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	201109	100.0		Pass
199	5.0 - 9.0% of mass 198	13536	6.73		Pass
275	10.0 - 30.0% of mass 198	54512	27.1		Pass
365	1.0 - 100.0% of mass 198	8032	3.99		Pass
441	Present, but less than mass 443	26531	13.2	(94.1) [b]	Pass
442	40.0 - 100.0% of mass 198	161397	80.3		Pass
443	17.0 - 23.0% of mass 442	28203	14.0	(17.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P3595-IC3595	2P81616.D	08/09/18	14:48	00:10	Initial cal 100
E2P3595-IC3595	2P81617.D	08/09/18	15:11	00:33	Initial cal 80
E2P3595-ICC3595	2P81618.D	08/09/18	15:34	00:56	Initial cal 50
E2P3595-IC3595	2P81619.D	08/09/18	15:57	01:19	Initial cal 25
E2P3595-IC3595	2P81620.D	08/09/18	16:19	01:41	Initial cal 10
E2P3595-IC3595	2P81621.D	08/09/18	16:42	02:04	Initial cal 5
E2P3595-IC3595	2P81622.D	08/09/18	17:05	02:27	Initial cal 2
E2P3595-IC3595	2P81623.D	08/09/18	17:27	02:49	Initial cal 1
E2P3595-ICV3595	2P81625.D	08/09/18	18:13	03:35	Initial cal verification 50
E2P3595-ICV3595	2P81626.D	08/09/18	18:36	03:58	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: E2P3596-DFTPP
Lab File ID: 2P81628.D
Instrument ID: GCMS2P
Injection Date: 08/09/18
Injection Time: 20:47

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	151158	45.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	182849	54.8		Pass
70	Less than 2.0% of mass 69	1146	0.34	(0.63) [a]	Pass
127	40.0 - 60.0% of mass 198	194688	58.3		Pass
197	Less than 1.04% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	333952	100.0		Pass
199	5.0 - 9.0% of mass 198	22101	6.62		Pass
275	10.0 - 30.0% of mass 198	87125	26.1		Pass
365	1.0 - 100.0% of mass 198	13731	4.11		Pass
441	Present, but less than mass 443	39643	11.9	(91.5) [b]	Pass
442	40.0 - 100.0% of mass 198	236693	70.9		Pass
443	17.0 - 23.0% of mass 442	43333	13.0	(18.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P3596-IC3596	2P81629.D	08/09/18	20:58	00:11	Initial cal 100
E2P3596-IC3596	2P81630.D	08/09/18	21:20	00:33	Initial cal 80
E2P3596-ICC3596	2P81631.D	08/09/18	21:43	00:56	Initial cal 50
E2P3596-IC3596	2P81632.D	08/09/18	22:05	01:18	Initial cal 25
E2P3596-IC3596	2P81633.D	08/09/18	22:28	01:41	Initial cal 10
E2P3596-IC3596	2P81634.D	08/09/18	22:51	02:04	Initial cal 5
E2P3596-IC3596	2P81635.D	08/09/18	23:13	02:26	Initial cal 2
E2P3596-IC3596	2P81636.D	08/09/18	23:36	02:49	Initial cal 1
E2P3596-ICV3596	2P81637.D	08/09/18	23:58	03:11	Initial cal verification 50
E2P3596-ICV3596	2P81638.D	08/10/18	00:21	03:34	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	E2P3597-DFTPP	**Injection Date:**	08/10/18
Lab File ID:	2P81640.D	**Injection Time:**	15:36
Instrument ID:	GCMS2P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	180010	44.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	221323	55.0		Pass
70	Less than 2.0% of mass 69	1400	0.35	(0.63) [a]	Pass
127	40.0 - 60.0% of mass 198	228501	56.8		Pass
197	Less than 1.04% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	402048	100.0		Pass
199	5.0 - 9.0% of mass 198	29355	7.30		Pass
275	10.0 - 30.0% of mass 198	108904	27.1		Pass
365	1.0 - 100.0% of mass 198	15160	3.77		Pass
441	Present, but less than mass 443	48528	12.1	(91.3) [b]	Pass
442	40.0 - 100.0% of mass 198	288768	71.8		Pass
443	17.0 - 23.0% of mass 442	53160	13.2	(18.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P3597-ICV3596	2P81643.D	08/10/18	16:33	00:57	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	E2P3598-DFTPP	**Injection Date:**	08/10/18
Lab File ID:	2P81645.D	**Injection Time:**	17:22
Instrument ID:	GCMS2P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	69694	48.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	81936	57.0		Pass
70	Less than 2.0% of mass 69	526	0.37	(0.64) [a]	Pass
127	40.0 - 60.0% of mass 198	82088	57.1		Pass
197	Less than 1.04% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	143837	100.0		Pass
199	5.0 - 9.0% of mass 198	10321	7.18		Pass
275	10.0 - 30.0% of mass 198	38347	26.7		Pass
365	1.0 - 100.0% of mass 198	6385	4.44		Pass
441	Present, but less than mass 443	18336	12.7	(91.0) [b]	Pass
442	40.0 - 100.0% of mass 198	111173	77.3		Pass
443	17.0 - 23.0% of mass 442	20147	14.0	(18.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P3598-ICV3595	2P81646.D	08/10/18	17:32	00:10	Initial cal verification 50
E2P3598-ICV3595	2P81647.D	08/10/18	17:55	00:33	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	E2P3603-DFTPP	**Injection Date:**	08/15/18
Lab File ID:	2P81772.D	**Injection Time:**	08:50
Instrument ID:	GCMS2P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	150380	44.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	185644	54.9		Pass
70	Less than 2.0% of mass 69	449	0.13	(0.24) [a]	Pass
127	40.0 - 60.0% of mass 198	189568	56.0		Pass
197	Less than 1.04% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	338304	100.0		Pass
199	5.0 - 9.0% of mass 198	23123	6.83		Pass
275	10.0 - 30.0% of mass 198	94197	27.8		Pass
365	1.0 - 100.0% of mass 198	14363	4.25		Pass
441	Present, but less than mass 443	46229	13.7	(99.2) [b]	Pass
442	40.0 - 100.0% of mass 198	263659	77.9		Pass
443	17.0 - 23.0% of mass 442	46603	13.8	(17.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P3603-CC3595	2P81773.D	08/15/18	09:01	00:11	Continuing cal 50
E2P3603-CC3596	2P81774.D	08/15/18	09:25	00:35	Continuing cal 50
OP14152-MB1	2P81777.D	08/15/18	10:03	01:13	Method Blank
OP14177-MB	2P81778.D	08/15/18	10:25	01:35	Method Blank
OP14177-BS	2P81781.D	08/15/18	10:48	01:58	Blank Spike
OP14177-BSD	2P81782.D	08/15/18	11:10	02:20	Blank Spike Duplicate
ZZZZZZ	2P81780.D	08/15/18	11:55	03:05	(unrelated sample)
ZZZZZZ	2P81783.D	08/15/18	12:17	03:27	(unrelated sample)
ZZZZZZ	2P81784.D	08/15/18	12:39	03:49	(unrelated sample)
ZZZZZZ	2P81786.D	08/15/18	13:25	04:35	(unrelated sample)
ZZZZZZ	2P81789.D	08/15/18	14:09	05:19	(unrelated sample)
JC71604-1	2P81787.D	08/15/18	15:17	06:27	SILO 6 WATERR
ZZZZZZ	2P81797.D	08/15/18	16:23	07:33	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5553-DFTPP
Lab File ID: P123743.D
Instrument ID: GCMSP
Injection Date: 06/20/18
Injection Time: 20:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	93077	37.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	97199	39.1		Pass
70	Less than 2.0% of mass 69	581	0.23	(0.60) [a]	Pass
127	40.0 - 60.0% of mass 198	128226	51.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	248533	100.0		Pass
199	5.0 - 9.0% of mass 198	17031	6.85		Pass
275	10.0 - 30.0% of mass 198	58816	23.7		Pass
365	1.0 - 100.0% of mass 198	7672	3.09		Pass
441	Present, but less than mass 443	24781	9.97	(78.1) [b]	Pass
442	40.0 - 100.0% of mass 198	169866	68.3		Pass
443	17.0 - 23.0% of mass 442	31722	12.8	(18.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5553-IC5553	P123744.D	06/20/18	21:40	00:47	Initial cal 100
EP5553-IC5553	P123745.D	06/20/18	22:08	01:15	Initial cal 80
EP5553-ICC5553	P123746.D	06/20/18	22:36	01:43	Initial cal 50
EP5553-IC5553	P123747.D	06/20/18	23:03	02:10	Initial cal 25
EP5553-IC5553	P123748.D	06/20/18	23:31	02:38	Initial cal 10
EP5553-IC5553	P123749.D	06/20/18	23:59	03:06	Initial cal 5
EP5553-IC5553	P123750.D	06/21/18	00:27	03:34	Initial cal 2
EP5553-IC5553	P123751.D	06/21/18	00:55	04:02	Initial cal 1
EP5553-ICV5553	P123752.D	06/21/18	01:23	04:30	Initial cal verification 50
EP5553-ICV5553	P123753.D	06/21/18	01:51	04:58	Initial cal verification 50
EP5553-ICV5553	P123754.D	06/21/18	02:19	05:26	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	EP5554-DFTPP	**Injection Date:**	06/21/18
Lab File ID:	P123755.D	**Injection Time:**	02:42
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	96334	37.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	100826	38.9		Pass
70	Less than 2.0% of mass 69	384	0.15	(0.38) [a]	Pass
127	40.0 - 60.0% of mass 198	134544	51.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	259221	100.0		Pass
199	5.0 - 9.0% of mass 198	18202	7.02		Pass
275	10.0 - 30.0% of mass 198	61474	23.7		Pass
365	1.0 - 100.0% of mass 198	8198	3.16		Pass
441	Present, but less than mass 443	26565	10.2	(79.5) [b]	Pass
442	40.0 - 100.0% of mass 198	178210	68.7		Pass
443	17.0 - 23.0% of mass 442	33426	12.9	(18.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5554-IC5554	P123756.D	06/21/18	02:55	00:13	Initial cal 100
EP5554-IC5554	P123757.D	06/21/18	03:23	00:41	Initial cal 80
EP5554-ICC5554	P123758.D	06/21/18	03:51	01:09	Initial cal 50
EP5554-IC5554	P123759.D	06/21/18	04:19	01:37	Initial cal 25
EP5554-IC5554	P123760.D	06/21/18	04:47	02:05	Initial cal 10
EP5554-IC5554	P123761.D	06/21/18	05:15	02:33	Initial cal 5
EP5554-IC5554	P123762.D	06/21/18	05:43	03:01	Initial cal 2
EP5554-IC5554	P123763.D	06/21/18	06:11	03:29	Initial cal 1
EP5554-ICV5554	P123765.D	06/21/18	07:07	04:25	Initial cal verification 50
EP5554-ICV5554	P123766.D	06/21/18	07:35	04:53	Initial cal verification 50
EP5554-ICV5554	P123767.D	06/21/18	08:03	05:21	Initial cal verification 50
EP5554-ICV5554	P123768.D	06/21/18	08:30	05:48	Initial cal verification 50
EP5554-ICV5554	P123769.D	06/21/18	12:35	09:53	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5579-DFTPP
Lab File ID: P124012.D
Instrument ID: GCMSP
Injection Date: 07/17/18
Injection Time: 08:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	66750	38.1		Pass
68	Less than 2.0% of mass 69	119	0.07	(0.18) [a]	Pass
69	Mass 69 relative abundance	65128	37.1		Pass
70	Less than 2.0% of mass 69	458	0.26	(0.70) [a]	Pass
127	40.0 - 60.0% of mass 198	92194	52.6		Pass
197	Less than 1.0% of mass 198	713	0.41		Pass
198	Base peak, 100% relative abundance	175330	100.0		Pass
199	5.0 - 9.0% of mass 198	11664	6.65		Pass
275	10.0 - 30.0% of mass 198	44002	25.1		Pass
365	1.0 - 100.0% of mass 198	5741	3.27		Pass
441	Present, but less than mass 443	19316	11.0	(76.7) [b]	Pass
442	40.0 - 100.0% of mass 198	128042	73.0		Pass
443	17.0 - 23.0% of mass 442	25168	14.4	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5579-IC5579	P124014.D	07/17/18	10:13	01:25	Initial cal 100
EP5579-IC5579	P124015.D	07/17/18	10:41	01:53	Initial cal 80
EP5579-ICC5579	P124016.D	07/17/18	11:09	02:21	Initial cal 50
EP5579-IC5579	P124017.D	07/17/18	11:37	02:49	Initial cal 25
EP5579-IC5579	P124018.D	07/17/18	12:04	03:16	Initial cal 10
EP5579-IC5579	P124019.D	07/17/18	12:32	03:44	Initial cal 5
EP5579-IC5579	P124020.D	07/17/18	13:01	04:13	Initial cal 2
EP5579-IC5579	P124021.D	07/17/18	13:28	04:40	Initial cal 1
EP5579-ICV5579	P124022.D	07/17/18	13:57	05:09	Initial cal verification 50
EP5579-ICV5579	P124023.D	07/17/18	14:25	05:37	Initial cal verification 50
EP5579-ICV5579	P124024A.D	07/17/18	15:57	07:09	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5580-DFTPP
Lab File ID: P124025.D
Instrument ID: GCMSP
Injection Date: 07/18/18
Injection Time: 10:10

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	98527	40.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	94848	39.1		Pass
70	Less than 2.0% of mass 69	547	0.23	(0.58) [a]	Pass
127	40.0 - 60.0% of mass 198	132146	54.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	242453	100.0		Pass
199	5.0 - 9.0% of mass 198	16449	6.78		Pass
275	10.0 - 30.0% of mass 198	57165	23.6		Pass
365	1.0 - 100.0% of mass 198	7567	3.12		Pass
441	Present, but less than mass 443	23615	9.74	(74.4) [b]	Pass
442	40.0 - 100.0% of mass 198	165314	68.2		Pass
443	17.0 - 23.0% of mass 442	31751	13.1	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5580-ICV5579	P124026.D	07/18/18	10:24	00:14	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	EP5612-DFTPP	**Injection Date:**	08/10/18
Lab File ID:	P124719.D	**Injection Time:**	21:59
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	63972	36.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	72122	41.3		Pass
70	Less than 2.0% of mass 69	239	0.14	(0.33) [a]	Pass
127	40.0 - 60.0% of mass 198	94691	54.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	174781	100.0		Pass
199	5.0 - 9.0% of mass 198	11847	6.78		Pass
275	10.0 - 30.0% of mass 198	45277	25.9		Pass
365	1.0 - 100.0% of mass 198	6039	3.46		Pass
441	Present, but less than mass 443	13496	7.72	(79.9) [b]	Pass
442	40.0 - 100.0% of mass 198	89567	51.2		Pass
443	17.0 - 23.0% of mass 442	16892	9.66	(18.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP5612-CC5579	P124720.D	08/10/18	22:11	00:12	Continuing cal 50
EP5612-CC5553	P124723.D	08/10/18	23:34	01:35	Continuing cal 50
EP5612-CC5554	P124723A.D	08/10/18	23:34	01:35	Continuing cal 50
OP14177-MB	P124725.D	08/11/18	00:30	02:31	Method Blank
OP14177-BS	P124726.D	08/11/18	00:58	02:59	Blank Spike
OP14177-BSD	P124727.D	08/11/18	01:25	03:26	Blank Spike Duplicate
ZZZZZZ	P124732.D	08/11/18	03:43	05:44	(unrelated sample)
ZZZZZZ	P124734.D	08/11/18	04:38	06:39	(unrelated sample)
ZZZZZZ	P124735.D	08/11/18	05:06	07:07	(unrelated sample)
ZZZZZZ	P124736.D	08/11/18	05:33	07:34	(unrelated sample)
ZZZZZZ	P124737.D	08/11/18	06:01	08:02	(unrelated sample)
ZZZZZZ	P124738.D	08/11/18	06:28	08:29	(unrelated sample)
ZZZZZZ	P124739.D	08/11/18	06:56	08:57	(unrelated sample)

Internal Standard Area Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Check Std:	E2P3603-CC3595	**Injection Date:**	08/15/18
Lab File ID:	2P81773.D	**Injection Time:**	09:01
Instrument ID:	GCMS2P	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	366577	4.96	1264551	6.01	623430	7.46	1236094	8.81	1264160	12.21	1219279	14.23
Upper Limit [a]	733154	5.46	2529102	6.51	1246860	7.96	2472188	9.31	2528320	12.71	2438558	14.73
Lower Limit [b]	183289	4.46	632276	5.51	311715	6.96	618047	8.31	632080	11.71	609640	13.73

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP14152-MB1	572444	4.95	2155252	6.00	1094011	7.45	2026018	8.81	1937937	12.20	1565198	14.23
OP14177-MB	568709	4.95	2092826	6.00	1011443	7.45	1883125	8.81	1884147	12.20	1572152	14.22
OP14177-BS	457924	4.96	1555680	6.01	751687	7.45	1408753	8.81	1414682	12.20	1283767	14.23
OP14177-BSD	453335	4.96	1592715	6.01	761413	7.45	1426720	8.81	1470148	12.20	1350349	14.23
ZZZZZZ	631464	4.95	2325407	6.00	1170562	7.45	2148670	8.81	2151608	12.19	1912583	14.22
ZZZZZZ	661475	4.95	2437276	6.00	1175815	7.45	2043108	8.81	1893156	12.20	1660546	14.23
ZZZZZZ	696567	4.95	2507949	6.00	1180886	7.45	2018818	8.81	1795816	12.20	1637074	14.23
ZZZZZZ	679943	4.95	2412267	6.00	1224587	7.45	2235696	8.81	2217238	12.20	1906011	14.23
ZZZZZZ	399276	4.96	852691	6.02	358240	7.49	803491	8.85	990695	12.22	1076341	14.24
JC71604-1	667282	4.96	2516579	6.00	1219112	7.45	2225600	8.81	2104879	12.20	1739087	14.23
ZZZZZZ	634206	4.95	2303628	6.00	1175644	7.45	2170044	8.81	2117074	12.20	1784543	14.23

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Internal Standard Area Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Check Std:	EP5612-CC5579	**Injection Date:**	08/10/18
Lab File ID:	P124720.D	**Injection Time:**	22:11
Instrument ID:	GCMSP	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	202589	4.37	733741	5.29	395385	6.61	858998	8.32	881723	13.38	979513	16.38
Upper Limit [a]	405178	4.87	1467482	5.79	790770	7.11	1717996	8.82	1763446	13.88	1959026	16.88
Lower Limit [b]	101295	3.87	366871	4.79	197693	6.11	429499	7.82	440862	12.88	489757	15.88

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP14177-MB	185272	4.37	673281	5.29	336619	6.61	694506	8.31	682887	13.37	736831	16.38
OP14177-BS	205714	4.37	730987	5.29	382121	6.61	803570	8.32	809089	13.38	850260	16.38
OP14177-BSD	153432	4.37	547084	5.29	281965	6.61	582510	8.32	601310	13.37	638653	16.38
ZZZZZZ	188429	4.37	722801	5.29	361791	6.61	747062	8.32	755461	13.37	815303	16.38
ZZZZZZ	197058	4.37	726914	5.29	365513	6.61	744746	8.32	745710	13.37	792102	16.38
ZZZZZZ	163224	4.37	560922	5.29	287671	6.61	590951	8.32	595616	13.37	638318	16.38
ZZZZZZ	174423	4.37	660243	5.29	335526	6.61	690527	8.32	714398	13.37	760352	16.38
ZZZZZZ	174144	4.37	655465	5.29	332338	6.61	681940	8.31	677962	13.37	739152	16.38
ZZZZZZ	175204	4.37	643375	5.29	322083	6.61	648104	8.31	649024	13.37	694185	16.38
ZZZZZZ	152169	4.37	561421	5.29	287035	6.61	581681	8.32	574463	13.37	611453	16.38

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JC71604-1	2P81787.D	39	28	80	70	69	78
OP14177-BS	P124726.D	45	33	91	63	68	85
OP14177-BS	2P81781.D	61	43	91	76	68	102
OP14177-BSD	P124727.D	40	27	84	61	65	76
OP14177-BSD	2P81782.D	54	37	85	72	65	93
OP14177-MB	P124725.D	45	29	97	69	76	93
OP14177-MB	2P81778.D	51	36	100	85	80	103

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-110%
S2 = Phenol-d5	10-110%
S3 = 2,4,6-Tribromophenol	36-151%
S4 = Nitrobenzene-d5	34-128%
S5 = 2-Fluorobiphenyl	38-119%
S6 = Terphenyl-d14	26-129%

Initial Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: E2P3595-ICC3595
Lab FileID: 2P81618.D

Response Factor Report MS2P

Method : C:\MSDCHEM\1\METHODS\M2P3595.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Aug 09 20:32:54 2018
Response via : Initial Calibration

Calibration Files
2 =2p81622.D 5 =2p81621.D 25 =2p81619.D 80 =2p81617.D
100 =2p81616.D 50 =2p81618.D 1 =2p81623.D 10 =2p81620.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.498	0.594	0.521	0.564	0.553	0.619	0.610	0.546	0.563	7.53
3) Pyridine	1.584	1.953	1.421	1.462	1.428	1.644	1.677	1.456	1.578	11.49
4) N-Nitrosodim	0.837	1.061	0.820	0.852	0.821	0.955	0.877	0.852	0.884	9.43
5) 2-Fluorophen	1.457	1.752	1.291	1.329	1.283	1.509	1.481	1.341	1.430	10.97
6) Indene	2.444	2.880	2.019	1.994	1.950	2.266	2.559	2.190	2.288	14.12
7) Cumene	3.900	4.688	3.392	3.405	3.294	3.883	4.155	3.611	3.791	12.40
8) Phenol-d5	1.874	2.265	1.624	1.644	1.574	1.882	1.862	1.685	1.801	12.45
9) Phenol	2.186	2.575	1.801	1.747	1.650	2.023	2.288	1.926	2.024	15.34
10) Aniline	2.418	2.822	1.868	1.727	1.627	1.988	2.428	2.071	2.119	19.19
11) bis(2-Chloro	1.362	1.669	1.185	1.134	1.108	1.313	1.427	1.267	1.308	13.99
12) 2-Chlorophen	1.615	1.864	1.317	1.285	1.245	1.496	1.631	1.393	1.481	14.35
13) Decane	1.823	2.127	1.445	1.345	1.268	1.581	1.838	1.569	1.625	17.71
14) 1,3-Dichloro	1.769	2.048	1.428	1.405	1.374	1.604	1.825	1.550	1.625	14.63
15) 1,4-Dichloro	1.629	1.940	1.390	1.356	1.335	1.530	1.624	1.491	1.537	12.91
16) Benzyl alcoh	0.832	1.042	0.756	0.778	0.737	0.877	0.800	0.789	0.826	11.78
17) 1,2-Dichloro	1.539	1.904	1.331	1.281	1.241	1.458	1.665	1.411	1.479	14.93
18) Acetophenone	2.196	2.630	1.752	1.698	1.657	1.985	2.225	1.948	2.012	16.36
19) 2-Methylphen	1.349	1.598	1.101	1.033	0.977	1.218	1.398	1.200	1.234	16.71
20) 2,2'-oxybis(	0.413	0.499	0.328	0.306	0.299	0.357	0.447	0.362	0.376	18.89
21) 3&4-Methylph	1.427	1.670	1.125	1.086	1.040	1.264	1.345	1.266	1.278	16.14
22) n-Nitroso-di	1.183	1.396	0.920	0.833	0.786	0.991	1.171	1.027	1.038	19.56
23) Hexachloroet	0.569	0.694	0.488	0.482	0.485	0.553	0.561	0.526	0.545	12.86
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.431	0.536	0.397	0.381	0.369	0.439	0.484	0.417	0.432	12.83
26) Nitrobenzene	0.445	0.537	0.386	0.360	0.344	0.415	0.437	0.412	0.417	14.34
27) Quinoline	0.732	0.917	0.647	0.652	0.626	0.748	0.766	0.684	0.722	13.03
28) Isophorone	0.761	0.927	0.657	0.656	0.622	0.760	0.801	0.698	0.735	13.51
29) 2-Nitropheno	0.168	0.223	0.179	0.185	0.183	0.212	0.147	0.172	0.183	13.19
30) 2,4-Dimethyl	0.366	0.453	0.311	0.308	0.295	0.354	0.348	0.335	0.346	14.38
31) Benzoic acid		0.218	0.226	0.271	0.264	0.297		0.195	0.245	15.61
32) bis(2-Chloro	0.418	0.503	0.356	0.339	0.328	0.393	0.423	0.381	0.393	14.33
33) 2,4-Dichloro	0.334	0.391	0.284	0.280	0.266	0.319	0.310	0.294	0.310	12.76
34) 2,6-Dichloro	0.289	0.356	0.254	0.252	0.243	0.287	0.285	0.274	0.280	12.65
35) 1,3,5-Trichl	0.358	0.458	0.323	0.313	0.312	0.357	0.395	0.334	0.356	13.93
36) 1,2,4-Trichl	0.354	0.422	0.302	0.297	0.292	0.340	0.352	0.319	0.335	12.82
37) 1,2,3-Trichl	0.319	0.408	0.287	0.267	0.263	0.304	0.361	0.301	0.314	15.60
38) Naphthalene	1.042	1.303	0.918	0.907	0.881	1.019	1.114	0.974	1.020	13.57
39) 4-Chloroanil	0.465	0.568	0.401	0.389	0.375	0.442	0.476	0.417	0.442	14.11
40) 2,3-Dichloro	0.415	0.487	0.341	0.342	0.331	0.390	0.409	0.364	0.385	13.59
41) Caprolactam	0.108	0.147	0.106	0.106	0.101	0.122	0.110	0.106	0.113	13.19
42) Hexachlorobu	0.187	0.239	0.172	0.175	0.173	0.197	0.203	0.183	0.191	11.77
43) 4-Chloro-3-m	0.321	0.410	0.301	0.304	0.290	0.349	0.329	0.307	0.326	11.80
44) 2-Methylnaph	0.631	0.772	0.549	0.549	0.532	0.629	0.629	0.594	0.611	12.57
45) 1-Methylnaph	0.702	0.858	0.599	0.588	0.568	0.670	0.739	0.639	0.670	14.26

Initial Calibration Summary

Job Number: JC71604 **Sample:** E2P3595-ICC3595
Account: TCMAW Tantara Corporation **Lab FileID:** 2P81618.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

```
46) Dimethylnaph 0.637 0.796 0.536 0.529 0.519 0.618 0.675 0.585 0.612  15.16

47) I   Acenaphthene-d10      ----------------ISTD--------------------
48) Hexachlorocy 0.322 0.426 0.355 0.397 0.394 0.434 0.261 0.354 0.368  15.67
49) 2,4,6-Trichl 0.416 0.534 0.394 0.403 0.393 0.451 0.411 0.423 0.428  10.89
50) 2,4,5-Trichl 0.462 0.556 0.412 0.411 0.399 0.460 0.432 0.449 0.448  11.10
51) 2-Fluorobiph 1.663 1.977 1.393 1.330 1.290 1.529 1.784 1.516 1.560  15.16
52) 2-Chloronaph 1.453 1.669 1.156 1.068 1.041 1.246 1.502 1.290 1.303  17.04
53) Biphenyl     1.820 2.188 1.521 1.519 1.462 1.713 1.915 1.632 1.721  14.26
54) 2-Nitroanili 0.404 0.532 0.416 0.412 0.394 0.465 0.382 0.424 0.429  11.26
55) Dimethylphth 1.529 1.872 1.324 1.312 1.252 1.512 1.564 1.407 1.471  13.43
56) Acenaphthyle 2.191 2.631 1.924 1.856 1.772 2.122 2.202 2.047 2.093  12.79
57) 2,6-Dinitrot 0.239 0.356 0.285 0.296 0.284 0.338 0.221 0.282 0.288  15.65
58) 3-Nitroanili 0.347 0.475 0.348 0.355 0.340 0.402 0.329 0.359 0.370  12.96
59) Acenaphthene 1.365 1.662 1.209 1.202 1.181 1.358 1.420 1.266 1.333  11.94
60) 2,4-Dinitrop 0.022 0.066 0.102 0.147 0.150 0.156       0.071 0.102  50.45
         ----- Quadratic regression -----              Coefficient =  0.9950
              Response Ratio = -0.02967 + 0.15467 *A + 0.00028 *A^2

61) 4-Nitropheno 0.180 0.266 0.214 0.224 0.218 0.253 0.159 0.215 0.216  16.10
62) Dibenzofuran 1.858 2.261 1.622 1.555 1.504 1.767 1.998 1.765 1.791  13.93
63) 2,4-Dinitrot 0.307 0.490 0.396 0.394 0.391 0.453 0.278 0.384 0.387  17.85
64) 2,3,4,6-Tetr 0.286 0.413 0.331 0.368 0.369 0.407 0.250 0.328 0.344  16.48
65) Diethylphtha 1.485 1.873 1.327 1.308 1.256 1.515 1.493 1.416 1.459  13.20
66) Fluorene     1.581 1.961 1.362 1.334 1.283 1.517 1.604 1.478 1.515  14.18
67) 4-Chlorophen 0.720 0.890 0.626 0.663 0.644 0.739 0.704 0.661 0.706  11.89
68) 4-Nitroanili 0.346 0.497 0.349 0.327 0.319 0.378 0.337 0.372 0.366  15.58

69) I   Phenanthrene-d10      ----------------ISTD--------------------
70) 4,6-Dinitro- 0.032 0.071 0.094 0.114 0.114 0.126       0.071 0.089  36.96
         ----- Quadratic regression -----              Coefficient =  0.9960
              Response Ratio = -0.01023 + 0.13194 *A + -0.00567 *A^2

71) n-Nitrosodip 0.601 0.755 0.520 0.496 0.483 0.570 0.604 0.563 0.574  14.99
72) 1,2-Diphenyl 0.936 1.165 0.795 0.715 0.682 0.838 0.947 0.866 0.868  17.60
73) 2,4,6-Tribro 0.096 0.133 0.106 0.115 0.115 0.126 0.094 0.107 0.112  12.14
74) 4-Bromopheny 0.236 0.298 0.211 0.219 0.215 0.248 0.225 0.226 0.235  11.95
75) Hexachlorobe 0.267 0.324 0.236 0.239 0.239 0.271 0.269 0.248 0.262  11.14
76) Pentachlorop 0.056 0.117 0.124 0.155 0.158 0.173 0.041 0.103 0.116  41.19
         ----- Quadratic regression -----              Coefficient =  0.9953
              Response Ratio = -0.01793 + 0.16821 *A + -0.00135 *A^2

77) Phenanthrene 1.117 1.349 0.961 0.961 0.940 1.078 1.140 1.025 1.071  12.61
78) Anthracene   1.109 1.411 0.986 0.948 0.934 1.089 1.119 1.052 1.081  13.99
79) Carbazole    1.123 1.395 0.975 0.955 0.937 1.100 1.112 1.042 1.080  13.60
80) Di-n-butylph 1.294 1.718 1.236 1.238 1.198 1.442 1.249 1.297 1.334  12.87
81) Fluoranthene 1.281 1.628 1.177 1.186 1.174 1.378 1.282 1.238 1.293  11.77
82) Octadecane   0.445 0.580 0.388 0.348 0.327 0.420 0.438 0.422 0.421  18.29

83) I   Chrysene-d12         ----------------ISTD--------------------
84) Pyrene       1.362 1.665 1.232 1.282 1.216 1.446 1.354 1.272 1.354  10.86
85) Terphenyl-d1 0.879 1.092 0.807 0.880 0.833 0.979 0.894 0.843 0.901  10.31
86) Butylbenzylp 0.521 0.700 0.560 0.597 0.578 0.683 0.481 0.552 0.584  12.87
87) Benzo[a]anth 1.245 1.527 1.108 1.153 1.135 1.296 1.277 1.164 1.238  10.96
88) 3,3'-Dichlor 0.384 0.529 0.416 0.471 0.471 0.518 0.333 0.419 0.443  15.17
89) Chrysene     1.089 1.348 0.991 1.025 1.012 1.163 1.062 1.034 1.090  10.76
90) bis(2-Ethylh 0.613 0.861 0.676 0.690 0.670 0.803 0.511 0.668 0.686  15.67

91) I   Perylene-d12         ----------------ISTD--------------------
92) Di-n-octylph 0.919 1.456 1.181 1.229 1.182 1.439 0.761 1.145 1.164  20.25
```

Initial Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Sample: E2P3595-ICC3595
Lab FileID: 2P81618.D

```
          ----- Quadratic regression -----                Coefficient =  0.9960
               Response Ratio = -0.04799 + 1.55107 *A + -0.13996 *A^2

 93) Benzo[b]fluo 1.169 1.480 1.077 1.132 1.126 1.259 1.152 1.152 1.193  10.61
 94) Benzo[k]fluo 1.138 1.454 0.996 0.895 0.864 1.085 1.131 1.028 1.074  17.12
 95) Benzo[a]pyre 0.987 1.302 0.961 0.973 0.972 1.104 0.997 0.978 1.034  11.36
 96) Indeno[1,2,3 0.832 1.106 0.916 0.995 0.980 1.094 0.846 0.890 0.957  10.95
 97) Dibenz(a,h)a 0.785 1.013 0.818 0.862 0.867 0.966 0.712 0.814 0.855  11.35
 98) Dibenz[a,h]a 0.960 1.209 0.916 0.918 0.920 1.032 0.837 0.931 0.965  11.63
 99) 7,12-Dimethy 0.495 0.649 0.478 0.500 0.500 0.570 0.448 0.486 0.516  12.35
100) Benzo[g,h,i] 0.937 1.156 0.897 0.931 0.921 1.047 0.938 0.912 0.967   9.17
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M2P3595.M         Fri Aug 10 12:05:38 2018   RPT1
```

8.6.1

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Sample: E2P3595-ICV3595
Lab FileID: 2P81625.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2P3595\2p81625.D Vial: 11
Acq On : 9 Aug 2018 6:13 pm Operator: seanb1
Sample : icv3595-50 Inst : MS2P
Misc : op13652,e2p3595,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P3595.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Aug 09 20:32:54 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	131	0.00	4.97
2	t	1,4-Dioxane	0.563	0.580	-3.0	123	0.00	2.35
3	t	Pyridine	1.578	1.624	-2.9	130	0.00	2.67
4	t	N-Nitrosodimethylamine	0.884	0.973	-10.1	134	0.00	2.64
9	t	Phenol	2.024	1.917	5.3	124	0.00	4.69
10		Aniline	2.119	1.790	15.5	118	0.00	4.70
11	t	bis(2-Chloroethyl)ether	1.308	1.255	4.1	125	0.00	4.75
12	t	2-Chlorophenol	1.481	1.336	9.8	117	0.00	4.80
14	t	1,3-Dichlorobenzene	1.625	1.528	6.0	125	0.00	4.92
15	t	1,4-Dichlorobenzene	1.537	1.404	8.7	120	0.00	4.98
16	t	Benzyl alcohol	0.826	0.876	-6.1	131	0.00	5.09
17	t	1,2-Dichlorobenzene	1.479	1.338	9.5	120	0.00	5.11
18	t	Acetophenone	2.012	1.798	10.6	119	0.00	5.30
19	t	2-Methylphenol	1.234	1.136	7.9	122	0.00	5.19
20	t	2,2'-oxybis(1-Chloropropa	0.376	0.371	1.3	136	0.00	5.20
21	t	3&4-Methylphenol	1.278	1.129	11.7	117	0.00	5.31
22	t	n-Nitroso-di-n-propylamin	1.038	0.906	12.7	120	0.00	5.31
23	t	Hexachloroethane	0.545	0.491	9.9	116	0.00	5.39
24	I	Naphthalene-d8	1.000	1.000	0.0	129	0.00	6.03
26	t	Nitrobenzene	0.417	0.374	10.3	116	0.00	5.45
28	t	Isophorone	0.735	0.747	-1.6	127	0.00	5.64
29	t	2-Nitrophenol	0.183	0.188	-2.7	114	0.00	5.71
30	t	2,4-Dimethylphenol	0.346	0.288	16.8	105	0.00	5.75
32	t	bis(2-Chloroethoxy)methan	0.393	0.431	-9.7	141	0.00	5.82
33	t	2,4-Dichlorophenol	0.310	0.299	3.5	121	0.00	5.91
34	t	2,6-Dichlorophenol	0.280	0.242	13.6	109	0.00	6.10
36	t	1,2,4-Trichlorobenzene	0.335	0.322	3.9	122	0.00	5.98
38	t	Naphthalene	1.020	0.940	7.8	119	0.00	6.04
39	t	4-Chloroaniline	0.442	0.382	13.6	111	0.00	6.08
41	t	Caprolactam	0.113	0.117	-3.5	124	0.00	6.38
42	t	Hexachlorobutadiene	0.191	0.169	11.5	111	0.00	6.15
43	t	4-Chloro-3-methylphenol	0.326	0.331	-1.5	123	0.00	6.49
44	t	2-Methylnaphthalene	0.611	0.591	3.3	121	0.00	6.61
45	t	1-Methylnaphthalene	0.670	0.586	12.5	113	0.00	6.69
47	I	Acenaphthene-d10	1.000	1.000	0.0	121	0.00	7.47
48	t	Hexachlorocyclopentadiene	0.368	0.292	20.6	80	0.00	6.75
49	t	2,4,6-Trichlorophenol	0.428	0.411	4.0	110	0.00	6.84
50	t	2,4,5-Trichlorophenol	0.448	0.436	2.7	114	0.00	6.88
52	t	2-Chloronaphthalene	1.303	1.152	11.6	111	0.00	7.02
53	t	Biphenyl	1.721	1.547	10.1	109	0.00	6.99

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: E2P3595-ICV3595
Lab FileID: 2P81625.D

54	t	2-Nitroaniline	0.429	0.471	-9.8	122	0.00	7.10
55	t	Dimethylphthalate	1.471	1.372	6.7	109	0.00	7.25
56	t	Acenaphthylene	2.093	1.800	14.0	102	0.00	7.35
57	t	2,6-Dinitrotoluene	0.288	0.310	-7.6	111	0.00	7.29
58	t	3-Nitroaniline	0.370	0.362	2.2	109	0.00	7.43
59	t	Acenaphthene	1.333	1.214	8.9	108	0.00	7.50
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	50.000	51.404	-2.8	102	0.00	7.52
			AvgRF	CCRF	% Dev			
61	t	4-Nitrophenol	0.216	0.230	-6.5	109	0.00	7.57
62	t	Dibenzofuran	1.791	1.589	11.3	108	0.00	7.64
63	t	2,4-Dinitrotoluene	0.387	0.399	-3.1	106	0.00	7.63
64		2,3,4,6-Tetrachlorophenol	0.344	0.351	-2.0	104	0.00	7.74
65	t	Diethylphthalate	1.459	1.428	2.1	114	0.00	7.83
66	t	Fluorene	1.515	1.419	6.3	113	0.00	7.93
67	t	4-Chlorophenyl-phenylethe	0.706	0.710	-0.6	116	0.00	7.92
68	t	4-Nitroaniline	0.366	0.315	13.9	100	0.00	7.95
69	I	Phenanthrene-d10	1.000	1.000	0.0	128	0.00	8.82
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylpheno	50.000	41.572	16.9	99	0.00	7.97
			AvgRF	CCRF	% Dev			
71	t	n-Nitrosodiphenylamine	0.574	0.588	-2.4	132	0.00	8.03
72	t	1,2-Diphenylhydrazine	0.868	0.761	12.3	117	0.00	8.07
74	t	4-Bromophenyl-phenylether	0.235	0.201	14.5	104	0.00	8.37
75	t	Hexachlorobenzene	0.262	0.232	11.5	110	0.00	8.44
			True	Calc.	% Drift			
76	t	Pentachlorophenol	50.000	44.522	11.0	100	0.00	8.64
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.071	1.001	6.5	119	0.00	8.85
78	t	Anthracene	1.081	0.988	8.6	117	0.00	8.90
79	t	Carbazole	1.080	1.012	6.3	118	0.00	9.07
80	t	Di-n-butylphthalate	1.334	1.433	-7.4	128	0.00	9.47
81	t	Fluoranthene	1.293	1.369	-5.9	128	0.00	10.22
83	I	Chrysene-d12	1.000	1.000	0.0	133	0.00	12.21
84	t	Pyrene	1.354	1.358	-0.3	125	0.00	10.51
86	t	Butylbenzylphthalate	0.584	0.672	-15.1	131	0.00	11.44
87	t	Benzo[a]anthracene	1.238	1.250	-1.0	129	0.00	12.19
88	t	3,3'-Dichlorobenzidine	0.443	0.500	-12.9	129	0.00	12.18
89	t	Chrysene	1.090	1.011	7.2	116	0.00	12.25
90	t	bis(2-Ethylhexyl)phthalat	0.686	0.705	-2.8	117	0.00	12.31
91	I	Perylene-d12	1.000	1.000	0.0	118	0.00	14.22
			True	Calc.	% Drift			
92	t	Di-n-octylphthalate	50.000	61.856	-23.7	132	0.00	13.26
			AvgRF	CCRF	% Dev			
93	t	Benzo[b]fluoranthene	1.193	1.359	-13.9	128	0.00	13.72
94	t	Benzo[k]fluoranthene	1.074	1.136	-5.8	124	0.00	13.75
95	t	Benzo[a]pyrene	1.034	1.236	-19.5	132	0.00	14.15
96	t	Indeno[1,2,3-cd]pyrene	0.957	1.213	-26.8	131	0.00	15.78
97	t	Dibenz(a,h)acridine	0.855	1.096	-28.2	134	0.08	15.50

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: E2P3595-ICV3595
Lab FileID: 2P81625.D

98	t	Dibenz[a,h]anthracene	0.965	1.076	-11.5	123	0.00	15.82
100	t	Benzo[g,h,i]perylene	0.967	1.218	-26.0	137	0.01	16.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p81618.D M2P3595.M Fri Aug 10 11:59:02 2018 RPT1

8.6.2

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: E2P3595-ICV3595
Lab FileID: 2P81626.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2P3595\2p81626.D Vial: 12
Acq On : 9 Aug 2018 6:36 pm Operator: seanb1
Sample : icv3595-50 Inst : MS2P
Misc : op13652,e2p3595,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P3595.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Aug 09 20:32:54 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
24 I	Naphthalene-d8	1.000	1.000	0.0	180	0.00	6.02
31 t	Benzoic acid	0.245	0.288	-17.6	174	0.00	5.87

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p81618.D M2P3595.M Fri Aug 10 11:59:04 2018 RPT1

8.6.3

8

Initial Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: E2P3596-ICC3596
Lab FileID: 2P81631.D

Response Factor Report MS2P

Method : C:\MSDCHEM\1\METHODS\M2P3596.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Aug 10 15:25:08 2018
Response via : Initial Calibration

Calibration Files
2 =2p81635.D 5 =2p81634.D 25 =2p81632.D 80 =2p81630.D
100 =2p81629.D 50 =2p81631.D 1 =2p81636.D 10 =2p81633.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
101) I 1,4-Dichlorobenzene-d	ISTD									
102) Benzaldehyde	1.151	1.169	0.960	0.929	0.864	0.944	1.191	1.015	1.028	12.21
103) I Naphthalene-d8a	ISTD									
104) Hydroquinone	0.226	0.303	0.303	0.320	0.297	0.319	0.206	0.278	0.281	15.22
105) I Acenaphthene-d10a	ISTD									
106) Atrazine	0.199	0.224	0.195	0.202	0.188	0.206	0.188	0.198	0.200	5.82
107) 1,2,4,5-Tetr	0.738	0.768	0.605	0.591	0.578	0.617	0.768	0.636	0.663	12.24
108) I Chrysene-d12a	ISTD									
109) Benzidine	0.064	0.087	0.165	0.287	0.290	0.267	0.049	0.086	0.162	64.64

----- Quadratic regression ----- Coefficient = 0.9955
Response Ratio = -0.02020 + 0.23269 *A + 0.02809 *A^2

110) I Phenanthrene-d10a	ISTD									
111) 1-Chloroocta	0.365	0.396	0.359	0.349	0.324	0.361	0.353	0.363	0.359	5.54
112) o-terphenyl	0.627	0.682	0.575	0.608	0.582	0.598	0.646	0.607	0.616	5.75
113) Pentachloron	0.029	0.034	0.042	0.047	0.045	0.045	0.031	0.038	0.039#	17.72

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2P3595.M Fri Aug 10 15:30:28 2018 RPT1

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: E2P3596-ICV3596
Lab FileID: 2P81637.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2P3596\2p81637.D Vial: 10
Acq On : 9 Aug 2018 11:58 pm Operator: seanb1
Sample : icv3596-50 Inst : MS2P
Misc : op13652,e2p3596,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P3595.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Aug 10 15:25:08 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
101 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	116	0.00	4.97
102	Benzaldehyde	1.028	1.216	-18.3	150	0.00	4.60
105 I	Acenaphthene-d10a	1.000	1.000	0.0	116	0.00	7.46
106	Atrazine	0.200	0.172	14.0	97	0.00	8.53
107	1,2,4,5-Tetrachlorobenzen	0.663	0.569	14.2	107	0.00	6.75
110 I	Phenanthrene-d10a	1.000	1.000	0.0	105	0.00	8.82
113	Pentachloronitrobenzene	0.039	0.041#	-5.1	97	0.00	8.64

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p81631a.D M2P3595.M Fri Aug 10 15:29:00 2018 RPT1

8.6.5

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: E2P3596-ICV3596
Lab FileID: 2P81638.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2P3596\2p81638.D Vial: 11
Acq On : 10 Aug 2018 12:21 am Operator: seanb1
Sample : icv3596-50 Inst : MS2P
Misc : op13652,e2p3596,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P3595.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Aug 10 15:25:08 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103 I	Naphthalene-d8a	1.000	1.000	0.0	123	0.00	6.02
104	Hydroquinone	0.281	0.282	-0.4	109	0.00	6.36

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p81631a.D M2P3595.M Fri Aug 10 15:29:02 2018 RPT1

8.6.9

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: E2P3597-ICV3596
Lab FileID: 2P81643.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2P3597\2p81643.D Vial: 4
Acq On : 10 Aug 2018 4:33 pm Operator: seanb1
Sample : icv3596-50 Inst : MS2P
Misc : op13652,e2p3597,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P3595.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Aug 10 15:25:08 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
108 I	Chrysene-d12a	1.000	1.000	0.0	105	0.01	12.20
		True	Calc.	% Drift			
109	Benzidine	50.000	55.310	-10.6	112	0.00	10.39

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p81631a.D M2P3595.M Fri Aug 10 18:33:56 2018 RPT1

8.6.7

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Sample: E2P3598-ICV3595
Lab FileID: 2P81646.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2P3598\2p81646.D Vial: 2
Acq On : 10 Aug 2018 5:32 pm Operator: seanb1
Sample : icv3595-50 Inst : MS2P
Misc : op13652,e2p3598,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P3595.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Aug 10 15:25:08 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	122	0.00	4.97
5	S	2-Fluorophenol	1.430	1.291	9.7	105	0.01	3.89
8	S	Phenol-d5	1.801	1.602	11.0	104	0.00	4.68
24	I	Naphthalene-d8	1.000	1.000	0.0	126	0.00	6.02
25	S	Nitrobenzene-d5	0.432	0.389	10.0	112	0.00	5.43
47	I	Acenaphthene-d10	1.000	1.000	0.0	124	0.00	7.47
51	S	2-Fluorobiphenyl	1.560	1.500	3.8	122	0.00	6.91
69	I	Phenanthrene-d10	1.000	1.000	0.0	126	0.00	8.82
73	S	2,4,6-Tribromophenol	0.112	0.112	0.0	113	0.00	8.14
83	I	Chrysene-d12	1.000	1.000	0.0	139	0.00	12.20
85	S	Terphenyl-d14	0.901	0.943	-4.7	134	0.00	10.73

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p81631a.D M2P3595.M Fri Aug 10 18:30:32 2018 RPT1

8.6.8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Sample: E2P3598-ICV3595
Lab FileID: 2P81647.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2P3598\2p81647.D Vial: 3
Acq On : 10 Aug 2018 5:55 pm Operator: seanb1
Sample : icv3595-50 Inst : MS2P
Misc : op13652,e2p3598,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P3595.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Aug 10 15:25:08 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00	4.97
6	t	Indene	2.288	2.315	-1.2	99	0.00	5.18
7	t	Cumene	3.791	3.684	2.8	92	0.00	4.31
13	t	Decane	1.625	1.473	9.4	90	0.00	4.84
24	I	Naphthalene-d8	1.000	1.000	0.0	105	0.00	6.02
27	t	Quinoline	0.722	0.600	16.9	84	-0.02	6.31
46	t	Dimethylnaphthalene	0.612	0.464	24.2	79	0.00	7.12
69	I	Phenanthrene-d10	1.000	1.000	0.0	90	0.00	8.82
82	t	Octadecane	0.421	0.417	1.0	89	0.00	8.70
91	I	Perylene-d12	1.000	1.000	0.0	108	0.00	14.22
99	t	7,12-Dimethylbenz(a)anthr	0.516	0.538	-4.3	102	-0.01	13.71

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p81631a.D M2P3595.M Wed Aug 15 13:00:13 2018 RPT1

8.6.9

Continuing Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: E2P3603-CC3595
Lab FileID: 2P81773.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2P3603\2p81773.D Vial: 2
Acq On : 15 Aug 2018 9:01 am Operator: angelar
Sample : cc3595-50 Inst : MS2P
Misc : op13652,e2p3603,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P3595.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Aug 10 15:25:08 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	117	-0.02	4.96
2	t	1,4-Dioxane	0.563	0.632	-12.3	120	-0.03	2.31
3	t	Pyridine	1.578	1.709	-8.3	122	-0.02	2.65
4	t	N-Nitrosodimethylamine	0.884	1.029	-16.4	126	-0.02	2.62
5	S	2-Fluorophenol	1.430	1.823	-27.5#	142	0.00	3.88
6	t	Indene	2.288	2.169	5.2	112	-0.02	5.17
7	t	Cumene	3.791	4.587	-21.0#	139	-0.02	4.29
8	S	Phenol-d5	1.801	2.077	-15.3	129	0.00	4.68
9	t	Phenol	2.024	2.098	-3.7	122	0.00	4.69
10		Aniline	2.119	2.124	-0.2	125	-0.02	4.68
11	t	bis(2-Chloroethyl)ether	1.308	1.329	-1.6	119	-0.02	4.74
12	t	2-Chlorophenol	1.481	1.531	-3.4	120	-0.01	4.79
13	t	Decane	1.625	1.502	7.6	111	-0.02	4.82
14	t	1,3-Dichlorobenzene	1.625	1.573	3.2	115	-0.02	4.91
15	t	1,4-Dichlorobenzene	1.537	1.498	2.5	115	-0.02	4.97
16	t	Benzyl alcohol	0.826	0.890	-7.7	119	-0.01	5.08
17	t	1,2-Dichlorobenzene	1.479	1.398	5.5	112	-0.02	5.10
18	t	Acetophenone	2.012	1.865	7.3	110	-0.01	5.29
19	t	2-Methylphenol	1.234	1.071	13.2	103	0.00	5.19
20	t	2,2'-oxybis(1-Chloropropa	0.376	0.334	11.2	110	-0.02	5.18
21	t	3&4-Methylphenol	1.278	1.134	11.3	105	0.00	5.31
22	t	n-Nitroso-di-n-propylamin	1.038	0.959	7.6	113	-0.01	5.30
23	t	Hexachloroethane	0.545	0.519	4.8	110	-0.02	5.37
24	I	Naphthalene-d8	1.000	1.000	0.0	109	-0.02	6.01
25	S	Nitrobenzene-d5	0.432	0.438	-1.4	109	-0.02	5.42
26	t	Nitrobenzene	0.417	0.411	1.4	108	-0.01	5.43
27	t	Quinoline	0.722	0.741	-2.6	108	-0.01	6.32
28	t	Isophorone	0.735	0.757	-3.0	109	-0.01	5.64
29	t	2-Nitrophenol	0.183	0.220	-20.2#	114	-0.02	5.69
30	t	2,4-Dimethylphenol	0.346	0.356	-2.9	110	0.00	5.74
31	t	Benzoic acid	0.245	0.322	-31.4#	119	0.01	5.88
32	t	bis(2-Chloroethoxy)methan	0.393	0.384	2.3	107	-0.01	5.81
33	t	2,4-Dichlorophenol	0.310	0.321	-3.5	110	-0.01	5.90
34	t	2,6-Dichlorophenol	0.280	0.284	-1.4	108	-0.01	6.09
35		1,3,5-Trichlorobenzene	0.356	0.364	-2.2	112	-0.02	5.71
36	t	1,2,4-Trichlorobenzene	0.335	0.334	0.3	107	-0.02	5.96
37		1,2,3-Trichlorobenzene	0.314	0.295	6.1	106	-0.01	6.15
38	t	Naphthalene	1.020	0.992	2.7	107	-0.02	6.03
39	t	4-Chloroaniline	0.442	0.422	4.5	105	0.00	6.08
40	t	2,3-Dichloroaniline	0.385	0.394	-2.3	111	-0.01	6.83
41	t	Caprolactam	0.113	0.122	-8.0	110	0.00	6.39

Continuing Calibration Summary

Job Number: JC71604 **Sample:** E2P3603-CC3595
Account: TCMAW Tantara Corporation **Lab FileID:** 2P81773.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

42	t	Hexachlorobutadiene	0.191	0.195	-2.1	108	-0.02	6.13
43	t	4-Chloro-3-methylphenol	0.326	0.348	-6.7	109	0.00	6.49
44	t	2-Methylnaphthalene	0.611	0.652	-6.7	114	-0.01	6.60
45	t	1-Methylnaphthalene	0.670	0.663	1.0	108	-0.01	6.68
46	t	Dimethylnaphthalene	0.612	0.585	4.4	104	-0.01	7.11
47	I	Acenaphthene-d10	1.000	1.000	0.0	108	-0.01	7.46
48	t	Hexachlorocyclopentadiene	0.368	0.451	-22.6#	112	-0.02	6.73
49	t	2,4,6-Trichlorophenol	0.428	0.455	-6.3	109	0.00	6.84
50	t	2,4,5-Trichlorophenol	0.448	0.462	-3.1	109	0.00	6.88
51	S	2-Fluorobiphenyl	1.560	1.442	7.6	102	-0.01	6.90
52	t	2-Chloronaphthalene	1.303	1.198	8.1	104	-0.01	7.00
53	t	Biphenyl	1.721	1.713	0.5	108	-0.01	6.98
54	t	2-Nitroaniline	0.429	0.513	-19.6	119	0.00	7.09
55	t	Dimethylphthalate	1.471	1.425	3.1	102	-0.01	7.23
56	t	Acenaphthylene	2.093	2.053	1.9	105	-0.01	7.34
57	t	2,6-Dinitrotoluene	0.288	0.332	-15.3	106	0.00	7.28
58	t	3-Nitroaniline	0.370	0.408	-10.3	110	0.00	7.43
59	t	Acenaphthene	1.333	1.326	0.5	106	-0.01	7.49
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	100.000	122.829	-22.8#	124	0.00	7.52
			AvgRF	CCRF	% Dev			
61	t	4-Nitrophenol	0.216	0.281	-30.1#	120	0.02	7.59
62	t	Dibenzofuran	1.791	1.752	2.2	107	-0.01	7.63
63	t	2,4-Dinitrotoluene	0.387	0.458	-18.3	109	0.00	7.62
64		2,3,4,6-Tetrachlorophenol	0.344	0.419	-21.8#	111	0.00	7.74
65	t	Diethylphthalate	1.459	1.546	-6.0	110	0.00	7.82
66	t	Fluorene	1.515	1.498	1.1	107	-0.01	7.92
67	t	4-Chlorophenyl-phenylethe	0.706	0.744	-5.4	109	-0.01	7.91
68	t	4-Nitroaniline	0.366	0.341	6.8	98	0.00	7.96
69	I	Phenanthrene-d10	1.000	1.000	0.0	114	0.00	8.81
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylpheno	50.000	55.965	-11.9	118	0.00	7.98
			AvgRF	CCRF	% Dev			
71	t	n-Nitrosodiphenylamine	0.574	0.532	7.3	106	0.00	8.03
72	t	1,2-Diphenylhydrazine	0.868	0.797	8.2	108	0.00	8.06
73	S	2,4,6-Tribromophenol	0.112	0.122	-8.9	110	-0.01	8.14
74	t	4-Bromophenyl-phenylether	0.235	0.247	-5.1	113	-0.02	8.36
75	t	Hexachlorobenzene	0.262	0.271	-3.4	114	-0.01	8.43
			True	Calc.	% Drift			
76	t	Pentachlorophenol	100.000	112.107	-12.1	117	0.00	8.63
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.071	1.047	2.2	110	0.00	8.84
78	t	Anthracene	1.081	1.032	4.5	108	0.00	8.89
79	t	Carbazole	1.080	1.078	0.2	111	0.00	9.06
80	t	Di-n-butylphthalate	1.334	1.543	-15.7	122	-0.01	9.45
81	t	Fluoranthene	1.293	1.523	-17.8	126	0.00	10.21
82	t	Octadecane	0.421	0.418	0.7	113	-0.01	8.69
83	I	Chrysene-d12	1.000	1.000	0.0	120	0.00	12.21
84	t	Pyrene	1.354	1.470	-8.6	122	0.00	10.50
85	S	Terphenyl-d14	0.901	0.972	-7.9	119	-0.01	10.72
86	t	Butylbenzylphthalate	0.584	0.730	-25.0#	129	0.00	11.43

Continuing Calibration Summary

Job Number: JC71604 **Sample:** E2P3603-CC3595
Account: TCMAW Tantara Corporation **Lab FileID:** 2P81773.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

87	t	Benzo[a]anthracene	1.238	1.327	-7.2	123	0.00	12.19
88	t	3,3'-Dichlorobenzidine	0.443	0.529	-19.4	123	0.00	12.18
89	t	Chrysene	1.090	1.065	2.3	110	0.00	12.25
90	t	bis(2-Ethylhexyl)phthalat	0.686	0.754	-9.9	113	-0.01	12.30
91	I	Perylene-d12	1.000	1.000	0.0	109	0.01	14.23
			True	Calc.	% Drift			
92	t	Di-n-octylphthalate	50.000	60.515	-21.0#	120	0.00	13.25
			AvgRF	CCRF	% Dev			
93	t	Benzo[b]fluoranthene	1.193	1.281	-7.4	111	0.02	13.73
94	t	Benzo[k]fluoranthene	1.074	1.035	3.6	104	0.01	13.77
95	t	Benzo[a]pyrene	1.034	1.073	-3.8	106	0.01	14.16
96	t	Indeno[1,2,3-cd]pyrene	0.957	1.079	-12.7	108	0.03	15.81
97	t	Dibenz(a,h)acridine	0.855	0.941	-10.1	106	0.02	15.43
98	t	Dibenz[a,h]anthracene	0.965	0.995	-3.1	105	0.03	15.85
99	t	7,12-Dimethylbenz(a)anthr	0.516	0.576	-11.6	110	0.00	13.72
100	t	Benzo[g,h,i]perylene	0.967	0.977	-1.0	102	0.04	16.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p81631a.D M2P3595.M Wed Aug 15 12:38:05 2018 RPT1

8.6.10

8

Continuing Calibration Summary

Job Number: JC71604 **Sample:** E2P3603-CC3596
Account: TCMAW Tantara Corporation **Lab FileID:** 2P81774.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2P3603\2p81774.D Vial: 3
Acq On : 15 Aug 2018 9:25 am Operator: angelar
Sample : cc3596-50 Inst : MS2P
Misc : op13652,e2p3603,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P3595.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Aug 10 15:25:08 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
101 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	113	-0.02	4.95
102	Benzaldehyde	1.028	1.100	-7.0	131	-0.02	4.59
103 I	Naphthalene-d8a	1.000	1.000	0.0	113	-0.02	6.00
104	Hydroquinone	0.281	0.350	-24.6#	124	0.01	6.37
105 I	Acenaphthene-d10a	1.000	1.000	0.0	115	-0.01	7.45
106	Atrazine	0.200	0.208	-4.0	116	0.00	8.52
107	1,2,4,5-Tetrachlorobenzen	0.663	0.624	5.9	116	-0.01	6.74
108 I	Chrysene-d12a	1.000	1.000	0.0	101	0.00	12.20
	----------	True	Calc.	% Drift	----------		
109	Benzidine	50.000	79.566	-59.1#	167	0.00	10.39
	----------	AvgRF	CCRF	% Dev	----------		
110 I	Phenanthrene-d10a	1.000	1.000	0.0	113	-0.01	8.81
111 s	1-Chlorooctadecane	0.359	0.373	-3.9	117	-0.02	10.08
112 s	o-terphenyl	0.616	0.618	-0.3	117	-0.02	9.21
113	Pentachloronitrobenzene	0.039	0.048#	-23.1#	121	0.00	8.64

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p81631a.D M2P3595.M Wed Aug 15 13:55:36 2018 RPT1

8.6.11

8

Initial Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5553-ICC5553
Lab FileID: P123746.D

Response Factor Report MSVOAMSP

Method : C:\MSDCHEM\1\METHODS\MP5553.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Jun 21 11:14:27 2018
Response via : Initial Calibration

Calibration Files
2 =p123750.D 5 =p123749.D 25 =p123747.D 80 =p123745.D
100 =p123744.D 50 =p123746.D 10 =p123748.D 1 =p123751.D

Compound	2	5	25	80	100	50	10	1	Avg	%RSD
101) I 1,4-Dichlorobenzene-d	ISTD									
102) Benzaldehyde	1.397	1.397	1.294	1.142	1.098	1.214	1.291	1.416	1.281	9.46
103) I Phenanthrene-d10b	ISTD									
104) Atrazine	0.216	0.222	0.224	0.205	0.202	0.211	0.208	0.215	0.213	3.63
105) I Chrysene-d12b	ISTD									
106) Benzidine	0.635	0.750	0.852	0.710		0.768	0.772	0.521	0.715	15.14
107) I Naphthalene-d8b	ISTD									
108) Hydroquinone		0.246	0.351	0.360	0.334	0.347	0.291		0.322	13.79
109) I Acenaphthene-d10b	ISTD									
110) 1,2,4,5-Tetr	0.695	0.665	0.627	0.552	0.561	0.585	0.609	0.671	0.621	8.57

(#) = Out of Range ### Number of calibration levels exceeded format ###

MP5552.M Thu Jun 21 11:18:29 2018 ACLIMS

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5553-ICV5553
Lab FileID: P123752.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP5553\p123752.D Vial: 10
Acq On : 21 Jun 2018 1:23 am Operator: chriss2
Sample : icv5553-50 Inst : MSVOAMSP
Misc : op9039,ep5553,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP5552.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Jun 21 11:14:27 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
101 I	1,4-Dichlorobenzene-d4b	1.000	1.000	0.0	98	0.00	4.68
102	Benzaldehyde	1.281	1.170	8.7	94	0.00	4.35
103 I	Phenanthrene-d10b	1.000	1.000	0.0	103	0.00	8.85
104	Atrazine	0.213	0.198	7.0	97	0.00	8.45
109 I	Acenaphthene-d10b	1.000	1.000	0.0	110	0.00	7.00
110	1,2,4,5-Tetrachlorobenzen	0.621	0.501	19.3	95	0.00	6.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p123746a.D MP5552.M Thu Jun 21 11:18:12 2018 ACLIMS

8.6.13

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5553-ICV5553
Lab FileID: P123753.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\EP5553\p123753.D          Vial: 11
  Acq On    : 21 Jun 2018   1:51 am                   Operator: chriss2
  Sample    : icv5553-50                              Inst    : MSVOAMSP
  Misc      : op9039,ep5553,1000,,,1,1                Multiplr: 1.00
  MS Integration Params: rteint.p

  Method       : C:\MSDCHEM\1\METHODS\MP5552.M (RTE Integrator)
  Title        : Semi Volatile Extractables by GC/MS
  Last Update  : Thu Jun 21 11:14:27 2018
  Response via : Multiple Level Calibration

  Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
105 I	Chrysene-d12b	1.000	1.000	0.0	116	0.00	14.06
106	Benzidine	0.715	0.836	-16.9	126	0.00	11.34

```
    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     p123746a.D MP5552.M         Thu Jun 21 11:18:14 2018   ACLIMS
```

8.6.14

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5553-ICV5553
Lab FileID: P123754.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP5553\p123754.D Vial: 12
Acq On : 21 Jun 2018 2:19 am Operator: chriss2
Sample : icv5553-50 Inst : MSVOAMSP
Misc : op9039,ep5553,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP5552.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Jun 21 11:14:27 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
107 I	Naphthalene-d8b	1.000	1.000	0.0	140	0.00	5.60
108	Hydroquinone	0.322	0.355	-10.2	144	0.00	5.87

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p123746a.D MP5552.M Thu Jun 21 11:18:16 2018 ACLIMS

8.6.15

8

Initial Calibration Summary

Job Number: JC71604 **Sample:** EP5554-ICC5554
Account: TCMAW Tantara Corporation **Lab FileID:** P123758.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Response Factor Report MSVOAMSP

Method : C:\msdchem\1\METHODS\MP5554.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Jun 21 12:21:44 2018
Response via : Initial Calibration

Calibration Files
2 =p123762.D 5 =p123761.D 25 =p123759.D 80 =p123757.D
100 =p123756.D 50 =p123758.D 10 =p123760.D 1 =p123763.D

Compound	2	5	25	80	100	50	10	1	Avg	%RSD
101) I 1,4-Dichlorobenzene-d	ISTD									
102) 2-Picoline	1.858	1.818	1.745	1.686	1.630	1.712	1.700	2.033	1.773	7.23
103) Pentachloroe	0.610	0.650	0.611	0.566	0.557	0.590	0.588	0.669	0.605	6.38
104) Methyl metha	0.907	0.946	0.927	0.908	0.887	0.894	0.914	1.007	0.924	4.13
105) N-Nitrosodie	0.747	0.748	0.736	0.714	0.696	0.711	0.725	0.759	0.730	2.97
106) N-Nitrosomet	0.790	0.741	0.684	0.658	0.653	0.656	0.684	0.666	0.692	7.08
107) Ethyl methan	1.117	1.181	1.136	1.078	1.048	1.076	1.127	1.392	1.144	9.45
108) N-Nitrosopyr	0.538	0.526	0.516	0.517	0.455	0.499	0.498	0.588	0.517	7.38
109) N-Nitrosomor	0.847	0.812	0.691	0.536		0.583	0.773	0.895	0.734	18.46
110) o-Toluidine	2.553	2.484	2.120	1.739	1.637	1.812	2.270	2.594	2.151	17.86
111) I Naphthalene-d8A	ISTD									
112) O,O,O-Trieth	0.172	0.173	0.170	0.160	0.155	0.163	0.165	0.165	0.165	3.81
113) N-Nitrosopip	0.231	0.235	0.215	0.202	0.193	0.206	0.215	0.238	0.217	7.49
114) A,A-Dimethyl	0.780	0.813	0.862	0.846	0.806	0.815	0.812	0.776	0.814	3.57
115) Hexachloropr	0.213	0.213	0.216	0.209	0.204	0.217	0.216	0.209	0.212	2.16
116) N-Nitrosodi-	0.255	0.258	0.251	0.238	0.232	0.247	0.249	0.283	0.252	6.03
117) p-Phenylened	0.214	0.283	0.244	0.201	0.185	0.151	0.281	0.185	0.218	21.76
118) Safrole	0.256	0.278	0.263	0.250	0.242	0.258	0.263	0.278	0.261	4.83
119) Isosafrole	0.192	0.215	0.204	0.193	0.189	0.197	0.201	0.211	0.200	4.60
120) Acenaphthene-d10A	ISTD									
121) Thionazin	0.192	0.187	0.191	0.174	0.165	0.181	0.186	0.218	0.187	8.41
122) Tetraethyl d	0.222	0.229	0.221	0.215	0.204	0.217	0.221	0.223	0.219	3.35
123) Phorate	0.146	0.191	0.304	0.349	0.321	0.332	0.233	0.132	0.251	34.72
---- Quadratic regression ---- Coefficient = 0.9972										
Response Ratio = -0.01947 + 0.36710 *A + -0.01240 *A^2										
124) Phenacetin	0.739	0.808	0.772	0.698	0.644	0.711	0.772	0.752	0.737	6.97
125) 1,4-Naphthoq	0.471	0.509	0.511	0.440	0.408	0.483	0.498	0.459	0.473	7.56
126) m-Dinitroben	0.156	0.175	0.210	0.220	0.205	0.211	0.185	0.166	0.191	12.36
127) Pentachlorob	0.617	0.607	0.569	0.541	0.509	0.548	0.562	0.689	0.580	9.67
128) 2-Naphthylam	1.443	1.510	1.361	1.126	1.041	1.208	1.392	1.565	1.331	14.07
129) 1-Naphthylam	1.319	1.409	1.176	1.069	0.978	1.076	1.271	1.251	1.194	12.16
130) 5-Nitro-o-to	0.360	0.423	0.422	0.397	0.369	0.399	0.424	0.348	0.393	7.68
131) I Phenanthrene-d10A	ISTD									
132) Disulfoton	0.388	0.405	0.397	0.365	0.341	0.356	0.404	0.399	0.382	6.41
133) Dinoseb	0.051	0.095	0.151	0.169		0.161	0.119	0.045	0.113	45.35
---- Quadratic regression ---- Coefficient = 0.9997										
Response Ratio = -0.00580 + 0.15319 *A + 0.00943 *A^2										
134) Dimethoate	0.324	0.336	0.324	0.277	0.258	0.297	0.324	0.311	0.306	8.88
135) 4-Aminobiphe	0.816	0.818	0.764	0.732	0.684	0.734	0.774	0.779	0.763	5.90
136) Methyl parat	0.144	0.179	0.210	0.193	0.179	0.202	0.193	0.124	0.178	16.66
137) Parathion	0.131	0.157	0.167	0.144	0.135	0.154	0.158	0.111	0.145	12.61

Initial Calibration Summary

Job Number: JC71604 **Sample:** EP5554-ICC5554
Account: TCMAW Tantara Corporation **Lab FileID:** P123758.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

```
138) Diphenylamin 0.602 0.621 0.574 0.505 0.481 0.529 0.590 0.646 0.568  10.26
139) Isodrin      0.138 0.134 0.132 0.125 0.118 0.128 0.132 0.139 0.131   5.32
140) Diallate     0.050 0.056 0.052 0.051 0.050 0.051 0.050 0.059 0.052   6.76
141) Pentachloron 0.038 0.047 0.042 0.039 0.037 0.039 0.042 0.040 0.040#  7.32
142) Pronamide    0.311 0.335 0.334 0.318 0.300 0.324 0.333 0.289 0.318   5.32
143) 4-Nitroquino 0.025 0.048 0.097 0.099 0.091 0.102 0.070 0.018 0.069  50.20
             ---- Quadratic regression ----  Coefficient =  0.9984
               Response Ratio = -0.02814 + 0.11906 *A + -0.00235 *A^2

144) Methapyrilin 0.446 0.474 0.392 0.237       0.280 0.440 0.425 0.385  23.48
             ---- Quadratic regression ----  Coefficient =  0.9937
               Response Ratio = 0.00939 + 0.39283 *A + -0.08168 *A^2

145) sym-Trinitro 0.026 0.034 0.059 0.069 0.064 0.066 0.043       0.052  33.22
             ---- Quadratic regression ----  Coefficient =  0.9972
               Response Ratio = -0.00557 + 0.07473 *A + -0.00279 *A^2


146) I   Chrysene-d12A         ----------------ISTD---------------------
147) Aramite      0.058 0.072 0.084 0.085 0.080 0.083 0.074 0.071 0.076  12.03
148) p-(Dimethyla 0.311 0.372 0.386 0.378 0.356 0.381 0.377 0.316 0.360   8.28
149) Kepone       0.082 0.091 0.068 0.047 0.044 0.056 0.084 0.089 0.070  27.41
             ---- Quadratic regression ----  Coefficient =  0.9979
               Response Ratio = 0.01440 + 0.06728 *A + -0.00169 *A^2

150) Famphur      0.444 0.466 0.327 0.160       0.241 0.423 0.441 0.357  33.12
             ---- Quadratic regression ----  Coefficient =  0.9977
               Response Ratio = 0.04957 + 0.38041 *A + -0.01880 *A^2

151) 2-Acetylamin 0.342 0.434 0.519 0.524 0.509 0.528 0.476       0.476  14.23
152) Chlorobenzil 0.316 0.347 0.358 0.354 0.336 0.354 0.348 0.318 0.341   4.85

153) I   Perylene-d12A         ----------------ISTD---------------------
154) 4,4-Methylen 0.185 0.205 0.189 0.152 0.140 0.170 0.195 0.175 0.176  12.45
155) Hexachloroph       0.001 0.019 0.054 0.057 0.039 0.004       0.029# 84.72
             ---- Quadratic regression ----  Coefficient =  0.9963
               Response Ratio = -0.03331 + 0.02889 *A + 0.00253 *A^2

156) 3-Methylchol 0.176 0.197 0.224 0.218 0.212 0.218 0.209 0.177 0.204   9.19
 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MP5552ap9.M        Thu Jun 21 12:42:37 2018   ACLIMS
```

8.6.16

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5554-ICV5554
Lab FileID: P123765.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP5553\p123765.D Vial: 21
Acq On : 21 Jun 2018 7:07 am Operator: chriss2
Sample : icv5554-50 Inst : MSVOAMSP
Misc : op9039,ep5554,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\MP5552ap9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Jun 21 12:21:44 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
101	I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	104	0.00	4.68
102	M	2-Picoline	1.773	1.759	0.8	107	0.00	3.21
105	M	N-Nitrosodiethylamine	0.730	0.699	4.2	102	0.00	3.87
106	M	N-Nitrosomethylethylamine	0.692	0.637	7.9	101	0.00	3.30
108	M	N-Nitrosopyrrolidine	0.517	0.485	6.2	101	0.00	4.95
109	M	N-Nitrosomorpholine	0.734	0.746	-1.6	133	0.00	4.98
110	M	o-Toluidine	2.151	2.174	-1.1	125	0.00	5.00
111	I	Naphthalene-d8A	1.000	1.000	0.0	108	0.00	5.60
113	M	N-Nitrosopiperidine	0.217	0.205	5.5	107	0.00	5.20
114	M	A,A-Dimethylphenethylamin	0.814	0.873	-7.2	115	-0.02	5.52
116	M	N-Nitrosodi-n-butylamine	0.252	0.239	5.2	104	0.00	5.88
120		Acenaphthene-d10A	1.000	1.000	0.0	107	0.00	7.00
128	M	2-Naphthylamine	1.331	1.435	-7.8	127	0.00	7.37
129	M	1-Naphthylamine	1.194	1.446	-21.1	143	0.00	7.28
130	M	5-Nitro-o-toluidine	0.393	0.427	-8.7	114	0.00	7.59
131	I	Phenanthrene-d10A	1.000	1.000	0.0	107	0.00	8.85
135	M	4-Aminobiphenyl	0.763	0.840	-10.1	122	0.00	8.58
146	I	Chrysene-d12A	1.000	1.000	0.0	108	0.00	14.06
148	M	p-(Dimethylamine)azobenze	0.360	0.364	-1.1	103	0.00	12.18
151	M	2-Acetylaminofluorene	0.476	0.529	-11.1	108	0.00	13.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p123758a.D MP5552ap9.M Thu Jun 21 12:33:28 2018 ACLIMS

8.6.17

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5554-ICV5554
Lab FileID: P123766.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP5553\p123766.D Vial: 22
Acq On : 21 Jun 2018 7:35 am Operator: chriss2
Sample : icv5554-50 Inst : MSVOAMSP
Misc : op9039,ep5554,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\MP5552ap9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Jun 21 12:21:44 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
131 I	Phenanthrene-d10A	1.000	1.000	0.0	106	0.00	8.85
		True	Calc.	% Drift			
133 M	Dinoseb	50.000	35.972	28.1	74	0.00	8.88

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p123758a.D MP5552ap9.M Thu Jun 21 12:33:30 2018 ACLIMS

8.6.18

8

Initial Calibration Verification

Job Number: JC71604 **Sample:** EP5554-ICV5554
Account: TCMAW Tantara Corporation **Lab FileID:** P123767.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP5553\p123767.D Vial: 23
Acq On : 21 Jun 2018 8:03 am Operator: chriss2
Sample : icv5554-50 Inst : MSVOAMSP
Misc : op9039,ep5554,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\MP5552ap9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Jun 21 12:21:44 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
111	I	Naphthalene-d8A	1.000	1.000	0.0	112	0.00	5.60
112	M	O,O,O-Triethyl phosphorot	0.165	0.156	5.5	108	0.00	5.39
120		Acenaphthene-d10A	1.000	1.000	0.0	106	0.00	7.00
121	M	Thionazin	0.187	0.177	5.3	104	0.00	7.54
122	M	Tetraethyl dithiopyrophos	0.219	0.219	0.0	107	0.00	7.93
131	I	Phenanthrene-d10A	1.000	1.000	0.0	107	0.00	8.85
132	M	Disulfoton	0.382	0.387	-1.3	116	0.00	8.88
134	M	Dimethoate	0.306	0.312	-2.0	112	0.00	8.33
136	M	Methyl parathion	0.178	0.203	-14.0	107	0.00	9.50
137	M	Parathion	0.145	0.156	-7.6	108	0.00	10.23
146	I	Chrysene-d12A	1.000	1.000	0.0	106	0.00	14.06
			True	Calc.	% Drift			
150	M	Famphur	50.000	58.242	-16.5	87	-0.02	12.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p123758a.D MP5552ap9.M Thu Jun 21 12:33:32 2018 ACLIMS

8.6.19

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5554-ICV5554
Lab FileID: P123768.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP5553\p123768.D Vial: 24
Acq On : 21 Jun 2018 8:30 am Operator: chriss2
Sample : icv5554-50 Inst : MSVOAMSP
Misc : op9039,ep5554,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\MP5552ap9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Jun 21 12:21:44 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
120	Acenaphthene-d10A	1.000	1.000	0.0	103	0.00	7.00
126 M	m-Dinitrobenzene	0.191	0.229	-19.9	112	0.00	6.76
131 I	Phenanthrene-d10A	1.000	1.000	0.0	110	0.00	8.85
138 M	Diphenylamine	0.568	0.588	-3.5	107	0.00	7.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p123758a.D MP5552ap9.M Thu Jun 21 13:08:29 2018 ACLIMS

8.6.20

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5554-ICV5554
Lab FileID: P123769.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP5554\p123769.D Vial: 10
Acq On : 21 Jun 2018 12:35 pm Operator: chriss2
Sample : icv5554-50 Inst : MSVOAMSP
Misc : op9039,ep5554,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\MP5552ap9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Jun 21 12:21:44 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
101	I	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	117	0.00	4.68
103		Pentachloroethane	0.605	0.508	16.0	101	0.00	4.47
104	M	Methyl methanesulfonate	0.924	0.852	7.8	112	0.00	3.55
107	M	Ethyl methanesulfonate	1.144	1.063	7.1	116	0.00	4.10
111	I	Naphthalene-d8A	1.000	1.000	0.0	125	0.00	5.60
115	M	Hexachloropropene	0.212	0.181	14.6	104	0.00	5.68
118	M	Safrole	0.261	0.243	6.9	118	0.00	6.04
119		Isosafrole	0.200	0.244	-22.0	155	0.00	6.44
120		Acenaphthene-d10A	1.000	1.000	0.0	127	0.00	7.00
			True	Calc.	% Drift			
123	M	Phorate	50.000	44.752	10.5	115	0.00	8.05
			AvgRF	CCRF	% Dev			
124	M	Phenacetin	0.737	0.666	9.6	118	0.00	8.13
125	M	1,4-Naphthoquinone	0.473	0.465	1.7	122	0.00	6.64
127	M	Pentachlorobenzene	0.580	0.468	19.3	108	0.00	7.17
131	I	Phenanthrene-d10A	1.000	1.000	0.0	116	0.00	8.85
139	M	Isodrin	0.131	0.129	1.5	117	0.00	10.71
140	M	Diallate	0.052	0.049#	5.8	114	0.00	8.22
141	M	Pentachloronitrobenzene	0.040	0.039#	2.5	102	0.00	8.60
142	M	Pronamide	0.318	0.307	3.5	110	0.00	8.69
			True	Calc.	% Drift			
143	M	4-Nitroquinoline 1-oxide	50.000	47.135	5.7	100	-0.02	10.21
145	M	sym-Trinitrobenzene	50.000	48.260	3.5	114	0.00	8.05
			AvgRF	CCRF	% Dev			
146	I	Chrysene-d12A	1.000	1.000	0.0	124	0.00	14.07
147		Aramite	0.076	0.078	-2.6	117	0.00	12.10
			True	Calc.	% Drift			
149		Kepone	50.000	51.686	-3.4	91	0.00	12.90
			AvgRF	CCRF	% Dev			
152	M	Chlorobenzilate	0.341	0.314	7.9	110	0.00	12.33
153	I	Perylene-d12A	1.000	1.000	0.0	124	0.00	17.10

8.6.21

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5554-ICV5554
Lab FileID: P123769.D

156	3-Methylcholanthrene	0.204	0.175	14.2	99	0.00	17.70

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p123758a.D MP5552ap9.M Thu Jun 21 12:59:18 2018 ACLIMS

8.6.21

8

Initial Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5579-ICC5579
Lab FileID: P124016.D

Response Factor Report MSVOAMSP

Method : C:\msdchem\1\METHODS\MP5579.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Jul 18 09:36:44 2018
Response via : Initial Calibration

Calibration Files
2 =p124020.D 5 =p124019.D 25 =p124017.D 80 =p124015.D
100 =p124014.D 50 =p124016.D 10 =p124018.D 1 =p124021.D

Compound	2	5	25	80	100	50	10	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.698	0.698	0.683	0.678	0.695	0.673	0.681	0.760	0.696	3.97
3) Pyridine	1.690	1.734	1.608	1.663	1.690	1.707	1.697	1.918	1.713	5.27
4) N-Nitrosodim	0.748	0.763	0.730	0.726	0.754	0.722	0.738	0.801	0.748	3.46
5) 2-Fluorophen	1.479	1.517	1.516	1.523	1.528	1.531	1.550	1.482	1.516	1.61
6) Indene	2.836	2.668	2.280	1.998	1.954	2.121	2.534	2.794	2.398	14.85
7) Cumene	4.104	4.152	3.799	3.406	3.326	3.584	3.988	4.328	3.836	9.60
8) Phenol-d5	1.835	1.884	1.818	1.749	1.735	1.781	1.879	1.775	1.807	3.13
9) Phenol	2.216	2.170	1.970	1.716	1.674	1.857	2.133	2.172	1.988	10.91
10) Aniline	2.531	2.419	1.931	1.547		1.683	2.365	2.536	2.145	19.45
11) bis(2-Chloro	1.455	1.461	1.253	1.177	1.181	1.212	1.375	1.487	1.325	10.07
12) 2-Chlorophen	1.722	1.702	1.573	1.465	1.442	1.515	1.667	1.690	1.597	7.05
13) Decane	1.514	1.465	1.233	1.014	0.976	1.108	1.396	1.570	1.284	18.16
14) 1,3-Dichloro	2.057	1.914	1.705	1.518	1.493	1.593	1.863	2.031	1.772	12.73
15) 1,4-Dichloro	1.944	1.890	1.625	1.467	1.433	1.531	1.763	1.908	1.695	12.25
16) Benzyl alcoh	0.868	0.912	0.898	0.882	0.888	0.909	0.905	0.851	0.889	2.39
17) 1,2-Dichloro	1.860	1.807	1.570	1.404	1.357	1.487	1.707	1.941	1.641	13.35
18) Acetophenone	2.329	2.204	1.863	1.605	1.582	1.712	2.063	2.272	1.954	15.51
19) 2-Methylphen	1.406	1.432	1.189	1.027	0.998	1.107	1.339	1.348	1.231	14.06
20) 2,2'-oxybis(	0.462	0.455	0.382	0.349	0.341	0.364	0.402	0.448	0.400	12.29
21) 3&4-Methylph	1.486	1.453	1.230	1.080	1.033	1.165	1.331	1.378	1.270	13.32
22) n-Nitroso-di	1.029	1.026	0.863	0.697	0.667	0.777	0.979	1.002	0.880	17.07
23) Hexachloroet	0.659	0.623	0.566	0.528	0.523	0.542	0.591	0.640	0.584	9.00
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.434	0.408	0.382	0.353	0.347	0.363	0.407	0.426	0.390	8.61
26) Nitrobenzene	0.435	0.417	0.372	0.330	0.319	0.344	0.404	0.458	0.385	13.31
27) Quinoline	0.823	0.796	0.756	0.721	0.706	0.735	0.791	0.846	0.772	6.49
28) Isophorone	0.686	0.700	0.647	0.592	0.577	0.624	0.686	0.658	0.646	7.01
29) 2-Nitropheno	0.194	0.215	0.221	0.202	0.195	0.208	0.222	0.186	0.205	6.33
30) 2,4-Dimethyl	0.329	0.335	0.316	0.319	0.310	0.317	0.339	0.328	0.324	3.17
31) Benzoic acid		0.187	0.259	0.297	0.297	0.288	0.224		0.259	17.43
32) bis(2-Chloro	0.430	0.406	0.363	0.327	0.322	0.341	0.393	0.439	0.377	12.15
33) 2,4-Dichloro	0.333	0.333	0.312	0.290	0.277	0.302	0.337	0.309	0.312	6.99
34) 2,6-Dichloro	0.318	0.322	0.289	0.257	0.244	0.267	0.313	0.315	0.291	10.60
35) 1,3,5-Trichl	0.462	0.445	0.377	0.320	0.306	0.345	0.421	0.462	0.392	16.26
36) 1,2,4-Trichl	0.436	0.421	0.358	0.320	0.307	0.336	0.399	0.452	0.379	14.72
37) 1,2,3-Trichl	0.400	0.398	0.339	0.294	0.283	0.312	0.374	0.432	0.354	15.50
38) Naphthalene	1.236	1.180	1.038	0.923	0.887	0.968	1.141	1.318	1.086	14.37
39) 4-Chloroanil	0.518	0.507	0.459	0.389	0.368	0.408	0.502	0.498	0.456	13.10
40) 2,3-Dichloro	0.456	0.430	0.370	0.331	0.316	0.345	0.409	0.419	0.384	13.34
41) Caprolactam	0.148	0.153	0.156	0.149	0.148	0.150	0.160	0.126	0.149	6.82
42) Hexachlorobu	0.243	0.221	0.195	0.177	0.174	0.185	0.210	0.243	0.206	13.47
43) 4-Chloro-3-m	0.320	0.327	0.324	0.305	0.293	0.314	0.330	0.280	0.312	5.79
44) 2-Methylnaph	0.733	0.703	0.635	0.556	0.531	0.587	0.679	0.740	0.645	12.56
45) 1-Methylnaph	0.884	0.843	0.758	0.675	0.644	0.705	0.821	0.910	0.780	12.73

Initial Calibration Summary

Job Number: JC71604 **Sample:** EP5579-ICC5579
Account: TCMAW Tantara Corporation **Lab FileID:** P124016.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

46) Dimethylnaph 0.747 0.739 0.654 0.583 0.557 0.607 0.709 0.744 0.667 11.63

47) I Acenaphthene-d10 ----------ISTD----------
48) Hexachlorocy 0.345 0.402 0.415 0.371 0.361 0.392 0.416 0.334 0.380 8.34
49) 2,4,6-Trichl 0.490 0.491 0.451 0.392 0.378 0.417 0.486 0.454 0.445 10.02
50) 2,4,5-Trichl 0.536 0.524 0.491 0.445 0.438 0.466 0.517 0.477 0.487 7.52
51) 2-Fluorobiph 1.927 1.799 1.542 1.342 1.310 1.416 1.696 1.960 1.624 15.93
52) 2-Chloronaph 1.651 1.603 1.328 1.135 1.112 1.224 1.506 1.743 1.413 17.36
53) Biphenyl 2.328 2.165 1.858 1.617 1.562 1.711 2.019 2.299 1.945 15.58
54) 2-Nitroanili 0.372 0.421 0.398 0.372 0.365 0.387 0.417 0.324 0.382 8.23
55) Dimethylphth 1.718 1.699 1.547 1.423 1.373 1.458 1.630 1.763 1.576 9.37
56) Acenaphthyle 2.460 2.427 2.253 1.974 1.934 2.107 2.397 2.451 2.250 9.71
57) 2,6-Dinitrot 0.314 0.334 0.354 0.332 0.332 0.345 0.358 0.265 0.329 8.92
58) 3-Nitroanili 0.405 0.429 0.436 0.408 0.406 0.420 0.460 0.352 0.414 7.55
59) Acenaphthene 1.684 1.577 1.375 1.207 1.181 1.281 1.492 1.651 1.431 13.87
60) 2,4-Dinitrop 0.040 0.090 0.181 0.198 0.198 0.197 0.141 0.149 41.94
---- Quadratic regression ---- Coefficient = 0.9998
Response Ratio = -0.02612 + 0.20639 *A + -0.00057 *A^2

61) 4-Nitropheno 0.171 0.188 0.222 0.221 0.220 0.221 0.220 0.209 9.93
62) Dibenzofuran 2.424 2.210 1.936 1.695 1.639 1.797 2.126 2.401 2.029 15.16
63) 2,4-Dinitrot 0.431 0.470 0.486 0.464 0.457 0.473 0.508 0.312 0.450 13.37
64) 2,3,4,6-Tetr 0.383 0.411 0.428 0.416 0.414 0.415 0.431 0.332 0.404 8.04
65) Diethylphtha 1.786 1.666 1.585 1.458 1.401 1.513 1.673 1.674 1.595 8.11
66) Fluorene 1.754 1.723 1.534 1.305 1.256 1.405 1.689 1.764 1.554 13.41
67) 4-Chlorophen 0.907 0.836 0.738 0.642 0.619 0.681 0.804 0.872 0.762 14.22
68) 4-Nitroanili 0.425 0.446 0.421 0.400 0.400 0.409 0.448 0.334 0.410 8.75

69) I Phenanthrene-d10 ----------ISTD----------
70) 4,6-Dinitro- 0.054 0.095 0.137 0.147 0.145 0.145 0.120 0.120 28.96
---- Quadratic regression ---- Coefficient = 0.9998
Response Ratio = -0.00706 + 0.15257 *A + -0.00179 *A^2

71) n-Nitrosodip 0.620 0.636 0.575 0.533 0.520 0.549 0.614 0.589 0.579 7.36
72) 1,2-Diphenyl 0.804 0.776 0.708 0.637 0.619 0.673 0.775 0.750 0.718 9.63
73) 2,4,6-Tribro 0.104 0.124 0.130 0.128 0.129 0.130 0.128 0.088 0.120 12.97
74) 4-Bromopheny 0.248 0.246 0.241 0.235 0.230 0.240 0.245 0.243 0.241 2.42
75) Hexachlorobe 0.316 0.287 0.266 0.251 0.246 0.257 0.288 0.315 0.278 9.88
76) Pentachlorop 0.103 0.138 0.168 0.163 0.163 0.168 0.158 0.152 15.63
77) Phenanthrene 1.343 1.257 1.130 1.030 1.003 1.074 1.214 1.372 1.178 11.92
78) Anthracene 1.255 1.262 1.149 1.048 1.020 1.093 1.253 1.180 1.157 8.33
79) Carbazole 1.144 1.154 1.082 1.007 0.976 1.037 1.160 1.039 1.075 6.62
80) Di-n-butylph 1.067 1.235 1.361 1.292 1.258 1.330 1.342 0.899 1.223 13.12
81) Fluoranthene 1.211 1.276 1.305 1.228 1.182 1.270 1.329 1.154 1.244 4.89
82) Octadecane 0.432 0.465 0.466 0.411 0.394 0.435 0.486 0.399 0.436 7.73

83) I Chrysene-d12 ----------ISTD----------
84) Pyrene 1.399 1.463 1.383 1.363 1.346 1.369 1.456 1.382 1.395 3.06
85) Terphenyl-d1 0.907 0.972 0.956 0.972 0.962 0.957 0.975 0.886 0.949 3.50
86) Butylbenzylp 0.351 0.475 0.594 0.629 0.633 0.618 0.553 0.550 18.89
87) Benzo[a]anth 1.170 1.226 1.267 1.303 1.296 1.280 1.254 1.204 1.250 3.73
88) 3,3'-Dichlor 0.290 0.372 0.434 0.455 0.444 0.450 0.410 0.408 14.58
89) Chrysene 1.360 1.313 1.199 1.155 1.150 1.164 1.285 1.403 1.254 7.95
90) bis(2-Ethylh 0.381 0.558 0.780 0.827 0.820 0.813 0.697 0.273 0.643 33.68
---- Quadratic regression ---- Coefficient = 0.9999
Response Ratio = -0.02694 + 0.83497 *A + -0.00054 *A^2

91) I Perylene-d12 ----------ISTD----------
92) Di-n-octylph 0.440 0.727 1.259 1.350 1.343 1.342 1.009 0.428 0.987 40.85

Initial Calibration Summary

Job Number: JC71604 **Sample:** EP5579-ICC5579
Account: TCMAW Tantara Corporation **Lab FileID:** P124016.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

```
             ---- Quadratic regression ----  Coefficient =  0.9997
               Response Ratio = -0.06088 + 1.38376 *A + -0.00496 *A^2

 93) Benzo[b]fluo 1.025 1.200 1.299 1.232 1.236 1.254 1.300 0.990 1.192   9.98
 94) Benzo[k]fluo 1.225 1.341 1.205 1.128 1.091 1.181 1.304 1.157 1.204   7.05
 95) Benzo[a]pyre 0.815 1.005 1.118 1.116 1.096 1.114 1.117 1.011 1.049  10.07
 96) Indeno[1,2,3 0.676 0.847 1.070 1.100 1.081 1.088 0.997 0.590 0.931  21.78
             ---- Linear regression ----  Coefficient =  0.9998
               Response Ratio = -0.01978 + 1.09810 *A

 97) Dibenz(a,h)a 0.535 0.755 1.022 1.055 1.046 1.050 0.937 0.440 0.855  29.13
             ---- Quadratic regression ----  Coefficient =  0.9999
               Response Ratio = -0.03053 + 1.08630 *A + -0.01045 *A^2

 98) Dibenz[a,h]a 0.826 0.993 1.127 1.102 1.092 1.127 1.113 0.637 1.002  17.92
 99) 7,12-Dimethy 0.365 0.459 0.541 0.520 0.515 0.533 0.535 0.356 0.478  16.07
100) Benzo[g,h,i] 0.900 1.055 1.101 1.111 1.101 1.121 1.100 0.787 1.034  11.90
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          MP5579.M          Wed Jul 18 10:16:00 2018   ACLIMS
```

8.6.22

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5579-ICV5579
Lab FileID: P124022.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP5579\p124022.D Vial: 11
Acq On : 17 Jul 2018 1:57 pm Operator: christc2
Sample : icv5579-50 Inst : MSVOAMSP
Misc : op9039,ep5579,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\MP5579.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Jul 18 09:36:44 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	85	0.00	4.58
2	t	1,4-Dioxane	0.696	0.623	10.5	79	0.00	2.12
3	t	Pyridine	1.713	1.631	4.8	81	0.00	2.44
4	t	N-Nitrosodimethylamine	0.748	0.688	8.0	81	0.00	2.41
9	t	Phenol	1.988	1.727	13.1	79	0.00	4.33
10	t	Aniline	2.145	1.941	9.5	98	0.00	4.34
11	t	bis(2-Chloroethyl)ether	1.325	1.171	11.6	82	0.00	4.39
12	t	2-Chlorophenol	1.597	1.384	13.3	78	0.00	4.43
14	t	1,3-Dichlorobenzene	1.772	1.550	12.5	83	0.00	4.54
15	t	1,4-Dichlorobenzene	1.695	1.463	13.7	81	0.00	4.59
16	t	Benzyl alcohol	0.889	0.871	2.0	82	0.00	4.68
17	t	1,2-Dichlorobenzene	1.641	1.398	14.8	80	0.00	4.70
18	t	Acetophenone	1.954	1.642	16.0	82	0.00	4.87
19	t	2-Methylphenol	1.231	1.172	4.8	90	0.00	4.77
20	t	2,2'-oxybis(1-Chloropropa	0.400	0.387	3.3	91	0.00	4.78
21	t	3&4-Methylphenol	1.270	1.121	11.7	82	0.00	4.88
22		n-Nitroso-di-n-propylamin	0.880	0.734	16.6	80	0.00	4.87
23	t	Hexachloroethane	0.584	0.512	12.3	80	0.00	4.95
24	I	Naphthalene-d8	1.000	1.000	0.0	84	0.00	5.50
26	t	Nitrobenzene	0.385	0.328	14.8	80	0.00	5.00
28	t	Isophorone	0.646	0.624	3.4	84	0.00	5.17
29	t	2-Nitrophenol	0.205	0.192	6.3	77	0.00	5.23
30	t	2,4-Dimethylphenol	0.324	0.340	-4.9	90	0.00	5.26
32	t	bis(2-Chloroethoxy)methan	0.377	0.383	-1.6	94	0.00	5.32
33	t	2,4-Dichlorophenol	0.312	0.285	8.7	79	0.00	5.40
34		2,6-Dichlorophenol	0.291	0.256	12.0	80	0.00	5.56
36	t	1,2,4-Trichlorobenzene	0.379	0.328	13.5	81	0.00	5.46
38	t	Naphthalene	1.086	0.949	12.6	82	0.00	5.52
39	t	4-Chloroaniline	0.456	0.408	10.5	83	0.00	5.55
41	t	Caprolactam	0.149	0.142	4.7	79	-0.02	5.79
42	t	Hexachlorobutadiene	0.206	0.173	16.0	78	0.00	5.61
43	t	4-Chloro-3-methylphenol	0.312	0.288	7.7	77	0.00	5.90
44	t	2-Methylnaphthalene	0.645	0.560	13.2	80	0.00	6.01
45	t	1-Methylnaphthalene	0.780	0.648	16.9	77	0.00	6.08
47	I	Acenaphthene-d10	1.000	1.000	0.0	83	0.00	6.87
48	t	Hexachlorocyclopentadiene	0.380	0.403	-6.1	75	0.00	6.13
49	t	2,4,6-Trichlorophenol	0.445	0.412	7.4	81	0.00	6.22
50	t	2,4,5-Trichlorophenol	0.487	0.432	11.3	77	0.00	6.25
52	t	2-Chloronaphthalene	1.413	1.215	14.0	82	0.00	6.38
53	t	Biphenyl	1.945	1.591	18.2	77	0.00	6.37

Initial Calibration Verification

Job Number: JC71604 **Sample:** EP5579-ICV5579
Account: TCMAW Tantara Corporation **Lab FileID:** P124022.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

54	t	2-Nitroaniline	0.382	0.392	-2.6	84	0.00	6.46
55	t	Dimethylphthalate	1.576	1.377	12.6	78	0.00	6.62
56	t	Acenaphthylene	2.250	1.908	15.2	75	0.00	6.74
57	t	2,6-Dinitrotoluene	0.329	0.324	1.5	78	0.00	6.67
58	t	3-Nitroaniline	0.414	0.386	6.8	76	0.00	6.82
59	t	Acenaphthene	1.431	1.198	16.3	77	0.00	6.90
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	43.635	12.7	67	0.00	6.92
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.209	0.196	6.2	73	0.00	6.99
62	t	Dibenzofuran	2.029	1.682	17.1	77	0.00	7.07
63	t	2,4-Dinitrotoluene	0.450	0.424	5.8	74	0.00	7.05
64		2,3,4,6-Tetrachlorophenol	0.404	0.381	5.7	76	0.00	7.20
65	t	Diethylphthalate	1.595	1.428	10.5	78	0.00	7.32
66	t	Fluorene	1.554	1.350	13.1	79	0.00	7.44
67	t	4-Chlorophenyl-phenylethe	0.762	0.664	12.9	80	0.00	7.44
68	t	4-Nitroaniline	0.410	0.386	5.9	78	0.00	7.46
69	I	Phenanthrene-d10	1.000	1.000	0.0	84	0.00	8.68
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	38.254	23.5	64	0.00	7.50
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.579	0.600	-3.6	92	0.00	7.58
72	t	1,2-Diphenylhydrazine	0.718	0.642	10.6	80	0.00	7.63
74	t	4-Bromophenyl-phenylether	0.241	0.210	12.9	73	0.00	8.05
75	t	Hexachlorobenzene	0.278	0.231	16.9	76	0.00	8.13
76	t	Pentachlorophenol	0.152	0.147	3.3	68	0.00	8.41
77	t	Phenanthrene	1.178	1.036	12.1	81	0.00	8.72
78	t	Anthracene	1.157	1.069	7.6	82	0.00	8.79
79	t	Carbazole	1.075	0.991	7.8	80	0.00	9.06
80	t	Di-n-butylphthalate	1.223	1.237	-1.1	78	0.00	9.75
81	t	Fluoranthene	1.244	1.168	6.1	77	0.00	10.79
83	I	Chrysene-d12	1.000	1.000	0.0	81	0.00	13.84
84	t	Pyrene	1.395	1.261	9.6	74	0.00	11.23
86	t	Butylbenzylphthalate	0.550	0.570	-3.6	75	0.00	12.82
87	t	Benzo[a]anthracene	1.250	1.233	1.4	78	0.00	13.82
88	t	3,3'-Dichlorobenzidine	0.408	0.422	-3.4	76	0.00	13.87
89	t	Chrysene	1.254	1.106	11.8	77	0.00	13.90
		----------	True	Calc.	% Drift	----------		
90	t	bis(2-Ethylhexyl)phthalat	50.000	46.485	7.0	75	0.00	14.23
		----------	AvgRF	CCRF	% Dev	----------		
91	I	Perylene-d12	1.000	1.000	0.0	82	0.00	16.85
		----------	True	Calc.	% Drift	----------		
92	t	Di-n-octylphthalate	50.000	44.634	10.7	72	0.00	15.66
		----------	AvgRF	CCRF	% Dev	----------		
93	t	Benzo[b]fluoranthene	1.192	1.195	-0.3	78	0.00	16.11
94	t	Benzo[k]fluoranthene	1.204	1.089	9.6	76	0.00	16.17
95	t	Benzo[a]pyrene	1.049	1.108	-5.6	82	0.00	16.73
		----------	True	Calc.	% Drift	----------		

8.6.23

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5579-ICV5579
Lab FileID: P124022.D

96	t	Indeno[1,2,3-cd]pyrene	50.000	46.271	7.5	75	0.00	18.79
97	t	Dibenz(a,h)acridine	50.000	44.608	10.8	73	0.09	18.51
			AvgRF	CCRF	% Dev			
98	t	Dibenz[a,h]anthracene	1.002	1.029	-2.7	75	0.00	18.84
99	t	7,12-Dimethylbenz(a)anthr	0.478	0.525	-9.8	81	0.00	16.14
100	t	Benzo[g,h,i]perylene	1.034	1.104	-6.8	81	0.00	19.21

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p124016a.D MP5579.M Wed Jul 18 10:12:48 2018 ACLIMS

8.6.23

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5579-ICV5579
Lab FileID: P124023.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP5579\p124023.D Vial: 12
Acq On : 17 Jul 2018 2:25 pm Operator: christc2
Sample : icv5579-50 Inst : MSVOAMSP
Misc : op9039,ep5579,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\MP5579.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Jul 18 09:36:44 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
24 I	Naphthalene-d8	1.000	1.000	0.0	105	0.00	5.50
31 t	Benzoic acid	0.259	0.247	4.6	90	0.00	5.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p124016a.D MP5579.M Wed Jul 18 10:12:50 2018 ACLIMS

8.6.24

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5579-ICV5579
Lab FileID: P124024A.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP5579\p124024a.D Vial: 13
Acq On : 17 Jul 2018 3:57 pm Operator: christc2
Sample : icv5579-50 Inst : MSVOAMSP
Misc : op9039,ep5579,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\MP5579.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Jul 18 09:36:44 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	4.58
6	t	Indene	2.398	2.286	4.7	111	0.00	4.77
7	t	Cumene	3.836	2.977	22.4	85	0.00	3.99
13	t	Decane	1.284	1.004	21.8	93	0.00	4.47
24	I	Naphthalene-d8	1.000	1.000	0.0	106	0.00	5.49
27	t	Quinoline	0.772	0.654	15.3	94	-0.01	5.75
40	t	2,3-Dichloroaniline	0.384	0.303	21.1	93	0.00	6.22
46	t	Dimethylnaphthalene	0.667	0.552	17.2	96	0.00	6.49
69	I	Phenanthrene-d10	1.000	1.000	0.0	96	0.00	8.67
82	t	Octadecane	0.436	0.426	2.3	94	0.00	8.59

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p124016a.D MP5579.M Wed Jul 18 10:12:52 2018 ACLIMS

8.6.25

8

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5580-ICV5579
Lab FileID: P124026.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EP5580\p124026.D Vial: 2
Acq On : 18 Jul 2018 10:24 am Operator: seanb1
Sample : icv5579-50 Inst : MSVOAMSP
Misc : op9039,ep5580,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP5579.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Jul 18 09:36:44 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	135	0.00	4.58
5	S	2-Fluorophenol	1.516	1.407	7.2	124	0.00	3.60
8	S	Phenol-d5	1.807	1.699	6.0	129	0.00	4.32
24	I	Naphthalene-d8	1.000	1.000	0.0	140	0.00	5.49
25	S	Nitrobenzene-d5	0.390	0.350	10.3	135	0.00	4.98
47	I	Acenaphthene-d10	1.000	1.000	0.0	137	0.00	6.87
51	S	2-Fluorobiphenyl	1.624	1.387	14.6	134	0.00	6.28
69	I	Phenanthrene-d10	1.000	1.000	0.0	136	0.00	8.67
73	S	2,4,6-Tribromophenol	0.120	0.114	5.0	120	0.00	7.72
83	I	Chrysene-d12	1.000	1.000	0.0	127	-0.01	13.83
85	S	Terphenyl-d14	0.949	0.990	-4.3	132	0.00	11.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p124016a.D MP5579.M Wed Jul 18 10:47:45 2018 ACLIMS

8.6.26

8

Continuing Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5612-CC5579
Lab FileID: P124720.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ep5612\p124720.d Vial: 2
Acq On : 10 Aug 2018 10:11 pm Operator: chriss2
Sample : cc5579-50 Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP5579.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Aug 12 23:09:03 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	4.37
2	t	1,4-Dioxane	0.696	0.569	18.2	83	-0.19	1.83
3	t	Pyridine	1.713	1.480	13.6	85	-0.15	2.17
4	t	N-Nitrosodimethylamine	0.748	0.502	32.9#	69	-0.16	2.13
5	S	2-Fluorophenol	1.516	1.370	9.6	88	-0.03	3.40
6	t	Indene	2.398	2.079	13.3	97	0.01	4.56
7	t	Cumene	3.836	3.147	18.0	87	-0.04	3.77
8	S	Phenol-d5	1.807	1.510	16.4	84	0.03	4.14
9	t	Phenol	1.988	1.723	13.3	91	0.02	4.15
10	t	Aniline	2.145	1.706	20.5#	100	0.00	4.13
11	t	bis(2-Chloroethyl)ether	1.325	1.066	19.5	87	0.00	4.18
12	t	2-Chlorophenol	1.597	1.399	12.4	91	0.00	4.23
13	t	Decane	1.284	0.912	29.0#	81	0.00	4.26
14	t	1,3-Dichlorobenzene	1.772	1.566	11.6	97	0.00	4.33
15	t	1,4-Dichlorobenzene	1.695	1.505	11.2	97	0.00	4.38
16	t	Benzyl alcohol	0.889	0.828	6.9	90	0.02	4.48
17	t	1,2-Dichlorobenzene	1.641	1.432	12.7	95	0.01	4.50
18	t	Acetophenone	1.954	1.701	12.9	98	0.02	4.67
19	t	2-Methylphenol	1.231	1.094	11.1	97	0.03	4.58
20	t	2,2'-oxybis(1-Chloropropa	0.400	0.329	17.8	89	0.01	4.58
21	t	3&4-Methylphenol	1.270	1.155	9.1	98	0.04	4.69
22		n-Nitroso-di-n-propylamin	0.880	0.767	12.8	97	0.02	4.67
23	t	Hexachloroethane	0.584	0.541	7.4	98	0.01	4.74
24	I	Naphthalene-d8	1.000	1.000	0.0	93	0.00	5.29
25	S	Nitrobenzene-d5	0.390	0.319	18.2	82	-0.01	4.77
26	t	Nitrobenzene	0.385	0.315	18.2	85	-0.01	4.79
27	t	Quinoline	0.772	0.752	2.6	95	0.02	5.55
28	t	Isophorone	0.646	0.583	9.8	87	0.00	4.96
29	t	2-Nitrophenol	0.205	0.221	-7.8	99	0.00	5.02
30	t	2,4-Dimethylphenol	0.324	0.317	2.2	93	0.01	5.07
31	t	Benzoic acid	0.259	0.274	-5.8	88	0.03	5.17
32	t	bis(2-Chloroethoxy)methan	0.377	0.324	14.1	88	0.00	5.12
33	t	2,4-Dichlorophenol	0.312	0.326	-4.5	100	0.01	5.20
34		2,6-Dichlorophenol	0.291	0.298	-2.4	104	0.01	5.36
35		1,3,5-Trichlorobenzene	0.392	0.374	4.6	101	-0.01	5.02
36	t	1,2,4-Trichlorobenzene	0.379	0.352	7.1	97	0.00	5.25
37		1,2,3-Trichlorobenzene	0.354	0.329	7.1	98	0.00	5.41
38	t	Naphthalene	1.086	0.968	10.9	93	0.00	5.30
39	t	4-Chloroaniline	0.456	0.432	5.3	98	0.01	5.35
40	t	2,3-Dichloroaniline	0.384	0.394	-2.6	106	0.02	6.00
41	t	Caprolactam	0.149	0.124	16.8	77	0.02	5.60

8.6.27

8

Continuing Calibration Summary

Job Number: JC71604 **Sample:** EP5612-CC5579
Account: TCMAW Tantara Corporation **Lab FileID:** P124720.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

42	t	Hexachlorobutadiene	0.206	0.192	6.8	96	0.00	5.39
43	t	4-Chloro-3-methylphenol	0.312	0.316	-1.3	93	0.04	5.71
44	t	2-Methylnaphthalene	0.645	0.624	3.3	99	0.02	5.79
45	t	1-Methylnaphthalene	0.780	0.725	7.1	96	0.02	5.86
46	t	Dimethylnaphthalene	0.667	0.649	2.7	99	0.01	6.25
47	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00	6.61
48	t	Hexachlorocyclopentadiene	0.380	0.377	0.8	97	0.01	5.91
49	t	2,4,6-Trichlorophenol	0.445	0.438	1.6	105	0.03	6.01
50	t	2,4,5-Trichlorophenol	0.487	0.483	0.8	104	0.00	6.04
51	S	2-Fluorobiphenyl	1.624	1.430	11.9	101	0.01	6.06
52	t	2-Chloronaphthalene	1.413	1.209	14.4	99	0.01	6.15
53	t	Biphenyl	1.945	1.661	14.6	97	0.01	6.13
54	t	2-Nitroaniline	0.382	0.331	13.4	86	0.02	6.23
55	t	Dimethylphthalate	1.576	1.496	5.1	103	0.02	6.38
56	t	Acenaphthylene	2.250	2.084	7.4	99	0.00	6.48
57	t	2,6-Dinitrotoluene	0.329	0.356	-8.2	104	0.01	6.42
58	t	3-Nitroaniline	0.414	0.415	-0.2	99	0.02	6.58
59	t	Acenaphthene	1.431	1.294	9.6	101	0.00	6.64
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	100.000	109.276	-9.3	109	0.02	6.68
			AvgRF	CCRF	% Dev			
61	t	4-Nitrophenol	0.209	0.179	14.4	81	0.00	6.77
62	t	Dibenzofuran	2.029	1.846	9.0	103	0.00	6.80
63	t	2,4-Dinitrotoluene	0.450	0.459	-2.0	97	0.01	6.79
64		2,3,4,6-Tetrachlorophenol	0.404	0.435	-7.7	105	0.01	6.93
65	t	Diethylphthalate	1.595	1.453	8.9	96	0.00	7.03
66	t	Fluorene	1.554	1.472	5.3	105	0.00	7.15
67	t	4-Chlorophenyl-phenylethe	0.762	0.748	1.8	110	0.00	7.15
68	t	4-Nitroaniline	0.410	0.386	5.9	95	0.00	7.18
69	I	Phenanthrene-d10	1.000	1.000	0.0	109	0.00	8.32
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylpheno	50.000	49.536	0.9	107	0.03	7.21
			AvgRF	CCRF	% Dev			
71	t	n-Nitrosodiphenylamine	0.579	0.522	9.8	103	0.02	7.28
72	t	1,2-Diphenylhydrazine	0.718	0.534	25.6#	86	0.01	7.32
73	S	2,4,6-Tribromophenol	0.120	0.132	-10.0	110	0.01	7.42
74	t	4-Bromophenyl-phenylether	0.241	0.233	3.3	106	0.00	7.72
75	t	Hexachlorobenzene	0.278	0.262	5.8	110	0.00	7.80
76	t	Pentachlorophenol	0.152	0.161	-5.9	104	0.02	8.08
77	t	Phenanthrene	1.178	1.001	15.0	101	0.00	8.35
78	t	Anthracene	1.157	1.037	10.4	103	0.00	8.43
79	t	Carbazole	1.075	1.028	4.4	108	0.02	8.69
80	t	Di-n-butylphthalate	1.223	1.240	-1.4	101	0.02	9.36
81	t	Fluoranthene	1.244	1.261	-1.4	108	0.02	10.37
82	t	Octadecane	0.436	0.326	25.2#	81	0.00	8.24
83	I	Chrysene-d12	1.000	1.000	0.0	117	0.01	13.38
84	t	Pyrene	1.395	1.226	12.1	105	-0.05	10.79
85	S	Terphenyl-d14	0.949	0.878	7.5	108	-0.04	11.22
86	t	Butylbenzylphthalate	0.550	0.543	1.3	103	0.00	12.38
87	t	Benzo[a]anthracene	1.250	1.151	7.9	105	0.01	13.36
88	t	3,3'-Dichlorobenzidine	0.408	0.434	-6.4	113	0.03	13.42
89	t	Chrysene	1.254	1.033	17.6	104	0.01	13.44

Continuing Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5612-CC5579
Lab FileID: P124720.D

			True	Calc.	% Drift			
90	t	bis(2-Ethylhexyl)phthalat	50.000	44.876	10.2	105	0.04	13.78

			AvgRF	CCRF	% Dev			
91	I	Perylene-d12	1.000	1.000	0.0	126	0.01	16.38

			True	Calc.	% Drift			
92	t	Di-n-octylphthalate	50.000	43.393	13.2	108	0.00	15.21

			AvgRF	CCRF	% Dev			
93	t	Benzo[b]fluoranthene	1.192	1.105	7.3	111	0.00	15.64
94	t	Benzo[k]fluoranthene	1.204	1.006	16.4	107	0.00	15.71
95	t	Benzo[a]pyrene	1.049	0.997	5.0	113	0.01	16.27

			True	Calc.	% Drift			
96	t	Indeno[1,2,3-cd]pyrene	50.000	44.501	11.0	111	0.07	18.32
97	t	Dibenz(a,h)acridine	50.000	45.041	9.9	113	0.06	17.96

			AvgRF	CCRF	% Dev			
98	t	Dibenz[a,h]anthracene	1.002	1.001	0.1	112	0.01	18.37
99	t	7,12-Dimethylbenz(a)anthr	0.478	0.486	-1.7	115	0.00	15.67
100	t	Benzo[g,h,i]perylene	1.034	0.969	6.3	109	0.08	18.74

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p124016a.D MP5579.M Sun Aug 12 23:38:32 2018

8.6.27

8

Continuing Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EP5612-CC5554
Lab FileID: P124723A.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ep5612\p124723a.d Vial: 5
Acq On : 10 Aug 2018 11:34 pm Operator: chriss2
Sample : cc5553-50 Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\methods\mp5579ap9.m (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Aug 12 23:26:03 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
131 I	Phenanthrene-d10A	1.000	1.000	0.0	78	0.00	8.32
141 M	Pentachloronitrobenzene	0.040	0.044	-10.0	88	0.00	8.09

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p124016a.D mp5579ap9.m Sun Aug 12 23:36:47 2018

8.6.28

8

Continuing Calibration Summary

Job Number: JC71604 **Sample:** EP5612-CC5553
Account: TCMAW Tantara Corporation **Lab FileID:** P124723.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ep5612\p124723.d Vial: 5
Acq On : 10 Aug 2018 11:34 pm Operator: chriss2
Sample : cc5553-50 Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP5579.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Aug 12 23:09:03 2018
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
101 I	1,4-Dichlorobenzene-d4b	1.000	1.000	0.0	64	0.00	4.37
102	Benzaldehyde	1.281	1.026	19.9	54	-0.02	4.04
103 I	Phenanthrene-d10b	1.000	1.000	0.0	68	0.00	8.32
104	Atrazine	0.213	0.218	-2.3	71	0.02	7.96
105 I	Chrysene-d12b	1.000	1.000	0.0	74	0.00	13.37
106	Benzidine	0.715	0.728	-1.8	70	-0.06	10.71
107 I	Naphthalene-d8b	1.000	1.000	0.0	64	0.00	5.29
108	Hydroquinone		----------NA----------				
109 I	Acenaphthene-d10b	1.000	1.000	0.0	66	0.00	6.61
110	1,2,4,5-Tetrachlorobenzen	0.621	0.684	-10.1	77	0.00	5.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
p124016a.D MP5579.M Sun Aug 12 23:41:38 2018

8.6.29

8

MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81787.D
Acq On : 15 Aug 2018 3:17 pm
Operator : angelar
Sample : jc71604-1
Misc : op14177,e2p3603,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 16 10:25:04 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.957	152	667282	40.00	ppm	-0.02
24) Naphthalene-d8	6.005	136	2516579	40.00	ppm	-0.02
47) Acenaphthene-d10	7.454	164	1219112	40.00	ppm	-0.02
69) Phenanthrene-d10	8.808	188	2225600	40.00	ppm	-0.01
83) Chrysene-d12	12.199	240	2104879	40.00	ppm	0.00
91) Perylene-d12	14.226	264	1739087	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.957	152	667282	40.00	ppm	-0.01
103) Naphthalene-d8a	6.005	136	2516579	40.00	ppm	-0.02
105) Acenaphthene-d10a	7.454	164	1219112	40.00	ppm	-0.01
108) Chrysene-d12a	12.199	240	2104879	40.00	ppm	0.00
110) Phenanthrene-d10a	8.808	188	2225600	40.00	ppm	-0.01
114) Chrysene-d12b	12.199	240	2104879	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.887	112	462185	19.37	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 38.74%			
8) Phenol-d5	4.678	99	417366	13.89	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 27.78%			
25) Nitrobenzene-d5	5.411	82	956084	35.20	ppm	-0.02
Spiked Amount 50.000	Range 19 - 61		Recovery = 70.40%#			
51) 2-Fluorobiphenyl	6.893	172	1641235	34.51	ppm	-0.02
Spiked Amount 50.000	Range 21 - 58		Recovery = 69.02%#			
73) 2,4,6-Tribromophenol	8.134	330	249605	40.21	ppm	-0.02
Spiked Amount 50.000	Range 12 - 68		Recovery = 80.42%#			
85) Terphenyl-d14	10.722	244	1844657	38.91	ppm	-0.01
Spiked Amount 50.000	Range 16 - 65		Recovery = 77.82%#			
111) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			

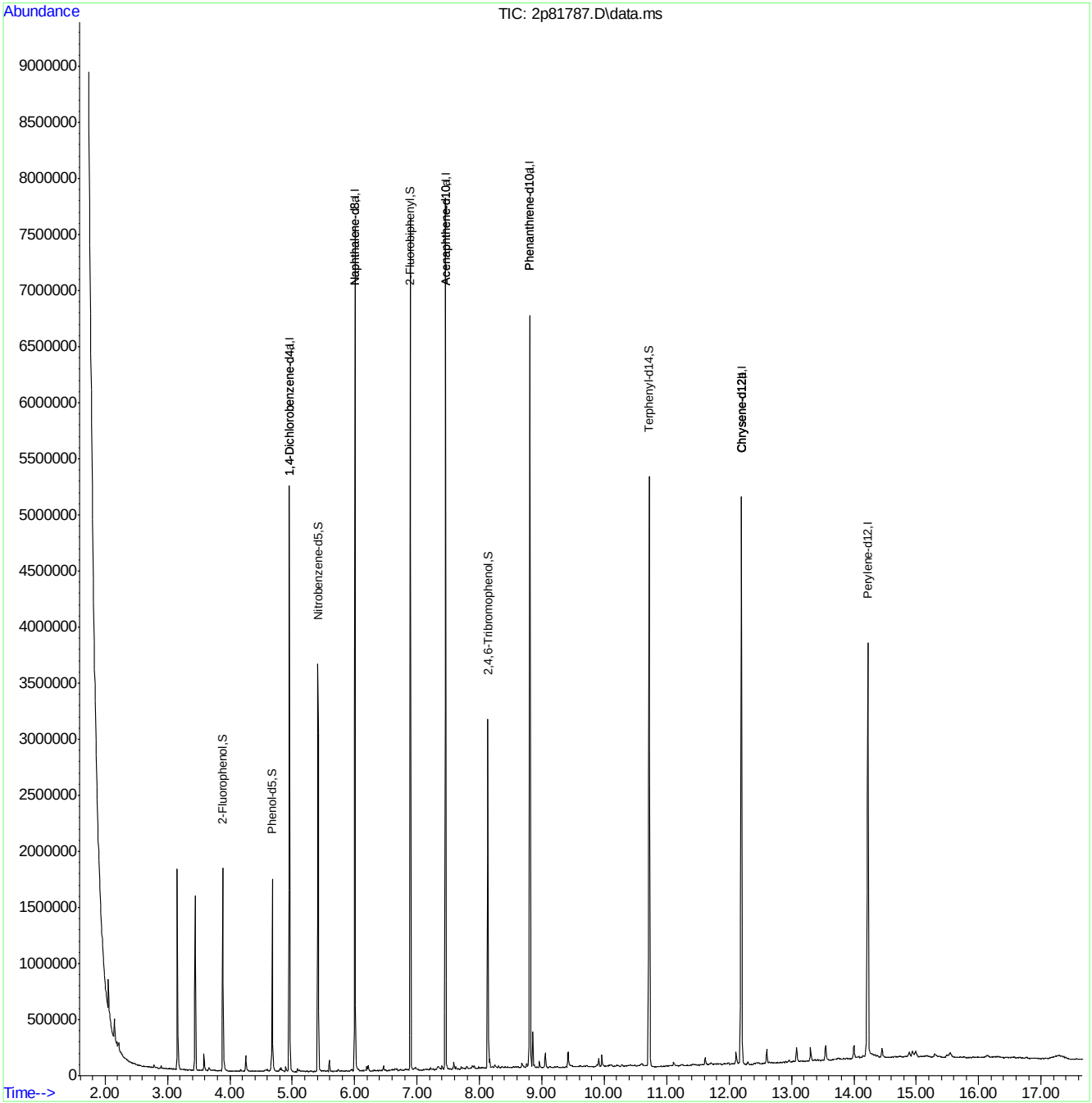
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81787.D
Acq On : 15 Aug 2018 3:17 pm
Operator : angelar
Sample : jc71604-1
Misc : op14177,e2p3603,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 16 10:25:04 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124725.d
Acq On : 11 Aug 2018 12:30 am
Operator : chriss2
Sample : op14177-mb Inst : MSVOAMSP
Misc : op14177,ep5612,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 13 01:00:47 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Aug 13 00:06:35 2018
Response via : Initial Calibration

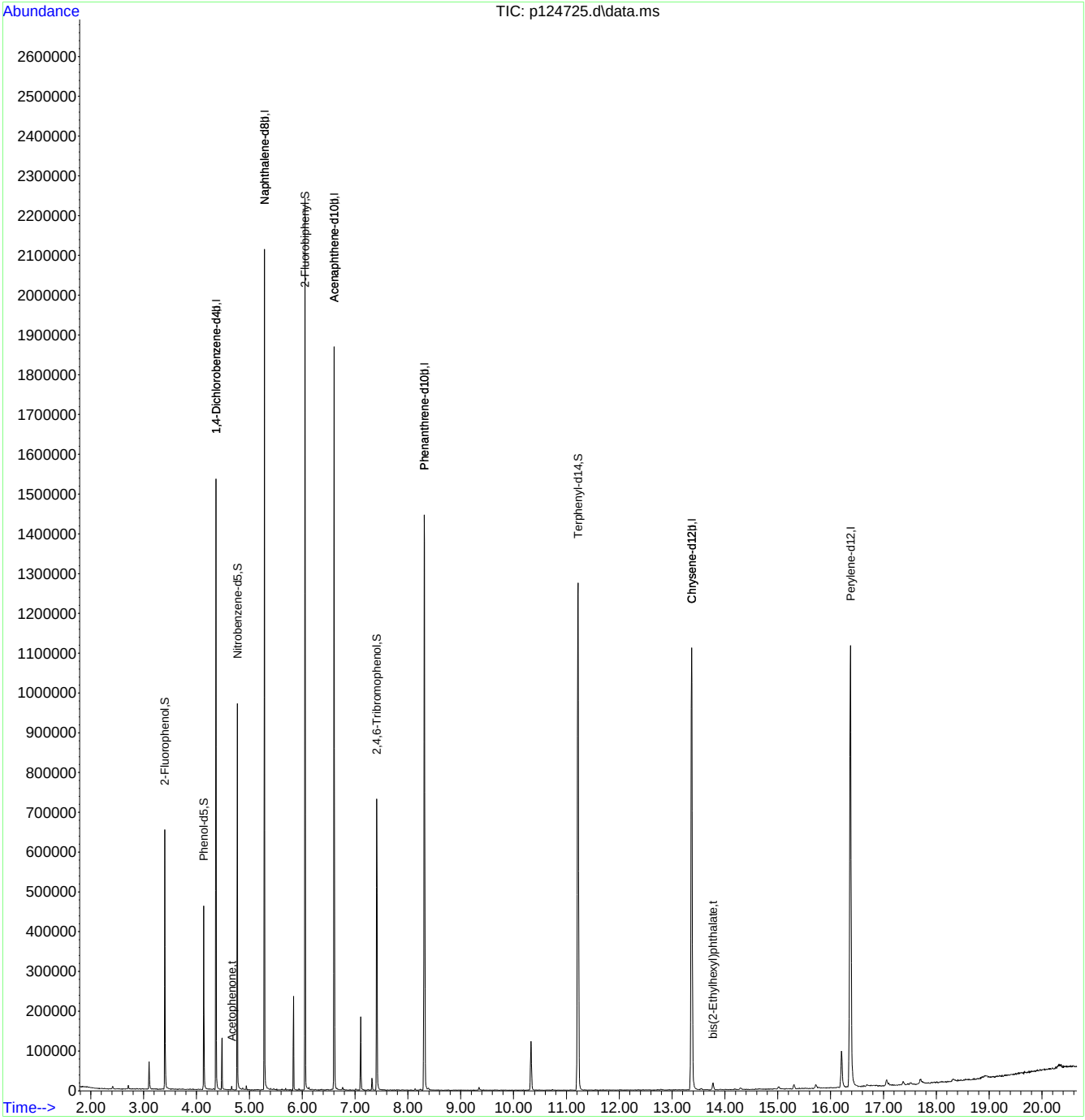
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.367	152	185272	40.00	ppm	0.00
24) Naphthalene-d8	5.286	136	673281	40.00	ppm	0.00
47) Acenaphthene-d10	6.606	164	336619	40.00	ppm	0.00
69) Phenanthrene-d10	8.310	188	694506	40.00	ppm	0.00
83) Chrysene-d12	13.369	240	682887	40.00	ppm	0.00
91) Perylene-d12	16.377	264	736831	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.367	152	185272	40.00	ppm	0.00
103) Phenanthrene-d10b	8.310	188	694506	40.00	ppm	0.00
105) Chrysene-d12b	13.369	240	682887	40.00	ppm	0.00
107) Naphthalene-d8b	5.286	136	673281	40.00	ppm	0.00
109) Acenaphthene-d10b	6.606	164	336619	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.400	112	158558	22.58	ppm	-0.03
Spiked Amount 50.000			Recovery = 45.16%			
8) Phenol-d5	4.138	99	123103	14.71	ppm	0.02
Spiked Amount 50.000			Recovery = 29.42%			
25) Nitrobenzene-d5	4.773	82	227062	34.59	ppm	-0.01
Spiked Amount 50.000			Recovery = 69.18%			
51) 2-Fluorobiphenyl	6.055	172	522104	38.20	ppm	0.01
Spiked Amount 50.000			Recovery = 76.40%			
73) 2,4,6-Tribromophenol	7.412	330	100682	48.29	ppm	0.00
Spiked Amount 50.000			Recovery = 96.58%			
85) Terphenyl-d14	11.221	244	751387	46.40	ppm	-0.04
Spiked Amount 50.000			Recovery = 92.80%			
Target Compounds						Qvalue
18) Acetophenone	4.667	105	2179	0.24	ppm	80
90) bis(2-Ethylhexyl)phtha...	13.770	149	9473	1.96	ppm	93

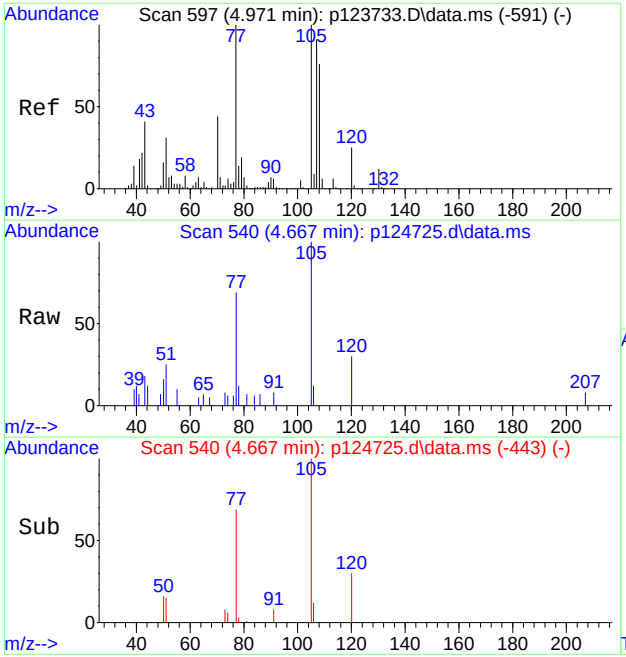
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124725.d
Acq On : 11 Aug 2018 12:30 am
Operator : chriss2
Sample : op14177-mb Inst : MSVOAMSP
Misc : op14177,ep5612,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 13 01:00:47 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Aug 13 00:06:35 2018
Response via : Initial Calibration

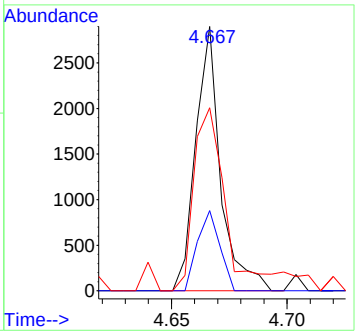


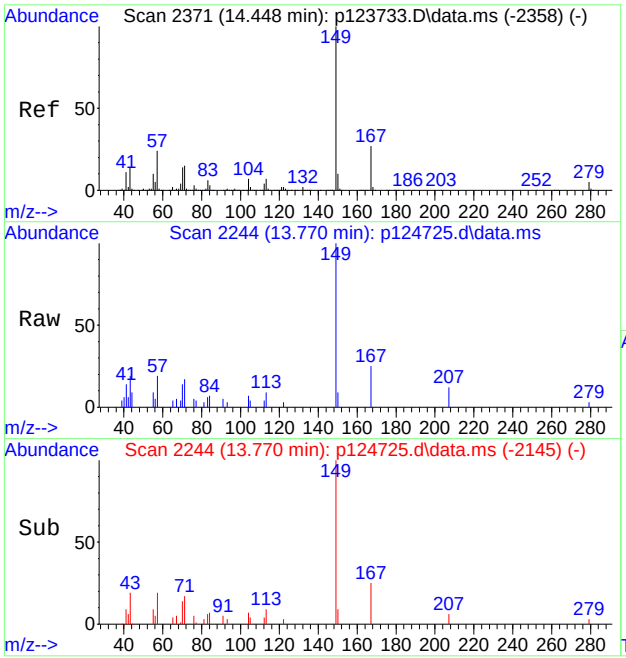


#18
Acetophenone
Concen: 0.24 ppm
RT: 4.667 min Scan# 540
Delta R.T. 0.019 min
Lab File: p124725.d
Acq: 11 Aug 2018 12:30 am

Tgt Ion:105 Resp: 2179

Ion	Ratio	Lower	Upper
105	100		
120	30.3	0.0	57.0
77	65.6	57.6	117.6

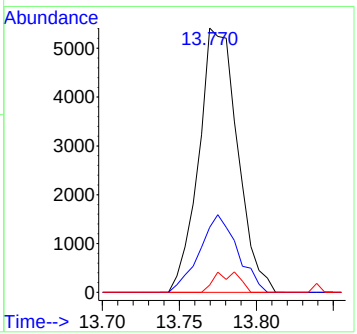




#90
bis(2-Ethylhexyl)phthalate
Concen: 1.96 ppm
RT: 13.770 min Scan# 2244
Delta R.T. 0.030 min
Lab File: p124725.d
Acq: 11 Aug 2018 12:30 am

Tgt Ion:149 Resp: 9473

Ion	Ratio	Lower	Upper
149	100		
167	24.6	0.0	57.8
279	2.8	0.0	35.9



Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81778.D
Acq On : 15 Aug 2018 10:25 am
Operator : angelar
Sample : op14177-mb
Misc : op14152,e2p3603,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 15 13:59:41 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

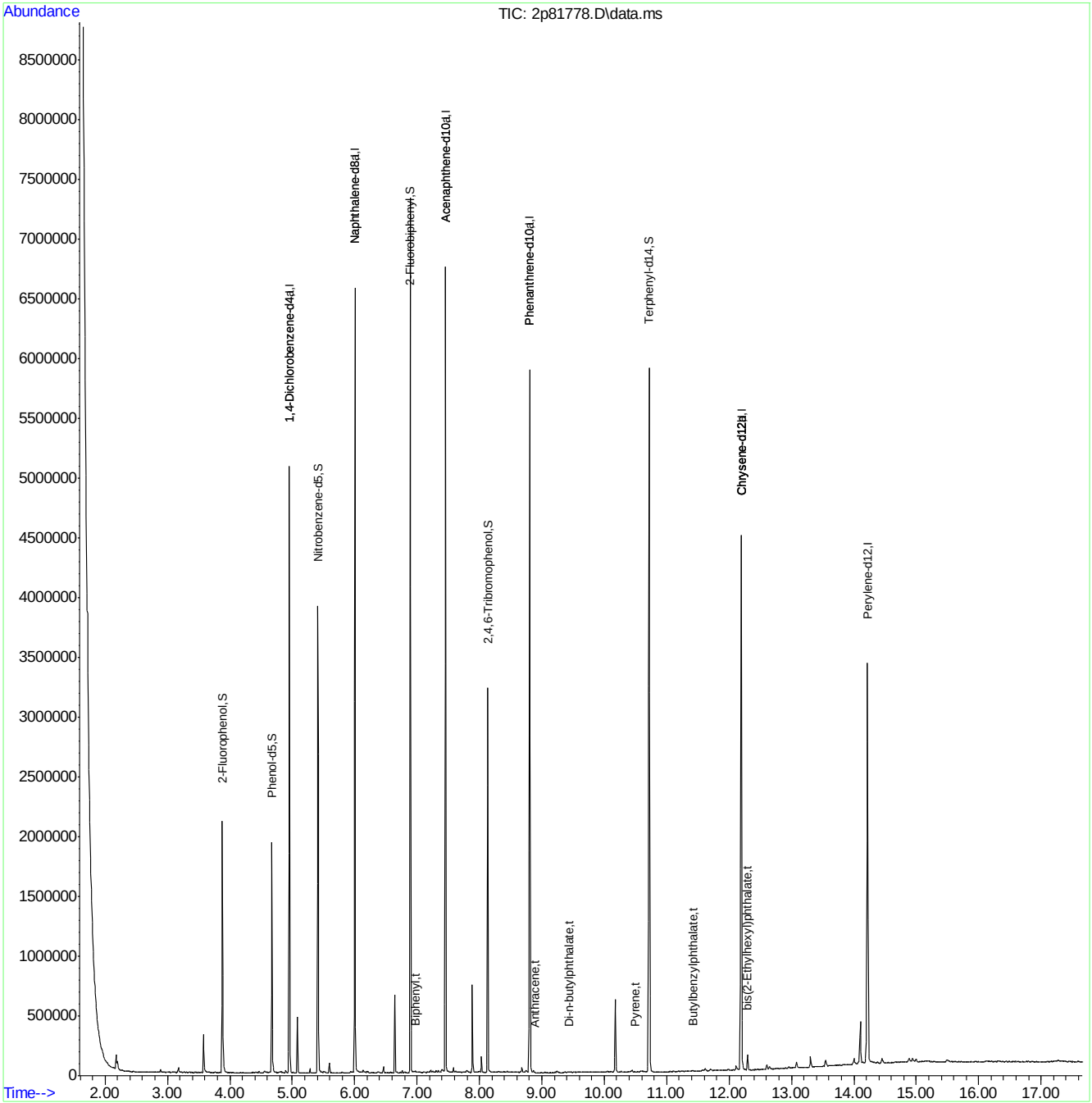
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.951	152	568709	40.00	ppm	-0.02
24) Naphthalene-d8	6.005	136	2092826	40.00	ppm	-0.02
47) Acenaphthene-d10	7.454	164	1011443	40.00	ppm	-0.02
69) Phenanthrene-d10	8.807	188	1883125	40.00	ppm	-0.01
83) Chrysene-d12	12.198	240	1884147	40.00	ppm	0.00
91) Perylene-d12	14.220	264	1572152	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.951	152	568709	40.00	ppm	-0.02
103) Naphthalene-d8a	6.005	136	2092826	40.00	ppm	-0.02
105) Acenaphthene-d10a	7.454	164	1011443	40.00	ppm	-0.01
108) Chrysene-d12a	12.198	240	1884147	40.00	ppm	0.00
110) Phenanthrene-d10a	8.807	188	1883125	40.00	ppm	-0.01
114) Chrysene-d12b	12.198	240	1884147	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.881	112	519313	25.54	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 51.08%			
8) Phenol-d5	4.673	99	462977	18.08	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 36.16%			
25) Nitrobenzene-d5	5.411	82	963000	42.64	ppm	-0.02
Spiked Amount 50.000	Range 19 - 61		Recovery = 85.28%#			
51) 2-Fluorobiphenyl	6.893	172	1573604	39.88	ppm	-0.02
Spiked Amount 50.000	Range 21 - 58		Recovery = 79.76%#			
73) 2,4,6-Tribromophenol	8.133	330	261664	49.82	ppm	-0.02
Spiked Amount 50.000	Range 12 - 68		Recovery = 99.64%#			
85) Terphenyl-d14	10.722	244	2194749	51.72	ppm	-0.01
Spiked Amount 50.000	Range 16 - 65		Recovery = 103.44%#			
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
Target Compounds						Qvalue
53) Biphenyl	6.973	154	2526	0.06	ppm	95
78) Anthracene	8.882	178	1089	0.02	ppm	90
80) Di-n-butylphthalate	9.439	149	1936	0.03	ppm	90
84) Pyrene	10.492	202	1349	0.02	ppm	80
86) Butylbenzylphthalate	11.418	149	1416	0.05	ppm	75
90) bis(2-Ethylhexyl)phtha...	12.295	149	40014	1.24	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

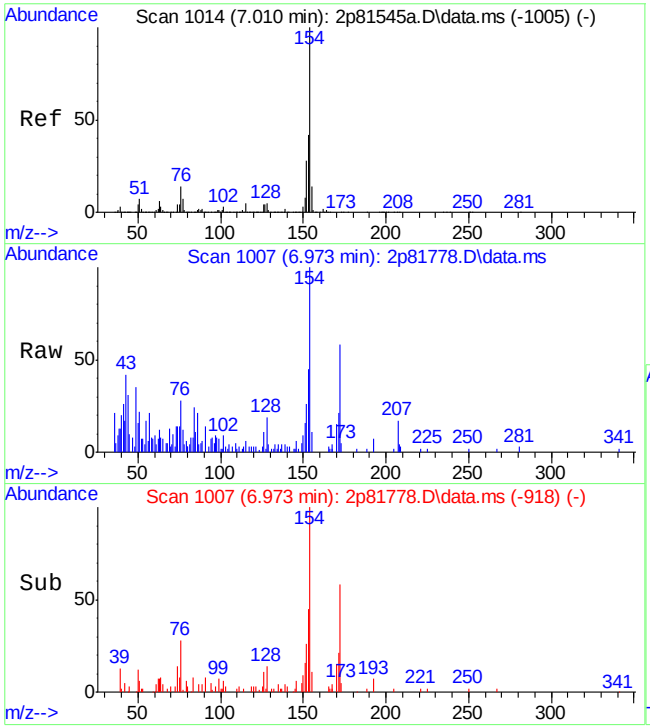
Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81778.D
Acq On : 15 Aug 2018 10:25 am
Operator : angelar
Sample : op14177-mb
Misc : op14152,e2p3603,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 15 13:59:41 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration



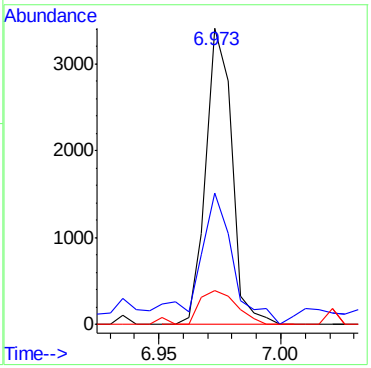
M2P3595.M Wed Aug 15 14:03:54 2018 RPT1 Page: 2

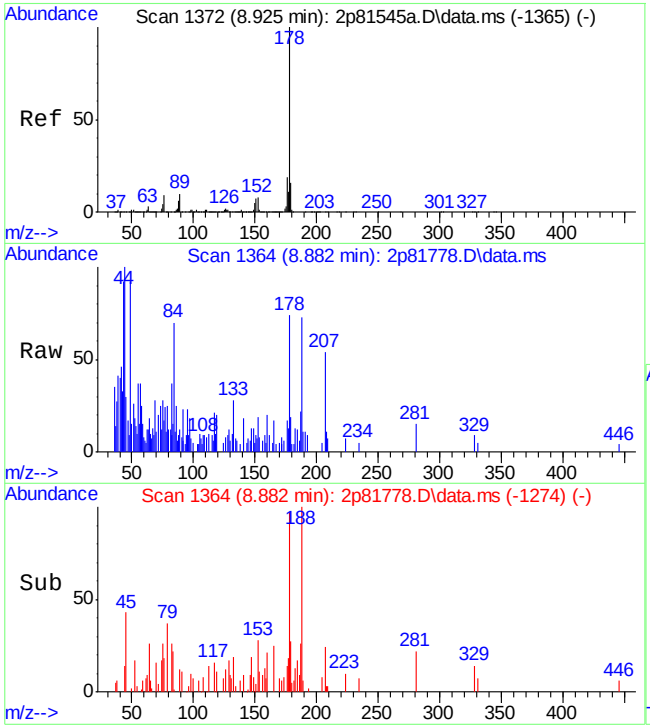


#53
Biphenyl
Concen: 0.06 ppm
RT: 6.973 min Scan# 1007
Delta R.T. -0.022 min
Lab File: 2p81778.D
Acq: 15 Aug 2018 10:25 am

Tgt Ion:154 Resp: 2526

Ion	Ratio	Lower	Upper
154	100		
153	39.6	12.0	72.0
155	10.1	0.0	43.0

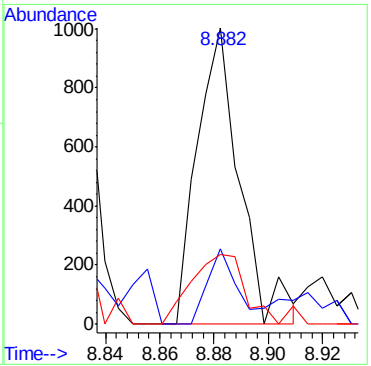


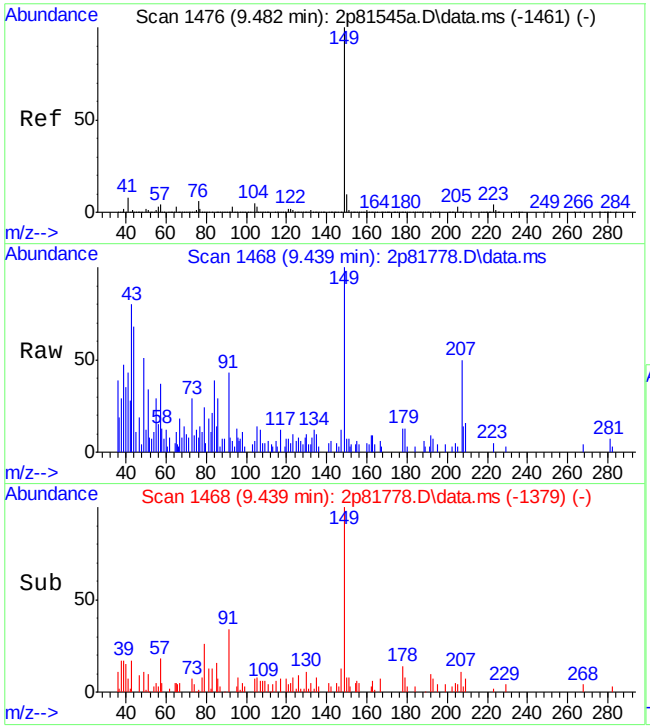


#78
Anthracene
Concen: 0.02 ppm
RT: 8.882 min Scan# 1364
Delta R.T. -0.016 min
Lab File: 2p81778.D
Acq: 15 Aug 2018 10:25 am

Tgt Ion:178 Resp: 1089

Ion	Ratio	Lower	Upper
178	100		
179	23.1	0.0	45.8
176	17.7	0.0	49.3

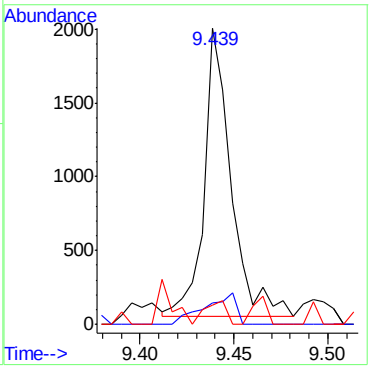


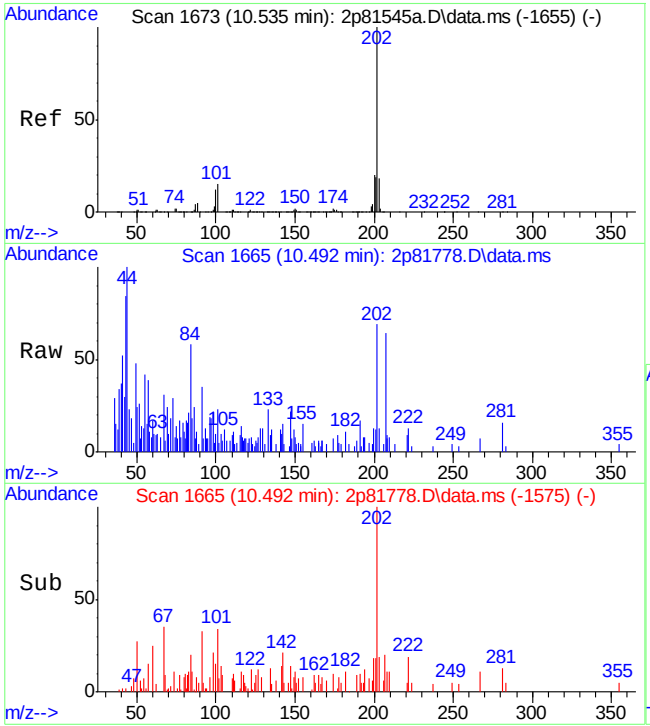


#80
Di-n-butylphthalate
Concen: 0.03 ppm
RT: 9.439 min Scan# 1468
Delta R.T. -0.022 min
Lab File: 2p81778.D
Acq: 15 Aug 2018 10:25 am

Tgt Ion:149 Resp: 1936

Ion	Ratio	Lower	Upper
149	100		
150	7.3	0.0	39.5
104	0.0	0.0	35.9

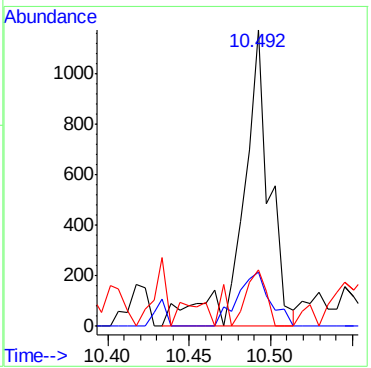


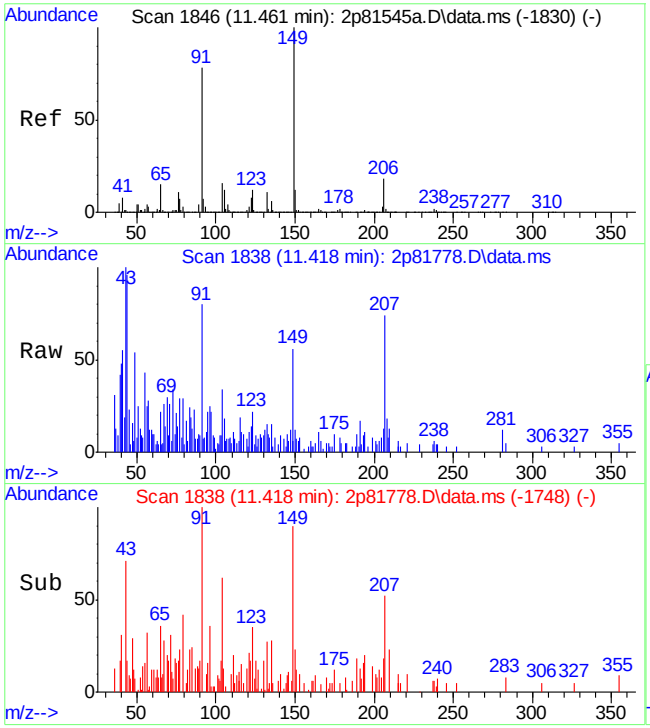


#84
Pyrene
Concen: 0.02 ppm
RT: 10.492 min Scan# 1665
Delta R.T. -0.016 min
Lab File: 2p81778.D
Acq: 15 Aug 2018 10:25 am

Tgt Ion:202 Resp: 1349

Ion	Ratio	Lower	Upper
202	100		
200	14.2	0.0	51.5
203	7.4	0.0	48.8

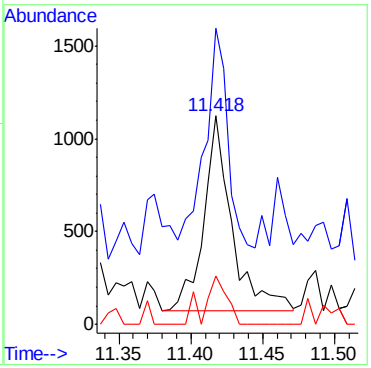


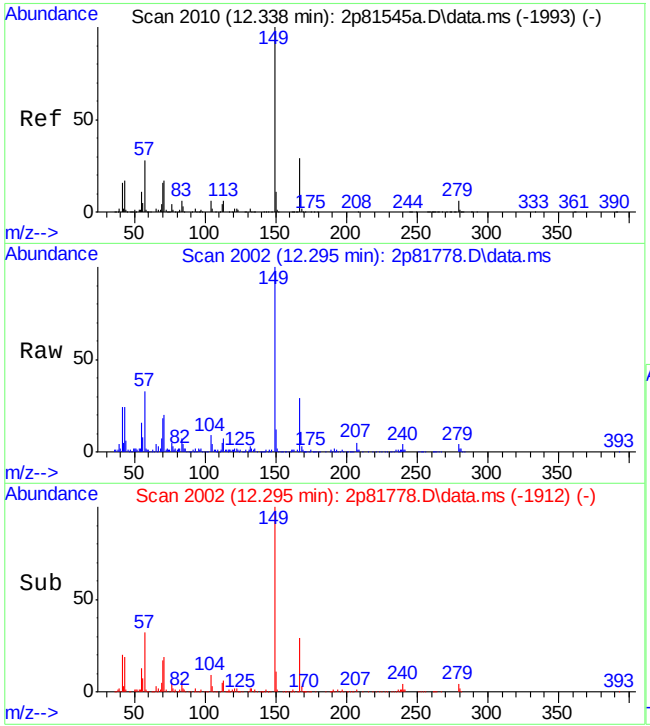


#86
Butylbenzylphthalate
Concen: 0.05 ppm
RT: 11.418 min Scan# 1838
Delta R.T. -0.016 min
Lab File: 2p81778.D
Acq: 15 Aug 2018 10:25 am

Tgt Ion:149 Resp: 1416

Ion	Ratio	Lower	Upper
149	100		
91	101.9	48.3	108.3
206	24.8	0.0	47.4

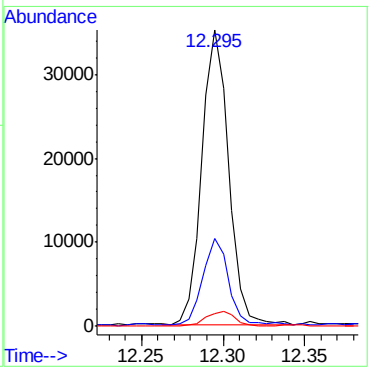




#90
bis(2-Ethylhexyl)phthalate
Concen: 1.24 ppm
RT: 12.295 min Scan# 2002
Delta R.T. -0.016 min
Lab File: 2p81778.D
Acq: 15 Aug 2018 10:25 am

Tgt Ion:149 Resp: 40014

Ion	Ratio	Lower	Upper
149	100		
167	29.1	0.0	57.4
279	4.0	0.0	35.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124726.d
Acq On : 11 Aug 2018 12:58 am
Operator : chriss2
Sample : op14177-bs Inst : MSVOAMSP
Misc : op14177,ep5612,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 13 01:15:39 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Aug 13 00:06:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.367	152	205714	40.00	ppm	0.00
24) Naphthalene-d8	5.286	136	730987	40.00	ppm	0.00
47) Acenaphthene-d10	6.606	164	382121	40.00	ppm	0.00
69) Phenanthrene-d10	8.315	188	803570	40.00	ppm	0.00
83) Chrysene-d12	13.380	240	809089	40.00	ppm	0.00
91) Perylene-d12	16.382	264	850260	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.367	152	205714	40.00	ppm	0.00
103) Phenanthrene-d10b	8.315	188	803570	40.00	ppm	0.00
105) Chrysene-d12b	13.380	240	809089	40.00	ppm	0.00
107) Naphthalene-d8b	5.286	136	730987	40.00	ppm	0.00
109) Acenaphthene-d10b	6.606	164	382121	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.400	112	176805	22.68	ppm	-0.03
Spiked Amount 50.000			Recovery = 45.36%			
8) Phenol-d5	4.138	99	152159	16.37	ppm	0.02
Spiked Amount 50.000			Recovery = 32.74%			
25) Nitrobenzene-d5	4.773	82	225220	31.60	ppm	-0.01
Spiked Amount 50.000			Recovery = 63.20%			
51) 2-Fluorobiphenyl	6.055	172	531282	34.24	ppm	0.01
Spiked Amount 50.000			Recovery = 68.48%			
73) 2,4,6-Tribromophenol	7.418	330	109715	45.48	ppm	0.01
Spiked Amount 50.000			Recovery = 90.96%			
85) Terphenyl-d14	11.221	244	811169	42.28	ppm	-0.05
Spiked Amount 50.000			Recovery = 84.56%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.835	88	57720	16.13	ppm	96
3) Pyridine	2.182	79	110846	12.58	ppm	86
4) N-Nitrosodimethylamine	2.140	42	60953	15.85	ppm	95
6) Indene	4.554	116	399130	32.36	ppm	95
7) Cumene	3.769	105	472781	23.97	ppm	98
9) Phenol	4.148	94	195639	19.13	ppm	88
10) Aniline	4.132	93	293982	26.65	ppm	93
11) bis(2-Chloroethyl)ether	4.180	93	213031	31.26	ppm	96
12) 2-Chlorophenol	4.223	128	270894	32.98	ppm	96
13) Decane	4.260	43	126796	19.20	ppm	95
14) 1,3-Dichlorobenzene	4.330	146	226976	24.91	ppm	98
15) 1,4-Dichlorobenzene	4.383	146	225351	25.85	ppm	96
16) Benzyl alcohol	4.480	108	151615	33.15	ppm	99
17) 1,2-Dichlorobenzene	4.496	146	220531	26.12	ppm	98
18) Acetophenone	4.666	105	328425	32.69	ppm	86
19) 2-Methylphenol	4.581	108	213266	33.69	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.576	121	63865	31.02	ppm #	75
21) 3&4-Methylphenol	4.693	108	220572	33.78	ppm	98
22) n-Nitroso-di-n-propyla...	4.672	70	152194	33.63	ppm	98
23) Hexachloroethane	4.736	201	73775	24.57	ppm	99
26) Nitrobenzene	4.789	77	218159	31.00	ppm	94
27) Quinoline	5.543	129	558648	39.61	ppm	99
28) Isophorone	4.960	82	429901	36.40	ppm	96
29) 2-Nitrophenol	5.019	139	161379	43.01	ppm	83
30) 2,4-Dimethylphenol	5.067	107	261671	44.18	ppm	96
31) Benzoic acid	5.158	105	123787	26.18	ppm	95
32) bis(2-Chloroethoxy)met...	5.115	93	255367	37.03	ppm	98
33) 2,4-Dichlorophenol	5.201	162	241306	42.38	ppm	96
34) 2,6-Dichlorophenol	5.356	162	225398	42.45	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124726.d
Acq On : 11 Aug 2018 12:58 am
Operator : chriss2
Sample : op14177-bs Inst : MSVOAMSP
Misc : op14177,ep5612,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 13 01:15:39 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Aug 13 00:06:35 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36)	1,2,4-Trichlorobenzene	5.249	180	199279	28.79	ppm		98
38)	Naphthalene	5.302	128	612486	30.85	ppm		99
39)	4-Chloroaniline	5.345	127	253544	30.41	ppm		97
40)	2,3-Dichloroaniline	5.997	161	261935	37.29	ppm		96
41)	Caprolactam	5.591	55	29645	10.91	ppm		97
42)	Hexachlorobutadiene	5.393	225	105333	27.99	ppm		99
43)	4-Chloro-3-methylphenol	5.708	107	240304	42.19	ppm		96
44)	2-Methylnaphthalene	5.794	141	411037	34.85	ppm		93
45)	1-Methylnaphthalene	5.863	142	457224	32.08	ppm		96
46)	Dimethylnaphthalene	6.253	156	441466	36.19	ppm		99
48)	Hexachlorocyclopentadiene	5.906	237	195666	53.97	ppm		96
49)	2,4,6-Trichlorophenol	6.002	196	179109	42.15	ppm		100
50)	2,4,5-Trichlorophenol	6.039	196	193367	41.57	ppm		99
52)	2-Chloronaphthalene	6.146	162	426866	31.63	ppm		98
53)	Biphenyl	6.130	154	625973	33.69	ppm		97
54)	2-Nitroaniline	6.232	65	133044	36.47	ppm		84
55)	Dimethylphthalate	6.371	163	597318	39.66	ppm		99
56)	Acenaphthylene	6.483	152	764552	35.57	ppm		99
57)	2,6-Dinitrotoluene	6.424	165	133705	42.49	ppm		99
58)	3-Nitroaniline	6.574	138	132593	33.49	ppm		91
59)	Acenaphthene	6.632	153	484980	35.48	ppm		95
60)	2,4-Dinitrophenol	6.675	184	166528	90.08	ppm	#	75
61)	4-Nitrophenol	6.761	109	46470	23.28	ppm	#	83
62)	Dibenzofuran	6.798	168	715992	36.95	ppm		93
63)	2,4-Dinitrotoluene	6.793	165	180510	41.98	ppm		96
64)	2,3,4,6-Tetrachlorophenol	6.926	232	160178	41.53	ppm		96
65)	Diethylphthalate	7.028	149	588853	38.66	ppm		98
66)	Fluorene	7.145	166	575562	38.78	ppm		99
67)	4-Chlorophenyl-phenyle...	7.140	204	284760	39.10	ppm		97
68)	4-Nitroaniline	7.177	138	150394	38.36	ppm		93
70)	4,6-Dinitro-2-methylph...	7.215	198	119583	41.37	ppm		88
71)	n-Nitrosodiphenylamine	7.279	169	421486	36.21	ppm		97
72)	1,2-Diphenylhydrazine	7.322	77	480305	33.31	ppm		93
74)	4-Bromophenyl-phenylether	7.717	248	192587	39.79	ppm		95
75)	Hexachlorobenzene	7.802	284	224647	40.18	ppm		97
76)	Pentachlorophenol	8.080	266	142943	46.92	ppm		97
77)	Phenanthrene	8.353	178	863082	36.47	ppm		99
78)	Anthracene	8.427	178	867448	37.31	ppm		99
79)	Carbazole	8.695	167	898244	41.60	ppm		99
80)	Di-n-butylphthalate	9.357	149	1053804	42.89	ppm		99
81)	Fluoranthene	10.372	202	1055096	42.21	ppm		98
82)	Octadecane	8.240	57	271825	31.03	ppm		93
84)	Pyrene	10.794	202	1048204	37.15	ppm		98
86)	Butylbenzylphthalate	12.375	149	463157	41.61	ppm		91
87)	Benzo[a]anthracene	13.358	228	970312	38.38	ppm		99
88)	3,3'-Dichlorobenzidine	13.417	252	485338	58.84	ppm		96
89)	Chrysene	13.433	228	873973	34.46	ppm		98
90)	bis(2-Ethylhexyl)phtha...	13.775	149	649477	39.77	ppm		99
92)	Di-n-octylphthalate	15.207	149	1047422	37.50	ppm		98
93)	Benzo[b]fluoranthene	15.645	252	990811	39.10	ppm		98
94)	Benzo[k]fluoranthene	15.704	252	921388	36.00	ppm		98
95)	Benzo[a]pyrene	16.265	252	868287	38.94	ppm		99
96)	Indeno[1,2,3-cd]pyrene	18.311	276	811999	35.51	ppm		96
98)	Dibenz[a,h]anthracene	18.375	278	834009	39.15	ppm		99
99)	7,12-Dimethylbenz(a)an...	15.661	256	406883	40.06	ppm		98
100)	Benzo[g,h,i]perylene	18.733	276	885256	40.27	ppm		97
102)	Benzaldehyde	4.041	105	170963	25.95	ppm		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124726.d
Acq On : 11 Aug 2018 12:58 am
Operator : chriss2
Sample : op14177-bs Inst : MSVOAMSP
Misc : op14177,ep5612,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 13 01:15:39 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Aug 13 00:06:35 2018
Response via : Initial Calibration

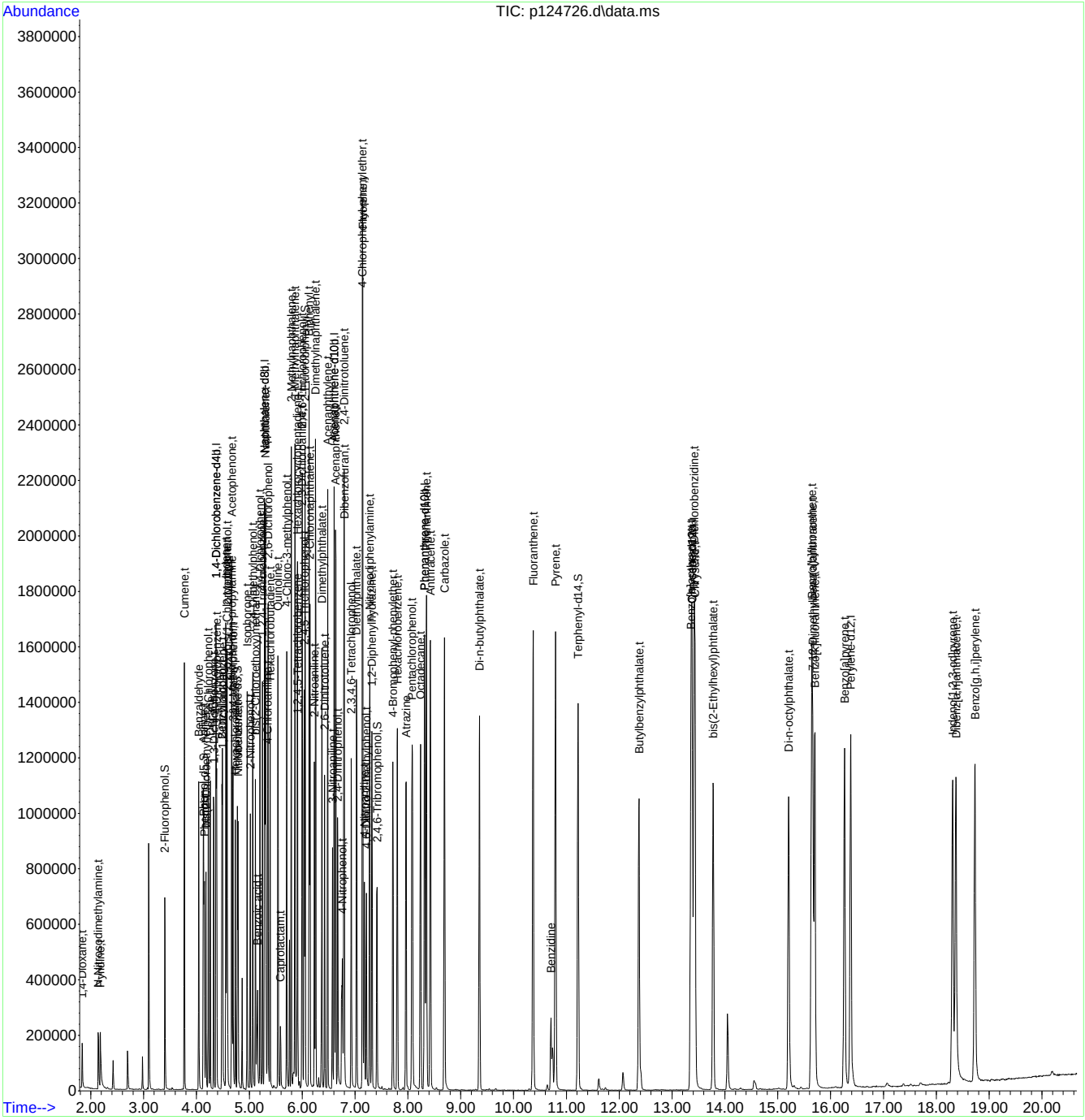
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) Atrazine	7.968	200	178253	41.68	ppm	81
106) Benzidine	10.709	184	164333	11.36	ppm	100
110) 1,2,4,5-Tetrachloroben...	5.917	216	156767	26.44	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124726.d
Acq On : 11 Aug 2018 12:58 am
Operator : chriss2
Sample : op14177-bs Inst : MSVOAMSP
Misc : op14177,ep5612,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 13 01:15:39 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Aug 13 00:06:35 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124727.d
Acq On : 11 Aug 2018 1:25 am
Operator : chriss2
Sample : op14177-bsd Inst : MSVOAMSP
Misc : op14177,ep5612,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 13 01:19:29 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Aug 13 00:06:35 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.367	152	153432	40.00	ppm	0.00
24) Naphthalene-d8	5.286	136	547084	40.00	ppm	0.00
47) Acenaphthene-d10	6.606	164	281965	40.00	ppm	0.00
69) Phenanthrene-d10	8.315	188	582510	40.00	ppm	0.00
83) Chrysene-d12	13.374	240	601310	40.00	ppm	0.00
91) Perylene-d12	16.377	264	638653	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.367	152	153432	40.00	ppm	0.00
103) Phenanthrene-d10b	8.315	188	582510	40.00	ppm	0.00
105) Chrysene-d12b	13.374	240	601310	40.00	ppm	0.00
107) Naphthalene-d8b	5.286	136	547084	40.00	ppm	0.00
109) Acenaphthene-d10b	6.606	164	281965	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.401	112	116159	19.98	ppm	-0.03
Spiked Amount 50.000			Recovery = 39.96%			
8) Phenol-d5	4.138	99	94622	13.65	ppm	0.02
Spiked Amount 50.000			Recovery = 27.30%			
25) Nitrobenzene-d5	4.773	82	161889	30.35	ppm	-0.01
Spiked Amount 50.000			Recovery = 60.70%			
51) 2-Fluorobiphenyl	6.056	172	373658	32.64	ppm	0.01
Spiked Amount 50.000			Recovery = 65.28%			
73) 2,4,6-Tribromophenol	7.413	330	73373	41.96	ppm	0.00
Spiked Amount 50.000			Recovery = 83.92%			
85) Terphenyl-d14	11.222	244	542083	38.02	ppm	-0.05
Spiked Amount 50.000			Recovery = 76.04%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.830	88	40661	15.24	ppm	92
3) Pyridine	2.172	79	113800	17.32	ppm	92
4) N-Nitrosodimethylamine	2.140	42	43136	15.04	ppm	88
6) Indene	4.554	116	302801	32.92	ppm	94
7) Cumene	3.769	105	362431	24.63	ppm	98
9) Phenol	4.148	94	121659	15.95	ppm	88
10) Aniline	4.132	93	192293	23.38	ppm	94
11) bis(2-Chloroethyl)ether	4.180	93	156923	30.87	ppm	94
12) 2-Chlorophenol	4.223	128	192803	31.47	ppm	97
13) Decane	4.261	43	95084	19.30	ppm	96
14) 1,3-Dichlorobenzene	4.325	146	173404	25.52	ppm	99
15) 1,4-Dichlorobenzene	4.383	146	173157	26.63	ppm	95
16) Benzyl alcohol	4.480	108	105485	30.93	ppm	98
17) 1,2-Dichlorobenzene	4.490	146	171956	27.31	ppm	98
18) Acetophenone	4.661	105	237997	31.76	ppm #	64
19) 2-Methylphenol	4.581	108	148281	31.41	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.576	121	47073	30.66	ppm #	75
21) 3&4-Methylphenol	4.693	108	147809	30.35	ppm	99
22) n-Nitroso-di-n-propyla...	4.667	70	111172	32.94	ppm	95
23) Hexachloroethane	4.736	201	54130	24.17	ppm	97
26) Nitrobenzene	4.784	77	159798	30.34	ppm	95
27) Quinoline	5.537	129	391039	37.04	ppm	99
28) Isophorone	4.955	82	307029	34.73	ppm	98
29) 2-Nitrophenol	5.019	139	111637	39.75	ppm	87
30) 2,4-Dimethylphenol	5.062	107	181363	40.91	ppm	98
31) Benzoic acid	5.147	105	74589	21.07	ppm	94
32) bis(2-Chloroethoxy)met...	5.115	93	179228	34.72	ppm	99
33) 2,4-Dichlorophenol	5.201	162	170085	39.92	ppm	95
34) 2,6-Dichlorophenol	5.356	162	161216	40.56	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124727.d
Acq On : 11 Aug 2018 1:25 am
Operator : chriss2
Sample : op14177-bsd Inst : MSVOAMSP
Misc : op14177,ep5612,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 13 01:19:29 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Aug 13 00:06:35 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36)	1,2,4-Trichlorobenzene	5.249	180	143667	27.73	ppm		98
38)	Naphthalene	5.302	128	456474	30.72	ppm		99
39)	4-Chloroaniline	5.345	127	167086	26.78	ppm		98
40)	2,3-Dichloroaniline	5.997	161	185061	35.20	ppm		95
41)	Caprolactam	5.585	55	18658	9.17	ppm		93
42)	Hexachlorobutadiene	5.393	225	76875	27.29	ppm		100
43)	4-Chloro-3-methylphenol	5.703	107	163111	38.27	ppm		89
44)	2-Methylnaphthalene	5.794	141	292313	33.12	ppm		93
45)	1-Methylnaphthalene	5.863	142	334801	31.38	ppm		95
46)	Dimethylnaphthalene	6.253	156	319235	34.97	ppm		98
48)	Hexachlorocyclopentadiene	5.906	237	131425	49.12	ppm		96
49)	2,4,6-Trichlorophenol	6.002	196	126631	40.39	ppm		99
50)	2,4,5-Trichlorophenol	6.040	196	130457	38.01	ppm		100
52)	2-Chloronaphthalene	6.146	162	308142	30.94	ppm		97
53)	Biphenyl	6.130	154	452438	33.00	ppm		98
54)	2-Nitroaniline	6.232	65	94066	34.94	ppm	#	75
55)	Dimethylphthalate	6.371	163	414187	37.27	ppm		99
56)	Acenaphthylene	6.483	152	549092	34.62	ppm		99
57)	2,6-Dinitrotoluene	6.424	165	91664	39.48	ppm		95
58)	3-Nitroaniline	6.574	138	84635	28.97	ppm		86
59)	Acenaphthene	6.633	153	351896	34.89	ppm		96
60)	2,4-Dinitrophenol	6.670	184	102235	75.73	ppm	#	87
61)	4-Nitrophenol	6.761	109	28929	19.64	ppm	#	81
62)	Dibenzofuran	6.793	168	500189	34.98	ppm		96
63)	2,4-Dinitrotoluene	6.787	165	124944	39.37	ppm		99
64)	2,3,4,6-Tetrachlorophenol	6.926	232	106295	37.35	ppm		95
65)	Diethylphthalate	7.028	149	402604	35.82	ppm		99
66)	Fluorene	7.140	166	408016	37.25	ppm		96
67)	4-Chlorophenyl-phenyle...	7.140	204	194990	36.28	ppm		96
68)	4-Nitroaniline	7.172	138	104219	36.03	ppm		89
70)	4,6-Dinitro-2-methylph...	7.210	198	75852	36.38	ppm		94
71)	n-Nitrosodiphenylamine	7.274	169	287912	34.12	ppm		96
72)	1,2-Diphenylhydrazine	7.316	77	334046	31.96	ppm		98
74)	4-Bromophenyl-phenylether	7.717	248	128978	36.76	ppm		93
75)	Hexachlorobenzene	7.797	284	152812	37.70	ppm		96
76)	Pentachlorophenol	8.075	266	91591	41.48	ppm		98
77)	Phenanthrene	8.347	178	606816	35.38	ppm		100
78)	Anthracene	8.422	178	605793	35.94	ppm		100
79)	Carbazole	8.689	167	618841	39.53	ppm		99
80)	Di-n-butylphthalate	9.352	149	705591	39.62	ppm		99
81)	Fluoranthene	10.367	202	718814	39.67	ppm		97
82)	Octadecane	8.241	57	181854	28.64	ppm		92
84)	Pyrene	10.794	202	716705	34.17	ppm		98
86)	Butylbenzylphthalate	12.370	149	310252	37.51	ppm		91
87)	Benzo[a]anthracene	13.353	228	669673	35.64	ppm		99
88)	3,3'-Dichlorobenzidine	13.412	252	295079	48.13	ppm		98
89)	Chrysene	13.428	228	618015	32.79	ppm		98
90)	bis(2-Ethylhexyl)phtha...	13.775	149	421599	34.90	ppm		99
92)	Di-n-octylphthalate	15.202	149	690243	33.10	ppm		98
93)	Benzo[b]fluoranthene	15.634	252	695634	36.55	ppm		97
94)	Benzo[k]fluoranthene	15.693	252	650562	33.84	ppm		98
95)	Benzo[a]pyrene	16.259	252	601984	35.94	ppm		98
96)	Indeno[1,2,3-cd]pyrene	18.305	276	573311	33.42	ppm		96
98)	Dibenz[a,h]anthracene	18.369	278	586072	36.63	ppm		99
99)	7,12-Dimethylbenz(a)an...	15.656	256	268942	35.25	ppm		97
100)	Benzo[g,h,i]perylene	18.727	276	615348	37.26	ppm		97
102)	Benzaldehyde	4.042	105	120586	24.54	ppm		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124727.d
Acq On : 11 Aug 2018 1:25 am
Operator : chriss2
Sample : op14177-bsd Inst : MSVOAMSP
Misc : op14177,ep5612,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 13 01:19:29 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Aug 13 00:06:35 2018
Response via : Initial Calibration

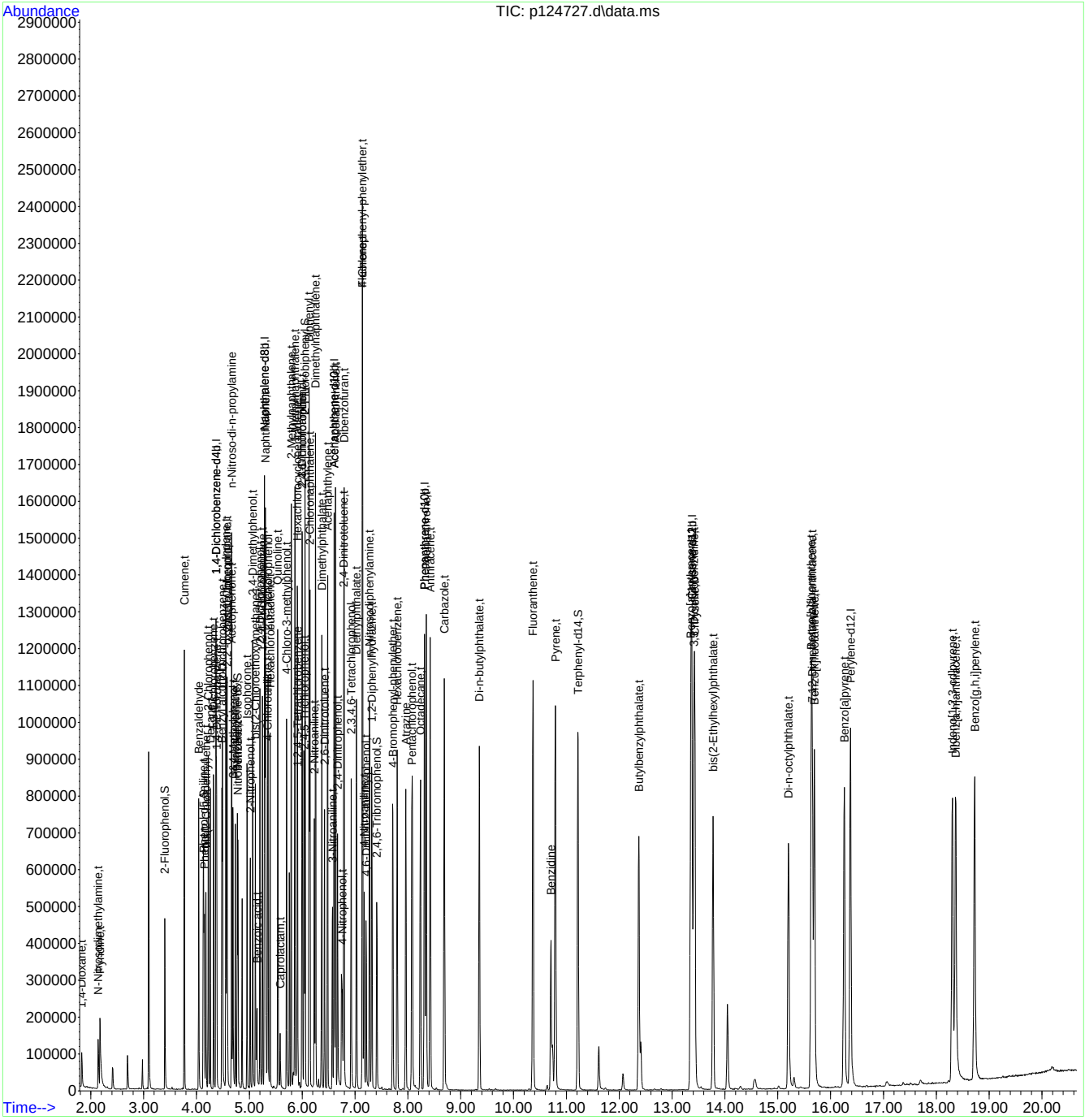
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) Atrazine	7.963	200	119554	38.57	ppm	82
106) Benzidine	10.709	184	266787	24.81	ppm	100
110) 1,2,4,5-Tetrachloroben...	5.917	216	110830	25.33	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124727.d
Acq On : 11 Aug 2018 1:25 am
Operator : chriss2
Sample : op14177-bsd Inst : MSVOAMSP
Misc : op14177,ep5612,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 13 01:19:29 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Aug 13 00:06:35 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81781.D
Acq On : 15 Aug 2018 10:48 am
Operator : angelar
Sample : op14177-bs
Misc : op14177,e2p3603,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 15 15:29:01 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.956	152	457924	40.00	ppm		-0.02
24) Naphthalene-d8	6.010	136	1555680	40.00	ppm		-0.02
47) Acenaphthene-d10	7.454	164	751687	40.00	ppm		-0.02
69) Phenanthrene-d10	8.813	188	1408753	40.00	ppm		0.00
83) Chrysene-d12	12.204	240	1414682	40.00	ppm		0.00
91) Perylene-d12	14.226	264	1283767	40.00	ppm		0.00
101) 1,4-Dichlorobenzene-d4a	4.956	152	457924	40.00	ppm		-0.01
103) Naphthalene-d8a	6.010	136	1555680	40.00	ppm		-0.01
105) Acenaphthene-d10a	7.454	164	751687	40.00	ppm		-0.01
108) Chrysene-d12a	12.204	240	1414682	40.00	ppm		0.01
110) Phenanthrene-d10a	8.813	188	1408753	40.00	ppm		0.00
114) Chrysene-d12b	12.204	240	1414682	40.00	ppm		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	3.887	112	495823	30.28	ppm		0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 60.56%#				
8) Phenol-d5	4.678	99	441581	21.41	ppm		0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 42.82%				
25) Nitrobenzene-d5	5.416	82	637582	37.98	ppm		-0.02
Spiked Amount 50.000	Range 19 - 61		Recovery = 75.96%#				
51) 2-Fluorobiphenyl	6.898	172	999484	34.09	ppm		-0.01
Spiked Amount 50.000	Range 21 - 58		Recovery = 68.18%#				
73) 2,4,6-Tribromophenol	8.139	330	179384	45.65	ppm		-0.01
Spiked Amount 50.000	Range 12 - 68		Recovery = 91.30%#				
85) Terphenyl-d14	10.722	244	1631036	51.19	ppm		-0.01
Spiked Amount 50.000	Range 16 - 65		Recovery = 102.38%#				
111) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm		
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#				
112) o-terphenyl	0.000	230	0	0.00	ppm		
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.341	88	114038	17.69	ppm		99
3) Pyridine	2.667	79	238336	13.19	ppm		98
4) N-Nitrosodimethylamine	2.635	74	230384	22.76	ppm		93
6) Indene	5.170	116	914601	34.92	ppm		99
7) Cumene	4.293	105	1434723	33.06	ppm		99
9) Phenol	4.689	94	516617	22.29	ppm	#	64
10) Aniline	4.689	93	636172	26.23	ppm	#	47
11) bis(2-Chloroethyl)ether	4.737	93	587221	39.21	ppm		100
12) 2-Chlorophenol	4.791	128	638205	37.65	ppm		96
13) Decane	4.823	57	448167	24.10	ppm		97
14) 1,3-Dichlorobenzene	4.908	146	508672	27.34	ppm		99
15) 1,4-Dichlorobenzene	4.967	146	472649	26.86	ppm		99
16) Benzyl alcohol	5.080	108	362797	38.35	ppm		94
17) 1,2-Dichlorobenzene	5.096	146	466194	27.54	ppm		99
18) Acetophenone	5.288	105	796997	34.61	ppm		94
19) 2-Methylphenol	5.181	108	454892	32.19	ppm		98
20) 2,2'-oxybis(1-Chloropr...	5.181	121	143605	33.34	ppm	#	65

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81781.D
Acq On : 15 Aug 2018 10:48 am
Operator : angelar
Sample : op14177-bs
Misc : op14177,e2p3603,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 15 15:29:01 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.309	108	455085	31.11	ppm		99
22) n-Nitroso-di-n-propyla...	5.299	70	415723	34.97	ppm		98
23) Hexachloroethane	5.374	201	151537	24.30	ppm		86
26) Nitrobenzene	5.433	77	592336	36.53	ppm		99
27) Quinoline	6.315	129	1152949	41.08	ppm		98
28) Isophorone	5.630	82	1186950	41.51	ppm		97
29) 2-Nitrophenol	5.695	139	324309	45.45	ppm		90
30) 2,4-Dimethylphenol	5.737	107	600392	44.58	ppm		96
31) Benzoic acid	5.855	105	322595	33.83	ppm		98
32) bis(2-Chloroethoxy)met...	5.802	93	640517	41.94	ppm		99
33) 2,4-Dichlorophenol	5.903	162	492703	40.91	ppm		97
34) 2,6-Dichlorophenol	6.085	162	428218	39.33	ppm		99
36) 1,2,4-Trichlorobenzene	5.962	180	396148	30.43	ppm		100
38) Naphthalene	6.026	128	1274502	32.13	ppm		99
39) 4-Chloroaniline	6.074	127	422617	24.61	ppm		99
40) 2,3-Dichloroaniline	6.829	161	531872	35.52	ppm		96
41) Caprolactam	6.374	113	60006	13.61	ppm		94
42) Hexachlorobutadiene	6.128	225	217549	29.27	ppm		98
43) 4-Chloro-3-methylphenol	6.486	107	580683	45.76	ppm	#	48
44) 2-Methylnaphthalene	6.593	141	881975	37.14	ppm		97
45) 1-Methylnaphthalene	6.679	141	867977	33.29	ppm		99
46) Dimethylnaphthalene	7.112	156	816134	34.29	ppm		99
48) Hexachlorocyclopentadiene	6.727	237	316941	45.86	ppm		99
49) 2,4,6-Trichlorophenol	6.834	196	361934	44.98	ppm		99
50) 2,4,5-Trichlorophenol	6.871	196	356603	42.40	ppm		99
52) 2-Chloronaphthalene	7.000	162	790279	32.27	ppm		98
53) Biphenyl	6.978	154	1184013	36.60	ppm		100
54) 2-Nitroaniline	7.085	65	380757	47.26	ppm		90
55) Dimethylphthalate	7.230	163	1135455	41.06	ppm		100
56) Acenaphthylene	7.342	152	1428568	36.32	ppm		99
57) 2,6-Dinitrotoluene	7.283	165	251596	46.56	ppm		95
58) 3-Nitroaniline	7.428	138	257031	37.02	ppm		95
59) Acenaphthene	7.486	153	921545	36.79	ppm		100
60) 2,4-Dinitrophenol	7.513	184	270216	100.19	ppm	#	81
61) 4-Nitrophenol	7.577	109	137554	33.86	ppm		95
62) Dibenzofuran	7.625	168	1275797	37.90	ppm		98
63) 2,4-Dinitrotoluene	7.615	165	332510	45.74	ppm		77
64) 2,3,4,6-Tetrachlorophenol	7.738	232	303668	46.97	ppm		96
65) Diethylphthalate	7.813	149	1159699	42.29	ppm		100
66) Fluorene	7.920	166	1109165	38.96	ppm		97
67) 4-Chlorophenyl-phenyle...	7.914	204	529732	39.94	ppm		97
68) 4-Nitroaniline	7.952	138	265265	38.61	ppm		96
70) 4,6-Dinitro-2-methylph...	7.973	198	192353	46.86	ppm		92
71) n-Nitrosodiphenylamine	8.021	169	731189	36.17	ppm		98
72) 1,2-Diphenylhydrazine	8.053	77	1204905	39.41	ppm		100
74) 4-Bromophenyl-phenylether	8.358	248	348408	42.15	ppm		91
75) Hexachlorobenzene	8.433	284	398258	43.21	ppm		99
76) Pentachlorophenol	8.626	266	281769	52.38	ppm		99
77) Phenanthrene	8.834	178	1507806	39.96	ppm		100
78) Anthracene	8.888	178	1443054	37.90	ppm		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81781.D
Acq On : 15 Aug 2018 10:48 am
Operator : angelar
Sample : op14177-bs
Misc : op14177,e2p3603,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 15 15:29:01 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

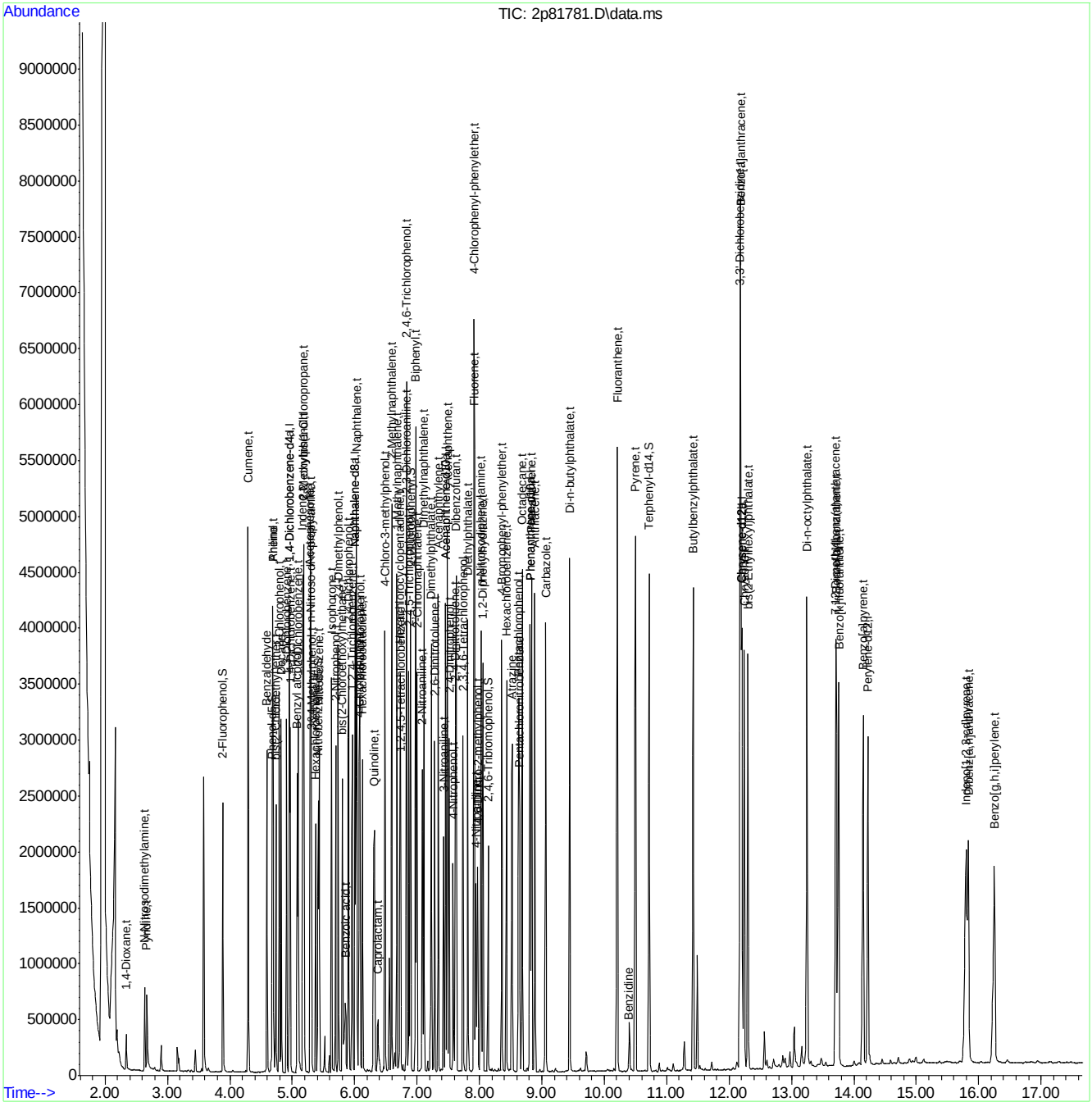
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.064	167	1621918	42.64	ppm	99
80)	Di-n-butylphthalate	9.444	149	2292527	48.79	ppm	100
81)	Fluoranthene	10.209	202	2329531	51.16	ppm	100
82)	Octadecane	8.684	43	586393	39.54	ppm	98
84)	Pyrene	10.498	202	2229163	46.56	ppm	99
86)	Butylbenzylphthalate	11.428	149	1164439	56.38	ppm	99
87)	Benzo[a]anthracene	12.182	228	2039038	46.56	ppm	100
88)	3,3'-Dichlorobenzidine	12.177	252	1152591	73.62	ppm	99
89)	Chrysene	12.241	228	1568127	40.67	ppm	99
90)	bis(2-Ethylhexyl)phtha...	12.300	149	1192828	49.13	ppm	100
92)	Di-n-octylphthalate	13.247	149	2480565	58.89	ppm	99
93)	Benzo[b]fluoranthene	13.718	252	1844637	48.17	ppm	97
94)	Benzo[k]fluoranthene	13.760	252	1631608	47.34	ppm	99
95)	Benzo[a]pyrene	14.151	252	1560651	47.01	ppm	100
96)	Indeno[1,2,3-cd]pyrene	15.798	276	1525716	49.66	ppm	99
98)	Dibenz[a,h]anthracene	15.836	278	1428694	46.11	ppm	98
99)	7,12-Dimethylbenz(a)an...	13.712	256	232267	14.03	ppm	98
100)	Benzo[g,h,i]perylene	16.258	276	1509655	48.63	ppm	97
102)	Benzaldehyde	4.593	105	424274	36.05	ppm	99
106)	Atrazine	8.524	215	151249	40.22	ppm	97
107)	1,2,4,5-Tetrachloroben...	6.738	216	297824	23.92	ppm	100
109)	Benzidine	10.385	184	9210	4.53	ppm	97
113)	Pentachloronitrobenzene	8.642	295	62688	45.83	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81781.D
Acq On : 15 Aug 2018 10:48 am
Operator : angelar
Sample : op14177-bs
Misc : op14177,e2p3603,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 15 15:29:01 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81782.D
Acq On : 15 Aug 2018 11:10 am
Operator : angelar
Sample : op14177-bsd
Misc : op14177,e2p3603,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 15 15:30:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.956	152	453335	40.00	ppm		-0.02
24) Naphthalene-d8	6.010	136	1592715	40.00	ppm		-0.02
47) Acenaphthene-d10	7.454	164	761413	40.00	ppm		-0.02
69) Phenanthrene-d10	8.813	188	1426720	40.00	ppm		0.00
83) Chrysene-d12	12.204	240	1470148	40.00	ppm		0.00
91) Perylene-d12	14.226	264	1350349	40.00	ppm		0.00
101) 1,4-Dichlorobenzene-d4a	4.956	152	453335	40.00	ppm		-0.01
103) Naphthalene-d8a	6.010	136	1592715	40.00	ppm		-0.01
105) Acenaphthene-d10a	7.454	164	761413	40.00	ppm		-0.01
108) Chrysene-d12a	12.204	240	1470148	40.00	ppm		0.01
110) Phenanthrene-d10a	8.813	188	1426720	40.00	ppm		0.00
114) Chrysene-d12b	12.204	240	1470148	40.00	ppm		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	3.887	112	433780	26.76	ppm		0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 53.52%				
8) Phenol-d5	4.678	99	380151	18.62	ppm		0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 37.24%				
25) Nitrobenzene-d5	5.416	82	619083	36.02	ppm		-0.02
Spiked Amount 50.000	Range 19 - 61		Recovery = 72.04%#				
51) 2-Fluorobiphenyl	6.898	172	959502	32.30	ppm		-0.01
Spiked Amount 50.000	Range 21 - 58		Recovery = 64.60%#				
73) 2,4,6-Tribromophenol	8.139	330	168315	42.30	ppm		-0.01
Spiked Amount 50.000	Range 12 - 68		Recovery = 84.60%#				
85) Terphenyl-d14	10.717	244	1535295	46.37	ppm		-0.02
Spiked Amount 50.000	Range 16 - 65		Recovery = 92.74%#				
111) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm		
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#				
112) o-terphenyl	0.000	230	0	0.00	ppm		
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.341	88	103842	16.27	ppm		99
3) Pyridine	2.667	79	327375	18.30	ppm		99
4) N-Nitrosodimethylamine	2.635	74	213546	21.31	ppm		92
6) Indene	5.170	116	917177	35.37	ppm		98
7) Cumene	4.293	105	1445013	33.63	ppm		99
9) Phenol	4.689	94	454800	19.82	ppm	#	59
10) Aniline	4.684	93	692535	28.84	ppm		80
11) bis(2-Chloroethyl)ether	4.737	93	586441	39.55	ppm		100
12) 2-Chlorophenol	4.791	128	610362	36.37	ppm		95
13) Decane	4.823	57	443624	24.09	ppm		96
14) 1,3-Dichlorobenzene	4.908	146	511499	27.77	ppm		99
15) 1,4-Dichlorobenzene	4.967	146	479814	27.55	ppm		99
16) Benzyl alcohol	5.079	108	343630	36.69	ppm		94
17) 1,2-Dichlorobenzene	5.095	146	469072	27.99	ppm		99
18) Acetophenone	5.288	105	777487	34.10	ppm		96
19) 2-Methylphenol	5.181	108	422437	30.20	ppm		98
20) 2,2'-oxybis(1-Chloropr...	5.181	121	142248	33.36	ppm	#	69

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81782.D
Acq On : 15 Aug 2018 11:10 am
Operator : angelar
Sample : op14177-bsd
Misc : op14177,e2p3603,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 15 15:30:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21)	3&4-Methylphenol	5.304	108	418269	28.88	ppm		98
22)	n-Nitroso-di-n-propyla...	5.293	70	403784	34.31	ppm		93
23)	Hexachloroethane	5.374	201	149885	24.28	ppm		88
26)	Nitrobenzene	5.432	77	590595	35.58	ppm		97
27)	Quinoline	6.315	129	1142816	39.78	ppm		99
28)	Isophorone	5.630	82	1164275	39.77	ppm		98
29)	2-Nitrophenol	5.694	139	313812	42.95	ppm		91
30)	2,4-Dimethylphenol	5.737	107	589986	42.79	ppm		94
31)	Benzoic acid	5.850	105	278996	28.58	ppm		99
32)	bis(2-Chloroethoxy)met...	5.801	93	618201	39.54	ppm		99
33)	2,4-Dichlorophenol	5.903	162	479444	38.89	ppm		99
34)	2,6-Dichlorophenol	6.085	162	412702	37.02	ppm		99
36)	1,2,4-Trichlorobenzene	5.962	180	392503	29.45	ppm		99
38)	Naphthalene	6.026	128	1294215	31.87	ppm		99
39)	4-Chloroaniline	6.074	127	388027	22.07	ppm		99
40)	2,3-Dichloroaniline	6.828	161	507491	33.11	ppm		95
41)	Caprolactam	6.368	113	53823	11.92	ppm		91
42)	Hexachlorobutadiene	6.128	225	212929	27.98	ppm		99
43)	4-Chloro-3-methylphenol	6.486	107	556162	42.81	ppm	#	47
44)	2-Methylnaphthalene	6.593	141	869152	35.75	ppm		97
45)	1-Methylnaphthalene	6.679	141	857548	32.12	ppm		100
46)	Dimethylnaphthalene	7.112	156	811624	33.31	ppm		98
48)	Hexachlorocyclopentadiene	6.727	237	316804	45.25	ppm		99
49)	2,4,6-Trichlorophenol	6.834	196	341251	41.87	ppm		100
50)	2,4,5-Trichlorophenol	6.871	196	335357	39.36	ppm		99
52)	2-Chloronaphthalene	7.000	162	775808	31.28	ppm		100
53)	Biphenyl	6.978	154	1172448	35.78	ppm		100
54)	2-Nitroaniline	7.085	65	368567	45.16	ppm		91
55)	Dimethylphthalate	7.230	163	1109408	39.61	ppm		100
56)	Acenaphthylene	7.342	152	1412783	35.46	ppm		99
57)	2,6-Dinitrotoluene	7.283	165	242655	44.33	ppm		96
58)	3-Nitroaniline	7.427	138	242930	34.54	ppm		97
59)	Acenaphthene	7.486	153	909508	35.84	ppm		97
60)	2,4-Dinitrophenol	7.513	184	253556	93.40	ppm	#	79
61)	4-Nitrophenol	7.577	109	120272	29.23	ppm		95
62)	Dibenzofuran	7.625	168	1243039	36.46	ppm		95
63)	2,4-Dinitrotoluene	7.615	165	319708	43.42	ppm		77
64)	2,3,4,6-Tetrachlorophenol	7.738	232	291370	44.50	ppm		97
65)	Diethylphthalate	7.813	149	1137134	40.94	ppm		99
66)	Fluorene	7.920	166	1073051	37.21	ppm		97
67)	4-Chlorophenyl-phenyle...	7.914	204	516384	38.44	ppm		95
68)	4-Nitroaniline	7.946	138	267947	38.50	ppm		94
70)	4,6-Dinitro-2-methylph...	7.973	198	186221	44.83	ppm		91
71)	n-Nitrosodiphenylamine	8.021	169	710108	34.69	ppm		99
72)	1,2-Diphenylhydrazine	8.053	77	1173084	37.89	ppm		100
74)	4-Bromophenyl-phenylether	8.358	248	338091	40.39	ppm		89
75)	Hexachlorobenzene	8.433	284	381680	40.89	ppm		98
76)	Pentachlorophenol	8.626	266	269506	49.68	ppm		98
77)	Phenanthrene	8.834	178	1474497	38.58	ppm		99
78)	Anthracene	8.888	178	1420114	36.83	ppm		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81782.D
Acq On : 15 Aug 2018 11:10 am
Operator : angelar
Sample : op14177-bsd
Misc : op14177,e2p3603,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 15 15:30:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

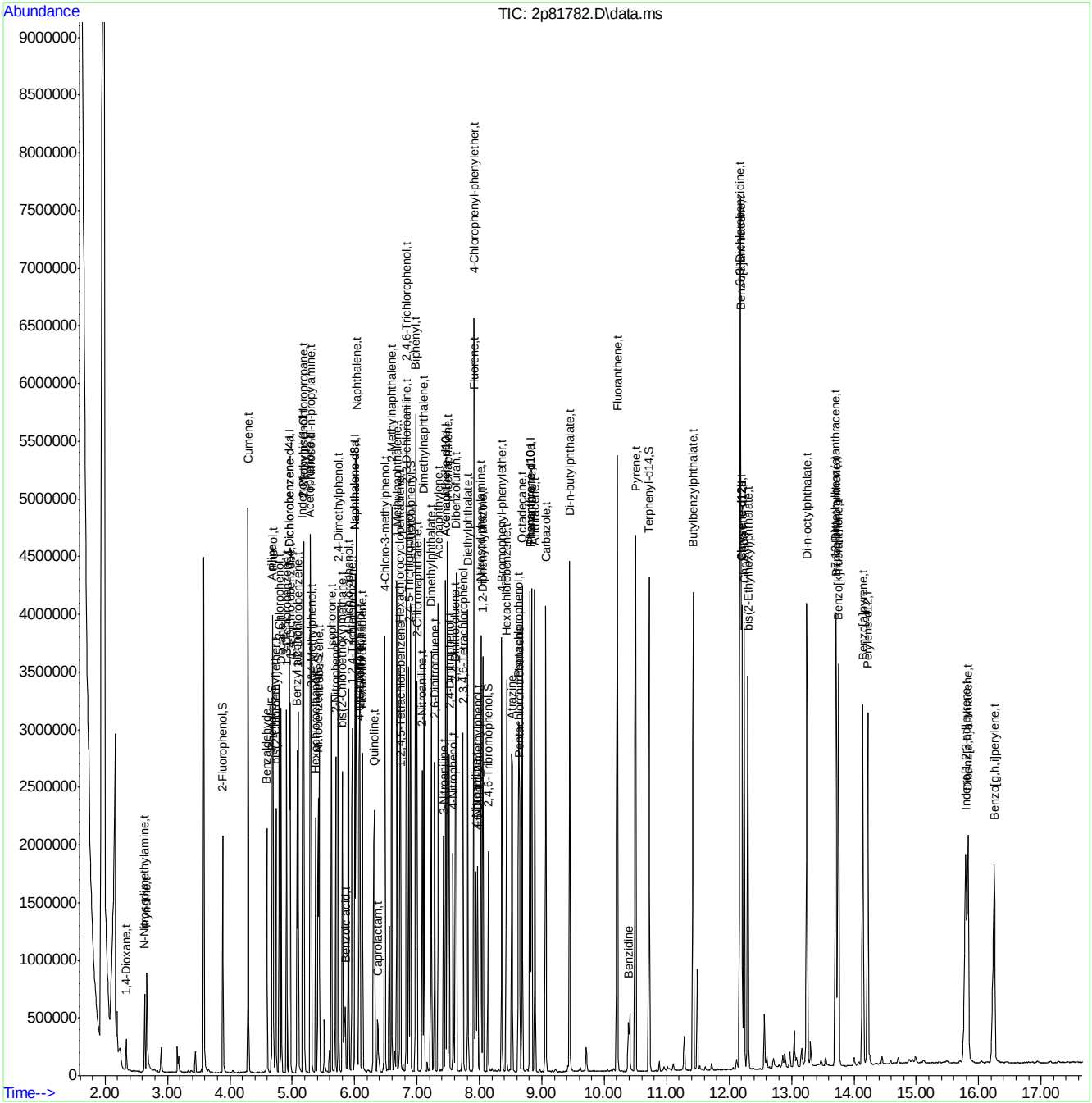
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79) Carbazole	9.064	167	1622400	42.12	ppm	100
80) Di-n-butylphthalate	9.444	149	2219988	46.65	ppm	99
81) Fluoranthene	10.209	202	2270240	49.23	ppm	99
82) Octadecane	8.684	43	557722	37.14	ppm	98
84) Pyrene	10.503	202	2170297	43.62	ppm	98
86) Butylbenzylphthalate	11.423	149	1132319	52.75	ppm	97
87) Benzo[a]anthracene	12.182	228	1967399	43.23	ppm	99
88) 3,3'-Dichlorobenzidine	12.177	252	1075171	66.09	ppm	99
89) Chrysene	12.241	228	1527756	38.12	ppm	99
90) bis(2-Ethylhexyl)phtha...	12.300	149	1113448	44.13	ppm	100
92) Di-n-octylphthalate	13.247	149	2333132	51.86	ppm	99
93) Benzo[b]fluoranthene	13.717	252	1821050	45.21	ppm	95
94) Benzo[k]fluoranthene	13.755	252	1558909	43.00	ppm	98
95) Benzo[a]pyrene	14.145	252	1517484	43.46	ppm	99
96) Indeno[1,2,3-cd]pyrene	15.793	276	1488893	46.07	ppm	99
98) Dibenz[a,h]anthracene	15.830	278	1365391	41.89	ppm	99
99) 7,12-Dimethylbenz(a)an...	13.712	256	273702	15.72	ppm	96
100) Benzo[g,h,i]perylene	16.253	276	1438504	44.05	ppm	98
102) Benzaldehyde	4.593	105	320833	27.54	ppm	98
106) Atrazine	8.524	215	142877	37.51	ppm	93
107) 1,2,4,5-Tetrachloroben...	6.737	216	281850	22.34	ppm	96
109) Benzidine	10.385	184	153088	20.15	ppm	100
113) Pentachloronitrobenzene	8.642	295	61509	44.41	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81782.D
Acq On : 15 Aug 2018 11:10 am
Operator : angelar
Sample : op14177-bsd
Misc : op14177,e2p3603,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

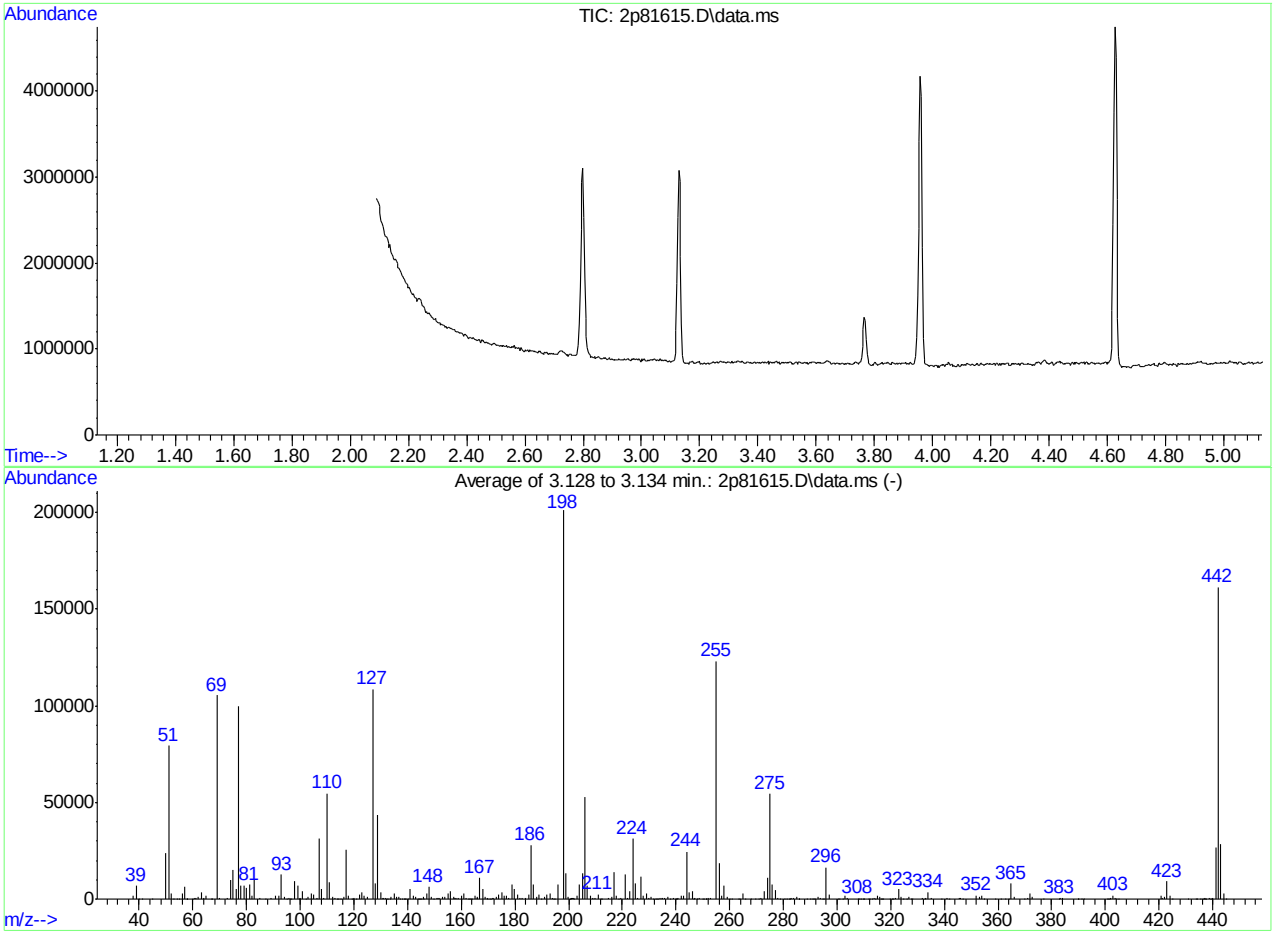
Quant Time: Aug 15 15:30:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration



DFTPP

Data File : C:\msdchem\1\DATA\2P3595\2p81615.D Vial: 1
Acq On : 9 Aug 2018 2:38 pm Operator: seanb1
Sample : dftpp Inst : MS2P
Misc : op13652,e2p3595,1000,,,1,1 Multiplr: 1.00
MS Integration Params: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M (ChemStation Integrator)
Title :



AutoFind: Scans 335, 336, 337; Background Corrected with Scan 327

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.5	79445	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	52.4	105341	PASS
70	69	0.00	2	0.5	543	PASS
127	198	40	60	54.0	108587	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	201109	PASS
199	198	5	9	6.7	13536	PASS
275	198	10	30	27.1	54512	PASS
365	198	1	100	4.0	8032	PASS
441	443	0.01	100	94.1	26531	PASS
442	198	40	100	80.3	161397	PASS
443	442	17	23	17.5	28203	PASS

2p81615.D DFTPP2P.M Fri Aug 10 12:03:54 2018 RPT1

Average of 3.128 to 3.134 min.: 2p81615.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.90	1596	56.00	3037	66.75	170	79.90	5658
38.95	6895	56.85	6189	67.00	181	80.95	7438
39.90	242	57.80	211	68.90	105341	81.85	1654
40.95	284	57.95	172	69.80	543	83.00	10330
44.85	141	60.00	110	72.85	761	84.90	518
49.95	23639	60.80	436	74.00	9735	86.90	44
51.00	79445	60.95	696	75.00	15310	88.90	341
51.95	3156	61.95	1301	76.05	5466	90.90	2026
52.80	163	63.00	3282	77.00	99648	91.95	1870
53.90	58	63.85	738	78.00	7116	92.90	12528
54.90	272	65.00	1713	79.00	6912	93.90	1008

Average of 3.128 to 3.134 min.: 2p81615.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.80	285	104.00	2727	114.20	105	123.85	1711
95.90	562	104.95	2372	114.85	141	124.95	1446
96.30	97	106.05	811	116.05	1378	127.00	108587
96.70	202	106.95	31573	117.00	25757	128.00	8217
98.00	9138	107.95	5124	117.90	1783	128.95	43573
99.00	7069	108.90	558	119.00	149	129.90	3371
99.70	108	110.00	54763	119.60	114	130.80	473
100.05	461	110.95	8521	119.90	426	131.00	331
100.90	4168	111.85	905	120.80	61	131.75	405
101.85	150	112.95	594	121.90	2140	132.10	117
102.95	1268	113.80	62	122.90	3225	132.50	173

Average of 3.128 to 3.134 min.: 2p81615.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.20	89	140.90	5077	148.95	1294	157.90	593
133.90	1150	141.95	1802	149.80	215	158.90	727
134.90	3197	142.95	1449	150.90	799	159.90	1595
135.90	1391	143.75	297	151.30	328	160.90	2954
136.90	1299	144.40	97	151.70	318	161.85	752
137.10	293	144.70	262	152.85	1470	162.60	56
137.90	297	145.10	66	153.90	1201	163.00	244
138.60	83	145.70	184	155.00	2819	163.60	127
138.90	117	145.95	934	156.00	4049	164.00	192
139.30	107	147.00	2810	157.00	1041	164.90	1592
140.00	203	147.95	6268	157.70	386	165.90	1019

Average of 3.128 to 3.134 min.: 2p81615.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
166.10	681	173.95	2271	184.95	2481	194.70	211
166.90	10870	175.00	3624	186.00	27968	196.00	7293
167.90	5503	175.95	1599	187.00	7700	197.90	201109
169.00	946	176.90	1694	187.90	910	198.90	13536
169.60	98	177.80	484	188.90	2058	199.95	1166
169.90	369	178.90	7599	189.95	283	200.50	156
170.70	146	179.90	5526	190.90	1099	200.80	154
170.90	278	181.00	2233	191.95	2564	201.10	425
171.70	362	181.90	336	192.95	2799	201.40	633
171.95	805	182.85	340	193.90	725	201.70	327
172.95	1143	183.75	645	194.50	176	201.90	222

Average of 3.128 to 3.134 min.: 2p81615.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
202.95	1636	214.80	663	225.85	494	234.70	415
204.00	7635	216.00	1156	226.95	11788	235.00	669
205.00	13134	216.90	13704	227.95	1701	235.90	687
206.00	52677	217.90	1792	228.90	2856	236.85	1247

207.00	7101	218.75	206	229.75	504	237.85	187
207.95	1991	219.55	332	230.85	1216	238.90	517
208.85	625	221.00	12670	231.70	143	239.75	248
209.85	737	221.90	752	232.30	58	240.00	208
211.00	2441	222.90	4110	232.80	76	240.30	101
211.70	159	224.00	31229	233.00	102	240.85	538
212.20	77	224.95	7899	233.85	828	241.90	2012

Average of 3.128 to 3.134 min.: 2p81615.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
243.00	1557	251.30	80	263.75	12	276.95	4507
244.00	24542	252.00	315	264.95	3012	277.85	709
244.95	3429	252.95	545	265.70	268	278.85	181
245.95	4158	254.95	123285	267.70	63	280.30	60
246.60	175	256.00	18414	269.70	271	281.40	54
246.90	798	256.90	1708	270.75	223	281.90	116
247.90	203	257.95	7121	271.80	509	282.40	92
248.85	885	258.90	1042	272.95	4317	282.90	658
249.70	131	259.95	154	274.00	10804	283.90	367
250.20	178	260.80	216	275.00	54512	284.95	901
251.05	179	263.10	55	275.95	7414	285.80	170

Average of 3.128 to 3.134 min.: 2p81615.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
286.00	65	296.95	2176	311.90	54	320.70	194
288.75	220	300.35	142	312.20	65	320.95	291
289.90	62	301.00	278	312.80	148	321.80	374
290.80	62	302.00	123	313.85	650	323.00	4974
291.40	72	302.90	1764	314.10	243	323.90	925
291.80	129	303.90	530	314.95	2018	324.80	70
292.95	1201	307.80	200	315.90	1113	325.80	94
293.85	392	308.10	94	316.50	95	326.90	939
294.80	211	308.95	129	316.90	69	327.70	213
295.00	141	309.80	61	317.10	125	327.95	231
295.90	16302	310.00	66	319.70	54	331.75	320

Average of 3.128 to 3.134 min.: 2p81615.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
332.80	150	352.95	1359	371.90	2793	401.10	120
332.95	388	353.95	1527	372.90	926	401.60	276
334.00	3665	354.90	285	376.80	52	401.85	884
335.00	797	358.80	101	382.70	286	402.90	1946
339.00	57	361.05	145	382.95	549	403.75	326
340.90	715	362.80	98	383.90	359	404.05	280
342.00	100	363.80	130	389.75	275	404.90	128
345.70	513	364.85	8032	390.00	69	420.85	1495
345.90	716	365.85	1221	390.95	228	421.30	330
346.85	204	369.85	171	391.90	237	421.95	1453
351.85	2054	370.90	552	400.90	95	423.00	9115

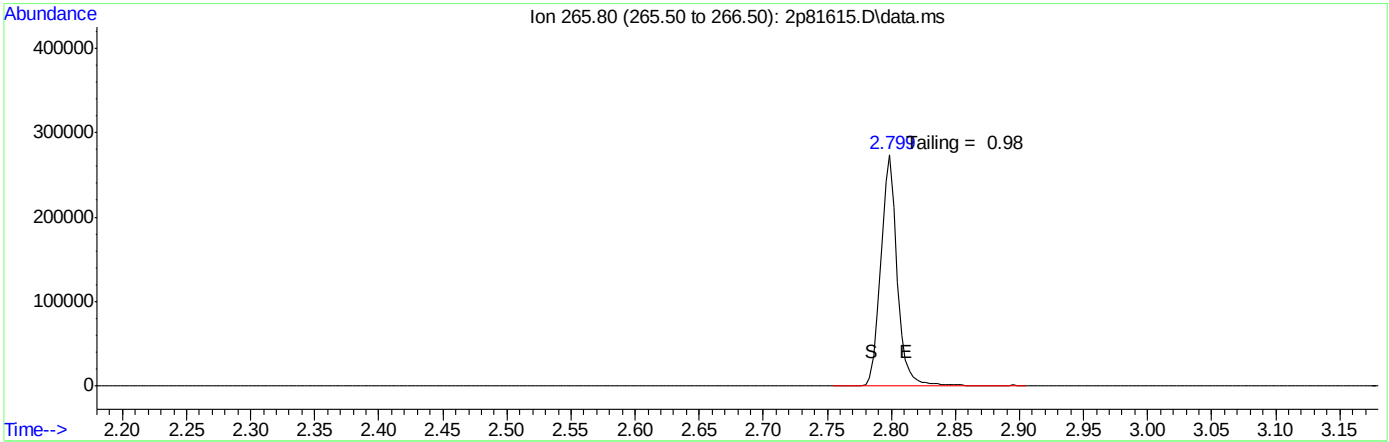
Average of 3.128 to 3.134 min.: 2p81615.D\data.ms
dftpp
Modified:subtracted

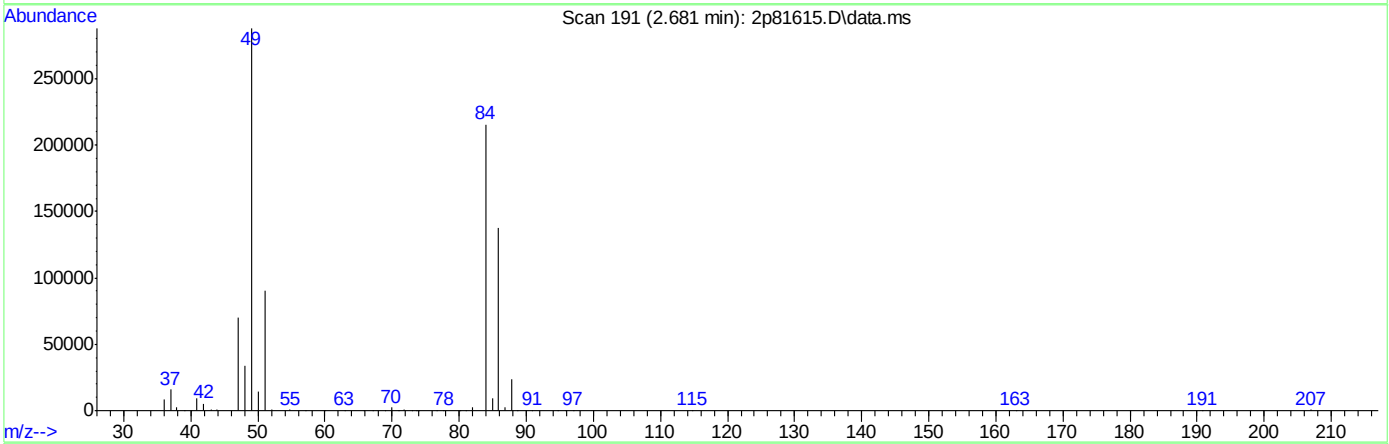
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.95	1730	438.55	360				
424.90	231	439.20	259				
430.60	56	439.40	128				
433.60	61	439.80	553				
434.00	55	441.05	26531				
435.45	178	442.00	161397				
436.00	90	443.00	28203				
436.45	203	444.00	2791				
436.85	324	444.80	110				
437.20	78						
437.60	293						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81615.D
Acq On : 9 Aug 2018 2:38 pm
Operator : seanb1
Sample : dftpp
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 09 14:42:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81615.D\data.ms

(1) Pentacholorphenol

2.680min (-2.680) 0.00ppb

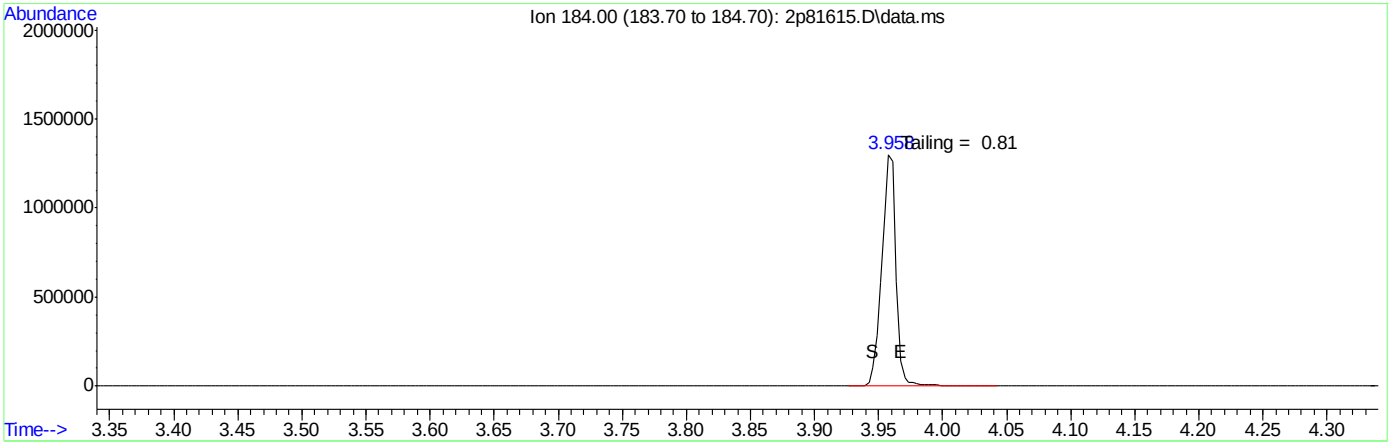
response 0

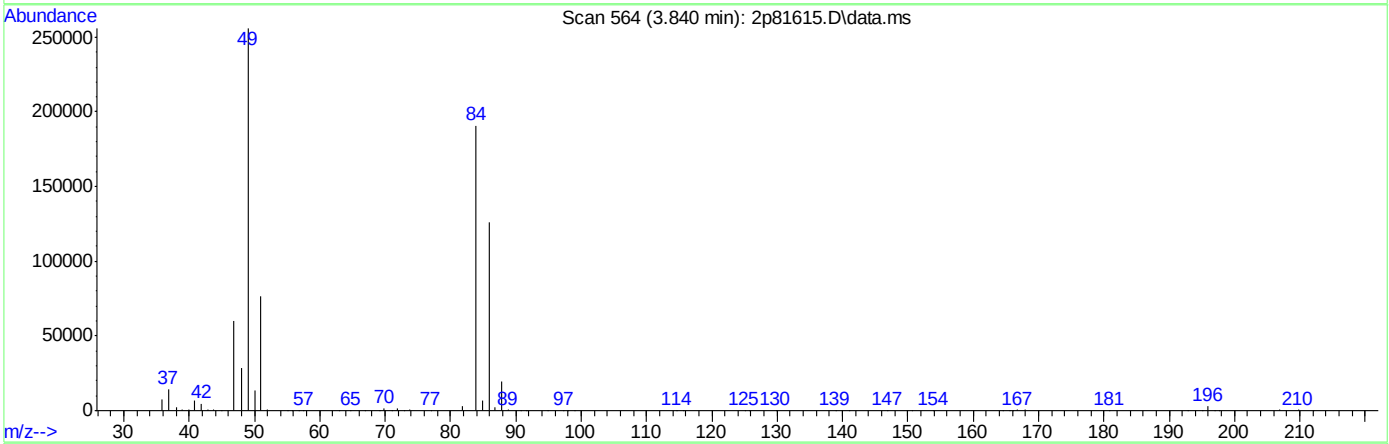
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81615.D
Acq On : 9 Aug 2018 2:38 pm
Operator : seanb1
Sample : dftpp
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 09 14:42:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81615.D\data.ms

(2) Benzidine

3.840min (-3.840) 0.00ppb

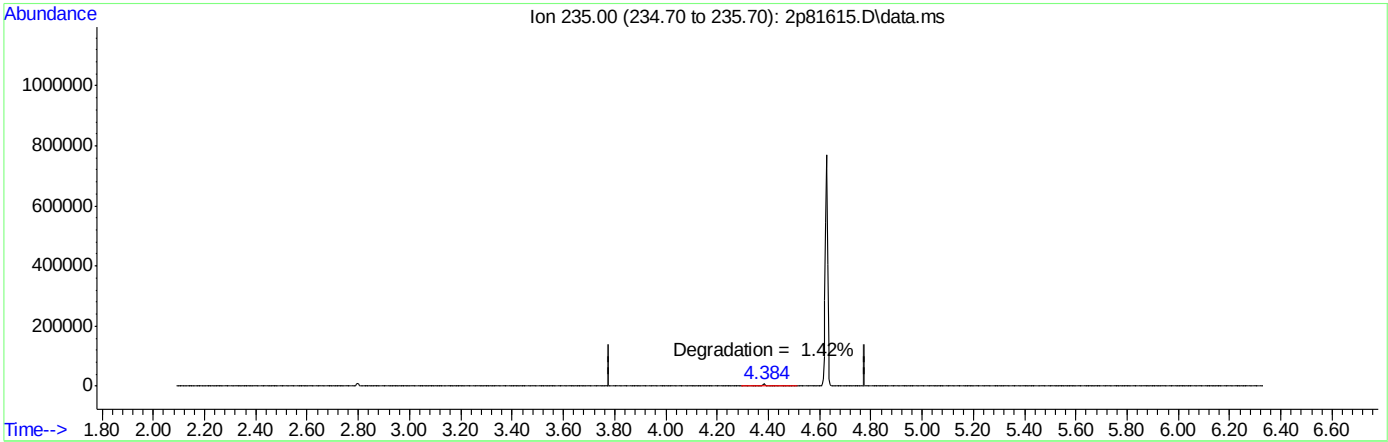
response 0

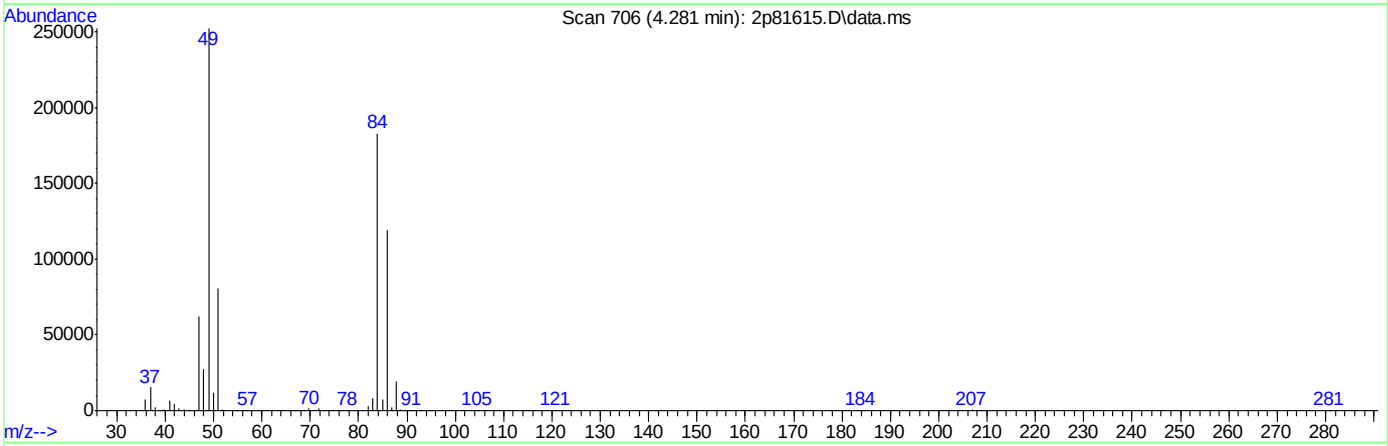
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81615.D
Acq On : 9 Aug 2018 2:38 pm
Operator : seanb1
Sample : dftpp
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 09 14:42:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81615.D\data.ms

(3) PP-DDT

4.280min (-4.280) 0.00ppb

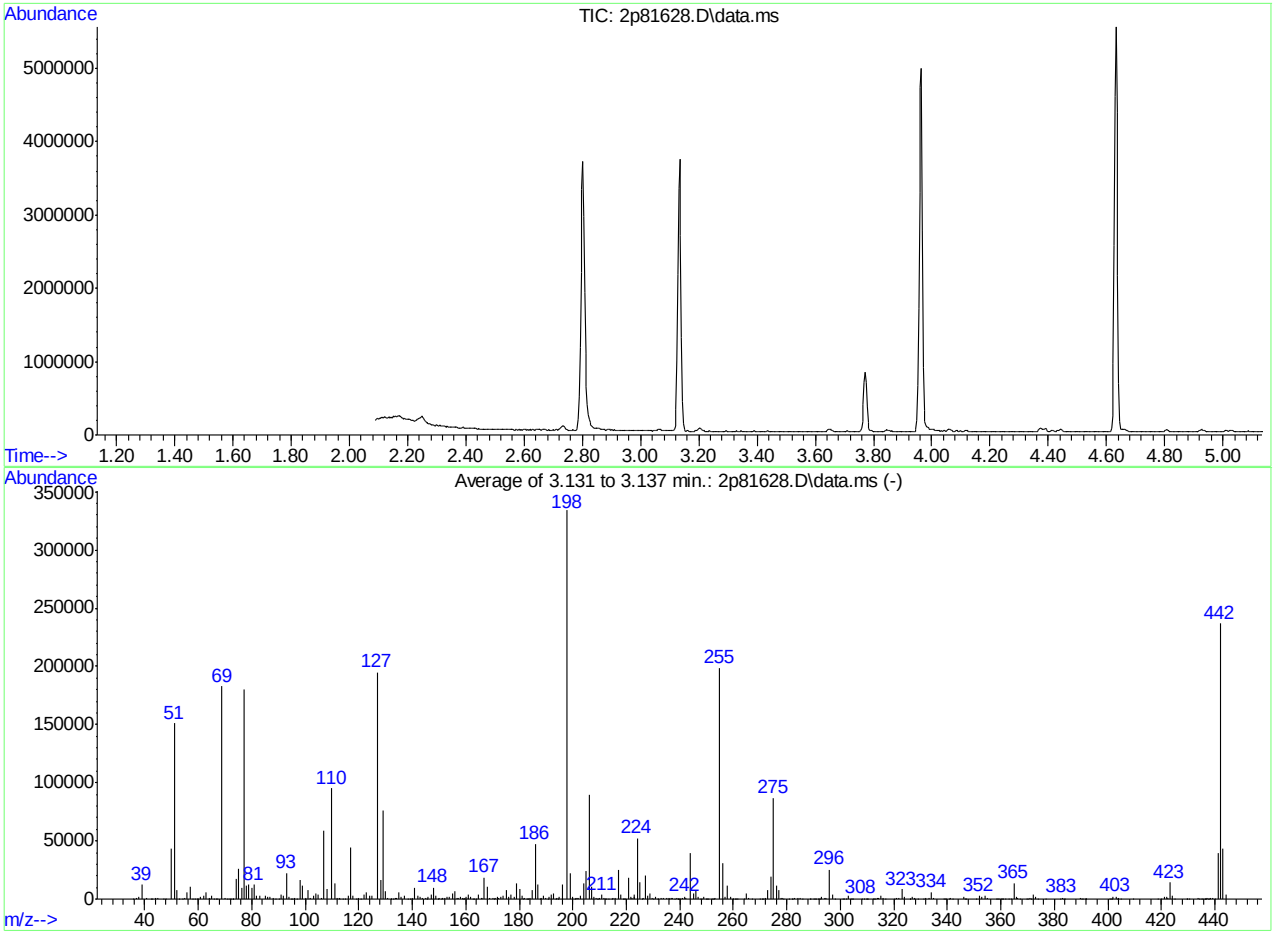
response 0

Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\2P3596\2p81628.D Vial: 1
Acq On : 9 Aug 2018 8:47 pm Operator: seanb1
Sample : dftpp Inst : MS2P
Misc : op13652,e2p3596,1000,,,1,1 Multiplr: 1.00
MS Integration Params: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M (ChemStation Integrator)
Title :



AutoFind: Scans 336, 337, 338; Background Corrected with Scan 327

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.3	151158	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	54.8	182849	PASS
70	69	0.00	2	0.6	1146	PASS
127	198	40	60	58.3	194688	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	333952	PASS
199	198	5	9	6.6	22101	PASS
275	198	10	30	26.1	87125	PASS
365	198	1	100	4.1	13731	PASS
441	443	0.01	100	91.5	39643	PASS
442	198	40	100	70.9	236693	PASS
443	442	17	23	18.3	43333	PASS

2p81628.D DFTPP2P.M Fri Aug 10 14:48:42 2018 RPT1

Average of 3.131 to 3.137 min.: 2p81628.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.85	141	50.00	42976	59.85	173	69.95	1146
36.90	1190	51.00	151158	60.95	2168	70.90	6
37.90	2289	52.00	7756	62.00	3002	71.80	137
39.00	12115	52.90	76	63.00	5460	72.10	68
40.85	670	54.10	89	63.95	661	72.80	263
42.20	59	54.90	999	64.20	184	73.10	468
42.90	148	55.95	5561	65.10	2505	74.00	16974
43.90	574	56.95	10779	65.80	221	74.90	25864
44.90	713	57.85	146	66.60	131	76.10	9613
46.90	491	58.80	181	67.00	260	77.00	180096
48.00	5	59.50	88	68.90	182849	78.00	11906

Average of 3.131 to 3.137 min.: 2p81628.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.00	12683	90.95	3664	100.95	7345	112.70	532
79.95	9492	91.95	3255	101.85	572	112.90	181
80.90	12219	92.90	22608	102.90	2926	113.80	53
81.90	2653	93.95	1963	103.95	4720	114.70	330
82.85	3002	94.80	109	104.90	3829	116.05	2811
84.95	2520	95.10	144	105.85	932	116.95	44221
85.90	1697	95.95	1068	107.00	58915	117.90	2930
86.85	1542	97.00	282	107.95	8618	119.00	496
87.85	1155	98.00	16847	109.90	95085	119.85	1019
88.85	400	99.00	11565	110.95	13919	120.90	373
90.20	94	100.05	1484	111.95	1468	121.90	3590

Average of 3.131 to 3.137 min.: 2p81628.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
122.90	5994	133.85	1276	143.90	523	151.40	801
123.95	2804	134.10	961	144.80	747	152.10	819
124.90	2695	135.05	5561	145.30	97	152.95	2417
126.95	194688	135.85	2085	145.95	1815	153.95	2342
128.05	16085	136.95	2617	146.90	4288	154.90	5291
128.95	76205	138.10	300	147.95	9991	155.95	6904
130.00	6934	139.00	199	148.95	2580	156.90	808
130.90	1210	139.90	1021	149.70	147	157.10	545
131.85	472	141.00	9424	149.95	664	157.85	1524
132.10	279	141.90	2648	150.80	310	158.70	468
133.05	492	142.95	2024	151.15	801	158.90	541

Average of 3.131 to 3.137 min.: 2p81628.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
159.20	305	166.10	1312	175.00	7580	183.30	85
159.70	858	166.90	18521	176.05	2226	184.00	1306
160.00	1746	167.95	10338	177.00	3681	184.95	7756
160.90	3753	168.95	1044	177.95	1627	186.00	47403
161.10	1079	170.05	613	178.95	13668	187.00	12360
161.85	1525	170.60	189	180.00	8377	187.80	437
162.75	472	170.95	659	180.90	3121	188.10	956
163.10	186	171.80	1630	181.60	271	188.90	2674
163.70	148	172.30	568	181.90	789	189.90	587
164.90	3599	172.95	1551	182.70	467	190.50	345
165.80	705	173.95	2973	183.00	119	190.90	1804

Average of 3.131 to 3.137 min.: 2p81628.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
191.90	4324	200.60	239	209.10	327	216.90	25299
192.85	4967	201.00	636	209.70	351	217.90	3410
193.60	208	201.55	1078	209.95	1454	218.80	444
193.90	1040	201.85	717	210.90	3825	219.20	252

194.40	244	202.95	2672	211.75	879	219.50	82
194.90	1498	204.00	13349	212.00	196	221.00	18685
196.00	12198	205.05	24499	212.60	55	221.80	1665
197.90	333952	206.00	89867	213.10	117	222.00	1214
198.90	22101	206.95	10611	214.70	262	222.80	1650
199.90	685	207.90	1994	214.95	1007	223.10	3881
200.05	1490	208.85	723	216.00	1386	224.00	52088

Average of 3.131 to 3.137 min.: 2p81628.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.00	14027	232.80	576	239.85	423	248.95	1714
225.80	382	233.95	1376	240.10	397	249.80	218
226.10	883	235.00	1236	240.95	1446	250.10	237
226.95	20137	235.80	417	241.90	2107	250.75	509
227.90	2950	236.05	710	242.10	1112	252.00	342
228.95	4577	236.80	641	244.00	39205	252.20	458
229.65	731	237.05	799	245.00	5331	252.80	448
230.00	424	238.20	170	245.95	7660	253.05	1164
231.00	1841	238.70	744	246.95	1618	254.95	198891
231.60	133	239.10	131	247.80	261	255.95	30523
231.95	333	239.30	189	248.00	270	257.00	2434

Average of 3.131 to 3.137 min.: 2p81628.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
257.90	11733	269.90	401	278.60	204	290.50	83
258.85	1839	270.80	176	280.85	162	290.90	256
259.70	183	271.20	509	282.00	105	291.70	84
260.00	470	271.90	798	282.20	195	292.00	117
260.75	274	272.95	7882	282.95	853	292.30	248
261.10	197	273.95	19000	283.95	591	292.95	2404
261.70	155	275.00	87125	284.85	1112	294.00	620
264.10	171	276.00	11713	285.95	342	294.80	1106
264.90	4612	276.95	7767	288.65	238	295.95	25459
265.80	658	277.80	715	288.90	168	296.90	3689
267.05	427	278.05	824	289.90	196	297.85	190

Average of 3.131 to 3.137 min.: 2p81628.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
300.80	342	310.30	51	321.95	611	332.95	1086
301.50	165	312.15	217	323.00	8304	334.00	5832
301.95	398	312.70	278	323.90	1795	335.00	1190
302.95	2868	313.00	97	325.90	241	338.70	114
303.80	367	313.80	1222	326.20	114	339.10	215
304.10	335	314.20	577	326.80	1729	339.60	98
304.70	111	315.00	3107	327.60	132	340.80	380
307.85	509	315.95	1357	327.85	732	341.00	651
308.70	77	316.85	226	328.85	279	341.90	247
309.70	130	320.05	368	331.10	61	345.95	1818
309.90	256	320.95	947	331.95	799	346.70	245

Average of 3.131 to 3.137 min.: 2p81628.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
346.85	396	360.85	120	371.20	363	390.75	358
350.85	313	361.50	65	371.95	4246	391.20	118
352.00	2605	363.10	80	373.00	1551	391.70	243
352.95	2111	363.75	376	373.95	198	391.90	139
353.95	2547	364.90	13731	376.90	210	400.75	313
354.80	520	365.90	1645	382.30	147	401.20	222
358.20	78	366.10	525	382.90	1263	401.40	255
358.70	79	367.00	70	383.60	205	401.95	1622
359.05	267	369.80	142	384.00	310	402.95	2227
359.80	129	370.10	154	389.85	561	403.70	413
360.50	126	370.85	849	390.20	145	404.00	630

Average of 3.131 to 3.137 min.: 2p81628.D\data.ms

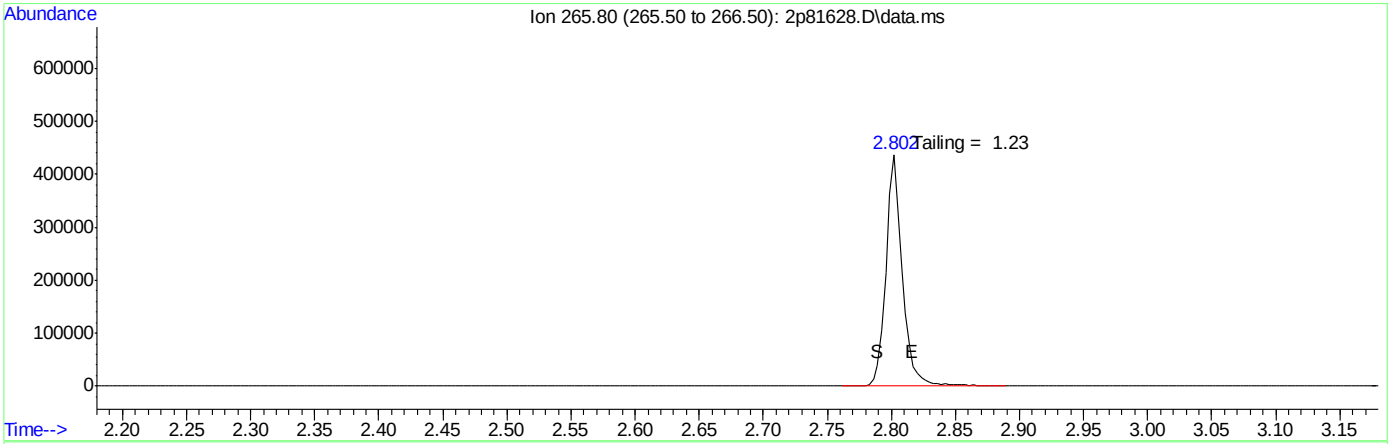
dftpp
Modified:subtracted

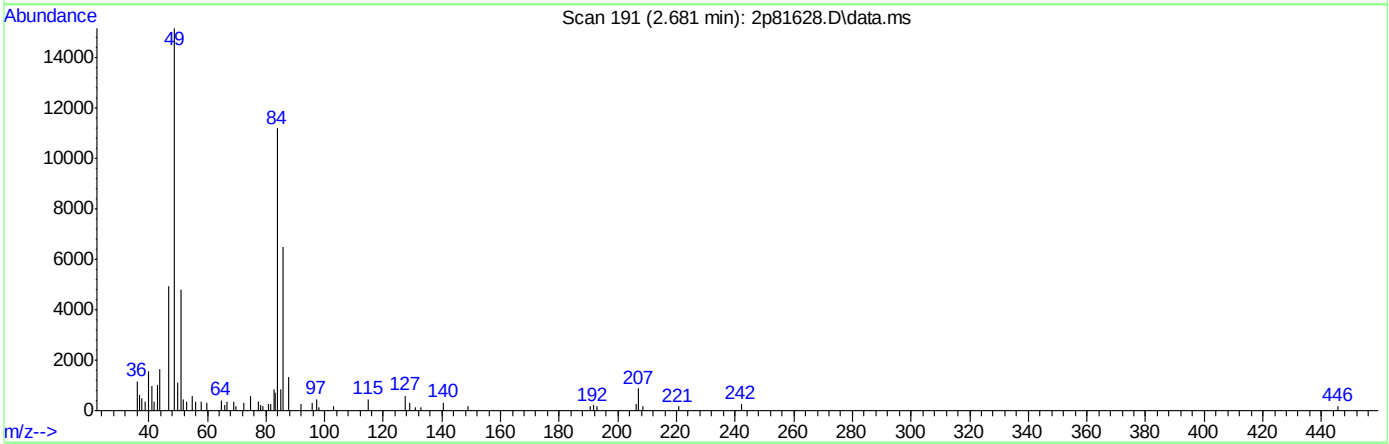
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
405.00	64	429.70	73	437.70	506		
409.50	80	430.45	141	438.15	946		
418.50	64	433.55	620	439.05	518		
419.80	68	434.30	188	439.80	253		
420.95	2036	434.90	164	441.05	39643		
421.95	1533	435.25	316	442.00	236693		
422.20	610	436.10	267	443.00	43333		
423.05	14452	436.35	246	444.00	4337		
423.95	2940	436.70	106				
424.95	407	437.10	528				
429.50	89	437.50	213				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81628.D
Acq On : 9 Aug 2018 8:47 pm
Operator : seanb1
Sample : dftpp
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 09 20:52:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81628.D\data.ms

(1) Pentacholorphenol

2.680min (-2.680) 0.00ppb

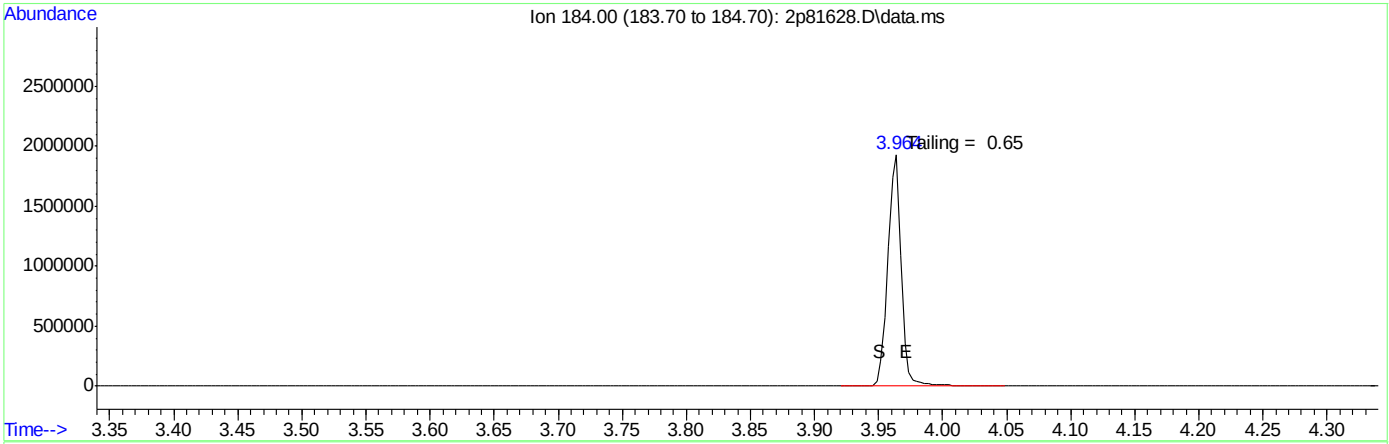
response 0

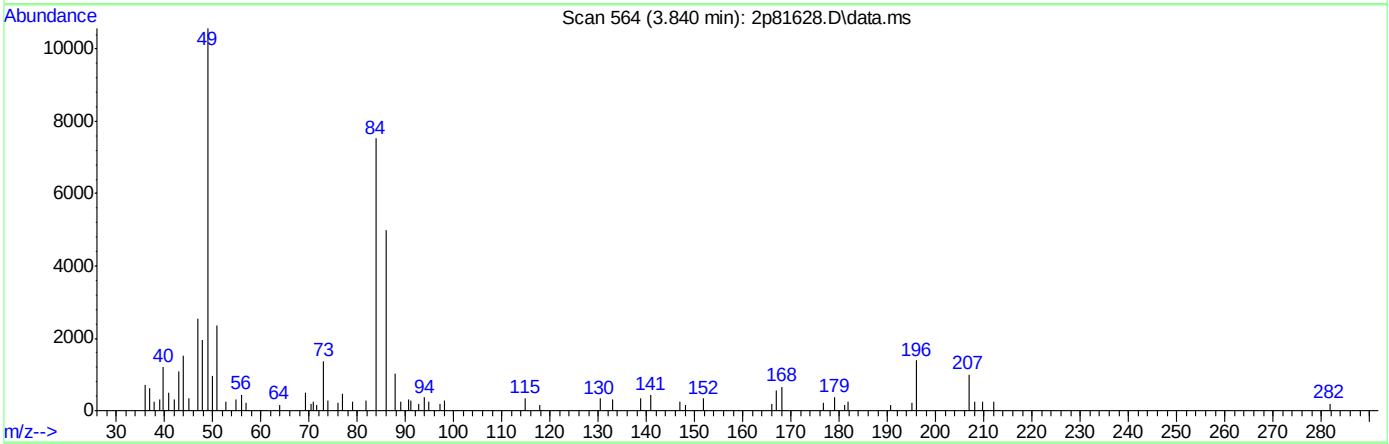
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81628.D
Acq On : 9 Aug 2018 8:47 pm
Operator : seanb1
Sample : dftpp
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 09 20:52:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81628.D\data.ms

(2) Benzidine

3.840min (-3.840) 0.00ppb

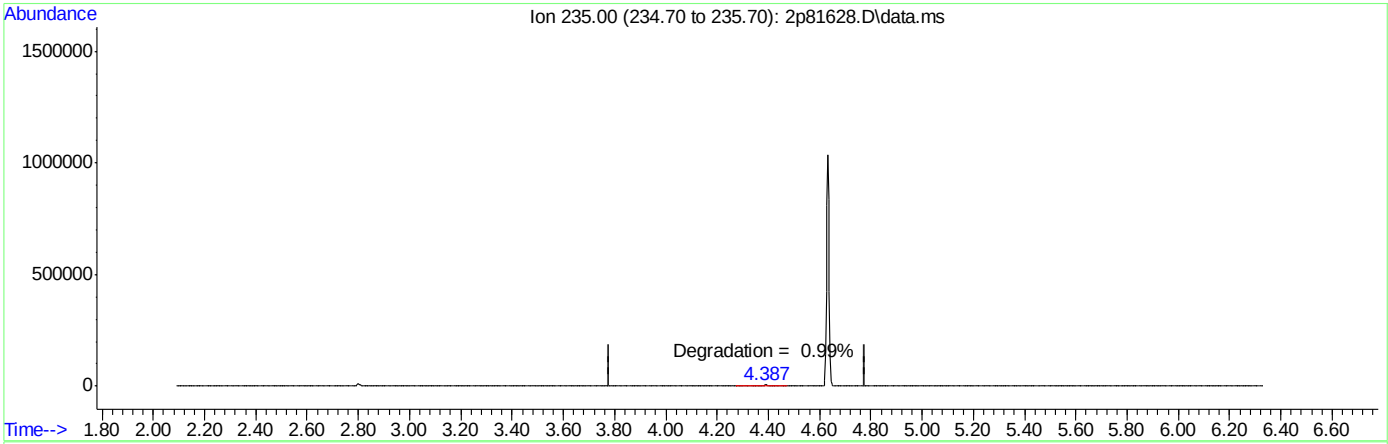
response 0

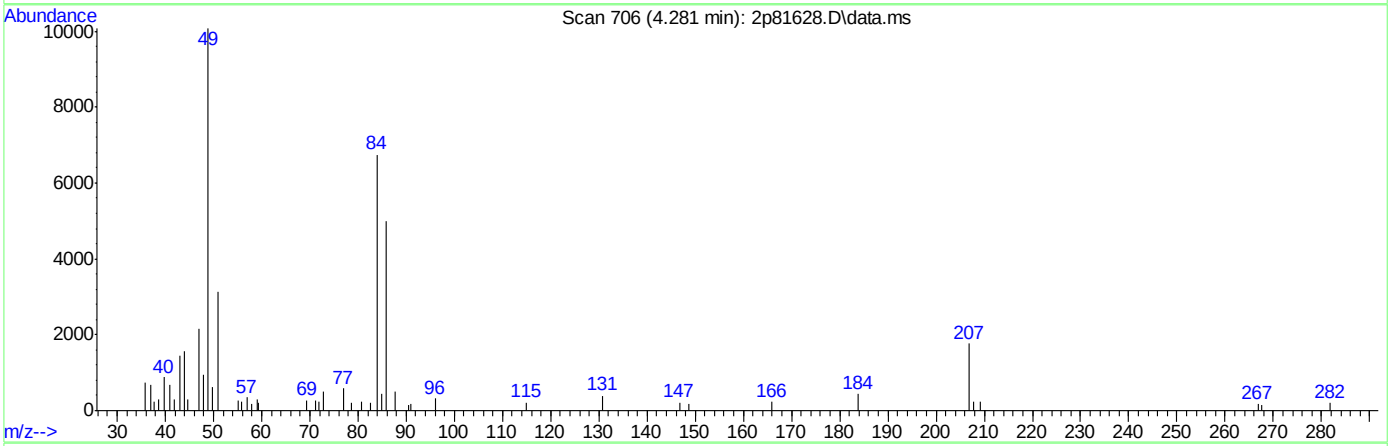
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81628.D
Acq On : 9 Aug 2018 8:47 pm
Operator : seanb1
Sample : dftpp
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 09 20:52:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81628.D\data.ms

(3) PP-DDT

4.280min (-4.280) 0.00ppb

response 0

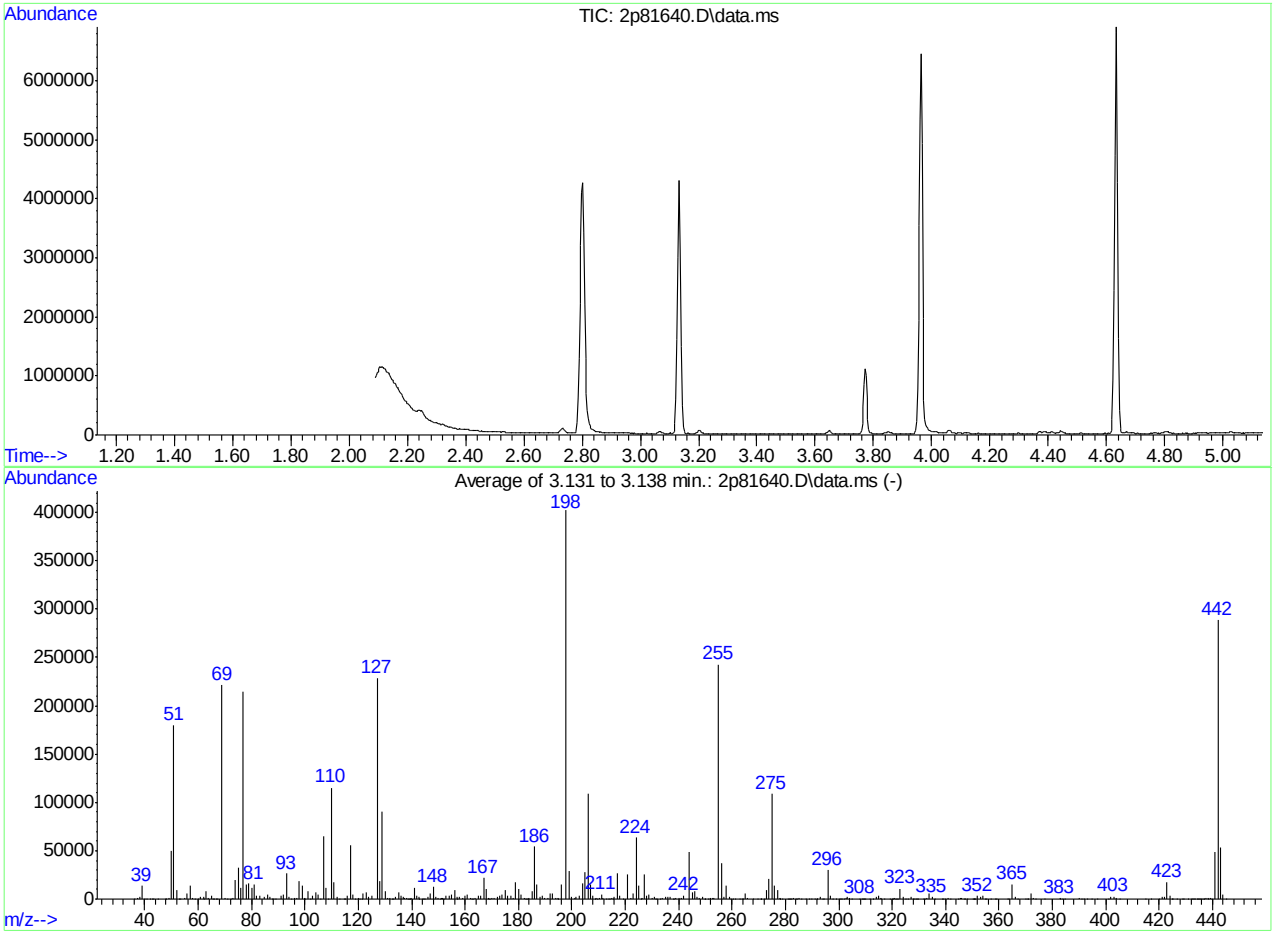
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

2P81628.D edits: PP-DDT

DFTPP

Data File : C:\msdchem\1\DATA\2P3597\2p81640.D Vial: 1
Acq On : 10 Aug 2018 3:36 pm Operator: seanb1
Sample : dftpp Inst : MS2P
Misc : op13652,e2p3597,1000,,,1,1 Multiplr: 1.00
MS Integration Params: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M (ChemStation Integrator)
Title :



AutoFind: Scans 336, 337, 338; Background Corrected with Scan 327

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.8	180010	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	55.0	221323	PASS
70	69	0.00	2	0.6	1400	PASS
127	198	40	60	56.8	228501	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	402048	PASS
199	198	5	9	7.3	29355	PASS
275	198	10	30	27.1	108904	PASS
365	198	1	100	3.8	15160	PASS
441	443	0.01	100	91.3	48528	PASS
442	198	40	100	71.8	288768	PASS
443	442	17	23	18.4	53160	PASS

2p81640.D DFTPP2P.M Fri Aug 10 16:39:45 2018 RPT1

Average of 3.131 to 3.138 min.: 2p81640.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.85	145	48.00	151	58.80	3	67.00	155
37.10	644	48.95	916	60.00	70	68.90	221323
37.95	2666	49.95	50134	60.90	2345	69.95	1400
38.95	13775	50.95	180010	61.90	2533	70.90	72
39.85	405	52.00	9104	62.10	571	72.00	56
40.85	5	52.90	298	63.00	7629	72.90	1546
42.05	155	53.10	274	63.95	1004	74.00	19948
42.70	101	54.95	996	64.90	3064	74.95	32134
43.20	122	55.95	6251	65.60	110	76.05	11099
44.90	41	56.95	13441	65.95	183	76.95	214394
47.80	138	57.90	631	66.50	133	78.00	14573

Average of 3.131 to 3.138 min.: 2p81640.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.95	15703	90.90	3221	101.00	8301	111.95	2404
80.00	11747	92.00	5056	101.85	565	112.70	339
80.95	15227	93.00	26624	102.90	3517	114.40	72
81.90	3016	93.90	2320	104.00	6519	115.00	129
82.95	3357	94.85	228	105.00	5039	116.05	3370
84.90	2692	96.00	1170	105.80	433	116.95	55451
85.95	5000	96.85	685	107.00	65243	117.95	4403
86.95	2159	97.95	18979	108.00	11363	118.85	559
87.70	326	99.00	13687	108.70	414	119.90	1003
87.95	161	99.80	468	109.95	115224	120.60	191
88.90	324	100.05	840	111.00	16945	121.10	328

Average of 3.131 to 3.138 min.: 2p81640.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
121.90	5282	132.95	341	140.95	11184	149.90	902
122.95	6701	133.95	2264	141.90	3871	150.60	108
123.95	2688	134.95	6969	142.60	480	151.00	1291
124.95	3306	136.00	3019	142.90	2744	151.40	719
127.00	228501	136.95	2586	143.85	193	151.60	331
127.95	18737	137.20	932	144.40	320	151.95	548
128.95	90019	137.95	878	144.85	457	152.95	3529
129.95	7642	138.60	421	145.95	2040	153.95	2967
130.95	1661	138.80	161	146.95	5566	155.00	5262
131.90	887	139.15	399	148.00	12742	156.00	8854
132.70	114	139.95	627	148.85	2419	156.80	408

Average of 3.131 to 3.138 min.: 2p81640.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
157.10	1788	166.90	21982	175.95	2955	185.00	7699
157.85	1925	167.90	10922	176.95	3939	186.00	54363
158.95	1428	168.70	429	177.95	1741	186.95	15200
159.90	4020	168.95	1329	178.95	17358	187.95	2093
160.95	5079	169.20	454	180.00	10562	188.95	4020
161.95	1393	170.00	840	180.95	5258	189.80	655
162.60	159	170.80	813	182.00	816	191.05	1550
162.80	92	171.95	1881	182.60	382	191.95	5337
163.85	879	173.00	2980	182.85	484	192.90	5844
165.00	3839	173.95	4270	183.30	157	194.00	1745
166.00	3155	174.95	8969	183.95	1118	194.60	428

Average of 3.131 to 3.138 min.: 2p81640.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
194.95	1265	207.00	15532	214.90	882	225.90	615
195.95	15232	207.90	3659	215.20	236	226.10	914
197.90	402048	208.75	177	216.00	2420	227.00	25027
198.90	29355	209.15	929	216.95	26768	228.00	3232

199.90	2699	209.70	488	217.95	3299	228.95	4730
200.90	662	210.25	1649	218.95	507	229.90	1209
201.50	2454	211.00	4705	220.95	25227	230.90	2307
202.95	3027	211.75	1251	222.10	1180	231.20	338
204.00	16019	212.85	542	222.95	5726	231.80	591
205.00	27312	213.75	160	224.00	63571	232.90	251
206.00	108891	214.00	74	225.00	14493	233.85	1724

Average of 3.131 to 3.138 min.: 2p81640.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
234.95	1971	245.95	8663	256.00	36656	265.90	1234
235.90	2016	247.00	2235	257.05	2008	267.90	147
236.95	2286	247.85	788	258.00	14156	269.75	489
237.90	158	248.90	1898	258.90	2798	270.60	244
238.20	166	249.70	433	259.65	347	270.80	589
238.85	814	249.90	76	260.45	342	271.90	242
239.95	1255	250.95	320	261.00	108	272.95	9009
240.80	1300	252.00	1109	262.80	249	273.95	21483
241.95	3724	252.85	1344	263.70	29	275.00	108904
244.00	48712	253.10	794	264.00	310	276.00	13941
245.05	7004	255.00	242987	264.90	5372	276.95	9544

Average of 3.131 to 3.138 min.: 2p81640.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
277.75	991	284.95	1721	296.00	29955	304.90	62
277.90	235	285.95	200	297.00	4070	307.80	561
278.10	443	287.70	306	297.85	319	308.70	77
278.80	619	288.95	475	299.00	91	308.95	250
280.90	94	289.85	411	300.20	52	309.40	64
281.10	152	290.80	111	300.80	77	309.85	463
281.70	105	291.60	104	301.05	384	311.70	78
281.95	251	292.00	227	301.85	360	312.75	471
282.90	1240	292.90	2684	302.90	1086	314.00	1876
283.70	517	293.85	412	303.05	2605	315.05	4088
284.10	322	294.35	562	303.95	1147	315.70	438

Average of 3.131 to 3.138 min.: 2p81640.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.95	1487	325.00	192	333.95	6314	346.85	426
316.95	235	325.95	281	334.95	1885	347.10	152
319.25	162	326.95	2141	336.05	201	348.00	113
319.90	85	327.80	396	338.70	54	350.15	180
320.30	123	328.00	617	338.85	108	350.60	55
320.85	689	328.70	108	339.70	75	350.80	102
321.20	367	329.00	235	340.95	1416	351.10	189
321.60	358	329.80	190	341.90	395	352.00	3310
322.00	276	331.80	301	344.65	165	353.05	2530
323.05	10808	331.95	502	345.70	739	353.95	3308
323.95	2460	332.90	1123	345.95	1682	354.80	620

Average of 3.131 to 3.138 min.: 2p81640.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
355.10	268	370.90	611	391.95	465	419.70	107
356.80	77	372.00	6039	392.90	82	420.95	2778
358.55	186	373.00	1058	394.90	126	421.95	2867
359.00	279	373.80	53	396.80	124	423.00	17715
363.00	105	376.95	227	400.95	531	423.95	3623
363.70	141	382.90	913	402.05	2006	424.80	200
364.90	15160	383.10	516	402.95	2930	425.10	146
365.95	2607	383.95	290	403.95	934	426.80	54
366.80	316	384.80	58	405.00	101	428.70	73
369.75	348	389.90	685	414.85	135	429.05	208
370.70	285	390.85	596	416.80	107	430.80	71

Average of 3.131 to 3.138 min.: 2p81640.D\data.ms

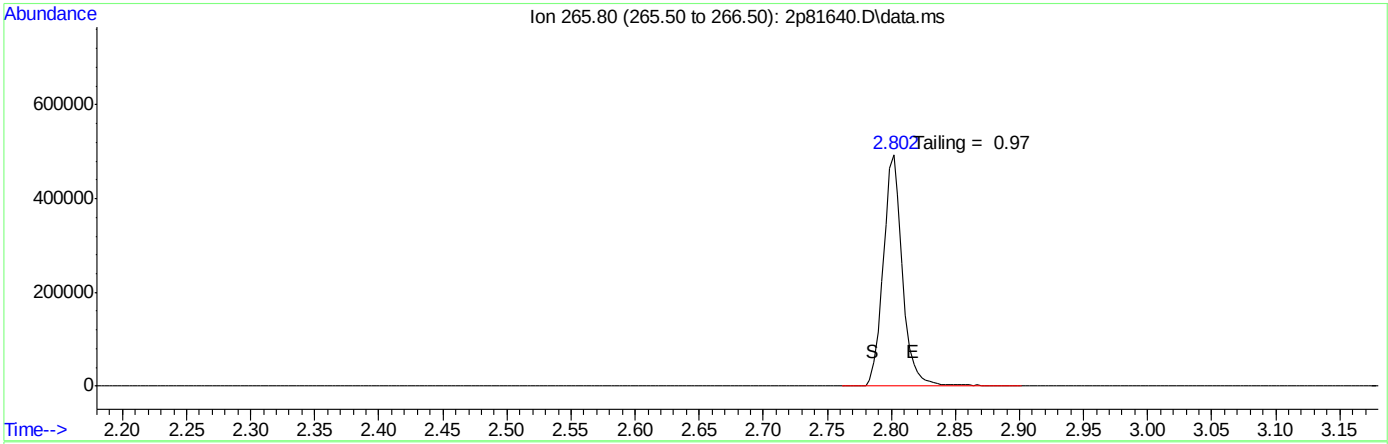
dftpp
Modified:subtracted

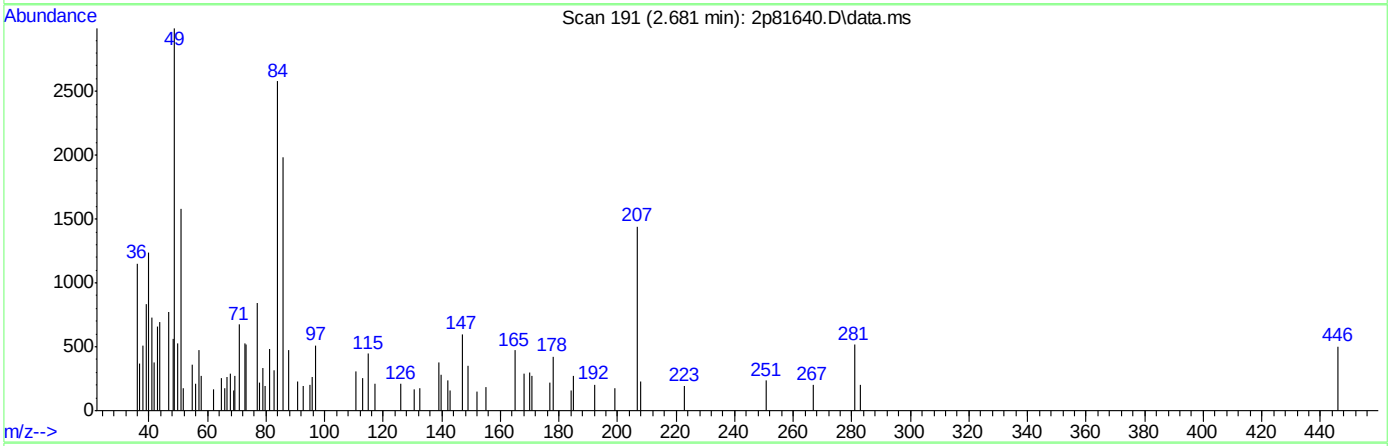
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
432.10	230	437.55	819				
432.50	83	438.20	435				
432.85	294	438.55	718				
433.50	312	439.15	915				
434.30	421	439.80	295				
434.60	145	441.10	48528				
435.10	209	442.00	288768				
435.30	161	443.00	53160				
435.80	478	444.00	4447				
436.60	363	444.90	186				
436.90	168						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3597\
Data File : 2p81640.D
Acq On : 10 Aug 2018 3:36 pm
Operator : seanb1
Sample : dftpp
Misc : op13652,e2p3597,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 10 15:41:00 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81640.D\data.ms

(1) Pentacholorphenol

2.680min (-2.680) 0.00ppb

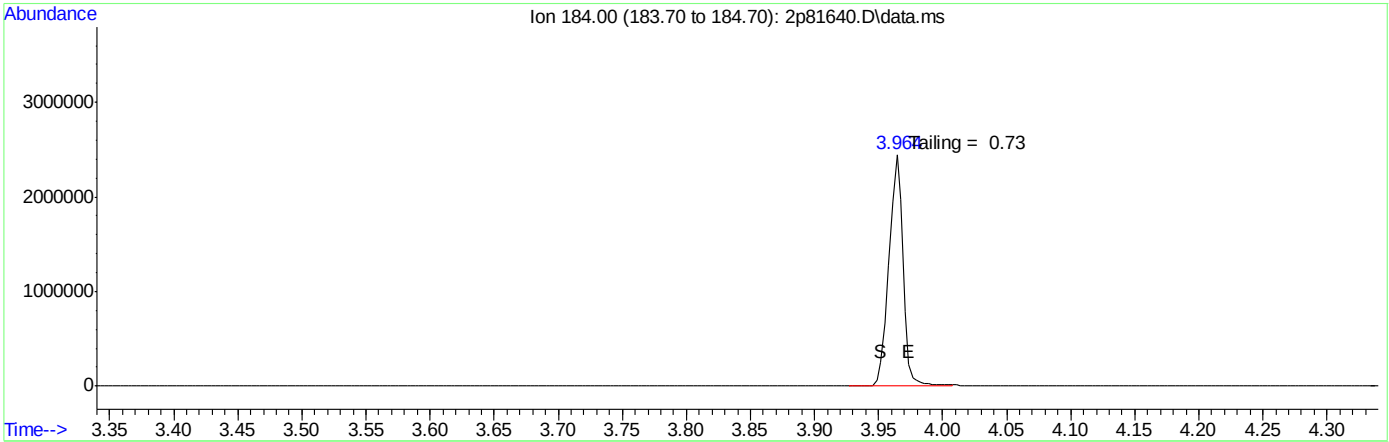
response 0

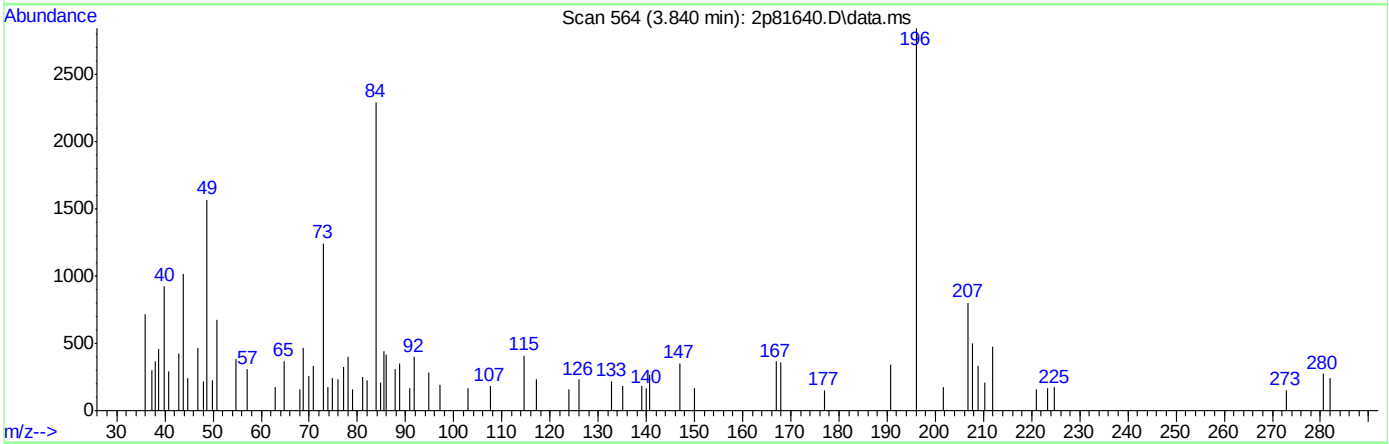
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3597\
Data File : 2p81640.D
Acq On : 10 Aug 2018 3:36 pm
Operator : seanb1
Sample : dftpp
Misc : op13652,e2p3597,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 10 15:41:00 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81640.D\data.ms

(2) Benzidine

3.840min (-3.840) 0.00ppb

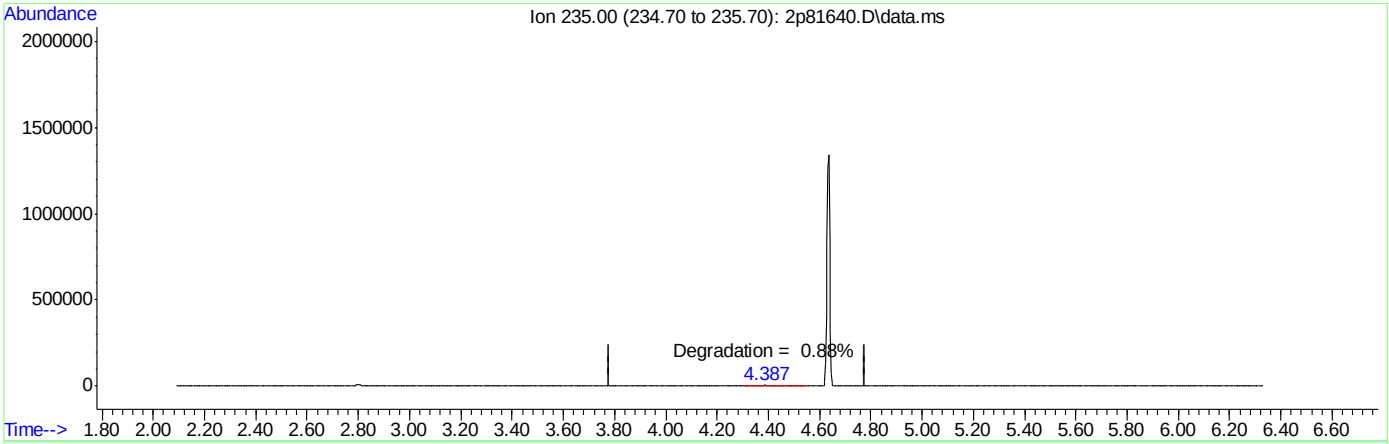
response 0

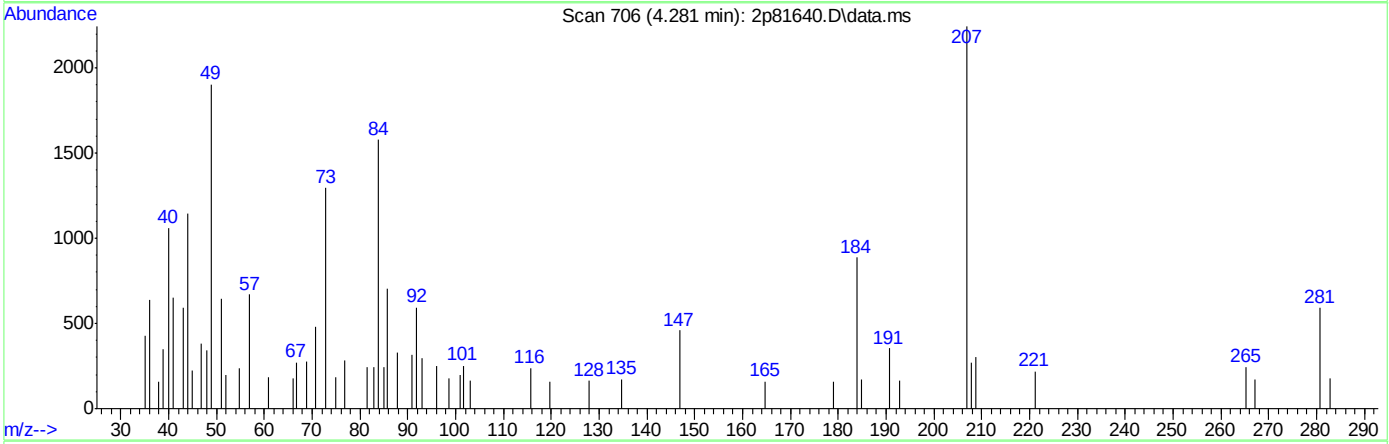
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3597\
Data File : 2p81640.D
Acq On : 10 Aug 2018 3:36 pm
Operator : seanb1
Sample : dftpp
Misc : op13652,e2p3597,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 10 15:41:00 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81640.D\data.ms

(3) PP-DDT

4.280min (-4.280) 0.00ppb

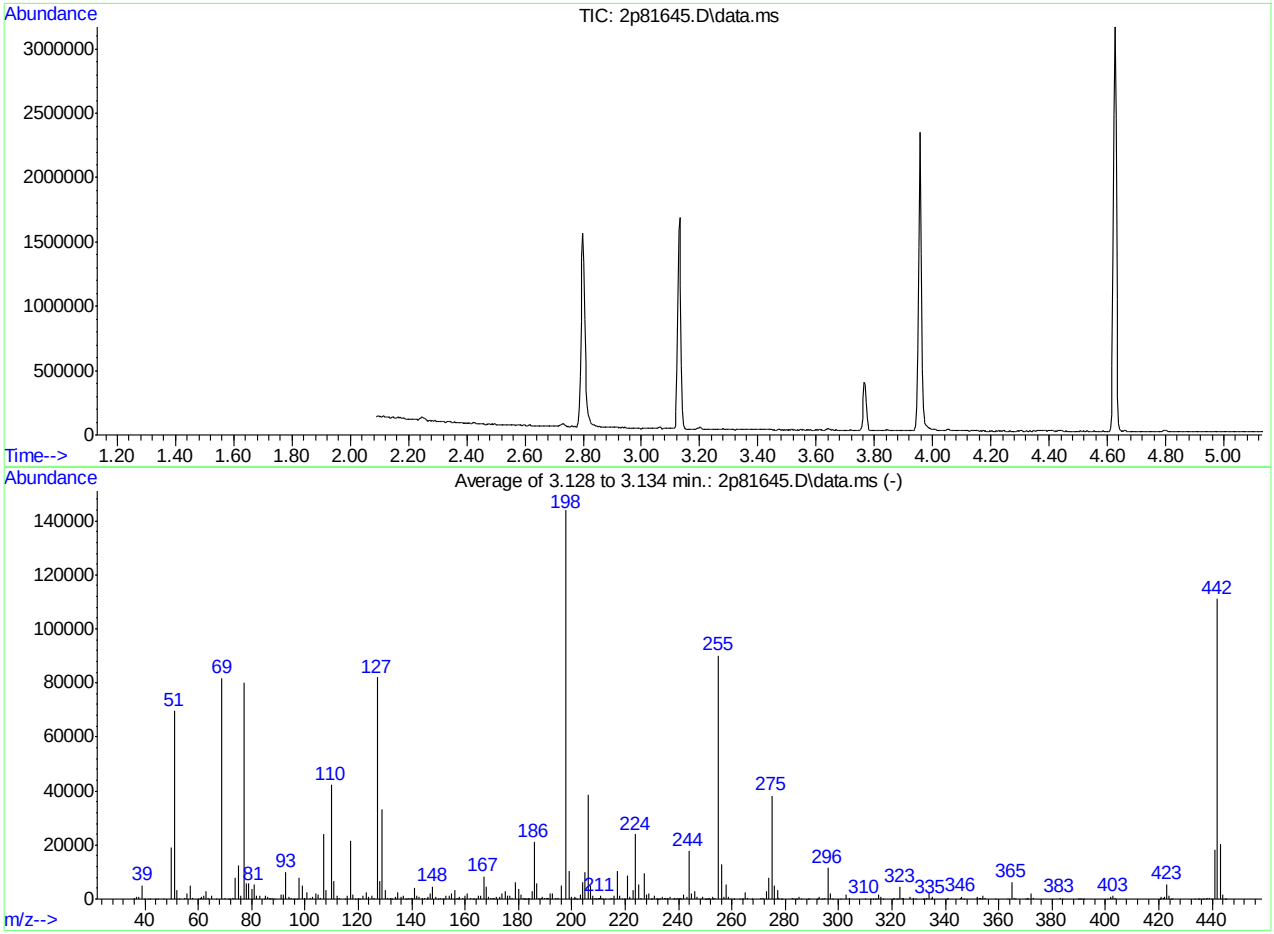
response 0

Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\2P3598\2p81645.D Vial: 1
Acq On : 10 Aug 2018 5:22 pm Operator: seanb1
Sample : dftpp Inst : MS2P
Misc : op13652,e2p3598,1000,,,1,1 Multiplr: 1.00
MS Integration Params: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M (ChemStation Integrator)
Title :



AutoFind: Scans 335, 336, 337; Background Corrected with Scan 327

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	48.5	69694	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	57.0	81936	PASS
70	69	0.00	2	0.6	526	PASS
127	198	40	60	57.1	82088	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	143837	PASS
199	198	5	9	7.2	10321	PASS
275	198	10	30	26.7	38347	PASS
365	198	1	100	4.4	6385	PASS
441	443	0.01	100	91.0	18336	PASS
442	198	40	100	77.3	111173	PASS
443	442	17	23	18.1	20147	PASS

2p81645.D DFTPP2P.M Fri Aug 10 18:32:52 2018 RPT1

Average of 3.128 to 3.134 min.: 2p81645.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.80	271	50.95	69694	63.00	2823	76.10	1147
36.85	705	52.00	3367	63.90	459	77.00	79944
37.85	717	52.75	211	64.95	1438	77.95	5622
39.00	5140	54.90	454	66.80	64	79.00	5695
39.85	58	55.90	1893	68.95	81936	80.00	3801
40.90	170	56.95	5077	69.90	526	80.95	5245
42.00	180	57.75	278	71.10	51	81.90	1283
43.85	74	59.90	124	71.70	53	82.90	1404
44.90	63	60.80	470	73.00	339	84.80	55
46.85	217	61.00	666	74.00	7949	85.00	1067
49.95	19064	61.90	1121	74.95	12526	85.90	839

Average of 3.128 to 3.134 min.: 2p81645.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
86.80	557	96.80	73	107.95	3473	120.60	58
87.00	165	97.95	7714	109.95	42288	121.85	1438
87.80	342	98.90	5135	110.90	6524	122.95	2679
88.70	62	99.85	294	111.85	1077	123.90	1026
90.90	1609	100.90	2547	112.95	248	124.90	1081
91.95	1642	101.95	230	114.80	110	125.80	308
92.90	10085	102.90	961	116.00	1246	127.00	82088
93.90	779	103.95	2251	117.00	21645	127.95	6570
94.80	227	105.00	1766	117.85	1509	129.00	33208
95.85	182	105.75	567	118.75	149	130.00	3140
96.10	89	107.00	24005	120.00	292	130.85	585

Average of 3.128 to 3.134 min.: 2p81645.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
131.80	100	139.80	298	148.90	1031	157.95	742
132.10	355	140.00	402	149.80	217	158.90	466
132.80	56	140.85	4350	150.90	541	159.95	1119
133.70	161	141.90	1370	151.50	158	160.95	2051
134.00	916	142.75	922	151.90	184	161.85	550
134.90	2356	143.80	352	152.95	1316	162.80	150
135.90	810	144.90	379	153.90	1061	163.50	172
136.90	1213	145.60	82	155.05	2159	164.05	216
137.85	187	146.05	798	156.00	3193	164.85	1320
138.20	89	146.90	2034	156.85	532	165.90	1281
138.85	298	147.95	4629	157.40	184	167.00	8341

Average of 3.128 to 3.134 min.: 2p81645.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
167.90	4447	177.75	608	184.95	2980	192.90	2108
168.80	726	178.90	6328	185.95	21088	193.90	511
169.75	309	180.00	3896	186.95	5845	194.75	413
170.55	367	180.95	1759	187.85	636	195.95	5131
170.90	289	181.80	241	188.70	376	197.90	143837
171.90	878	182.20	120	188.85	680	198.90	10321
172.90	958	182.40	116	189.85	301	199.90	832
173.85	2013	182.80	98	190.75	350	200.60	153
174.95	2746	183.10	102	191.00	294	201.20	662
175.95	1107	183.70	87	191.20	321	201.50	306
176.90	1214	183.95	439	191.90	1929	201.80	76

Average of 3.128 to 3.134 min.: 2p81645.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
203.00	1629	211.00	524	220.95	8672	230.95	1211
203.95	6161	211.40	203	221.80	643	231.65	118
204.95	10084	212.55	141	223.00	3173	231.90	82
206.00	38557	214.10	67	224.00	23936	232.30	62

206.95	5032	214.80	519	225.00	5447	232.80	191
207.90	1445	215.90	1220	225.90	374	233.10	74
208.75	404	216.90	10190	226.95	9655	233.95	775
209.10	168	217.90	1272	227.95	1514	234.60	270
209.85	382	218.90	107	228.85	2219	234.95	601
210.50	382	219.50	116	229.70	90	235.60	93
210.75	1159	220.00	201	230.00	63	235.85	322

Average of 3.128 to 3.134 min.: 2p81645.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
236.95	898	244.95	2098	252.90	897	263.60	52
238.00	104	245.95	2764	253.60	295	263.95	176
238.70	233	246.85	779	255.00	90147	264.85	2558
238.90	125	247.95	124	255.95	12752	265.75	308
239.65	420	248.95	818	257.00	800	267.30	57
240.10	144	250.00	79	257.95	5394	267.60	50
240.80	613	250.40	82	258.85	643	270.85	349
241.00	199	250.85	196	259.70	65	271.85	611
241.90	1702	251.30	67	260.60	54	273.00	2903
243.00	828	251.70	266	260.80	96	273.95	7876
243.95	17797	252.60	199	262.75	153	275.00	38347

Average of 3.128 to 3.134 min.: 2p81645.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
275.95	5041	288.65	157	300.80	80	320.60	126
276.95	3349	289.00	52	302.90	1661	320.90	235
277.75	526	291.75	140	303.85	497	321.70	158
278.30	85	292.20	108	309.80	73	322.10	160
278.85	146	292.85	985	311.90	56	323.05	4392
282.80	324	293.65	209	312.80	51	323.85	536
283.00	181	294.00	59	313.80	161	324.15	271
283.80	112	294.80	405	314.10	200	326.70	919
284.10	96	295.95	11619	314.90	1617	327.80	332
284.95	725	296.90	1904	315.85	760	328.90	74
285.80	54	297.90	53	316.60	70	331.70	53

Average of 3.128 to 3.134 min.: 2p81645.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
331.95	162	351.80	427	366.10	131	390.95	209
332.50	75	351.95	851	370.10	103	391.80	96
332.95	469	352.80	570	370.70	142	400.60	70
333.95	2317	353.00	273	370.95	266	401.80	647
334.70	197	353.70	138	371.95	2137	402.00	296
334.95	671	353.95	1077	373.00	611	402.95	1131
340.70	169	354.90	341	382.90	607	403.75	559
340.95	366	358.70	53	383.80	216	420.40	142
345.70	231	363.40	53	389.70	80	420.95	881
345.95	996	364.95	6385	390.10	167	421.80	305
346.70	73	365.80	628	390.70	109	422.05	919

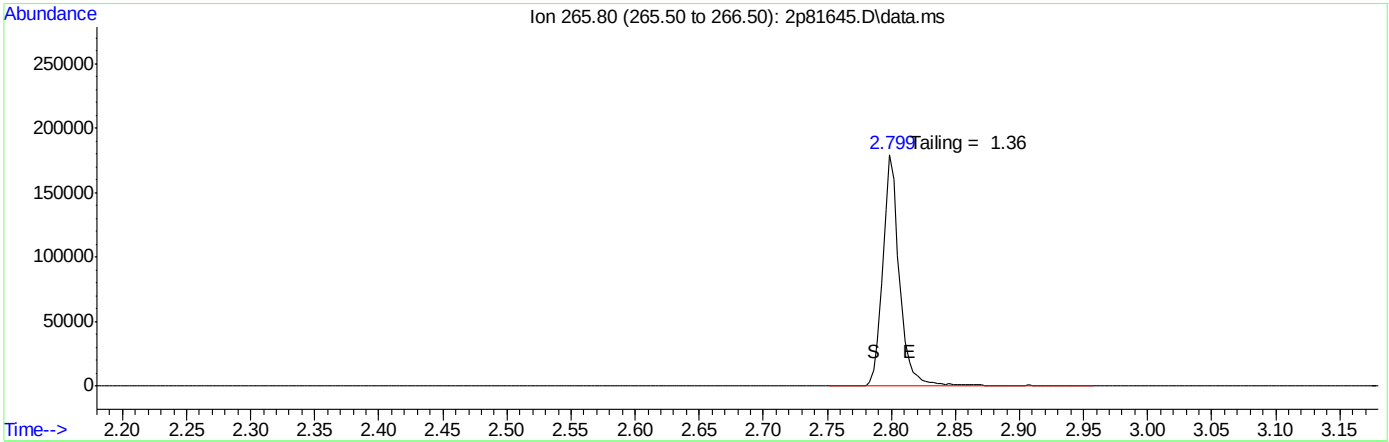
Average of 3.128 to 3.134 min.: 2p81645.D\data.ms
dftpp
Modified:subtracted

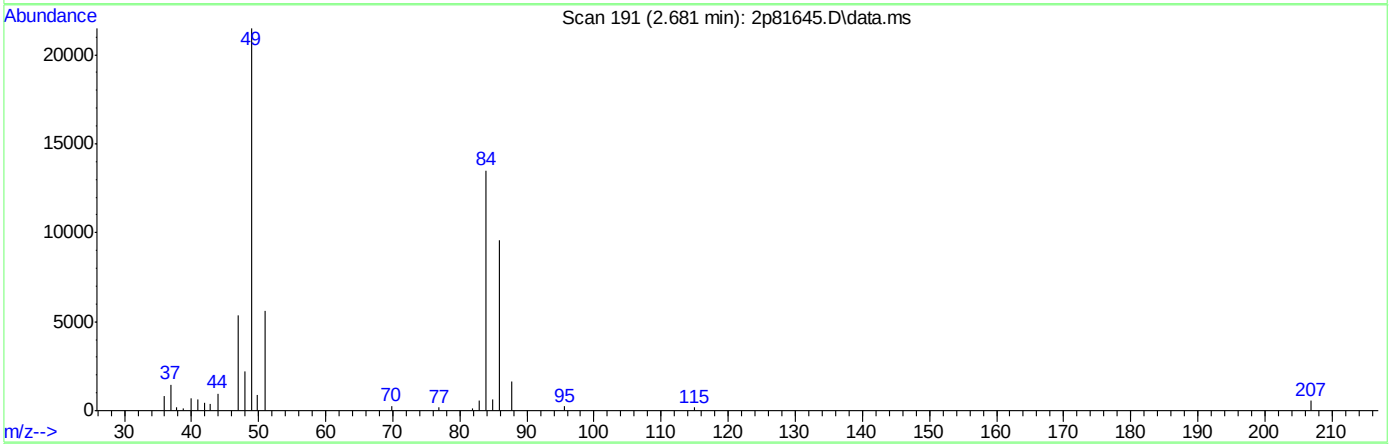
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
422.95	5596	438.90	233				
423.90	1354	439.90	187				
424.70	82	441.00	18336				
425.15	175	442.00	111173				
433.25	118	443.00	20147				
434.70	71	443.95	1758				
435.00	93	444.70	59				
436.40	57	445.00	101				
437.00	150						
437.65	161						
438.25	291						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3598\
Data File : 2p81645.D
Acq On : 10 Aug 2018 5:22 pm
Operator : seanb1
Sample : dftpp
Misc : op13652,e2p3598,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 10 17:26:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81645.D\data.ms

(1) Pentacholorphenol

2.680min (-2.680) 0.00ppb

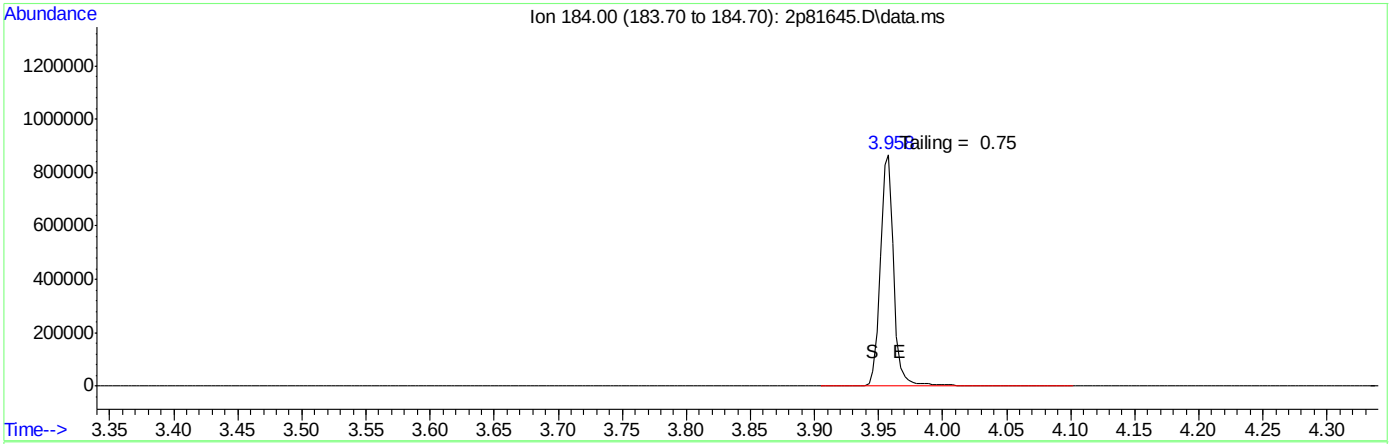
response 0

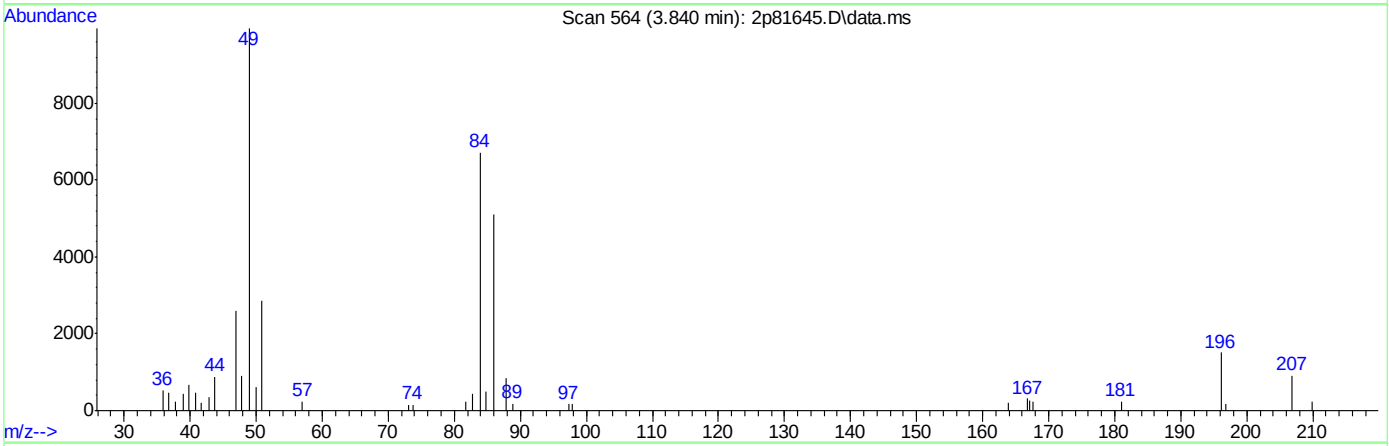
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3598\
Data File : 2p81645.D
Acq On : 10 Aug 2018 5:22 pm
Operator : seanb1
Sample : dftpp
Misc : op13652,e2p3598,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 10 17:26:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81645.D\data.ms

(2) Benzidine

3.840min (-3.840) 0.00ppb

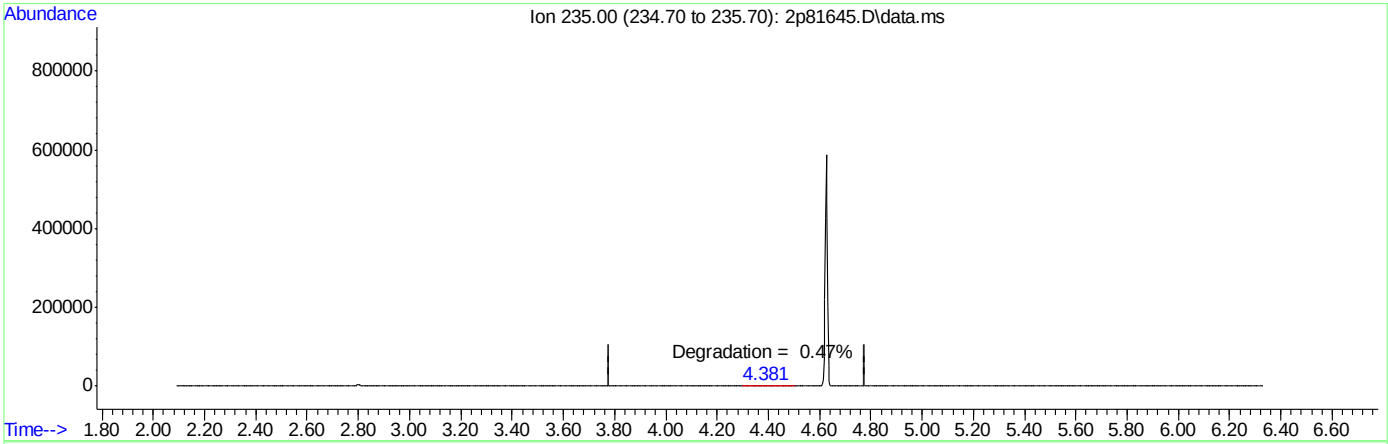
response 0

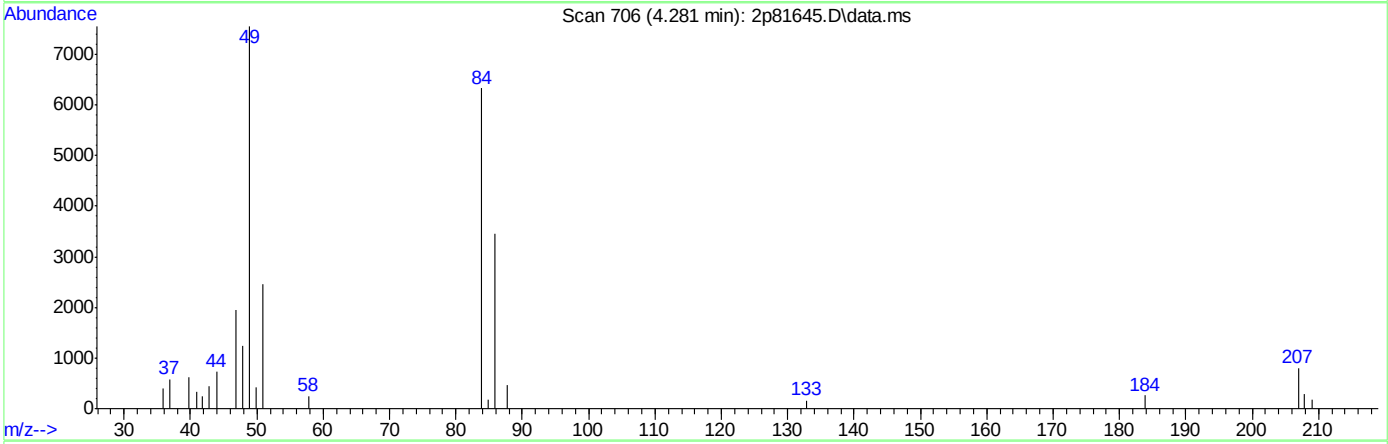
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3598\
Data File : 2p81645.D
Acq On : 10 Aug 2018 5:22 pm
Operator : seanb1
Sample : dftpp
Misc : op13652,e2p3598,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 10 17:26:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81645.D\data.ms

(3) PP-DDT

4.280min (-4.280) 0.00ppb

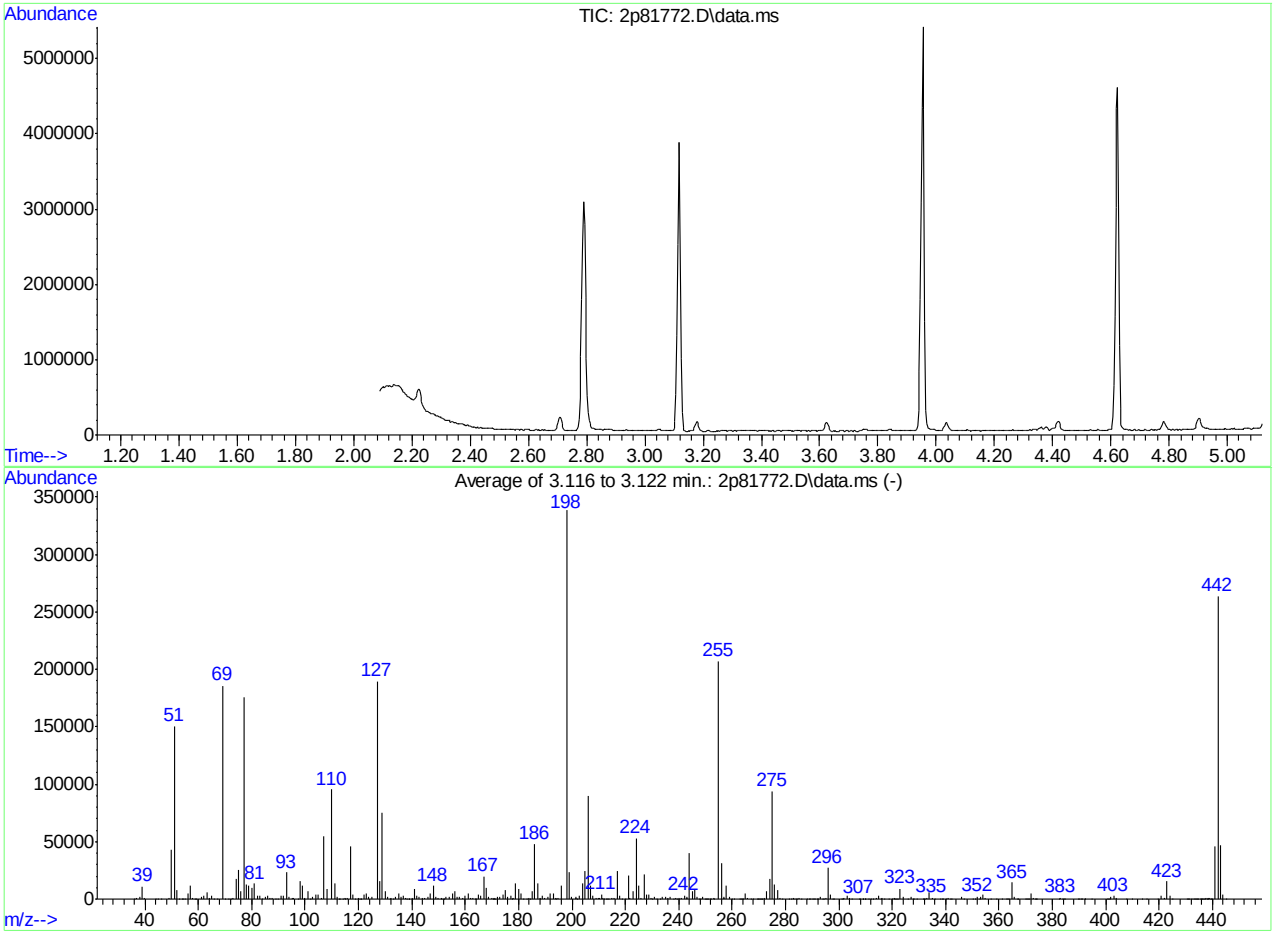
response 0

Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\2P3603\2p81772.D Vial: 1
Acq On : 15 Aug 2018 8:50 am Operator: angelar
Sample : dftpp Inst : MS2P
Misc : op13652,e2p3603,1000,,,1,1 Multiplr: 1.00
MS Integration Params: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M (ChemStation Integrator)
Title :



AutoFind: Scans 331, 332, 333; Background Corrected with Scan 322

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.5	150380	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	54.9	185644	PASS
70	69	0.00	2	0.2	449	PASS
127	198	40	60	56.0	189568	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	338304	PASS
199	198	5	9	6.8	23123	PASS
275	198	10	30	27.8	94197	PASS
365	198	1	100	4.2	14363	PASS
441	443	0.01	100	99.2	46229	PASS
442	198	40	100	77.9	263659	PASS
443	442	17	23	17.7	46603	PASS

2p81772.D DFTPP2P.M Wed Aug 15 12:34:57 2018 RPT1

Average of 3.116 to 3.122 min.: 2p81772.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.75	158	52.00	7844	62.05	2505	74.00	17771
36.85	777	52.90	53	63.05	6249	75.00	25852
37.90	2354	53.90	196	63.95	729	76.05	6473
39.00	11090	54.05	154	65.00	3075	77.00	175810
39.90	594	54.95	477	65.85	323	78.00	12298
43.80	213	55.95	4589	66.95	359	78.95	11696
44.95	455	57.00	11385	68.95	185644	80.00	9998
45.90	52	57.95	716	69.95	449	81.00	13555
48.95	708	58.80	4	71.10	115	82.00	2915
49.95	42974	59.05	272	71.95	320	83.00	3037
50.95	150380	61.00	2157	72.95	1386	83.90	352

Average of 3.116 to 3.122 min.: 2p81772.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
84.95	2313	95.80	1131	106.95	54577	116.95	46004
85.90	2763	97.10	364	108.00	8560	117.90	3727
86.90	1426	98.00	15421	110.00	95283	118.85	430
87.80	1090	98.95	11412	110.95	14188	119.80	303
88.90	69	99.90	1234	111.90	2130	120.00	548
89.90	164	100.95	6747	112.80	190	120.70	173
91.00	3008	101.90	346	112.90	271	121.00	271
92.00	3264	102.90	2315	114.00	110	121.90	4111
92.95	23064	103.95	4410	114.80	181	122.95	5030
93.90	1556	104.90	4000	115.10	562	123.95	2393
95.00	528	105.95	1235	115.80	774	124.95	2473

Average of 3.116 to 3.122 min.: 2p81772.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
127.00	189568	136.95	2985	146.05	1639	155.05	5227
128.00	16093	137.80	728	146.95	4559	156.00	6796
128.95	74949	138.10	187	148.00	11666	156.95	1703
129.95	6722	138.80	403	148.90	2033	157.90	1819
130.90	1686	139.00	243	149.90	638	158.90	1045
131.70	240	139.95	987	150.90	422	159.95	2879
132.00	832	140.95	8927	151.05	898	160.95	4861
132.85	184	141.90	2571	151.70	486	161.95	1355
133.90	2332	142.85	2343	152.00	318	162.90	591
134.90	5144	143.90	793	152.90	2367	163.80	137
135.90	2139	144.95	713	153.95	1806	164.05	511

Average of 3.116 to 3.122 min.: 2p81772.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
164.85	3629	172.95	2275	182.90	472	191.95	4658
165.95	2894	173.95	3629	183.90	950	192.90	4659
167.00	19606	175.00	7541	184.10	359	193.80	723
167.95	9389	176.00	2467	185.00	6596	194.00	19
168.80	1518	176.95	3144	186.00	48165	194.90	830
169.80	604	177.70	36	187.00	13904	196.00	12117
170.30	196	178.00	914	187.85	1265	197.90	338304
170.65	561	178.95	13963	188.10	329	198.90	23123
170.90	285	179.95	8360	188.95	3091	199.80	1789
171.20	259	180.90	4489	189.90	902	201.35	1740
171.90	1528	181.90	471	190.95	1538	201.60	538

Average of 3.116 to 3.122 min.: 2p81772.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
201.90	418	211.50	1172	221.00	20723	231.00	2064
202.90	2798	212.00	259	221.80	1407	231.85	207
204.00	13667	212.80	149	222.95	6739	232.90	441
205.00	24130	213.10	223	224.00	52752	233.90	1764

206.00	89891	213.80	138	225.00	11935	234.90	1712
206.95	12074	214.90	1077	226.00	755	235.90	1349
207.95	3213	215.90	962	227.00	21577	236.95	2153
208.90	845	216.95	24712	227.95	3793	237.90	267
209.90	614	217.95	2660	228.95	4038	238.90	532
210.30	780	218.80	204	229.80	564	239.10	206
211.00	4244	219.90	342	230.00	139	239.90	909

Average of 3.116 to 3.122 min.: 2p81772.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
240.85	1425	249.75	278	257.05	1811	266.95	234
242.00	3258	250.20	127	257.95	11560	267.90	283
242.90	987	250.75	345	258.90	2278	269.30	52
243.20	1570	251.00	221	259.85	412	269.50	80
244.00	39707	251.80	225	260.85	405	269.80	329
245.00	6459	252.00	146	262.65	128	270.50	239
245.95	8662	252.95	1413	263.20	76	270.75	355
246.85	1685	253.20	408	263.80	228	271.10	244
247.85	363	255.00	206912	263.95	452	272.00	680
248.10	129	256.00	31200	264.90	4876	272.95	6968
248.90	1563	256.80	668	265.85	610	274.00	17787

Average of 3.116 to 3.122 min.: 2p81772.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
275.00	94197	284.95	1215	293.80	180	303.85	811
276.00	12887	285.85	328	294.10	291	304.80	80
276.95	8024	288.00	149	295.00	589	307.60	274
277.95	1402	288.75	212	295.95	27296	307.90	88
278.80	466	289.20	140	296.95	4360	308.90	57
281.10	70	289.90	208	297.85	296	309.10	254
282.10	166	290.70	268	298.20	95	309.65	177
282.85	558	291.10	100	300.90	412	310.00	202
283.10	248	291.70	161	301.40	173	311.30	63
283.80	266	292.10	114	302.00	731	312.00	63
284.00	354	292.95	1844	303.05	2749	312.90	355

Average of 3.116 to 3.122 min.: 2p81772.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
313.95	1356	322.00	222	332.95	1107	345.95	2217
314.90	3192	323.00	9187	333.95	5807	346.95	362
315.80	507	323.95	1636	335.00	1348	350.25	103
316.05	1411	325.70	69	336.00	181	351.05	336
316.90	97	326.95	1712	338.10	50	351.95	2474
318.70	72	327.80	335	338.80	212	352.80	496
320.05	173	327.95	492	339.00	72	353.10	1749
320.60	270	329.00	103	339.90	169	354.00	3514
320.85	640	331.50	115	340.85	1121	354.95	666
321.30	114	331.75	379	341.90	69	356.80	52
321.80	333	332.00	253	342.05	274	359.00	225

Average of 3.116 to 3.122 min.: 2p81772.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
361.00	74	371.10	276	389.75	267	402.95	2577
362.75	171	371.95	5052	390.00	337	404.00	1019
363.10	68	372.95	1307	390.70	147	407.80	53
363.45	198	373.50	89	391.00	441	409.70	58
364.90	14363	373.80	54	392.00	264	413.60	51
365.90	2260	374.00	110	392.20	58	415.20	206
366.90	88	382.70	330	394.80	50	419.35	134
367.10	76	383.05	1000	400.50	114	420.90	2570
369.85	355	383.80	148	401.00	205	421.90	772
370.30	132	384.05	199	401.30	149	422.05	1445
370.75	512	384.75	122	402.00	2191	423.00	15383

Average of 3.116 to 3.122 min.: 2p81772.D\data.ms

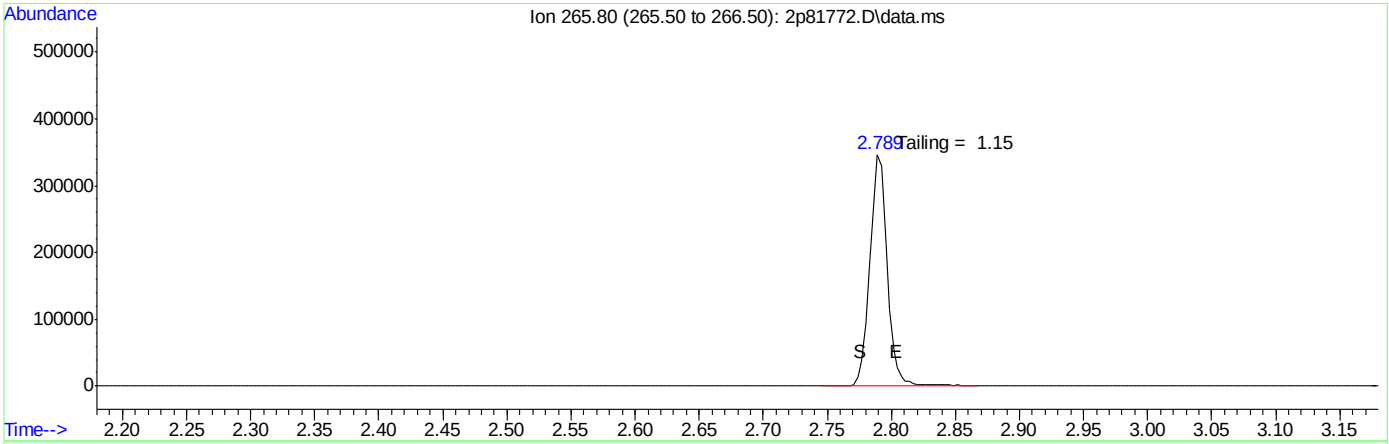
dftpp
Modified:subtracted

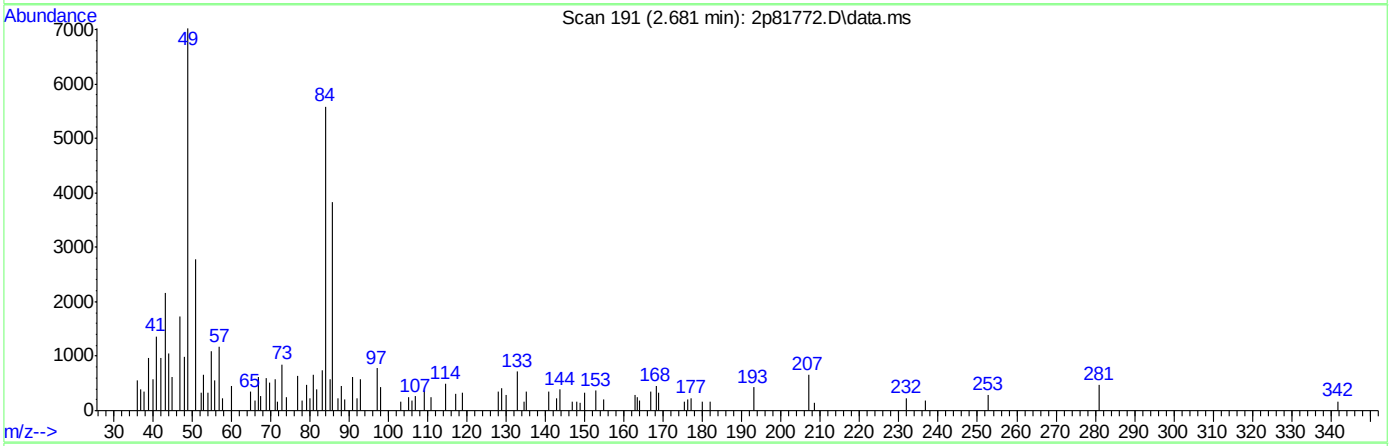
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
424.00	2584	435.30	215	439.30	272		
424.90	245	435.80	135	439.50	328		
430.30	83	436.05	389	439.70	160		
430.80	106	436.40	318	441.10	46229		
431.10	80	436.90	141	442.00	263659		
431.90	276	437.10	216	443.00	46603		
432.90	61	437.55	590	444.00	3904		
433.35	126	438.00	221	444.90	140		
433.60	90	438.20	275				
434.00	99	438.55	660				
434.50	91	439.00	572				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81772.D
Acq On : 15 Aug 2018 8:50 am
Operator : angelar
Sample : dftpp
Misc : op13652,e2p3603,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 15 08:54:28 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81772.D\data.ms

(1) Pentacholorphenol

2.680min (-2.680) 0.00ppb

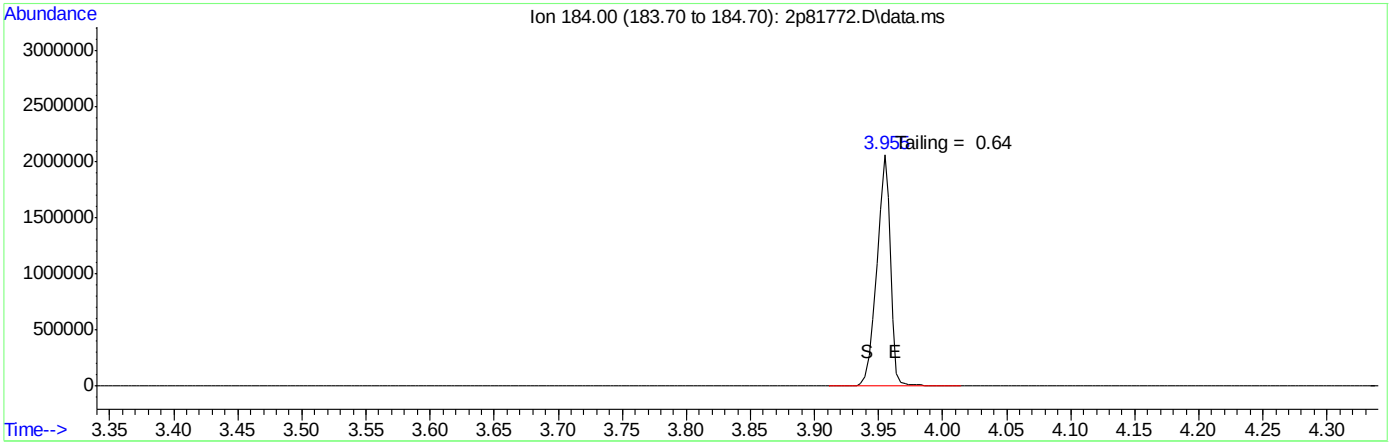
response 0

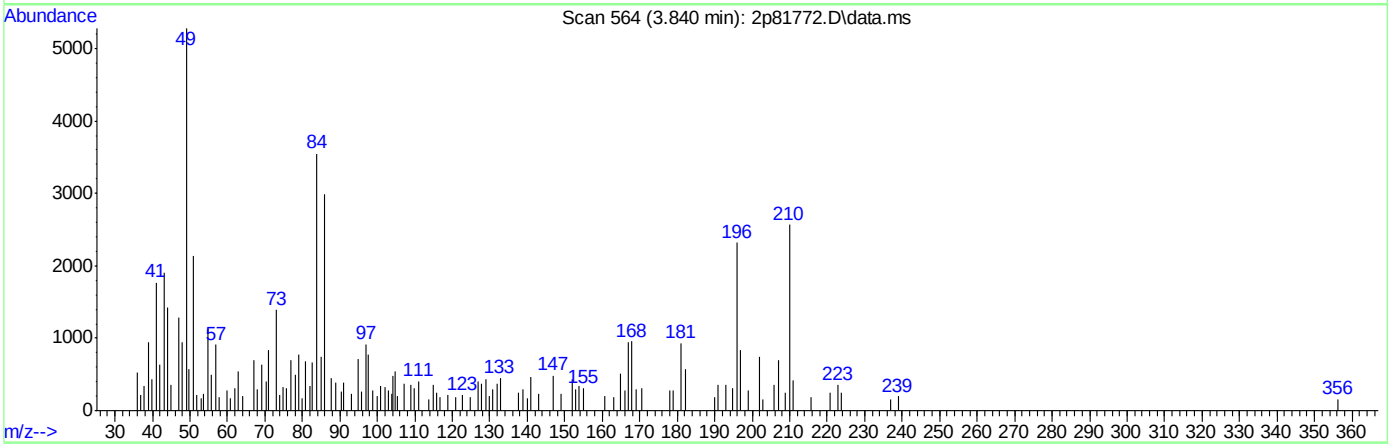
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81772.D
Acq On : 15 Aug 2018 8:50 am
Operator : angelar
Sample : dftpp
Misc : op13652,e2p3603,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 15 08:54:28 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81772.D\data.ms

(2) Benzidine

3.840min (-3.840) 0.00ppb

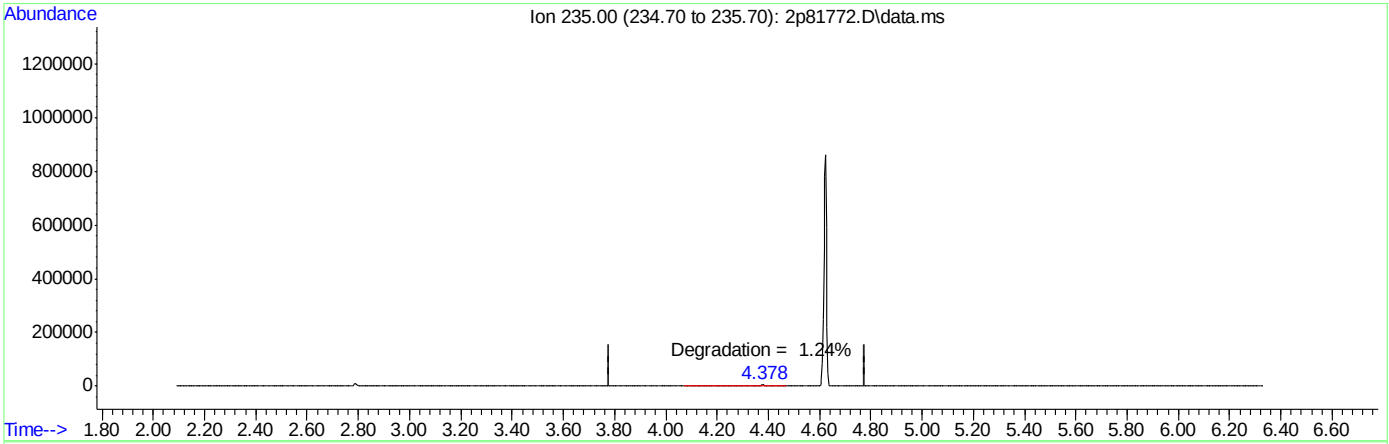
response 0

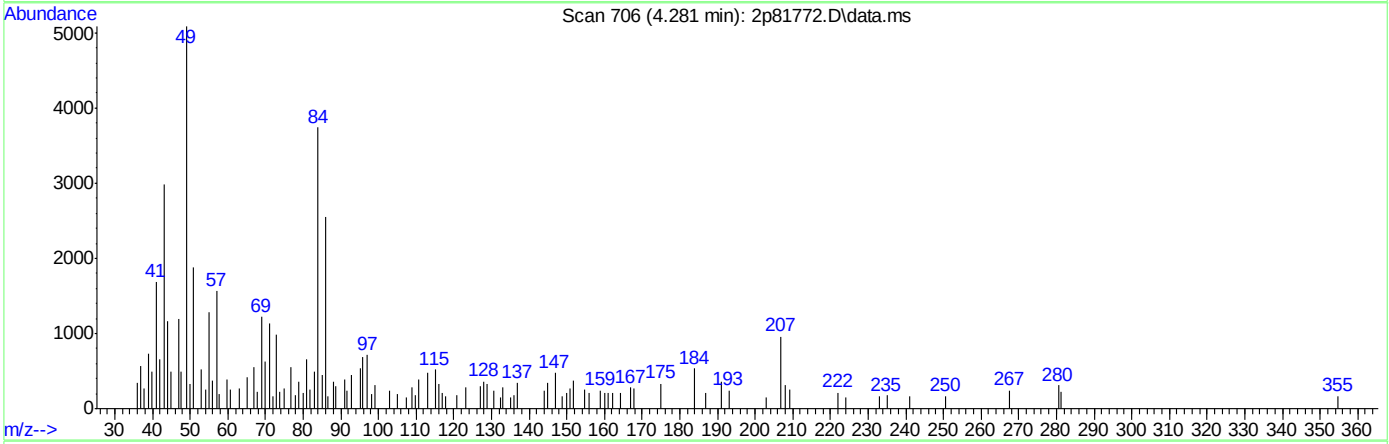
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81772.D
Acq On : 15 Aug 2018 8:50 am
Operator : angelar
Sample : dftpp
Misc : op13652,e2p3603,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 15 08:54:28 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Jul 20 16:47:23 2010
Response via : Initial Calibration





TIC: 2p81772.D\data.ms

(3) PP-DDT

4.280min (-4.280) 0.00ppb

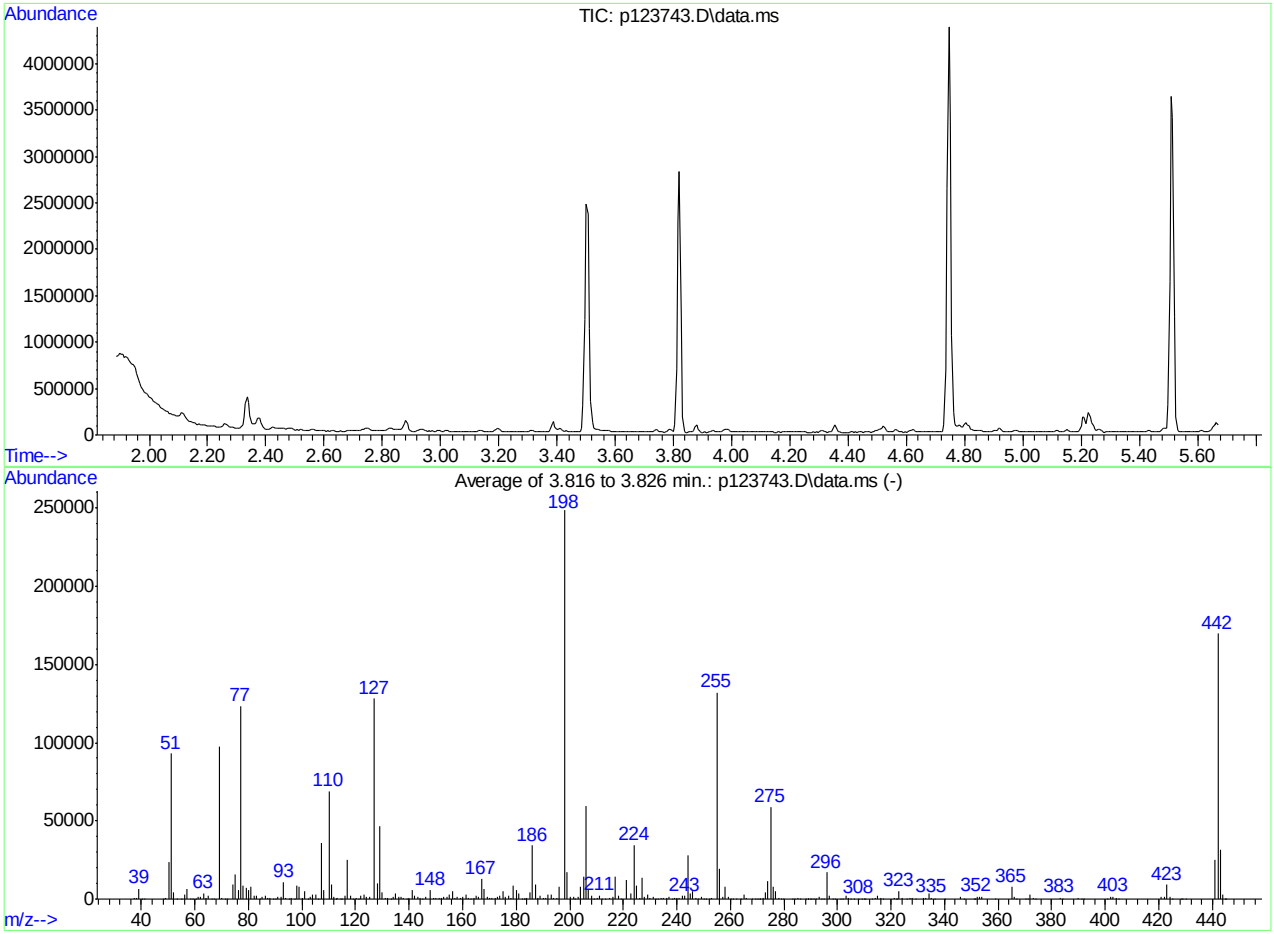
response 0

Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\EP5553\p123743.D Vial: 1
Acq On : 20 Jun 2018 8:53 pm Operator: chriss2
Sample : dftpp Inst : MSVOAMSP
Misc : op9039,ep5553,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um



AutoFind: Scans 362, 363, 364; Background Corrected with Scan 357

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.5	93077	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.1	97199	PASS
70	69	0.00	2	0.6	581	PASS
127	198	40	60	51.6	128226	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	248533	PASS
199	198	5	9	6.9	17031	PASS
275	198	10	30	23.7	58816	PASS
365	198	1	100	3.1	7672	PASS
441	443	0.10	100	78.1	24781	PASS
442	198	40	100	68.3	169866	PASS
443	442	17	23	18.7	31722	PASS

p123743.D DFTPPP.M Thu Jun 21 10:44:53 2018 ACLIMS

Average of 3.816 to 3.826 min.: p123743.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.10	479	55.10	351	66.10	232	79.10	6855
38.05	954	56.10	2681	67.05	119	80.05	5680
39.10	6589	57.10	6471	69.00	97199	81.05	7716
40.10	168	58.05	346	70.05	581	82.00	2060
41.10	287	59.05	15	71.10	220	83.05	2251
48.00	59	60.15	251	72.20	92	84.10	133
49.10	542	61.10	1341	74.05	9122	85.10	1599
50.10	23803	62.05	1570	75.05	15553	86.10	2147
51.05	93077	63.10	3906	76.05	5785	87.05	960
52.05	4635	64.10	508	77.05	123518	88.00	497
53.10	305	65.05	2151	78.10	8278	89.05	321

Average of 3.816 to 3.826 min.: p123743.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
90.20	64	101.05	4885	112.70	56	123.00	3163
91.05	1540	102.05	353	113.10	503	124.05	1667
92.10	1808	103.05	1442	114.15	189	125.05	1726
93.10	10796	104.05	2713	114.95	70	127.10	128226
94.00	784	105.00	2550	116.10	1902	128.05	9787
95.10	73	106.00	184	117.00	25166	129.00	46390
96.05	697	107.10	35919	118.05	1902	130.00	3997
97.10	108	108.10	5789	119.00	27	131.00	631
98.05	8663	110.00	69008	120.10	592	132.05	407
99.05	7627	111.10	9647	121.10	79	133.00	79
100.00	724	112.00	1431	122.00	2388	134.00	1233

Average of 3.816 to 3.826 min.: p123743.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
135.00	3889	146.00	1155	158.05	1114	169.10	1224
136.05	1754	148.00	6086	159.05	940	170.05	585
137.05	1799	149.05	1009	160.00	1804	171.05	503
138.00	440	150.10	582	161.05	2728	172.00	990
139.05	361	151.15	986	162.00	641	173.00	1328
140.00	673	152.00	438	163.05	340	174.00	2435
141.00	5817	153.00	1785	164.10	420	175.10	4808
142.10	2051	154.10	1557	164.95	1917	176.05	1636
143.10	1387	155.05	2911	166.00	1699	177.00	2179
144.05	503	156.10	5209	167.00	12661	178.10	915
145.00	224	157.10	1084	168.00	6403	179.00	8604

Average of 3.816 to 3.826 min.: p123743.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
180.10	5979	190.00	495	201.80	28	213.00	112
181.00	3349	191.00	581	203.00	1552	215.00	772
182.10	337	192.00	2795	204.05	8232	216.00	1271
182.90	117	193.05	2706	205.10	14134	217.00	14290
183.10	262	194.05	664	206.10	59360	218.05	1974
184.05	876	195.05	543	207.05	6572	219.20	171
185.05	4261	196.00	7935	208.00	1939	221.00	12530
186.05	34246	198.00	248533	209.00	343	223.00	3484
187.00	9269	199.00	17031	210.10	396	224.10	34440
188.10	928	200.00	1429	211.10	2479	225.05	8709
189.00	2209	201.50	1240	212.05	343	226.05	1022

Average of 3.816 to 3.826 min.: p123743.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
227.00	13773	238.10	95	249.05	1150	261.00	227
228.00	1767	239.00	513	250.00	215	262.00	92
229.00	2910	240.00	388	250.95	357	264.00	337
230.00	510	241.00	857	252.00	255	265.00	2849

231.05	1221	242.05	1901	253.00	785	265.95	528
232.05	221	243.05	2137	255.00	132242	267.95	129
233.00	208	244.10	28037	256.00	19661	269.20	59
234.00	1022	245.10	3447	257.05	1463	270.00	89
235.00	738	246.00	5122	258.00	7558	270.80	68
236.00	802	246.95	919	259.10	1291	271.05	329
237.00	1115	248.00	342	259.90	179	272.00	413

Average of 3.816 to 3.826 min.: p123743.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
273.00	4112	285.90	89	296.00	17037	309.05	152
274.00	11302	288.00	112	297.00	2298	309.90	81
275.00	58816	288.90	121	298.00	137	310.15	163
276.00	8117	289.10	117	299.20	53	313.00	187
277.00	4892	289.90	127	301.05	135	314.05	739
278.05	852	290.20	73	301.90	277	315.00	1947
279.05	184	291.00	50	303.00	1909	316.00	1081
279.90	52	292.00	271	304.00	612	317.00	301
283.00	199	293.00	1160	305.00	58	321.05	576
284.05	146	294.00	262	306.00	54	321.90	73
285.05	1006	294.95	266	308.00	254	322.15	228

Average of 3.816 to 3.826 min.: p123743.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
323.05	5352	339.90	84	367.00	54	400.95	16
324.05	1051	346.00	1332	370.00	142	402.00	1393
326.00	81	347.00	140	370.95	380	403.00	1762
326.90	871	351.00	78	372.05	2909	403.95	552
328.00	565	351.20	53	373.05	856	405.10	52
329.00	67	352.00	1674	374.00	56	421.00	1450
332.05	477	353.05	1136	383.05	753	422.00	1239
333.00	486	354.00	1700	383.95	265	423.00	9162
334.05	3722	358.95	156	389.90	444	424.00	1765
335.05	945	365.00	7672	391.05	268	425.05	174
336.10	54	366.00	1352	392.00	203	428.20	52

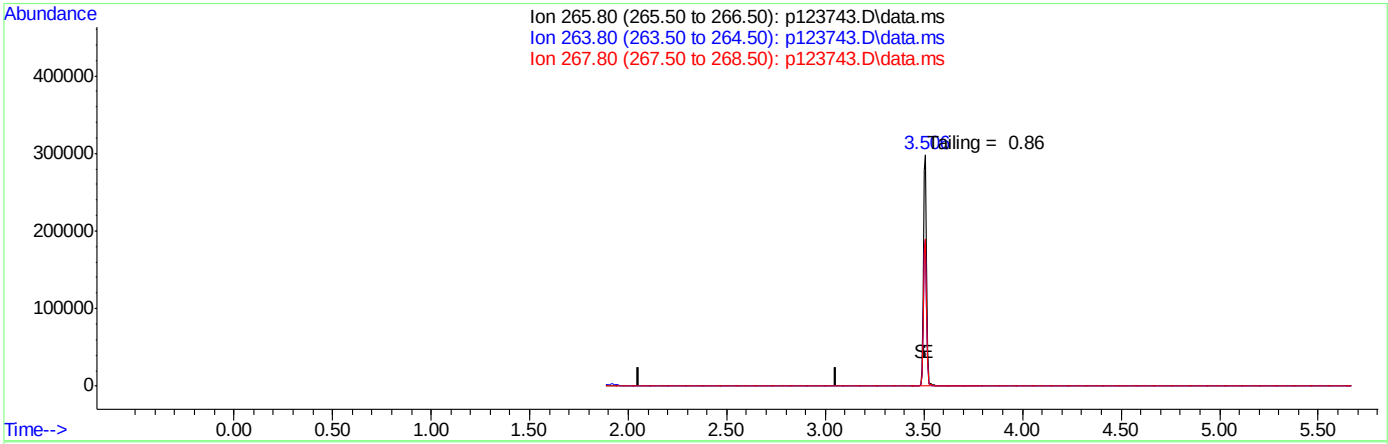
Average of 3.816 to 3.826 min.: p123743.D\data.ms
dftpp
Modified:subtracted

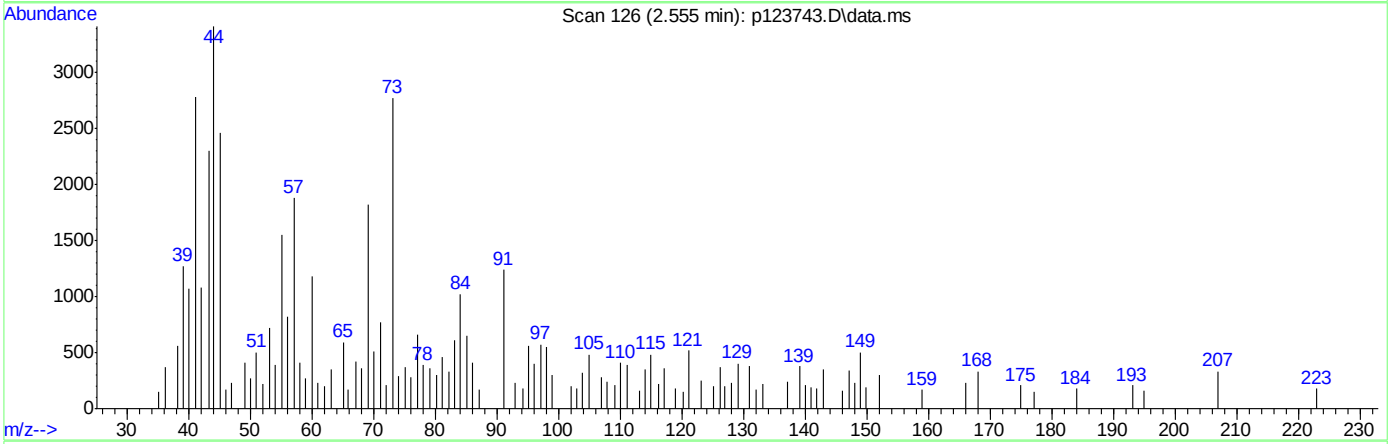
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
428.80	59						
430.20	51						
441.00	24781						
442.00	169866						
443.00	31722						
444.00	2753						
444.80	57						
445.00	197						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123743.D
Acq On : 20 Jun 2018 8:53 pm
Operator : chriss2
Sample : dftpp
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 20 20:59:30 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Mon Oct 16 09:17:27 2017
Response via : Initial Calibration





TIC: p123743.D\data.ms

(1) Pentachlorophenol (t)

2.555min (-2.555) 0.00ppb

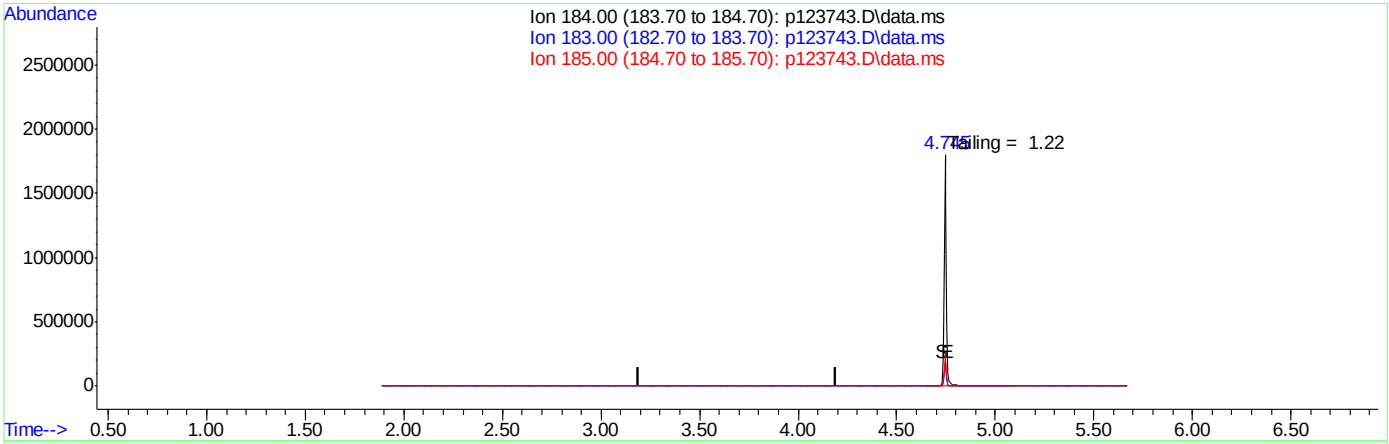
response 0

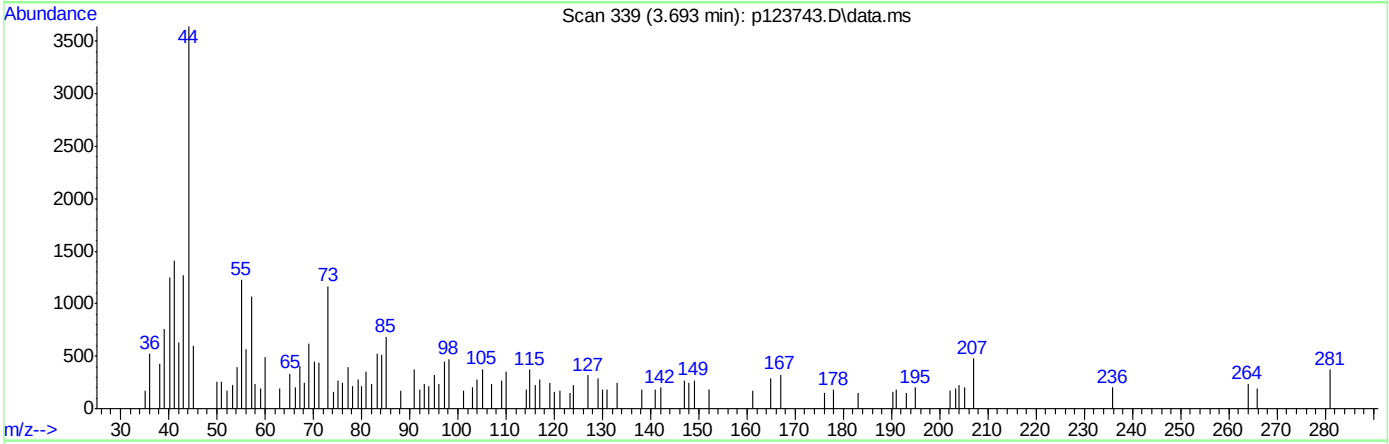
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.10	0.00#
267.80	63.80	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123743.D
Acq On : 20 Jun 2018 8:53 pm
Operator : chriss2
Sample : dftpp
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 20 20:59:30 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Mon Oct 16 09:17:27 2017
Response via : Initial Calibration





TIC: p123743.D\data.ms

(2) Benzidine (t)

3.693min (-3.693) 0.00ppb

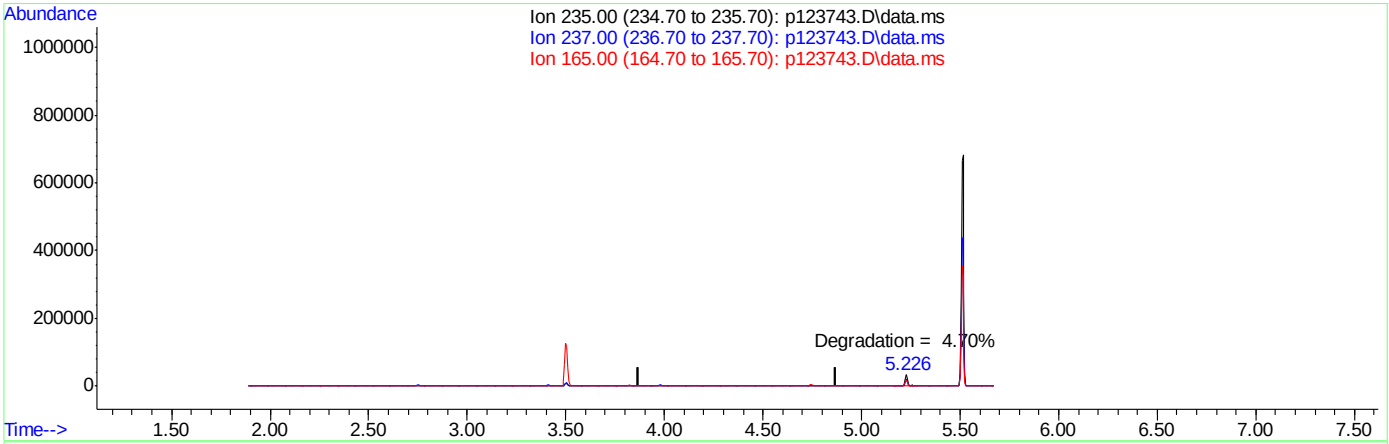
response 0

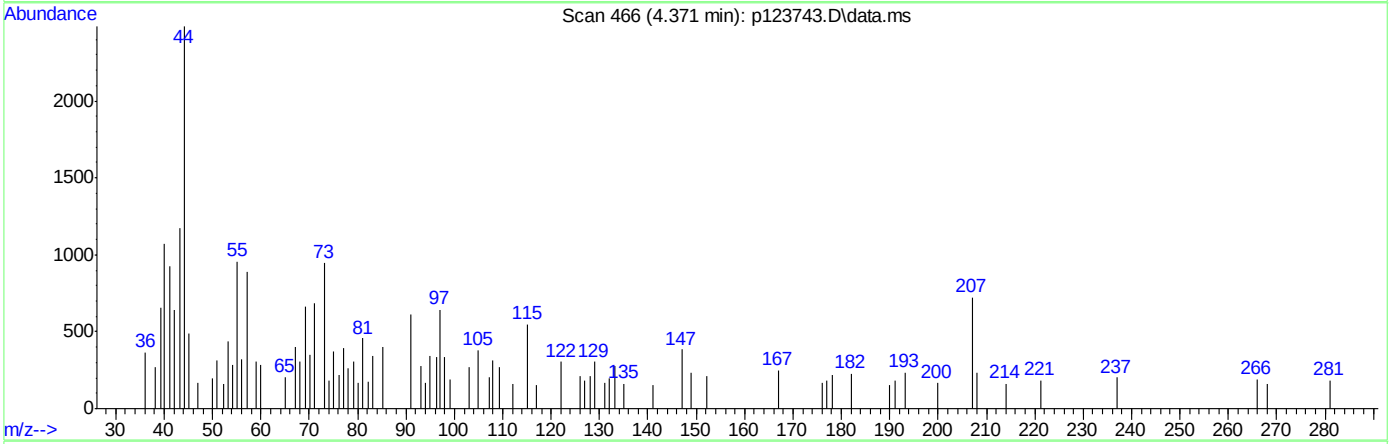
Ion	Exp%	Act%
184.00	100	0.00
183.00	12.40	0.00
185.00	16.70	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123743.D
Acq On : 20 Jun 2018 8:53 pm
Operator : chriss2
Sample : dftpp
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 20 20:59:30 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Mon Oct 16 09:17:27 2017
Response via : Initial Calibration





TIC: p123743.D\data.ms

(3) ddt

4.371min (-4.371) 0.00ppb

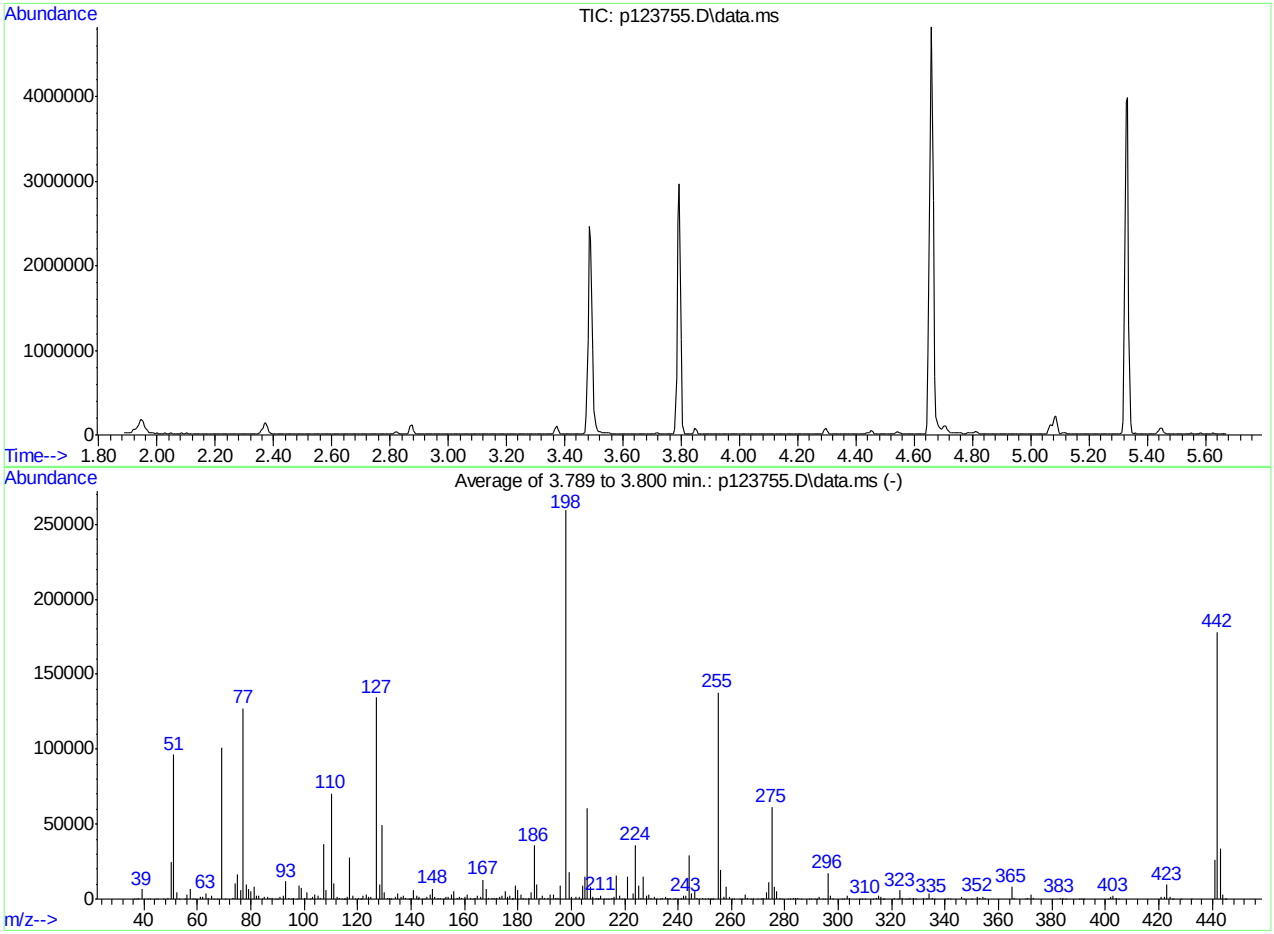
response 0

Ion	Exp%	Act%
235.00	100	0.00
237.00	66.80	0.00#
165.00	41.20	0.00#
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\EP5553\p123755.D Vial: 1
Acq On : 21 Jun 2018 2:42 am Operator: chriss2
Sample : dftpp Inst : MSVOAMSP
Misc : op9039,ep5554,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um



AutoFind: Scans 357, 358, 359; Background Corrected with Scan 351

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.2	96334	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.9	100826	PASS
70	69	0.00	2	0.4	384	PASS
127	198	40	60	51.9	134544	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	259221	PASS
199	198	5	9	7.0	18202	PASS
275	198	10	30	23.7	61474	PASS
365	198	1	100	3.2	8198	PASS
441	443	0.10	100	79.5	26565	PASS
442	198	40	100	68.7	178210	PASS
443	442	17	23	18.8	33426	PASS

p123755.D DFTPPP.M Thu Jun 21 11:23:03 2018 ACLIMS

Average of 3.789 to 3.800 min.: p123755.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	63	50.10	24397	63.10	4057	77.05	127222
37.10	318	51.10	96334	64.10	619	78.10	9446
38.10	951	52.10	4620	65.10	2214	79.05	6821
39.10	6464	53.05	326	66.10	224	80.10	5360
40.00	264	55.10	396	67.15	48	81.10	7984
41.15	270	56.10	2926	69.10	100826	82.10	2391
42.10	215	57.10	6426	70.10	384	83.10	1967
44.10	126	58.05	300	73.05	517	84.00	154
45.05	221	59.10	56	74.10	10256	84.20	60
47.20	77	61.10	1511	75.10	16213	85.10	1622
49.05	525	62.10	1473	76.15	6116	86.10	1869

Average of 3.789 to 3.800 min.: p123755.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.10	1106	98.10	8744	110.10	70426	120.05	462
88.10	547	99.05	7696	111.10	10140	120.90	94
89.05	305	100.05	778	112.10	1156	121.20	110
90.00	56	101.05	4588	112.95	502	122.10	2294
91.05	1522	102.10	272	114.10	64	123.05	3271
92.10	2090	103.05	1478	114.60	53	124.00	1652
93.10	11837	104.00	2833	115.05	69	125.05	1602
94.05	936	105.00	2420	116.05	1890	127.10	134544
95.05	229	106.00	563	117.10	27456	128.05	9645
96.10	480	107.10	36769	118.10	2175	129.00	49128
97.10	335	108.10	6121	119.05	382	130.10	4462

Average of 3.789 to 3.800 min.: p123755.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
131.00	934	142.10	2074	152.05	369	163.05	303
132.05	532	142.70	107	153.05	1854	164.05	422
132.40	58	143.00	1491	154.05	1384	164.95	1922
134.05	1334	144.10	339	155.10	3210	166.10	1821
135.05	4089	144.95	336	156.10	5101	167.05	12765
136.05	1624	146.05	1156	157.05	1138	168.00	6626
137.10	2237	147.10	3366	158.00	1240	169.10	1057
138.00	467	148.00	7078	159.05	817	170.10	514
139.05	276	149.00	1466	160.05	1751	171.00	573
140.00	515	150.00	530	161.10	3095	172.05	1007
141.00	5689	151.10	762	162.05	922	173.05	1437

Average of 3.789 to 3.800 min.: p123755.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
174.05	2515	184.05	877	195.10	403	208.05	1872
175.10	4984	185.10	4542	196.00	8648	209.05	648
176.00	1550	186.10	35848	198.00	259221	210.00	300
177.00	2233	187.10	10113	199.00	18202	210.20	752
177.70	93	188.10	1050	200.00	1357	211.10	2281
178.05	725	189.00	2181	201.55	1621	212.00	270
179.00	8996	190.05	402	203.05	1531	213.05	169
180.05	6129	191.05	1066	204.10	8967	214.00	59
181.05	3005	192.05	3051	205.10	14974	215.00	720
182.05	524	193.10	3179	206.10	60760	216.05	1400
183.00	395	194.00	722	207.05	8167	217.00	15805

Average of 3.789 to 3.800 min.: p123755.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
218.00	1927	230.00	511	241.00	674	251.90	71
219.00	230	231.05	1187	242.05	2071	252.10	306
219.90	121	231.95	191	243.05	2076	252.90	192
221.05	14947	233.00	236	244.10	29004	253.10	389

223.00	3831	234.00	1036	245.10	3949	255.00	137885
224.10	36018	235.10	1179	246.05	5211	256.00	19775
225.10	9274	236.00	683	247.00	873	257.00	1770
226.10	974	237.00	1151	248.05	213	258.00	8125
227.00	14851	238.05	155	249.00	969	259.05	1477
228.00	2125	238.95	585	250.00	215	260.00	268
229.00	3359	240.05	350	251.10	421	261.00	207

Average of 3.789 to 3.800 min.: p123755.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
263.10	106	274.00	10946	286.05	238	301.00	183
263.95	320	275.00	61474	289.00	260	302.05	243
265.05	3220	276.00	8011	290.05	148	303.10	2120
265.95	523	277.00	5024	291.00	101	304.00	570
267.10	61	278.05	883	292.00	228	307.95	269
267.90	142	279.00	193	293.00	1224	308.90	104
268.10	78	281.05	125	294.00	344	310.05	322
269.80	74	281.95	201	295.00	147	313.00	82
271.05	301	283.00	736	296.00	17394	314.05	925
272.00	479	284.05	410	297.00	2547	315.00	2066
273.00	4337	285.00	866	298.00	153	316.00	1157

Average of 3.789 to 3.800 min.: p123755.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
316.80	64	332.00	436	352.05	1846	383.80	88
317.10	191	333.00	588	353.05	1068	384.00	257
321.00	538	334.00	3416	354.05	1767	385.10	64
322.00	204	335.00	878	355.00	548	390.00	384
323.10	5785	336.10	66	365.00	8198	391.05	255
324.00	1032	339.80	66	365.95	1082	392.05	201
325.10	60	341.05	779	370.00	208	401.10	91
326.10	55	342.00	93	371.00	539	402.05	1277
327.00	946	345.95	1571	372.05	3371	403.00	2093
328.00	543	346.90	194	373.05	731	404.00	761
329.10	77	349.90	51	383.00	895	405.00	114

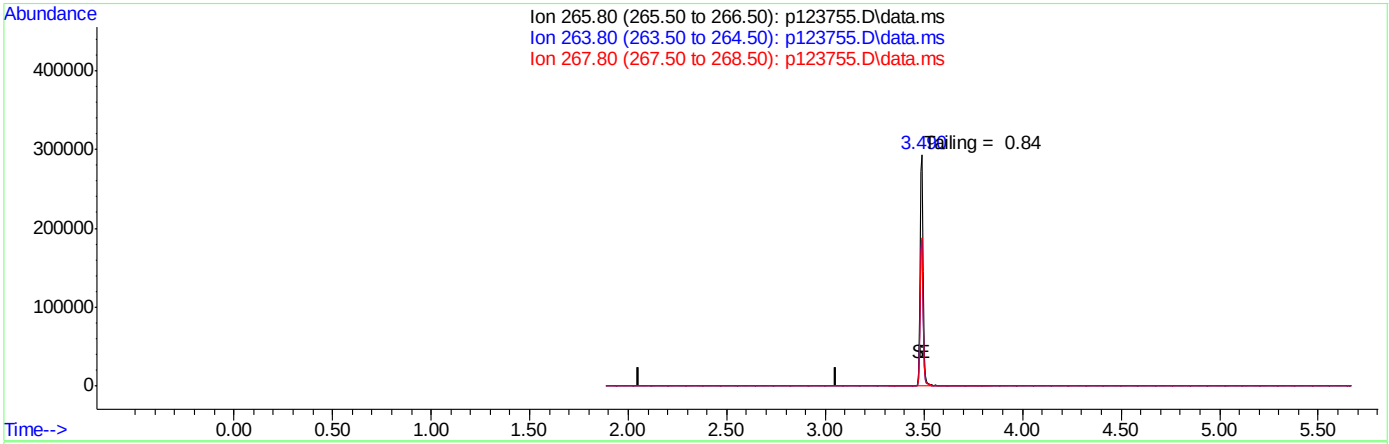
Average of 3.789 to 3.800 min.: p123755.D\data.ms
dftpp
Modified:subtracted

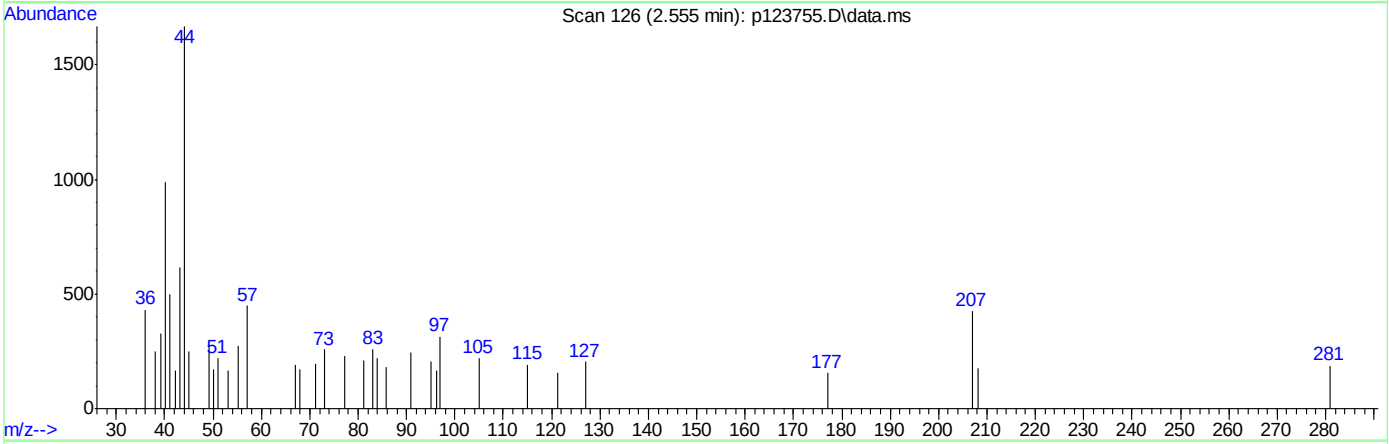
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
420.95	1430	444.00	2763				
422.05	1305	444.90	79				
423.05	9681	445.05	127				
424.05	1902						
424.90	82						
425.30	57						
428.20	63						
432.10	60						
441.05	26565						
442.00	178210						
443.00	33426						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123755.D
Acq On : 21 Jun 2018 2:42 am
Operator : chriss2
Sample : dftpp
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 21 02:48:33 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Mon Oct 16 09:17:27 2017
Response via : Initial Calibration





TIC: p123755.D\data.ms

(1) Pentachlorophenol (t)

2.555min (-2.555) 0.00ppb

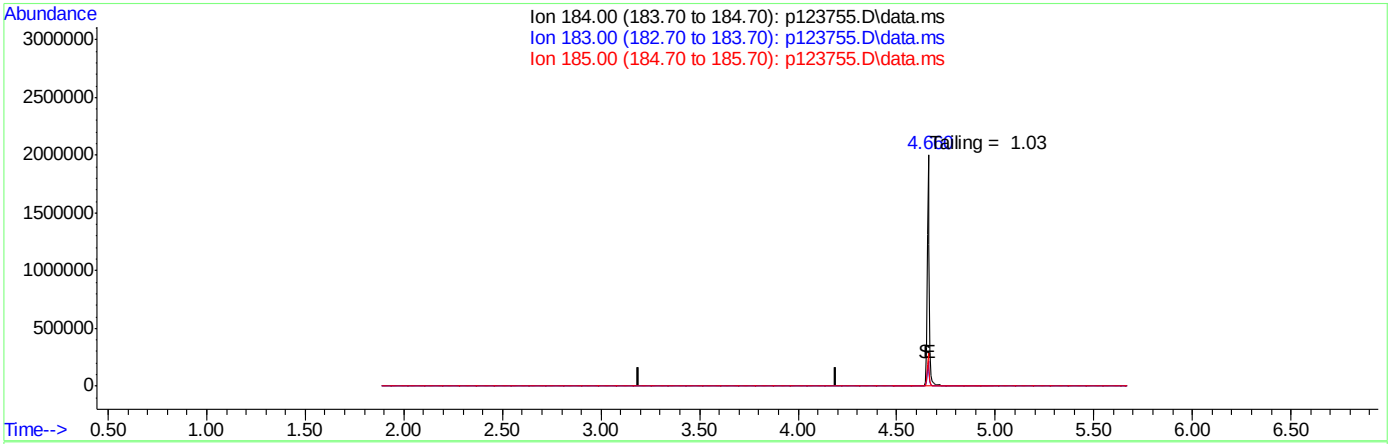
response 0

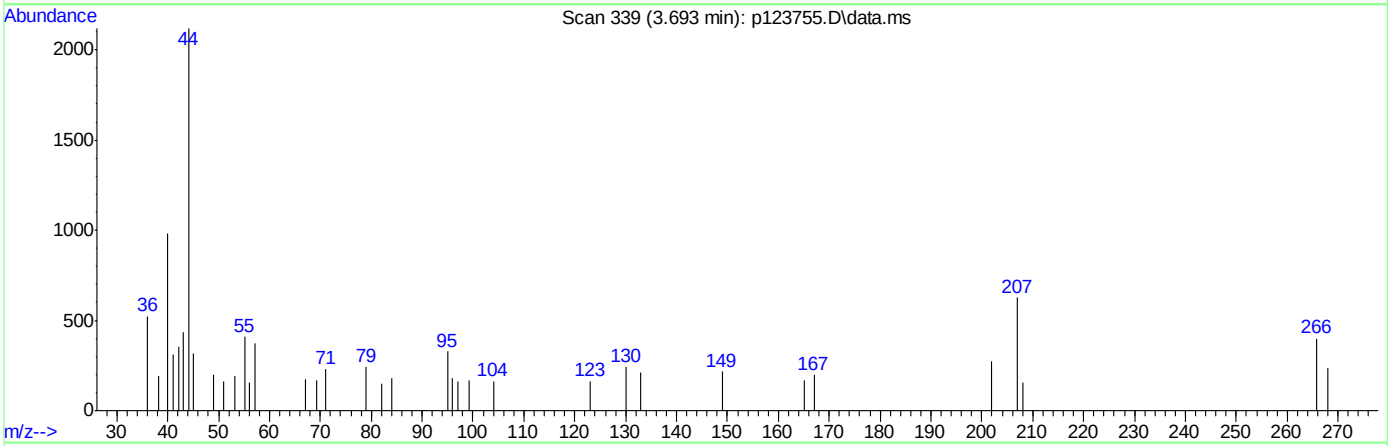
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.10	0.00#
267.80	63.80	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123755.D
Acq On : 21 Jun 2018 2:42 am
Operator : chriss2
Sample : dftpp
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 21 02:48:33 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Mon Oct 16 09:17:27 2017
Response via : Initial Calibration





TIC: p123755.D\data.ms

(2) Benzidine (t)

3.693min (-3.693) 0.00ppb

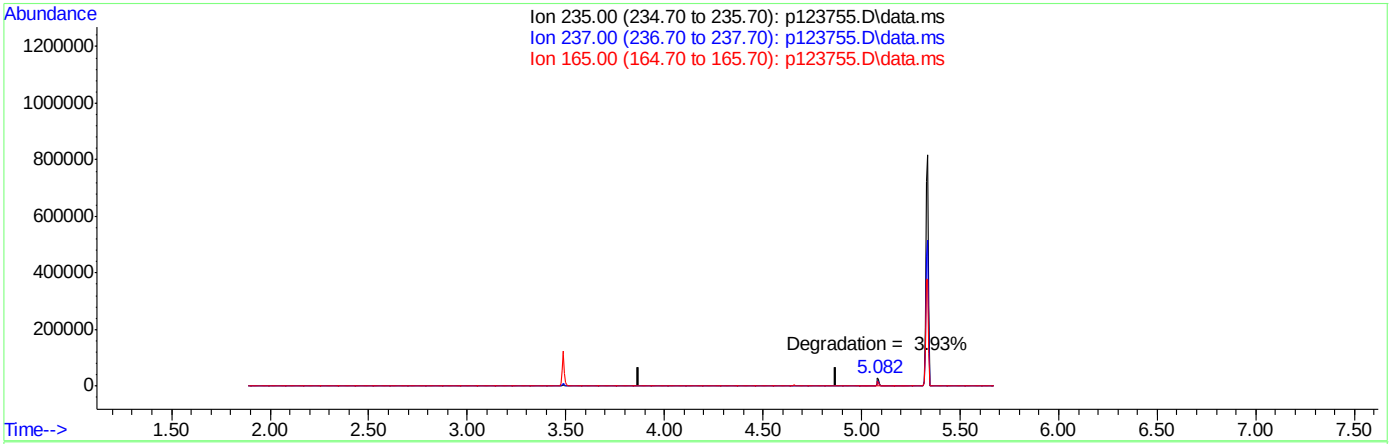
response 0

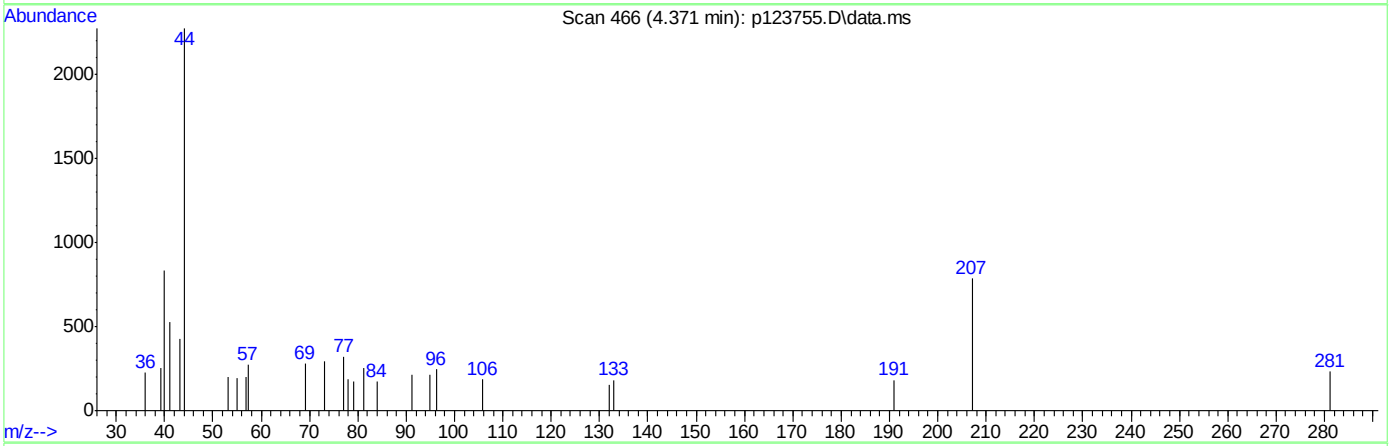
Ion	Exp%	Act%
184.00	100	0.00
183.00	12.40	0.00
185.00	16.70	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123755.D
Acq On : 21 Jun 2018 2:42 am
Operator : chriss2
Sample : dftpp
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 21 02:48:33 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Mon Oct 16 09:17:27 2017
Response via : Initial Calibration





TIC: p123755.D\data.ms

(3) ddt

4.371min (-4.371) 0.00ppb

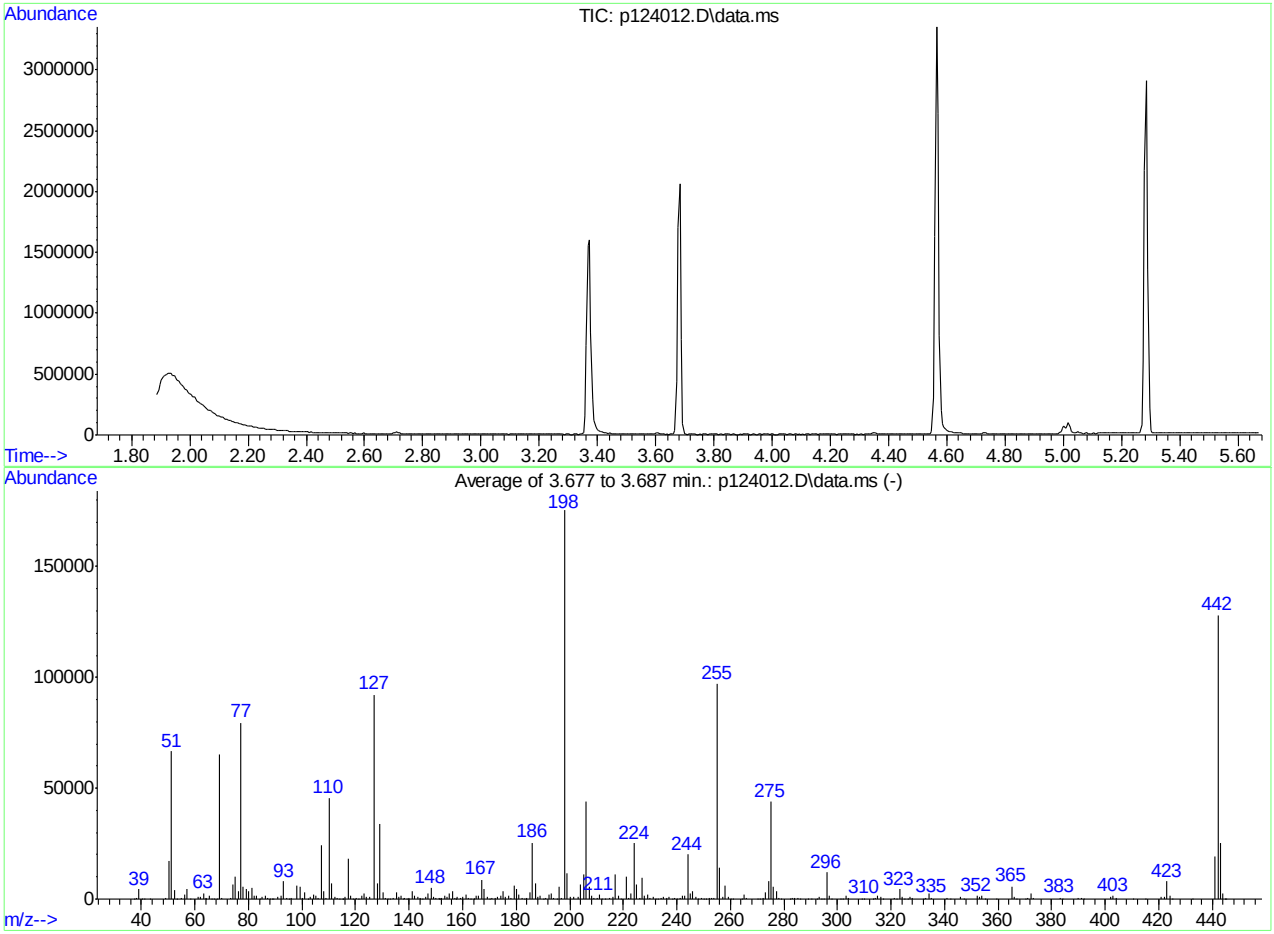
response 0

Ion	Exp%	Act%
235.00	100	0.00
237.00	66.80	0.00#
165.00	41.20	0.00#
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\EP5579\p124012.D Vial: 1
Acq On : 17 Jul 2018 8:48 am Operator: christc2
Sample : dftpp Inst : MSVOAMSP
Misc : op9039,ep5579,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um



AutoFind: Scans 336, 337, 338; Background Corrected with Scan 331

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.1	66750	PASS
68	69	0.00	2	0.2	119	PASS
69	198	0.00	100	37.1	65128	PASS
70	69	0.00	2	0.7	458	PASS
127	198	40	60	52.6	92194	PASS
197	198	0.00	1	0.4	713	PASS
198	198	100	100	100.0	175330	PASS
199	198	5	9	6.7	11664	PASS
275	198	10	30	25.1	44002	PASS
365	198	1	100	3.3	5741	PASS
441	443	0.10	100	76.7	19316	PASS
442	198	40	100	73.0	128042	PASS
443	442	17	23	19.7	25168	PASS

p124012.D DFTPPP.M Wed Jul 18 09:21:27 2018 ACLIMS

Average of 3.677 to 3.687 min.: p124012.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.10	215	55.10	379	67.15	116	80.10	3699
38.10	578	56.10	1795	68.10	119	81.10	5283
39.15	4514	57.10	4769	69.10	65128	82.10	1509
40.10	164	58.15	178	70.10	458	83.10	1373
41.10	96	61.10	792	73.15	773	84.20	262
43.10	103	62.10	1164	74.10	6682	85.10	1130
49.15	376	63.10	2698	75.10	10186	86.10	1404
50.20	17033	64.00	355	76.15	3769	87.15	585
51.15	66750	64.20	54	77.10	79639	88.05	192
52.20	3918	65.15	1434	78.10	5657	88.90	53
53.10	157	66.15	129	79.10	4466	89.20	86

Average of 3.677 to 3.687 min.: p124012.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.10	1273	103.10	962	113.80	54	124.05	1084
92.10	1311	104.10	1888	115.00	61	125.10	1114
93.10	8017	105.10	1693	115.20	61	127.10	92194
94.05	521	106.10	404	116.10	1287	128.10	7027
95.10	216	107.10	24133	117.10	18337	129.10	33976
96.05	437	108.10	3611	118.10	1442	130.10	2906
98.10	6089	109.10	291	119.05	226	131.10	665
99.10	5381	110.10	45610	120.05	319	132.00	248
100.10	540	111.10	6890	121.10	56	132.95	201
101.05	3159	112.10	958	122.10	1585	134.05	775
102.10	135	113.10	354	123.05	2517	135.10	2904

Average of 3.677 to 3.687 min.: p124012.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.10	1048	145.10	238	154.05	1015	164.00	79
137.10	1510	146.10	794	155.10	2341	164.20	186
137.70	51	147.10	2331	156.10	3808	165.05	1573
138.10	322	148.10	4871	157.05	727	166.00	1420
139.10	206	149.10	1031	157.40	121	167.10	8818
140.05	439	150.00	317	158.10	789	168.10	4787
141.10	3806	151.00	256	159.10	554	169.10	838
142.10	1360	151.25	368	160.10	1268	169.95	262
143.05	1074	151.60	126	161.10	2110	170.95	345
143.90	81	152.10	380	162.00	596	172.05	695
144.15	302	153.10	1338	163.10	172	173.10	1089

Average of 3.677 to 3.687 min.: p124012.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
174.10	1774	185.10	3174	196.05	5593	208.05	1475
175.10	3593	186.10	25433	196.80	713	209.05	509
176.10	1135	187.10	6885	198.00	175330	210.10	373
177.00	1641	188.05	840	199.00	11664	211.05	1836
178.05	619	189.05	1479	200.05	1039	212.00	138
179.05	6040	190.10	249	201.55	880	213.10	59
180.10	4465	191.00	692	203.05	1123	215.05	543
181.05	1958	192.10	1962	204.10	6361	216.05	847
182.05	365	193.10	2402	205.10	10976	217.00	10983
183.15	267	194.05	412	206.10	44066	218.10	1448
184.00	510	195.10	148	207.10	5528	219.00	121

Average of 3.677 to 3.687 min.: p124012.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
221.10	10157	232.05	216	243.10	1542	253.90	296
222.00	633	233.00	129	244.10	20123	255.10	96885
223.00	2751	234.05	694	245.10	2767	256.05	14006
224.10	25200	235.00	784	246.00	3729	257.10	1002

225.10	6553	236.00	440	247.00	789	258.00	5875
226.10	667	237.05	790	248.00	97	259.10	822
227.05	9750	238.10	60	249.00	704	260.00	200
228.00	1479	239.05	416	250.00	73	261.10	191
229.05	2132	239.95	253	250.95	168	264.05	233
229.95	316	241.05	524	252.00	302	265.05	2183
231.05	814	242.10	1565	253.00	522	266.00	404

Average of 3.677 to 3.687 min.: p124012.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
270.05	111	283.00	501	297.00	1736	316.10	847
271.15	229	284.05	398	297.95	129	317.10	72
272.05	310	285.05	711	301.10	56	321.10	424
273.10	3272	286.10	71	302.10	148	322.05	198
274.10	8070	289.05	186	303.05	1516	323.10	4389
275.10	44002	290.10	63	304.10	362	324.05	929
276.10	5832	292.10	246	309.00	55	325.00	55
277.05	3599	293.05	835	309.95	150	326.10	56
278.05	653	294.05	260	313.10	62	327.00	880
279.05	140	294.90	54	314.05	550	328.00	415
282.10	66	296.00	12002	315.00	1503	332.05	251

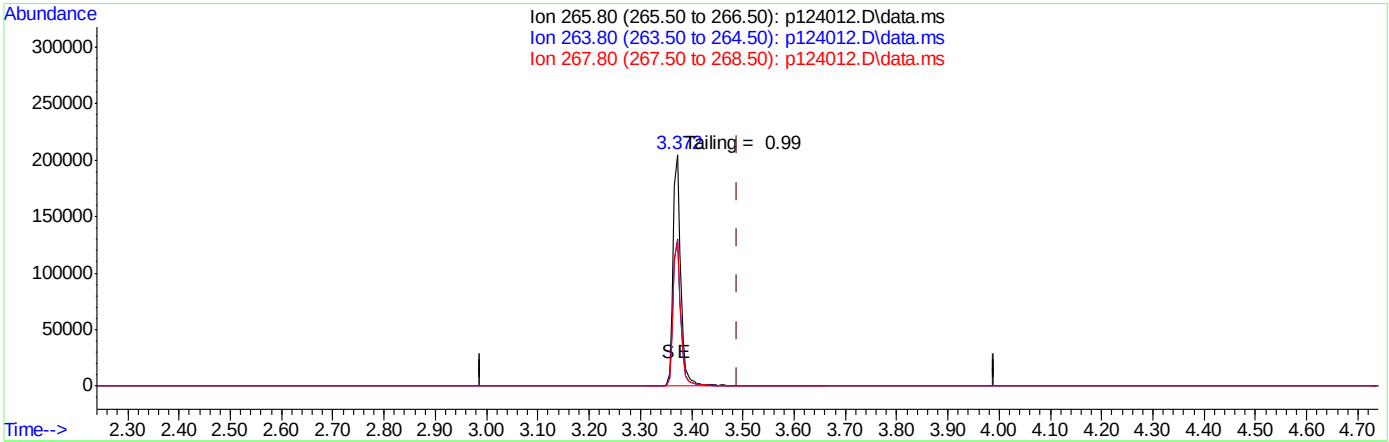
Average of 3.677 to 3.687 min.: p124012.D\data.ms
dftpp
Modified:subtracted

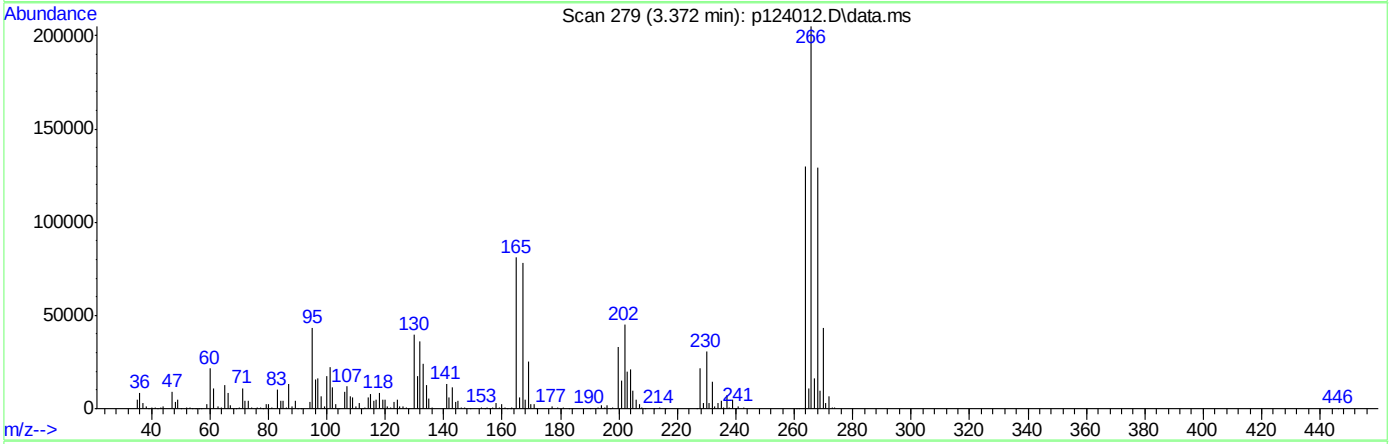
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
333.00	390	359.20	83	391.05	336	424.95	139
334.05	2661	365.00	5741	392.05	148	432.50	63
335.05	665	366.00	806	402.00	990	441.05	19316
341.05	650	367.00	51	403.00	1318	442.05	128042
342.05	163	370.00	123	404.00	597	443.10	25168
346.05	969	371.05	337	410.20	66	444.05	2472
347.10	93	372.10	2352	415.00	50	444.80	54
352.05	1440	373.05	588	420.95	1250	445.00	78
353.05	1010	383.00	688	422.00	1041		
354.05	1344	384.10	71	423.05	7861		
355.05	267	390.05	357	424.05	1449		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124012.D
Acq On : 17 Jul 2018 8:48 am
Operator : christc2
Sample : dftpp
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 17 08:54:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Thu Jun 21 11:23:15 2018
Response via : Initial Calibration





TIC: p124012.D\data.ms

(1) Pentachlorophenol (t)

3.372min (-0.117) 933.71ppb

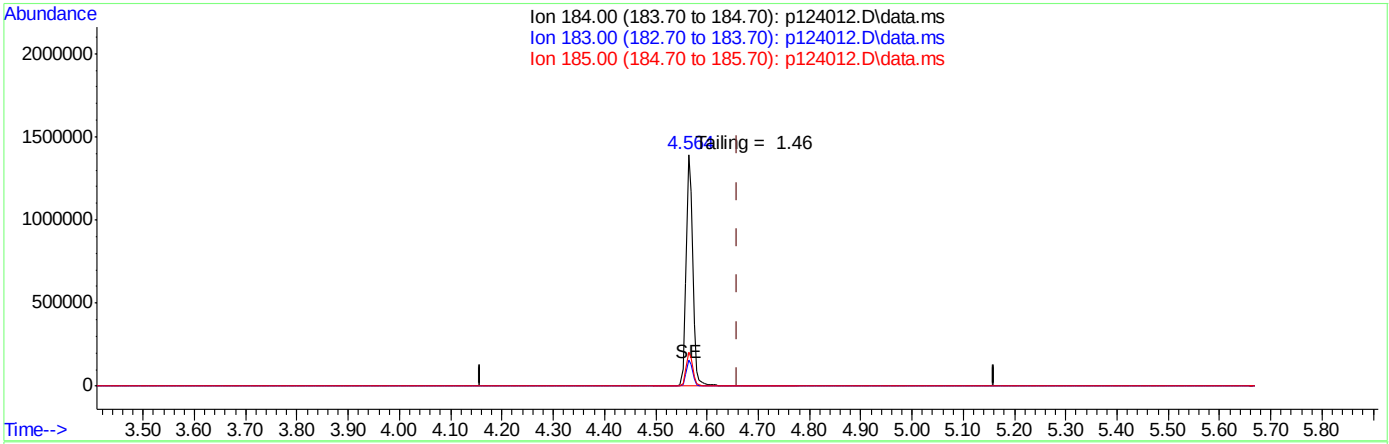
response 216611

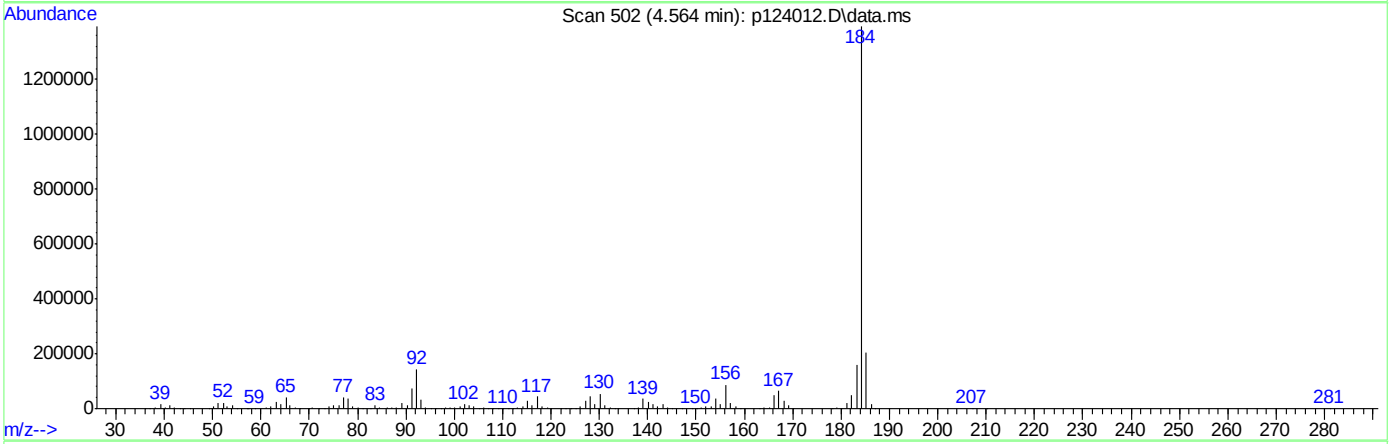
Ion	Exp%	Act%
265.80	100	100
263.80	62.90	63.34
267.80	64.00	63.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124012.D
Acq On : 17 Jul 2018 8:48 am
Operator : christc2
Sample : dftpp
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 17 08:54:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Thu Jun 21 11:23:15 2018
Response via : Initial Calibration





TIC: p124012.D\data.ms

(2) Benzidine (t)

4.564min (-0.096) 639.84ppb

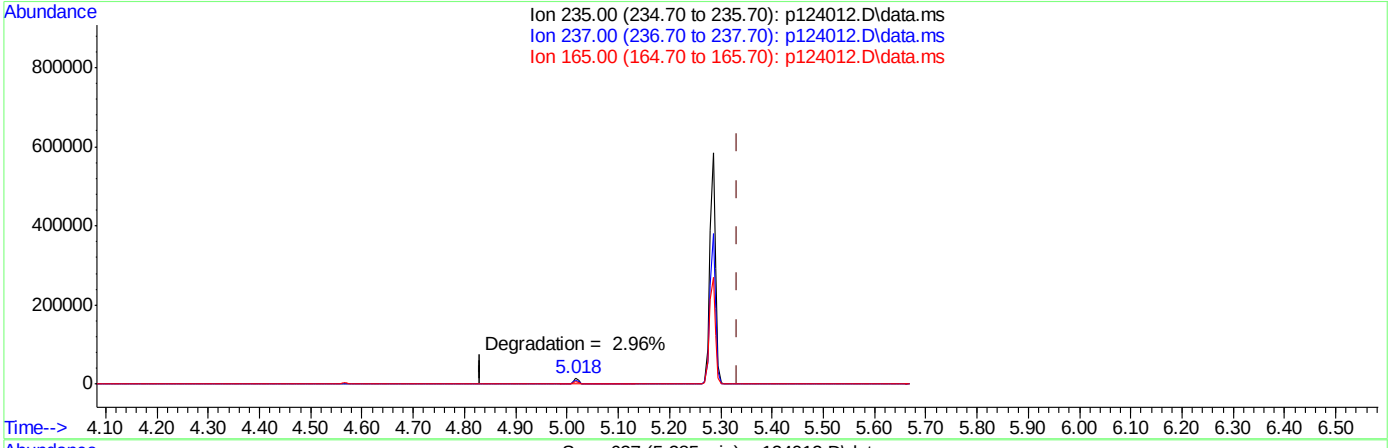
response 1256627

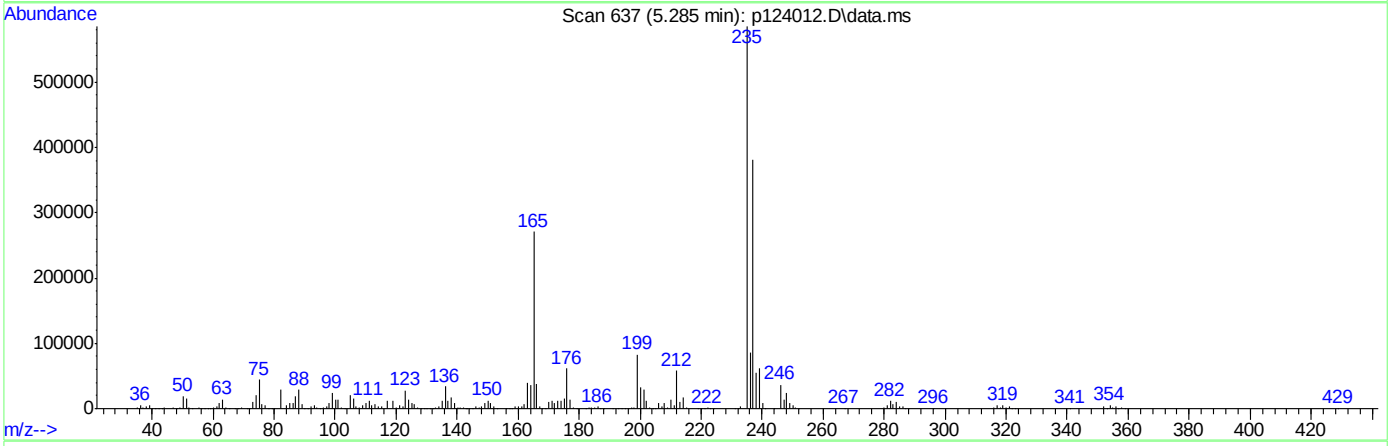
Ion	Exp%	Act%
184.00	100	100
183.00	11.00	11.12
185.00	14.40	14.88
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124012.D
Acq On : 17 Jul 2018 8:48 am
Operator : christc2
Sample : dftpp
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 17 08:54:43 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Thu Jun 21 11:23:15 2018
Response via : Initial Calibration





TIC: p124012.D\data.ms

(3) ddt

5.285min (-0.048) 452.07ppb

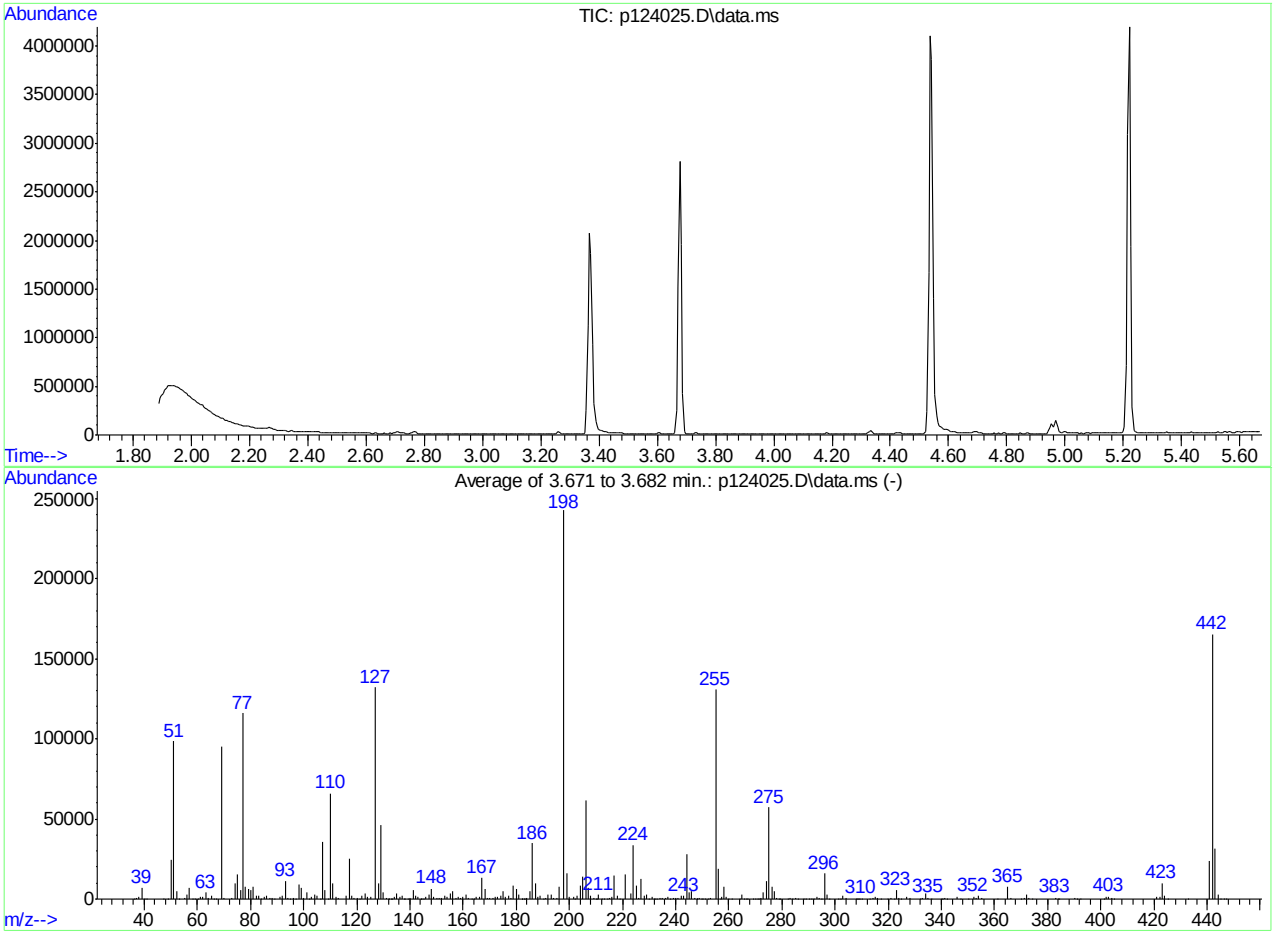
response 454971

Ion	Exp%	Act%
235.00	100	100
237.00	63.10	64.75
165.00	46.00	48.75
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\EP5580\p124025.D Vial: 1
Acq On : 18 Jul 2018 10:10 am Operator: seanb1
Sample : dftpp Inst : MSVOAMSP
Misc : op9039,ep5580,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um



AutoFind: Scans 335, 336, 337; Background Corrected with Scan 330

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.6	98527	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.1	94848	PASS
70	69	0.00	2	0.6	547	PASS
127	198	40	60	54.5	132146	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	242453	PASS
199	198	5	9	6.8	16449	PASS
275	198	10	30	23.6	57165	PASS
365	198	1	100	3.1	7567	PASS
441	443	0.10	100	74.4	23615	PASS
442	198	40	100	68.2	165314	PASS
443	442	17	23	19.2	31751	PASS

p124025.D DFTPPP.M Wed Jul 18 10:31:56 2018 ACLIMS

Average of 3.671 to 3.682 min.: p124025.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	64	53.15	244	65.20	2063	79.10	6669
37.20	429	55.10	454	66.10	300	80.10	5315
38.15	1248	56.10	2592	67.15	153	81.10	7961
39.15	6826	57.10	7035	69.10	94848	82.10	2095
40.10	258	58.05	336	70.05	547	83.10	1952
41.10	130	59.15	124	73.10	577	84.05	54
47.05	126	60.10	58	74.10	9613	85.10	1266
49.10	248	61.15	1344	75.10	15110	86.10	2054
50.10	24749	62.10	1310	76.20	5672	87.10	873
51.15	98527	63.10	4042	77.05	115825	88.05	431
52.10	5084	64.10	567	78.15	7868	89.10	278

Average of 3.671 to 3.682 min.: p124025.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.10	1743	102.10	237	113.05	497	127.10	132146
92.10	1999	103.05	1185	116.15	1975	128.05	9740
93.10	11420	104.10	2766	117.10	25376	129.05	45836
94.15	814	105.05	2110	118.10	2233	130.10	4274
95.05	163	106.10	336	119.05	433	131.05	877
96.05	760	107.10	35848	120.05	447	131.90	180
97.10	271	108.10	5756	121.00	79	132.15	234
98.10	8984	109.10	349	122.10	2353	132.90	100
99.10	7118	110.10	65986	123.10	3451	133.15	159
100.05	714	111.10	9880	124.05	1577	134.10	1387
101.10	4433	112.10	1115	125.10	1722	135.10	3691

Average of 3.671 to 3.682 min.: p124025.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.05	1472	145.05	322	156.10	4745	167.10	13194
137.10	1919	146.05	1165	157.15	985	168.10	6467
137.90	134	147.10	2750	158.00	1073	169.10	995
138.05	287	148.10	6476	159.00	1032	170.05	447
139.05	341	149.05	1319	160.05	1615	171.05	520
140.05	639	150.10	405	161.10	2623	172.05	1149
141.10	5823	151.05	816	162.05	813	173.10	1386
142.10	1948	151.85	453	163.15	353	174.10	2467
143.10	1526	153.05	1861	164.10	354	175.10	5058
144.05	315	154.10	1404	165.00	1623	176.05	1430
144.30	82	155.10	3224	166.05	1702	177.05	2206

Average of 3.671 to 3.682 min.: p124025.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
178.10	827	187.10	9796	199.00	16449	210.10	305
179.00	8495	188.10	1141	200.05	1260	210.40	213
180.10	6345	189.05	1856	201.50	1170	211.10	2537
181.05	2807	190.10	368	201.90	131	212.00	75
182.05	311	191.05	910	203.05	1845	213.00	118
182.30	92	192.05	3042	204.10	8511	214.10	50
182.95	168	193.10	2788	205.10	14083	215.05	705
183.20	162	194.05	719	206.10	61893	216.05	1246
184.05	735	195.10	419	207.10	7336	217.00	14541
185.05	4576	196.10	7641	208.05	1786	218.05	1876
186.10	34950	198.00	242453	209.05	397	218.95	165

Average of 3.671 to 3.682 min.: p124025.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
221.05	15104	232.10	172	243.10	1890	252.10	292
223.00	3727	233.00	131	244.10	27885	253.05	778
224.10	33824	234.00	886	245.10	3915	255.05	130672
225.10	8607	234.95	901	246.05	4936	256.05	18880

226.05	839	236.05	881	247.05	1064	256.90	348
227.00	12915	237.05	1247	248.00	138	257.10	1252
228.00	1920	238.05	162	248.20	86	258.05	7672
229.05	2834	239.05	505	249.00	906	259.00	1203
230.05	281	240.05	507	249.90	72	260.00	299
231.10	1146	241.00	878	250.10	51	261.10	323
231.80	68	242.10	1833	251.00	176	263.90	190

Average of 3.671 to 3.682 min.: p124025.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.05	3059	275.10	57165	288.10	51	301.05	172
265.95	288	276.10	7602	289.00	128	302.00	310
266.70	66	277.05	4909	290.10	160	303.05	2049
267.10	55	278.05	771	290.90	55	304.05	570
269.10	53	278.90	67	292.05	153	307.80	54
270.00	146	279.10	69	293.05	1085	308.15	221
270.90	132	282.05	188	294.05	402	308.90	60
271.20	285	283.05	642	295.00	196	309.10	63
272.05	518	284.05	326	296.00	15865	310.05	227
273.05	4042	285.05	882	297.05	2525	313.00	63
274.05	10874	286.10	107	297.95	162	314.05	698

Average of 3.671 to 3.682 min.: p124025.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.05	1644	332.05	305	350.10	57	373.05	883
316.05	988	333.00	574	352.05	1610	374.10	53
317.00	226	334.05	3354	353.00	1041	383.00	755
319.90	84	335.05	1045	354.05	1815	384.00	101
321.10	543	336.10	130	355.10	438	384.20	114
322.10	281	339.90	86	361.00	57	390.05	482
323.10	5929	340.20	66	365.00	7567	391.05	303
324.10	993	341.05	758	366.05	995	392.10	231
324.95	128	342.10	188	370.00	138	401.00	162
327.00	1206	346.00	1212	371.00	464	402.00	1224
328.00	637	347.00	258	372.10	3126	403.00	1748

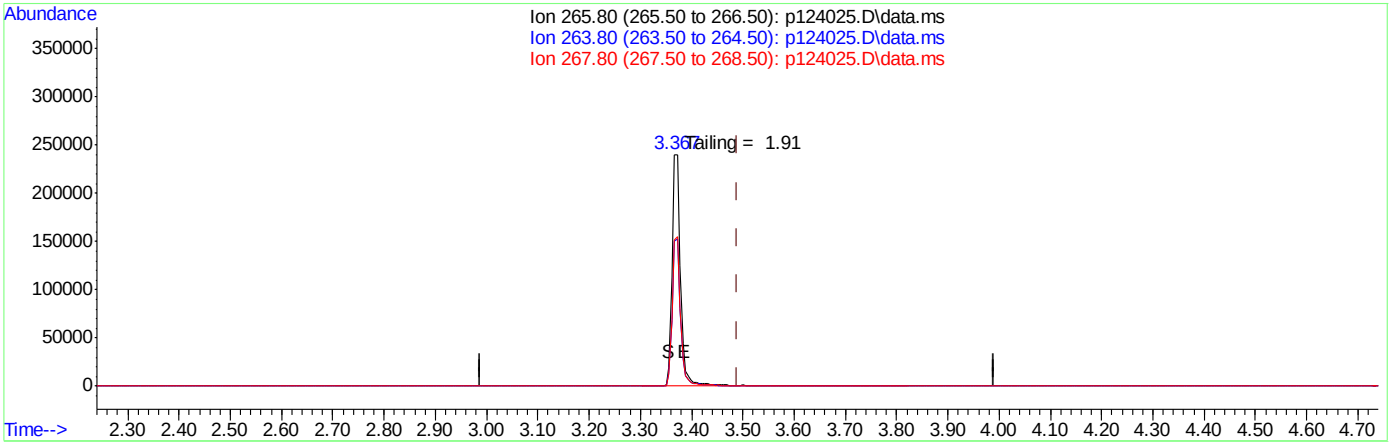
Average of 3.671 to 3.682 min.: p124025.D\data.ms
dftpp
Modified:subtracted

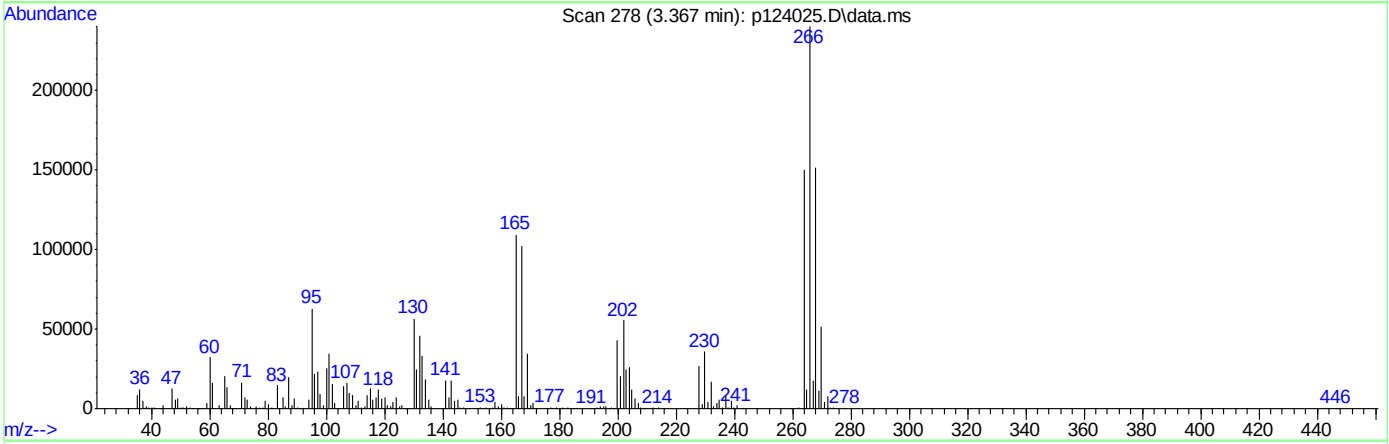
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
403.95	596	444.05	3104				
405.00	103	445.00	126				
421.00	1297	446.30	77				
422.05	1379	447.00	52				
423.10	10021						
424.00	1819						
425.05	160						
432.90	58						
441.00	23615						
442.05	165314						
443.00	31751						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5580\
Data File : p124025.D
Acq On : 18 Jul 2018 10:10 am
Operator : seanb1
Sample : dftpp
Misc : op9039,ep5580,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 18 10:16:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Thu Jun 21 11:23:15 2018
Response via : Initial Calibration





TIC: p124025.D\data.ms

(1) Pentachlorophenol (t)

3.367min (-0.123) 1168.49ppb

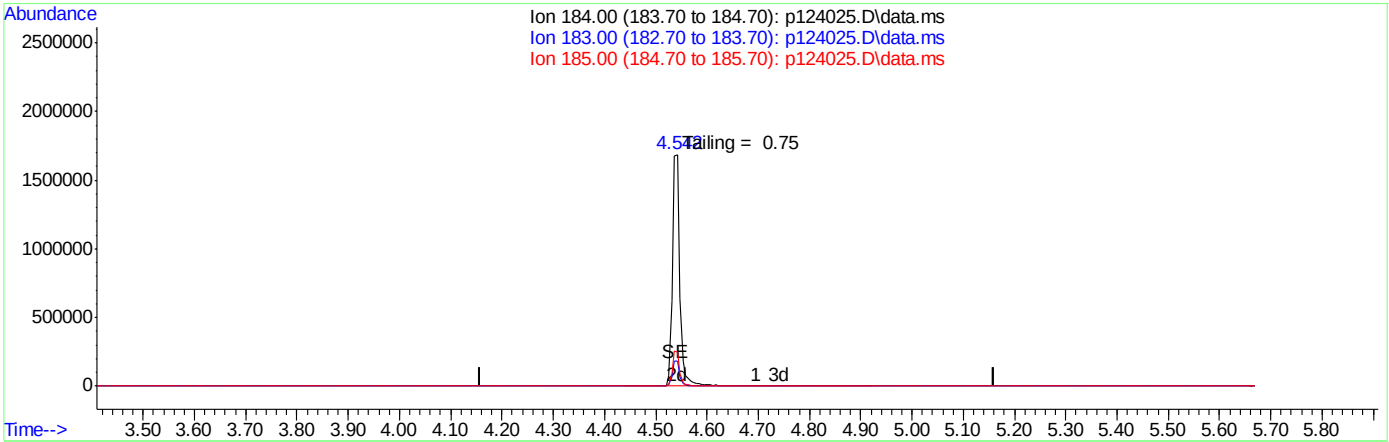
response 271079

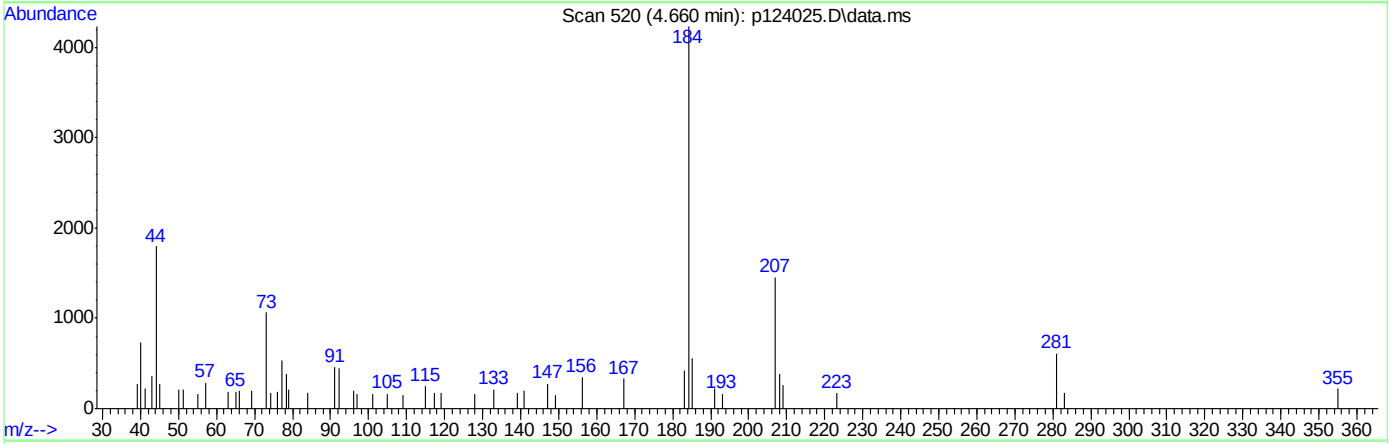
Ion	Exp%	Act%
265.80	100	100
263.80	62.90	62.49
267.80	64.00	63.01
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5580\
Data File : p124025.D
Acq On : 18 Jul 2018 10:10 am
Operator : seanb1
Sample : dftpp
Misc : op9039,ep5580,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 18 10:16:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Thu Jun 21 11:23:15 2018
Response via : Initial Calibration





TIC: p124025.D\data.ms

(2) Benzidine (t)

4.660min 0.00ppb d

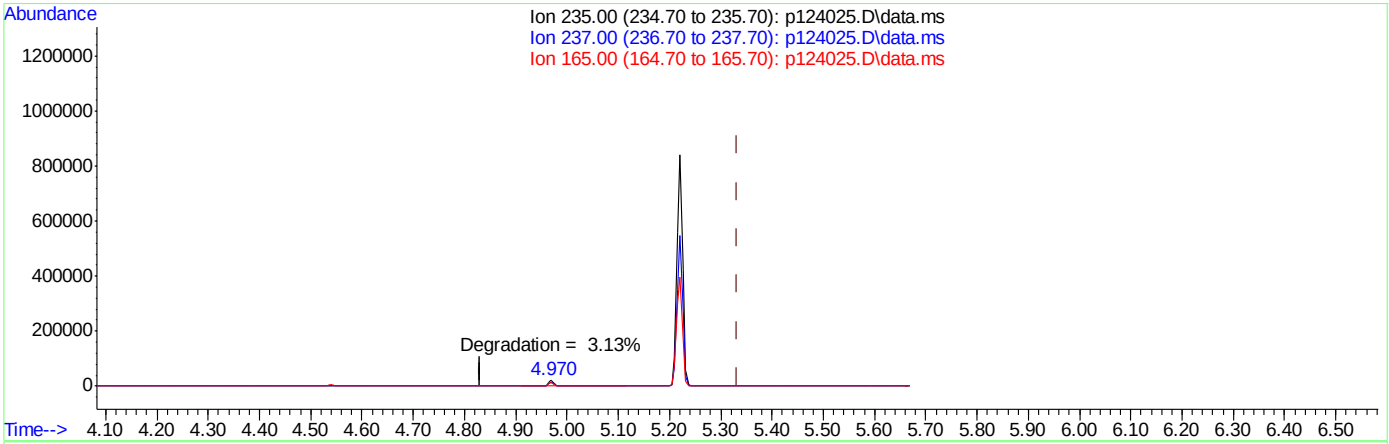
response 0

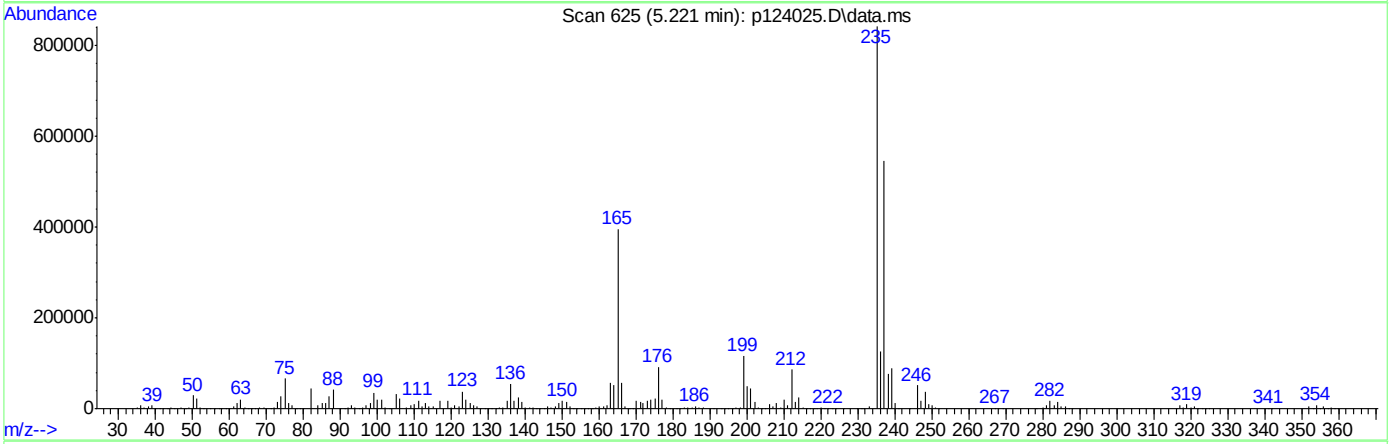
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.00	0.00
185.00	14.40	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5580\
Data File : p124025.D
Acq On : 18 Jul 2018 10:10 am
Operator : seanb1
Sample : dftpp
Misc : op9039,ep5580,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 18 10:16:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Thu Jun 21 11:23:15 2018
Response via : Initial Calibration





TIC: p124025.D\data.ms

(3) ddt

5.221min (-0.112) 638.96ppb

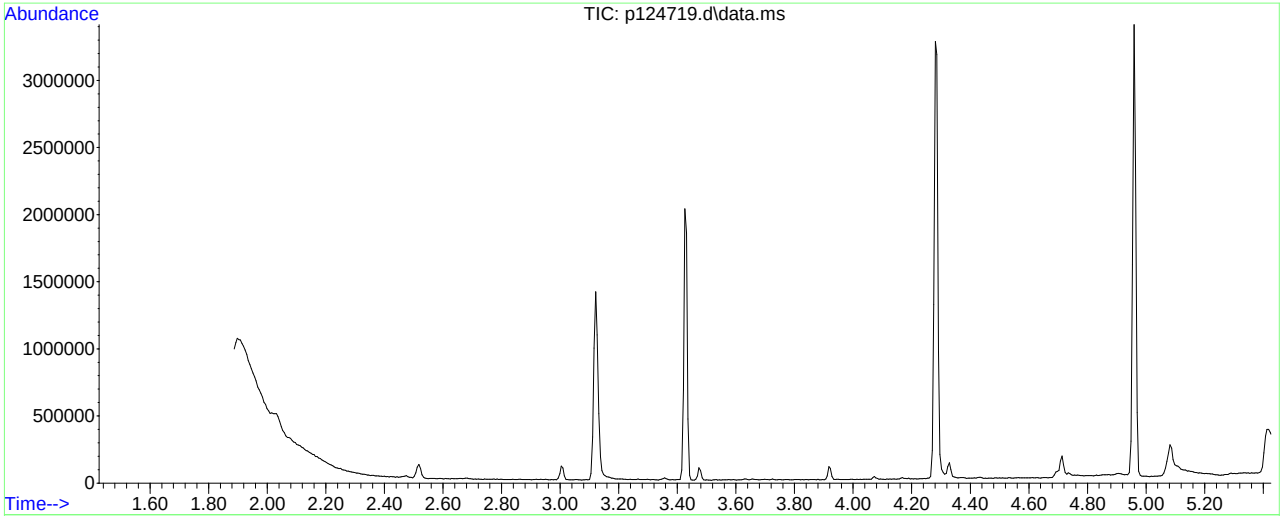
response 643065

Ion	Exp%	Act%
235.00	100	100
237.00	63.10	64.21
165.00	46.00	48.26
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\data\ep5612\p124719.d Vial: 1
Acq On : 10 Aug 2018 9:59 pm Operator: chriss2
Sample : DFTPP Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um



AutoFind: Scans 288, 289, 290; Background Corrected with Scan 284

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.6	63972	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.3	72122	PASS
70	69	0.00	2	0.3	239	PASS
127	198	40	60	54.2	94691	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	174781	PASS
199	198	5	9	6.8	11847	PASS
275	198	10	30	25.9	45277	PASS
365	198	1	100	3.5	6039	PASS
441	443	0.10	100	79.9	13496	PASS
442	198	40	100	51.2	89567	PASS
443	442	17	23	18.9	16892	PASS

p124719.d DFTPPP.M Sun Aug 12 22:46:59 2018

Average of 3.420 to 3.431 min.: p124719.d\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.15	339	52.10	3375	64.10	439	77.10	82266
38.15	1142	53.05	189	65.10	1249	78.10	5673
39.10	4638	55.10	360	66.10	134	79.10	5314
40.10	169	56.10	1831	67.10	122	80.10	4468
41.10	158	57.10	4207	69.10	72122	81.10	5675
44.10	30	58.05	288	70.10	239	82.05	1353
45.10	64	59.20	64	71.10	73	83.10	1429
48.10	63	60.05	226	73.10	607	84.05	52
49.15	537	61.10	896	74.10	7253	85.10	970
50.10	17034	62.10	1060	75.10	11842	86.10	1310
51.10	63972	63.10	2872	76.15	4500	87.05	875

Average of 3.420 to 3.431 min.: p124719.d\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
88.05	400	100.10	496	113.10	232	124.05	1362
89.00	179	101.05	3462	114.00	71	125.05	1217
90.00	76	102.00	147	115.10	74	127.10	94691
91.10	1253	103.05	1338	116.10	1587	128.05	7334
92.10	1419	104.05	2099	117.05	17620	129.05	36075
93.05	8821	105.10	2077	118.05	1436	130.00	2838
94.10	783	107.10	24730	119.10	137	131.00	704
96.10	196	108.05	4081	120.05	436	132.05	385
97.10	76	110.10	47627	121.10	283	134.05	1157
98.10	6981	111.10	6717	122.05	2052	135.05	3085
99.05	5876	112.10	742	123.10	2567	136.05	1302

Average of 3.420 to 3.431 min.: p124719.d\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
137.10	1801	148.00	4855	157.95	791	169.10	904
138.05	367	149.05	1007	159.00	758	170.05	417
139.00	298	150.05	456	160.05	1519	171.05	511
140.05	433	151.10	681	161.05	2056	172.05	980
141.05	4471	151.50	189	162.05	631	173.10	1157
142.05	1246	152.05	275	163.05	344	174.05	1913
143.05	962	153.05	1788	164.05	337	175.10	3385
144.05	450	154.10	1161	165.00	1627	176.05	1162
145.05	246	155.10	2445	166.05	1369	177.00	1935
146.10	803	156.05	3970	167.05	9115	178.05	623
147.00	2074	157.10	821	168.00	4375	179.00	6386

Average of 3.420 to 3.431 min.: p124719.d\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
180.05	4297	191.05	645	201.80	100	213.05	182
181.00	2417	192.00	2220	203.00	1289	214.10	54
182.05	423	193.05	2397	204.10	6919	215.05	608
182.95	292	194.05	518	205.10	11045	216.00	1164
184.05	588	195.00	320	206.10	47312	217.00	12479
185.10	3491	196.05	5524	207.10	6376	218.00	1482
186.10	26694	198.00	174781	208.10	1705	219.10	95
187.10	7524	199.00	11847	208.95	493	221.00	10356
188.05	841	200.00	1075	210.20	524	222.00	264
189.05	1665	201.20	54	211.05	1906	223.00	2574
190.05	400	201.45	823	212.20	77	224.10	26214

Average of 3.420 to 3.431 min.: p124719.d\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.10	6415	236.05	470	247.05	830	259.00	1110
226.15	839	237.05	846	248.05	251	260.00	174
227.00	10816	238.10	141	249.00	754	260.95	153
228.05	1514	239.05	527	250.10	88	263.00	64
229.05	2260	240.00	357	250.90	181	263.80	99
229.95	401	240.95	659	252.00	232	264.00	109
231.05	982	242.10	1444	253.05	528	265.10	2439
232.10	151	243.10	1537	255.00	101635	265.90	339
233.05	207	244.10	19395	256.05	15651	267.10	193
234.05	750	245.10	2614	257.05	1291	267.90	12
235.05	819	246.05	3878	258.00	6746	269.95	213

Average of 3.420 to 3.431 min.: p124719.d\data.ms

DFTPPP.M Sun Aug 12 22:46:23 2018 Page: 0

DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
271.05	219	282.10	72	296.00	13419	314.05	648
272.10	287	283.05	565	297.00	1931	315.05	1680
273.05	3141	284.05	333	297.95	163	315.90	85
274.10	8102	285.10	776	301.05	213	316.05	766
275.05	45277	285.90	77	301.90	102	317.05	149
276.10	6250	289.05	250	302.10	84	321.15	450
277.00	4333	290.05	187	303.10	1600	322.05	262
278.05	626	291.10	62	304.10	399	323.10	4432
279.00	86	292.00	194	308.10	123	324.10	666
279.20	77	293.00	818	309.10	104	327.00	813
281.10	41	294.00	264	310.15	126	328.05	465

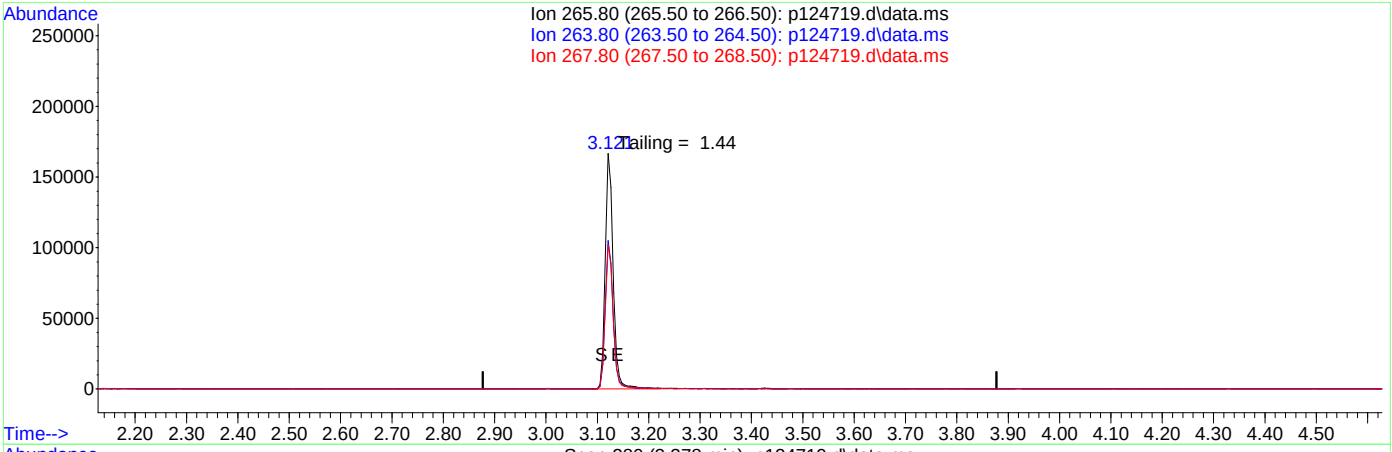
Average of 3.420 to 3.431 min.: p124719.d\data.ms
DFTPP
Modified:subtracted

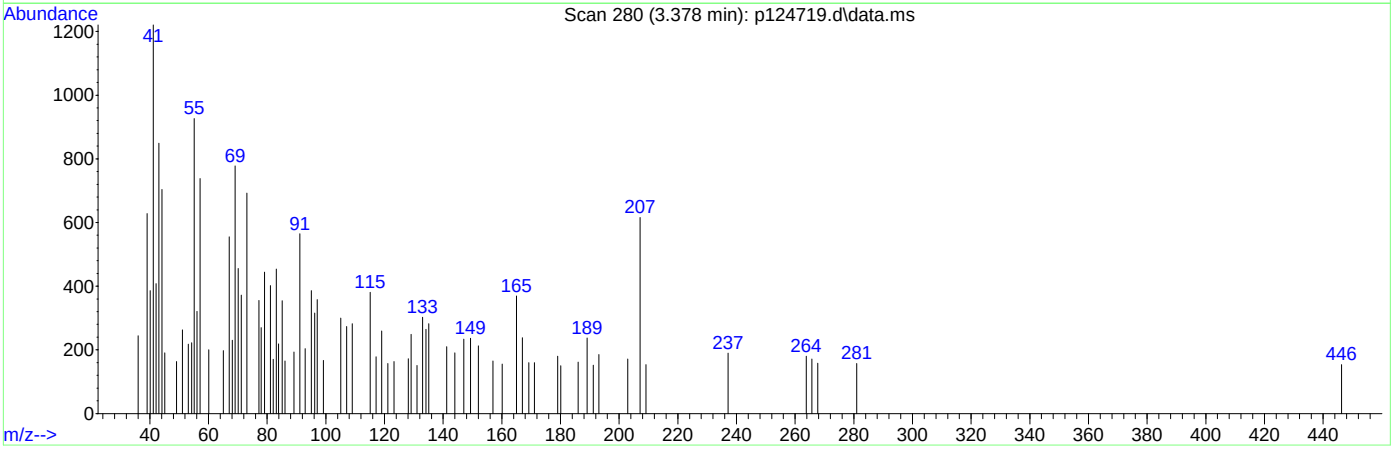
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
329.05	104	354.10	1365	373.10	595	422.05	720
332.05	253	355.10	215	383.00	567	423.10	6593
333.10	384	359.00	66	384.00	191	424.05	1375
334.10	2804	363.90	60	390.00	280	425.10	73
335.05	733	365.00	6039	391.05	198	439.85	171
341.05	496	365.90	54	392.00	91	441.10	13496
342.10	61	366.10	690	400.90	229	442.10	89567
346.00	1111	369.90	55	402.00	797	443.10	16892
346.80	67	370.20	73	403.10	989	444.10	1870
352.05	1336	371.00	305	404.05	439	445.10	77
353.05	841	372.10	2256	421.00	832	446.30	71

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124719.d
Acq On : 10 Aug 2018 9:59 pm
Operator : chriss2
Sample : DFTPP Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Results File: DFTPPP.RES
Quant Time: Aug 12 22:46:18 2018
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Sun Jul 15 22:24:44 2018
Response via : Initial Calibration





TIC: p124719.d\data.ms

(1) Pentachlorophenol (t)

3.377min (-3.377) 0.00ppb

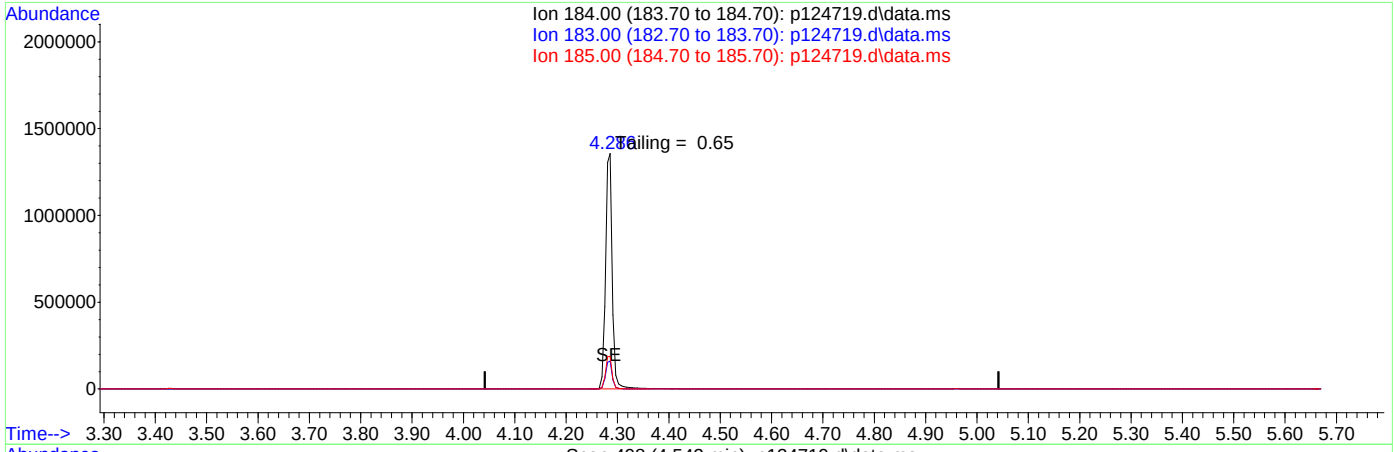
response 0

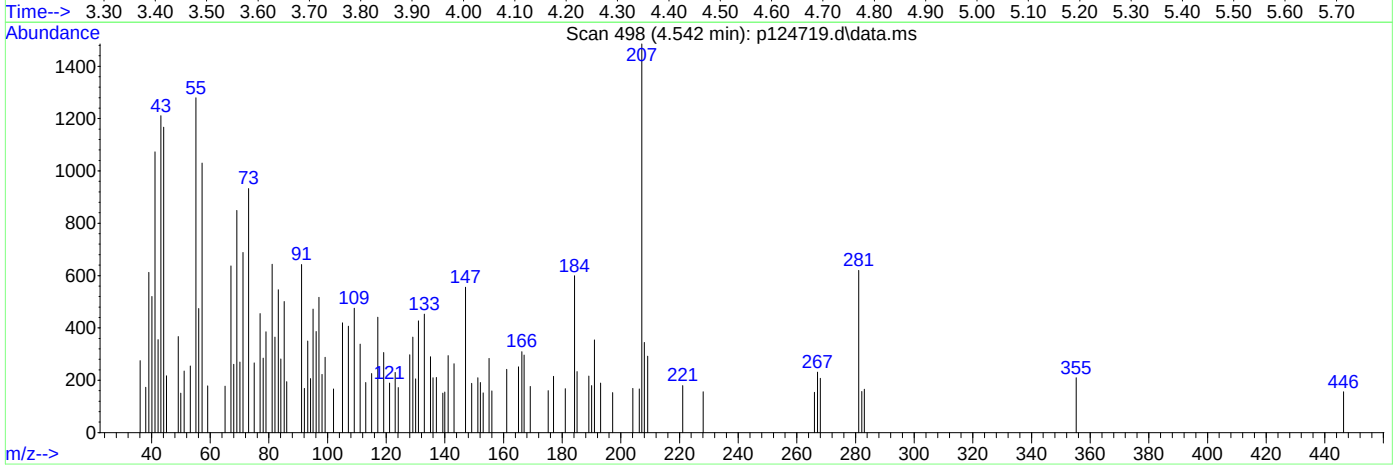
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.40	0.00#
267.80	62.90	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124719.d
Acq On : 10 Aug 2018 9:59 pm
Operator : chriss2
Sample : DFTPP Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Results File: DFTPPP.RES
Quant Time: Aug 12 22:46:18 2018
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Sun Jul 15 22:24:44 2018
Response via : Initial Calibration





TIC: p124719.d\data.ms

(2) Benzidine (t)

4.542min (-4.542) 0.00ppb

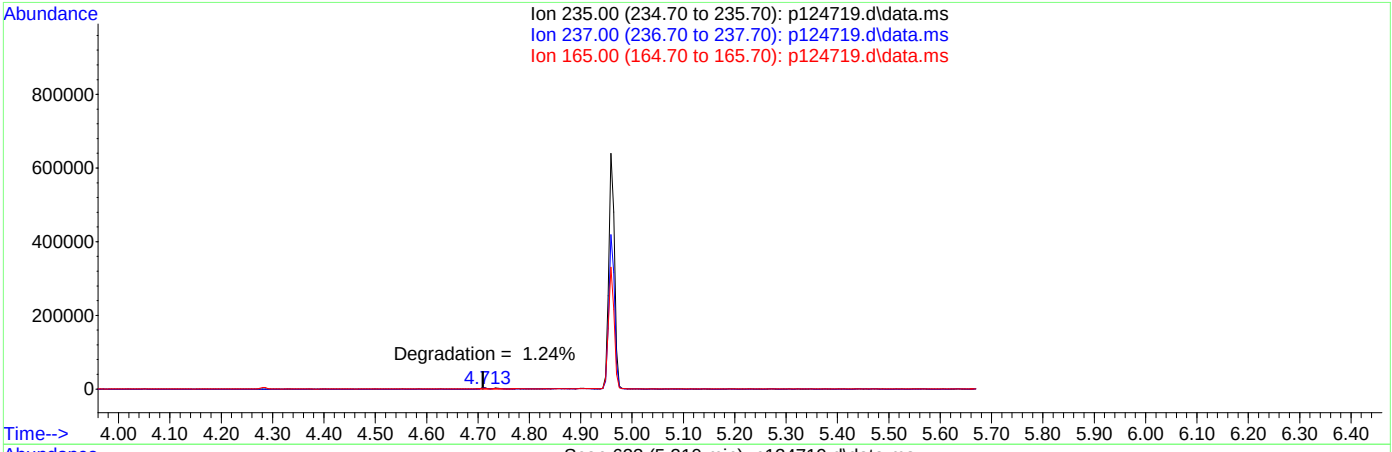
response 0

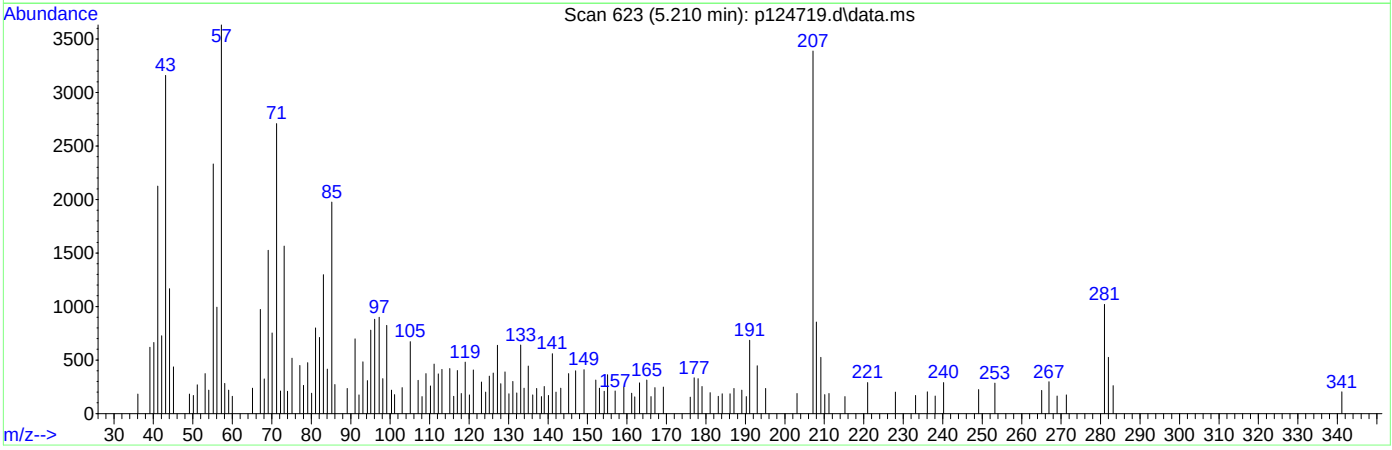
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.30	0.00
185.00	14.80	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124719.d
Acq On : 10 Aug 2018 9:59 pm
Operator : chriss2
Sample : DFTPP Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\DFTPPP.M
Quant Results File: DFTPPP.RES
Quant Time: Aug 12 22:46:18 2018
Quant Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
QLast Update : Sun Jul 15 22:24:44 2018
Response via : Initial Calibration





TIC: p124719.d\data.ms

(3) ddt

5.210min (-5.210) 0.00ppb

response 0

Ion	Exp%	Act%
235.00	100	0.00
237.00	64.90	0.00#
165.00	47.10	0.00#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 08/15/18 12:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81616.D
Acq On : 9 Aug 2018 2:48 pm
Operator : seanb1
Sample : ic3595-100
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 09 17:10:59 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.973	152	269635	40.00	ppm	-0.01
24) Naphthalene-d8	6.026	136	986361	40.00	ppm	-0.02
47) Acenaphthene-d10	7.470	164	486956	40.00	ppm	-0.02
69) Phenanthrene-d10	8.824	188	917923	40.00	ppm	-0.02
83) Chrysene-d12	12.209	240	910958	40.00	ppm	-0.03
91) Perylene-d12	14.220	264	1020979	40.00	ppm	-0.03
101) 1,4-Dichlorobenzene-d4a	4.973	152	269635	40.00	ppm	0.00
103) Naphthalene-d8a	6.026	136	986361	40.00	ppm	0.00
105) Acenaphthene-d10a	7.470	164	486956	40.00	ppm	-0.01
108) Chrysene-d12a	12.209	240	910958	40.00	ppm	-0.01
110) Phenanthrene-d10a	8.824	188	917923	40.00	ppm	-0.01
114) Chrysene-d12b	12.209	240	910958	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.881	112	865004	62.60	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 125.20%#			
8) Phenol-d5	4.684	99	1060752	63.83	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 127.66%#			
25) Nitrobenzene-d5	5.433	82	909866	75.87	ppm	-0.02
Spiked Amount 50.000	Range 19 - 61		Recovery = 151.74%#			
51) 2-Fluorobiphenyl	6.914	172	1570096	75.24	ppm	-0.02
Spiked Amount 50.000	Range 21 - 58		Recovery = 150.48%#			
73) 2,4,6-Tribromophenol	8.150	330	264138	89.24	ppm	-0.02
Spiked Amount 50.000	Range 12 - 68		Recovery = 178.48%#			
85) Terphenyl-d14	10.738	244	1897253	72.43	ppm	-0.02
Spiked Amount 50.000	Range 16 - 65		Recovery = 144.86%#			
111) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.336	88	373097	77.68	ppm	99
3) Pyridine	2.667	79	962756	73.08	ppm	99
4) N-Nitrosodimethylamine	2.635	74	553537	69.59	ppm #	98
6) Indene	5.186	116	1314665	77.98	ppm	98
7) Cumene	4.309	105	2220249	64.78	ppm	99
9) Phenol	4.694	94	1112050	63.50	ppm	94
10) Aniline	4.700	93	1096416	80.93	ppm #	52
11) bis(2-Chloroethyl)ether	4.753	93	746678	67.61	ppm	100
12) 2-Chlorophenol	4.801	128	839212	69.02	ppm	99
13) Decane	4.844	57	854862	67.15	ppm	99
14) 1,3-Dichlorobenzene	4.924	146	926046	70.95	ppm	97
15) 1,4-Dichlorobenzene	4.989	146	900022	76.71	ppm	100
16) Benzyl alcohol	5.096	108	496569	71.89	ppm	99
17) 1,2-Dichlorobenzene	5.112	146	836556	75.27	ppm	98
18) Acetophenone	5.310	105	1116938	75.69	ppm	95
19) 2-Methylphenol	5.192	108	658748	72.46	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.197	121	201473	74.21	ppm #	66

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81616.D
Acq On : 9 Aug 2018 2:48 pm
Operator : seanb1
Sample : ic3595-100
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 09 17:10:59 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.315	108	700764	75.18	ppm		99
22) n-Nitroso-di-n-propyla...	5.315	70	529626	69.74	ppm		98
23) Hexachloroethane	5.395	201	326821	80.43	ppm		93
26) Nitrobenzene	5.449	77	847172	72.83	ppm		98
27) Quinoline	6.342	129	1544375	73.74	ppm		100
28) Isophorone	5.652	82	1533257	71.15	ppm		98
29) 2-Nitrophenol	5.711	139	451466	82.96	ppm		89
30) 2,4-Dimethylphenol	5.753	107	727191	83.27	ppm		99
31) Benzoic acid	5.887	105	651504	108.44	ppm		90
32) bis(2-Chloroethoxy)met...	5.823	93	809272	71.15	ppm		98
33) 2,4-Dichlorophenol	5.914	162	656389	73.20	ppm		95
34) 2,6-Dichlorophenol	6.101	162	598362	78.32	ppm		98
35) 1,3,5-Trichlorobenzene	5.721	180	768838	74.35	ppm		98
36) 1,2,4-Trichlorobenzene	5.978	180	720616	73.72	ppm		97
37) 1,2,3-Trichlorobenzene	6.165	180	648338	76.53	ppm		99
38) Naphthalene	6.042	128	2172899	78.69	ppm		100
39) 4-Chloroaniline	6.090	127	923513	78.04	ppm		95
40) 2,3-Dichloroaniline	6.845	161	816721	74.05	ppm		96
41) Caprolactam	6.401	113	250112m	72.73	ppm		
42) Hexachlorobutadiene	6.149	225	426991	81.24	ppm		99
43) 4-Chloro-3-methylphenol	6.497	107	714767	77.00	ppm	#	97
44) 2-Methylnaphthalene	6.615	141	1312270	70.11	ppm		98
45) 1-Methylnaphthalene	6.695	141	1401423	74.09	ppm		97
46) Dimethylnaphthalene	7.128	156	1280390	74.12	ppm		99
48) Hexachlorocyclopentadiene	6.748	237	959297	188.01	ppm		99
49) 2,4,6-Trichlorophenol	6.850	196	478783	79.66	ppm		99
50) 2,4,5-Trichlorophenol	6.887	196	485684	79.54	ppm		99
52) 2-Chloronaphthalene	7.016	162	1267339	71.81	ppm		99
53) Biphenyl	6.994	154	1779767	73.61	ppm		100
54) 2-Nitroaniline	7.101	65	479129	78.46	ppm		98
55) Dimethylphthalate	7.246	163	1523592	72.83	ppm		99
56) Acenaphthylene	7.358	152	2156666	73.73	ppm		99
57) 2,6-Dinitrotoluene	7.294	165	345511	82.96	ppm		87
58) 3-Nitroaniline	7.438	138	413527	78.32	ppm		97
59) Acenaphthene	7.497	153	1438061	81.53	ppm		96
60) 2,4-Dinitrophenol	7.524	184	364073	175.22	ppm		98
61) 4-Nitrophenol	7.583	109	265493	94.85	ppm		98
62) Dibenzofuran	7.642	168	1830958	76.11	ppm		99
63) 2,4-Dinitrotoluene	7.631	165	476523	90.40	ppm		90
64) 2,3,4,6-Tetrachlorophenol	7.748	232	449218	87.35	ppm		93
65) Diethylphthalate	7.829	149	1529341	76.04	ppm		98
66) Fluorene	7.936	166	1561643	76.10	ppm		99
67) 4-Chlorophenyl-phenyle...	7.930	204	784076	78.18	ppm		98
68) 4-Nitroaniline	7.962	138	388390	77.79	ppm		98
70) 4,6-Dinitro-2-methylph...	7.984	198	260760	95.03	ppm		84
71) n-Nitrosodiphenylamine	8.037	169	1107362	75.10	ppm		100
72) 1,2-Diphenylhydrazine	8.069	77	1565872	72.22	ppm		99
74) 4-Bromophenyl-phenylether	8.374	248	493695	73.88	ppm		94
75) Hexachlorobenzene	8.444	284	549583	73.64	ppm		78
76) Pentachlorophenol	8.636	266	725293	167.88	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81616.D
Acq On : 9 Aug 2018 2:48 pm
Operator : seanb1
Sample : ic3595-100
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 09 17:10:59 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

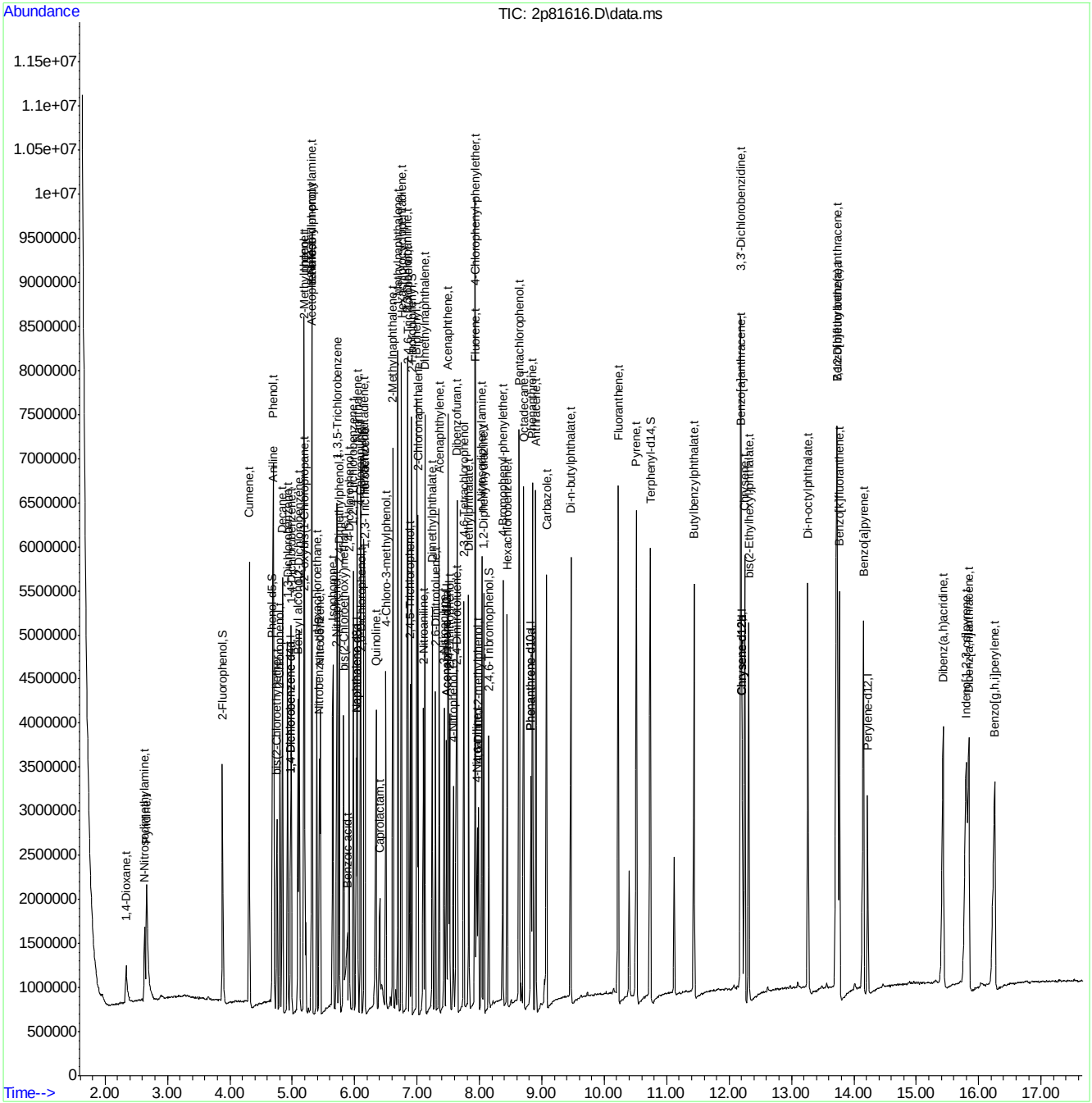
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	8.850	178	2157372	78.09	ppm	99
78) Anthracene	8.904	178	2144491	78.41	ppm	99
79) Carbazole	9.075	167	2151110	74.30	ppm	100
80) Di-n-butylphthalate	9.465	149	2749955	70.63	ppm	99
81) Fluoranthene	10.225	202	2694719	63.45	ppm	100
82) Octadecane	8.706	43	749842	66.93	ppm	96
84) Pyrene	10.514	202	2768269	71.39	ppm	98
86) Butylbenzylphthalate	11.439	149	1316275	73.88	ppm	98
87) Benzo[a]anthracene	12.193	228	2584041	66.38	ppm	99
88) 3,3'-Dichlorobenzidine	12.188	252	1073568	76.91	ppm	99
89) Chrysene	12.252	228	2303761	82.56	ppm	99
90) bis(2-Ethylhexyl)phtha...	12.316	149	1526502	88.38	ppm	100
92) Di-n-octylphthalate	13.263	149	3017189	68.35	ppm	99
93) Benzo[b]fluoranthene	13.728	252	2874245	67.30	ppm	99
94) Benzo[k]fluoranthene	13.771	252	2205336	68.09	ppm	98
95) Benzo[a]pyrene	14.156	252	2480228	71.02	ppm	98
96) Indeno[1,2,3-cd]pyrene	15.798	276	2500623	59.69	ppm	93
97) Dibenz(a,h)acridine	15.429	279	2212841	67.81	ppm	100
98) Dibenz[a,h]anthracene	15.841	278	2348141	72.07	ppm	98
99) 7,12-Dimethylbenz(a)an...	13.728	256	1275159	79.48	ppm	98
100) Benzo[g,h,i]perylene	16.258	276	2351714	71.06	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81616.D
Acq On : 9 Aug 2018 2:48 pm
Operator : seanb1
Sample : ic3595-100
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 09 17:10:59 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration



Manual Integration Approval Summary

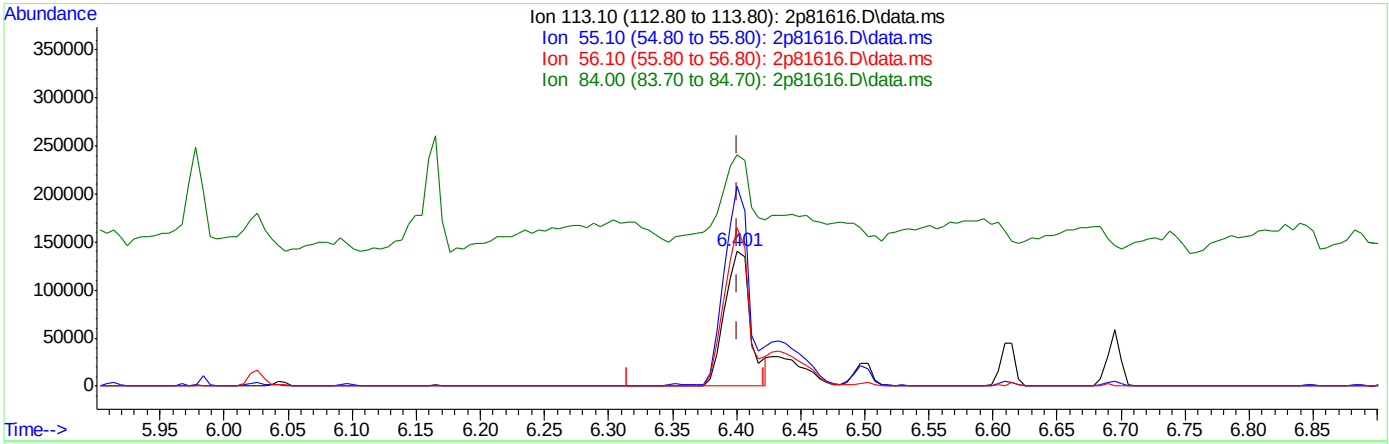
Sample Number:	E2P3595-IC3595	**Method:**	SW846 8270D
Lab FileID:	2P81616.D	**Analyst approved:**	08/10/18 12:04 Sean Block
Injection Time:	08/09/18 14:48	**Supervisor approved:**	08/15/18 12:35 Kristi Schollenberger

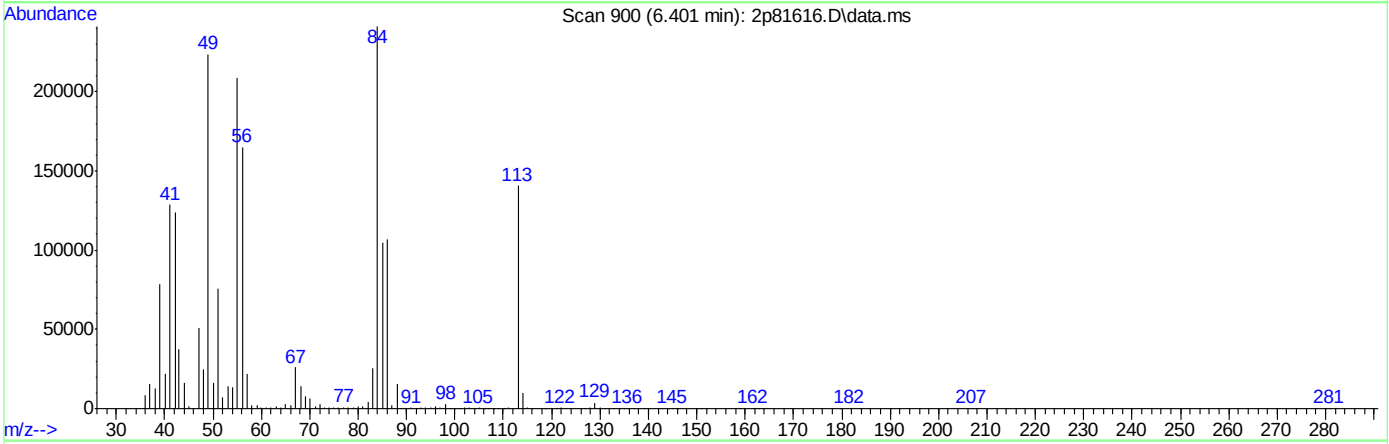
Parameter	CAS	Sig#	R.T. (min.)	Reason
Caprolactam	105-60-2		6.40	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81616.D
Acq On : 9 Aug 2018 2:48 pm
Operator : seanb1
Sample : ic3595-100
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 09 17:10:39 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration





TIC: 2p81616.D\data.ms

(41) Caprolactam (t)

6.401min (-0.000) 56.44ppm

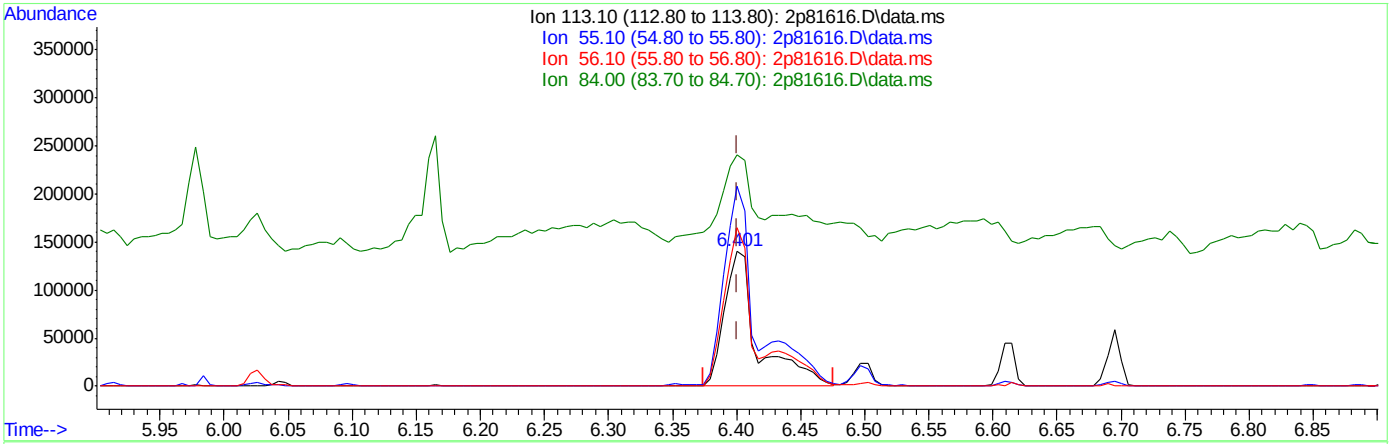
response 194081

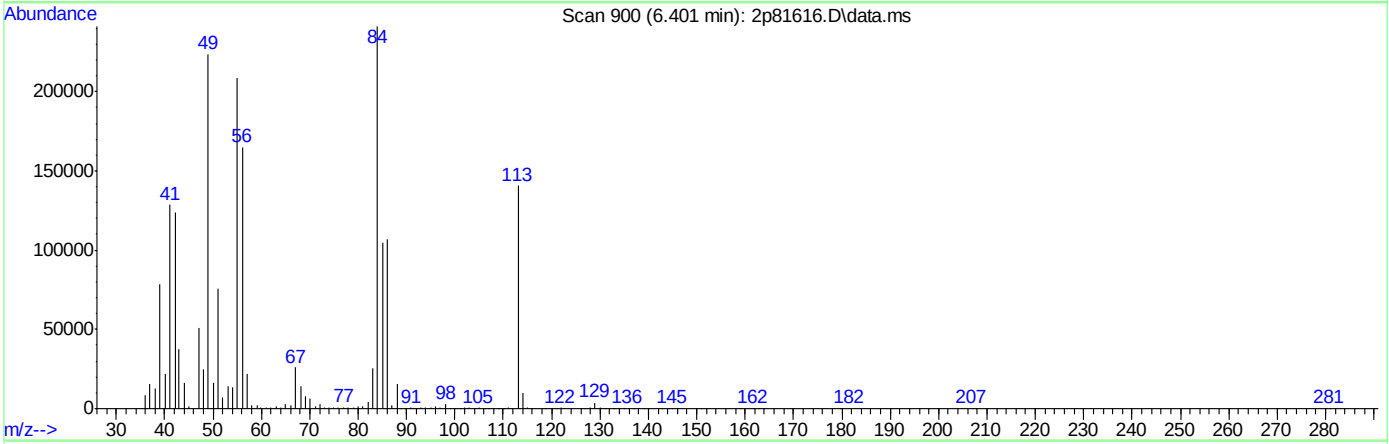
Ion	Exp%	Act%
113.10	100	100
55.10	153.30	149.07
56.10	120.10	118.51
84.00	65.60	55.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81616.D
Acq On : 9 Aug 2018 2:48 pm
Operator : seanb1
Sample : ic3595-100
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 09 17:10:39 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration





TIC: 2p81616.D\data.ms

(41) Caprolactam (t)

6.401min (-0.000) 72.73ppm m

response 250112

Ion	Exp%	Act%
113.10	100	100
55.10	153.30	148.29
56.10	120.10	117.21
84.00	65.60	171.51#

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 08/15/18 12:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81617.D
Acq On : 9 Aug 2018 3:11 pm
Operator : seanb1
Sample : ic3595-80
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 09 17:12:10 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.973	152	294356	40.00	ppm	-0.01
24) Naphthalene-d8	6.026	136	1075327	40.00	ppm	-0.02
47) Acenaphthene-d10	7.470	164	530067	40.00	ppm	-0.02
69) Phenanthrene-d10	8.824	188	1005932	40.00	ppm	-0.02
83) Chrysene-d12	12.209	240	953933	40.00	ppm	-0.03
91) Perylene-d12	14.220	264	1046224	40.00	ppm	-0.03
101) 1,4-Dichlorobenzene-d4a	4.973	152	294356	40.00	ppm	0.00
103) Naphthalene-d8a	6.026	136	1075327	40.00	ppm	0.00
105) Acenaphthene-d10a	7.470	164	530067	40.00	ppm	-0.01
108) Chrysene-d12a	12.209	240	953933	40.00	ppm	-0.01
110) Phenanthrene-d10a	8.824	188	1005932	40.00	ppm	-0.01
114) Chrysene-d12b	12.209	240	953933	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.881	112	782122	51.85	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 103.70%#			
8) Phenol-d5	4.684	99	967924	53.35	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 106.70%#			
25) Nitrobenzene-d5	5.433	82	819580	62.69	ppm	-0.02
Spiked Amount 50.000	Range 19 - 61		Recovery = 125.38%#			
51) 2-Fluorobiphenyl	6.914	172	1410198	62.08	ppm	-0.02
Spiked Amount 50.000	Range 21 - 58		Recovery = 124.16%#			
73) 2,4,6-Tribromophenol	8.150	330	231581	71.40	ppm	-0.02
Spiked Amount 50.000	Range 12 - 68		Recovery = 142.80%#			
85) Terphenyl-d14	10.733	244	1678281	61.19	ppm	-0.02
Spiked Amount 50.000	Range 16 - 65		Recovery = 122.38%#			
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.341	88	332084	63.33	ppm	98
3) Pyridine	2.667	79	860442	59.83	ppm	97
4) N-Nitrosodimethylamine	2.641	74	501809	57.79	ppm #	98
6) Indene	5.186	116	1173819	63.77	ppm	99
7) Cumene	4.309	105	2004640	53.58	ppm	98
9) Phenol	4.694	94	1028500	53.80	ppm	96
10) Aniline	4.700	93	1016559	58.99	ppm	80
11) bis(2-Chloroethyl)ether	4.753	93	667723	55.38	ppm	98
12) 2-Chlorophenol	4.801	128	756315	56.98	ppm	98
13) Decane	4.844	57	791762	56.97	ppm	98
14) 1,3-Dichlorobenzene	4.924	146	827239	58.06	ppm	99
15) 1,4-Dichlorobenzene	4.983	146	798528	62.34	ppm	98
16) Benzyl alcohol	5.090	108	458217	60.77	ppm	97
17) 1,2-Dichlorobenzene	5.112	146	754367	62.18	ppm	99
18) Acetophenone	5.309	105	999788	62.06	ppm	97
19) 2-Methylphenol	5.192	108	608091	61.27	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.197	121	179995	60.73	ppm #	73

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81617.D
Acq On : 9 Aug 2018 3:11 pm
Operator : seanb1
Sample : ic3595-80
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 09 17:12:10 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.315	108	639459	62.84	ppm		99
22) n-Nitroso-di-n-propyla...	5.315	70	490385	59.15	ppm		94
23) Hexachloroethane	5.395	201	283605	63.93	ppm		93
26) Nitrobenzene	5.449	77	775132	61.13	ppm		99
27) Quinoline	6.336	129	1402353	61.42	ppm		99
28) Isophorone	5.646	82	1409850	60.01	ppm		98
29) 2-Nitrophenol	5.711	139	397140	66.94	ppm		95
30) 2,4-Dimethylphenol	5.753	107	662412	69.57	ppm		99
31) Benzoic acid	5.876	105	582191	88.89	ppm		88
32) bis(2-Chloroethoxy)met...	5.823	93	730058	58.88	ppm		99
33) 2,4-Dichlorophenol	5.914	162	602085	61.59	ppm		97
34) 2,6-Dichlorophenol	6.096	162	542926	65.18	ppm		98
35) 1,3,5-Trichlorobenzene	5.721	180	673870	59.78	ppm		97
36) 1,2,4-Trichlorobenzene	5.978	180	638245	59.89	ppm		99
37) 1,2,3-Trichlorobenzene	6.165	180	575063	62.27	ppm		99
38) Naphthalene	6.042	128	1951093	64.81	ppm		99
39) 4-Chloroaniline	6.090	127	835701	64.78	ppm		95
40) 2,3-Dichloroaniline	6.845	161	735508	61.17	ppm		96
41) Caprolactam	6.395	113	228486m	60.95	ppm		
42) Hexachlorobutadiene	6.149	225	375443	65.52	ppm		100
43) 4-Chloro-3-methylphenol	6.497	107	653505	64.58	ppm	#	99
44) 2-Methylnaphthalene	6.609	141	1179937	57.82	ppm		97
45) 1-Methylnaphthalene	6.695	141	1264893	61.34	ppm		98
46) Dimethylnaphthalene	7.123	156	1138122	60.43	ppm		95
48) Hexachlorocyclopentadiene	6.748	237	842312	151.65	ppm		99
49) 2,4,6-Trichlorophenol	6.850	196	427229	65.30	ppm		98
50) 2,4,5-Trichlorophenol	6.882	196	435561	65.53	ppm		98
52) 2-Chloronaphthalene	7.016	162	1131856	58.92	ppm		99
53) Biphenyl	6.994	154	1610799	61.20	ppm		100
54) 2-Nitroaniline	7.101	65	437223	65.78	ppm		95
55) Dimethylphthalate	7.246	163	1391219	61.09	ppm		100
56) Acenaphthylene	7.353	152	1968028	61.81	ppm		99
57) 2,6-Dinitrotoluene	7.294	165	313292	69.10	ppm		92
58) 3-Nitroaniline	7.438	138	376296	65.47	ppm		98
59) Acenaphthene	7.497	153	1274806	66.39	ppm		98
60) 2,4-Dinitrophenol	7.518	184	312537	121.51	ppm		82
61) 4-Nitrophenol	7.577	109	237896	78.08	ppm		92
62) Dibenzofuran	7.641	168	1649035	62.98	ppm		98
63) 2,4-Dinitrotoluene	7.625	165	417918	72.83	ppm		98
64) 2,3,4,6-Tetrachlorophenol	7.748	232	389827	69.63	ppm		94
65) Diethylphthalate	7.829	149	1386462	63.33	ppm		98
66) Fluorene	7.930	166	1414154	63.30	ppm		99
67) 4-Chlorophenyl-phenyle...	7.925	204	702688	64.37	ppm		85
68) 4-Nitroaniline	7.957	138	346508	63.75	ppm		96
70) 4,6-Dinitro-2-methylph...	7.978	198	229241	64.36	ppm		84
71) n-Nitrosodiphenylamine	8.032	169	998120	61.77	ppm		98
72) 1,2-Diphenylhydrazine	8.069	77	1438850	60.55	ppm		99
74) 4-Bromophenyl-phenylether	8.374	248	440469	60.15	ppm		96
75) Hexachlorobenzene	8.444	284	481090	58.82	ppm		81
76) Pentachlorophenol	8.636	266	624996	132.01	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81617.D
Acq On : 9 Aug 2018 3:11 pm
Operator : seanb1
Sample : ic3595-80
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 09 17:12:10 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

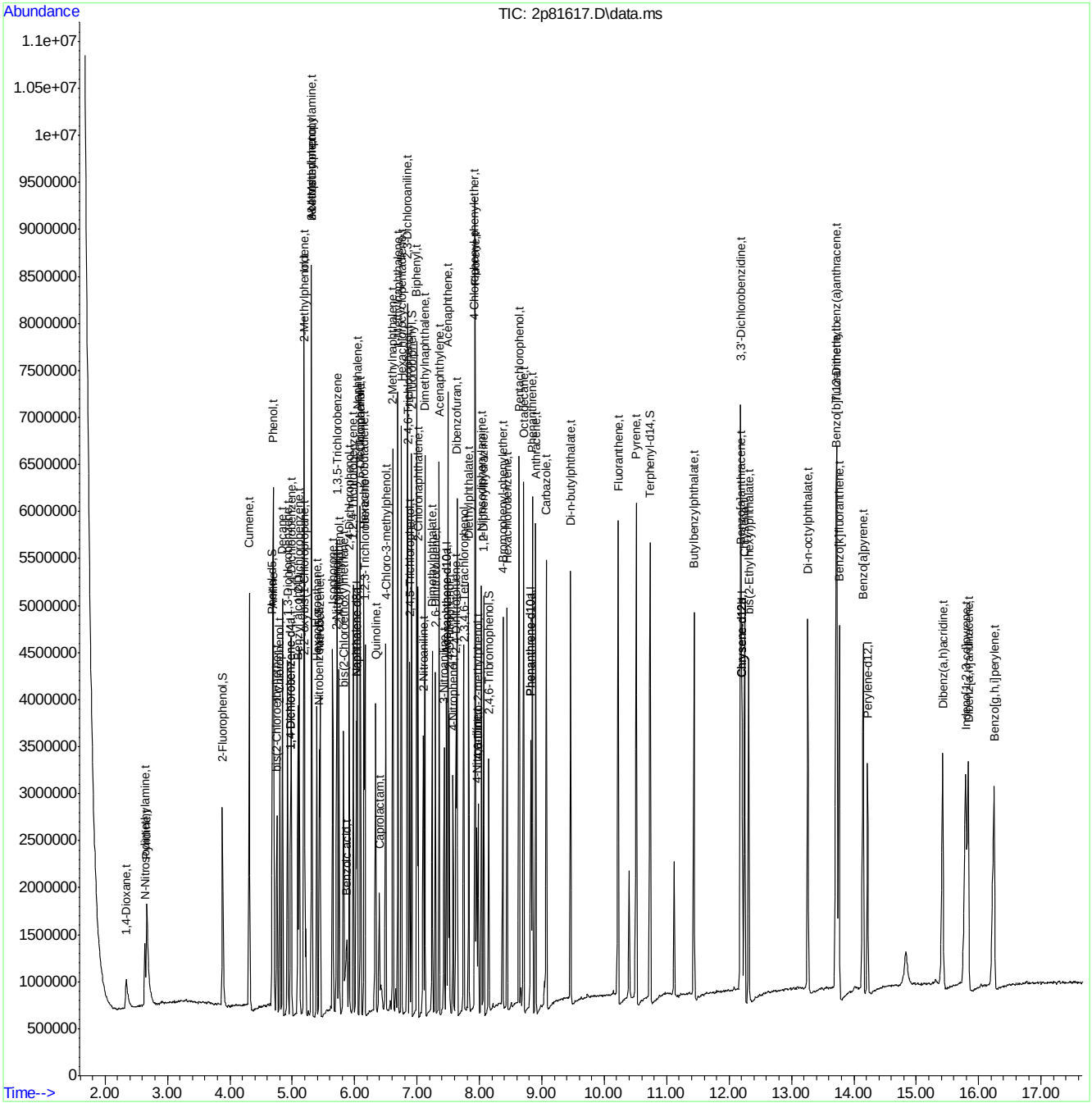
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	8.850	178	1933447	63.87	ppm	99
78) Anthracene	8.904	178	1906953	63.63	ppm	100
79) Carbazole	9.070	167	1921843	60.58	ppm	99
80) Di-n-butylphthalate	9.460	149	2491547	58.39	ppm	99
81) Fluoranthene	10.225	202	2385276	51.25	ppm	99
82) Octadecane	8.706	43	699764	57.00	ppm	95
84) Pyrene	10.514	202	2446343	60.25	ppm	98
86) Butylbenzylphthalate	11.439	149	1138959	61.04	ppm	98
87) Benzo[a]anthracene	12.193	228	2200390	53.98	ppm	99
88) 3,3'-Dichlorobenzidine	12.182	252	898962	61.50	ppm	97
89) Chrysene	12.252	228	1954699	66.90	ppm	99
90) bis(2-Ethylhexyl)phtha...	12.316	149	1315745	72.74	ppm	99
92) Di-n-octylphthalate	13.263	149	2571366	56.84	ppm	98
93) Benzo[b]fluoranthene	13.718	252	2367921	54.11	ppm	100
94) Benzo[k]fluoranthene	13.766	252	1872922	56.43	ppm	98
95) Benzo[a]pyrene	14.151	252	2035971	56.90	ppm	98
96) Indeno[1,2,3-cd]pyrene	15.793	276	2082442	48.50	ppm	92
97) Dibenz(a,h)acridine	15.424	279	1803921	53.95	ppm	99
98) Dibenz[a,h]anthracene	15.836	278	1920601	57.53	ppm	98
99) 7,12-Dimethylbenz(a)an...	13.723	256	1047114	63.69	ppm	98
100) Benzo[g,h,i]perylene	16.247	276	1947734	57.43	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81617.D
Acq On : 9 Aug 2018 3:11 pm
Operator : seanb1
Sample : ic3595-80
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 09 17:12:10 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration



Manual Integration Approval Summary

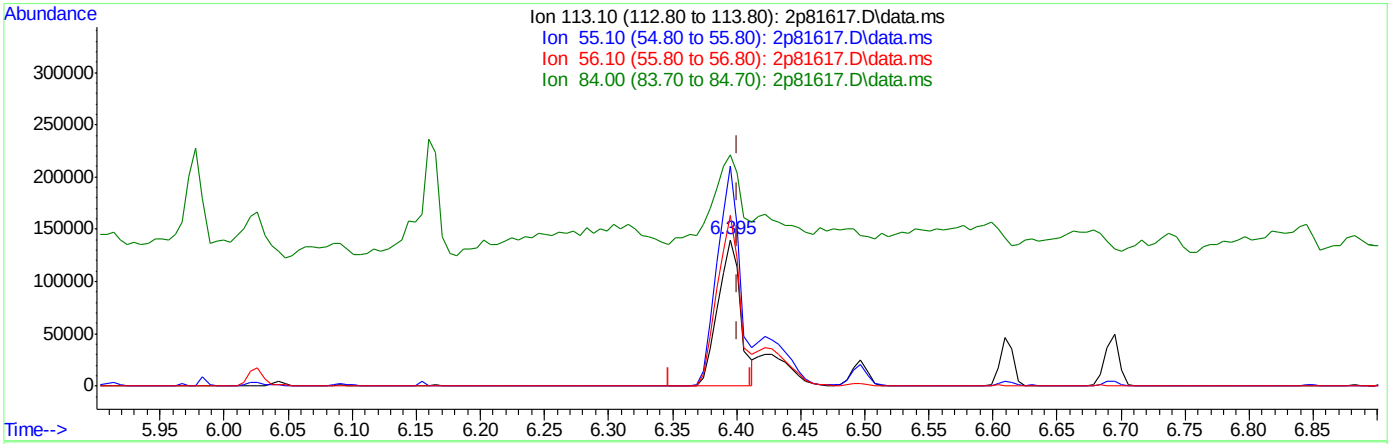
Sample Number:	E2P3595-IC3595	**Method:**	SW846 8270D
Lab FileID:	2P81617.D	**Analyst approved:**	08/10/18 12:04 Sean Block
Injection Time:	08/09/18 15:11	**Supervisor approved:**	08/15/18 12:35 Kristi Schollenberger

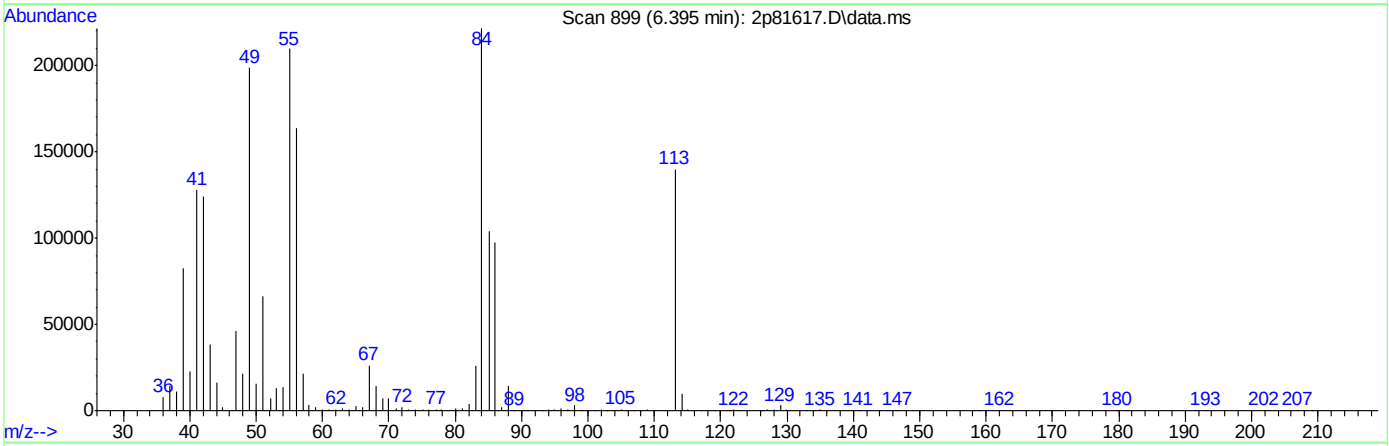
Parameter	CAS	Sig#	R.T. (min.)	Reason
Caprolactam	105-60-2		6.40	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81617.D
Acq On : 9 Aug 2018 3:11 pm
Operator : seanb1
Sample : ic3595-80
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 09 17:11:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration





TIC: 2p81617.D\data.ms

(41) Caprolactam (t)

6.395min (-0.006) 45.97ppm

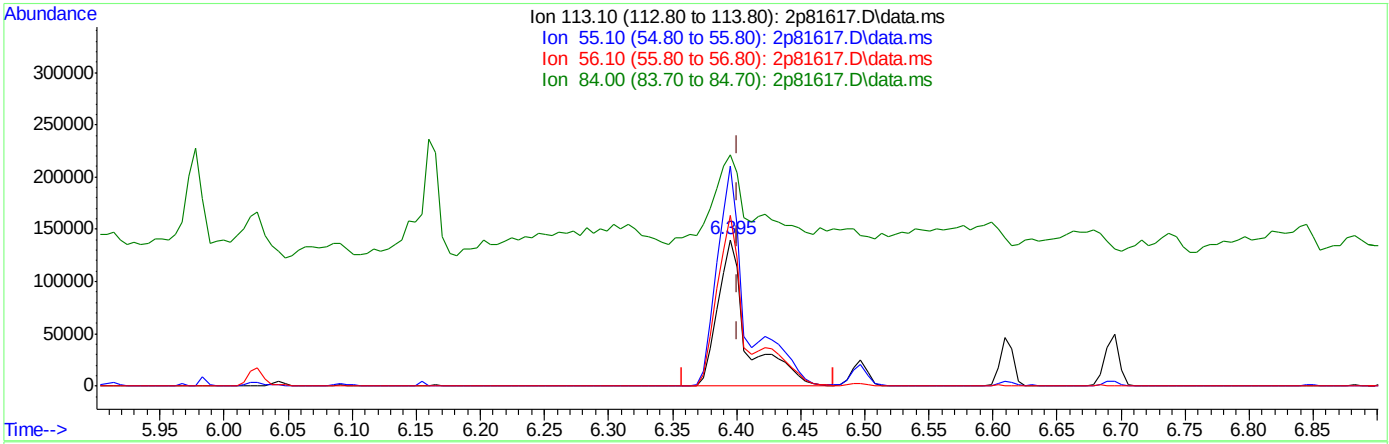
response 172350

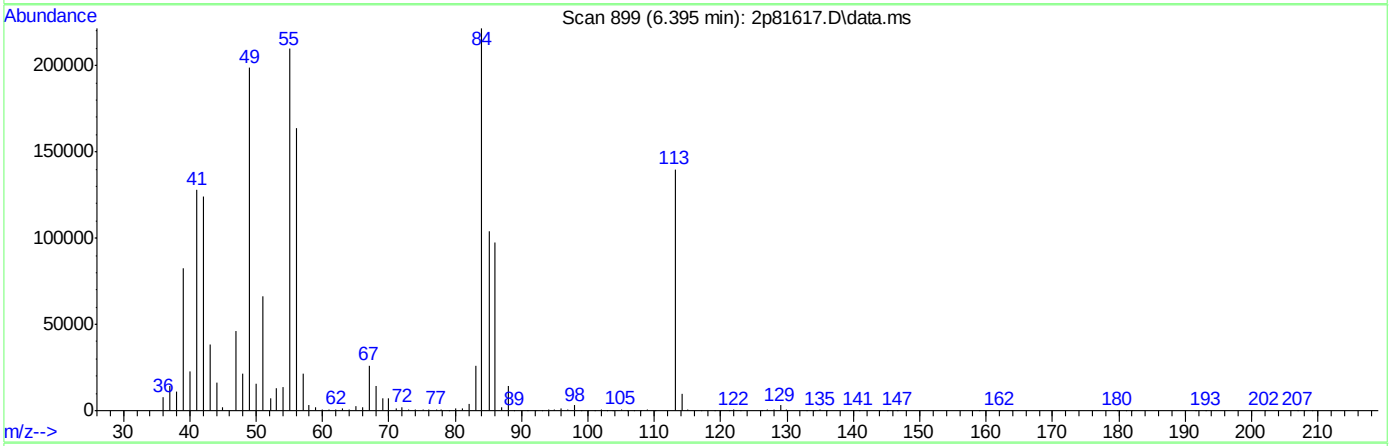
Ion	Exp%	Act%
113.10	100	100
55.10	153.30	149.99
56.10	120.10	116.39
84.00	65.60	58.75

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81617.D
Acq On : 9 Aug 2018 3:11 pm
Operator : seanb1
Sample : ic3595-80
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 09 17:11:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration





TIC: 2p81617.D\data.ms

(41) Caprolactam (t)

6.395min (-0.006) 60.95ppm m

response 228486

Ion	Exp%	Act%
113.10	100	100
55.10	153.30	150.05
56.10	120.10	116.82
84.00	65.60	158.23#

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81618.D
Acq On : 9 Aug 2018 3:34 pm
Operator : seanb1
Sample : icc3595-50
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 09 17:12:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.973	152	312691	40.00	ppm	-0.01
24) Naphthalene-d8	6.026	136	1154963	40.00	ppm	-0.02
47) Acenaphthene-d10	7.470	164	576512	40.00	ppm	-0.02
69) Phenanthrene-d10	8.818	188	1087887	40.00	ppm	-0.03
83) Chrysene-d12	12.204	240	1051192	40.00	ppm	-0.03
91) Perylene-d12	14.220	264	1116912	40.00	ppm	-0.03
101) 1,4-Dichlorobenzene-d4a	4.973	152	312691	40.00	ppm	0.00
103) Naphthalene-d8a	6.026	136	1154963	40.00	ppm	0.00
105) Acenaphthene-d10a	7.470	164	576512	40.00	ppm	-0.01
108) Chrysene-d12a	12.204	240	1051192	40.00	ppm	-0.02
110) Phenanthrene-d10a	8.818	188	1087887	40.00	ppm	-0.02
114) Chrysene-d12b	12.204	240	1051192	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.882	112	589686	36.80	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 73.60%#			
8) Phenol-d5	4.678	99	735567	38.17	ppm	-0.01
Spiked Amount 50.000	Range 10 - 59		Recovery = 76.34%#			
25) Nitrobenzene-d5	5.433	82	633193	45.09	ppm	-0.02
Spiked Amount 50.000	Range 19 - 61		Recovery = 90.18%#			
51) 2-Fluorobiphenyl	6.909	172	1102068	44.61	ppm	-0.02
Spiked Amount 50.000	Range 21 - 58		Recovery = 89.22%#			
73) 2,4,6-Tribromophenol	8.150	330	170911	48.72	ppm	-0.02
Spiked Amount 50.000	Range 12 - 68		Recovery = 97.44%#			
85) Terphenyl-d14	10.733	244	1285784	42.54	ppm	-0.02
Spiked Amount 50.000	Range 16 - 65		Recovery = 85.08%#			
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.341	88	241777	43.41	ppm	99
3) Pyridine	2.667	79	642697	42.07	ppm	96
4) N-Nitrosodimethylamine	2.635	74	373264	40.47	ppm #	95
6) Indene	5.187	116	885615	45.30	ppm	99
7) Cumene	4.309	105	1517659	38.18	ppm	98
9) Phenol	4.689	94	790664	38.93	ppm	95
10) Aniline	4.700	93	776877	37.48	ppm	96
11) bis(2-Chloroethyl)ether	4.753	93	513386	40.09	ppm	99
12) 2-Chlorophenol	4.801	128	584666	41.46	ppm	100
13) Decane	4.844	57	617824	41.85	ppm	98
14) 1,3-Dichlorobenzene	4.924	146	627108	41.43	ppm	97
15) 1,4-Dichlorobenzene	4.983	146	597840	43.94	ppm	98
16) Benzyl alcohol	5.090	108	342634	42.77	ppm	99
17) 1,2-Dichlorobenzene	5.112	146	570000	44.23	ppm	99
18) Acetophenone	5.304	105	776006	45.35	ppm	95
19) 2-Methylphenol	5.187	108	476165	45.16	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.197	121	139460	44.30	ppm #	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81618.D
Acq On : 9 Aug 2018 3:34 pm
Operator : seanb1
Sample : icc3595-50
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 09 17:12:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.310	108	493959	45.70	ppm	99
22) n-Nitroso-di-n-propyla...	5.310	70	387491	44.00	ppm	98
23) Hexachloroethane	5.395	201	216136	45.87	ppm	93
26) Nitrobenzene	5.443	77	599042	43.98	ppm	96
27) Quinoline	6.331	129	1080159	44.04	ppm	99
28) Isophorone	5.647	82	1097627	43.50	ppm	99
29) 2-Nitrophenol	5.711	139	305729	47.98	ppm	97
30) 2,4-Dimethylphenol	5.748	107	511043	49.97	ppm	98
31) Benzoic acid	5.866	105	428864	60.96	ppm	90
32) bis(2-Chloroethoxy)met...	5.818	93	567577	42.62	ppm	99
33) 2,4-Dichlorophenol	5.914	162	460375	43.85	ppm	99
34) 2,6-Dichlorophenol	6.096	162	414855	46.37	ppm	98
35) 1,3,5-Trichlorobenzene	5.721	180	515659	42.59	ppm	98
36) 1,2,4-Trichlorobenzene	5.978	180	491269	42.92	ppm	98
37) 1,2,3-Trichlorobenzene	6.160	180	439316	44.29	ppm	98
38) Naphthalene	6.042	128	1471264	45.50	ppm	99
39) 4-Chloroaniline	6.085	127	638568	46.08	ppm	93
40) 2,3-Dichloroaniline	6.845	161	562741	43.58	ppm	97
41) Caprolactam	6.385	113	176254	43.77	ppm	96
42) Hexachlorobutadiene	6.149	225	284227	46.18	ppm	99
43) 4-Chloro-3-methylphenol	6.492	107	503667	46.34	ppm	96
44) 2-Methylnaphthalene	6.609	141	907708	41.42	ppm	98
45) 1-Methylnaphthalene	6.690	141	966812	43.65	ppm	96
46) Dimethylnaphthalene	7.123	156	891649	44.08	ppm	96
48) Hexachlorocyclopentadiene	6.743	237	625623	103.57	ppm	99
49) 2,4,6-Trichlorophenol	6.845	196	324734	45.63	ppm	99
50) 2,4,5-Trichlorophenol	6.882	196	331571	45.86	ppm	98
52) 2-Chloronaphthalene	7.010	162	897637	42.96	ppm	96
53) Biphenyl	6.994	154	1234143	43.11	ppm	99
54) 2-Nitroaniline	7.096	65	335249	46.37	ppm	99
55) Dimethylphthalate	7.240	163	1089446	43.99	ppm	100
56) Acenaphthylene	7.353	152	1528932	44.15	ppm	99
57) 2,6-Dinitrotoluene	7.289	165	243649	49.41	ppm	86
58) 3-Nitroaniline	7.433	138	289780	46.36	ppm	100
59) Acenaphthene	7.497	153	978525	46.86	ppm	98
60) 2,4-Dinitrophenol	7.519	184	224772	74.61	ppm	88
61) 4-Nitrophenol	7.572	109	182366	55.03	ppm	90
62) Dibenzofuran	7.642	168	1273728	44.72	ppm	98
63) 2,4-Dinitrotoluene	7.626	165	326795	52.36	ppm	94
64) 2,3,4,6-Tetrachlorophenol	7.743	232	293619	48.22	ppm	99
65) Diethylphthalate	7.823	149	1092100	45.87	ppm	97
66) Fluorene	7.930	166	1093120	44.99	ppm	98
67) 4-Chlorophenyl-phenyle...	7.925	204	532434	44.84	ppm	87
68) 4-Nitroaniline	7.952	138	272646	46.12	ppm	99
70) 4,6-Dinitro-2-methylph...	7.973	198	170825	40.23	ppm	85
71) n-Nitrosodiphenylamine	8.032	169	775266	44.37	ppm	100
72) 1,2-Diphenylhydrazine	8.064	77	1139162	44.33	ppm	96
74) 4-Bromophenyl-phenylether	8.374	248	337504	42.62	ppm	97
75) Hexachlorobenzene	8.444	284	368438	41.66	ppm	86
76) Pentachlorophenol	8.636	266	469365	91.67	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81618.D
Acq On : 9 Aug 2018 3:34 pm
Operator : seanb1
Sample : icc3595-50
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 09 17:12:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

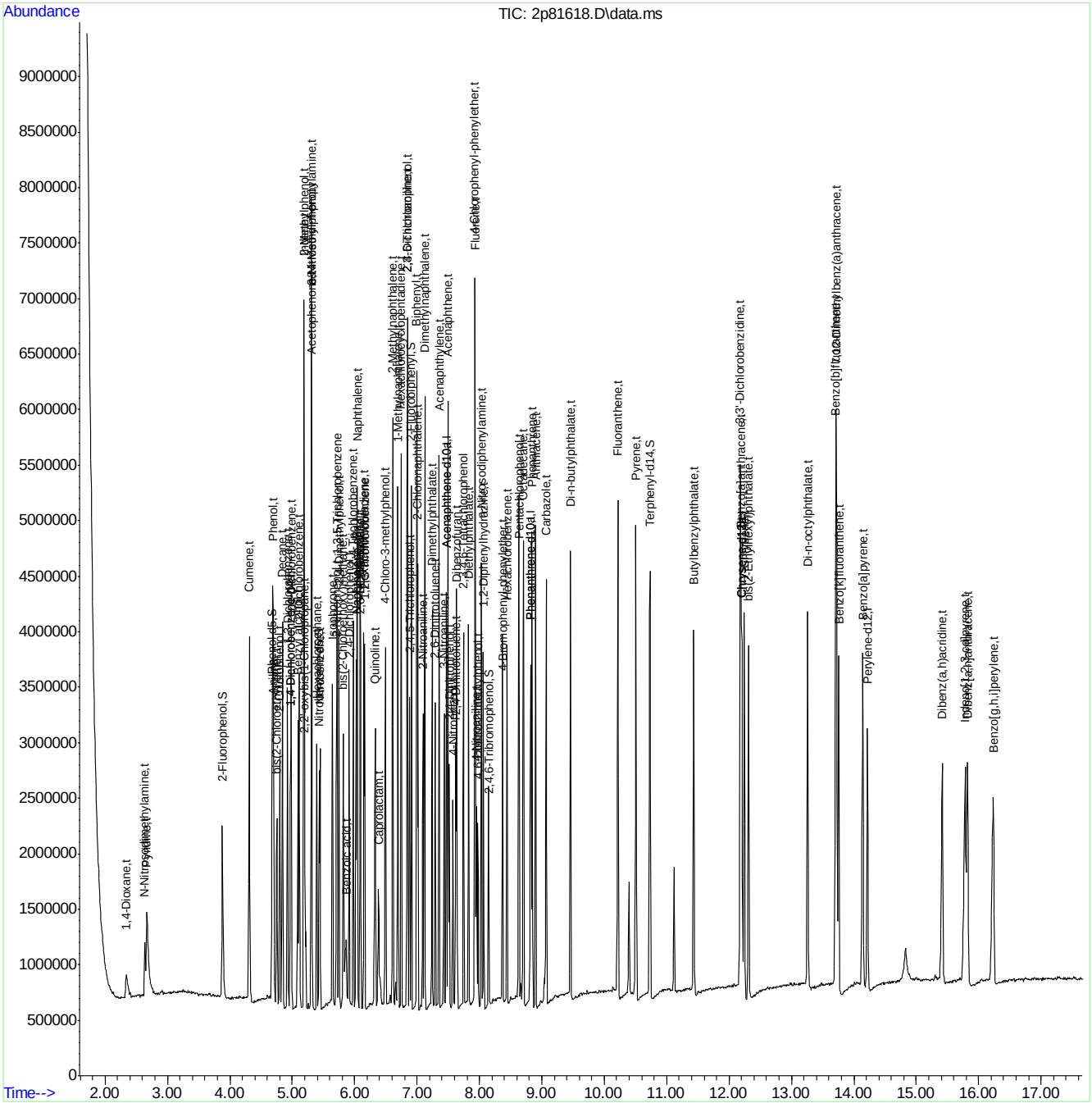
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	8.845	178	1465777	44.77	ppm	99
78) Anthracene	8.899	178	1480689	45.68	ppm	99
79) Carbazole	9.070	167	1495484	43.59	ppm	99
80) Di-n-butylphthalate	9.460	149	1961496	42.51	ppm	99
81) Fluoranthene	10.220	202	1873438	37.22	ppm	99
82) Octadecane	8.701	43	571554	43.05	ppm	91
84) Pyrene	10.508	202	1900656	42.48	ppm	98
86) Butylbenzylphthalate	11.434	149	897674	43.66	ppm	99
87) Benzo[a]anthracene	12.188	228	1703523	37.92	ppm	99
88) 3,3'-Dichlorobenzidine	12.177	252	680958	42.28	ppm	98
89) Chrysene	12.247	228	1528134	47.46	ppm	99
90) bis(2-Ethylhexyl)phtha...	12.311	149	1055586	52.96	ppm	98
92) Di-n-octylphthalate	13.258	149	2008506	41.59	ppm	99
93) Benzo[b]fluoranthene	13.712	252	1757320	37.61	ppm	100
94) Benzo[k]fluoranthene	13.760	252	1514754	42.75	ppm	97
95) Benzo[a]pyrene	14.146	252	1541980	40.36	ppm	99
96) Indeno[1,2,3-cd]pyrene	15.782	276	1527634	33.33	ppm	91
97) Dibenz(a,h)acridine	15.419	279	1348050	37.76	ppm	100
98) Dibenz[a,h]anthracene	15.820	278	1440184	40.41	ppm	99
99) 7,12-Dimethylbenz(a)an...	13.718	256	796190	45.36	ppm	97
100) Benzo[g,h,i]perylene	16.232	276	1461529	40.37	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81618.D
Acq On : 9 Aug 2018 3:34 pm
Operator : seanb1
Sample : icc3595-50
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 09 17:12:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81619.D
Acq On : 9 Aug 2018 3:57 pm
Operator : seanb1
Sample : ic3595-25
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 09 17:13:27 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.972	152	318161	40.00	ppm	-0.01
24) Naphthalene-d8	6.021	136	1159438	40.00	ppm	-0.02
47) Acenaphthene-d10	7.465	164	570802	40.00	ppm	-0.02
69) Phenanthrene-d10	8.818	188	1063662	40.00	ppm	-0.03
83) Chrysene-d12	12.204	240	1050656	40.00	ppm	-0.03
91) Perylene-d12	14.215	264	1089588	40.00	ppm	-0.03
101) 1,4-Dichlorobenzene-d4a	4.972	152	318161	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	1159438	40.00	ppm	-0.01
105) Acenaphthene-d10a	7.465	164	570802	40.00	ppm	-0.02
108) Chrysene-d12a	12.204	240	1050656	40.00	ppm	-0.02
110) Phenanthrene-d10a	8.818	188	1063662	40.00	ppm	-0.02
114) Chrysene-d12b	12.204	240	1050656	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.881	112	256634	15.74	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 31.48%			
8) Phenol-d5	4.673	99	322857	16.46	ppm	-0.02
Spiked Amount 50.000	Range 10 - 59		Recovery = 32.92%			
25) Nitrobenzene-d5	5.427	82	288025	20.43	ppm	-0.02
Spiked Amount 50.000	Range 19 - 61		Recovery = 40.86%			
51) 2-Fluorobiphenyl	6.909	172	496883	20.31	ppm	-0.02
Spiked Amount 50.000	Range 21 - 58		Recovery = 40.62%			
73) 2,4,6-Tribromophenol	8.144	330	70273	20.49	ppm	-0.02
Spiked Amount 50.000	Range 12 - 68		Recovery = 40.98%			
85) Terphenyl-d14	10.728	244	530114	17.55	ppm	-0.03
Spiked Amount 50.000	Range 16 - 65		Recovery = 35.10%			
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.346	88	103610	18.28	ppm	97
3) Pyridine	2.672	79	282497	18.17	ppm	98
4) N-Nitrosodimethylamine	2.640	74	162979	17.37	ppm #	94
6) Indene	5.186	116	401506	20.18	ppm	96
7) Cumene	4.309	105	674406	16.68	ppm	98
9) Phenol	4.684	94	358040	17.33	ppm	88
10) Aniline	4.694	93	371528	16.21	ppm	93
11) bis(2-Chloroethyl)ether	4.748	93	235699	18.09	ppm	97
12) 2-Chlorophenol	4.801	128	261910	18.26	ppm	98
13) Decane	4.844	57	287340	19.13	ppm	96
14) 1,3-Dichlorobenzene	4.924	146	283896	18.43	ppm	100
15) 1,4-Dichlorobenzene	4.983	146	276345	19.96	ppm	98
16) Benzyl alcohol	5.085	108	150323	18.44	ppm	91
17) 1,2-Dichlorobenzene	5.111	146	264726	20.19	ppm	97
18) Acetophenone	5.304	105	348441	20.01	ppm	94
19) 2-Methylphenol	5.181	108	218963	20.41	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.197	121	65137	20.33	ppm	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81619.D
Acq On : 9 Aug 2018 3:57 pm
Operator : seanb1
Sample : ic3595-25
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 09 17:13:27 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.309	108	223782	20.35	ppm		96
22) n-Nitroso-di-n-propyla...	5.304	70	182928	20.41	ppm		97
23) Hexachloroethane	5.395	201	97068	20.24	ppm		95
26) Nitrobenzene	5.443	77	279827	20.47	ppm		99
27) Quinoline	6.315	129	468797	19.04	ppm		99
28) Isophorone	5.641	82	475823	18.78	ppm		99
29) 2-Nitrophenol	5.705	139	129801	20.29	ppm		86
30) 2,4-Dimethylphenol	5.743	107	225042	21.92	ppm		96
31) Benzoic acid	5.834	105	163637	23.17	ppm		90
32) bis(2-Chloroethoxy)met...	5.817	93	257901	19.29	ppm		98
33) 2,4-Dichlorophenol	5.908	162	205750	19.52	ppm		94
34) 2,6-Dichlorophenol	6.090	162	184381	20.53	ppm		97
35) 1,3,5-Trichlorobenzene	5.716	180	234046	19.26	ppm		95
36) 1,2,4-Trichlorobenzene	5.978	180	218645	19.03	ppm		100
37) 1,2,3-Trichlorobenzene	6.160	180	207658	20.85	ppm		97
38) Naphthalene	6.042	128	665357	20.50	ppm		98
39) 4-Chloroaniline	6.085	127	290890	20.91	ppm		96
40) 2,3-Dichloroaniline	6.839	161	246810	19.04	ppm		94
41) Caprolactam	6.363	113	76695	18.97	ppm		93
42) Hexachlorobutadiene	6.149	225	124579	20.16	ppm		99
43) 4-Chloro-3-methylphenol	6.486	107	218155	19.99	ppm	#	99
44) 2-Methylnaphthalene	6.609	141	398063	18.09	ppm		97
45) 1-Methylnaphthalene	6.689	141	434335	19.54	ppm		95
46) Dimethylnaphthalene	7.123	156	388769	19.14	ppm		97
48) Hexachlorocyclopentadiene	6.743	237	253536	42.39	ppm		98
49) 2,4,6-Trichlorophenol	6.844	196	140476	19.94	ppm		100
50) 2,4,5-Trichlorophenol	6.877	196	147034	20.54	ppm		99
52) 2-Chloronaphthalene	7.010	162	412398	19.93	ppm		98
53) Biphenyl	6.989	154	542727	19.15	ppm		98
54) 2-Nitroaniline	7.090	65	148579	20.76	ppm		96
55) Dimethylphthalate	7.235	163	472341	19.26	ppm		100
56) Acenaphthylene	7.353	152	686391	20.02	ppm		99
57) 2,6-Dinitrotoluene	7.283	165	101843	20.86	ppm		80
58) 3-Nitroaniline	7.427	138	124296	20.08	ppm		97
59) Acenaphthene	7.492	153	431387	20.86	ppm		98
60) 2,4-Dinitrophenol	7.513	184	73096	26.96	ppm	#	59
61) 4-Nitrophenol	7.566	109	76440	23.30	ppm		92
62) Dibenzofuran	7.636	168	578483	20.52	ppm		96
63) 2,4-Dinitrotoluene	7.615	165	141366	22.88	ppm		88
64) 2,3,4,6-Tetrachlorophenol	7.743	232	117917	19.56	ppm		95
65) Diethylphthalate	7.823	149	473271	20.07	ppm		98
66) Fluorene	7.930	166	485886	20.20	ppm		97
67) 4-Chlorophenyl-phenyle...	7.925	204	223272	18.99	ppm		92
68) 4-Nitroaniline	7.941	138	124522	21.28	ppm		99
70) 4,6-Dinitro-2-methylph...	7.968	198	62502	15.21	ppm		92
71) n-Nitrosodiphenylamine	8.026	169	345830	20.24	ppm		99
72) 1,2-Diphenylhydrazine	8.064	77	528335	21.03	ppm		99
74) 4-Bromophenyl-phenylether	8.369	248	140371	18.13	ppm		91
75) Hexachlorobenzene	8.438	284	156804	18.13	ppm		77
76) Pentachlorophenol	8.631	266	164904	32.94	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81619.D
Acq On : 9 Aug 2018 3:57 pm
Operator : seanb1
Sample : ic3595-25
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 09 17:13:27 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

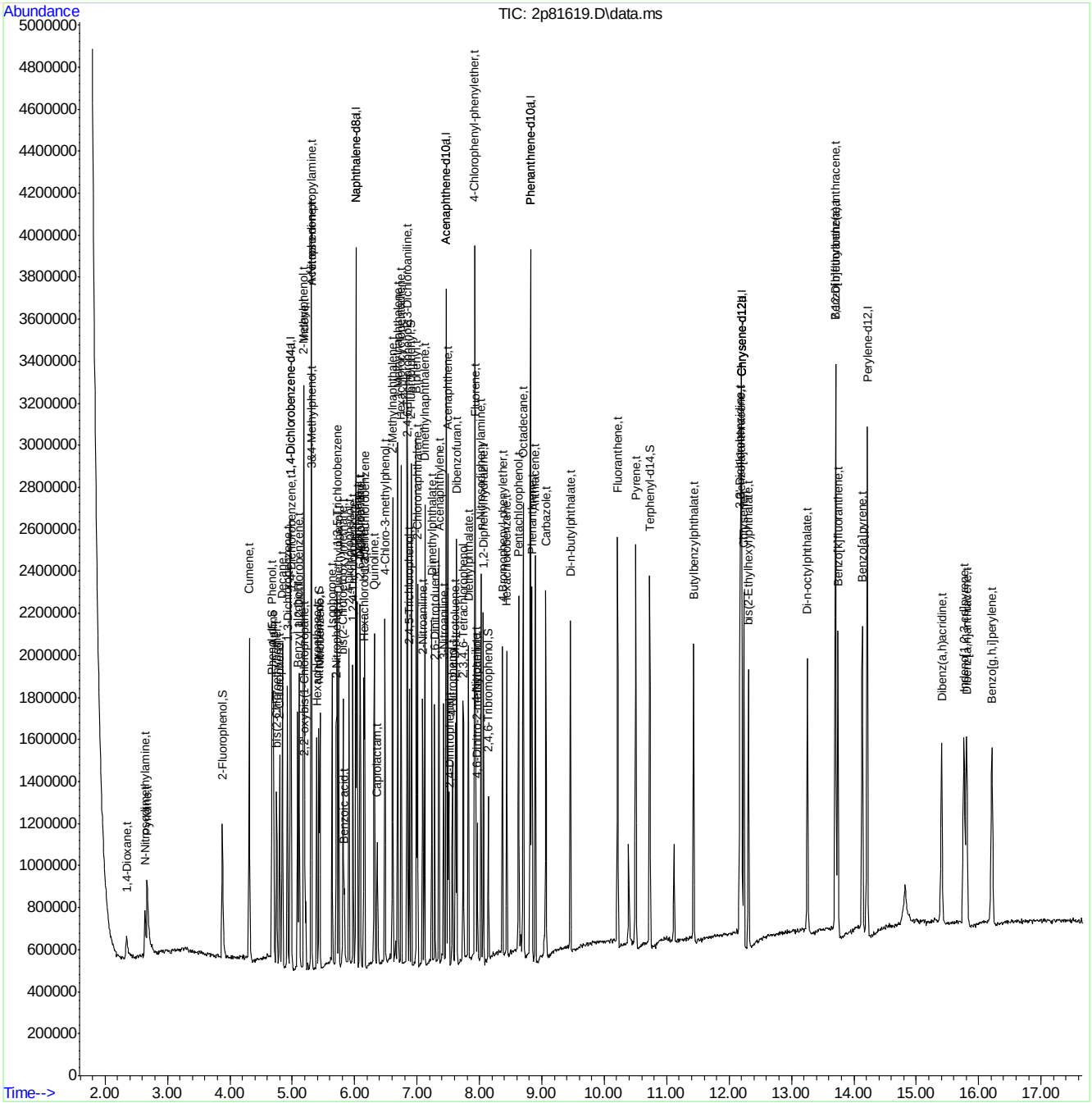
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.845	178	639163	19.97	ppm	98
78)	Anthracene	8.893	178	655480	20.68	ppm	99
79)	Carbazole	9.064	167	648334	19.33	ppm	99
80)	Di-n-butylphthalate	9.460	149	821874	18.22	ppm	98
81)	Fluoranthene	10.214	202	782266	15.90	ppm	98
82)	Octadecane	8.700	43	257774	19.86	ppm	90
84)	Pyrene	10.503	202	809296	18.10	ppm	99
86)	Butylbenzylphthalate	11.434	149	367692	17.89	ppm	98
87)	Benzo[a]anthracene	12.182	228	727442	16.20	ppm	100
88)	3,3'-Dichlorobenzidine	12.172	252	272985	16.96	ppm	98
89)	Chrysene	12.236	228	650622	20.22	ppm	98
90)	bis(2-Ethylhexyl)phtha...	12.311	149	443641	22.27	ppm	98
92)	Di-n-octylphthalate	13.252	149	804480	17.08	ppm	98
93)	Benzo[b]fluoranthene	13.707	252	733505	16.09	ppm	99
94)	Benzo[k]fluoranthene	13.744	252	677992	19.61	ppm	99
95)	Benzo[a]pyrene	14.135	252	654186	17.55	ppm	98
96)	Indeno[1,2,3-cd]pyrene	15.766	276	623861	13.95	ppm	95
97)	Dibenz(a,h)acridine	15.408	279	557232	16.00	ppm	97
98)	Dibenz[a,h]anthracene	15.809	278	623542	17.93	ppm	99
99)	7,12-Dimethylbenz(a)an...	13.707	256	325787	19.03	ppm	93
100)	Benzo[g,h,i]perylene	16.215	276	611069	17.30	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81619.D
Acq On : 9 Aug 2018 3:57 pm
Operator : seanb1
Sample : ic3595-25
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 09 17:13:27 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81620.D
Acq On : 9 Aug 2018 4:19 pm
Operator : seanb1
Sample : ic3595-10
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 09 17:14:05 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	355229	40.00	ppm	-0.02
24) Naphthalene-d8	6.021	136	1318050	40.00	ppm	-0.02
47) Acenaphthene-d10	7.465	164	641320	40.00	ppm	-0.02
69) Phenanthrene-d10	8.818	188	1188136	40.00	ppm	-0.03
83) Chrysene-d12	12.198	240	1196069	40.00	ppm	-0.04
91) Perylene-d12	14.215	264	1216472	40.00	ppm	-0.03
101) 1,4-Dichlorobenzene-d4a	4.967	152	355229	40.00	ppm	-0.01
103) Naphthalene-d8a	6.021	136	1318050	40.00	ppm	-0.01
105) Acenaphthene-d10a	7.465	164	641320	40.00	ppm	-0.02
108) Chrysene-d12a	12.198	240	1196069	40.00	ppm	-0.02
110) Phenanthrene-d10a	8.818	188	1188136	40.00	ppm	-0.02
114) Chrysene-d12b	12.198	240	1196069	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.876	112	119121	6.54	ppm	-0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 13.08%			
8) Phenol-d5	4.673	99	149675	6.84	ppm	-0.02
Spiked Amount 50.000	Range 10 - 59		Recovery = 13.68%			
25) Nitrobenzene-d5	5.427	82	137267	8.57	ppm	-0.02
Spiked Amount 50.000	Range 19 - 61		Recovery = 17.14%#			
51) 2-Fluorobiphenyl	6.909	172	243099	8.84	ppm	-0.02
Spiked Amount 50.000	Range 21 - 58		Recovery = 17.68%#			
73) 2,4,6-Tribromophenol	8.144	330	31770	8.29	ppm	-0.02
Spiked Amount 50.000	Range 12 - 68		Recovery = 16.58%			
85) Terphenyl-d14	10.728	244	252159	7.33	ppm	-0.03
Spiked Amount 50.000	Range 16 - 65		Recovery = 14.66%#			
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.346	88	48521	7.67	ppm	97
3) Pyridine	2.678	79	129345	7.45	ppm	96
4) N-Nitrosodimethylamine	2.640	74	75654	7.22	ppm #	100
6) Indene	5.186	116	194520	8.76	ppm	97
7) Cumene	4.309	105	320686	7.10	ppm	99
9) Phenol	4.684	94	171056	7.41	ppm	86
10) Aniline	4.694	93	183960	7.40	ppm	99
11) bis(2-Chloroethyl)ether	4.748	93	112557	7.74	ppm	97
12) 2-Chlorophenol	4.796	128	123731	7.72	ppm	96
13) Decane	4.844	57	139381	8.31	ppm	97
14) 1,3-Dichlorobenzene	4.924	146	137612	8.00	ppm	98
15) 1,4-Dichlorobenzene	4.983	146	132432	8.57	ppm	94
16) Benzyl alcohol	5.085	108	70113	7.70	ppm	96
17) 1,2-Dichlorobenzene	5.112	146	125343	8.56	ppm	98
18) Acetophenone	5.299	105	173031	8.90	ppm	99
19) 2-Methylphenol	5.181	108	106584	8.90	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.197	121	32104	8.98	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81620.D
Acq On : 9 Aug 2018 4:19 pm
Operator : seanb1
Sample : ic3595-10
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 09 17:14:05 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.304	108	112420	9.15	ppm		98
22) n-Nitroso-di-n-propyla...	5.299	70	91221	9.12	ppm		89
23) Hexachloroethane	5.390	201	46744	8.73	ppm		90
26) Nitrobenzene	5.443	77	135761	8.73	ppm		98
27) Quinoline	6.310	129	225290	8.05	ppm		97
28) Isophorone	5.636	82	230111	7.99	ppm		96
29) 2-Nitrophenol	5.705	139	56518	7.77	ppm		86
30) 2,4-Dimethylphenol	5.743	107	110475	9.47	ppm		96
31) Benzoic acid	5.812	105	64267	8.01	ppm		91
32) bis(2-Chloroethoxy)met...	5.812	93	125531	8.26	ppm		97
33) 2,4-Dichlorophenol	5.909	162	96923	8.09	ppm		96
34) 2,6-Dichlorophenol	6.090	162	90128	8.83	ppm		97
35) 1,3,5-Trichlorobenzene	5.716	180	110038	7.96	ppm		98
36) 1,2,4-Trichlorobenzene	5.973	180	105056	8.04	ppm		96
37) 1,2,3-Trichlorobenzene	6.160	180	99286	8.77	ppm		98
38) Naphthalene	6.037	128	320868	8.70	ppm		99
39) 4-Chloroaniline	6.080	127	137523	8.70	ppm		94
40) 2,3-Dichloroaniline	6.839	161	120080	8.15	ppm		91
41) Caprolactam	6.352	113	34772	7.57	ppm		96
42) Hexachlorobutadiene	6.144	225	60177	8.57	ppm		96
43) 4-Chloro-3-methylphenol	6.481	107	101123	8.15	ppm	#	97
44) 2-Methylnaphthalene	6.609	141	195647	7.82	ppm		95
45) 1-Methylnaphthalene	6.689	141	210590	8.33	ppm		96
46) Dimethylnaphthalene	7.117	156	192867	8.35	ppm		94
48) Hexachlorocyclopentadiene	6.743	237	113373	16.87	ppm		97
49) 2,4,6-Trichlorophenol	6.839	196	67857	8.57	ppm		94
50) 2,4,5-Trichlorophenol	6.871	196	72055	8.96	ppm		96
52) 2-Chloronaphthalene	7.005	162	206847	8.90	ppm		95
53) Biphenyl	6.989	154	261585	8.22	ppm		99
54) 2-Nitroaniline	7.085	65	68009	8.46	ppm		85
55) Dimethylphthalate	7.235	163	225553	8.19	ppm		98
56) Acenaphthylene	7.347	152	328168	8.52	ppm		99
57) 2,6-Dinitrotoluene	7.283	165	45231	8.25	ppm		90
58) 3-Nitroaniline	7.422	138	57622	8.29	ppm		90
59) Acenaphthene	7.492	153	203046	8.74	ppm		99
60) 2,4-Dinitrophenol	7.508	184	22861	12.32	ppm	#	67
61) 4-Nitrophenol	7.561	109	34396	9.33	ppm		90
62) Dibenzofuran	7.636	168	282904	8.93	ppm		98
63) 2,4-Dinitrotoluene	7.615	165	61597	8.87	ppm		94
64) 2,3,4,6-Tetrachlorophenol	7.738	232	52557	7.76	ppm		91
65) Diethylphthalate	7.818	149	227046	8.57	ppm		95
66) Fluorene	7.925	166	236911	8.77	ppm		99
67) 4-Chlorophenyl-phenyle...	7.920	204	105904	8.02	ppm		79
68) 4-Nitroaniline	7.936	138	59596	9.06	ppm		97
70) 4,6-Dinitro-2-methylph...	7.968	198	20965	6.30	ppm		98
71) n-Nitrosodiphenylamine	8.027	169	167278	8.77	ppm		100
72) 1,2-Diphenylhydrazine	8.064	77	257179	9.16	ppm		98
74) 4-Bromophenyl-phenylether	8.369	248	67037	7.75	ppm		91
75) Hexachlorobenzene	8.438	284	73732	7.63	ppm		81
76) Pentachlorophenol	8.626	266	61153	10.94	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81620.D
Acq On : 9 Aug 2018 4:19 pm
Operator : seanb1
Sample : ic3595-10
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 09 17:14:05 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

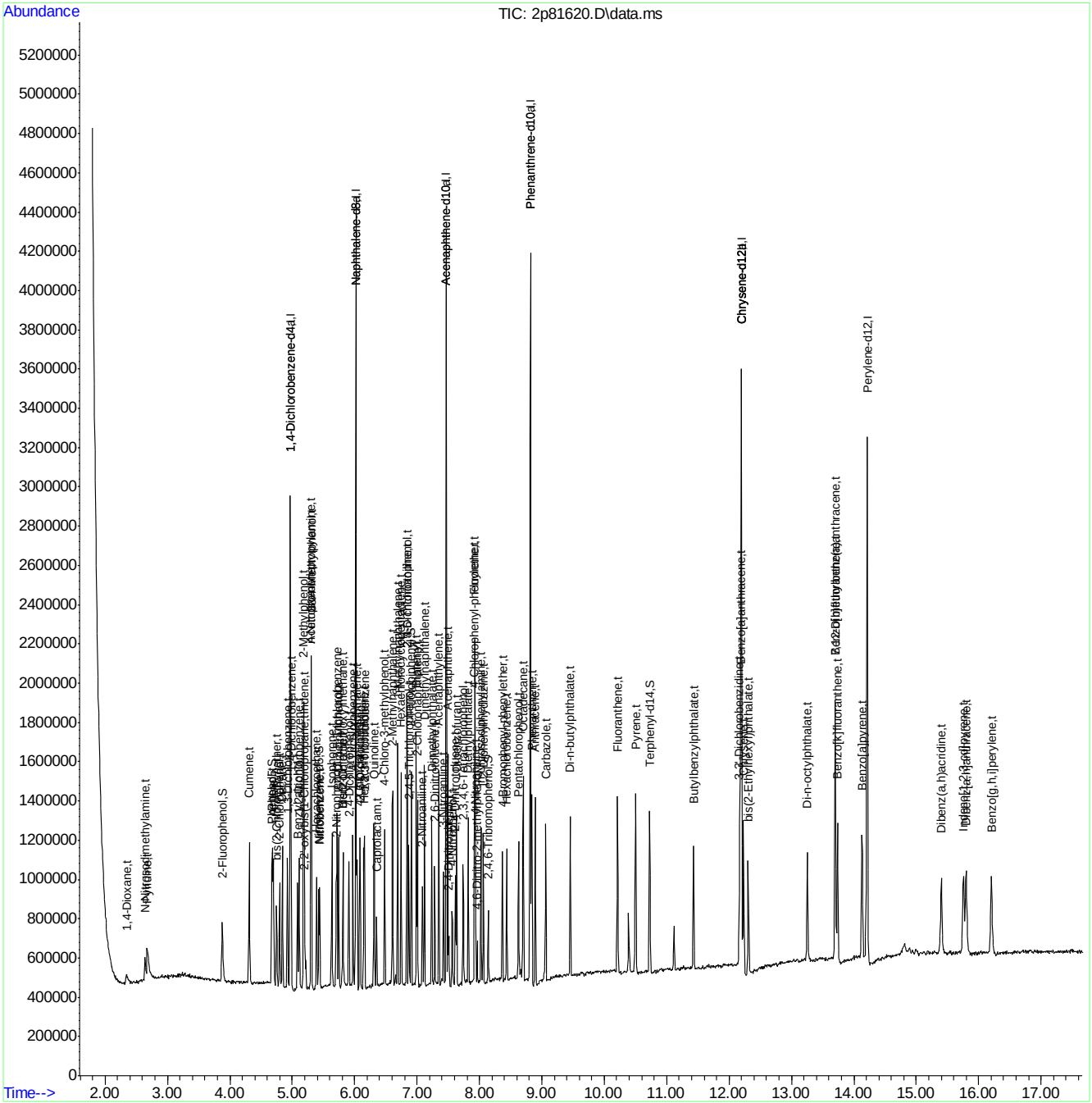
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.840	178	304335	8.51	ppm	99
78)	Anthracene	8.893	178	312570	8.83	ppm	99
79)	Carbazole	9.059	167	309408	8.26	ppm	99
80)	Di-n-butylphthalate	9.455	149	385128	7.64	ppm	98
81)	Fluoranthene	10.214	202	367612	6.69	ppm	98
82)	Octadecane	8.700	43	125348	8.64	ppm	92
84)	Pyrene	10.503	202	380449	7.47	ppm	99
86)	Butylbenzylphthalate	11.434	149	165116	7.06	ppm	98
87)	Benzo[a]anthracene	12.182	228	348085	6.81	ppm	97
88)	3,3'-Dichlorobenzidine	12.166	252	125312	6.84	ppm	98
89)	Chrysene	12.231	228	309085	8.44	ppm	98
90)	bis(2-Ethylhexyl)phtha...	12.311	149	199763	8.81	ppm	97
92)	Di-n-octylphthalate	13.252	149	348312	6.62	ppm	98
93)	Benzo[b]fluoranthene	13.701	252	350323	6.88	ppm	98
94)	Benzo[k]fluoranthene	13.739	252	312508	8.10	ppm	99
95)	Benzo[a]pyrene	14.129	252	297411	7.15	ppm	98
96)	Indeno[1,2,3-cd]pyrene	15.755	276	270753	5.42	ppm	96
97)	Dibenz(a,h)acridine	15.402	279	247600	6.37	ppm	98
98)	Dibenz[a,h]anthracene	15.798	278	283254	7.30	ppm	96
99)	7,12-Dimethylbenz(a)an...	13.701	256	147708	7.73	ppm	92
100)	Benzo[g,h,i]perylene	16.205	276	277308	7.03	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81620.D
Acq On : 9 Aug 2018 4:19 pm
Operator : seanb1
Sample : ic3595-10
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 09 17:14:05 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration



M2P3595.M Thu Aug 09 17:14:10 2018 RPT1 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81621.D
Acq On : 9 Aug 2018 4:42 pm
Operator : seanb1
Sample : ic3595-5
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 09 17:14:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	359347	40.00	ppm	-0.02
24) Naphthalene-d8	6.021	136	1355958	40.00	ppm	-0.02
47) Acenaphthene-d10	7.465	164	684674	40.00	ppm	-0.02
69) Phenanthrene-d10	8.818	188	1266518	40.00	ppm	-0.03
83) Chrysene-d12	12.199	240	1316468	40.00	ppm	-0.04
91) Perylene-d12	14.215	264	1294274	40.00	ppm	-0.03
101) 1,4-Dichlorobenzene-d4a	4.967	152	359347	40.00	ppm	-0.01
103) Naphthalene-d8a	6.021	136	1355958	40.00	ppm	-0.01
105) Acenaphthene-d10a	7.465	164	684674	40.00	ppm	-0.02
108) Chrysene-d12a	12.199	240	1316468	40.00	ppm	-0.02
110) Phenanthrene-d10a	8.818	188	1266518	40.00	ppm	-0.02
114) Chrysene-d12b	12.199	240	1316468	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.876	112	78709	4.27	ppm	-0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 8.54%#			
8) Phenol-d5	4.673	99	101747	4.59	ppm	-0.02
Spiked Amount 50.000	Range 10 - 59		Recovery = 9.18%#			
25) Nitrobenzene-d5	5.427	82	90773	5.51	ppm	-0.02
Spiked Amount 50.000	Range 19 - 61		Recovery = 11.02%#			
51) 2-Fluorobiphenyl	6.909	172	169211	5.77	ppm	-0.02
Spiked Amount 50.000	Range 21 - 58		Recovery = 11.54%#			
73) 2,4,6-Tribromophenol	8.144	330	21108	5.17	ppm	-0.02
Spiked Amount 50.000	Range 12 - 68		Recovery = 10.34%#			
85) Terphenyl-d14	10.728	244	179770	4.75	ppm	-0.03
Spiked Amount 50.000	Range 16 - 65		Recovery = 9.50%#			
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.341	88	26669	4.17	ppm	94
3) Pyridine	2.689	79	87718	5.00	ppm	92
4) N-Nitrosodimethylamine	2.640	74	47643	4.49	ppm #	97
6) Indene	5.181	116	129351	5.76	ppm	92
7) Cumene	4.309	105	210581	4.61	ppm	97
9) Phenol	4.684	94	115654	4.96	ppm	86
10) Aniline	4.694	93	126744	5.28	ppm	91
11) bis(2-Chloroethyl)ether	4.748	93	74974	5.09	ppm	97
12) 2-Chlorophenol	4.796	128	83723	5.17	ppm	97
13) Decane	4.844	57	95528	5.63	ppm	97
14) 1,3-Dichlorobenzene	4.924	146	91985	5.29	ppm	96
15) 1,4-Dichlorobenzene	4.983	146	87133	5.57	ppm	97
16) Benzyl alcohol	5.085	108	46797	5.08	ppm	99
17) 1,2-Dichlorobenzene	5.112	146	85525	5.77	ppm	97
18) Acetophenone	5.299	105	118140	6.01	ppm	97
19) 2-Methylphenol	5.181	108	71764	5.92	ppm	96
20) 2,2'-oxybis(1-Chloropr...	5.197	121	22408	6.19	ppm	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81621.D
Acq On : 9 Aug 2018 4:42 pm
Operator : seanb1
Sample : ic3595-5
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 09 17:14:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21)	3&4-Methylphenol	5.304	108	75022	6.04	ppm		96
22)	n-Nitroso-di-n-propyla...	5.299	70	62694	6.19	ppm		93
23)	Hexachloroethane	5.395	201	31180	5.76	ppm		89
26)	Nitrobenzene	5.438	77	90939	5.69	ppm		96
27)	Quinoline	6.310	129	155416	5.40	ppm		98
28)	Isophorone	5.636	82	157095	5.30	ppm		96
29)	2-Nitrophenol	5.705	139	37769	5.05	ppm		91
30)	2,4-Dimethylphenol	5.743	107	76791	6.40	ppm		95
31)	Benzoic acid	5.802	105	36984	4.48	ppm		89
32)	bis(2-Chloroethoxy)met...	5.812	93	85233	5.45	ppm		99
33)	2,4-Dichlorophenol	5.909	162	66237	5.37	ppm		96
34)	2,6-Dichlorophenol	6.090	162	60349	5.75	ppm		96
35)	1,3,5-Trichlorobenzene	5.716	180	77585	5.46	ppm		95
36)	1,2,4-Trichlorobenzene	5.973	180	71497	5.32	ppm		96
37)	1,2,3-Trichlorobenzene	6.160	180	69105	5.93	ppm		95
38)	Naphthalene	6.037	128	220865	5.82	ppm		98
39)	4-Chloroaniline	6.080	127	96247	5.92	ppm		92
40)	2,3-Dichloroaniline	6.839	161	82615	5.45	ppm		92
41)	Caprolactam	6.347	113	24949	5.28	ppm		93
42)	Hexachlorobutadiene	6.144	225	40547	5.61	ppm		93
43)	4-Chloro-3-methylphenol	6.481	107	69477	5.44	ppm	#	96
44)	2-Methylnaphthalene	6.609	141	130871	5.09	ppm		97
45)	1-Methylnaphthalene	6.689	141	145358	5.59	ppm		98
46)	Dimethylnaphthalene	7.117	156	134890	5.68	ppm		93
48)	Hexachlorocyclopentadiene	6.743	237	72836	10.15	ppm		99
49)	2,4,6-Trichlorophenol	6.839	196	45710	5.41	ppm		97
50)	2,4,5-Trichlorophenol	6.871	196	47563	5.54	ppm		97
52)	2-Chloronaphthalene	7.005	162	142811	5.76	ppm		94
53)	Biphenyl	6.989	154	187281	5.51	ppm		99
54)	2-Nitroaniline	7.085	65	45492	5.30	ppm		82
55)	Dimethylphthalate	7.235	163	160189	5.45	ppm		99
56)	Acenaphthylene	7.347	152	225149	5.47	ppm		98
57)	2,6-Dinitrotoluene	7.283	165	30468	5.20	ppm		87
58)	3-Nitroaniline	7.422	138	40675	5.48	ppm		94
59)	Acenaphthene	7.492	153	142241	5.74	ppm		99
60)	2,4-Dinitrophenol	7.508	184	11231	9.38	ppm	#	63
61)	4-Nitrophenol	7.561	109	22762	5.78	ppm		90
62)	Dibenzofuran	7.636	168	193485	5.72	ppm		95
63)	2,4-Dinitrotoluene	7.615	165	41900	5.65	ppm		95
64)	2,3,4,6-Tetrachlorophenol	7.738	232	35329	4.89	ppm		94
65)	Diethylphthalate	7.818	149	160302	5.67	ppm		96
66)	Fluorene	7.925	166	167834	5.82	ppm		99
67)	4-Chlorophenyl-phenyle...	7.920	204	76167	5.40	ppm		80
68)	4-Nitroaniline	7.936	138	42557	6.06	ppm		99
70)	4,6-Dinitro-2-methylph...	7.962	198	11253	4.48	ppm		86
71)	n-Nitrosodiphenylamine	8.027	169	119523	5.88	ppm		99
72)	1,2-Diphenylhydrazine	8.059	77	184466	6.17	ppm		94
74)	4-Bromophenyl-phenylether	8.369	248	47120	5.11	ppm		90
75)	Hexachlorobenzene	8.438	284	51366	4.99	ppm		78
76)	Pentachlorophenol	8.626	266	37173	6.24	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81621.D
Acq On : 9 Aug 2018 4:42 pm
Operator : seanb1
Sample : ic3595-5
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 09 17:14:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration

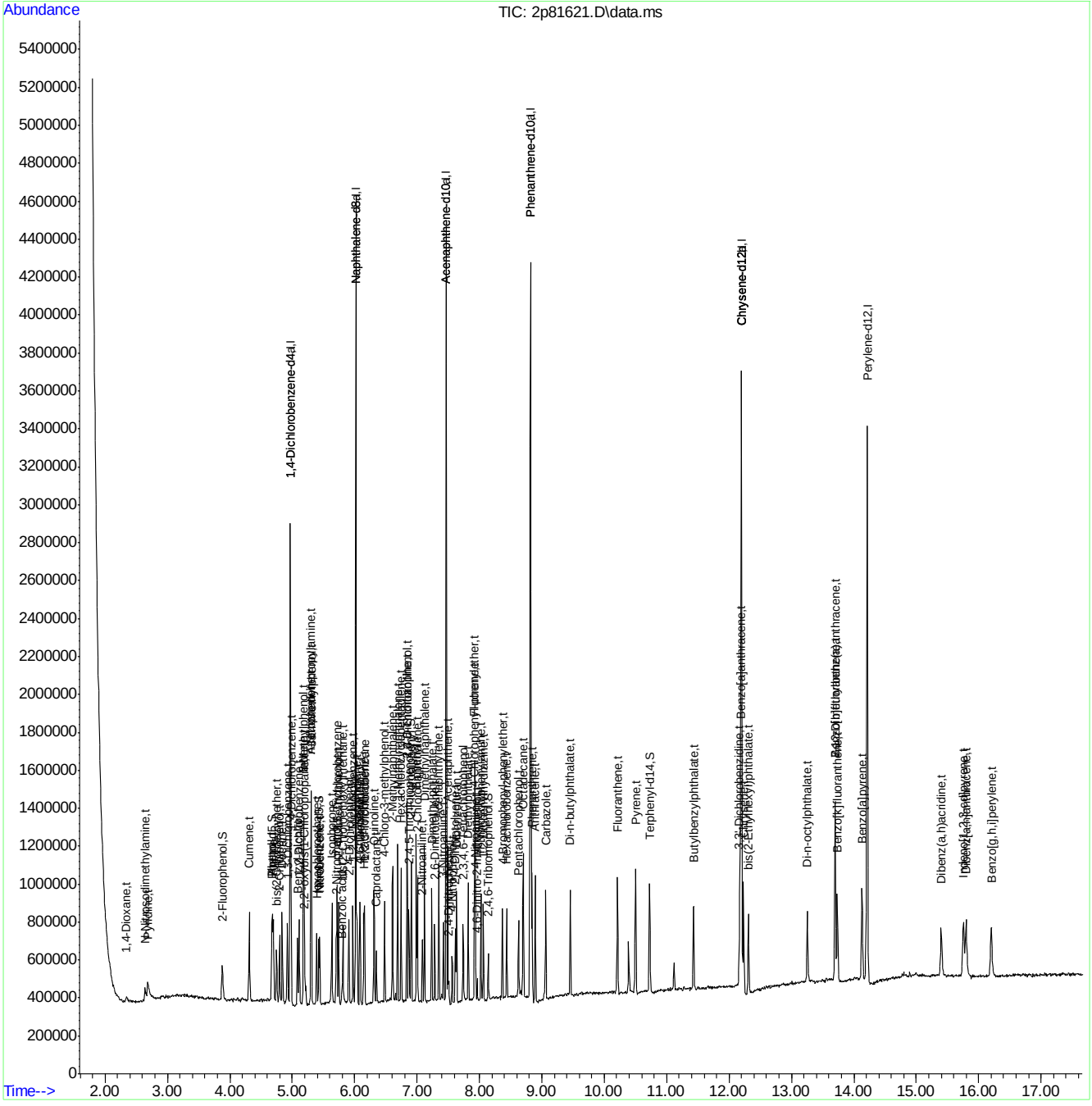
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	8.840	178	213625	5.60	ppm	98
78) Anthracene	8.893	178	223372	5.92	ppm	99
79) Carbazole	9.059	167	220916	5.53	ppm	99
80) Di-n-butylphthalate	9.455	149	271949	5.06	ppm	98
81) Fluoranthene	10.214	202	257762	4.40	ppm	97
82) Octadecane	8.700	43	91818	5.94	ppm	89
84) Pyrene	10.503	202	274069	4.89	ppm	99
86) Butylbenzylphthalate	11.434	149	115116	4.47	ppm	96
87) Benzo[a]anthracene	12.182	228	251355	4.47	ppm	97
88) 3,3'-Dichlorobenzidine	12.166	252	86995	4.31	ppm	92
89) Chrysene	12.231	228	221886	5.50	ppm	96
90) bis(2-Ethylhexyl)phtha...	12.311	149	141651	5.67	ppm	99
92) Di-n-octylphthalate	13.252	149	235591	4.21	ppm	99
93) Benzo[b]fluoranthene	13.701	252	239401	4.42	ppm	97
94) Benzo[k]fluoranthene	13.739	252	235302	5.73	ppm	99
95) Benzo[a]pyrene	14.129	252	210677	4.76	ppm	97
96) Indeno[1,2,3-cd]pyrene	15.755	276	178861	3.37	ppm	99
97) Dibenz(a,h)acridine	15.397	279	163932	3.96	ppm	99
98) Dibenz[a,h]anthracene	15.798	278	195651	4.74	ppm	96
99) 7,12-Dimethylbenz(a)an...	13.701	256	104939	5.16	ppm	94
100) Benzo[g,h,i]perylene	16.205	276	186961	4.46	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81621.D
Acq On : 9 Aug 2018 4:42 pm
Operator : seanb1
Sample : ic3595-5
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 09 17:14:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 13:21:21 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81622.D
Acq On : 9 Aug 2018 5:05 pm
Operator : seanb1
Sample : ic3595-2
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 09 17:29:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:16:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	435182	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	1643789	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	813411	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	1485833	40.00	ppm	0.00
83) Chrysene-d12	12.199	240	1476329	40.00	ppm	0.00
91) Perylene-d12	14.215	264	1473723	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.967	152	435182	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	1643789	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	813411	40.00	ppm	0.00
108) Chrysene-d12a	12.199	240	1476329	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	1485833	40.00	ppm	0.00
114) Chrysene-d12b	12.199	240	1476329	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.881	112	31702	2.06	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery =	4.12%#		
8) Phenol-d5	4.673	99	40786	2.11	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery =	4.22%#		
25) Nitrobenzene-d5	5.427	82	35432	2.04	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery =	4.08%#		
51) 2-Fluorobiphenyl	6.909	172	67654	2.21	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery =	4.42%#		
73) 2,4,6-Tribromophenol	8.139	330	7167	1.65	ppm	-0.01
Spiked Amount 50.000	Range 12 - 68		Recovery =	3.30%#		
85) Terphenyl-d14	10.728	244	64882	1.94	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery =	3.88%#		
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.346	88	10841	1.76	ppm	87
3) Pyridine	2.694	79	34460	2.03	ppm	93
4) N-Nitrosodimethylamine	2.646	74	18204	1.87	ppm	91
6) Indene	5.181	116	53178	2.21	ppm	98
7) Cumene	4.309	105	84858	2.10	ppm	97
9) Phenol	4.684	94	47562	2.24	ppm	91
10) Aniline	4.694	93	52622	2.40	ppm	95
11) bis(2-Chloroethyl)ether	4.748	93	29630	2.13	ppm	99
12) 2-Chlorophenol	4.796	128	35138	2.25	ppm	97
13) Decane	4.839	57	39669	2.34	ppm	97
14) 1,3-Dichlorobenzene	4.924	146	38484	2.26	ppm	96
15) 1,4-Dichlorobenzene	4.983	146	35441	2.16	ppm	94
16) Benzyl alcohol	5.085	108	18108	2.01	ppm	100
17) 1,2-Dichlorobenzene	5.112	146	33480	2.14	ppm	99
18) Acetophenone	5.299	105	47786	2.26	ppm	100
19) 2-Methylphenol	5.181	108	29358	2.27	ppm	95
20) 2,2'-oxybis(1-Chloropr...	5.197	121	8995	2.31	ppm #	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81622.D
Acq On : 9 Aug 2018 5:05 pm
Operator : seanb1
Sample : ic3595-2
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 09 17:29:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:16:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.304	108	31045	2.30	ppm		99
22) n-Nitroso-di-n-propyla...	5.299	70	25740	2.38	ppm		86
23) Hexachloroethane	5.390	201	12391	2.12	ppm		83
26) Nitrobenzene	5.443	77	36544	2.17	ppm		95
27) Quinoline	6.310	129	60165	2.06	ppm		99
28) Isophorone	5.636	82	62564	2.11	ppm		97
29) 2-Nitrophenol	5.705	139	13825	1.75	ppm		93
30) 2,4-Dimethylphenol	5.743	107	30099	2.14	ppm		100
31) Benzoic acid	5.791	105	10631	1.06	ppm		91
32) bis(2-Chloroethoxy)met...	5.812	93	34381	2.18	ppm		97
33) 2,4-Dichlorophenol	5.909	162	27437	2.18	ppm		91
34) 2,6-Dichlorophenol	6.090	162	23714	2.08	ppm		98
35) 1,3,5-Trichlorobenzene	5.716	180	29454	2.05	ppm		97
36) 1,2,4-Trichlorobenzene	5.973	180	29097	2.15	ppm		97
37) 1,2,3-Trichlorobenzene	6.160	180	26257	2.09	ppm		98
38) Naphthalene	6.037	128	85614	2.08	ppm		99
39) 4-Chloroaniline	6.080	127	38202	2.15	ppm		97
40) 2,3-Dichloroaniline	6.839	161	34117	2.21	ppm		97
41) Caprolactam	6.342	113	8908	1.89	ppm		98
42) Hexachlorobutadiene	6.144	225	15408	1.98	ppm		95
43) 4-Chloro-3-methylphenol	6.481	107	26397	1.97	ppm	#	41
44) 2-Methylnaphthalene	6.609	141	51883	2.09	ppm		95
45) 1-Methylnaphthalene	6.690	141	57685	2.15	ppm		98
46) Dimethylnaphthalene	7.117	156	52356	2.13	ppm		98
48) Hexachlorocyclopentadiene	6.743	237	26179	3.27	ppm		98
49) 2,4,6-Trichlorophenol	6.839	196	16920	1.92	ppm		94
50) 2,4,5-Trichlorophenol	6.871	196	18777	2.06	ppm		100
52) 2-Chloronaphthalene	7.005	162	59101	2.33	ppm		97
53) Biphenyl	6.989	154	74016	2.18	ppm		99
54) 2-Nitroaniline	7.085	65	16451	1.84	ppm		91
55) Dimethylphthalate	7.235	163	62202	2.11	ppm		98
56) Acenaphthylene	7.347	152	89114	2.13	ppm		99
57) 2,6-Dinitrotoluene	7.283	165	9705	1.56	ppm		97
58) 3-Nitroaniline	7.422	138	14132	1.83	ppm		92
59) Acenaphthene	7.492	153	55504	2.08	ppm		99
60) 2,4-Dinitrophenol	7.508	184	1789	0.76	ppm	#	25
61) 4-Nitrophenol	7.561	109	7330	1.56	ppm		96
62) Dibenzofuran	7.631	168	75567	2.13	ppm		92
63) 2,4-Dinitrotoluene	7.615	165	12505	1.47	ppm		88
64) 2,3,4,6-Tetrachlorophenol	7.738	232	11651	1.55	ppm		93
65) Diethylphthalate	7.818	149	60376	2.05	ppm		97
66) Fluorene	7.925	166	64317	2.12	ppm		100
67) 4-Chlorophenyl-phenyle...	7.920	204	29280	2.05	ppm		96
68) 4-Nitroaniline	7.936	138	14056	1.85	ppm		99
70) 4,6-Dinitro-2-methylph...	7.963	198	2408	0.66	ppm		90
71) n-Nitrosodiphenylamine	8.027	169	44639	2.13	ppm		94
72) 1,2-Diphenylhydrazine	8.059	77	69526	2.22	ppm		99
74) 4-Bromophenyl-phenylether	8.369	248	17518	2.00	ppm		96
75) Hexachlorobenzene	8.439	284	19834	2.06	ppm		95
76) Pentachlorophenol	8.631	266	8277	1.61	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81622.D
Acq On : 9 Aug 2018 5:05 pm
Operator : seanb1
Sample : ic3595-2
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 09 17:29:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:16:18 2018
Response via : Initial Calibration

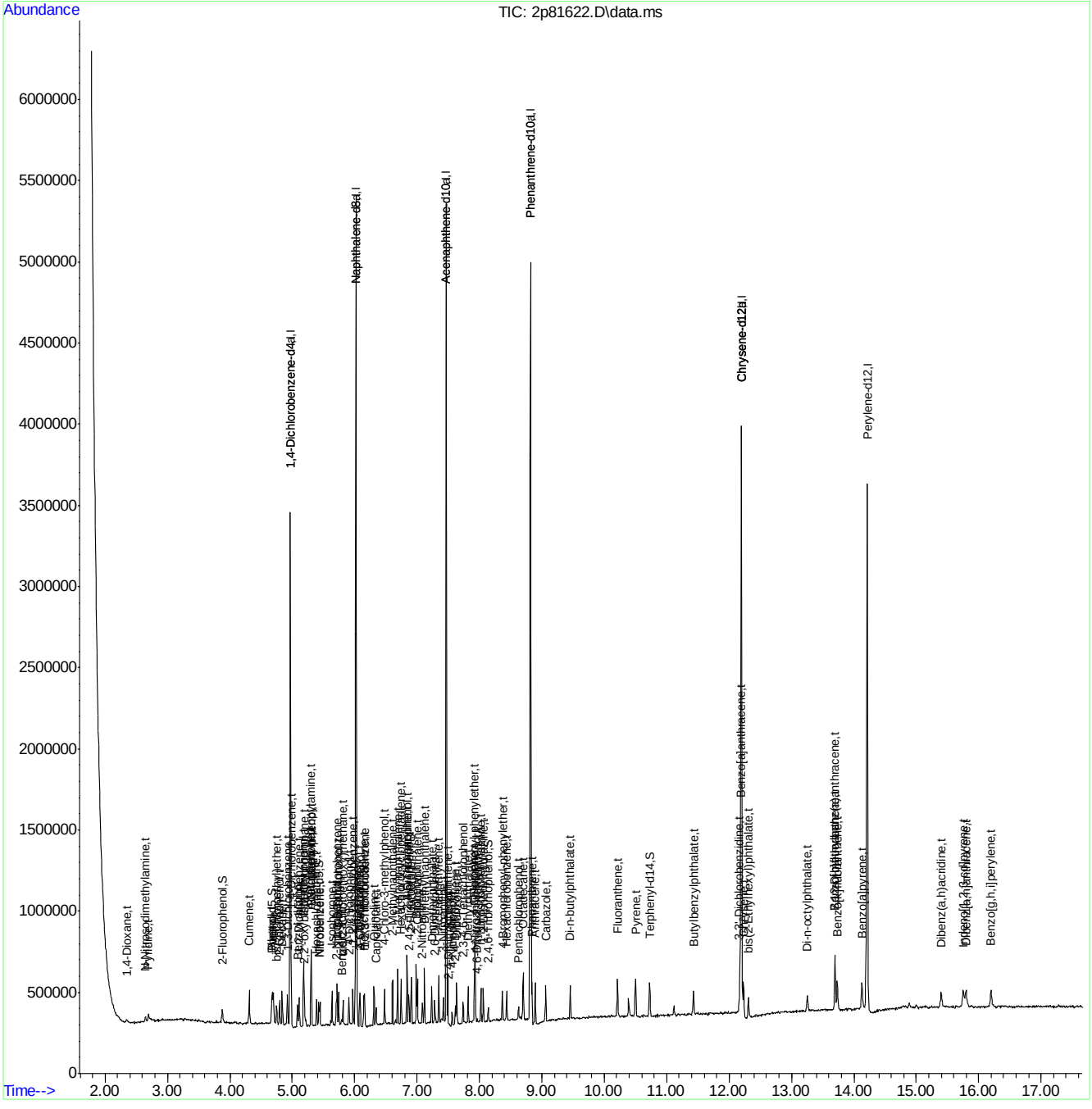
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	8.840	178	82978	2.12	ppm	99
78) Anthracene	8.893	178	82356	2.07	ppm	99
79) Carbazole	9.059	167	83404	2.10	ppm	97
80) Di-n-butylphthalate	9.455	149	96109	1.91	ppm	100
81) Fluoranthene	10.214	202	95139	1.98	ppm	96
82) Octadecane	8.701	43	33086	2.15	ppm	97
84) Pyrene	10.503	202	100540	2.01	ppm	98
86) Butylbenzylphthalate	11.434	149	38486	1.70	ppm	94
87) Benzo[a]anthracene	12.183	228	91938	2.02	ppm	98
88) 3,3'-Dichlorobenzidine	12.167	252	28371	1.63	ppm	97
89) Chrysene	12.231	228	80370	1.99	ppm	98
90) bis(2-Ethylhexyl)phtha...	12.311	149	45245	1.68	ppm	97
92) Di-n-octylphthalate	13.252	149	67689	1.44	ppm	100
93) Benzo[b]fluoranthene	13.696	252	86124	1.94	ppm	98
94) Benzo[k]fluoranthene	13.734	252	83848	2.16	ppm	96
95) Benzo[a]pyrene	14.129	252	72752	1.88	ppm	99
96) Indeno[1,2,3-cd]pyrene	15.755	276	61309	1.67	ppm	98
97) Dibenz(a,h)acridine	15.397	279	57814	1.76	ppm	100
98) Dibenz[a,h]anthracene	15.798	278	70766	1.94	ppm	98
99) 7,12-Dimethylbenz(a)an...	13.696	256	36444	1.86	ppm	94
100) Benzo[g,h,i]perylene	16.199	276	69013	1.92	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81622.D
Acq On : 9 Aug 2018 5:05 pm
Operator : seanb1
Sample : ic3595-2
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 09 17:29:09 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:16:18 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81623.D
Acq On : 9 Aug 2018 5:27 pm
Operator : seanb1
Sample : ic3595-1
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 09 17:44:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:29:22 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	402184	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	1517282	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	761142	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	1413522	40.00	ppm	0.00
83) Chrysene-d12	12.198	240	1411169	40.00	ppm	0.00
91) Perylene-d12	14.215	264	1387323	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.967	152	402184	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	1517282	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	761142	40.00	ppm	0.00
108) Chrysene-d12a	12.198	240	1411169	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	1413522	40.00	ppm	0.00
114) Chrysene-d12b	12.198	240	1411169	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.881	112	14886	1.04	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery =	2.08%#		
8) Phenol-d5	4.673	99	18726	1.04	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery =	2.08%#		
25) Nitrobenzene-d5	5.427	82	18364	1.14	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery =	2.28%#		
51) 2-Fluorobiphenyl	6.909	172	33949	1.17	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery =	2.34%#		
73) 2,4,6-Tribromophenol	8.139	330	3327	0.83	ppm	-0.01
Spiked Amount 50.000	Range 12 - 68		Recovery =	1.66%#		
85) Terphenyl-d14	10.728	244	31527	0.99	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery =	1.98%#		
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.346	88	6135	1.10	ppm	# 62
3) Pyridine	2.699	79	16858	1.07	ppm	88
4) N-Nitrosodimethylamine	2.646	74	8820	0.99	ppm	88
6) Indene	5.181	116	25728	1.14	ppm	96
7) Cumene	4.309	105	41781	1.11	ppm	97
9) Phenol	4.684	94	23002	1.15	ppm	94
10) Aniline	4.694	93	24413	1.17	ppm	81
11) bis(2-Chloroethyl)ether	4.748	93	14343	1.10	ppm	91
12) 2-Chlorophenol	4.796	128	16395	1.12	ppm	92
13) Decane	4.844	57	18485	1.15	ppm	96
14) 1,3-Dichlorobenzene	4.924	146	18346	1.14	ppm	92
15) 1,4-Dichlorobenzene	4.983	146	16331	1.07	ppm	90
16) Benzyl alcohol	5.085	108	8045	0.96	ppm	97
17) 1,2-Dichlorobenzene	5.112	146	16742	1.15	ppm	98
18) Acetophenone	5.299	105	22367	1.12	ppm	96
19) 2-Methylphenol	5.181	108	14061	1.15	ppm	95
20) 2,2'-oxybis(1-Chloropr...	5.197	121	4496	1.22	ppm	# 86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81623.D
Acq On : 9 Aug 2018 5:27 pm
Operator : seanb1
Sample : ic3595-1
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 09 17:44:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:29:22 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.304	108	13525	1.06	ppm		96
22) n-Nitroso-di-n-propyla...	5.299	70	11776	1.15	ppm		90
23) Hexachloroethane	5.395	201	5637	1.03	ppm		92
26) Nitrobenzene	5.443	77	16571	1.06	ppm		96
27) Quinoline	6.310	129	29072	1.07	ppm		96
28) Isophorone	5.636	82	30365	1.10	ppm		92
29) 2-Nitrophenol	5.705	139	5563	0.78	ppm		85
30) 2,4-Dimethylphenol	5.743	107	13201	1.01	ppm		98
31) Benzoic acid	5.785	105	4232	0.49	ppm		92
32) bis(2-Chloroethoxy)met...	5.812	93	16027	1.09	ppm		98
33) 2,4-Dichlorophenol	5.908	162	11740	1.00	ppm		97
34) 2,6-Dichlorophenol	6.090	162	10802	1.02	ppm		100
35) 1,3,5-Trichlorobenzene	5.716	180	14983	1.13	ppm		92
36) 1,2,4-Trichlorobenzene	5.973	180	13362	1.06	ppm		90
37) 1,2,3-Trichlorobenzene	6.160	180	13682	1.17	ppm		98
38) Naphthalene	6.037	128	42269	1.11	ppm		97
39) 4-Chloroaniline	6.080	127	18053	1.09	ppm		97
40) 2,3-Dichloroaniline	6.839	161	15529	1.07	ppm		96
41) Caprolactam	6.342	113	4187	0.97	ppm	#	87
42) Hexachlorobutadiene	6.144	225	7702	1.07	ppm		96
43) 4-Chloro-3-methylphenol	6.481	107	12471	1.01	ppm	#	48
44) 2-Methylnaphthalene	6.609	141	23845	1.03	ppm		96
45) 1-Methylnaphthalene	6.689	141	28043	1.12	ppm		99
46) Dimethylnaphthalene	7.117	156	25590	1.12	ppm		98
48) Hexachlorocyclopentadiene	6.743	237	9916	1.36	ppm		99
49) 2,4,6-Trichlorophenol	6.839	196	7823	0.95	ppm		95
50) 2,4,5-Trichlorophenol	6.871	196	8216	0.96	ppm		96
52) 2-Chloronaphthalene	7.005	162	28582	1.18	ppm		98
53) Biphenyl	6.989	154	36442	1.13	ppm		98
54) 2-Nitroaniline	7.085	65	7273	0.88	ppm		83
55) Dimethylphthalate	7.235	163	29763	1.07	ppm		98
56) Acenaphthylene	7.347	152	41904	1.06	ppm		98
57) 2,6-Dinitrotoluene	7.283	165	4204	0.74	ppm		83
58) 3-Nitroaniline	7.422	138	6255	0.88	ppm		94
59) Acenaphthene	7.492	153	27025	1.08	ppm		99
61) 4-Nitrophenol	7.561	109	3025	0.71	ppm		92
62) Dibenzofuran	7.631	168	38027	1.13	ppm		98
63) 2,4-Dinitrotoluene	7.615	165	5286	0.69	ppm		93
64) 2,3,4,6-Tetrachlorophenol	7.738	232	4762	0.70	ppm		90
65) Diethylphthalate	7.818	149	28410	1.03	ppm		96
66) Fluorene	7.925	166	30530	1.07	ppm		98
67) 4-Chlorophenyl-phenyle...	7.920	204	13403	1.00	ppm		90
68) 4-Nitroaniline	7.936	138	6409	0.91	ppm		94
71) n-Nitrosodiphenylamine	8.027	169	21333	1.06	ppm		95
72) 1,2-Diphenylhydrazine	8.059	77	33477	1.11	ppm		97
74) 4-Bromophenyl-phenylether	8.369	248	7948	0.95	ppm		80
75) Hexachlorobenzene	8.438	284	9490	1.03	ppm		96
76) Pentachlorophenol	8.626	266	2922	0.65	ppm		98
77) Phenanthrene	8.839	178	40298	1.07	ppm		97
78) Anthracene	8.893	178	39550	1.04	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81623.D
Acq On : 9 Aug 2018 5:27 pm
Operator : seanb1
Sample : ic3595-1
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 09 17:44:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:29:22 2018
Response via : Initial Calibration

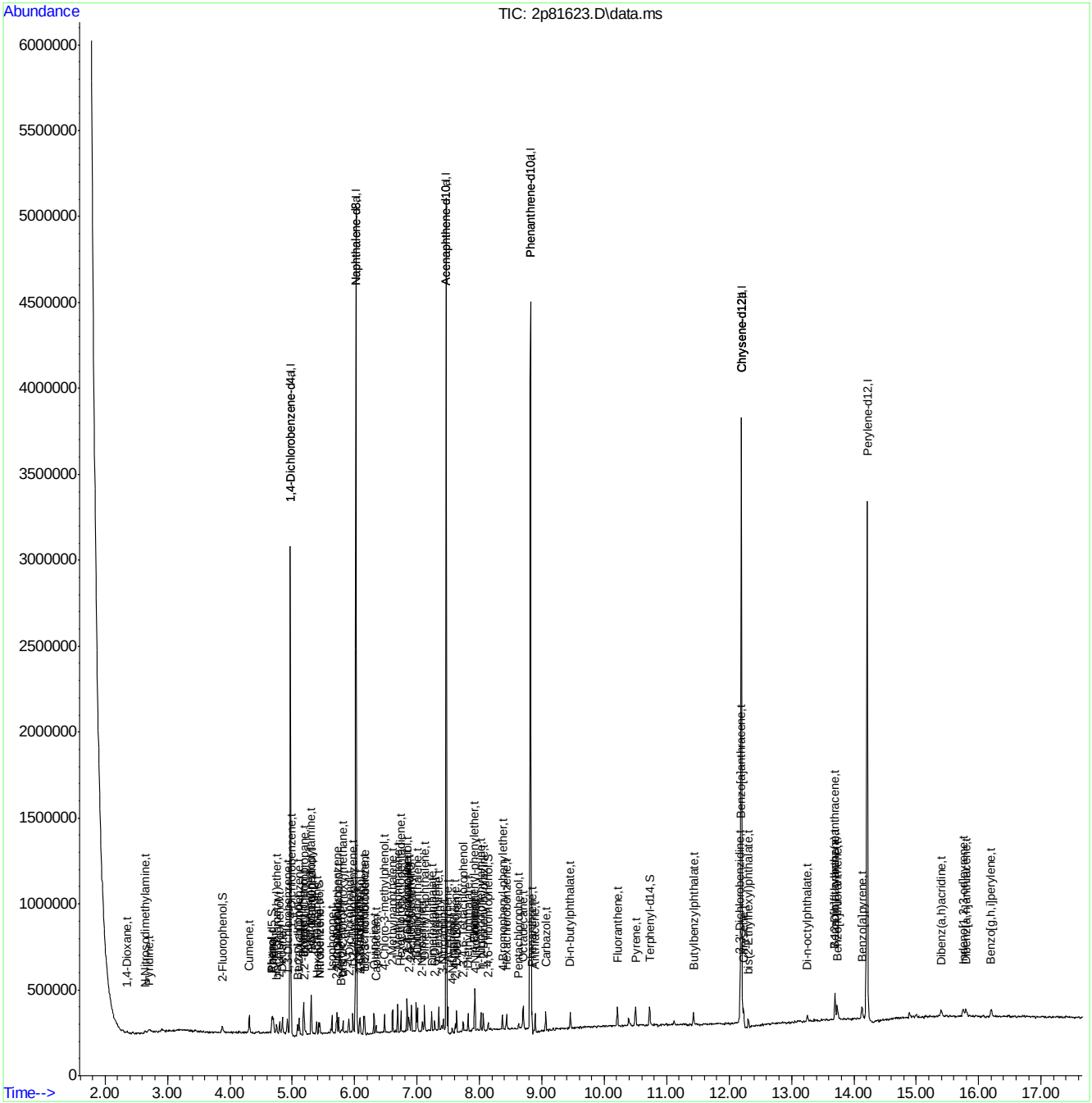
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.059	167	39303	1.03	ppm	99
80)	Di-n-butylphthalate	9.455	149	44137	0.93	ppm	99
81)	Fluoranthene	10.209	202	45299	0.99	ppm	98
82)	Octadecane	8.700	43	15495	1.05	ppm	96
84)	Pyrene	10.503	202	47776	1.00	ppm	99
86)	Butylbenzylphthalate	11.434	149	16967	0.80	ppm	100
87)	Benzo[a]anthracene	12.182	228	45043	1.04	ppm	99
88)	3,3'-Dichlorobenzidine	12.172	252	11733	0.73	ppm	96
89)	Chrysene	12.231	228	37454	0.97	ppm	99
90)	bis(2-Ethylhexyl)phtha...	12.311	149	18025	0.72	ppm	97
92)	Di-n-octylphthalate	13.252	149	26380	0.62	ppm	99
93)	Benzo[b]fluoranthene	13.696	252	39946	0.96	ppm	97
94)	Benzo[k]fluoranthene	13.733	252	39222	1.06	ppm	98
95)	Benzo[a]pyrene	14.129	252	34585	0.96	ppm	96
96)	Indeno[1,2,3-cd]pyrene	15.755	276	29333	0.87	ppm	91
97)	Dibenz(a,h)acridine	15.397	279	24691	0.81	ppm	97
98)	Dibenz[a,h]anthracene	15.798	278	29046	0.85	ppm	91
99)	7,12-Dimethylbenz(a)an...	13.696	256	15553	0.85	ppm	88
100)	Benzo[g,h,i]perylene	16.199	276	32525	0.97	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81623.D
Acq On : 9 Aug 2018 5:27 pm
Operator : seanb1
Sample : ic3595-1
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 09 17:44:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:29:22 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81625.D
Acq On : 9 Aug 2018 6:13 pm
Operator : seanb1
Sample : icv3595-50
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 10 11:56:15 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:45:01 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.972	152	409983	40.00	ppm	0.00
24) Naphthalene-d8	6.026	136	1489972	40.00	ppm	0.00
47) Acenaphthene-d10	7.470	164	694737	40.00	ppm	0.00
69) Phenanthrene-d10	8.823	188	1397304	40.00	ppm	0.00
83) Chrysene-d12	12.209	240	1402520	40.00	ppm	0.00
91) Perylene-d12	14.220	264	1319819	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.972	152	409983	40.00	ppm	0.00
103) Naphthalene-d8a	6.026	136	1489972	40.00	ppm	0.00
105) Acenaphthene-d10a	7.470	164	694737	40.00	ppm	0.00
108) Chrysene-d12a	12.209	240	1402520	40.00	ppm	0.00
110) Phenanthrene-d10a	8.823	188	1397304	40.00	ppm	0.00
114) Chrysene-d12b	12.209	240	1402520	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.346	88	297439	51.53	ppm	98
3) Pyridine	2.667	79	832388	51.46	ppm	98
4) N-Nitrosodimethylamine	2.640	74	498507	55.00	ppm	100
9) Phenol	4.689	94	982286	47.34	ppm	96
10) Aniline	4.700	93	917446	42.25	ppm	97
11) bis(2-Chloroethyl)ether	4.753	93	643222	47.97	ppm	99
12) 2-Chlorophenol	4.801	128	684808	45.12	ppm	99
14) 1,3-Dichlorobenzene	4.924	146	782943	47.00	ppm	99
15) 1,4-Dichlorobenzene	4.983	146	719327	45.67	ppm	98
16) Benzyl alcohol	5.090	108	449164	53.03	ppm	100
17) 1,2-Dichlorobenzene	5.112	146	685485	45.22	ppm	99
18) Acetophenone	5.304	105	921673	44.70	ppm	99
19) 2-Methylphenol	5.186	108	582311	46.03	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.197	121	189939	49.25	ppm	91
21) 3&4-Methylphenol	5.315	108	578526	44.17	ppm	89
22) n-Nitroso-di-n-propyla...	5.309	70	464135	43.61	ppm	99
23) Hexachloroethane	5.395	201	251581	45.06	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81625.D
Acq On : 9 Aug 2018 6:13 pm
Operator : seanb1
Sample : icv3595-50
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 10 11:56:15 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:45:01 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
26) Nitrobenzene	5.448	77	696536	44.85	ppm		94
28) Isophorone	5.641	82	1391948	50.83	ppm		96
29) 2-Nitrophenol	5.711	139	349924	51.20	ppm		93
30) 2,4-Dimethylphenol	5.748	107	535779	41.54	ppm		99
32) bis(2-Chloroethoxy)met...	5.818	93	802289	54.85	ppm		99
33) 2,4-Dichlorophenol	5.908	162	556695	48.26	ppm		94
34) 2,6-Dichlorophenol	6.096	162	450895	43.24	ppm		100
36) 1,2,4-Trichlorobenzene	5.978	180	599410	48.07	ppm		99
38) Naphthalene	6.042	128	1751285	46.10	ppm		100
39) 4-Chloroaniline	6.085	127	710829	43.21	ppm		100
41) Caprolactam	6.379	113	218432	51.72	ppm		97
42) Hexachlorobutadiene	6.149	225	315329	44.30	ppm		99
43) 4-Chloro-3-methylphenol	6.491	107	617403	50.80	ppm	#	42
44) 2-Methylnaphthalene	6.609	141	1100904	48.41	ppm		98
45) 1-Methylnaphthalene	6.695	141	1090945	43.69	ppm		99
48) Hexachlorocyclopentadiene	6.748	237	252896	39.59	ppm		98
49) 2,4,6-Trichlorophenol	6.844	196	356804	47.98	ppm		99
50) 2,4,5-Trichlorophenol	6.882	196	378339	48.67	ppm		99
52) 2-Chloronaphthalene	7.016	162	1000180	44.19	ppm		98
53) Biphenyl	6.994	154	1343324	44.93	ppm		99
54) 2-Nitroaniline	7.096	65	409323	54.97	ppm		97
55) Dimethylphthalate	7.246	163	1191492	46.62	ppm		99
56) Acenaphthylene	7.353	152	1563387	43.01	ppm		100
57) 2,6-Dinitrotoluene	7.294	165	269540	53.97	ppm		91
58) 3-Nitroaniline	7.433	138	314503	49.01	ppm		97
59) Acenaphthene	7.497	153	1054366	45.54	ppm		98
60) 2,4-Dinitrophenol	7.518	184	117794	51.40	ppm	#	60
61) 4-Nitrophenol	7.572	109	199392	53.10	ppm		99
62) Dibenzofuran	7.641	168	1379859	44.35	ppm		99
63) 2,4-Dinitrotoluene	7.625	165	346707	51.61	ppm		95
64) 2,3,4,6-Tetrachlorophenol	7.743	232	304640	50.99	ppm		98
65) Diethylphthalate	7.829	149	1240423	48.95	ppm		98
66) Fluorene	7.930	166	1232555	46.84	ppm		98
67) 4-Chlorophenyl-phenyle...	7.925	204	616515	50.29	ppm		99
68) 4-Nitroaniline	7.952	138	273139	43.02	ppm		98
70) 4,6-Dinitro-2-methylph...	7.973	198	168750	41.57	ppm		99
71) n-Nitrosodiphenylamine	8.032	169	1027157	51.23	ppm		99
72) 1,2-Diphenylhydrazine	8.069	77	1329822	43.86	ppm		93
74) 4-Bromophenyl-phenylether	8.374	248	350474	42.75	ppm		96
75) Hexachlorobenzene	8.444	284	405369	44.34	ppm		97
76) Pentachlorophenol	8.636	266	234220	44.52	ppm		98
77) Phenanthrene	8.850	178	1747966	46.70	ppm		99
78) Anthracene	8.904	178	1725724	45.70	ppm		99
79) Carbazole	9.069	167	1767135	46.84	ppm		99
80) Di-n-butylphthalate	9.465	149	2502062	53.69	ppm		99
81) Fluoranthene	10.219	202	2391300	52.95	ppm		99
84) Pyrene	10.514	202	2380778	50.15	ppm		98
86) Butylbenzylphthalate	11.439	149	1178512	57.55	ppm		98
87) Benzo[a]anthracene	12.193	228	2191637	50.48	ppm		100
88) 3,3'-Dichlorobenzidine	12.182	252	876743	56.49	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81625.D
Acq On : 9 Aug 2018 6:13 pm
Operator : seanb1
Sample : icv3595-50
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 10 11:56:15 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:45:01 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
89)	Chrysene	12.247	228	1772328	46.36	ppm	99
90)	bis(2-Ethylhexyl)phtha...	12.311	149	1235673	51.34	ppm	99
92)	Di-n-octylphthalate	13.257	149	2660609	61.86	ppm	99
93)	Benzo[b]fluoranthene	13.717	252	2241730	56.94	ppm	95
94)	Benzo[k]fluoranthene	13.755	252	1873700	52.88	ppm	97
95)	Benzo[a]pyrene	14.145	252	2039471	59.76	ppm	99
96)	Indeno[1,2,3-cd]pyrene	15.782	276	2001794	63.37	ppm	96
97)	Dibenz(a,h)acridine	15.499	279	1808973	64.15	ppm	98
98)	Dibenz[a,h]anthracene	15.825	278	1775863	55.75	ppm	99
99)	7,12-Dimethylbenz(a)an...	13.712	256	304804	17.91	ppm	99
100)	Benzo[g,h,i]perylene	16.242	276	2009324	62.96	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

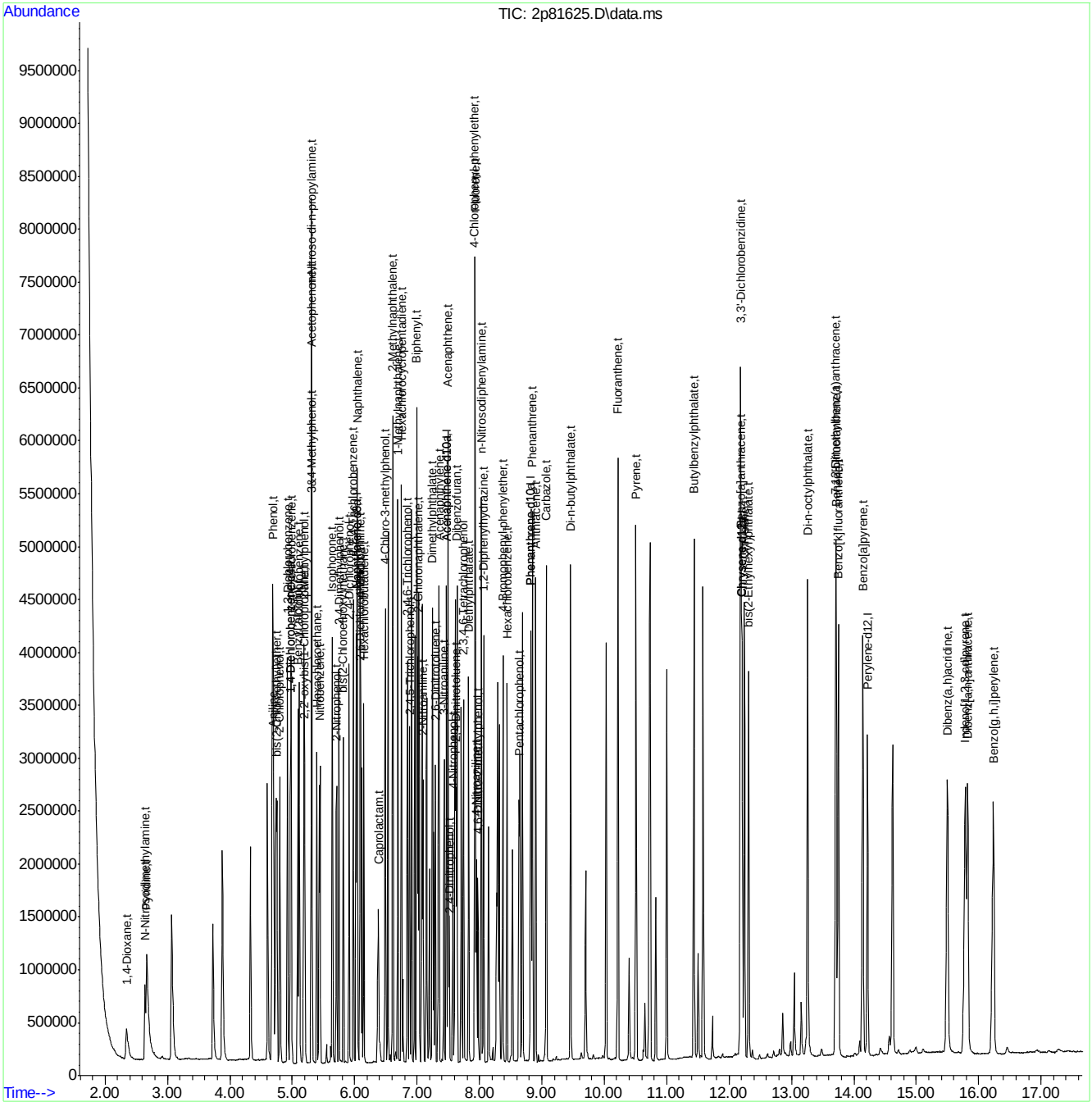
9.5.9

6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81625.D
Acq On : 9 Aug 2018 6:13 pm
Operator : seanb1
Sample : icv3595-50
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 10 11:56:15 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:45:01 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81626.D
Acq On : 9 Aug 2018 6:36 pm
Operator : seanb1
Sample : icv3595-50
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 10 11:57:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:45:01 2018
Response via : Initial Calibration

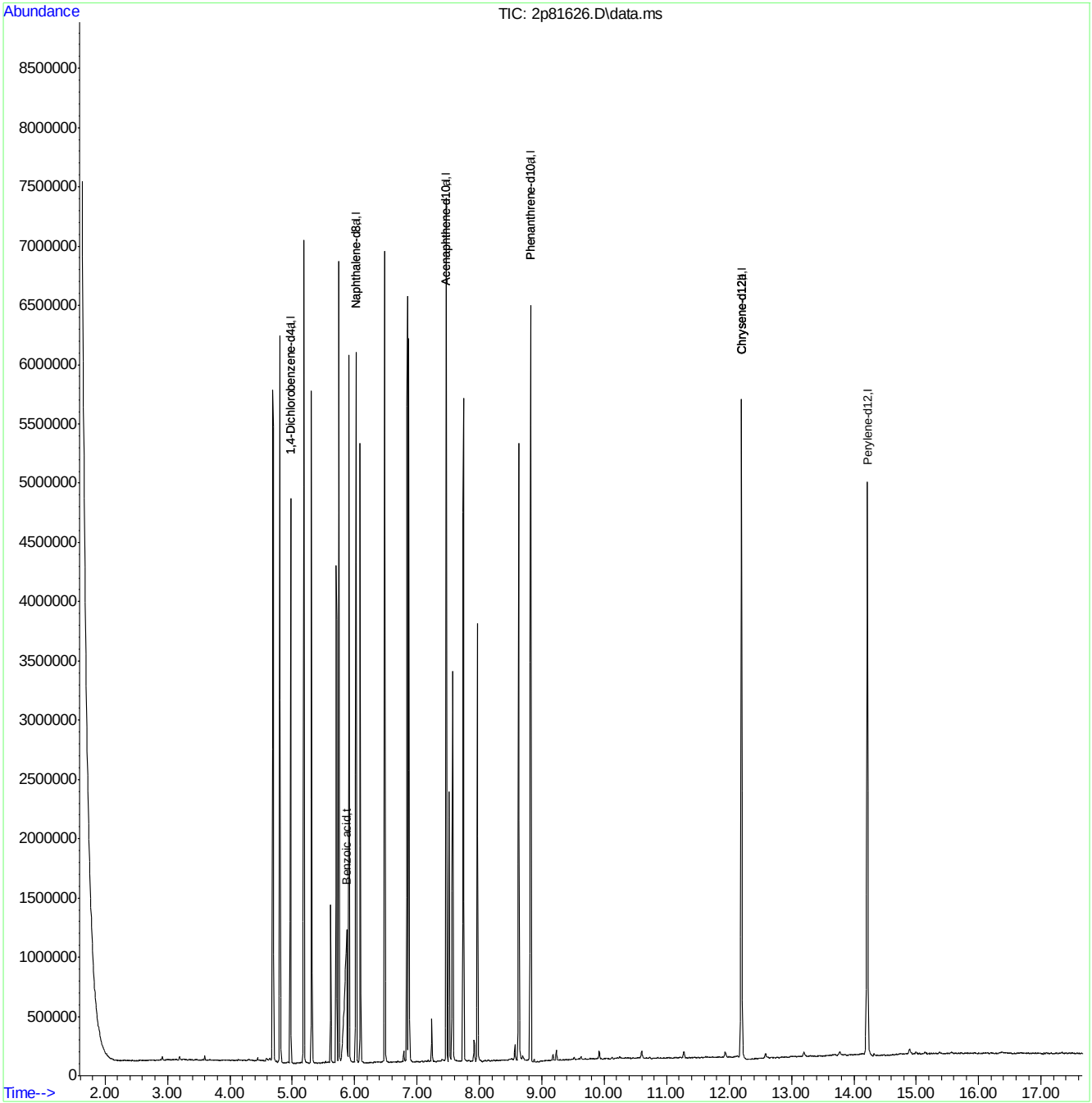
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.973	152	631996	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	2075516	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	1335766	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	2129380	40.00	ppm	0.00
83) Chrysene-d12	12.199	240	2424604	40.00	ppm	0.00
91) Perylene-d12	14.220	264	2359065	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.973	152	631996	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	2075516	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	1335766	40.00	ppm	0.00
108) Chrysene-d12a	12.199	240	2424604	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	2129380	40.00	ppm	0.00
114) Chrysene-d12b	12.199	240	2424604	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
Target Compounds						Qvalue
31) Benzoic acid	5.871	105	746192	58.66	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3595\
Data File : 2p81626.D
Acq On : 9 Aug 2018 6:36 pm
Operator : seanb1
Sample : icv3595-50
Misc : op13652,e2p3595,1000,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 10 11:57:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Aug 09 17:45:01 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81629.D
Acq On : 9 Aug 2018 8:58 pm
Operator : seanb1
Sample : ic3596-100
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 10 14:50:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration

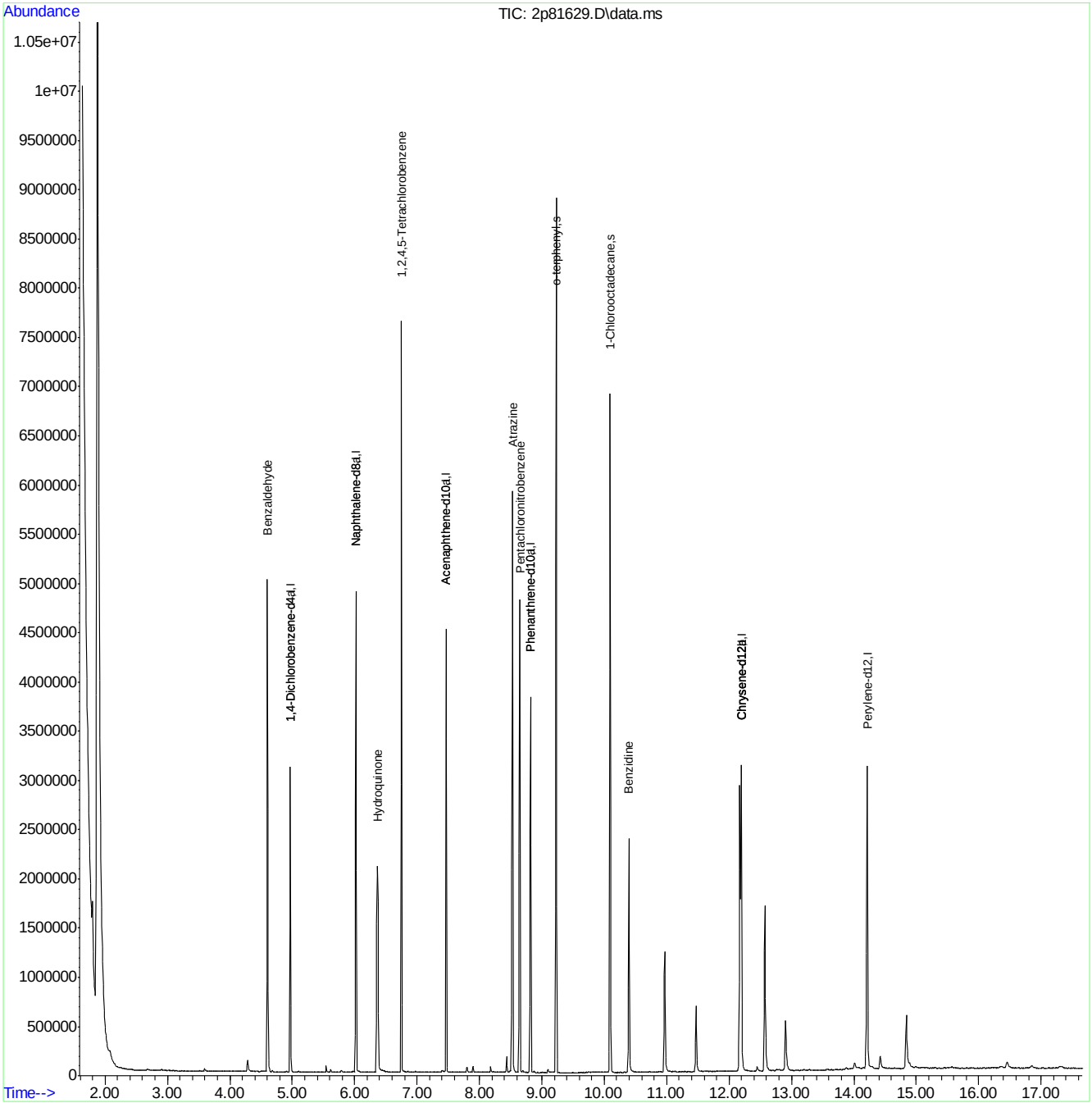
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	393794	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	1554785	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	717976	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	1160428	40.00	ppm	0.00
83) Chrysene-d12	12.199	240	1267877	40.00	ppm	0.00
91) Perylene-d12	14.215	264	1429810	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.967	152	393794	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	1554785	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	717976	40.00	ppm	0.00
108) Chrysene-d12a	12.199	240	1267877	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	1160428	40.00	ppm	0.00
114) Chrysene-d12b	12.199	240	1267877	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	10.091	57	940388	89.82	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	179.64%#		
112) o-terphenyl	9.230	230	1687708	97.30	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	194.60%#		
Target Compounds						Qvalue
102) Benzaldehyde	4.603	105	850858	91.59	ppm	98
104) Hydroquinone	6.369	110	1152538	93.04	ppm	98
106) Atrazine	8.529	215	337844	91.42	ppm	96
107) 1,2,4,5-Tetrachloroben...	6.748	216	1037995	93.73	ppm	98
109) Benzidine	10.396	184	918096	108.47	ppm	100
113) Pentachloronitrobenzene	8.647	295	130304	100.87	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81629.D
Acq On : 9 Aug 2018 8:58 pm
Operator : seanb1
Sample : ic3596-100
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 10 14:50:36 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81630.D
Acq On : 9 Aug 2018 9:20 pm
Operator : seanb1
Sample : ic3596-80
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 14:51:15 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration

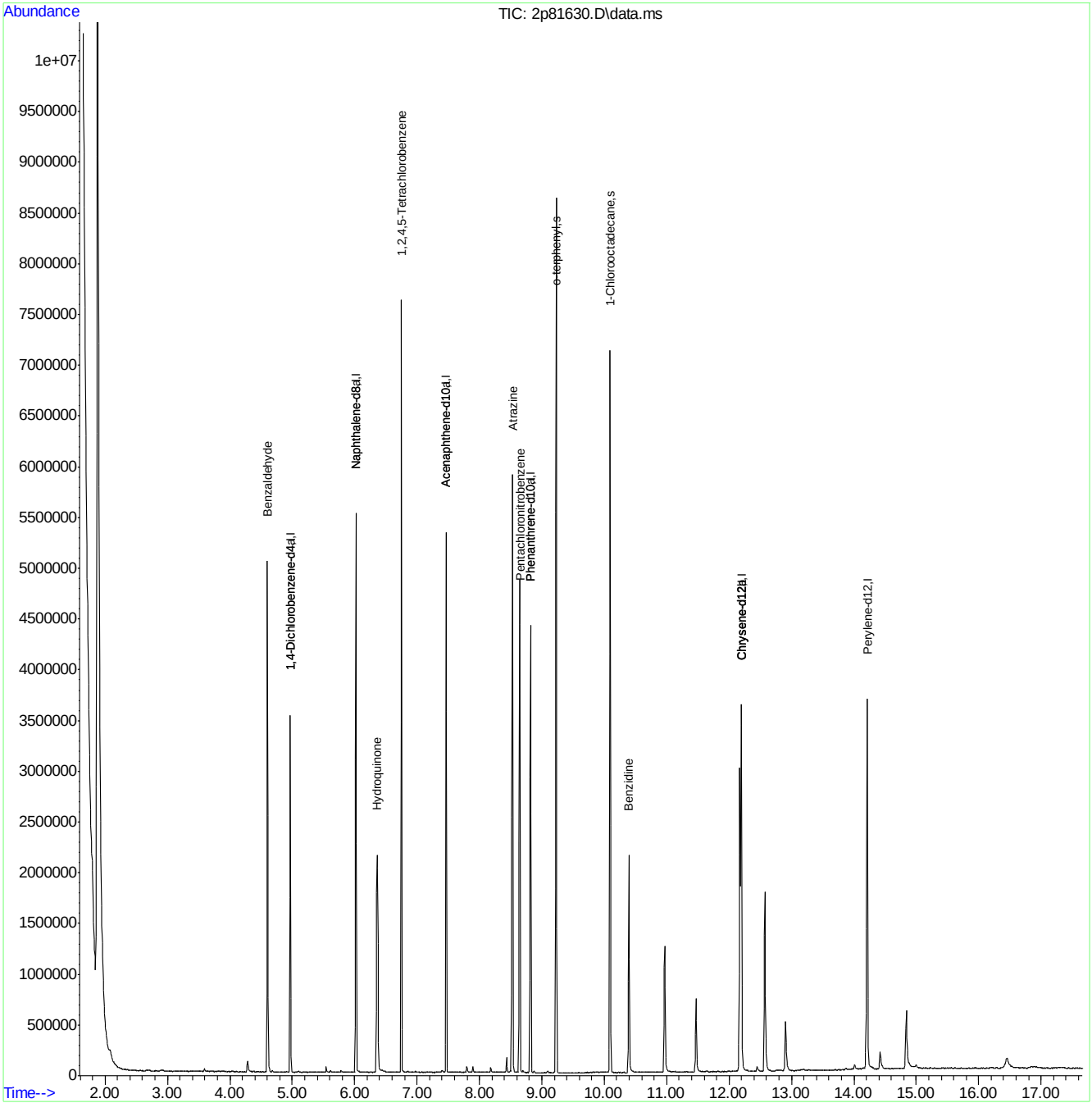
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	438080	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	1751043	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	830640	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	1352795	40.00	ppm	0.00
83) Chrysene-d12	12.199	240	1504169	40.00	ppm	0.00
91) Perylene-d12	14.215	264	1681885	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.967	152	438080	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	1751043	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	830640	40.00	ppm	0.00
108) Chrysene-d12a	12.199	240	1504169	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	1352795	40.00	ppm	0.00
114) Chrysene-d12b	12.199	240	1504169	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	10.091	57	943162	77.27	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	154.54%#		
112) o-terphenyl	9.230	230	1645981	81.40	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	162.80%#		
Target Compounds						Qvalue
102) Benzaldehyde	4.603	105	813811	78.75	ppm	99
104) Hydroquinone	6.358	110	1120614	80.32	ppm	99
106) Atrazine	8.529	215	336168	78.63	ppm	95
107) 1,2,4,5-Tetrachloroben...	6.748	216	982311	76.67	ppm	99
109) Benzidine	10.396	184	862986	85.94	ppm	99
113) Pentachloronitrobenzene	8.647	295	127334	84.56	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81630.D
Acq On : 9 Aug 2018 9:20 pm
Operator : seanb1
Sample : ic3596-80
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 14:51:15 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81631.D
Acq On : 9 Aug 2018 9:43 pm
Operator : seanb1
Sample : icc3596-50
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 10 14:51:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration

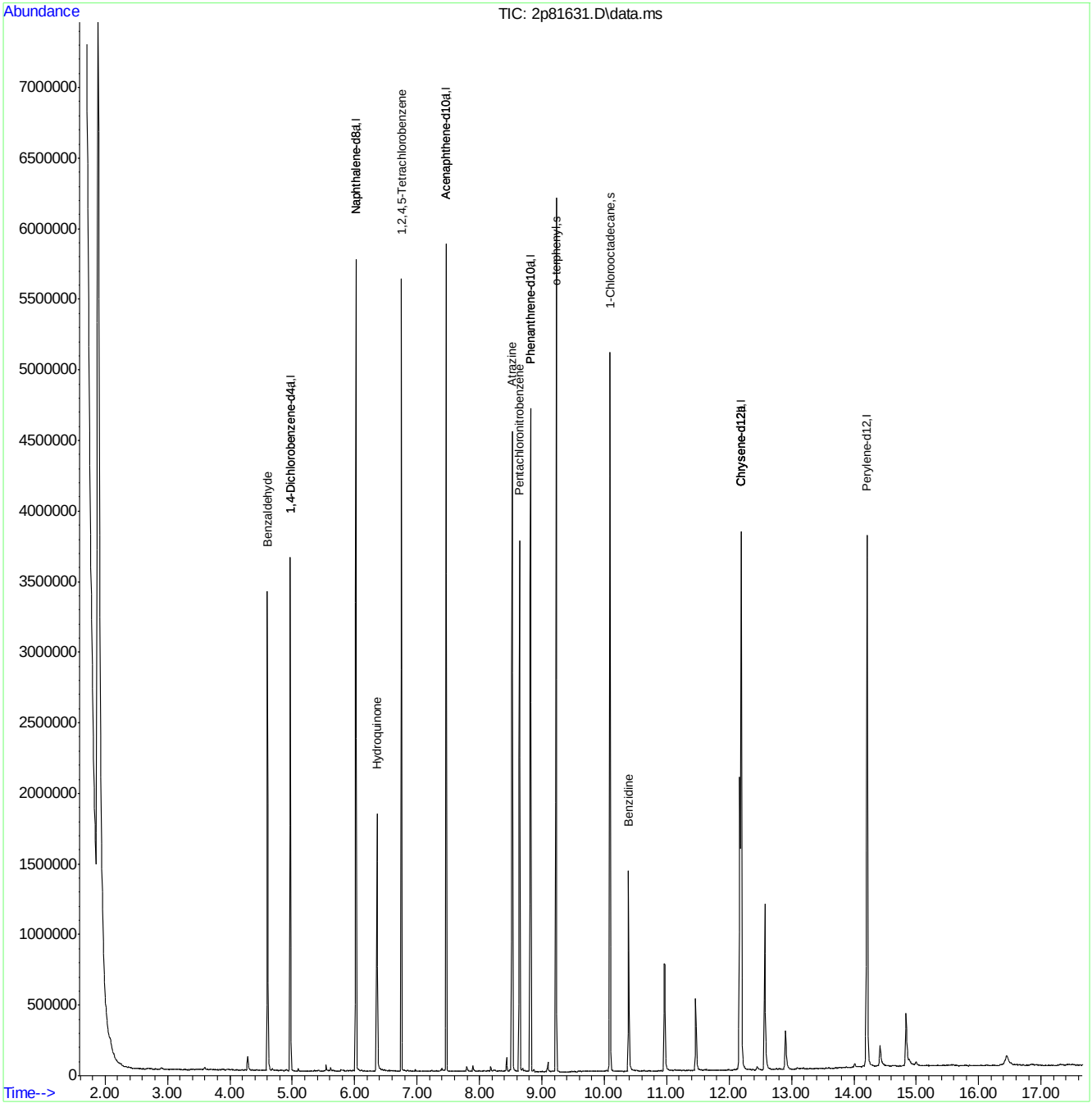
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	479738	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	1852410	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	881894	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	1495710	40.00	ppm	0.00
83) Chrysene-d12	12.193	240	1640792	40.00	ppm	-0.01
91) Perylene-d12	14.210	264	1763753	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.967	152	479738	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	1852410	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	881894	40.00	ppm	0.00
108) Chrysene-d12a	12.193	240	1640792	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	1495710	40.00	ppm	0.00
114) Chrysene-d12b	12.193	240	1640792	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	10.091	57	674748	50.00	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	100.00%#		
112) o-terphenyl	9.230	230	1117877	50.00	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	100.00%#		
Target Compounds						Qvalue
102) Benzaldehyde	4.604	105	565854	50.00	ppm	100
104) Hydroquinone	6.358	110	737963	50.00	ppm	100
106) Atrazine	8.524	215	226957	50.00	ppm	100
107) 1,2,4,5-Tetrachloroben...	6.748	216	680154	50.00	ppm	100
109) Benzidine	10.391	184	547678	50.00	ppm	100
113) Pentachloronitrobenzene	8.642	295	83249	50.00	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81631.D
Acq On : 9 Aug 2018 9:43 pm
Operator : seanb1
Sample : icc3596-50
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 10 14:51:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81632.D
Acq On : 9 Aug 2018 10:05 pm
Operator : seanb1
Sample : ic3596-25
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 10 14:52:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration

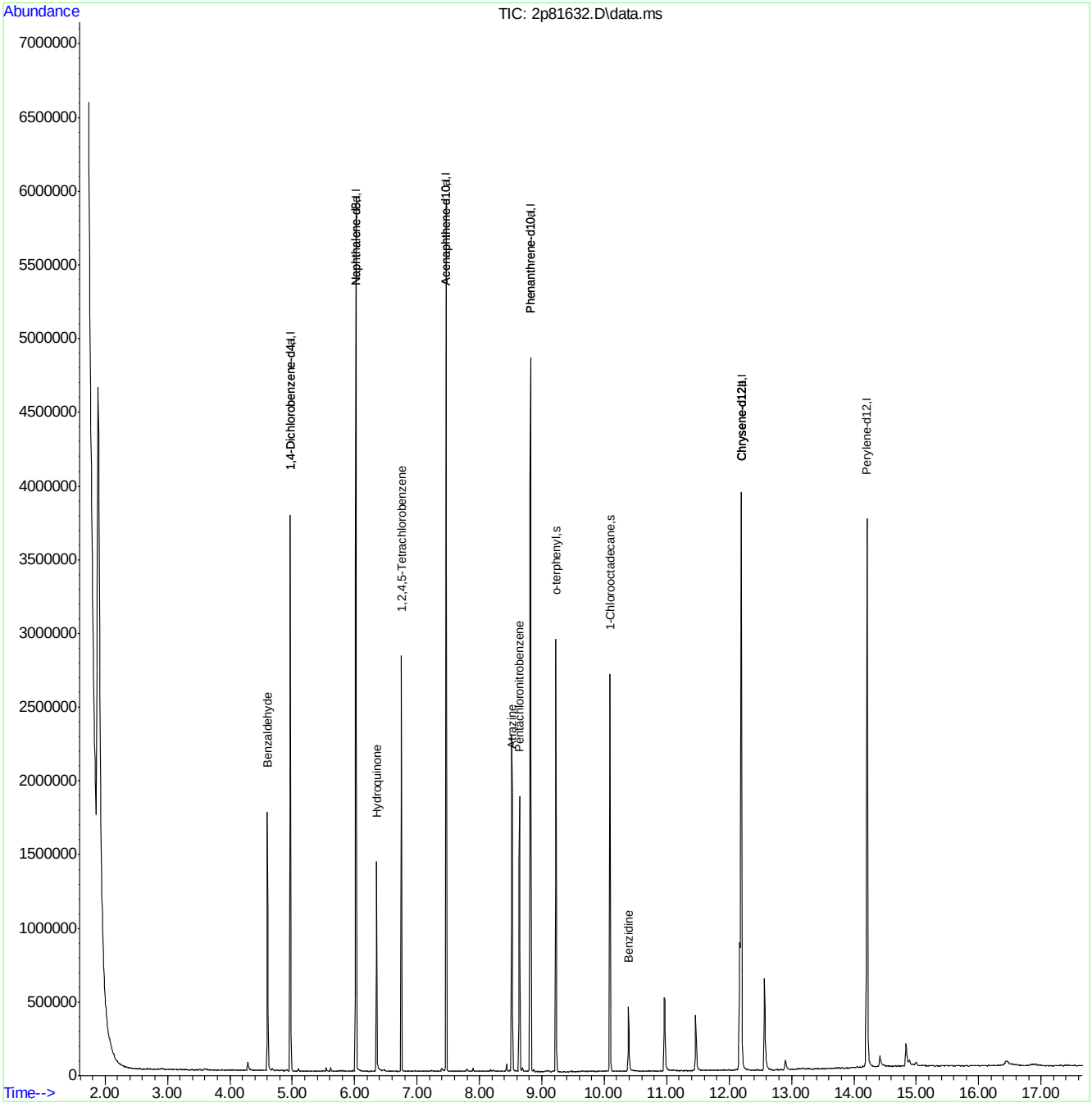
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	498262	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	1900818	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	908469	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	1571545	40.00	ppm	0.00
83) Chrysene-d12	12.199	240	1674999	40.00	ppm	0.00
91) Perylene-d12	14.210	264	1690507	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.967	152	498262	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	1900818	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	908469	40.00	ppm	0.00
108) Chrysene-d12a	12.199	240	1674999	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	1571545	40.00	ppm	0.00
114) Chrysene-d12b	12.199	240	1674999	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	10.091	57	352697	24.87	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	49.74%		
112) o-terphenyl	9.230	230	564883	24.05	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	48.10%		
Target Compounds						Qvalue
102) Benzaldehyde	4.604	105	298923	25.43	ppm	98
104) Hydroquinone	6.353	110	359945	23.77	ppm	98
106) Atrazine	8.524	215	110787	23.69	ppm	91
107) 1,2,4,5-Tetrachloroben...	6.748	216	343727	24.53	ppm	96
109) Benzidine	10.391	184	172471	15.42	ppm	98
113) Pentachloronitrobenzene	8.642	295	41498	23.72	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81632.D
Acq On : 9 Aug 2018 10:05 pm
Operator : seanb1
Sample : ic3596-25
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 10 14:52:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81633.D
Acq On : 9 Aug 2018 10:28 pm
Operator : seanb1
Sample : ic3596-10
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 10 14:53:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration

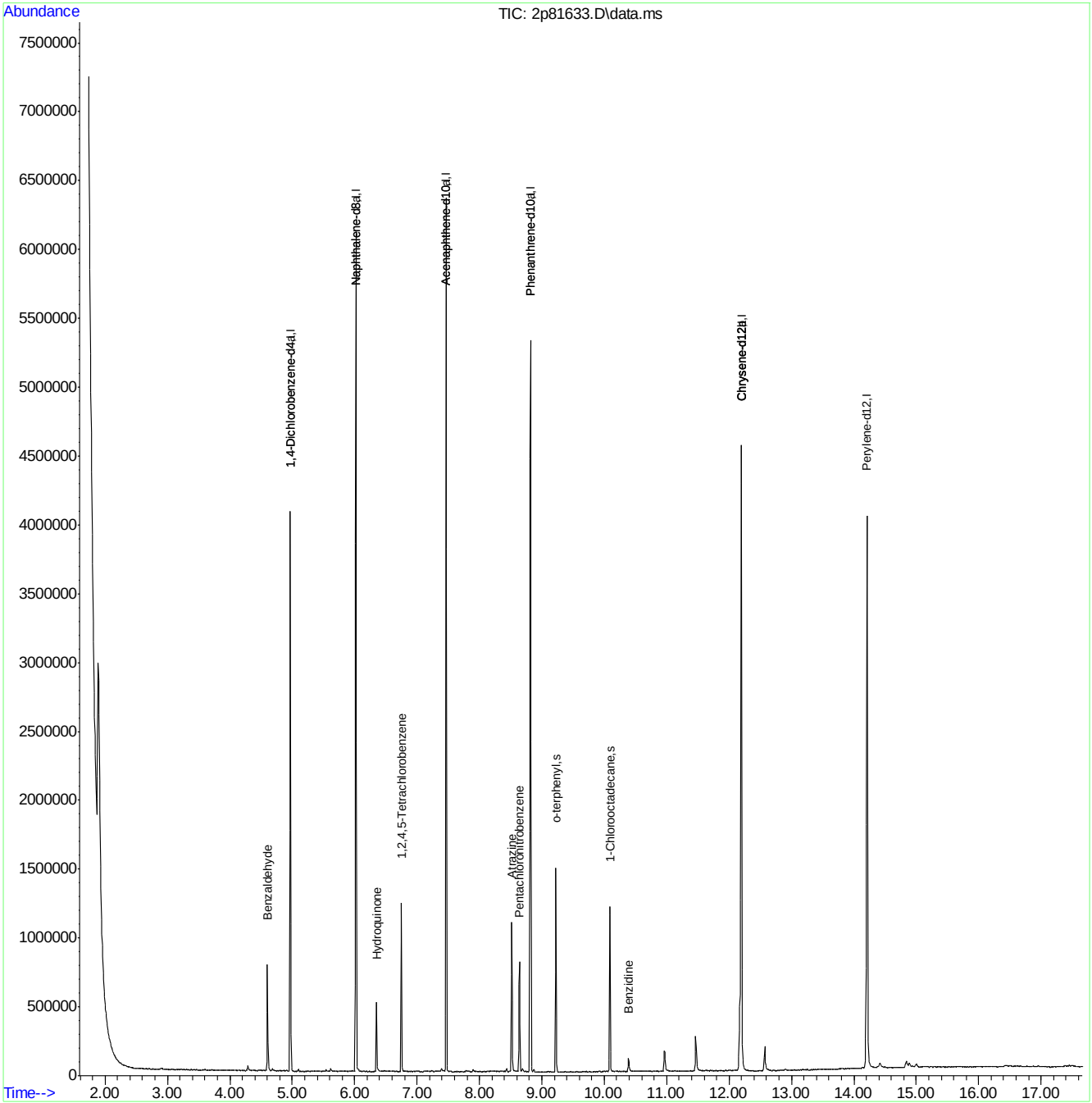
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	532342	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	2021991	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	985502	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	1740643	40.00	ppm	0.00
83) Chrysene-d12	12.199	240	1810461	40.00	ppm	0.00
91) Perylene-d12	14.210	264	1770514	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.967	152	532342	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	2021991	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	985502	40.00	ppm	0.00
108) Chrysene-d12a	12.199	240	1810461	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	1740643	40.00	ppm	0.00
114) Chrysene-d12b	12.199	240	1810461	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	10.091	57	157780	10.05	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	20.10%		
112) o-terphenyl	9.225	230	264176	10.15	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	20.30%		
Target Compounds						Qvalue
102) Benzaldehyde	4.604	105	135148	10.76	ppm	98
104) Hydroquinone	6.353	110	140531	8.72	ppm	96
106) Atrazine	8.519	215	48694	9.60	ppm	98
107) 1,2,4,5-Tetrachloroben...	6.748	216	156689	10.31	ppm	99
109) Benzidine	10.391	184	39120	3.24	ppm	96
113) Pentachloronitrobenzene	8.642	295	16455	8.49	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81633.D
Acq On : 9 Aug 2018 10:28 pm
Operator : seanb1
Sample : ic3596-10
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 10 14:53:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81634.D
Acq On : 9 Aug 2018 10:51 pm
Operator : seanb1
Sample : ic3596-5
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 10 14:54:10 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration

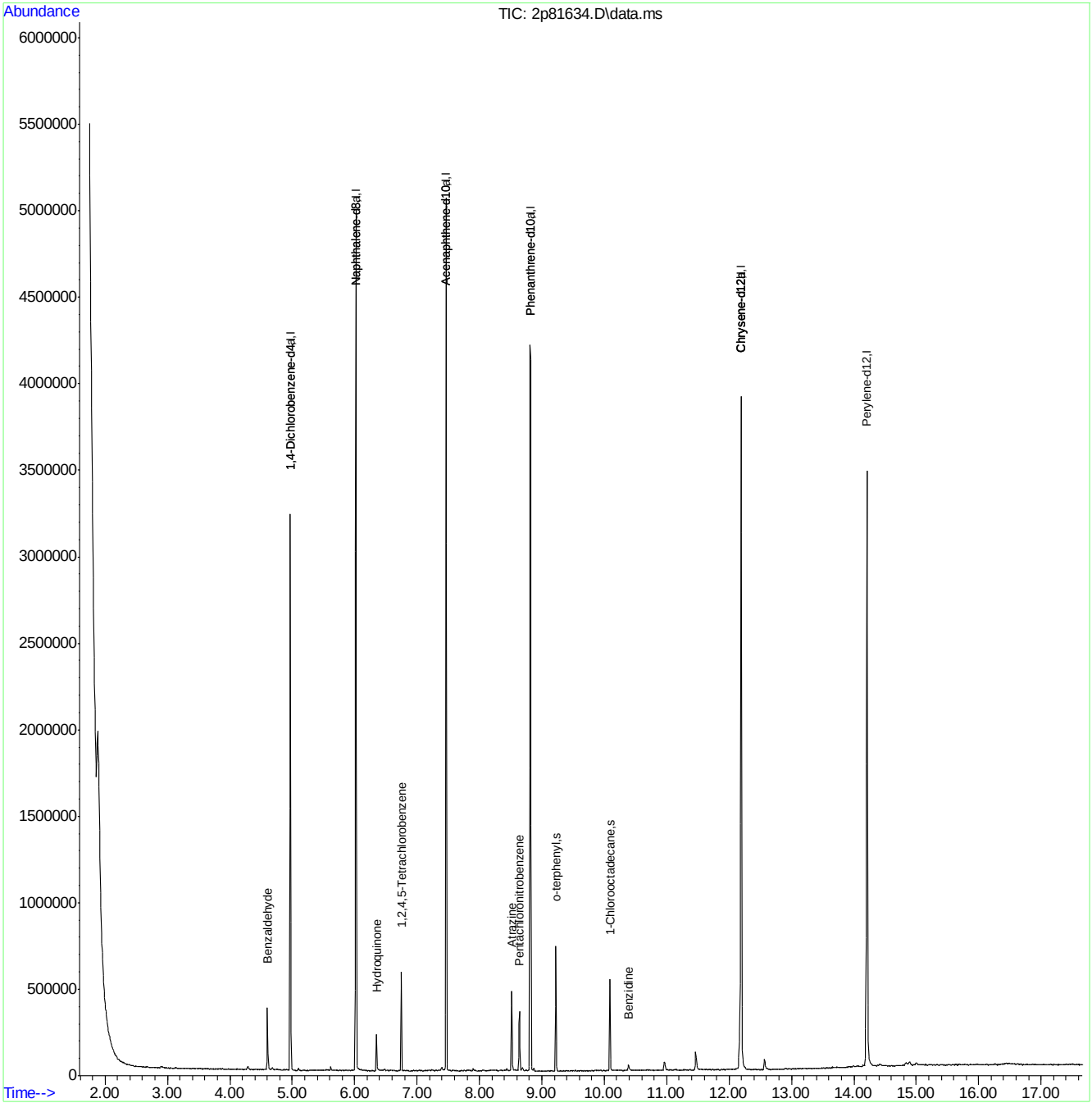
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	425854	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	1614243	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	777585	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	1425146	40.00	ppm	0.00
83) Chrysene-d12	12.193	240	1493908	40.00	ppm	-0.01
91) Perylene-d12	14.210	264	1496818	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.967	152	425854	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	1614243	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	777585	40.00	ppm	0.00
108) Chrysene-d12a	12.193	240	1493908	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	1425146	40.00	ppm	0.00
114) Chrysene-d12b	12.193	240	1493908	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	10.091	57	70507	5.48	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	10.96%#		
112) o-terphenyl	9.225	230	121579	5.71	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	11.42%#		
Target Compounds						Qvalue
102) Benzaldehyde	4.604	105	62254	6.20	ppm	96
104) Hydroquinone	6.353	110	61111	4.75	ppm	97
106) Atrazine	8.519	215	21812	5.45	ppm	90
107) 1,2,4,5-Tetrachloroben...	6.748	216	74602	6.22	ppm	99
109) Benzidine	10.391	184	16233	1.63	ppm	96
113) Pentachloronitrobenzene	8.642	295	6097	3.84	ppm	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81634.D
Acq On : 9 Aug 2018 10:51 pm
Operator : seanb1
Sample : ic3596-5
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 10 14:54:10 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81635.D
Acq On : 9 Aug 2018 11:13 pm
Operator : seanb1
Sample : ic3596-2
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 10 14:57:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration

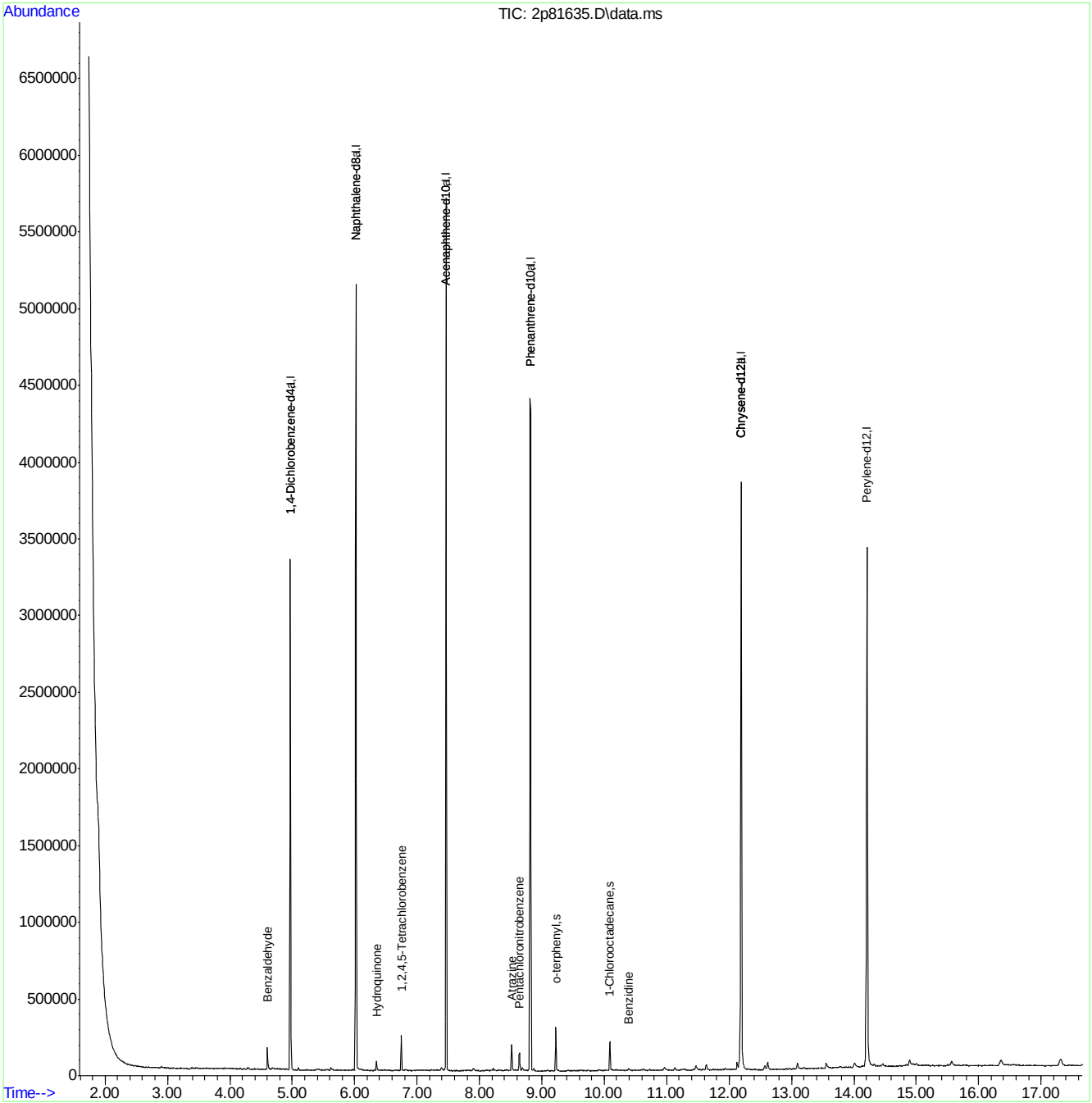
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	443905	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	1678229	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	817080	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	1483418	40.00	ppm	0.00
83) Chrysene-d12	12.193	240	1522300	40.00	ppm	-0.01
91) Perylene-d12	14.210	264	1482635	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.967	152	443905	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	1678229	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	817080	40.00	ppm	0.00
108) Chrysene-d12a	12.193	240	1522300	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	1483418	40.00	ppm	0.00
114) Chrysene-d12b	12.193	240	1522300	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	10.086	57	27067	2.02	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	4.04%#		
112) o-terphenyl	9.225	230	46525	2.10	ppm	0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	4.20%#		
Target Compounds						Qvalue
102) Benzaldehyde	4.604	105	25544	2.44	ppm	93
104) Hydroquinone	6.353	110	18927	1.42	ppm	96
106) Atrazine	8.519	215	8134	1.93	ppm	99
107) 1,2,4,5-Tetrachloroben...	6.748	216	30141	2.39	ppm	99
109) Benzidine	10.391	184	4864	0.48	ppm	97
113) Pentachloronitrobenzene	8.642	295	2142	1.30	ppm	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81635.D
Acq On : 9 Aug 2018 11:13 pm
Operator : seanb1
Sample : ic3596-2
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 10 14:57:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81636.D
Acq On : 9 Aug 2018 11:36 pm
Operator : seanb1
Sample : ic3596-1
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 10 14:57:39 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration

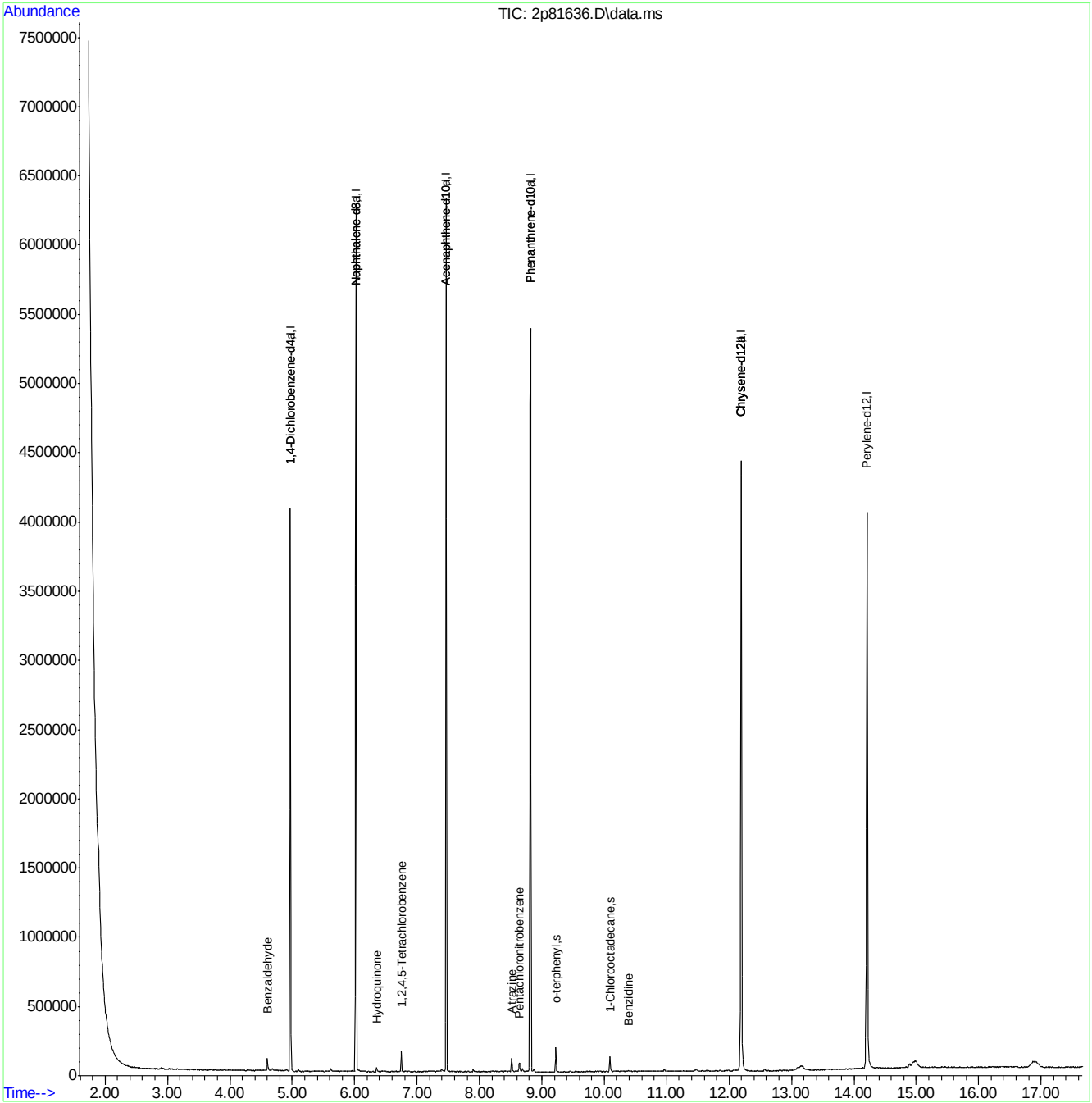
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.967	152	540210	40.00	ppm		0.00
24) Naphthalene-d8	6.021	136	1994215	40.00	ppm		0.00
47) Acenaphthene-d10	7.465	164	977138	40.00	ppm		0.00
69) Phenanthrene-d10	8.818	188	1787073	40.00	ppm		0.00
83) Chrysene-d12	12.193	240	1862648	40.00	ppm		-0.01
91) Perylene-d12	14.210	264	1794984	40.00	ppm		-0.01
101) 1,4-Dichlorobenzene-d4a	4.967	152	540210	40.00	ppm		0.00
103) Naphthalene-d8a	6.021	136	1994215	40.00	ppm		0.00
105) Acenaphthene-d10a	7.465	164	977138	40.00	ppm		0.00
108) Chrysene-d12a	12.193	240	1862648	40.00	ppm		0.00
110) Phenanthrene-d10a	8.818	188	1787073	40.00	ppm		0.00
114) Chrysene-d12b	12.193	240	1862648	40.00	ppm		-0.01
System Monitoring Compounds							
5) 2-Fluorophenol	0.000	112	0	0.00	ppm		
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm		
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm		
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm		
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm		
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm		
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#			
111) 1-Chlorooctadecane	10.091	57	15765	0.98	ppm		0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	1.96%#			
112) o-terphenyl	9.225	230	28873	1.08	ppm		0.00
Spiked Amount 50.000	Range 20 - 70		Recovery =	2.16%#			
Target Compounds							Qvalue
102) Benzaldehyde	4.604	105	16088	1.26	ppm		95
104) Hydroquinone	6.353	110	10275	0.65	ppm	#	89
106) Atrazine	8.519	215	4593	0.91	ppm		97
107) 1,2,4,5-Tetrachloroben...	6.748	216	18761	1.24	ppm		96
109) Benzidine	10.391	184	2293	0.18	ppm		64
113) Pentachloronitrobenzene	8.642	295	1385	0.70	ppm	#	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81636.D
Acq On : 9 Aug 2018 11:36 pm
Operator : seanb1
Sample : ic3596-1
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 10 14:57:39 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 14:50:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81637.D
Acq On : 9 Aug 2018 11:58 pm
Operator : seanb1
Sample : icv3596-50
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 10 15:25:49 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

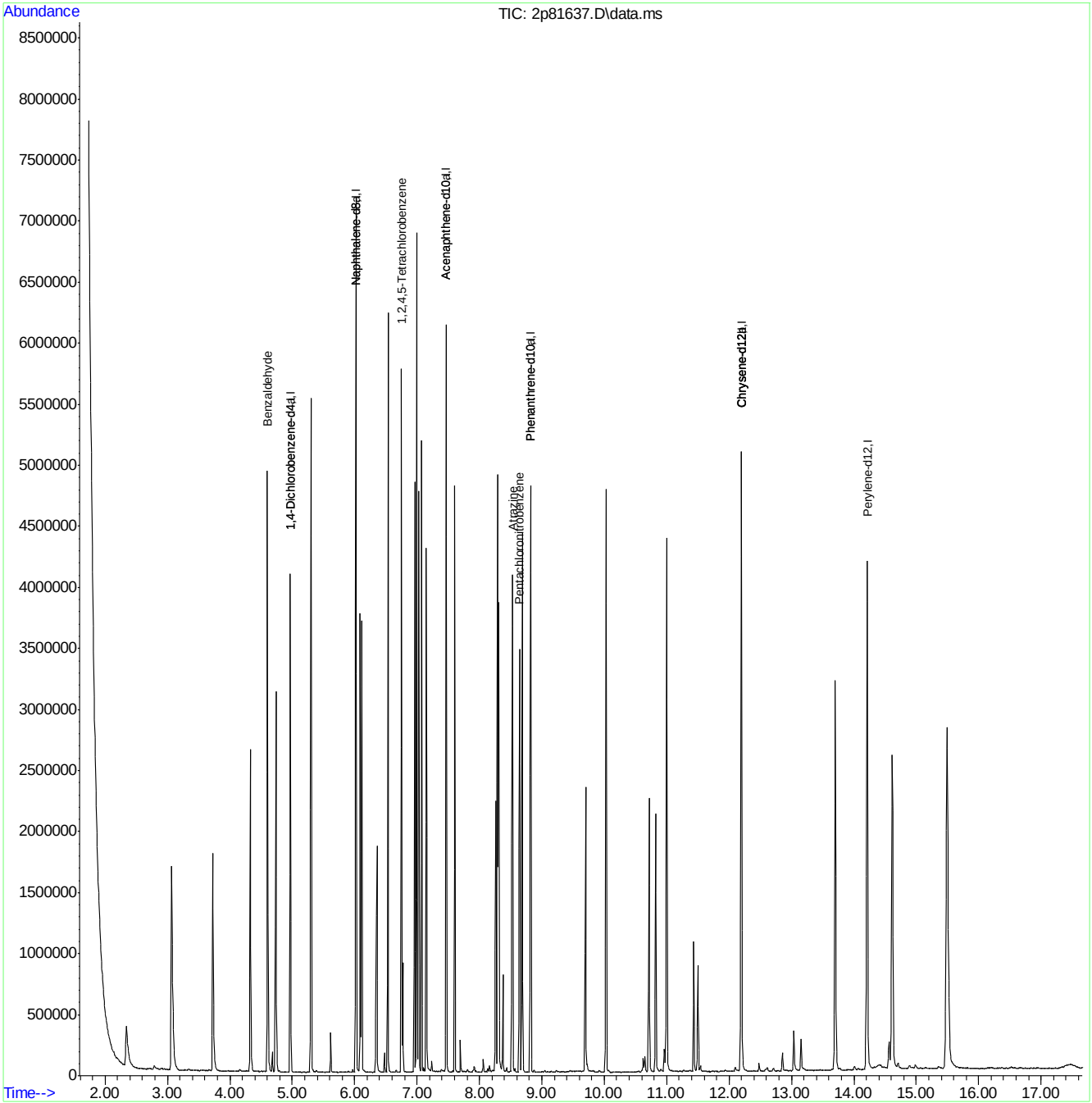
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	557139	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	2278520	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	1020157	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	1564623	40.00	ppm	0.00
83) Chrysene-d12	12.198	240	2063997	40.00	ppm	0.00
91) Perylene-d12	14.215	264	1925542	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.967	152	557139	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	2278520	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	1020157	40.00	ppm	0.00
108) Chrysene-d12a	12.198	240	2063997	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	1564623	40.00	ppm	0.00
114) Chrysene-d12b	12.198	240	2063997	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
Target Compounds						Qvalue
102) Benzaldehyde	4.603	105	846864	59.15	ppm	98
106) Atrazine	8.529	215	219368	42.99	ppm	95
107) 1,2,4,5-Tetrachloroben...	6.748	216	725925	42.95	ppm	98
113) Pentachloronitrobenzene	8.642	295	80486	52.99	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81637.D
Acq On : 9 Aug 2018 11:58 pm
Operator : seanb1
Sample : icv3596-50
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 10 15:25:49 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81638.D
Acq On : 10 Aug 2018 12:21 am
Operator : seanb1
Sample : icv3596-50
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 10 15:26:21 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

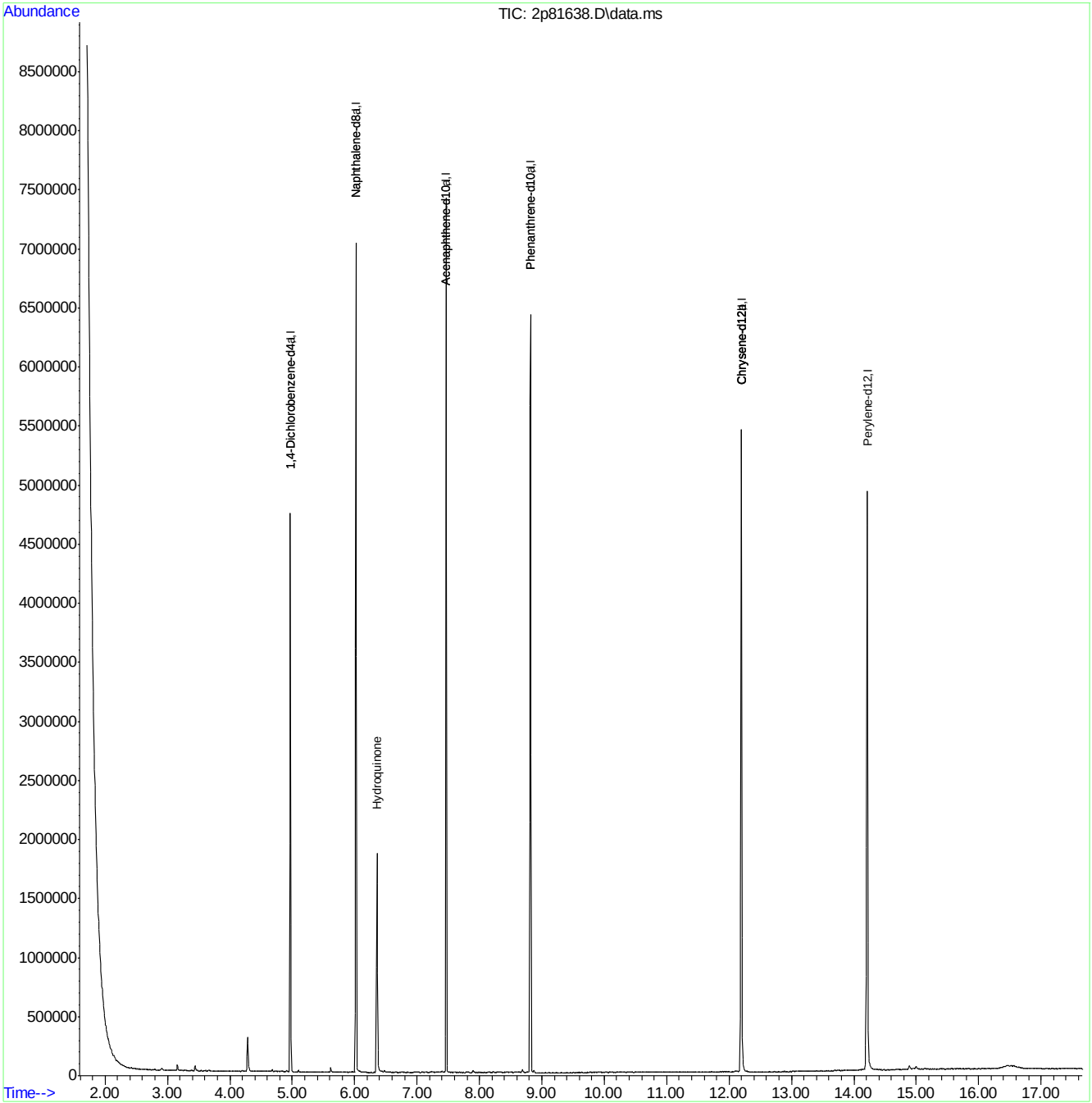
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	616071	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	2287122	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	1138439	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	2114287	40.00	ppm	0.00
83) Chrysene-d12	12.198	240	2309061	40.00	ppm	0.00
91) Perylene-d12	14.215	264	2307935	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.967	152	616071	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	2287122	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	1138439	40.00	ppm	0.00
108) Chrysene-d12a	12.198	240	2309061	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	2114287	40.00	ppm	0.00
114) Chrysene-d12b	12.198	240	2309061	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
Target Compounds						Qvalue
104) Hydroquinone	6.358	110	805766	50.09	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3596\
Data File : 2p81638.D
Acq On : 10 Aug 2018 12:21 am
Operator : seanb1
Sample : icv3596-50
Misc : op13652,e2p3596,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 10 15:26:21 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3597\
Data File : 2p81643.D
Acq On : 10 Aug 2018 4:33 pm
Operator : seanb1
Sample : icv3596-50
Misc : op13652,e2p3597,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 10 16:54:07 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

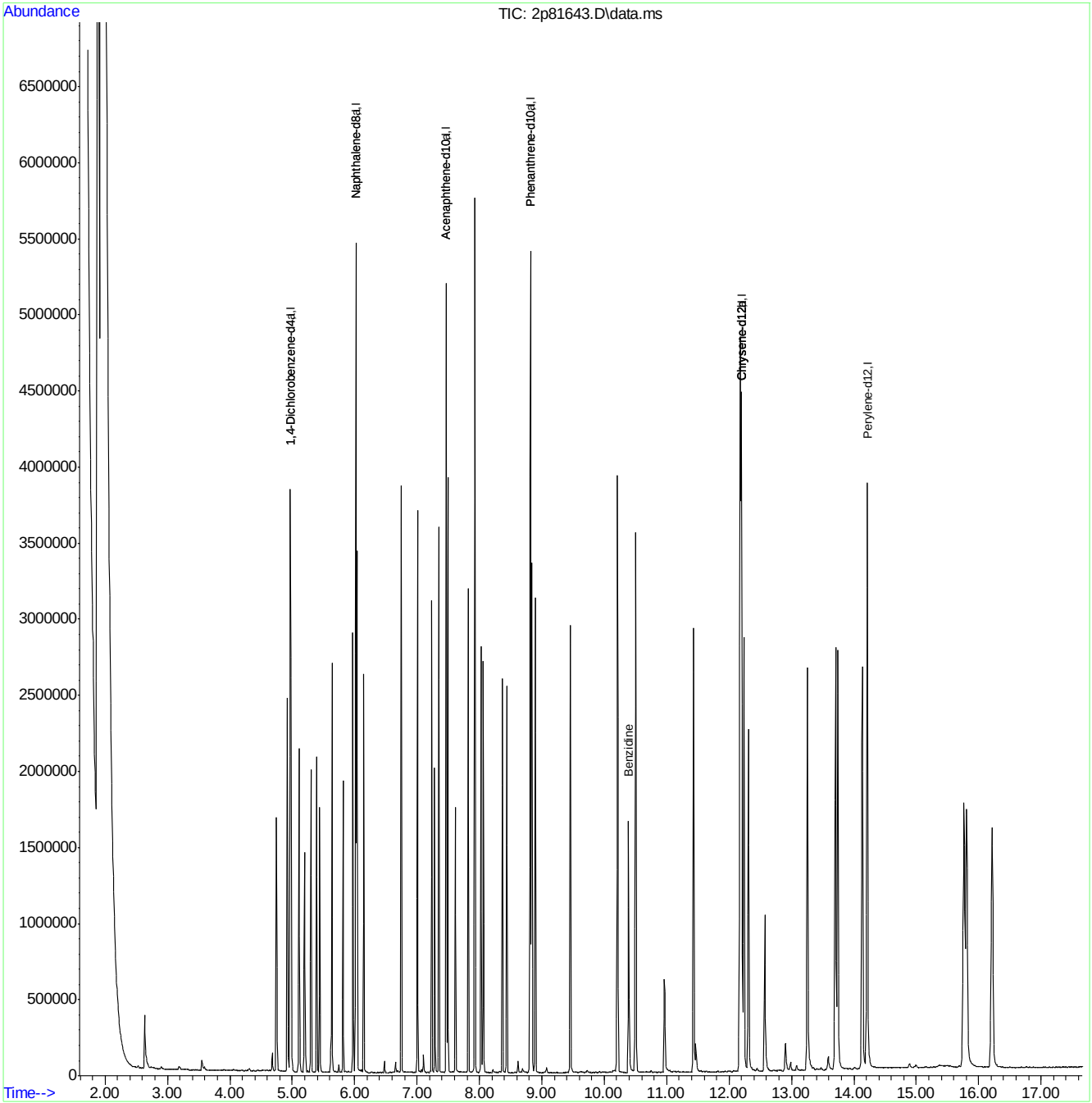
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	514812	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	1764295	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	892060	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	1754656	40.00	ppm	0.00
83) Chrysene-d12	12.204	240	1726736	40.00	ppm	0.00
91) Perylene-d12	14.215	264	1698476	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.967	152	514812	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	1764295	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	892060	40.00	ppm	0.00
108) Chrysene-d12a	12.204	240	1726736	40.00	ppm	0.01
110) Phenanthrene-d10a	8.818	188	1754656	40.00	ppm	0.00
114) Chrysene-d12b	12.204	240	1726736	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
Target Compounds						Qvalue
109) Benzidine	10.391	184	613423	55.31	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3597\
Data File : 2p81643.D
Acq On : 10 Aug 2018 4:33 pm
Operator : seanb1
Sample : icv3596-50
Misc : op13652,e2p3597,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 10 16:54:07 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3598\
Data File : 2p81646.D
Acq On : 10 Aug 2018 5:32 pm
Operator : seanb1
Sample : icv3595-50
Misc : op13652,e2p3598,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 10 17:58:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	382361	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	1455536	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	716506	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	1371376	40.00	ppm	0.00
83) Chrysene-d12	12.199	240	1459256	40.00	ppm	0.00
91) Perylene-d12	14.215	264	1492510	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.967	152	382361	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	1455536	40.00	ppm	0.00
105) Acenaphthene-d10a	7.465	164	716506	40.00	ppm	0.00
108) Chrysene-d12a	12.199	240	1459256	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	1371376	40.00	ppm	0.00
114) Chrysene-d12b	12.199	240	1459256	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.892	112	616888	45.12	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 90.24%#			
8) Phenol-d5	4.678	99	765853	44.48	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 88.96%#			
25) Nitrobenzene-d5	5.427	82	707516	45.04	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 90.08%#			
51) 2-Fluorobiphenyl	6.909	172	1343223	48.06	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 96.12%#			
73) 2,4,6-Tribromophenol	8.144	330	192449	50.32	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 100.64%#			
85) Terphenyl-d14	10.733	244	1720627	52.35	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery = 104.70%#			
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			

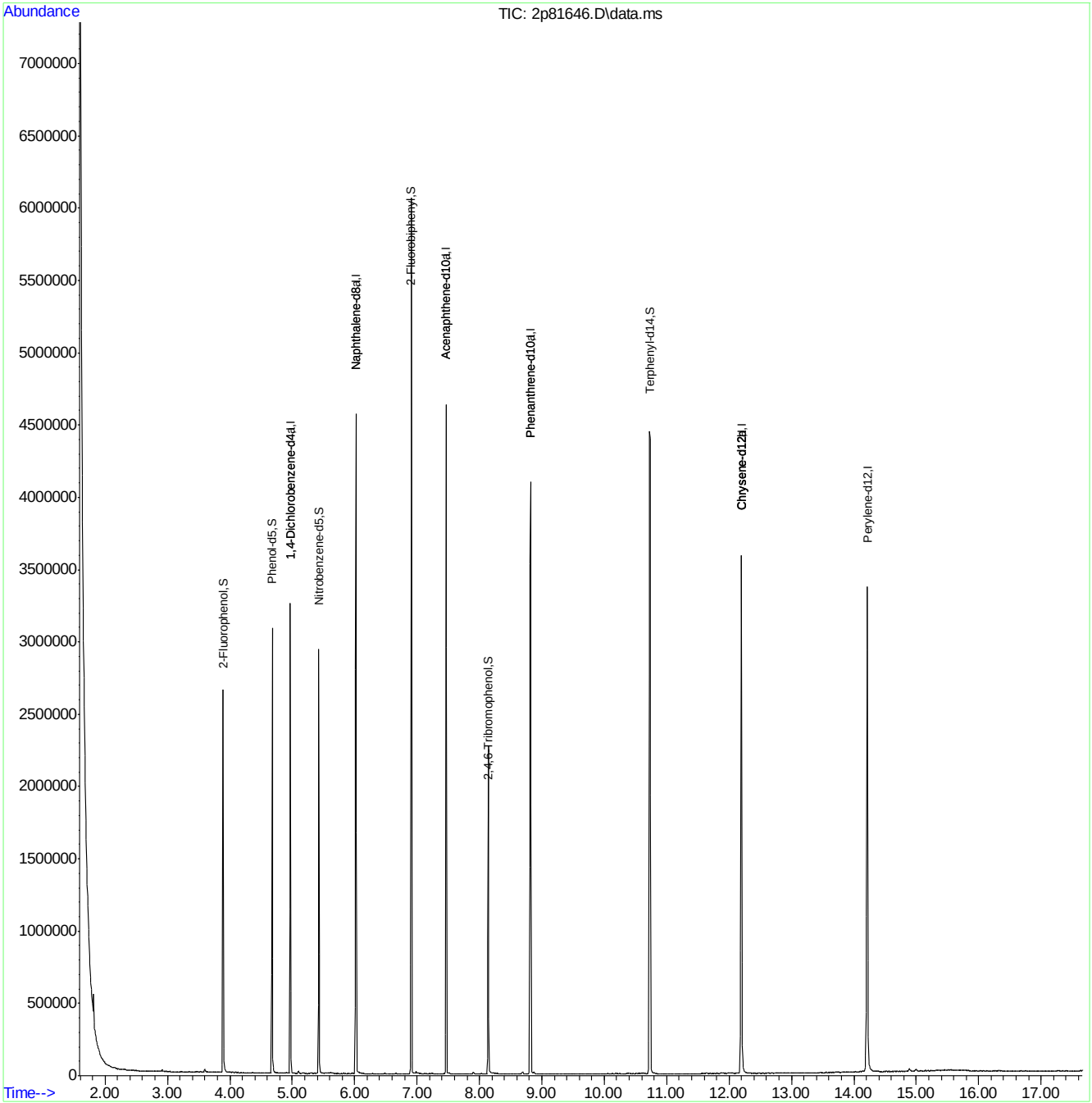
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3598\
Data File : 2p81646.D
Acq On : 10 Aug 2018 5:32 pm
Operator : seanb1
Sample : icv3595-50
Misc : op13652,e2p3598,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 10 17:58:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3598\
Data File : 2p81647.D
Acq On : 10 Aug 2018 5:55 pm
Operator : seanb1
Sample : icv3595-50
Misc : op13652,e2p3598,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 18:30:13 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

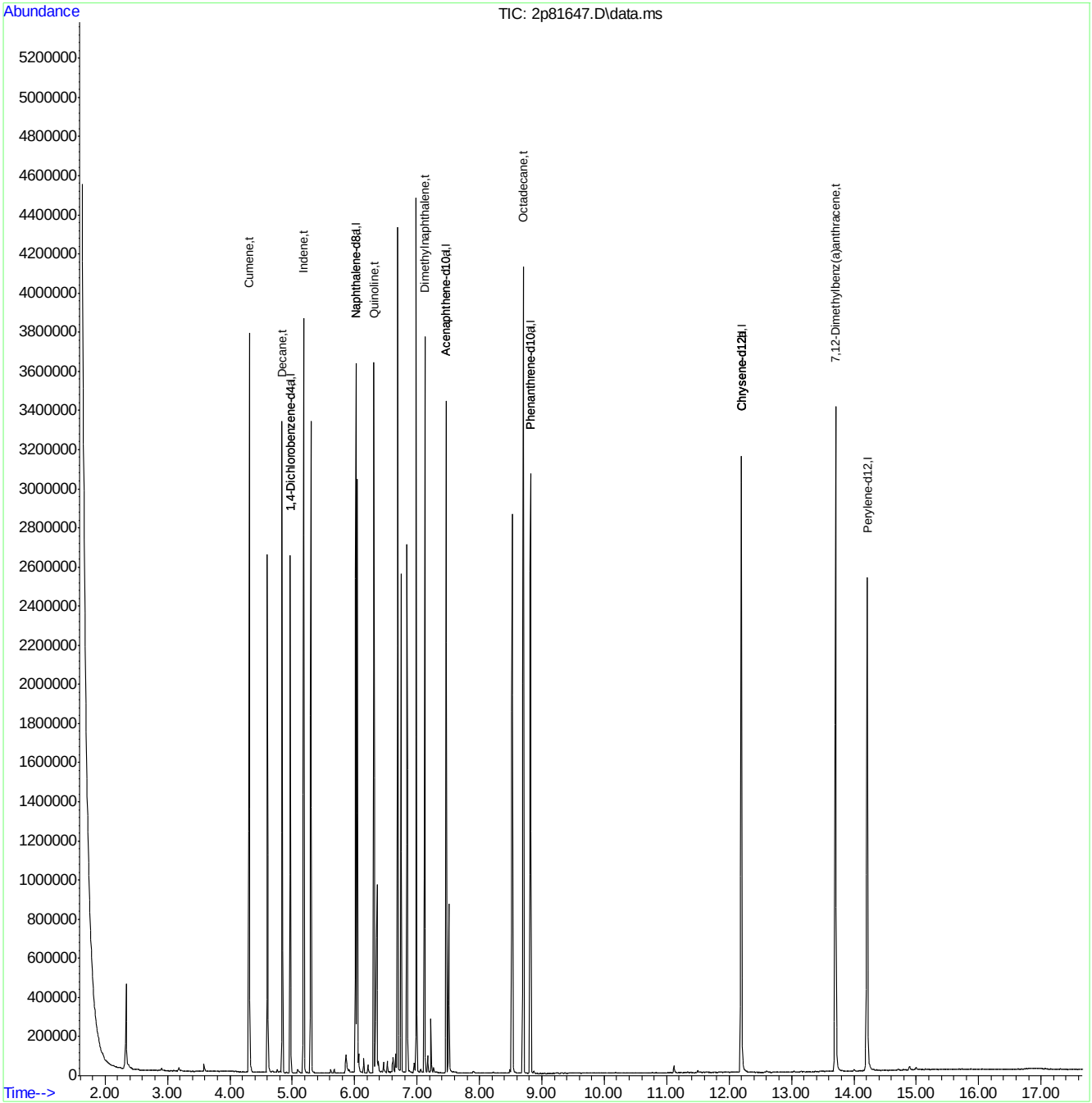
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.967	152	303594	40.00	ppm	0.00
24) Naphthalene-d8	6.021	136	1214046	40.00	ppm	0.00
47) Acenaphthene-d10	7.465	164	521859	40.00	ppm	0.00
69) Phenanthrene-d10	8.818	188	979037	40.00	ppm	0.00
83) Chrysene-d12	12.199	240	1337046	40.00	ppm	0.00
91) Perylene-d12	14.215	264	1205171	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.967	152	303594	40.00	ppm	0.00
103) Naphthalene-d8a	6.021	136	1214046	40.00	ppm	# 0.00
105) Acenaphthene-d10a	7.465	164	521859	40.00	ppm	0.00
108) Chrysene-d12a	12.199	240	1337046	40.00	ppm	0.00
110) Phenanthrene-d10a	8.818	188	979037	40.00	ppm	0.00
114) Chrysene-d12b	12.199	240	1337046	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery =	0.00%#		
Target Compounds						Qvalue
6) Indene	5.181	116	878559	50.60	ppm	98
7) Cumene	4.309	105	1398008	48.59	ppm	99
13) Decane	4.839	57	558942	45.33	ppm	98
27) Quinoline	6.310	129	910518	41.58	ppm	100
46) Dimethylnaphthalene	7.123	156	704438	37.93	ppm	99
82) Octadecane	8.701	43	509722	49.46	ppm	98
99) 7,12-Dimethylbenz(a)an...	13.707	256	809755	52.11	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3598\
Data File : 2p81647.D
Acq On : 10 Aug 2018 5:55 pm
Operator : seanb1
Sample : icv3595-50
Misc : op13652,e2p3598,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 10 18:30:13 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 08/15/18 17:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81773.D
Acq On : 15 Aug 2018 9:01 am
Operator : angelar
Sample : cc3595-50
Misc : op13652,e2p3603,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 15 12:37:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.956	152	366577	40.00	ppm	-0.02
24) Naphthalene-d8	6.010	136	1264551	40.00	ppm	-0.02
47) Acenaphthene-d10	7.460	164	623430	40.00	ppm	-0.01
69) Phenanthrene-d10	8.813	188	1236094	40.00	ppm	0.00
83) Chrysene-d12	12.209	240	1264160	40.00	ppm	0.00
91) Perylene-d12	14.231	264	1219279	40.00	ppm	0.01
101) 1,4-Dichlorobenzene-d4a	4.956	152	366577	40.00	ppm	-0.01
103) Naphthalene-d8a	6.010	136	1264551	40.00	ppm	-0.01
105) Acenaphthene-d10a	7.460	164	623430	40.00	ppm	0.00
108) Chrysene-d12a	12.209	240	1264160	40.00	ppm	0.02
110) Phenanthrene-d10a	8.813	188	1236094	40.00	ppm	0.00
114) Chrysene-d12b	12.209	240	1264160	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.876	112	835141	63.71	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 127.42%#			
8) Phenol-d5	4.684	99	951916	57.66	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 115.32%#			
25) Nitrobenzene-d5	5.416	82	692533	50.75	ppm	-0.02
Spiked Amount 50.000	Range 19 - 61		Recovery = 101.50%#			
51) 2-Fluorobiphenyl	6.898	172	1123996	46.22	ppm	-0.01
Spiked Amount 50.000	Range 21 - 58		Recovery = 92.44%#			
73) 2,4,6-Tribromophenol	8.139	330	187980	54.53	ppm	-0.01
Spiked Amount 50.000	Range 12 - 68		Recovery = 109.06%#			
85) Terphenyl-d14	10.722	244	1535804	53.94	ppm	-0.01
Spiked Amount 50.000	Range 16 - 65		Recovery = 107.88%#			
111) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
112) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000	Range 20 - 70		Recovery = 0.00%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.309	88	289422	56.07	ppm	98
3) Pyridine	2.646	79	783202	54.16	ppm	99
4) N-Nitrosodimethylamine	2.619	74	471432	58.17	ppm	95
6) Indene	5.170	116	993937	47.41	ppm	98
7) Cumene	4.288	105	2102052	60.50	ppm	99
9) Phenol	4.694	94	961415	51.82	ppm	99
10) Aniline	4.684	93	973180	50.12	ppm	85
11) bis(2-Chloroethyl)ether	4.737	93	608865	50.79	ppm	98
12) 2-Chlorophenol	4.791	128	701503	51.70	ppm	100
13) Decane	4.823	57	688134	46.22	ppm	98
14) 1,3-Dichlorobenzene	4.908	146	720721	48.39	ppm	98
15) 1,4-Dichlorobenzene	4.967	146	686545	48.74	ppm	100
16) Benzyl alcohol	5.079	108	407597	53.82	ppm	92
17) 1,2-Dichlorobenzene	5.096	146	640373	47.25	ppm	99
18) Acetophenone	5.293	105	854598	46.36	ppm	95
19) 2-Methylphenol	5.186	108	490721	43.38	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.181	121	153129	44.41	ppm #	60

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81773.D
Acq On : 15 Aug 2018 9:01 am
Operator : angelar
Sample : cc3595-50
Misc : op13652,e2p3603,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 15 12:37:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21)	3&4-Methylphenol	5.309	108	519561	44.37	ppm		99
22)	n-Nitroso-di-n-propyla...	5.299	70	439436	46.18	ppm		96
23)	Hexachloroethane	5.374	201	237654	47.60	ppm		93
26)	Nitrobenzene	5.432	77	649885	49.31	ppm		100
27)	Quinoline	6.320	129	1171849	51.37	ppm		98
28)	Isophorone	5.636	82	1197265	51.52	ppm		98
29)	2-Nitrophenol	5.695	139	347335	59.88	ppm		87
30)	2,4-Dimethylphenol	5.743	107	562635	51.40	ppm		97
31)	Benzoic acid	5.876	105	508510	65.61	ppm		99
32)	bis(2-Chloroethoxy)met...	5.807	93	607300	48.92	ppm		99
33)	2,4-Dichlorophenol	5.903	162	506956	51.79	ppm		96
34)	2,6-Dichlorophenol	6.085	162	449298	50.76	ppm		99
35)	1,3,5-Trichlorobenzene	5.705	180	575617	51.10	ppm		99
36)	1,2,4-Trichlorobenzene	5.962	180	527493	49.85	ppm		99
37)	1,2,3-Trichlorobenzene	6.149	180	465793	46.95	ppm		98
38)	Naphthalene	6.026	128	1568164	48.64	ppm		100
39)	4-Chloroaniline	6.080	127	667535	47.82	ppm		95
40)	2,3-Dichloroaniline	6.834	161	622815	51.17	ppm		100
41)	Caprolactam	6.390	113	193304m	53.93	ppm		
42)	Hexachlorobutadiene	6.128	225	307492	50.89	ppm		99
43)	4-Chloro-3-methylphenol	6.492	107	549688	53.29	ppm	#	47
44)	2-Methylnaphthalene	6.598	141	1031046	53.41	ppm		97
45)	1-Methylnaphthalene	6.679	141	1048655	49.48	ppm		100
46)	Dimethylnaphthalene	7.112	156	925166	47.82	ppm		97
48)	Hexachlorocyclopentadiene	6.727	237	703406	122.72	ppm		99
49)	2,4,6-Trichlorophenol	6.839	196	354254	53.09	ppm		99
50)	2,4,5-Trichlorophenol	6.877	196	360381	51.66	ppm		99
52)	2-Chloronaphthalene	7.000	162	933483	45.96	ppm		99
53)	Biphenyl	6.984	154	1335107	49.77	ppm		100
54)	2-Nitroaniline	7.091	65	399398	59.77	ppm		96
55)	Dimethylphthalate	7.230	163	1110369	48.42	ppm		99
56)	Acenaphthylene	7.342	152	1600192	49.05	ppm		99
57)	2,6-Dinitrotoluene	7.283	165	259104	57.81	ppm		97
58)	3-Nitroaniline	7.428	138	318032	55.22	ppm		94
59)	Acenaphthene	7.486	153	1033535	49.75	ppm		100
60)	2,4-Dinitrophenol	7.518	184	279233	122.83	ppm		97
61)	4-Nitrophenol	7.588	109	218714	64.91	ppm		92
62)	Dibenzofuran	7.631	168	1364973	48.89	ppm		98
63)	2,4-Dinitrotoluene	7.620	165	356983	59.22	ppm		96
64)	2,3,4,6-Tetrachlorophenol	7.738	232	326223	60.85	ppm		97
65)	Diethylphthalate	7.818	149	1204944	52.99	ppm		98
66)	Fluorene	7.920	166	1167648	49.45	ppm		98
67)	4-Chlorophenyl-phenyle...	7.914	204	580050	52.73	ppm		99
68)	4-Nitroaniline	7.957	138	265868	46.66	ppm		95
70)	4,6-Dinitro-2-methylph...	7.978	198	201816	55.97	ppm		88
71)	n-Nitrosodiphenylamine	8.027	169	821262	46.30	ppm		99
72)	1,2-Diphenylhydrazine	8.059	77	1230972	45.89	ppm		95
74)	4-Bromophenyl-phenylether	8.358	248	380887	52.52	ppm		86
75)	Hexachlorobenzene	8.433	284	419409	51.86	ppm		92
76)	Pentachlorophenol	8.631	266	547494	112.11	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81773.D
Acq On : 15 Aug 2018 9:01 am
Operator : angelar
Sample : cc3595-50
Misc : op13652,e2p3603,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 15 12:37:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

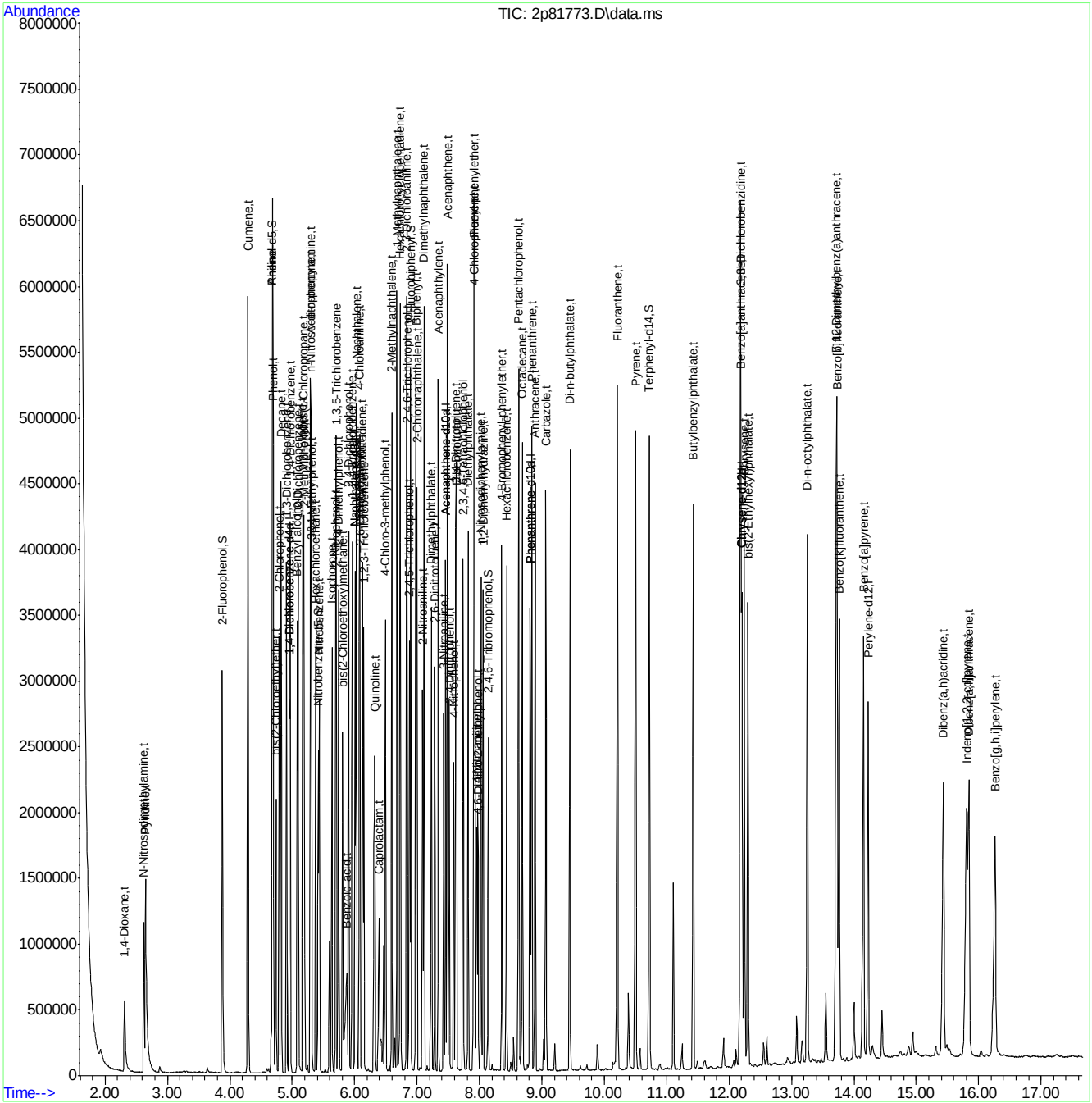
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.840	178	1617018	48.84	ppm	99
78)	Anthracene	8.893	178	1594746	47.74	ppm	99
79)	Carbazole	9.064	167	1666393	49.93	ppm	99
80)	Di-n-butylphthalate	9.449	149	2384305	57.84	ppm	100
81)	Fluoranthene	10.214	202	2352878	58.89	ppm	99
82)	Octadecane	8.690	43	645171	49.58	ppm	98
84)	Pyrene	10.503	202	2323412	54.30	ppm	100
86)	Butylbenzylphthalate	11.428	149	1154274	62.54	ppm	100
87)	Benzo[a]anthracene	12.188	228	2096943	53.58	ppm	98
88)	3,3'-Dichlorobenzidine	12.182	252	836006	59.76	ppm	99
89)	Chrysene	12.247	228	1683014	48.84	ppm	99
90)	bis(2-Ethylhexyl)phtha...	12.300	149	1192132	54.95	ppm	100
92)	Di-n-octylphthalate	13.252	149	2412058	60.52	ppm	99
93)	Benzo[b]fluoranthene	13.728	252	1952014	53.67	ppm	99
94)	Benzo[k]fluoranthene	13.771	252	1577606	48.20	ppm	98
95)	Benzo[a]pyrene	14.156	252	1635794	51.88	ppm	99
96)	Indeno[1,2,3-cd]pyrene	15.809	276	1644077	56.34	ppm	99
97)	Dibenz(a,h)acridine	15.434	279	1433951	55.05	ppm	100
98)	Dibenz[a,h]anthracene	15.846	278	1516240	51.52	ppm	98
99)	7,12-Dimethylbenz(a)an...	13.723	256	877900	55.84	ppm	99
100)	Benzo[g,h,i]perylene	16.269	276	1489605	50.52	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81773.D
Acq On : 15 Aug 2018 9:01 am
Operator : angelar
Sample : cc3595-50
Misc : op13652,e2p3603,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 15 12:37:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration



Manual Integration Approval Summary

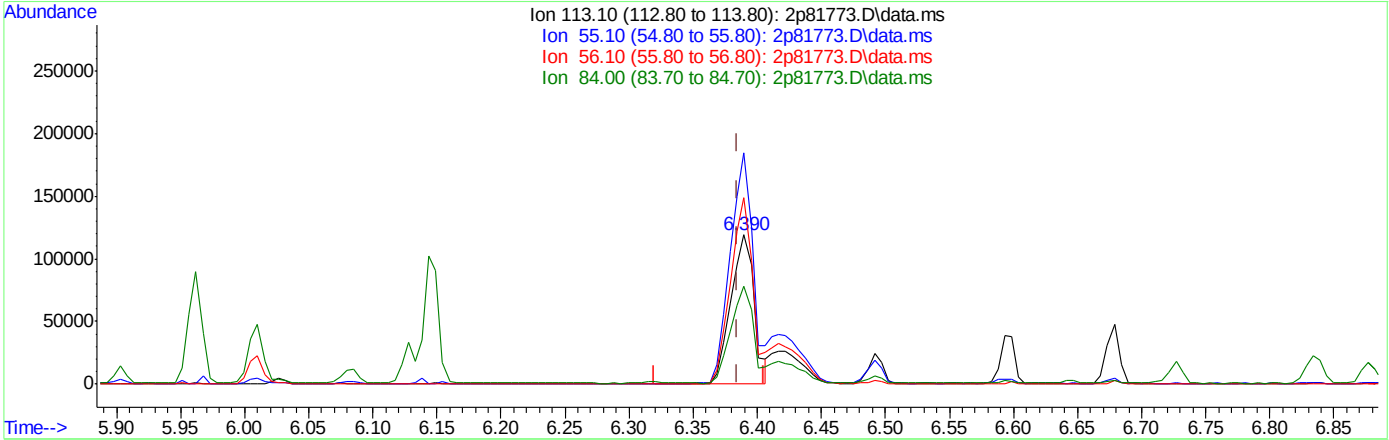
Sample Number: E2P3603-CC3595
Lab FileID: 2P81773.D
Injection Time: 08/15/18 09:01
Method: SW846 8270D
Analyst approved: 08/15/18 14:07 Dipa Patel
Supervisor approved: 08/15/18 17:01 Kristi Schollenberger

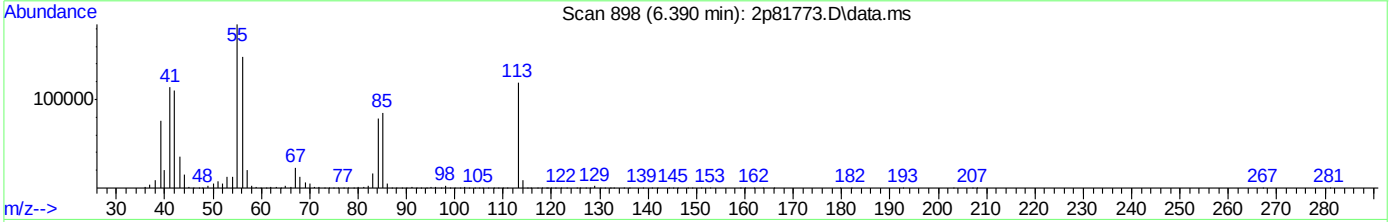
Parameter	CAS	Sig#	R.T. (min.)	Reason
Caprolactam	105-60-2		6.39	Poor instrument integration

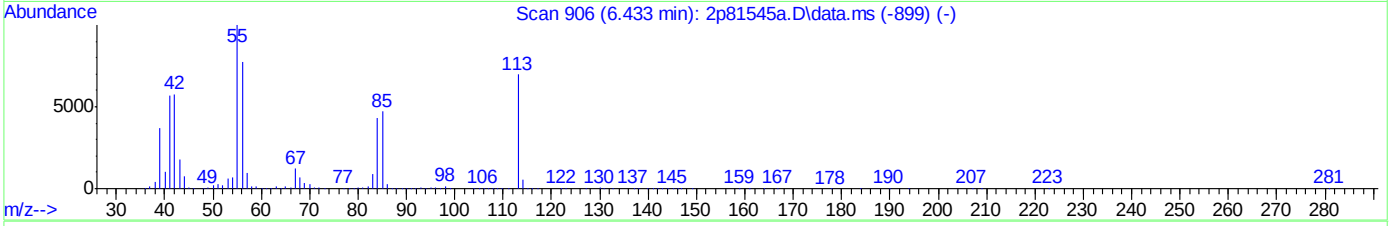
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81773.D
Acq On : 15 Aug 2018 9:01 am
Operator : angelar
Sample : cc3595-50
Misc : op13652,e2p3603,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 15 12:36:17 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration







TIC: 2p81773.D\data.ms

(41) Caprolactam (t)

6.390min (+0.005) 40.94ppm

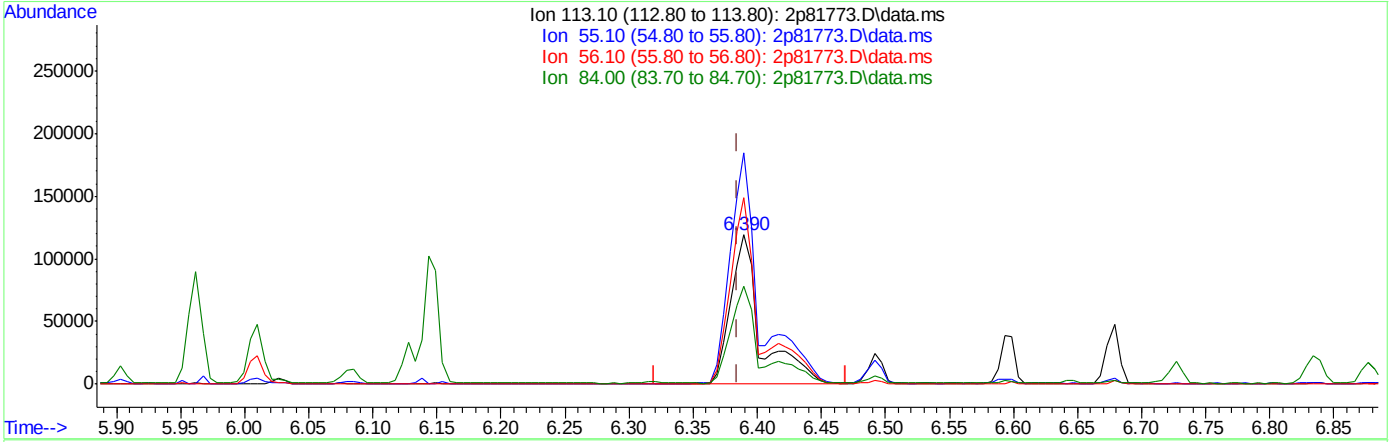
response 146753

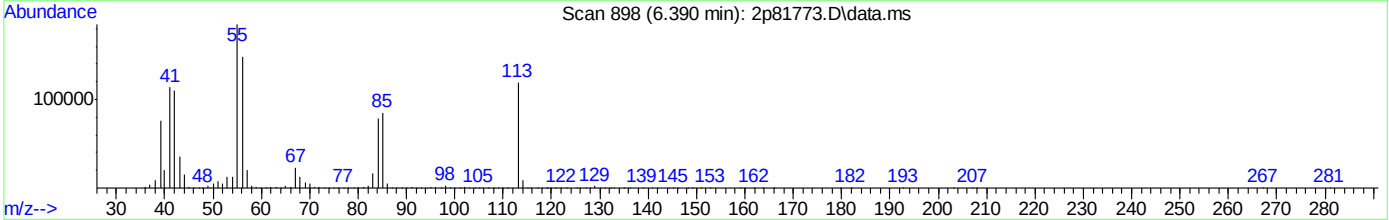
Ion	Exp%	Act%
113.10	100	100
55.10	148.70	155.14
56.10	116.70	124.49
84.00	62.10	64.50

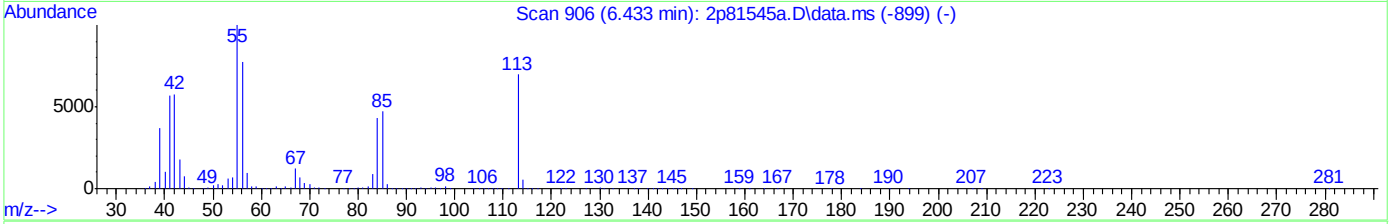
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81773.D
Acq On : 15 Aug 2018 9:01 am
Operator : angelar
Sample : cc3595-50
Misc : op13652,e2p3603,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 15 12:36:17 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration







TIC: 2p81773.D\data.ms

(41) Caprolactam (t)

6.390min (+0.005) 53.93ppm m

response 193304

Ion	Exp%	Act%
113.10	100	100
55.10	148.70	155.27
56.10	116.70	124.74
84.00	62.10	65.79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81774.D
Acq On : 15 Aug 2018 9:25 am
Operator : angelar
Sample : cc3596-50
Misc : op13652,e2p3603,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 15 13:55:16 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration

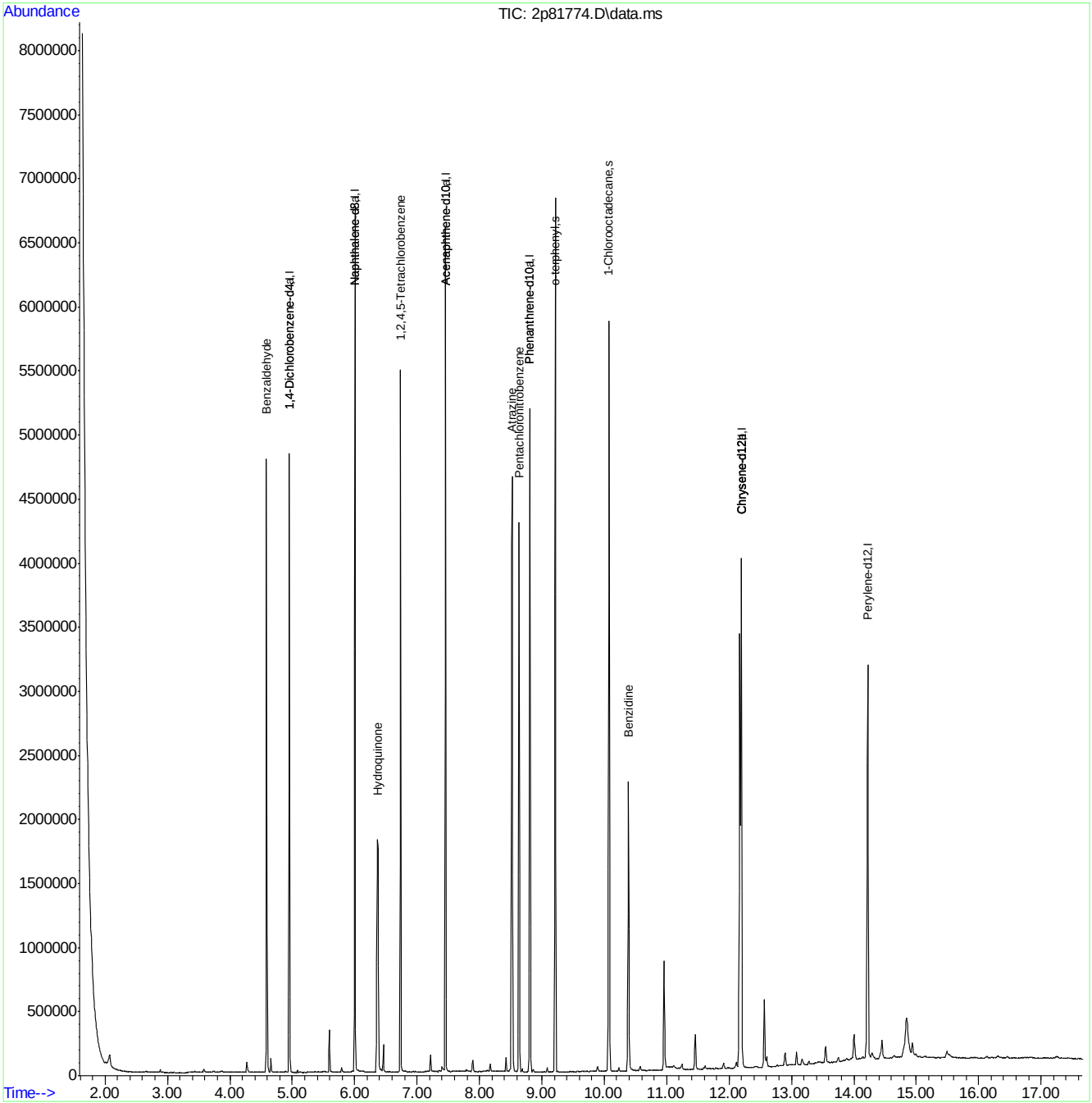
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.951	152	540955	40.00	ppm	-0.02
24) Naphthalene-d8	6.005	136	2088489	40.00	ppm	-0.02
47) Acenaphthene-d10	7.454	164	1013658	40.00	ppm	-0.02
69) Phenanthrene-d10	8.807	188	1688208	40.00	ppm	-0.01
83) Chrysene-d12	12.199	240	1656351	40.00	ppm	0.00
91) Perylene-d12	14.226	264	1506973	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.951	152	540955	40.00	ppm	-0.02
103) Naphthalene-d8a	6.005	136	2088489	40.00	ppm	-0.02
105) Acenaphthene-d10a	7.454	164	1013658	40.00	ppm	-0.01
108) Chrysene-d12a	12.199	240	1656351	40.00	ppm	0.00
110) Phenanthrene-d10a	8.807	188	1688208	40.00	ppm	-0.01
114) Chrysene-d12b	12.199	240	1656351	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery =	0.00%#		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery =	0.00%#		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery =	0.00%#		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery =	0.00%#		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery =	0.00%#		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery =	0.00%#		
111) 1-Chlorooctadecane	10.075	57	786745	51.98	ppm	-0.02
Spiked Amount 50.000	Range 20 - 70		Recovery =	103.96%#		
112) o-terphenyl	9.214	230	1303972	50.17	ppm	-0.02
Spiked Amount 50.000	Range 20 - 70		Recovery =	100.34%#		
Target Compounds						Qvalue
102) Benzaldehyde	4.587	105	743897	53.51	ppm	96
104) Hydroquinone	6.369	110	913021	62.16	ppm	93
106) Atrazine	8.524	215	263118	51.89	ppm	96
107) 1,2,4,5-Tetrachloroben...	6.738	216	790420	47.07	ppm	98
109) Benzidine	10.391	184	917253	79.57	ppm	99
113) Pentachloronitrobenzene	8.636	295	100967	61.60	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P3603\
Data File : 2p81774.D
Acq On : 15 Aug 2018 9:25 am
Operator : angelar
Sample : cc3596-50
Misc : op13652,e2p3603,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 15 13:55:16 2018
Quant Method : C:\MSDCHEM\1\METHODS\M2P3595.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Aug 10 15:24:09 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123744.D
Acq On : 20 Jun 2018 9:40 pm
Operator : chriss2
Sample : ic5553-100
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 21 10:46:39 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration

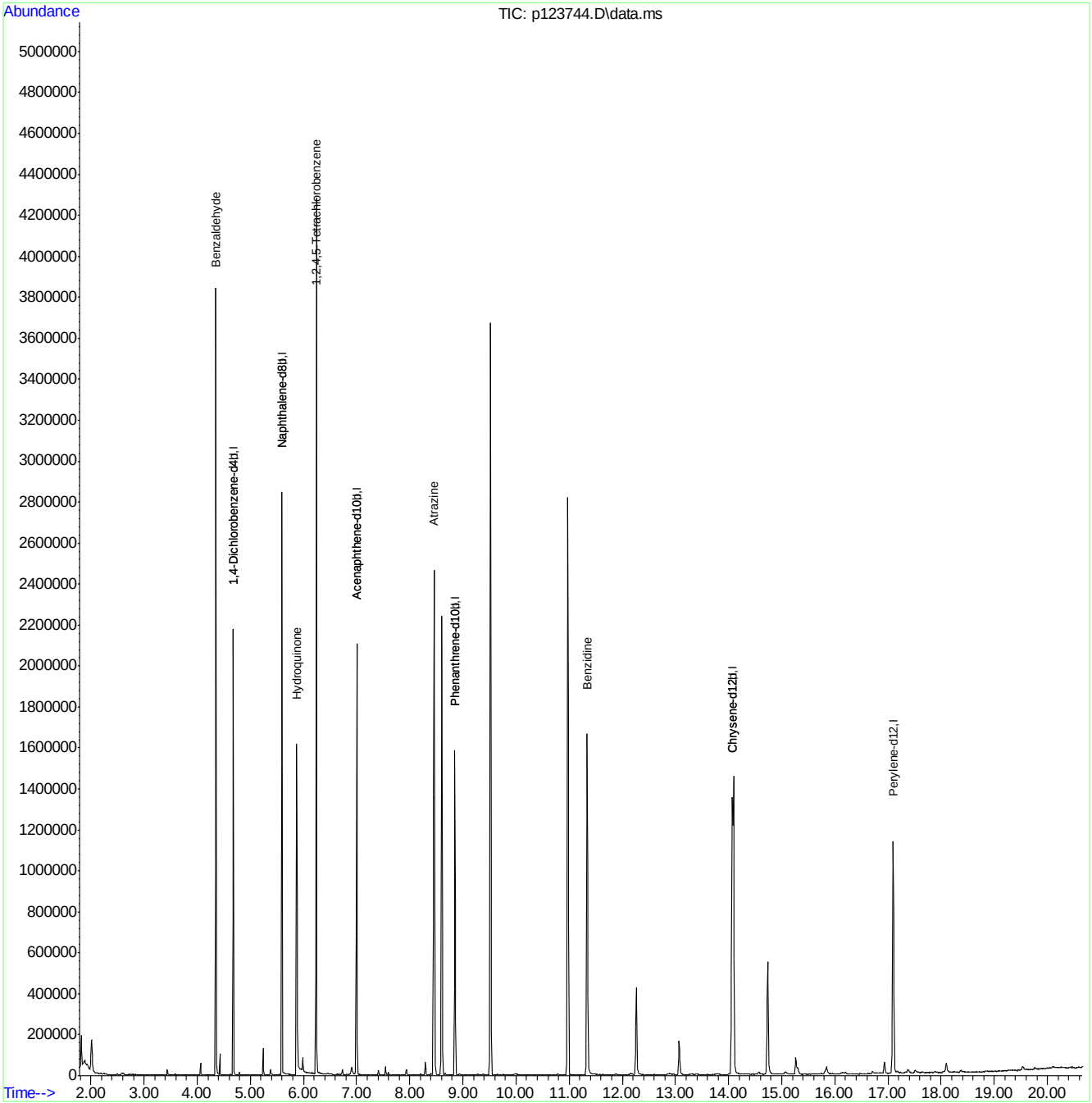
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	231958	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	902082	40.00	ppm	0.00
47) Acenaphthene-d10	7.001	164	408249	40.00	ppm	0.00
69) Phenanthrene-d10	8.850	188	745366	40.00	ppm	0.00
83) Chrysene-d12	14.069	240	678330	40.00	ppm	0.00
91) Perylene-d12	17.098	264	699059	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.677	152	231958	40.00	ppm	0.00
103) Phenanthrene-d10b	8.850	188	745366	40.00	ppm	0.00
105) Chrysene-d12b	14.069	240	678330	40.00	ppm	0.00
107) Naphthalene-d8b	5.596	136	902082	40.00	ppm	0.00
109) Acenaphthene-d10b	7.001	164	408249	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) Benzaldehyde	4.357	105	636944	90.63	ppm	96
104) Atrazine	8.460	200	377190	95.98	ppm	99
106) Benzidine	11.339	184	997254	75.99	ppm	100
108) Hydroquinone	5.874	110	754110	96.04	ppm	98
110) 1,2,4,5-Tetrachloroben...	6.243	216	572145	95.66	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123744.D
Acq On : 20 Jun 2018 9:40 pm
Operator : chriss2
Sample : ic5553-100
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 21 10:46:39 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123745.D
Acq On : 20 Jun 2018 10:08 pm
Operator : chriss2
Sample : ic5553-80
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 21 10:47:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration

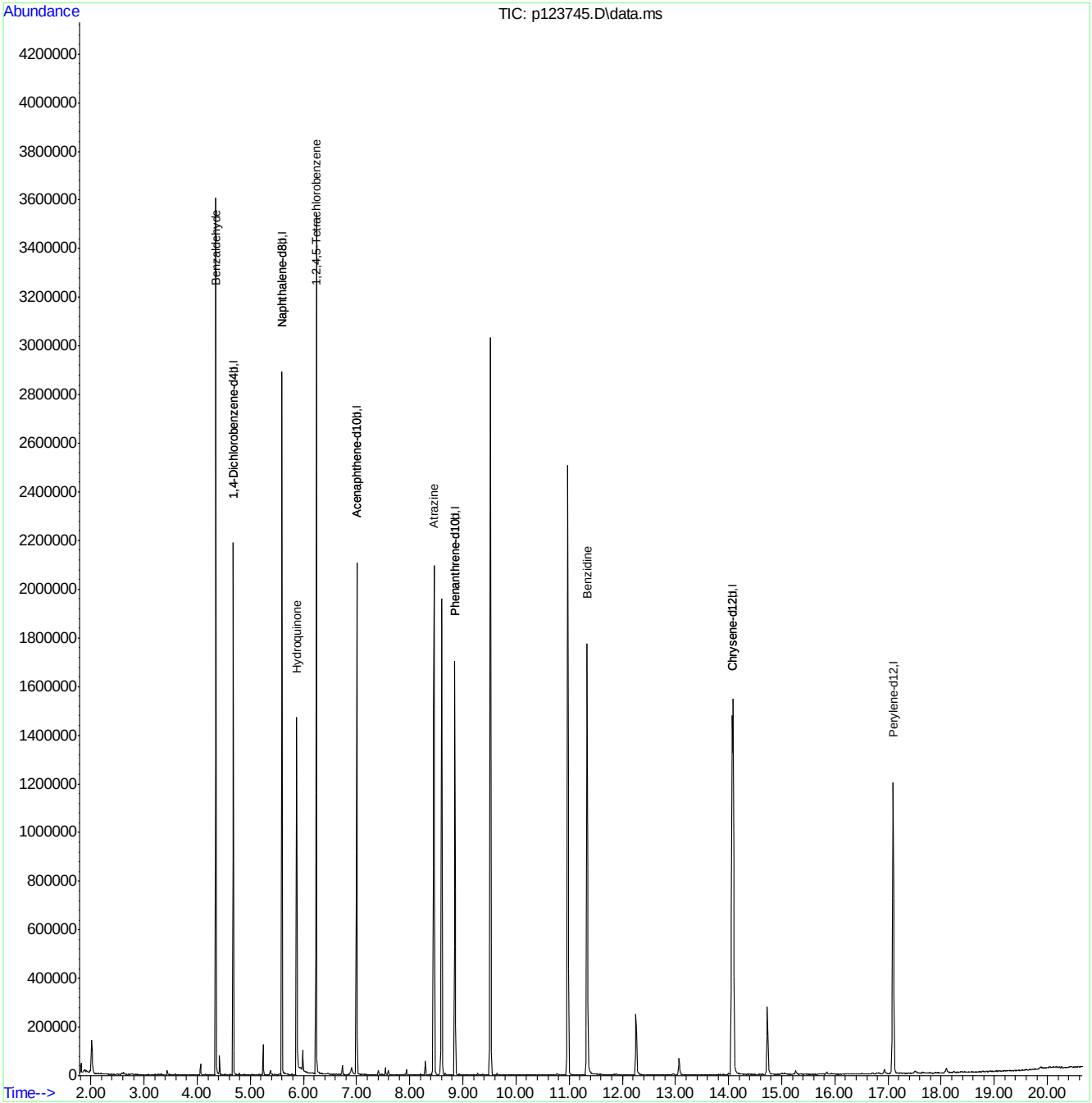
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	231978	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	908634	40.00	ppm	0.00
47) Acenaphthene-d10	7.001	164	429185	40.00	ppm	0.00
69) Phenanthrene-d10	8.850	188	792275	40.00	ppm	0.00
83) Chrysene-d12	14.069	240	727731	40.00	ppm	0.00
91) Perylene-d12	17.098	264	742940	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.677	152	231978	40.00	ppm	0.00
103) Phenanthrene-d10b	8.850	188	792275	40.00	ppm	0.00
105) Chrysene-d12b	14.069	240	727731	40.00	ppm	0.00
107) Naphthalene-d8b	5.596	136	908634	40.00	ppm	0.00
109) Acenaphthene-d10b	7.001	164	429185	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) Benzaldehyde	4.351	105	529666	75.36	ppm	98
104) Atrazine	8.460	200	324274	77.63	ppm	97
106) Benzidine	11.339	184	1033368	73.40	ppm	100
108) Hydroquinone	5.874	110	654628	82.77	ppm	97
110) 1,2,4,5-Tetrachloroben...	6.243	216	474060	75.39	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123745.D
Acq On : 20 Jun 2018 10:08 pm
Operator : chriss2
Sample : ic5553-80
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 21 10:47:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123746.D
Acq On : 20 Jun 2018 10:36 pm
Operator : chriss2
Sample : icc5553-50
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 21 10:47:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration

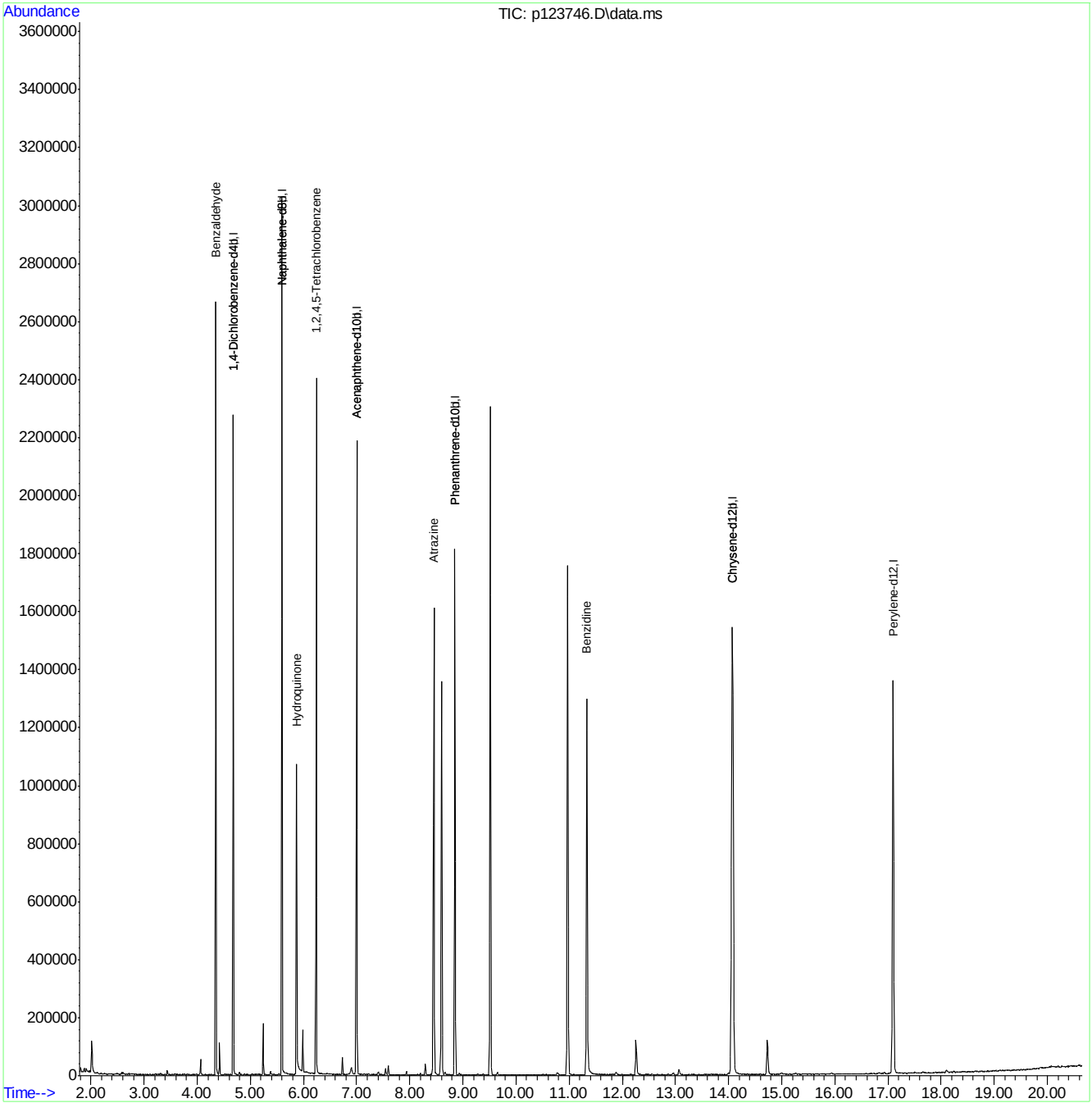
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	246425	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	953197	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	447794	40.00	ppm	0.00
69) Phenanthrene-d10	8.849	188	844623	40.00	ppm	0.00
83) Chrysene-d12	14.069	240	787768	40.00	ppm	0.00
91) Perylene-d12	17.098	264	812413	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.677	152	246425	40.00	ppm	0.00
103) Phenanthrene-d10b	8.849	188	844623	40.00	ppm	0.00
105) Chrysene-d12b	14.069	240	787768	40.00	ppm	0.00
107) Naphthalene-d8b	5.596	136	953197	40.00	ppm	0.00
109) Acenaphthene-d10b	6.996	164	447794	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) Benzaldehyde	4.351	105	373880	50.07	ppm	100
104) Atrazine	8.454	200	222539	49.97	ppm	100
106) Benzidine	11.334	184	756620	49.65	ppm	100
108) Hydroquinone	5.874	110	413312	49.81	ppm	100
110) 1,2,4,5-Tetrachloroben...	6.242	216	327417	49.91	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123746.D
Acq On : 20 Jun 2018 10:36 pm
Operator : chriss2
Sample : icc5553-50
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 21 10:47:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123747.D
Acq On : 20 Jun 2018 11:03 pm
Operator : chriss2
Sample : ic5553-25
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 21 10:48:16 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration

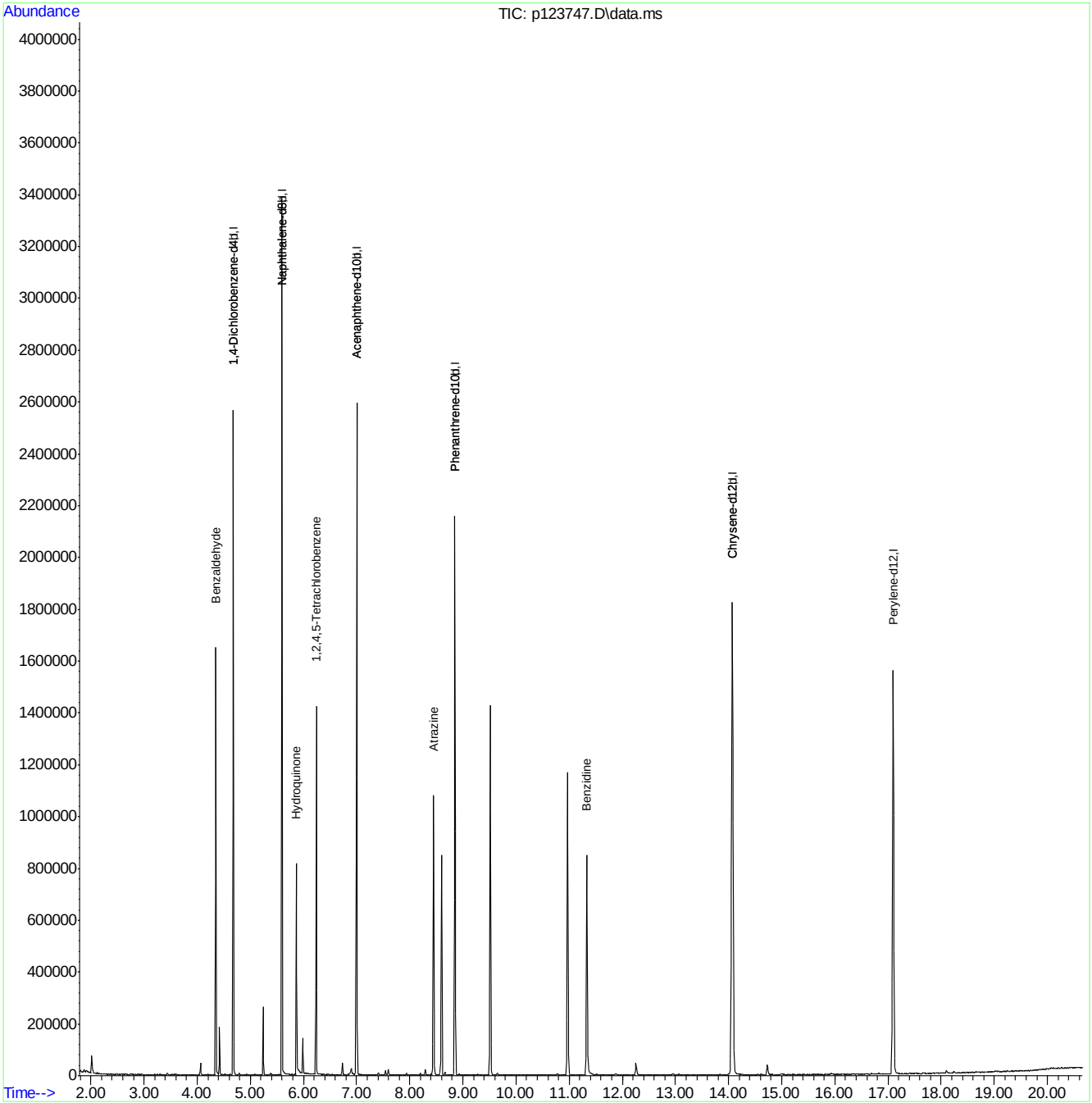
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	275836	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	1079922	40.00	ppm	0.00
47) Acenaphthene-d10	7.001	164	510880	40.00	ppm	0.00
69) Phenanthrene-d10	8.849	188	983604	40.00	ppm	0.00
83) Chrysene-d12	14.069	240	921530	40.00	ppm	0.00
91) Perylene-d12	17.098	264	951030	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.677	152	275836	40.00	ppm	0.00
103) Phenanthrene-d10b	8.849	188	983604	40.00	ppm	0.00
105) Chrysene-d12b	14.069	240	921530	40.00	ppm	0.00
107) Naphthalene-d8b	5.596	136	1079922	40.00	ppm	0.00
109) Acenaphthene-d10b	7.001	164	510880	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) Benzaldehyde	4.351	105	223053	26.69	ppm	99
104) Atrazine	8.449	200	137593	26.53	ppm	96
106) Benzidine	11.334	184	490772	27.53	ppm	100
108) Hydroquinone	5.868	110	236819	25.19	ppm	96
110) 1,2,4,5-Tetrachloroben...	6.242	216	200328	26.76	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123747.D
Acq On : 20 Jun 2018 11:03 pm
Operator : chriss2
Sample : ic5553-25
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 21 10:48:16 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123748.D
Acq On : 20 Jun 2018 11:31 pm
Operator : chriss2
Sample : ic5553-10
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 21 10:48:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration

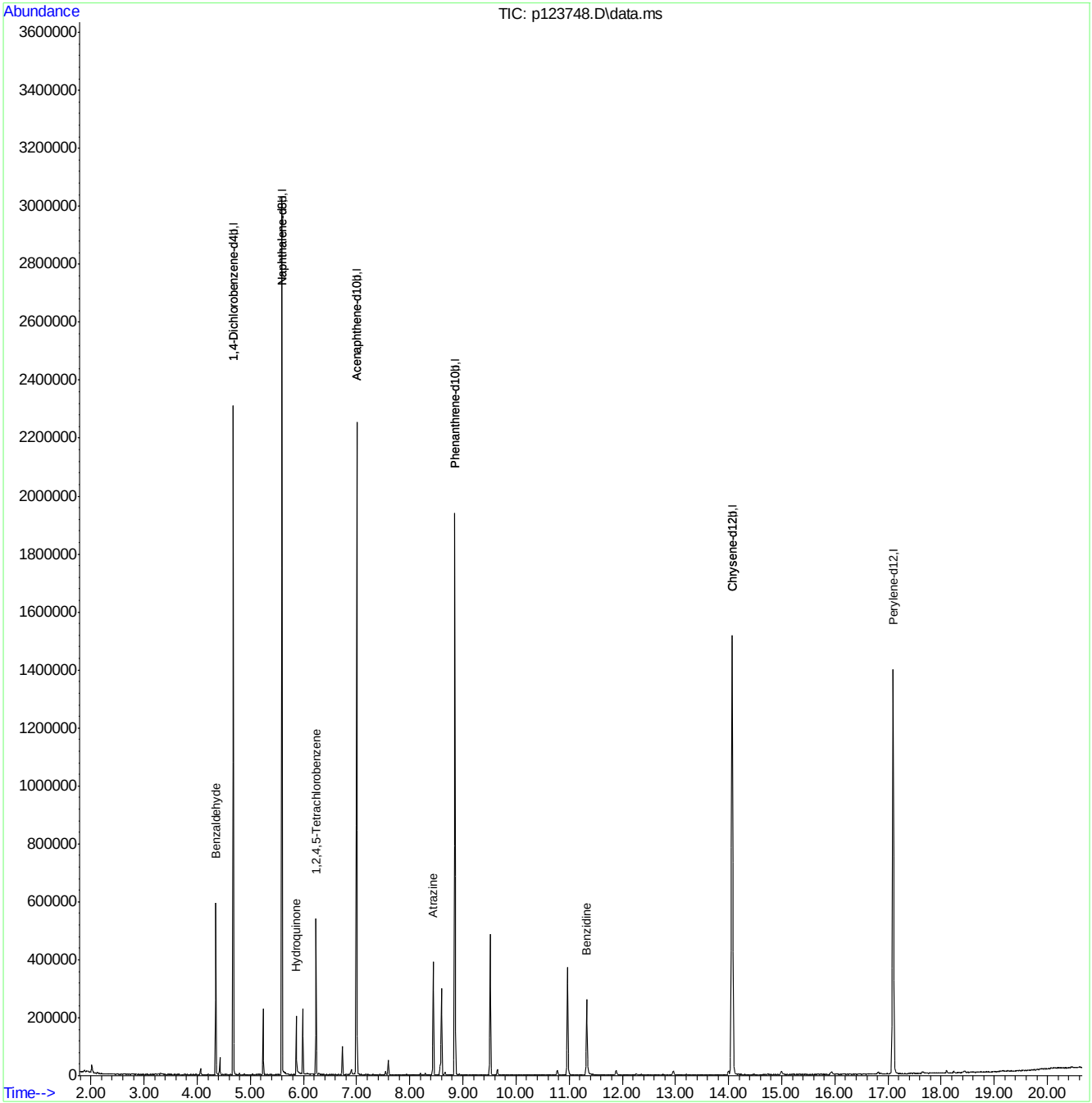
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	250804	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	978739	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	464550	40.00	ppm	0.00
69) Phenanthrene-d10	8.850	188	901061	40.00	ppm	0.00
83) Chrysene-d12	14.069	240	835223	40.00	ppm	0.00
91) Perylene-d12	17.098	264	851142	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.677	152	250804	40.00	ppm	0.00
103) Phenanthrene-d10b	8.850	188	901061	40.00	ppm	0.00
105) Chrysene-d12b	14.069	240	835223	40.00	ppm	0.00
107) Naphthalene-d8b	5.596	136	978739	40.00	ppm	0.00
109) Acenaphthene-d10b	6.996	164	464550	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) Benzaldehyde	4.351	105	80928	10.65	ppm	97
104) Atrazine	8.444	200	46956	9.88	ppm	95
106) Benzidine	11.334	184	161112	9.97	ppm	100
108) Hydroquinone	5.869	110	71151	8.35	ppm	99
110) 1,2,4,5-Tetrachloroben...	6.237	216	70717	10.39	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123748.D
Acq On : 20 Jun 2018 11:31 pm
Operator : chriss2
Sample : ic5553-10
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 21 10:48:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123749.D
Acq On : 20 Jun 2018 11:59 pm
Operator : chriss2
Sample : ic5553-5
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 21 10:49:33 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration

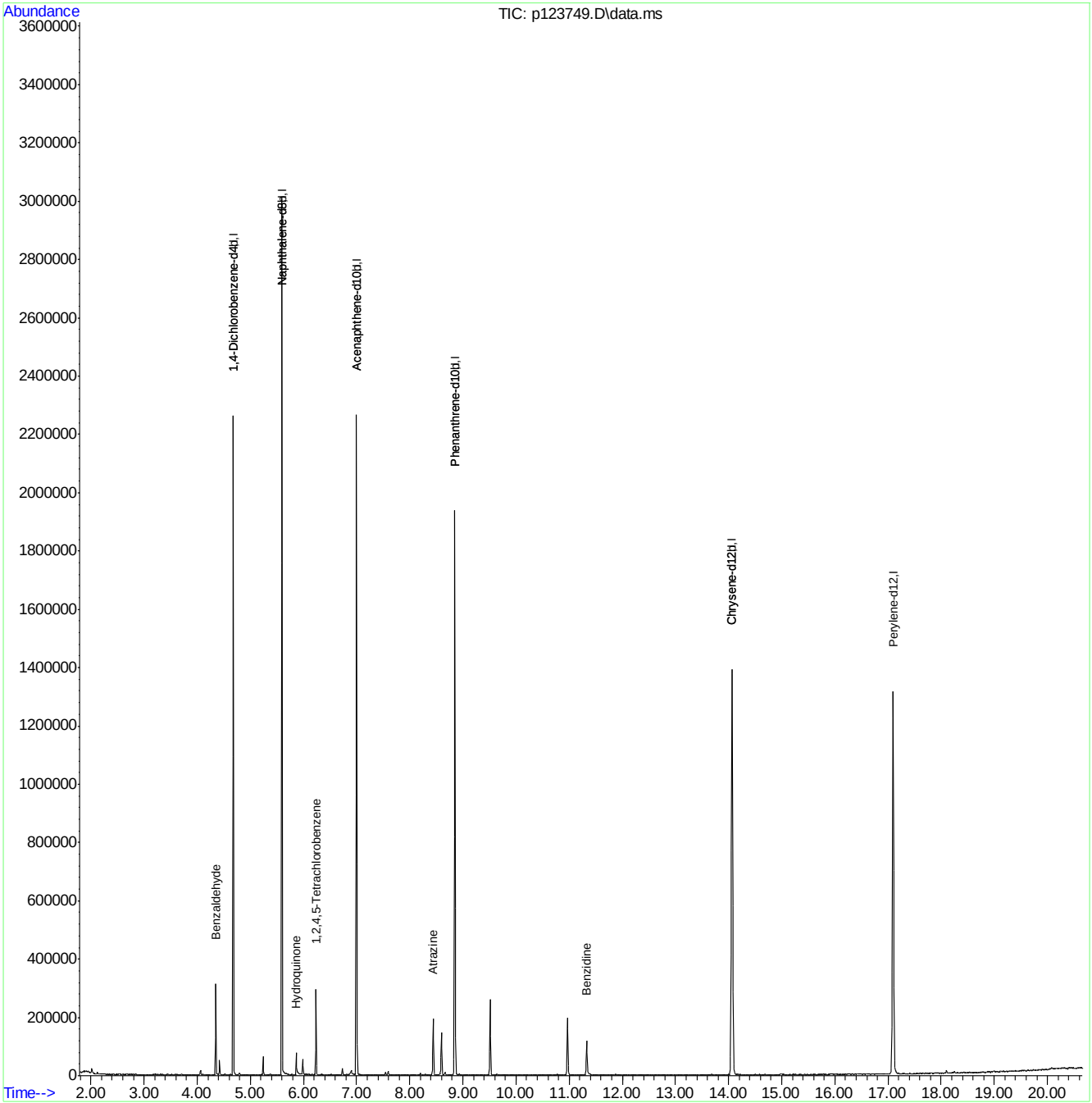
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	244281	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	967280	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	454673	40.00	ppm	0.00
69) Phenanthrene-d10	8.850	188	876809	40.00	ppm	0.00
83) Chrysene-d12	14.064	240	794790	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	811985	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.677	152	244281	40.00	ppm	0.00
103) Phenanthrene-d10b	8.850	188	876809	40.00	ppm	0.00
105) Chrysene-d12b	14.064	240	794790	40.00	ppm	0.00
107) Naphthalene-d8b	5.596	136	967280	40.00	ppm	0.00
109) Acenaphthene-d10b	6.996	164	454673	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) Benzaldehyde	4.351	105	42671	5.77	ppm	97
104) Atrazine	8.444	200	24344	5.27	ppm	94
106) Benzidine	11.328	184	74554	4.85	ppm	100
108) Hydroquinone	5.869	110	29729	3.53	ppm	97
110) 1,2,4,5-Tetrachloroben...	6.237	216	37801	5.67	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123749.D
Acq On : 20 Jun 2018 11:59 pm
Operator : chriss2
Sample : ic5553-5
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 21 10:49:33 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123750.D
Acq On : 21 Jun 2018 12:27 am
Operator : chriss2
Sample : ic5553-2
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 21 10:50:04 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration

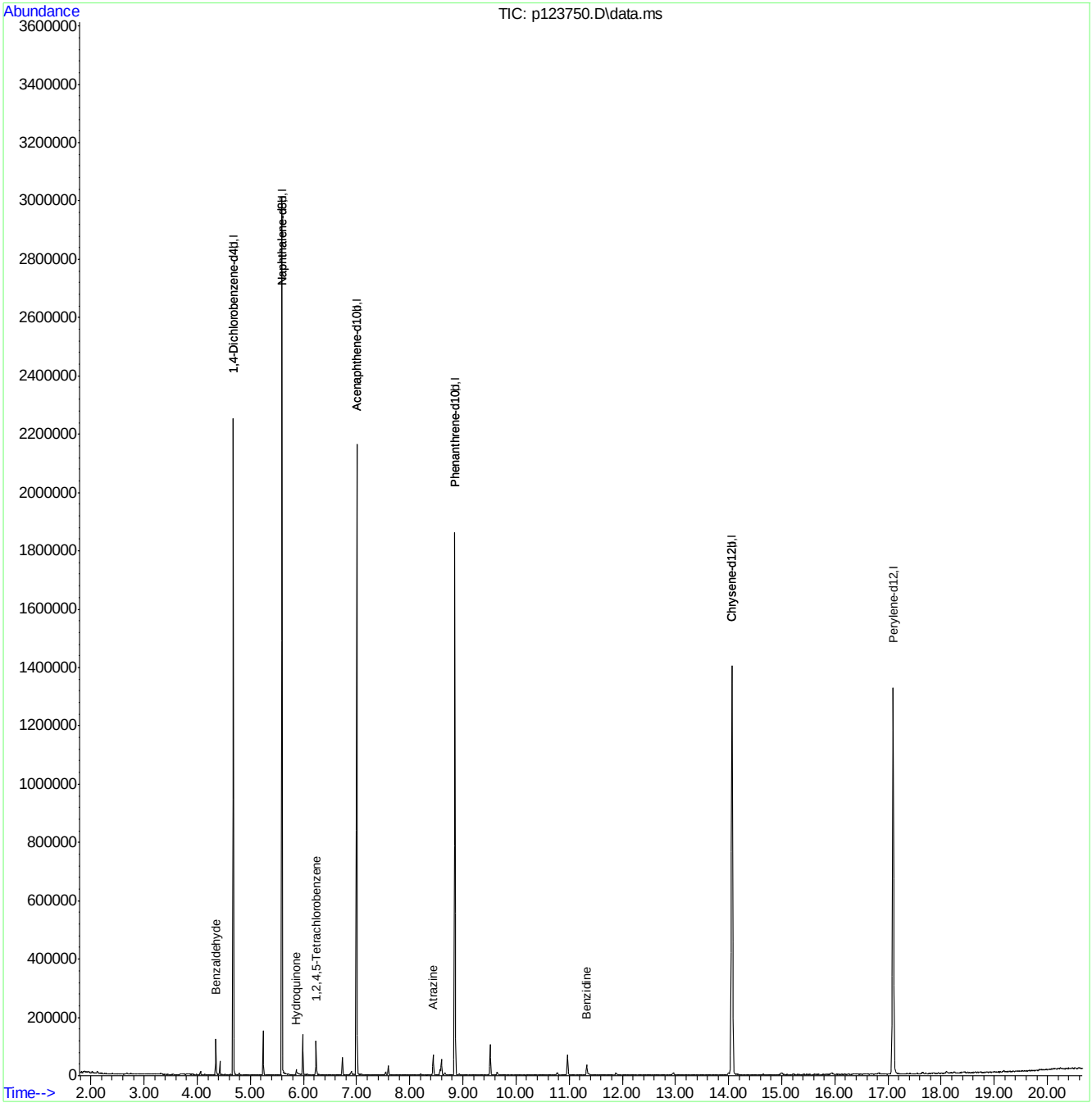
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	243117	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	945819	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	449317	40.00	ppm	0.00
69) Phenanthrene-d10	8.849	188	840656	40.00	ppm	0.00
83) Chrysene-d12	14.063	240	777188	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	794720	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.677	152	243117	40.00	ppm	0.00
103) Phenanthrene-d10b	8.849	188	840656	40.00	ppm	0.00
105) Chrysene-d12b	14.063	240	777188	40.00	ppm	0.00
107) Naphthalene-d8b	5.596	136	945819	40.00	ppm	0.00
109) Acenaphthene-d10b	6.996	164	449317	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) Benzaldehyde	4.351	105	16986	2.31	ppm	95
104) Atrazine	8.443	200	9063	2.04	ppm	97
106) Benzidine	11.328	184	24657	1.64	ppm	100
108) Hydroquinone	5.868	110	9498	1.15	ppm	95
110) 1,2,4,5-Tetrachloroben...	6.242	216	15617	2.37	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123750.D
Acq On : 21 Jun 2018 12:27 am
Operator : chriss2
Sample : ic5553-2
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 21 10:50:04 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123751.D
Acq On : 21 Jun 2018 12:55 am
Operator : chriss2
Sample : ic5553-1
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 21 10:50:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration

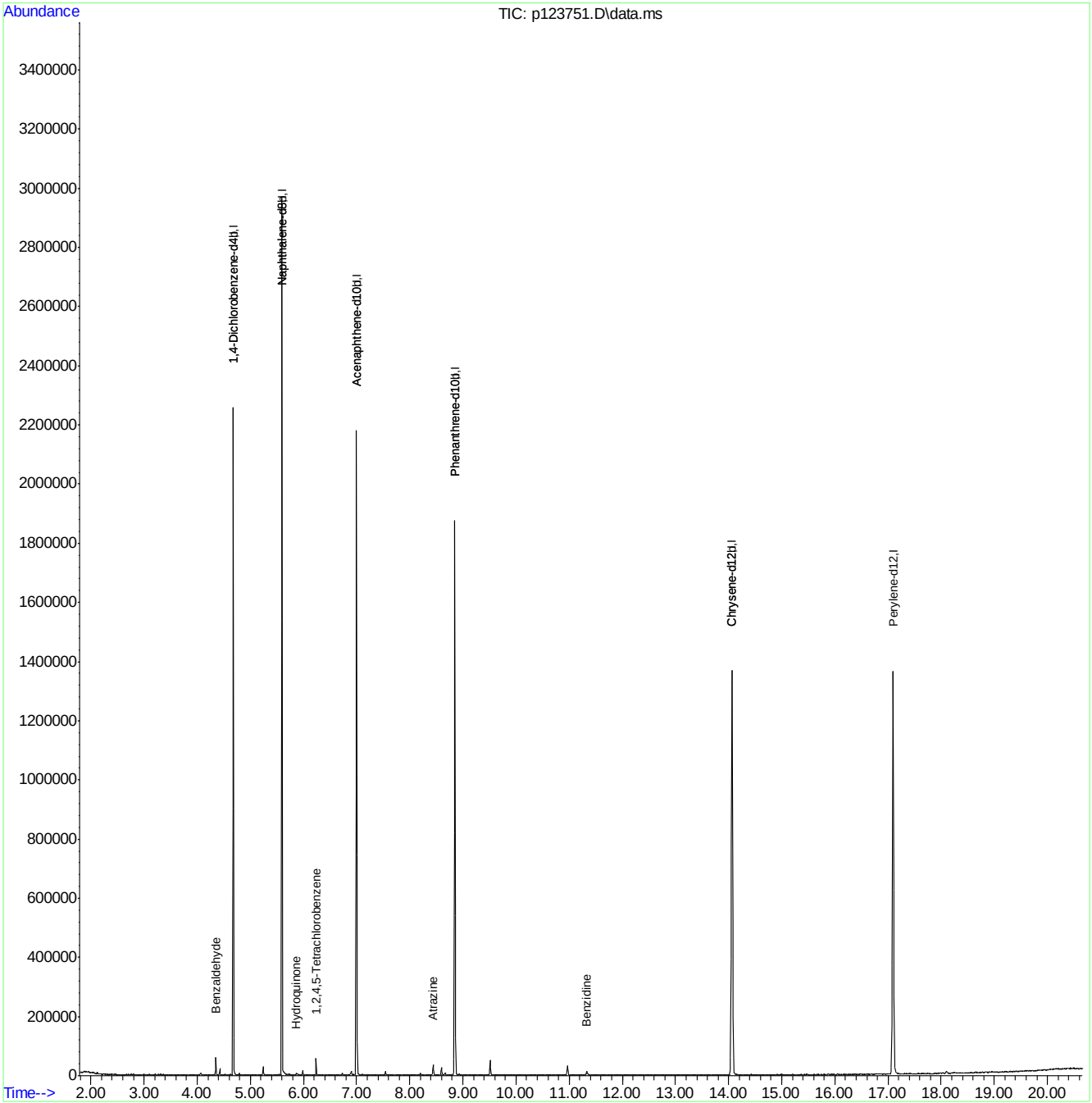
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	241806	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	948643	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	447307	40.00	ppm	0.00
69) Phenanthrene-d10	8.849	188	846468	40.00	ppm	0.00
83) Chrysene-d12	14.063	240	782764	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	797633	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.677	152	241806	40.00	ppm	0.00
103) Phenanthrene-d10b	8.849	188	846468	40.00	ppm	0.00
105) Chrysene-d12b	14.063	240	782764	40.00	ppm	0.00
107) Naphthalene-d8b	5.596	136	948643	40.00	ppm	0.00
109) Acenaphthene-d10b	6.996	164	447307	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) Benzaldehyde	4.351	105	8560	1.17	ppm	94
104) Atrazine	8.443	200	4551	1.02	ppm	86
106) Benzidine	11.334	184	10187	0.67	ppm	100
108) Hydroquinone	5.868	110	3951	0.48	ppm	87
110) 1,2,4,5-Tetrachloroben...	6.237	216	7506	1.15	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123751.D
Acq On : 21 Jun 2018 12:55 am
Operator : chriss2
Sample : ic5553-1
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 21 10:50:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 10:46:01 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123752.D
Acq On : 21 Jun 2018 1:23 am
Operator : chriss2
Sample : icv5553-50
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 21 11:15:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:14:27 2018
Response via : Initial Calibration

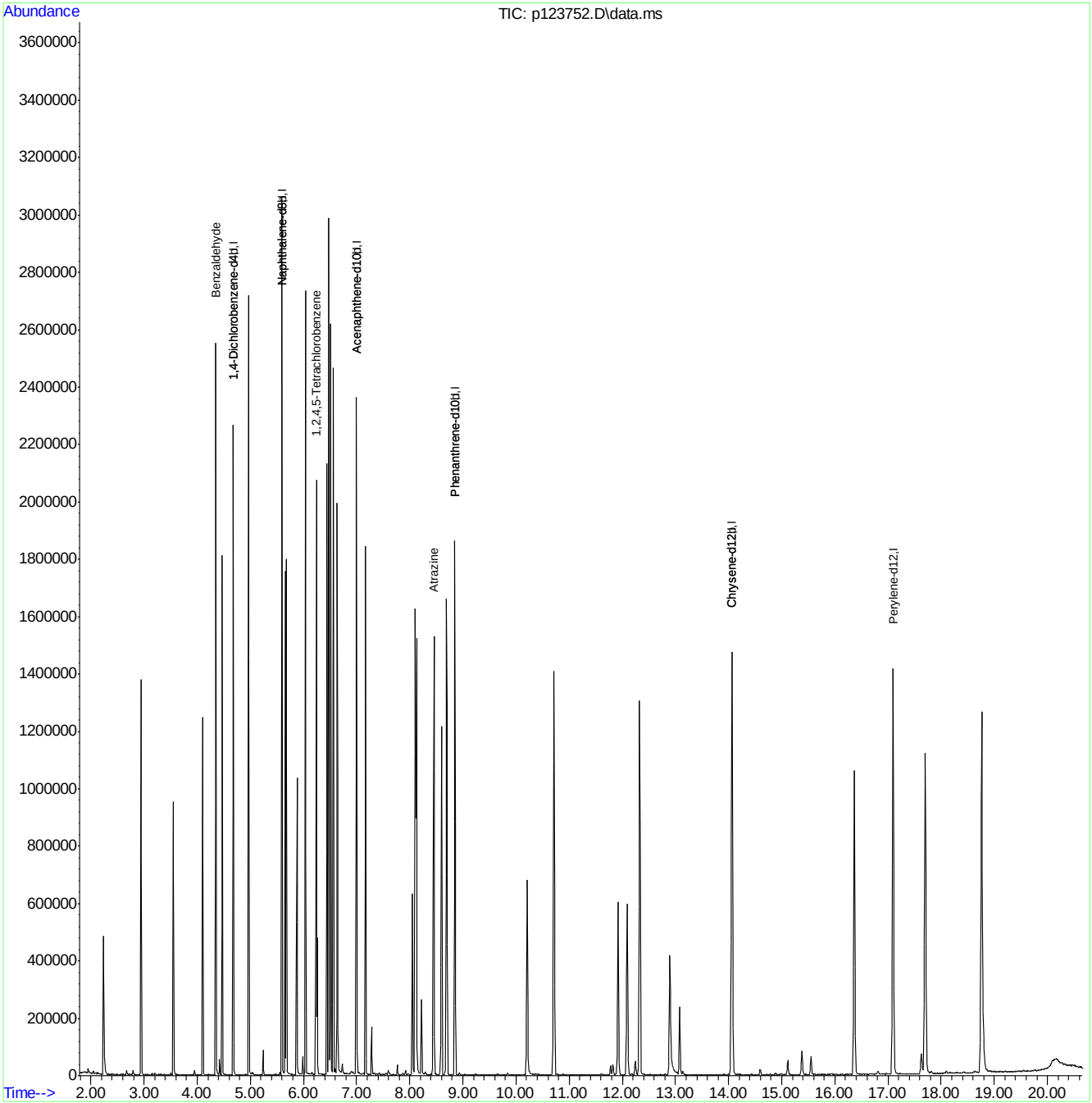
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	241122	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	953994	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	493837	40.00	ppm	0.00
69) Phenanthrene-d10	8.849	188	872830	40.00	ppm	0.00
83) Chrysene-d12	14.063	240	841966	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	839030	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.677	152	241122	40.00	ppm	0.00
103) Phenanthrene-d10b	8.849	188	872830	40.00	ppm	0.00
105) Chrysene-d12b	14.063	240	841966	40.00	ppm	0.00
107) Naphthalene-d8b	5.596	136	953994	40.00	ppm	0.00
109) Acenaphthene-d10b	6.996	164	493837	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) Benzaldehyde	4.351	105	352558	45.65	ppm	98
104) Atrazine	8.454	200	216086	46.52	ppm	98
110) 1,2,4,5-Tetrachloroben...	6.242	216	309429	40.38	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123752.D
Acq On : 21 Jun 2018 1:23 am
Operator : chriss2
Sample : icv5553-50
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 21 11:15:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:14:27 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123753.D
Acq On : 21 Jun 2018 1:51 am
Operator : chriss2
Sample : icv5553-50
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 21 11:15:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:14:27 2018
Response via : Initial Calibration

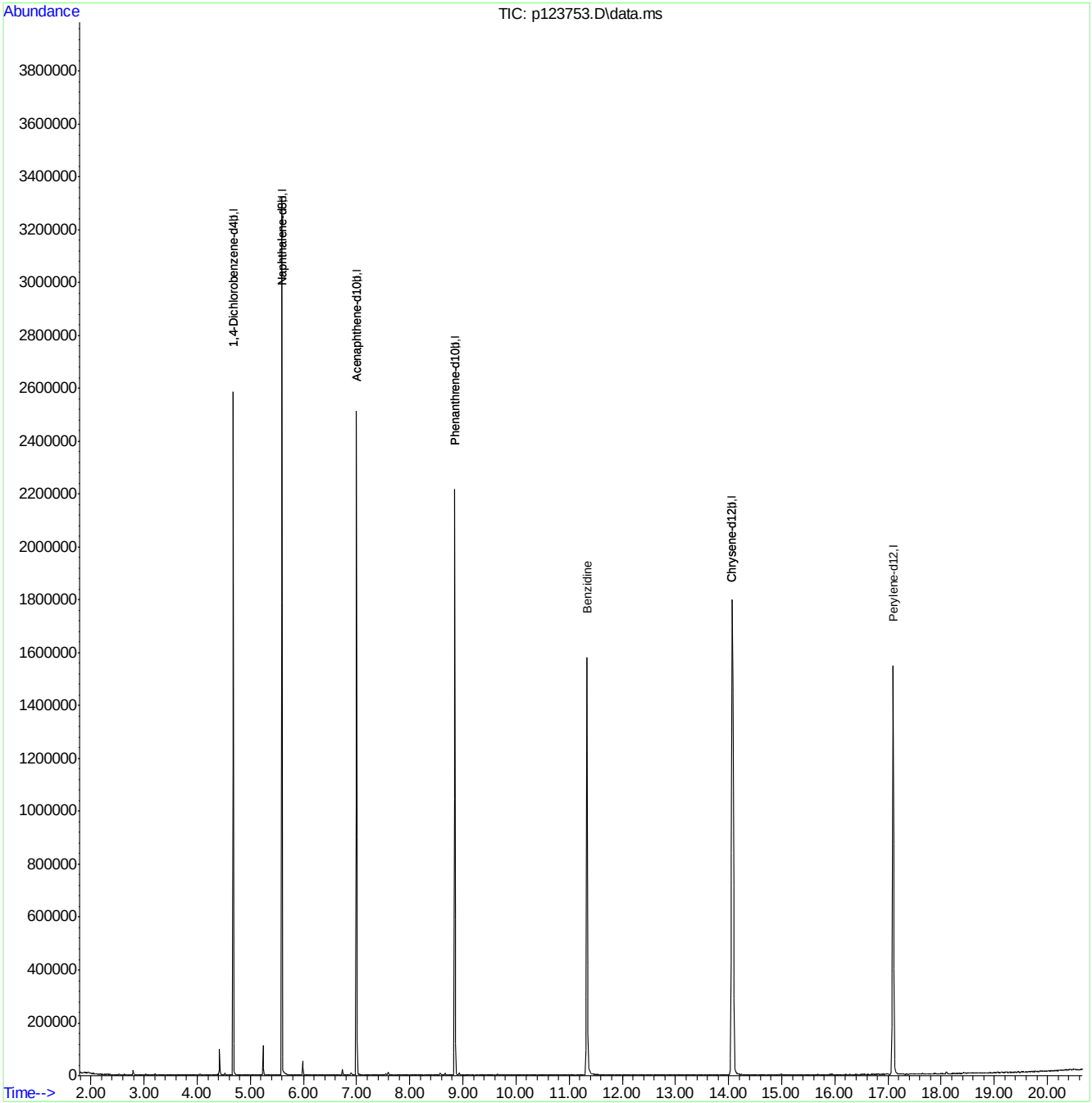
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	277491	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	1052326	40.00	ppm	0.00
47) Acenaphthene-d10	7.001	164	554210	40.00	ppm	0.00
69) Phenanthrene-d10	8.850	188	993635	40.00	ppm	0.00
83) Chrysene-d12	14.064	240	910616	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	925761	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.677	152	277491	40.00	ppm	0.00
103) Phenanthrene-d10b	8.850	188	993635	40.00	ppm	0.00
105) Chrysene-d12b	14.064	240	910616	40.00	ppm	0.00
107) Naphthalene-d8b	5.596	136	1052326	40.00	ppm	0.00
109) Acenaphthene-d10b	7.001	164	554210	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
106) Benzidine	11.339	184	951794	58.44	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123753.D
Acq On : 21 Jun 2018 1:51 am
Operator : chriss2
Sample : icv5553-50
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 21 11:15:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:14:27 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123754.D
Acq On : 21 Jun 2018 2:19 am
Operator : chriss2
Sample : icv5553-50
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 21 11:16:13 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:14:27 2018
Response via : Initial Calibration

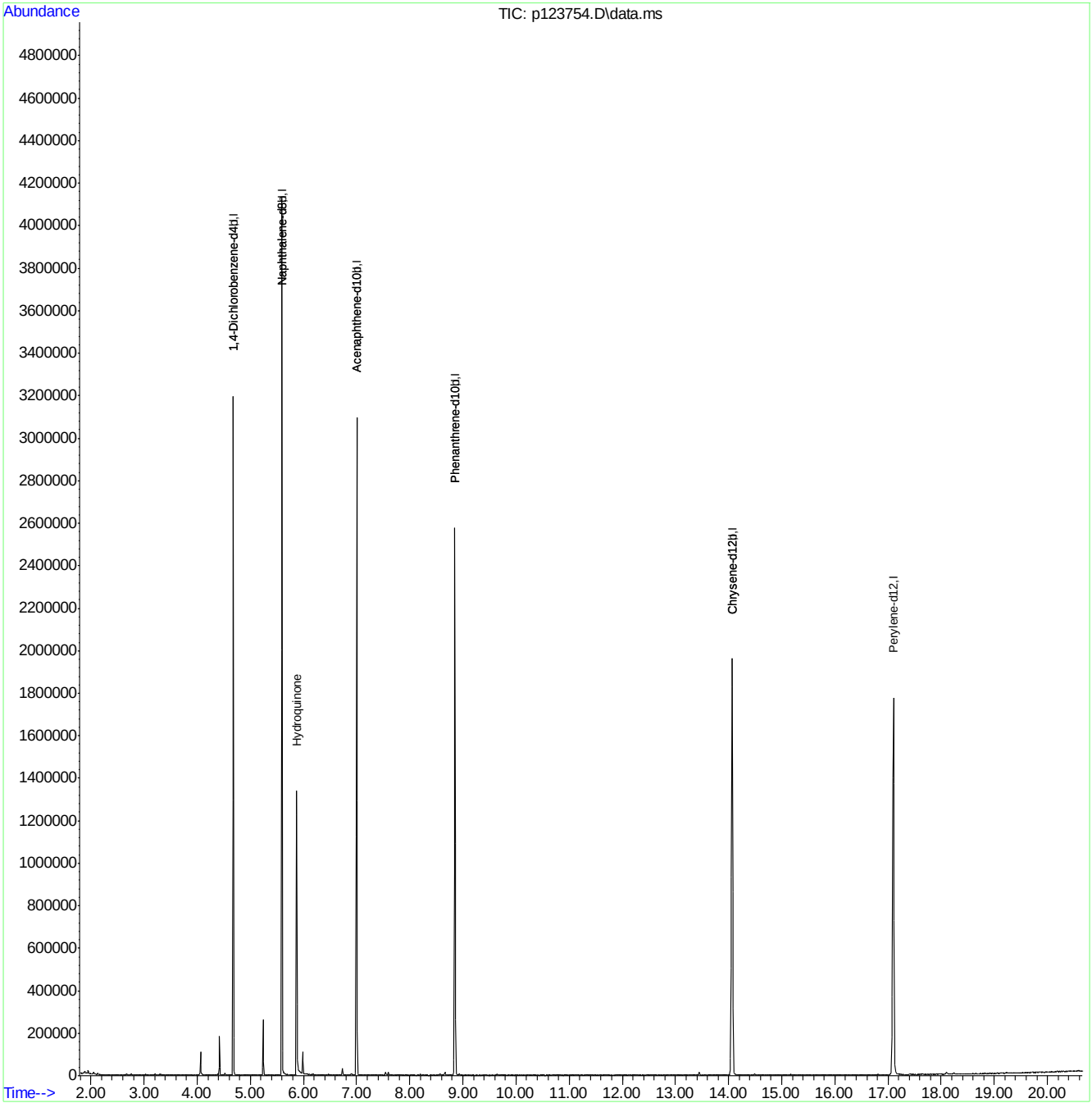
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	349301	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	1337805	40.00	ppm	0.00
47) Acenaphthene-d10	7.001	164	632971	40.00	ppm	0.00
69) Phenanthrene-d10	8.849	188	1212453	40.00	ppm	0.00
83) Chrysene-d12	14.069	240	1206760	40.00	ppm	0.00
91) Perylene-d12	17.103	264	1129133	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.677	152	349301	40.00	ppm	0.00
103) Phenanthrene-d10b	8.849	188	1212453	40.00	ppm	0.00
105) Chrysene-d12b	14.069	240	1206760	40.00	ppm	0.00
107) Naphthalene-d8b	5.596	136	1337805	40.00	ppm	0.00
109) Acenaphthene-d10b	7.001	164	632971	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
108) Hydroquinone	5.874	110	593426	55.19	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123754.D
Acq On : 21 Jun 2018 2:19 am
Operator : chriss2
Sample : icv5553-50
Misc : op9039,ep5553,1000,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 21 11:16:13 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5552.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:14:27 2018
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/25/18 12:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:56:39 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	200628	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	748397	40.00	ppm	0.00
47) Acenaphthene-d10	7.001	164	389327	40.00	ppm	0.00
69) Phenanthrene-d10	8.855	188	720925	40.00	ppm	0.00
83) Chrysene-d12	14.069	240	666235	40.00	ppm	0.00
91) Perylene-d12	17.103	264	669770	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4A	4.677	152	200628	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	748397	40.00	ppm	0.00
120) Acenaphthene-d10A	7.001	164	389327	40.00	ppm	0.00
131) Phenanthrene-d10A	8.855	188	720925	40.00	ppm	0.00
146) Chrysene-d12A	14.069	240	666235	40.00	ppm	0.00
153) Perylene-d12A	17.103	264	669770	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	200628	40.00	ppm	0.00
159) Phenanthrene-d10b	8.855	188	720925	40.00	ppm	0.00
161) Chrysene-d12b	14.069	240	666235	40.00	ppm	0.00
163) Naphthalene-d8b	5.596	136	748397	40.00	ppm	0.00
165) Acenaphthene-d10b	7.001	164	389327	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	748397	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	200628	40.00	ppm	0.00
174) Chrysene-d12c	14.069	240	666182	40.00	ppm	0.00
176) Chrysene-d12d	14.069	240	666182	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	748397	40.00	ppm	0.00
180) Chrysene-d12D	14.069	240	666182	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) 2-Picoline	3.203	93	817598	95.20	ppm	99
103) Pentachloroethane	4.474	167	279569	94.55	ppm	87
104) Methyl methanesulfonate	3.555	80	445142	99.23	ppm	99
105) N-Nitrosodiethylamine	3.871	102	349203	97.91	ppm	95
106) N-Nitrosomethylethylamine	3.304	42	327665	100.23	ppm	98
107) Ethyl methanesulfonate	4.106	79	525815	97.39	ppm	98
108) N-Nitrosopyrrolidine	4.966	41	228103m	90.85	ppm	
109) N-Nitrosomorpholine	4.987	56	252006	86.20	ppm	98
110) o-Toluidine	4.998	106	821180	90.38	ppm #	47
112) O,O,O-Triethyl phospho...	5.399	198	289469	95.14	ppm	82

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:56:39 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration

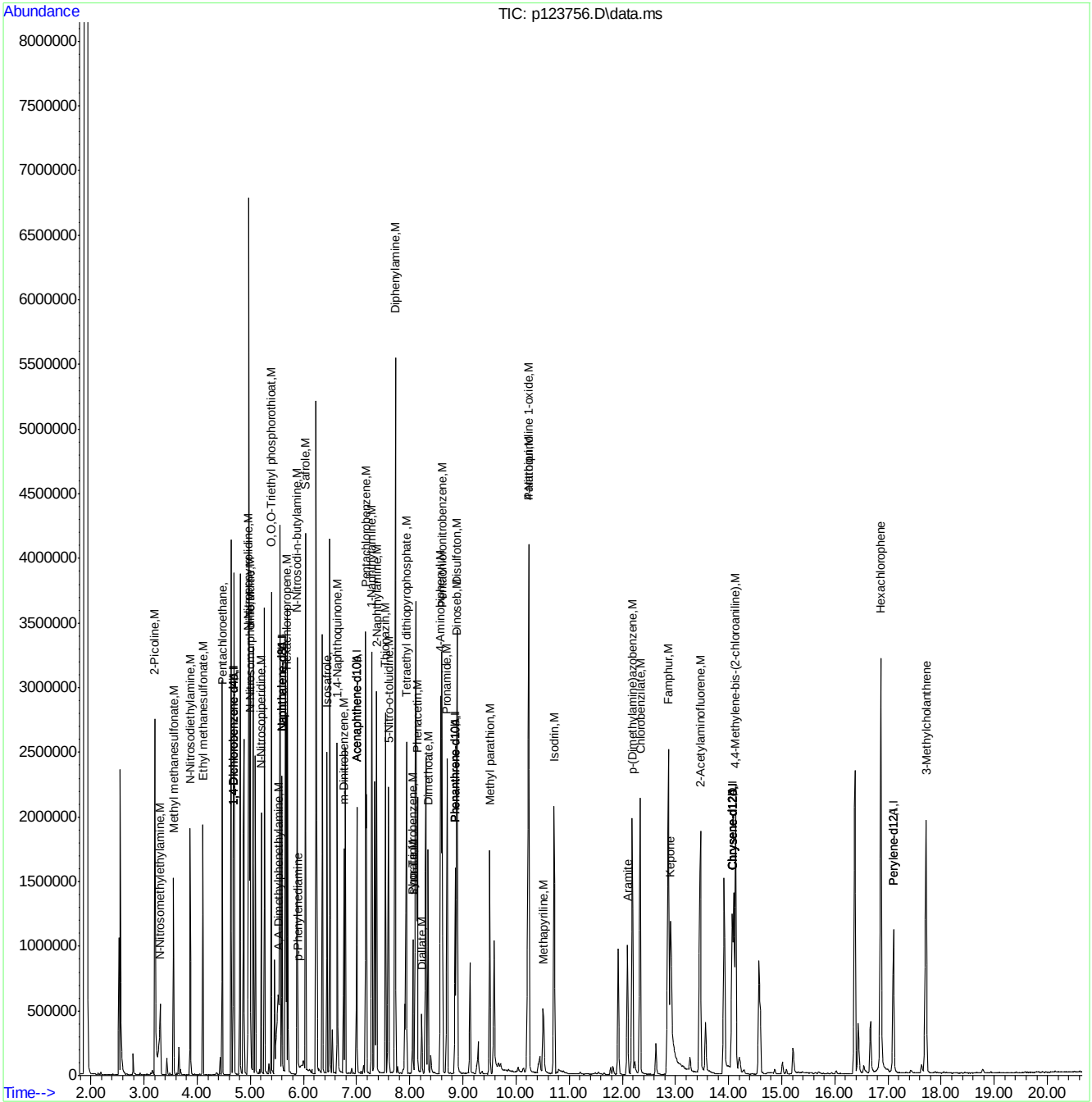
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
113) N-Nitrosopiperidine	5.206	42	361406	93.69	ppm	97
114) A,A-Dimethylphenethyla...	5.527	58	1508408m	99.27	ppm	
115) Hexachloropropene	5.682	213	381362	93.78	ppm	99
116) N-Nitrosodi-n-butylamine	5.885	84	434757	94.23	ppm	94
117) p-Phenylenediamine	5.895	108	346843m	122.80	ppm	
118) Safrole	6.040	162	452695	93.96	ppm	99
119) Isosafrole	6.440	162	354137	96.15	ppm	98
121) Thionazin	7.546	143	160466	90.98	ppm	99
122) Tetraethyl dithiopyrop...	7.936	322	198607	93.90	ppm	100
123) Phorate	8.059	75	312446	96.66	ppm	100
124) Phenacetin	8.144	108	627099	90.56	ppm	98
125) 1,4-Naphthoquinone	6.638	158	397278	84.52	ppm	97
126) m-Dinitrobenzene	6.761	168	199776	97.39	ppm	83
127) Pentachlorobenzene	7.172	250	495348	92.80	ppm	98
128) 2-Naphthylamine	7.375	143	1013208	86.18	ppm	97
129) 1-Naphthylamine	7.284	143	951484	90.82	ppm	99
130) 5-Nitro-o-toluidine	7.600	152	358779	92.32	ppm	94
132) Disulfoton	8.892	88	615248	95.97	ppm	98
133) Dinoseb	8.887	211	291657	100.30	ppm	98
134) Dimethoate	8.347	87	464147	86.66	ppm	98
135) 4-Aminobiphenyl	8.582	169	1233655	93.27	ppm	100
136) Methyl parathion	9.507	125	321787	88.56	ppm	98
137) Parathion	10.244	109	243437	88.21	ppm	97
138) Diphenylamine	7.728	169	1732481	181.77	ppm	97
139) Isodrin	10.719	193	212667	92.20	ppm	96
140) Diallate	8.225	86	89523	98.19	ppm	95
141) Pentachloronitrobenzene	8.609	295	133602	188.38	ppm	97
142) Pronamide	8.705	173	541471	92.65	ppm	99
143) 4-Nitroquinoline 1-oxide	10.244	190	659444	357.99	ppm	94
144) Methapyriline	10.511	58	361573m	71.85	ppm	
145) sym-Trinitrobenzene	8.059	213	115667	97.58	ppm	94
147) Aramite	12.098	185	132586	95.67	ppm	97
148) p-(Dimethylamine)azobe...	12.188	120	593406	93.43	ppm	97
149) Kepone	12.904	272	436017m	579.56	ppm	
150) Famphur	12.872	218	1323520	330.40	ppm	97
151) 2-Acetylaminofluorene	13.471	181	847679	96.46	ppm	99
152) Chlorobenzilate	12.338	251	560187	94.91	ppm	95
154) 4,4-Methylene-bis-(2-c...	14.133	266	233995	82.01	ppm	100
155) Hexachlorophene	16.868	196	474631	730.12	ppm	98
156) 3-Methylcholanthrene	17.718	252	354623	96.95	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:56:39 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration



Manual Integration Approval Summary

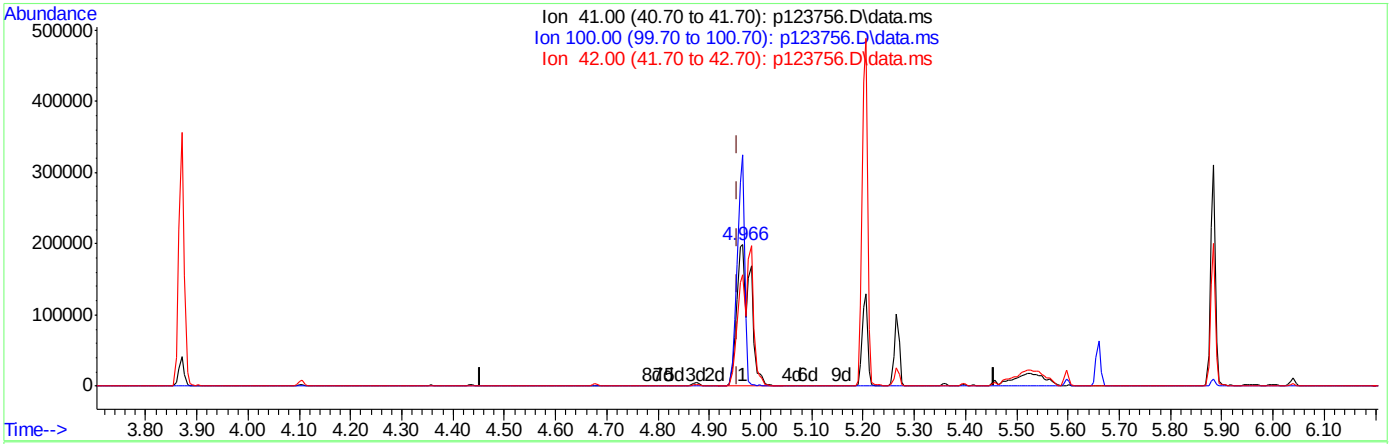
Sample Number: EP5554-IC5554
Lab FileID: P123756.D
Injection Time: 06/21/18 02:55
Method: SW846 8270D
Analyst approved: 06/21/18 13:12 Sean Block
Supervisor approved: 06/25/18 12:07 Kristi Schollenberger

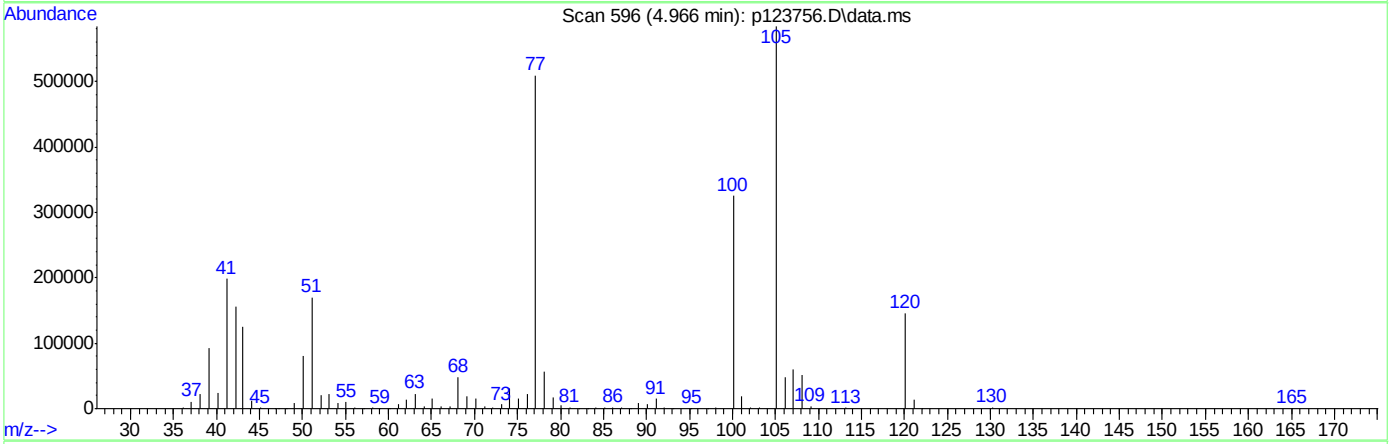
Parameter	CAS	Sig#	R.T. (min.)	Reason
N-Nitrosopyrrolidine	930-55-2		4.97	Overlapping peak
A,A-Dimethylphenethylamine	122-09-8		5.53	Split peak
p-Phenylenediamine	106-50-3		5.90	Split peak
Methapyrilene	91-80-5		10.51	Split peak
Kepone	143-50-0		12.90	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:29:41 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration





TIC: p123756.D\data.ms

(108) N-Nitrosopyrrolidine (M)

4.966min (+0.011) 146.64ppm

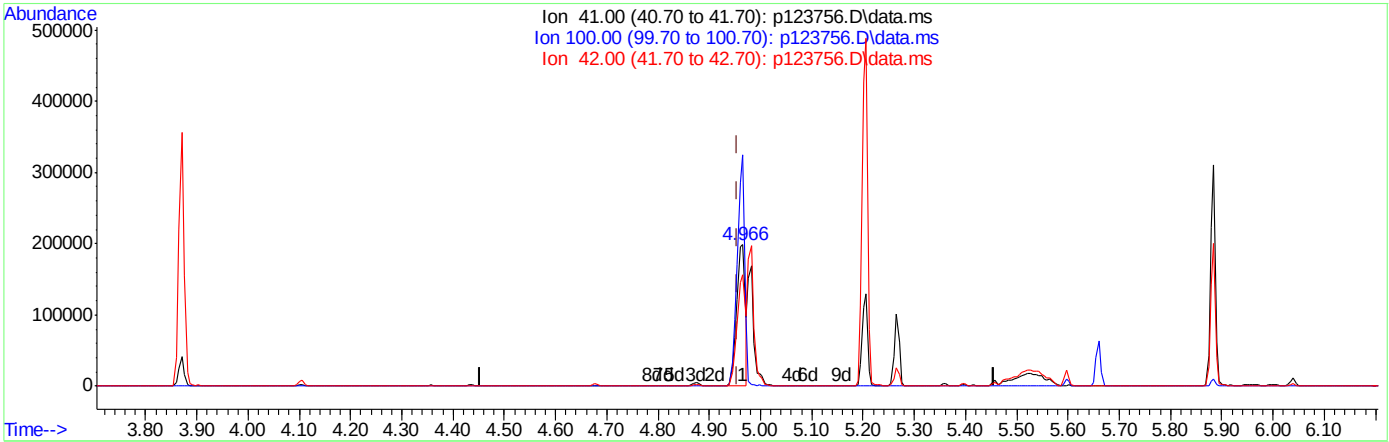
response 368170

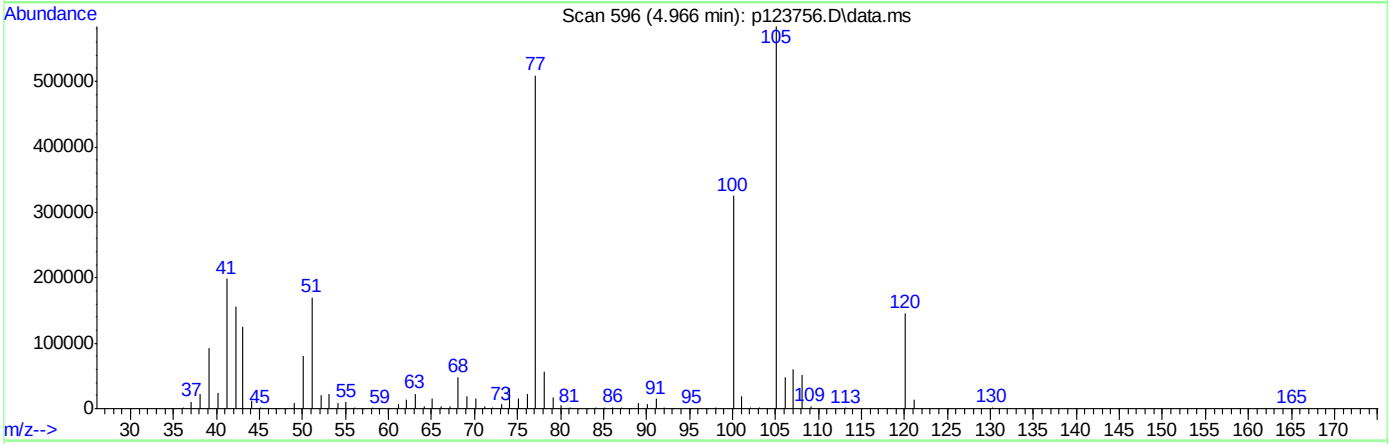
Ion	Exp%	Act%
41.00	100	100
100.00	157.60	164.08
42.00	75.30	78.72
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:29:41 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration





TIC: p123756.D\data.ms

(108) N-Nitrosopyrrolidine (M)

4.966min (+0.011) 90.85ppm m

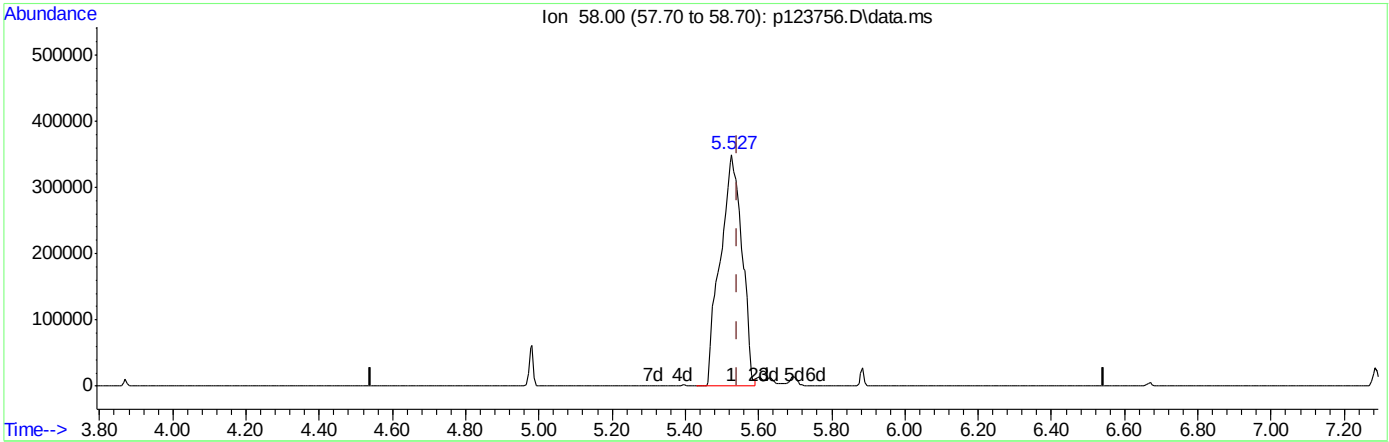
response 228103

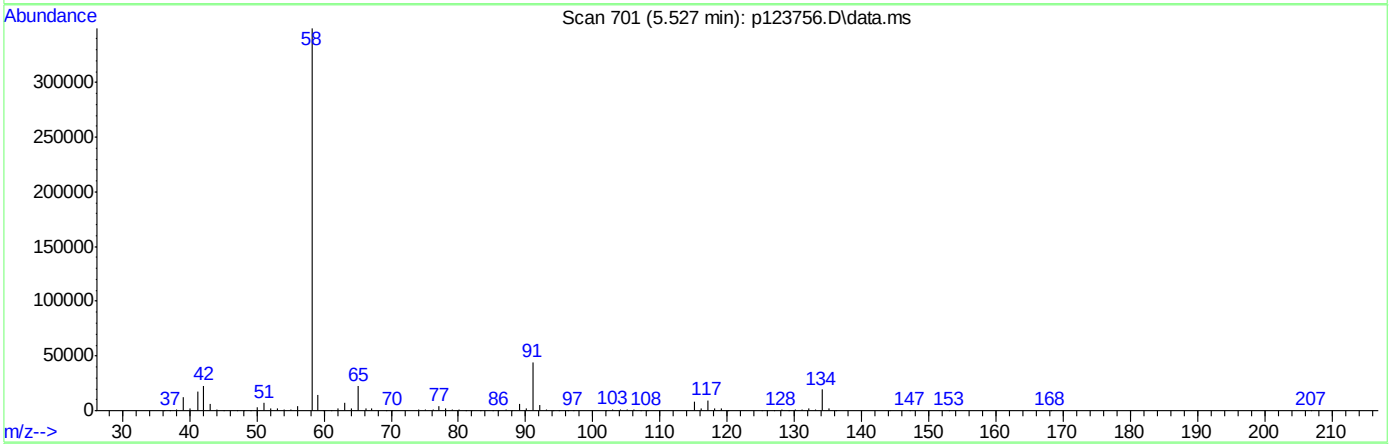
Ion	Exp%	Act%
41.00	100	100
100.00	157.60	163.76
42.00	75.30	78.77
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:29:41 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration





TIC: p123756.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.527min (-0.016) 95.20ppm

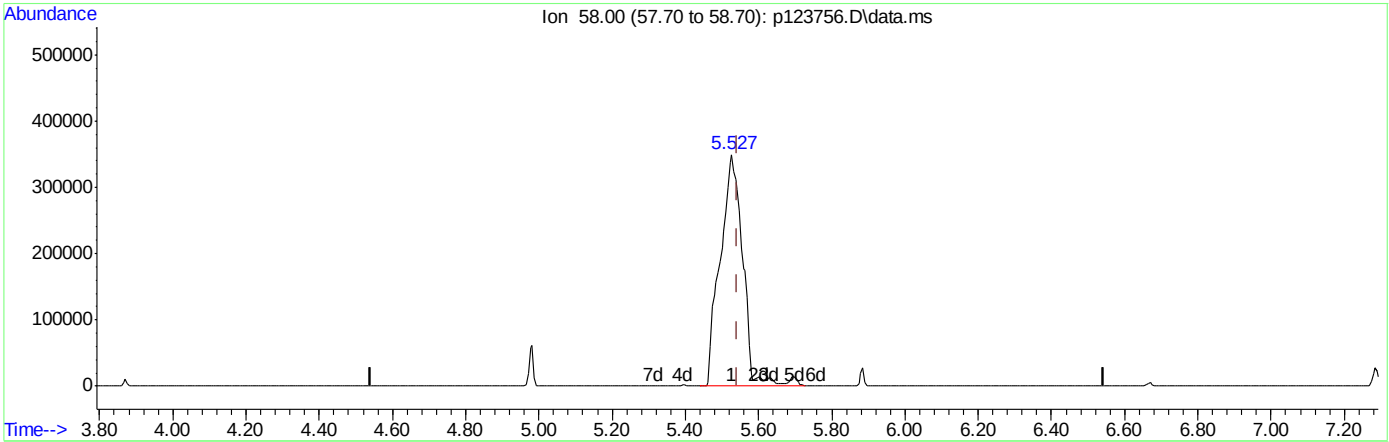
response 1446493

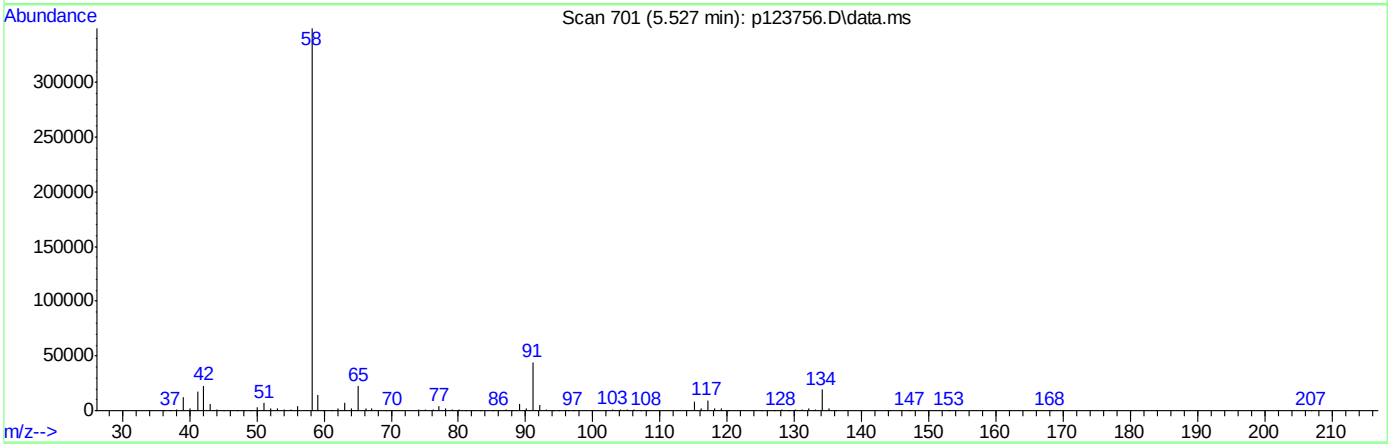
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:29:41 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration





TIC: p123756.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.527min (-0.016) 99.27ppm m

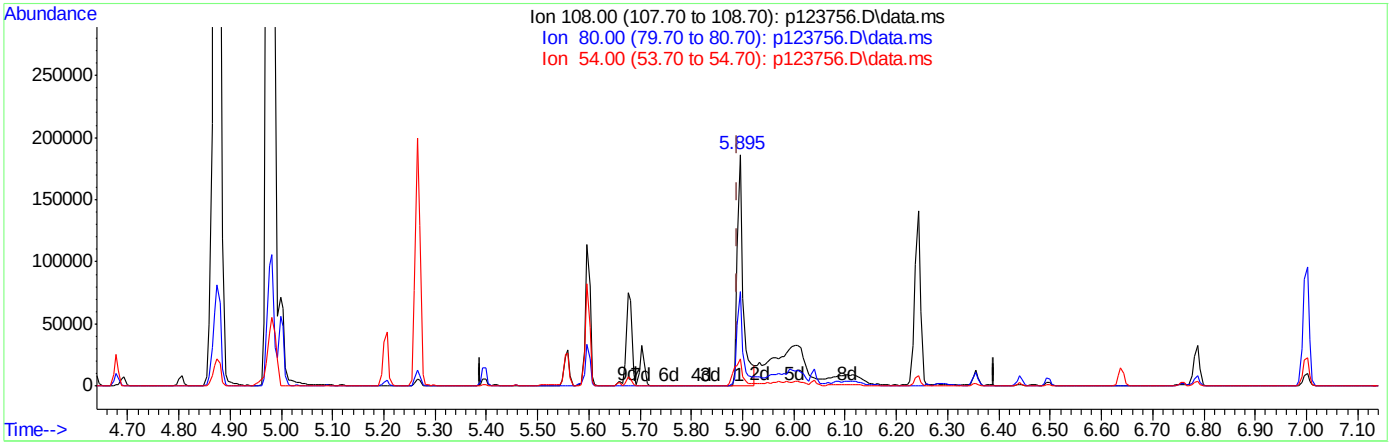
response 1508408

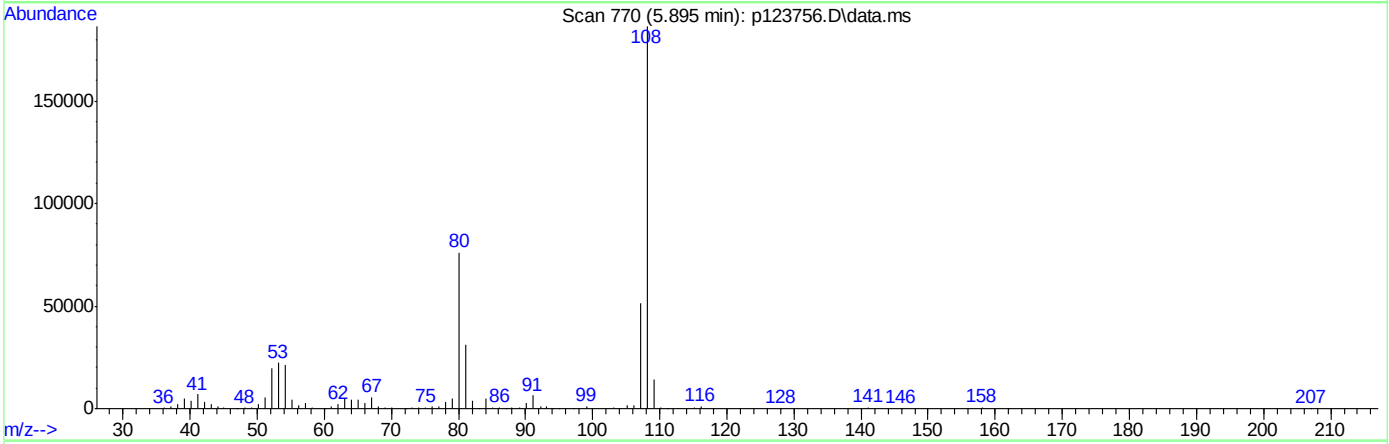
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:29:41 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration





TIC: p123756.D\data.ms

(117) p-Phenylenediamine

5.895min (+0.005) 52.58ppm

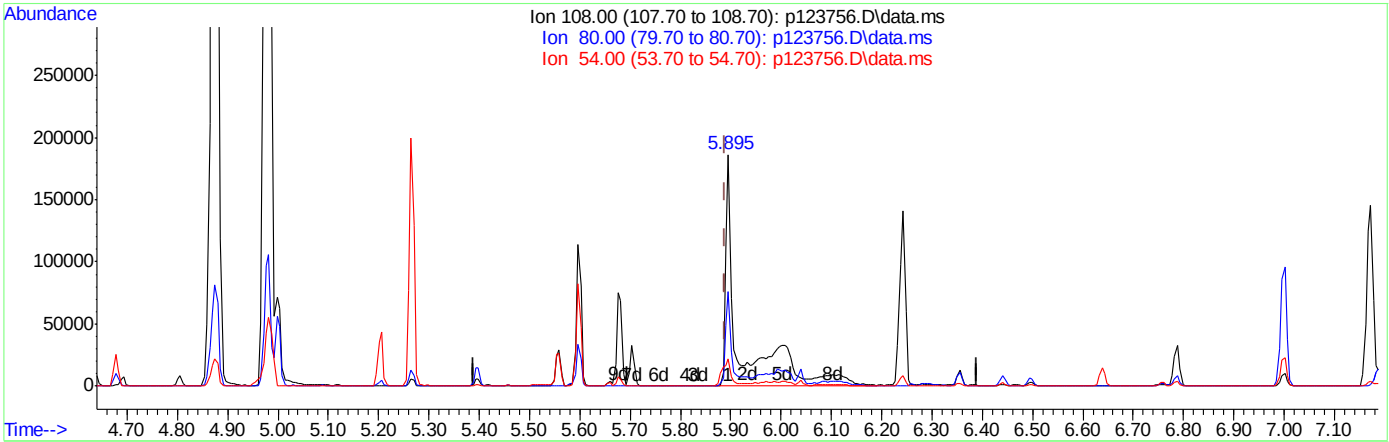
response 148505

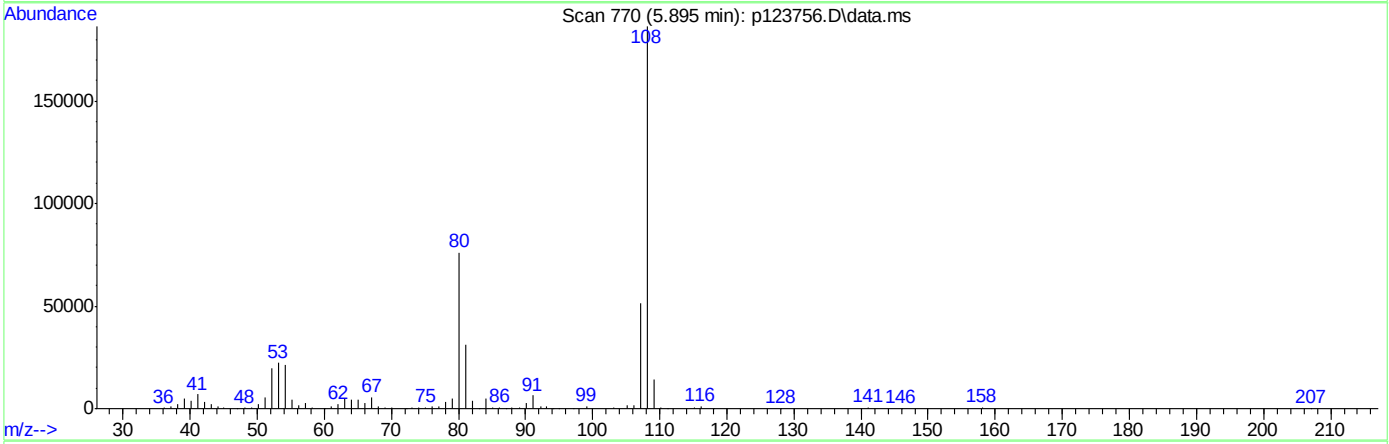
Ion	Exp%	Act%
108.00	100	100
80.00	42.60	40.59
54.00	14.20	11.46
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:29:41 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration





TIC: p123756.D\data.ms

(117) p-Phenylenediamine

5.895min (+0.005) 122.80ppm m

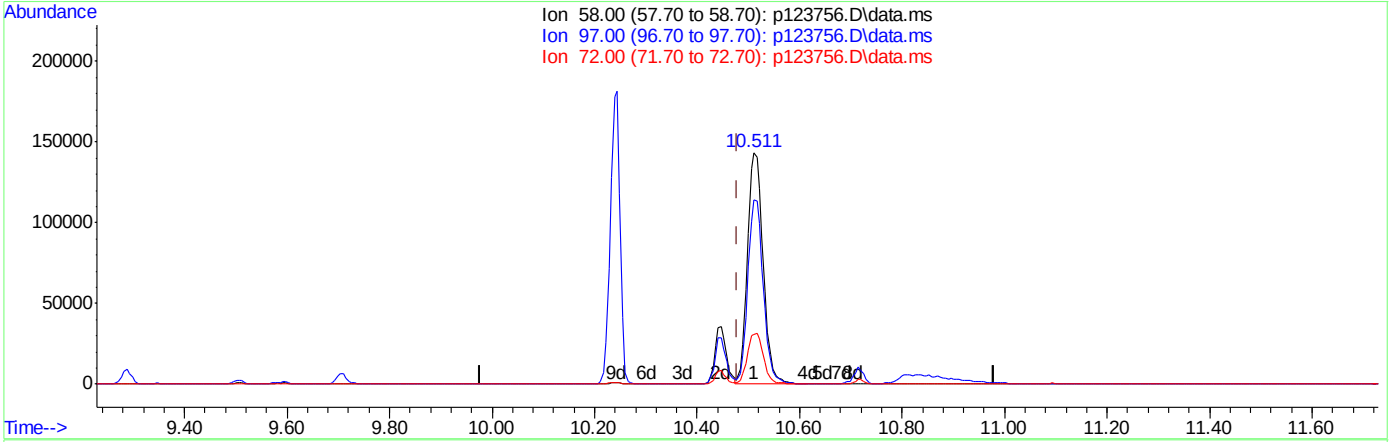
response 346843

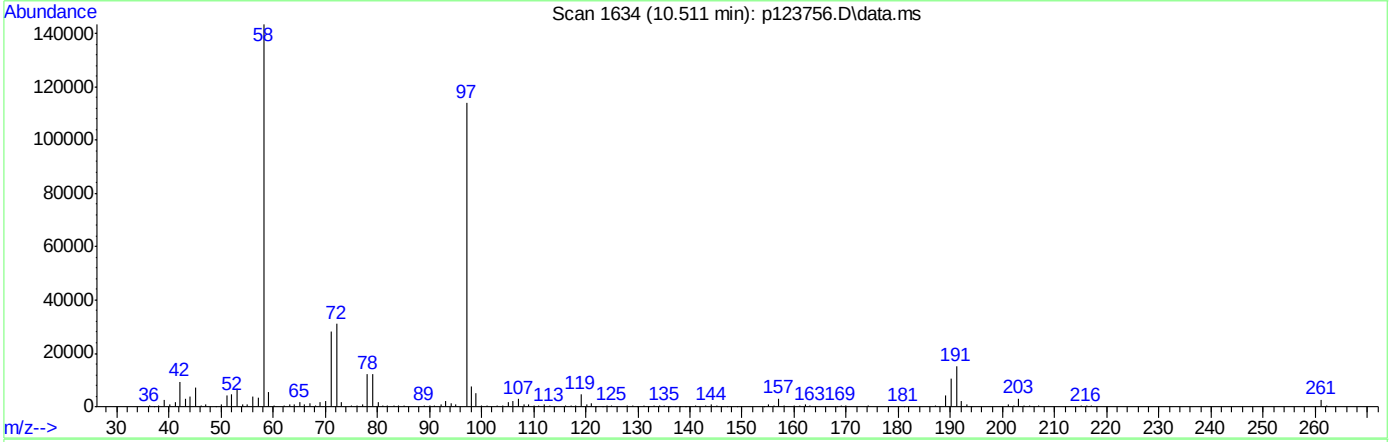
Ion	Exp%	Act%
108.00	100	100
80.00	42.60	40.82
54.00	14.20	11.55
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:29:41 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration





TIC: p123756.D\data.ms

(144) Methapyriline (M)

10.511min (+0.032) 60.90ppm

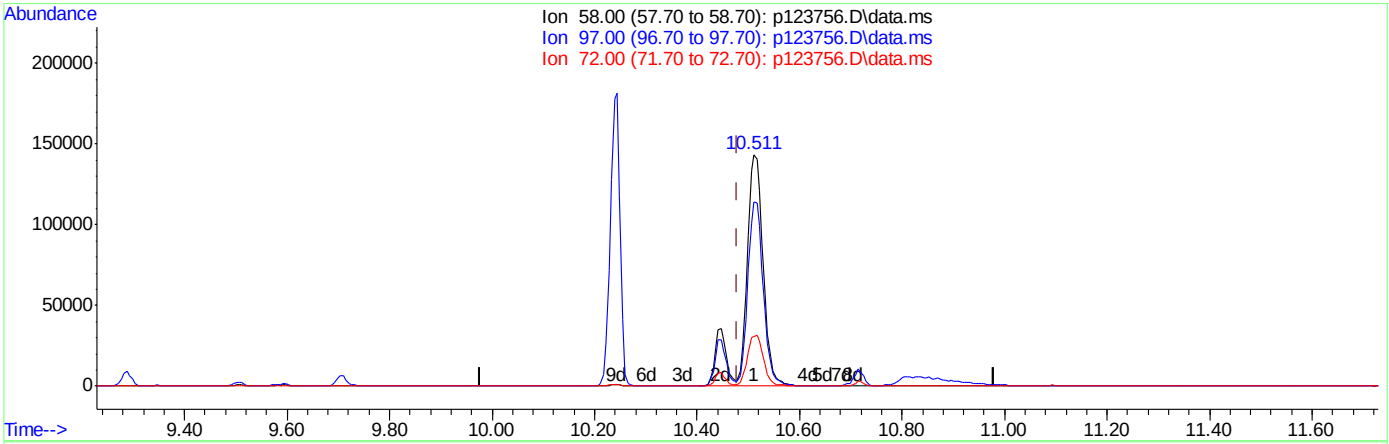
response 306455

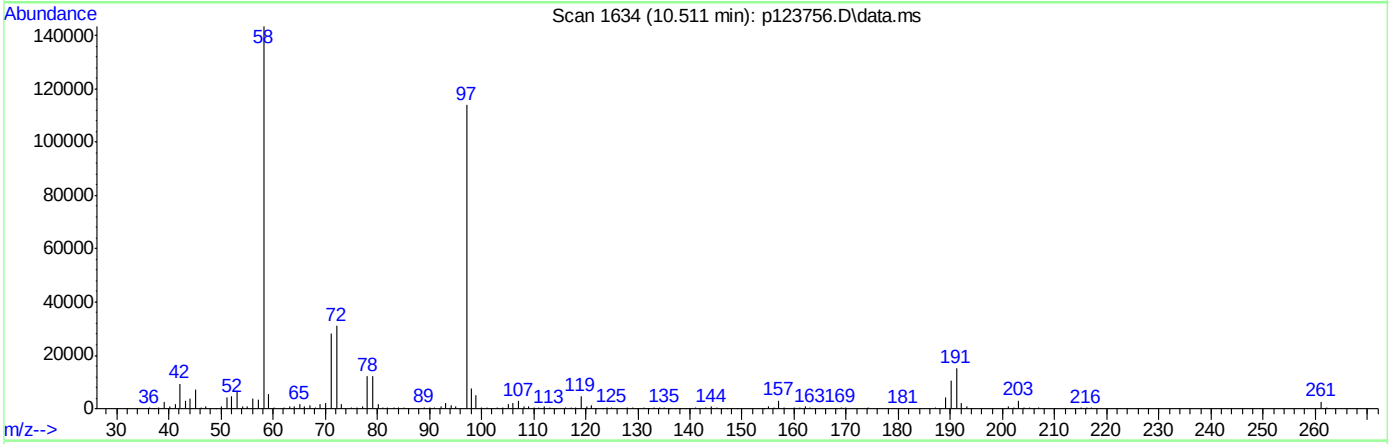
Ion	Exp%	Act%
58.00	100	100
97.00	76.30	79.27
72.00	22.40	21.71
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:29:41 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration





TIC: p123756.D\data.ms

(144) Methapyriline (M)

10.511min (+0.032) 71.85ppm m

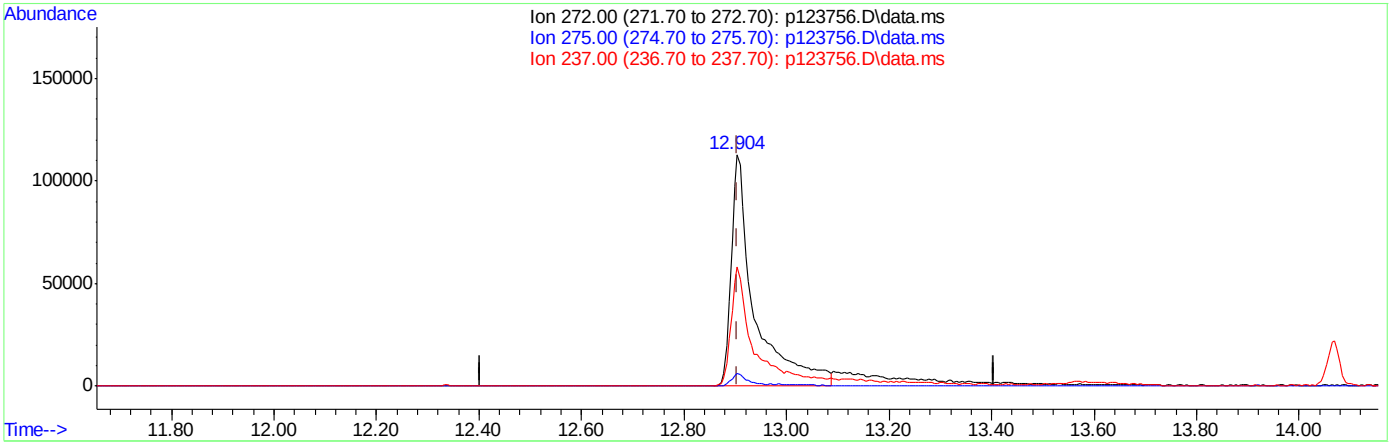
response 361573

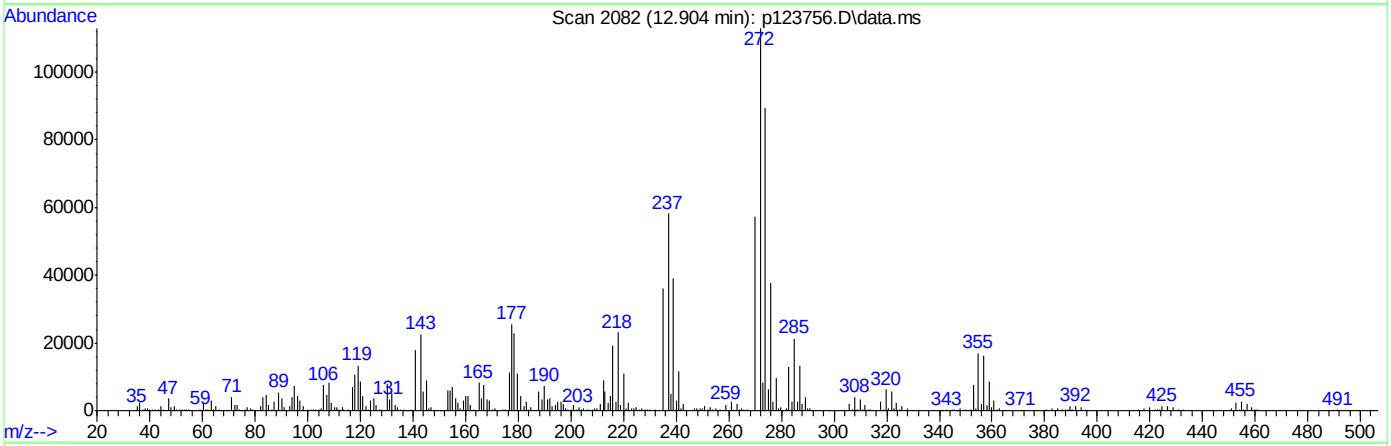
Ion	Exp%	Act%
58.00	100	100
97.00	76.30	79.47
72.00	22.40	21.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:29:41 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration





TIC: p123756.D\data.ms

(149) Kepone

12.904min (-0.000) 474.56ppm

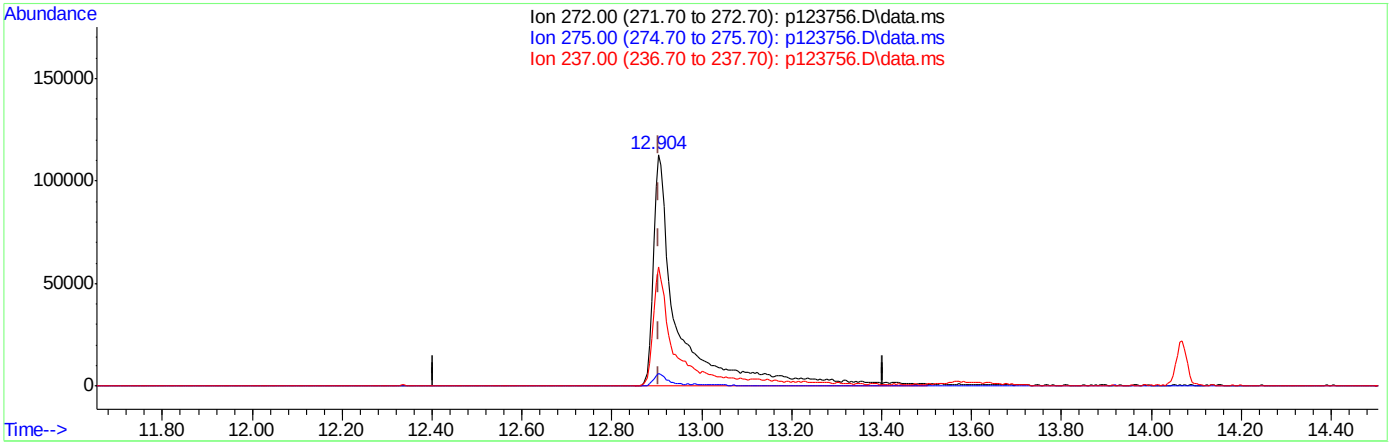
response 357020

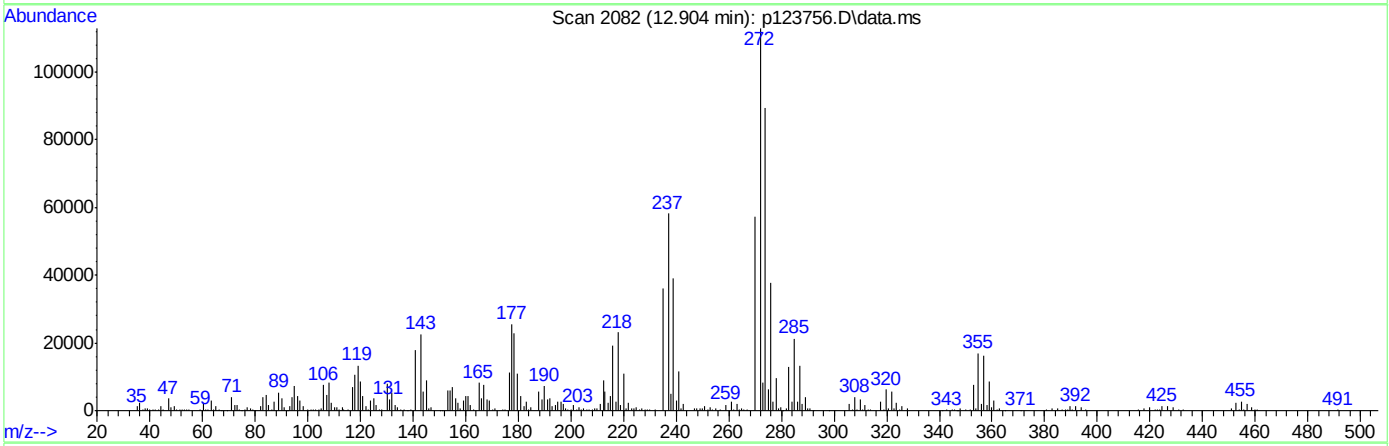
Ion	Exp%	Act%
272.00	100	100
275.00	5.50	5.52
237.00	49.90	50.98
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123756.D
Acq On : 21 Jun 2018 2:55 am
Operator : chriss2
Sample : ic5554-100
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 11:29:41 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:28:32 2018
Response via : Initial Calibration





TIC: p123756.D\data.ms

(149) Kepone

12.904min (-0.000) 579.56ppm m

response 436017

Ion	Exp%	Act%
272.00	100	100
275.00	5.50	5.52
237.00	49.90	51.49
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/25/18 12:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123757.D
Acq On : 21 Jun 2018 3:23 am
Operator : chriss2
Sample : ic5554-80
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 21 11:54:47 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	200849	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	757171	40.00	ppm	0.00
47) Acenaphthene-d10	7.001	164	388819	40.00	ppm	0.00
69) Phenanthrene-d10	8.855	188	736319	40.00	ppm	0.00
83) Chrysene-d12	14.069	240	691077	40.00	ppm	0.00
91) Perylene-d12	17.103	264	692718	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4A	4.677	152	200849	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	757171	40.00	ppm	0.00
120) Acenaphthene-d10A	7.001	164	388819	40.00	ppm	0.00
131) Phenanthrene-d10A	8.855	188	736319	40.00	ppm	0.00
146) Chrysene-d12A	14.069	240	691077	40.00	ppm	0.00
153) Perylene-d12A	17.103	264	692718	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	200849	40.00	ppm	0.00
159) Phenanthrene-d10b	8.855	188	736319	40.00	ppm	0.00
161) Chrysene-d12b	14.069	240	691077	40.00	ppm	0.00
163) Naphthalene-d8b	5.596	136	757171	40.00	ppm	0.00
165) Acenaphthene-d10b	7.001	164	388819	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	757171	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	200849	40.00	ppm	0.00
174) Chrysene-d12c	14.069	240	691077	40.00	ppm	0.00
176) Chrysene-d12d	14.069	240	691077	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	757171	40.00	ppm	0.00
180) Chrysene-d12D	14.069	240	691077	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) 2-Picoline	3.203	93	677138	78.76	ppm	98
103) Pentachloroethane	4.474	167	227372	76.81	ppm	89
104) Methyl methanesulfonate	3.555	80	364846	81.24	ppm	100
105) N-Nitrosodiethylamine	3.870	102	286665	80.28	ppm	97
106) N-Nitrosomethylethylamine	3.304	42	264474	80.81	ppm	99
107) Ethyl methanesulfonate	4.106	79	432867	80.08	ppm	98
108) N-Nitrosopyrrolidine	4.960	41	207753	82.65	ppm	79
109) N-Nitrosomorpholine	4.982	56	215468	73.62	ppm	94
110) o-Toluidine	4.998	106	698721	76.81	ppm #	61
112) O,O,O-Triethyl phospho...	5.398	198	242459	78.76	ppm	80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123757.D
Acq On : 21 Jun 2018 3:23 am
Operator : chriss2
Sample : ic5554-80
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 21 11:54:47 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration

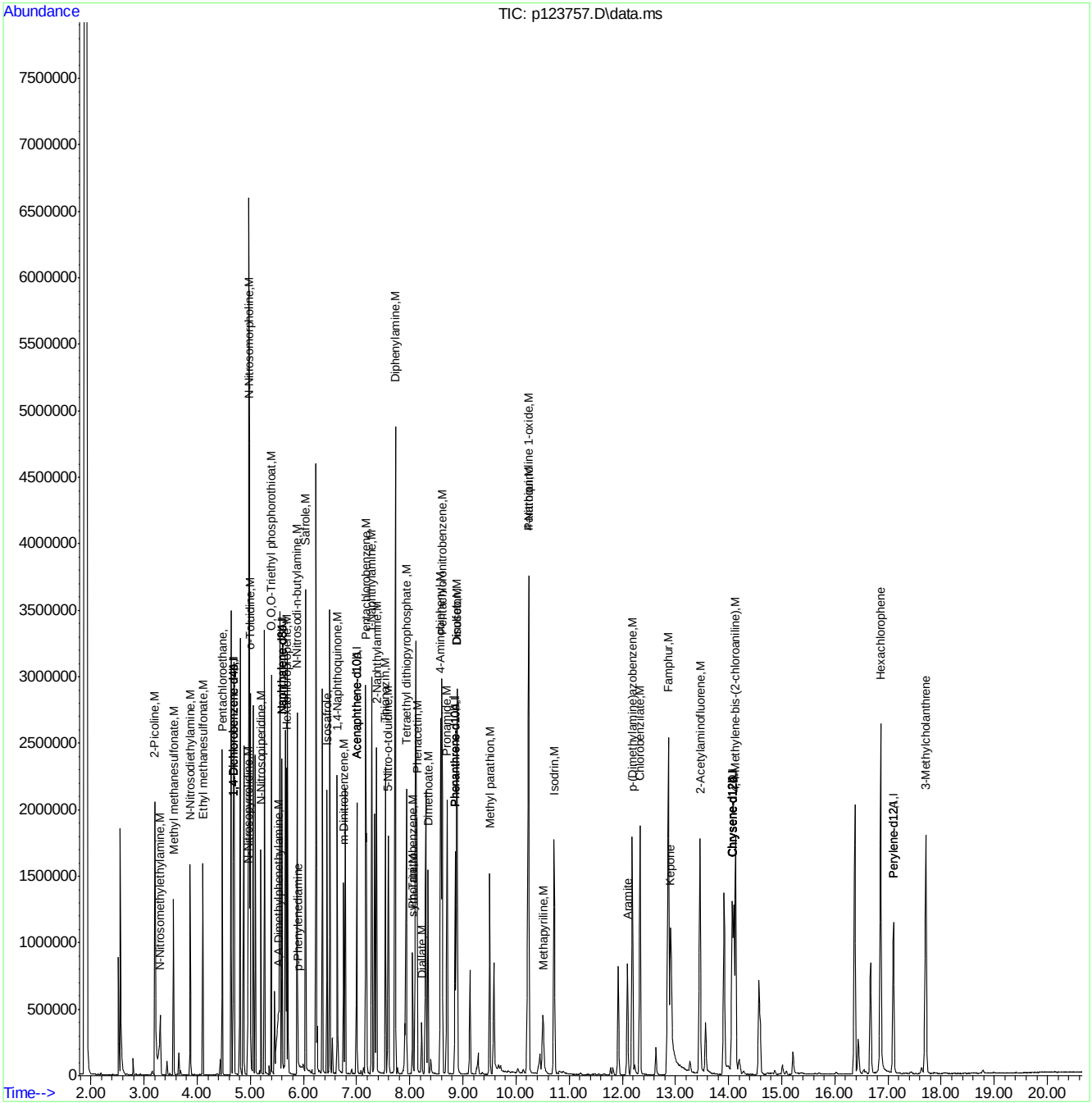
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
113) N-Nitrosopiperidine	5.201	42	305931	78.39	ppm		91
114) A,A-Dimethylphenethyla...	5.532	58	1280390m	83.29	ppm		
115) Hexachloropropene	5.681	213	316677	76.97	ppm		99
116) N-Nitrosodi-n-butylamine	5.884	84	360632	77.26	ppm		94
117) p-Phenylenediamine	5.895	108	304664m	106.62	ppm		
118) Safrole	6.039	162	378305	77.61	ppm		100
119) Isosafrole	6.440	162	292405	78.47	ppm		96
121) Thionazin	7.546	143	134995	76.64	ppm		98
122) Tetraethyl dithiopyrop...	7.936	322	167183	79.15	ppm		100
123) Phorate	8.053	75	271189	84.00	ppm		100
124) Phenacetin	8.139	108	543131	78.54	ppm		100
125) 1,4-Naphthoquinone	6.638	158	342374	72.93	ppm		95
126) m-Dinitrobenzene	6.761	168	170795	83.37	ppm	#	74
127) Pentachlorobenzene	7.172	250	421049	78.98	ppm		99
128) 2-Naphthylamine	7.375	143	875564	74.57	ppm		98
129) 1-Naphthylamine	7.284	143	831526	79.47	ppm		99
130) 5-Nitro-o-toluidine	7.594	152	308851	79.58	ppm		99
132) Disulfoton	8.892	88	538075	82.18	ppm		99
133) Dinoseb	8.887	211	248754	83.76	ppm		99
134) Dimethoate	8.342	87	407400	74.48	ppm		99
135) 4-Aminobiphenyl	8.582	169	1077686	79.77	ppm		99
136) Methyl parathion	9.507	125	284230	76.59	ppm		96
137) Parathion	10.238	109	212446	75.37	ppm		97
138) Diphenylamine	7.728	169	1486067	152.65	ppm		99
139) Isodrin	10.714	193	184550	78.34	ppm		97
140) Diallate	8.224	86	74730	80.25	ppm		96
141) Pentachloronitrobenzene	8.609	295	114140	157.58	ppm		99
142) Pronamide	8.705	173	468882	78.55	ppm		99
143) 4-Nitroquinoline 1-oxide	10.238	190	585088	310.98	ppm		97
144) Methapyriline	10.506	58	349751m	68.05	ppm		
145) sym-Trinitrobenzene	8.059	213	102289	84.49	ppm		95
147) Aramite	12.097	185	116994	81.38	ppm		99
148) p-(Dimethylamine)azobe...	12.188	120	522932	79.37	ppm		98
149) Kepone	12.904	272	388627m	498.00	ppm		
150) Famphur	12.867	218	1327391	319.46	ppm		98
151) 2-Acetylaminofluorene	13.465	181	724871	79.52	ppm		100
152) Chlorobenzilate	12.333	251	489620	79.98	ppm		99
154) 4,4-Methylene-bis-(2-c...	14.133	266	210745	71.42	ppm		100
155) Hexachlorophene	16.863	196	371440	552.46	ppm		97
156) 3-Methylcholanthrene	17.712	252	302082	79.85	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123757.D
Acq On : 21 Jun 2018 3:23 am
Operator : chriss2
Sample : ic5554-80
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 21 11:54:47 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration



Manual Integration Approval Summary

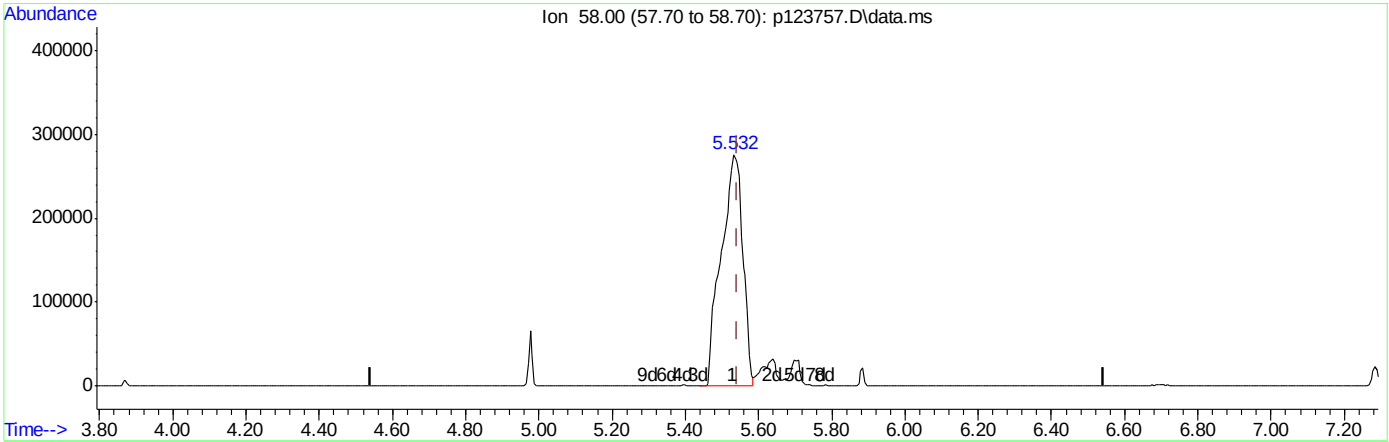
Sample Number: EP5554-IC5554
Lab FileID: P123757.D
Injection Time: 06/21/18 03:23
Method: SW846 8270D
Analyst approved: 06/21/18 13:12 Sean Block
Supervisor approved: 06/25/18 12:07 Kristi Schollenberger

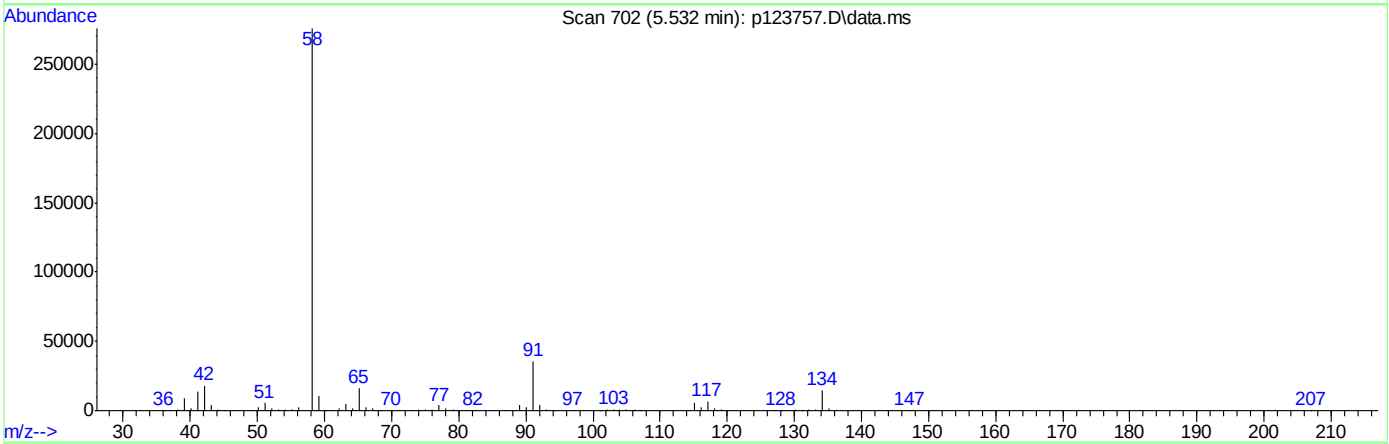
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		5.53	Split peak
p-Phenylenediamine	106-50-3		5.90	Split peak
Methapyrilene	91-80-5		10.51	Split peak
Kepone	143-50-0		12.90	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123757.D
Acq On : 21 Jun 2018 3:23 am
Operator : chriss2
Sample : ic5554-80
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 21 11:31:40 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123757.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.532min (-0.011) 73.65ppm

response 1132207

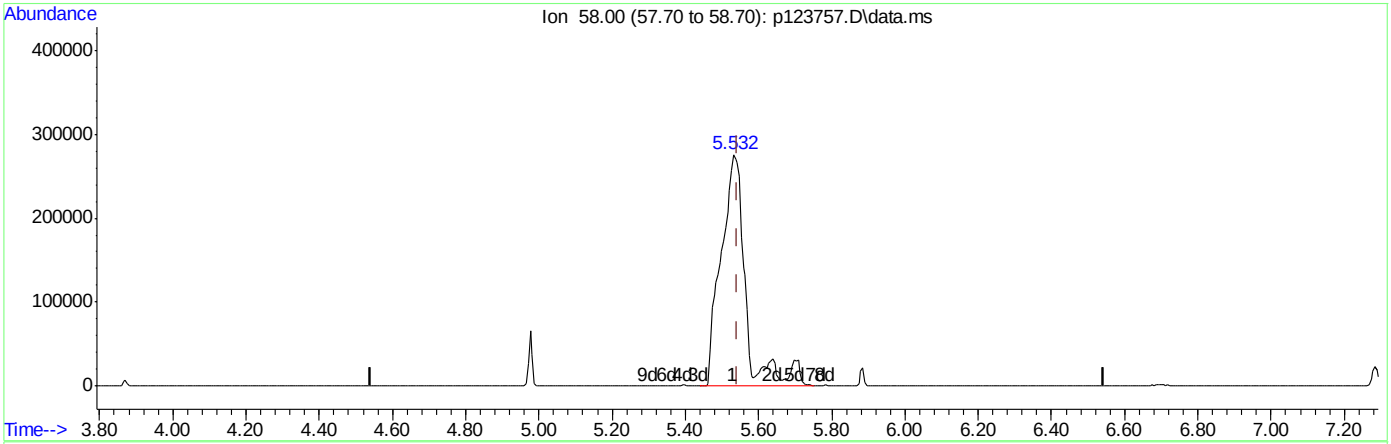
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

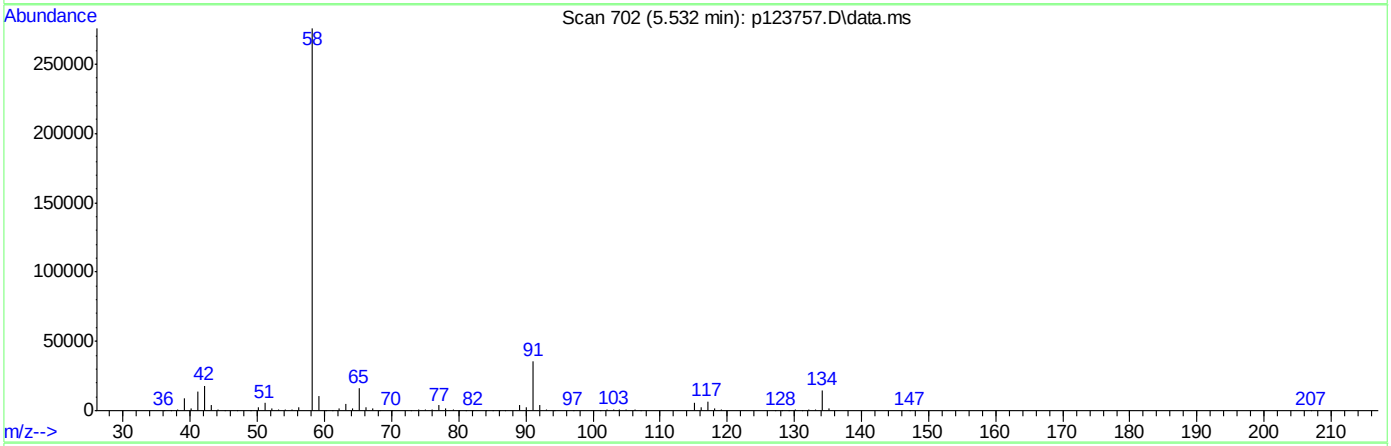
P123757.D edits: A,A-Dimethylphenethylamine

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123757.D
Acq On : 21 Jun 2018 3:23 am
Operator : chriss2
Sample : ic5554-80
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 21 11:31:40 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123757.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.532min (-0.011) 83.29ppm m

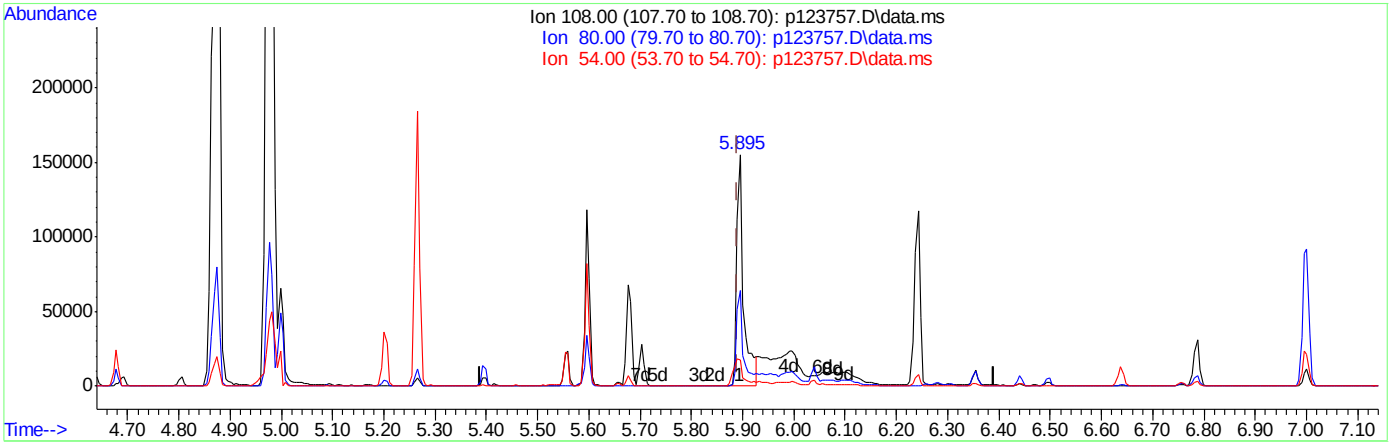
response 1280390

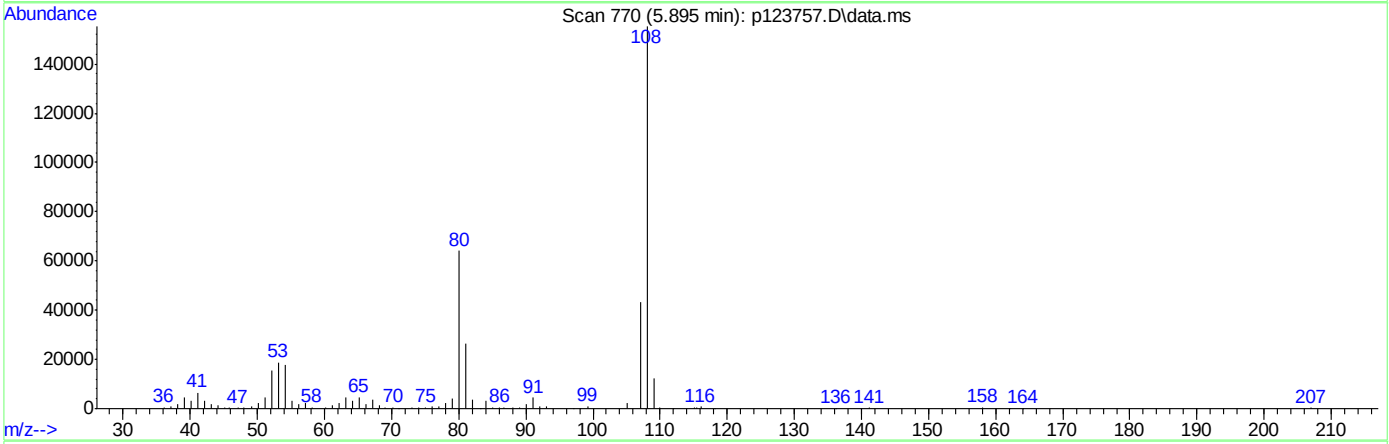
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123757.D
Acq On : 21 Jun 2018 3:23 am
Operator : chriss2
Sample : ic5554-80
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 21 11:31:40 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123757.D\data.ms

(117) p-Phenylenediamine

5.895min (+0.005) 51.02ppm

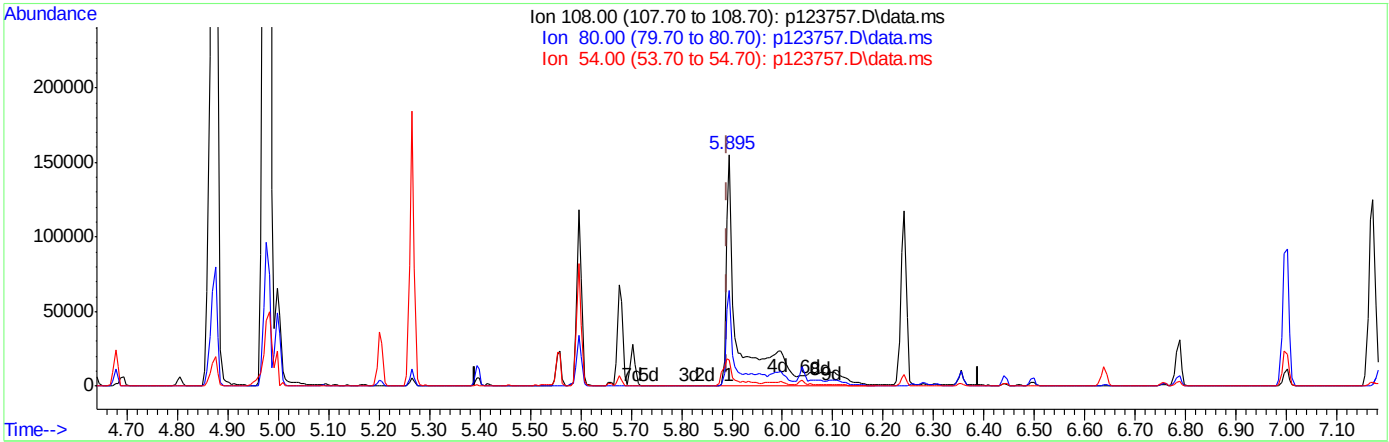
response 145780

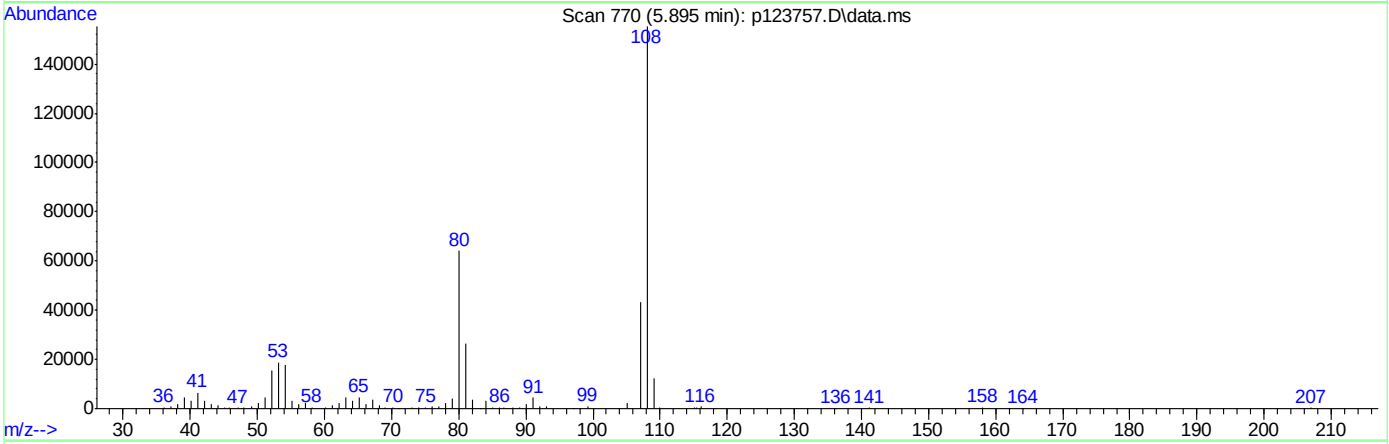
Ion	Exp%	Act%
108.00	100	100
80.00	42.60	41.24
54.00	14.20	11.47
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123757.D
Acq On : 21 Jun 2018 3:23 am
Operator : chriss2
Sample : ic5554-80
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 21 11:31:40 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123757.D\data.ms

(117) p-Phenylenediamine

5.895min (+0.005) 106.62ppm m

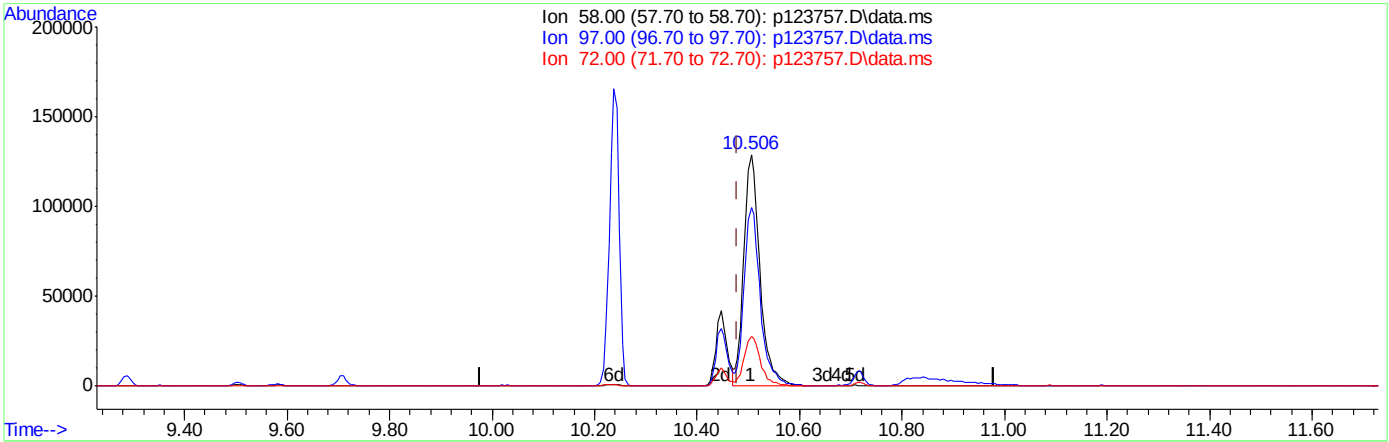
response 304664

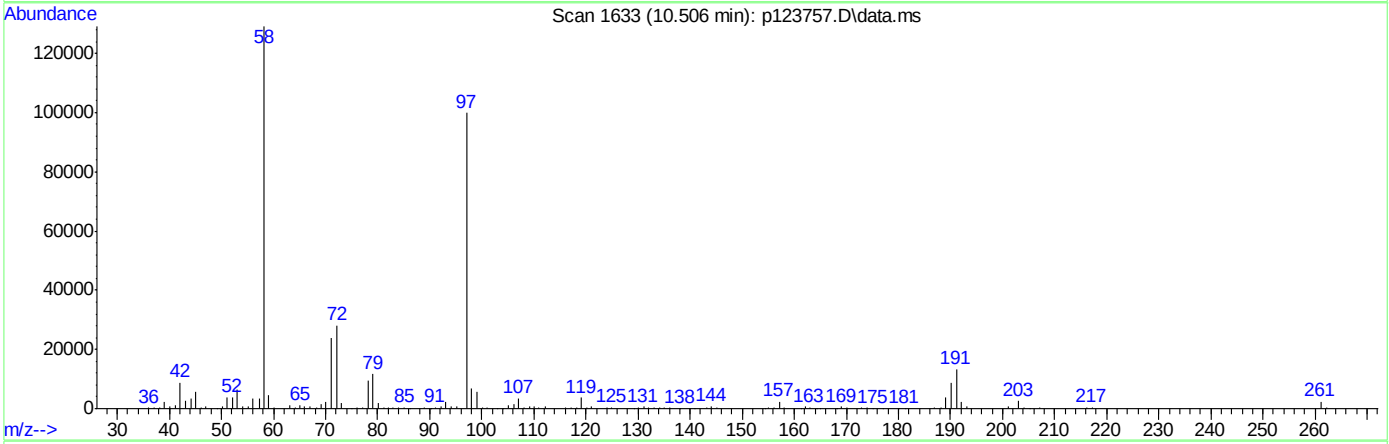
Ion	Exp%	Act%
108.00	100	100
80.00	42.60	41.28
54.00	14.20	11.45
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123757.D
Acq On : 21 Jun 2018 3:23 am
Operator : chriss2
Sample : ic5554-80
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 21 11:31:40 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123757.D\data.ms

(144) Methapyriline (M)

10.506min (+0.026) 56.08ppm

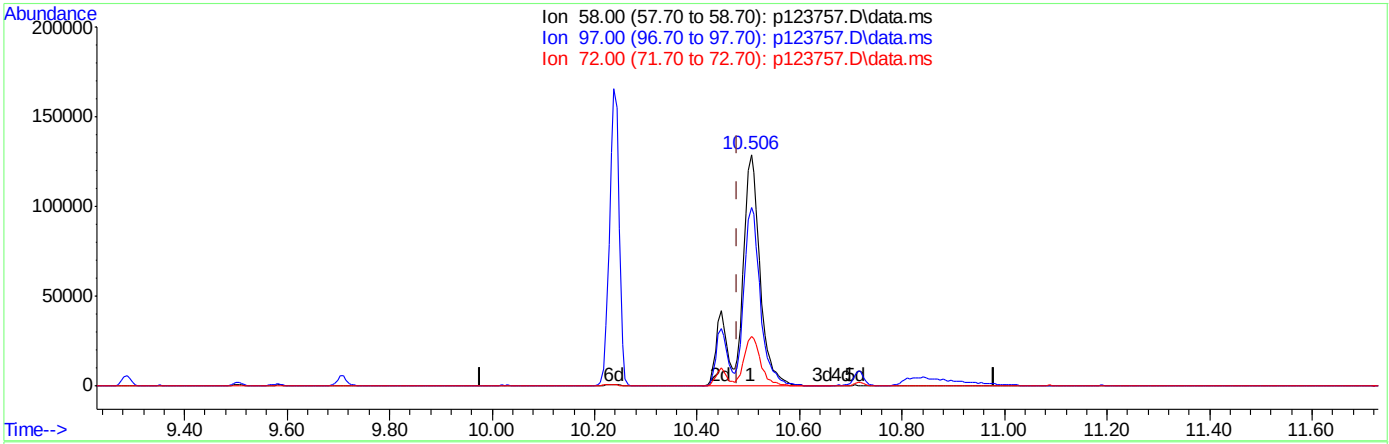
response 288247

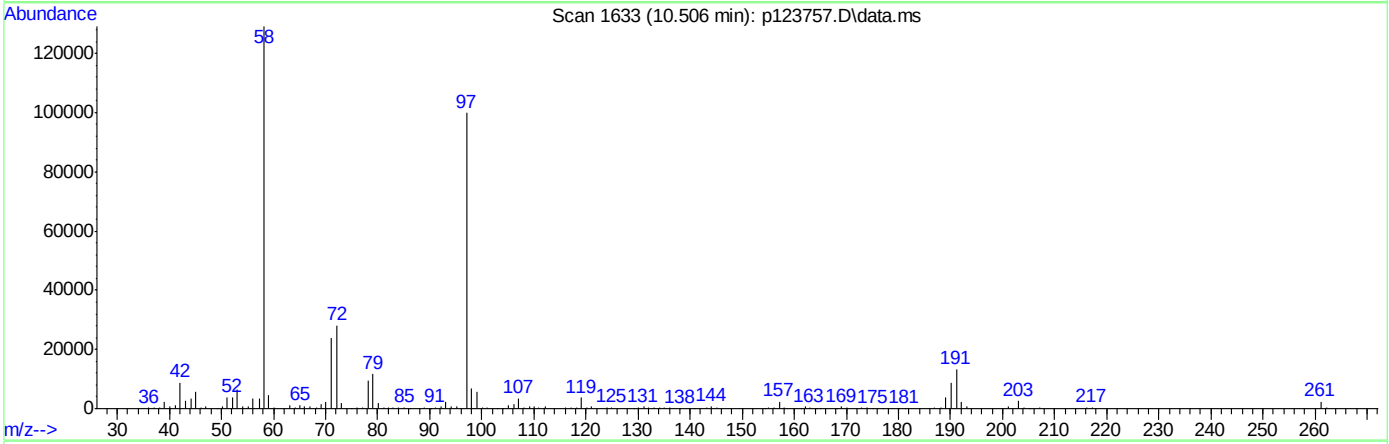
Ion	Exp%	Act%
58.00	100	100
97.00	76.30	77.02
72.00	22.40	21.50
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123757.D
Acq On : 21 Jun 2018 3:23 am
Operator : chriss2
Sample : ic5554-80
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 21 11:31:40 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123757.D\data.ms

(144) Methapyriline (M)

10.506min (+0.026) 68.05ppm m

response 349751

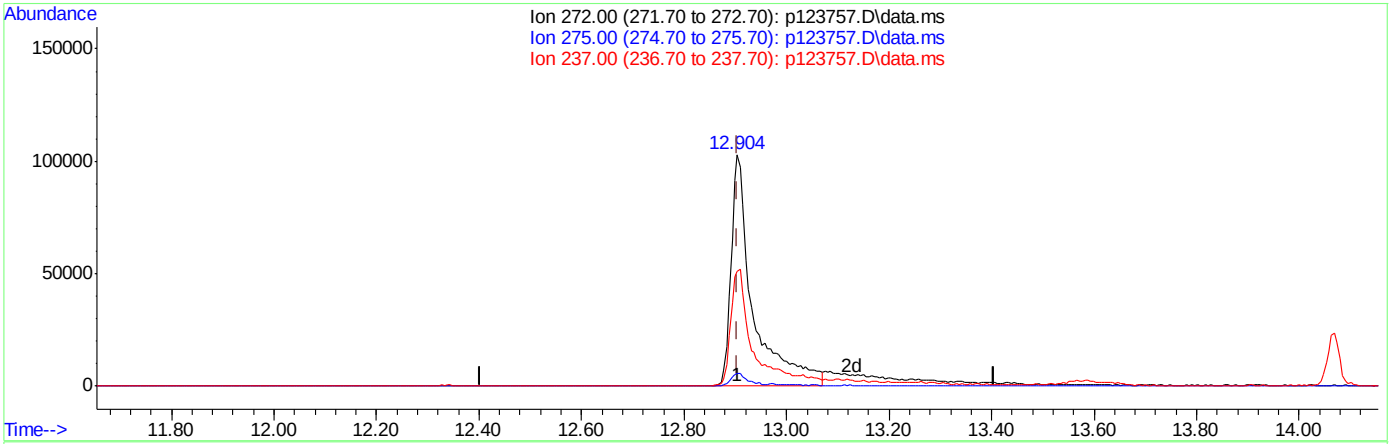
Ion	Exp%	Act%
58.00	100	100
97.00	76.30	77.28
72.00	22.40	21.71
0.00	0.00	0.00

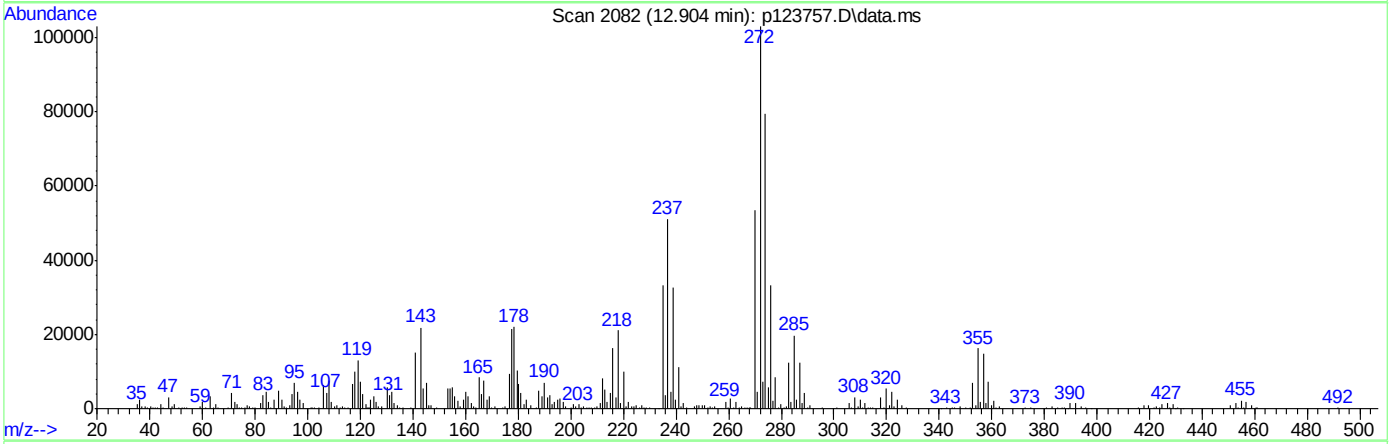
SGS JC71604

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123757.D
Acq On : 21 Jun 2018 3:23 am
Operator : chriss2
Sample : ic5554-80
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 21 11:31:40 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123757.D\data.ms

(149) Kepone

12.904min (-0.000) 397.74ppm

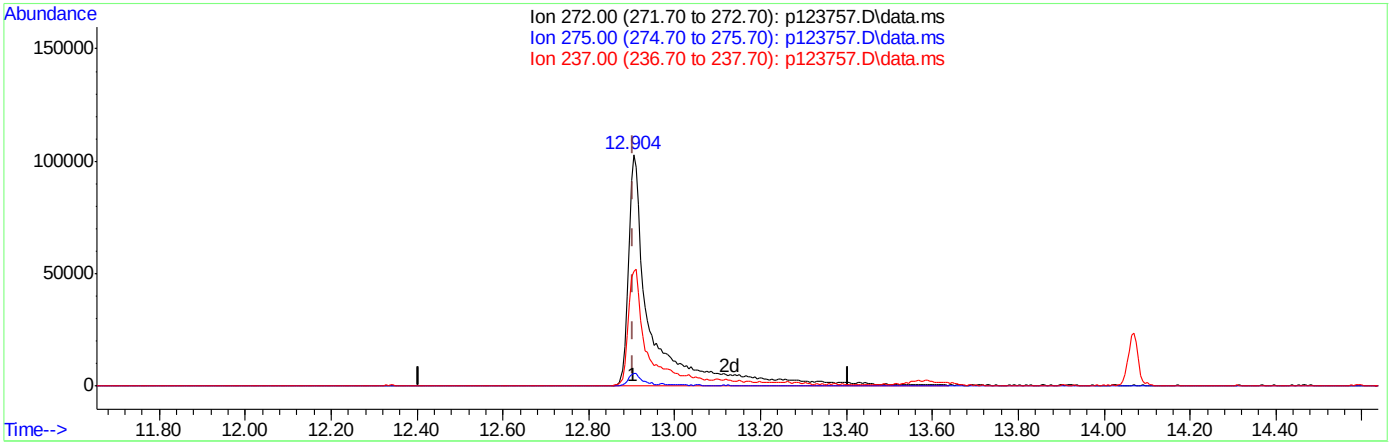
response 310387

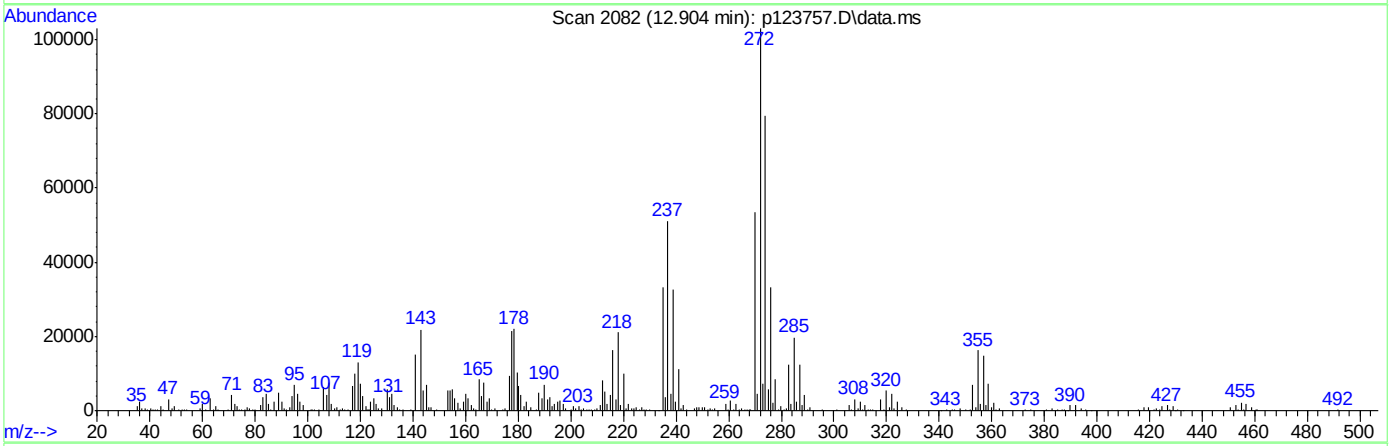
Ion	Exp%	Act%
272.00	100	100
275.00	5.50	5.62
237.00	49.90	49.78
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123757.D
Acq On : 21 Jun 2018 3:23 am
Operator : chriss2
Sample : ic5554-80
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 21 11:31:40 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123757.D\data.ms

(149) Kepone

12.904min (-0.000) 498.00ppm m

response 388627

Ion	Exp%	Act%
272.00	100	100
275.00	5.50	5.58
237.00	49.90	49.65
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/25/18 12:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123758.D
Acq On : 21 Jun 2018 3:51 am
Operator : chriss2
Sample : icc5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 21 12:08:18 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	209874	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	773304	40.00	ppm	0.00
47) Acenaphthene-d10	7.001	164	392320	40.00	ppm	0.00
69) Phenanthrene-d10	8.850	188	741747	40.00	ppm	0.00
83) Chrysene-d12	14.064	240	692856	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	688832	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4A	4.677	152	209874	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	773304	40.00	ppm	0.00
120) Acenaphthene-d10A	7.001	164	392320	40.00	ppm	0.00
131) Phenanthrene-d10A	8.850	188	741747	40.00	ppm	0.00
146) Chrysene-d12A	14.064	240	692856	40.00	ppm	0.00
153) Perylene-d12A	17.098	264	688832	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	209874	40.00	ppm	0.00
159) Phenanthrene-d10b	8.850	188	741747	40.00	ppm	0.00
161) Chrysene-d12b	14.064	240	692856	40.00	ppm	-0.01
163) Naphthalene-d8b	5.596	136	773304	40.00	ppm	0.00
165) Acenaphthene-d10b	7.001	164	392320	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	773304	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	209874	40.00	ppm	0.00
174) Chrysene-d12c	14.064	240	692856	40.00	ppm	0.00
176) Chrysene-d12d	14.064	240	692856	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	773304	40.00	ppm	0.00
180) Chrysene-d12D	14.064	240	692856	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) 2-Picoline	3.208	93	449218	50.00	ppm	100
103) Pentachloroethane	4.469	167	154655	50.00	ppm	100
104) Methyl methanesulfonate	3.550	80	234635	50.00	ppm	100
105) N-Nitrosodiethylamine	3.871	102	186552	50.00	ppm	100
106) N-Nitrosomethylethylamine	3.304	42	172174	50.35	ppm	100
107) Ethyl methanesulfonate	4.100	79	282401	50.00	ppm	100
108) N-Nitrosopyrrolidine	4.955	41	130846	49.82	ppm	87
109) N-Nitrosomorpholine	4.982	56	152913	50.00	ppm	100
110) o-Toluidine	4.998	106	475250	50.00	ppm	100
112) O,O,O-Triethyl phospho...	5.393	198	157199	50.00	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123758.D
Acq On : 21 Jun 2018 3:51 am
Operator : chriss2
Sample : icc5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 21 12:08:18 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration

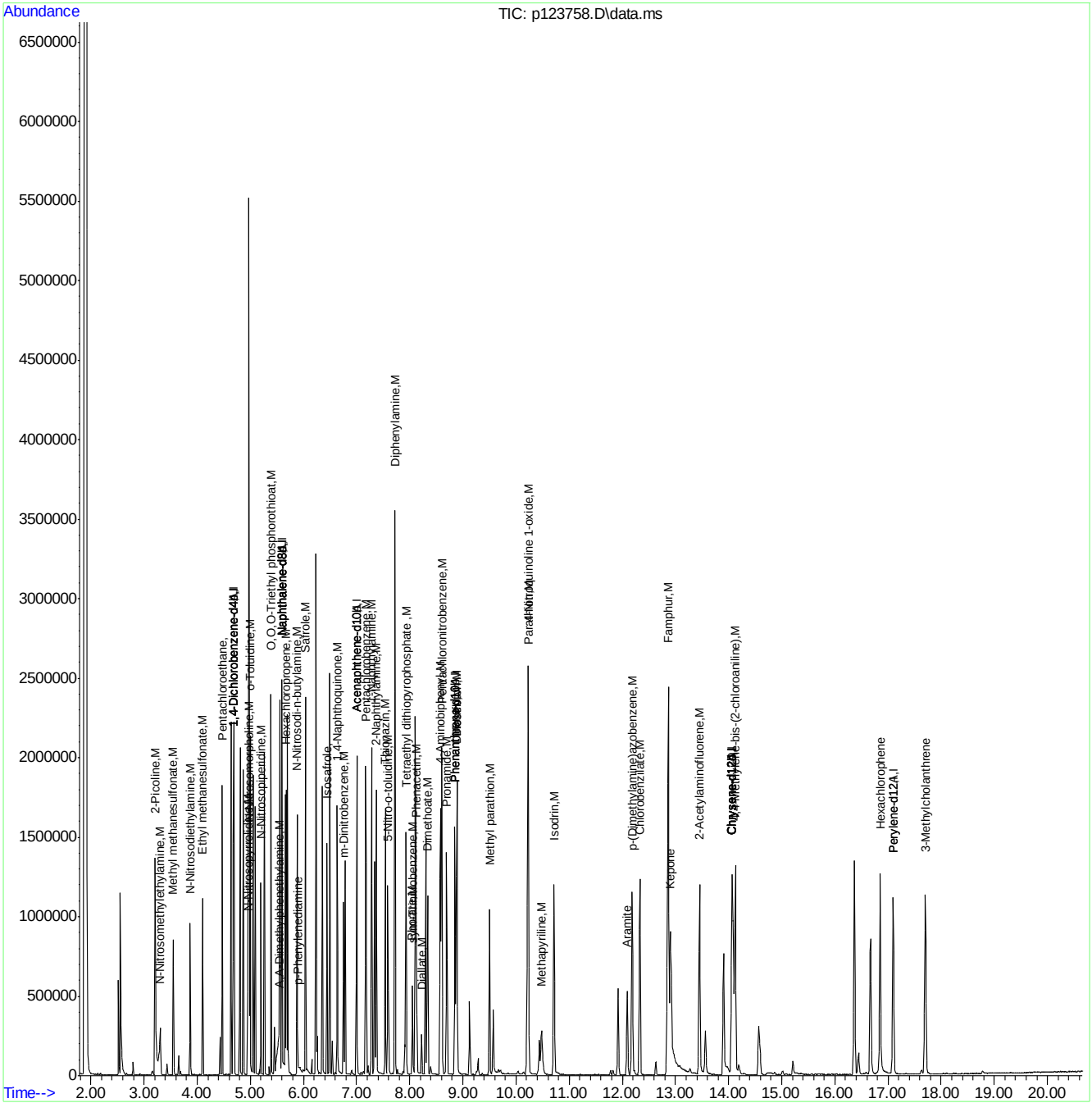
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
113) N-Nitrosopiperidine	5.201	42	199296	50.00	ppm	100
114) A,A-Dimethylphenethyla...	5.543	58	787468m	50.16	ppm	
115) Hexachloropropene	5.676	213	210096	50.00	ppm	100
116) N-Nitrosodi-n-butylamine	5.879	84	238356	50.00	ppm	100
117) p-Phenylenediamine	5.890	108	146334m	50.14	ppm	
118) Safrole	6.040	162	248928	50.00	ppm	100
119) Isosafrole	6.440	162	190274	50.00	ppm	100
121) Thionazin	7.541	143	88867	50.00	ppm	100
122) Tetraethyl dithiopyrop...	7.931	322	106562	50.00	ppm	100
123) Phorate	8.048	75	162693	49.95	ppm	100
124) Phenacetin	8.128	108	348879	50.00	ppm	100
125) 1,4-Naphthoquinone	6.638	158	236826	50.00	ppm	100
126) m-Dinitrobenzene	6.755	168	103564	50.10	ppm	100
127) Pentachlorobenzene	7.172	250	268938	50.00	ppm	100
128) 2-Naphthylamine	7.370	143	592354	50.00	ppm	100
129) 1-Naphthylamine	7.284	143	527876	50.00	ppm	100
130) 5-Nitro-o-toluidine	7.589	152	195798	50.00	ppm	100
132) Disulfoton	8.887	88	329806	50.00	ppm	100
133) Dinoseb	8.882	211	149593	50.00	ppm	100
134) Dimethoate	8.337	87	275517	50.00	ppm	100
135) 4-Aminobiphenyl	8.577	169	680438	50.00	ppm	100
136) Methyl parathion	9.501	125	186932	50.00	ppm	100
137) Parathion	10.233	109	142342	50.13	ppm	100
138) Diphenylamine	7.722	169	980669	100.00	ppm	100
139) Isodrin	10.714	193	118657	50.00	ppm	100
140) Diallate	8.225	86	46903	50.00	ppm	100
141) Pentachloronitrobenzene	8.604	295	72969	100.00	ppm	100
142) Pronamide	8.695	173	300667	50.00	ppm	100
143) 4-Nitroquinoline 1-oxide	10.228	190	379005	199.97	ppm	100
144) Methapyriline	10.479	58	259604m	50.14	ppm	
145) sym-Trinitrobenzene	8.054	213	60974	50.00	ppm	96
147) Aramite	12.092	185	72065	50.00	ppm	100
148) p-(Dimethylamine)azobe...	12.189	120	330033	49.97	ppm	100
149) Kepone	12.904	272	292341m	373.66	ppm	
150) Famphur	12.867	218	1249758	300.00	ppm	100
151) 2-Acetylaminofluorene	13.455	181	456967	50.00	ppm	100
152) Chlorobenzilate	12.333	251	306893	50.00	ppm	100
154) 4,4-Methylene-bis-(2-c...	14.128	266	146715	50.00	ppm	100
155) Hexachlorophene	16.852	196	167143	250.00	ppm	100
156) 3-Methylcholanthrene	17.702	252	188099	50.00	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123758.D
Acq On : 21 Jun 2018 3:51 am
Operator : chriss2
Sample : icc5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 21 12:08:18 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration



Manual Integration Approval Summary

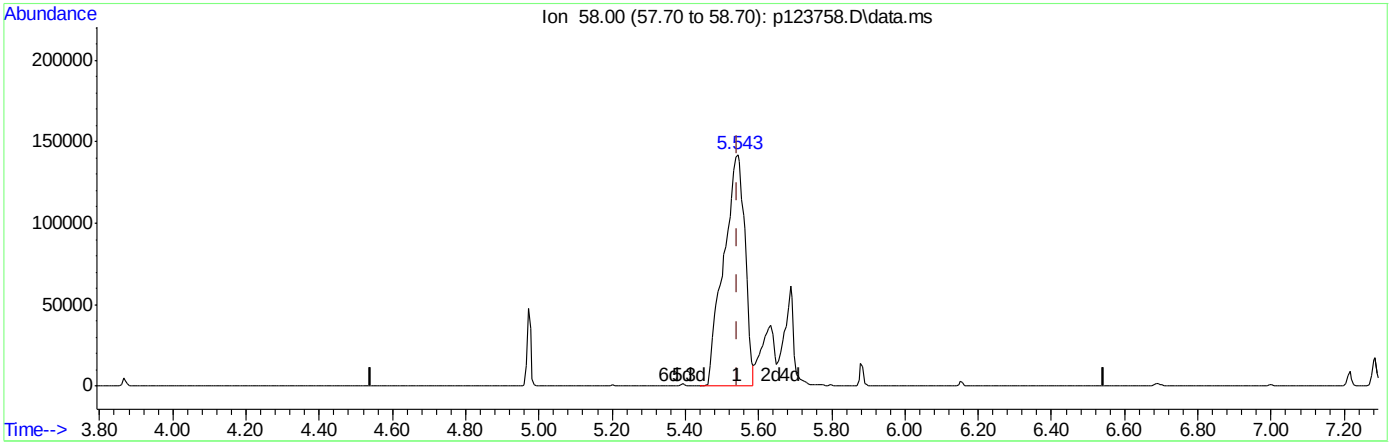
Sample Number:	EP5554-ICC5554	**Method:**	SW846 8270D
Lab FileID:	P123758.D	**Analyst approved:**	06/21/18 13:12 Sean Block
Injection Time:	06/21/18 03:51	**Supervisor approved:**	06/25/18 12:07 Kristi Schollenberger

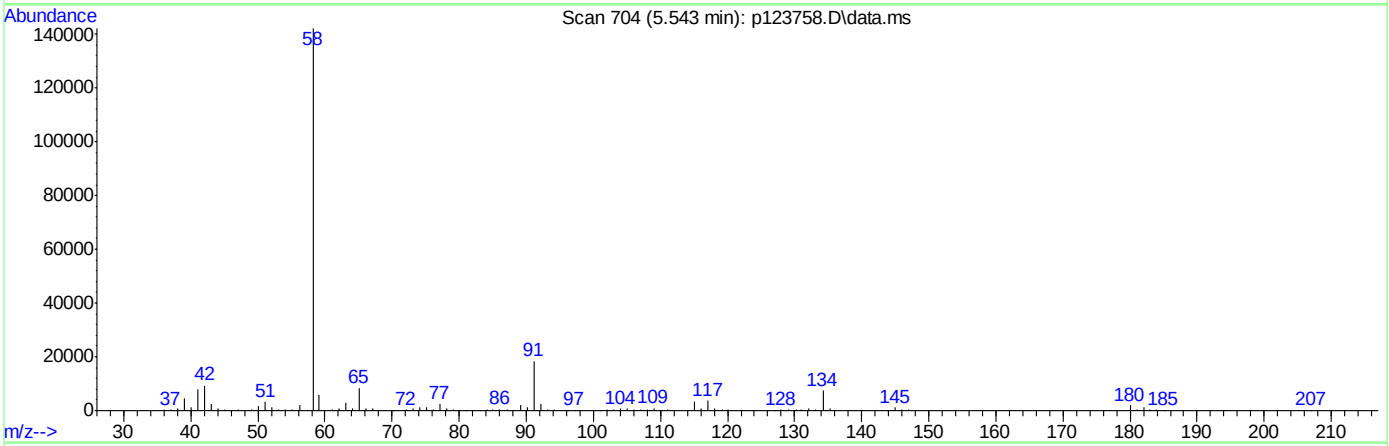
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		5.54	Split peak
p-Phenylenediamine	106-50-3		5.89	Split peak
Methapyrilene	91-80-5		10.48	Split peak
Kepone	143-50-0		12.90	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123758.D
Acq On : 21 Jun 2018 3:51 am
Operator : chriss2
Sample : icc5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 21 11:35:22 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123758.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.543min (0.000) 36.75ppm

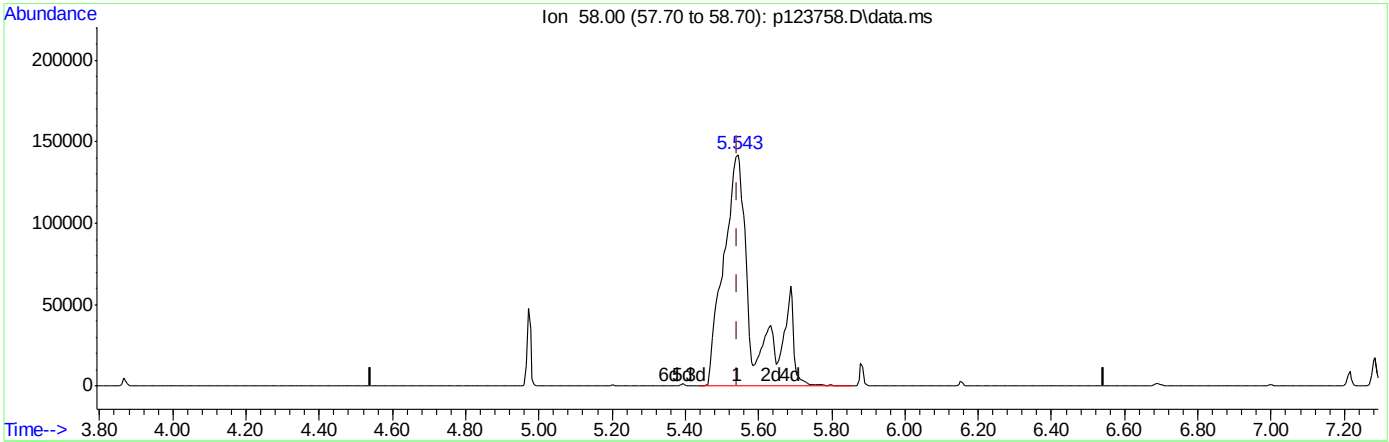
response 576993

Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123758.D
Acq On : 21 Jun 2018 3:51 am
Operator : chriss2
Sample : icc5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 21 11:35:22 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration



TIC: p123758.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.543min (0.000) 50.16ppm m

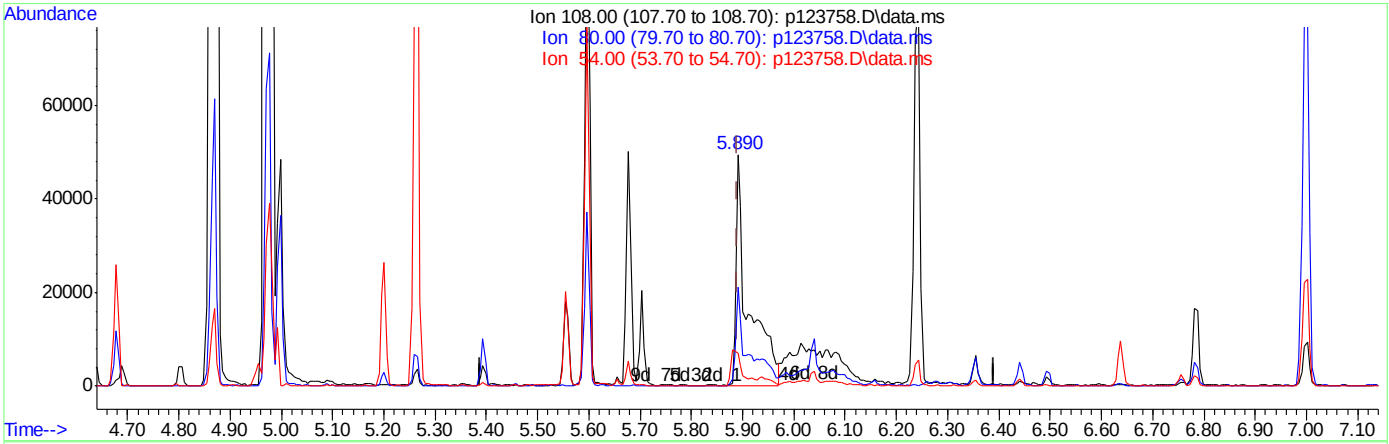
response 787468

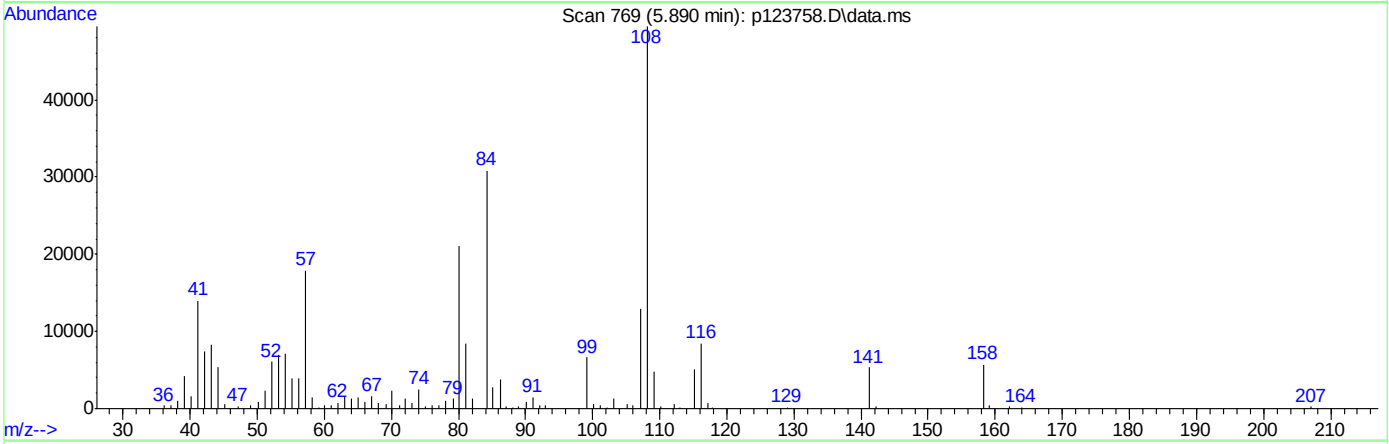
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123758.D
Acq On : 21 Jun 2018 3:51 am
Operator : chriss2
Sample : icc5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 21 11:35:22 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123758.D\data.ms

(117) p-Phenylenediamine

5.890min (0.000) 29.12ppm

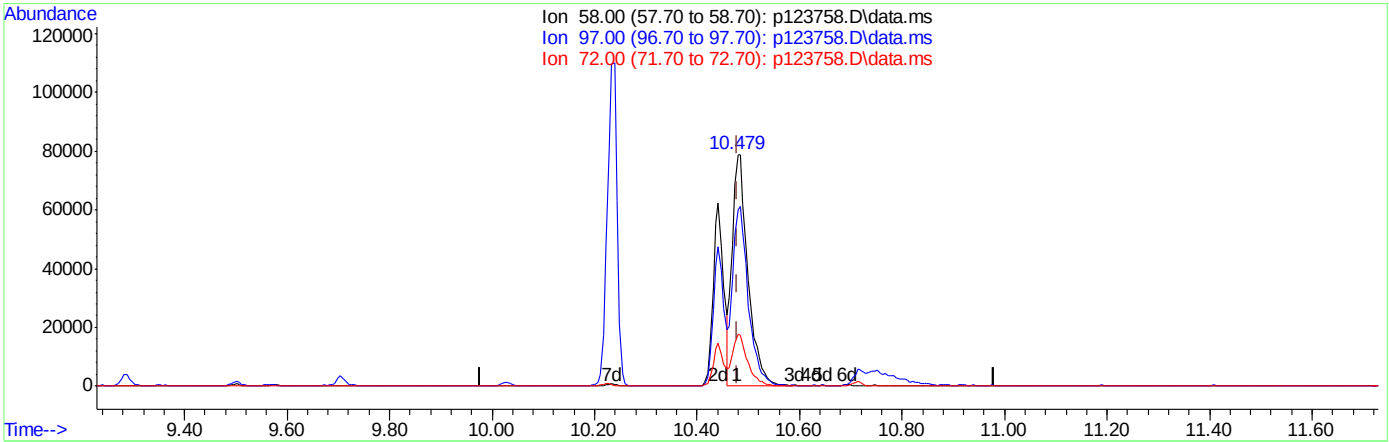
response 84978

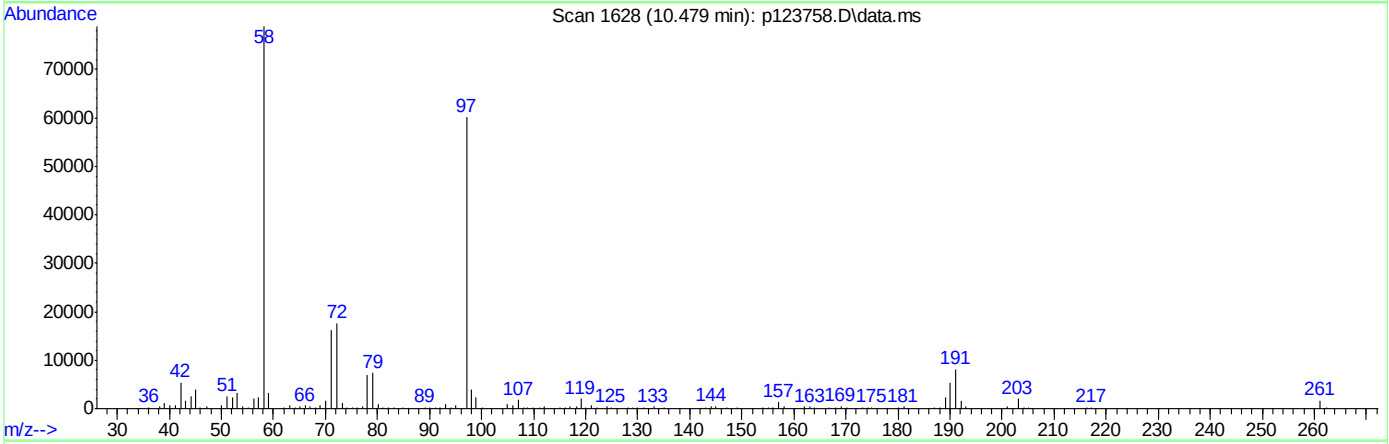
Ion	Exp%	Act%
108.00	100	100
80.00	42.60	42.99
54.00	14.20	14.52
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123758.D
Acq On : 21 Jun 2018 3:51 am
Operator : chriss2
Sample : icc5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 21 11:35:22 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123758.D\data.ms

(144) Methapyriline (M)

10.479min (0.000) 32.99ppm

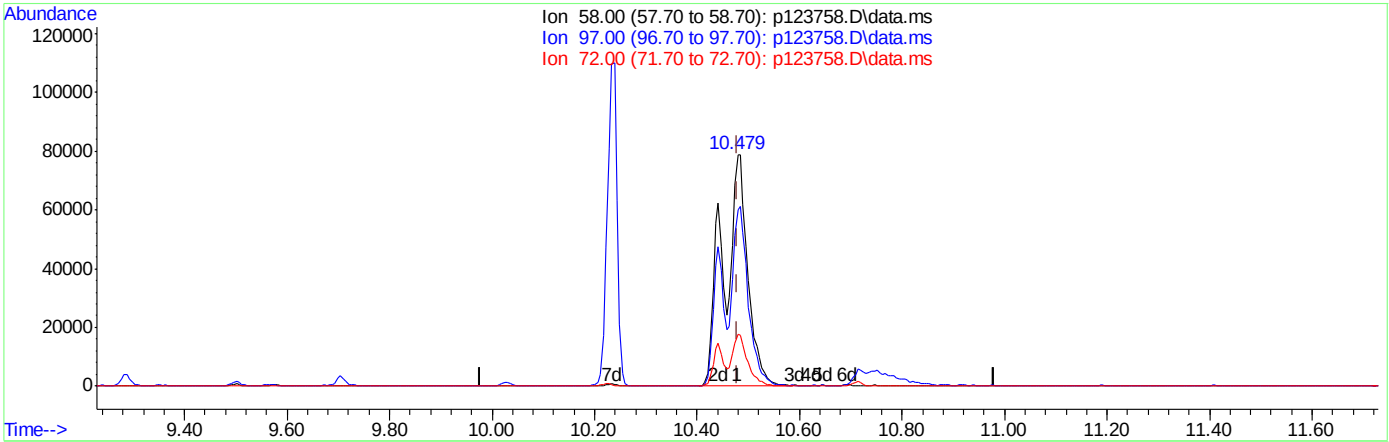
response 170796

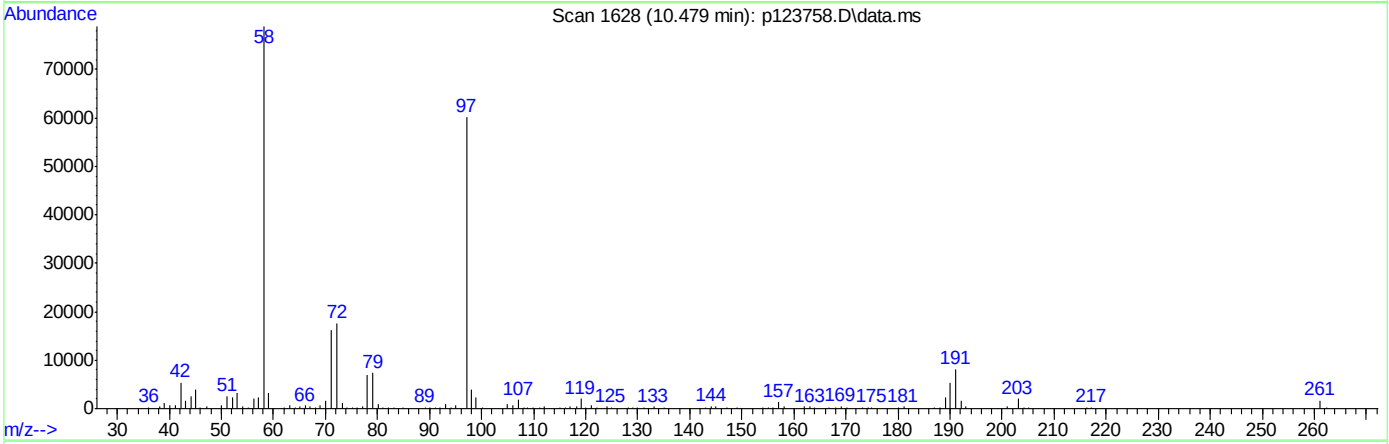
Ion	Exp%	Act%
58.00	100	100
97.00	76.30	75.39
72.00	22.40	22.11
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123758.D
Acq On : 21 Jun 2018 3:51 am
Operator : chriss2
Sample : icc5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 21 11:35:22 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123758.D\data.ms

(144) Methapyriline (M)

10.479min (0.000) 50.14ppm m

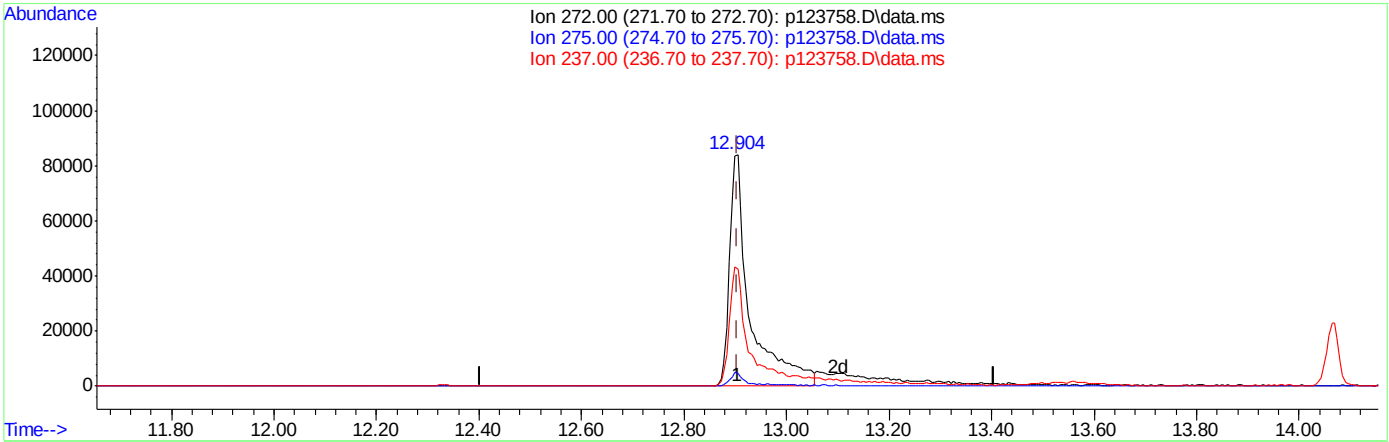
response 259604

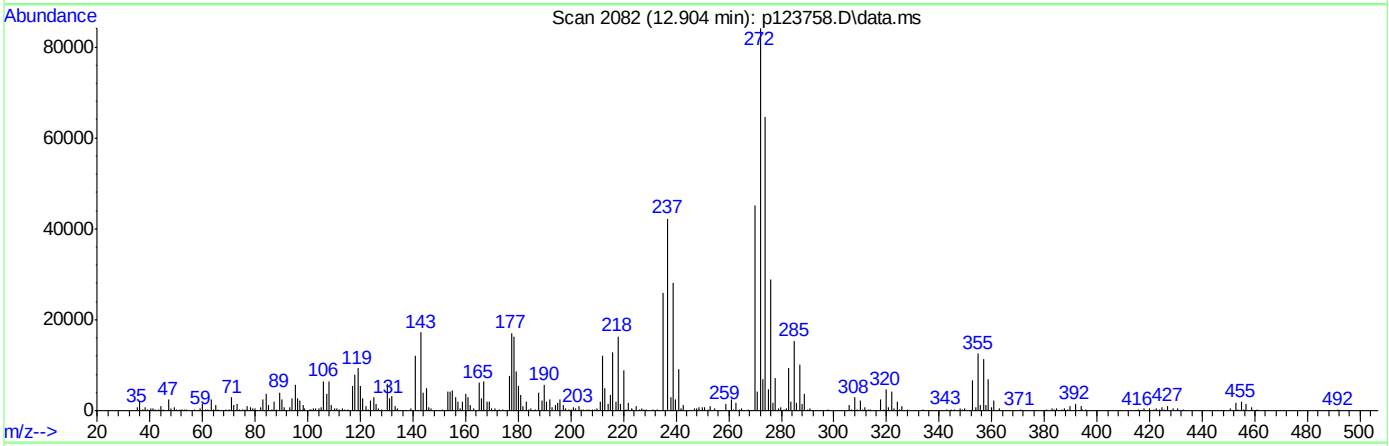
Ion	Exp%	Act%
58.00	100	100
97.00	76.30	76.26
72.00	22.40	22.37
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123758.D
Acq On : 21 Jun 2018 3:51 am
Operator : chriss2
Sample : icc5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 21 11:35:22 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123758.D\data.ms

(149) Kepone

12.904min (0.000) 300.00ppm

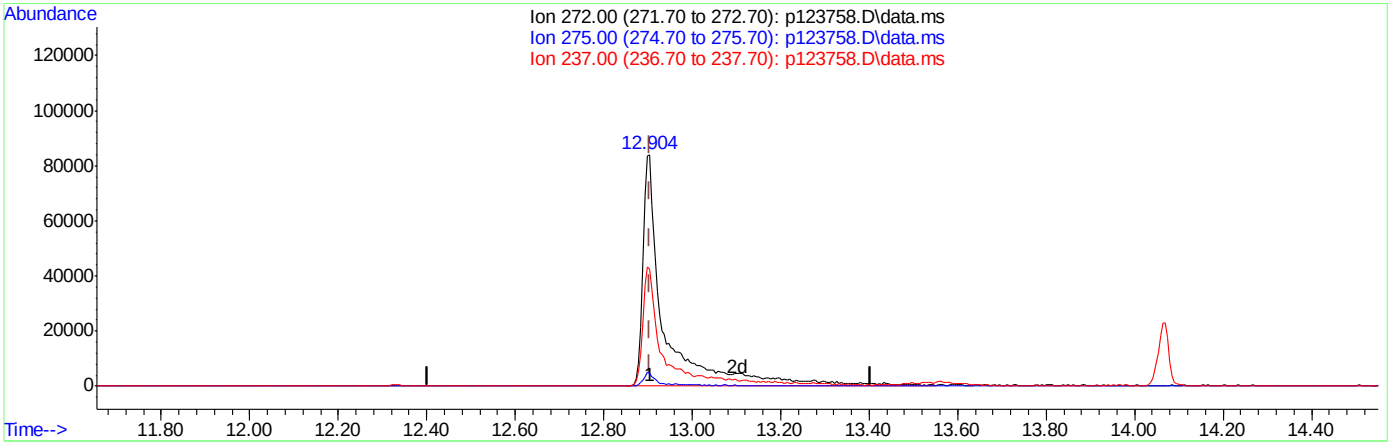
response 234714

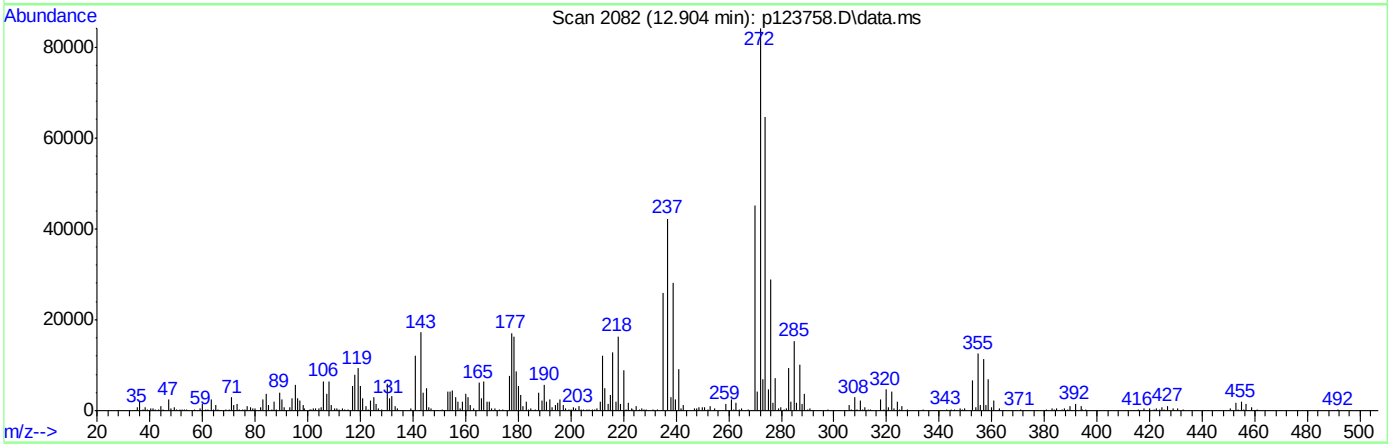
Ion	Exp%	Act%
272.00	100	100
275.00	5.50	5.48
237.00	49.90	49.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123758.D
Acq On : 21 Jun 2018 3:51 am
Operator : chriss2
Sample : icc5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 21 11:35:22 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123758.D\data.ms

(149) Kepone

12.904min (0.000) 373.66ppm m

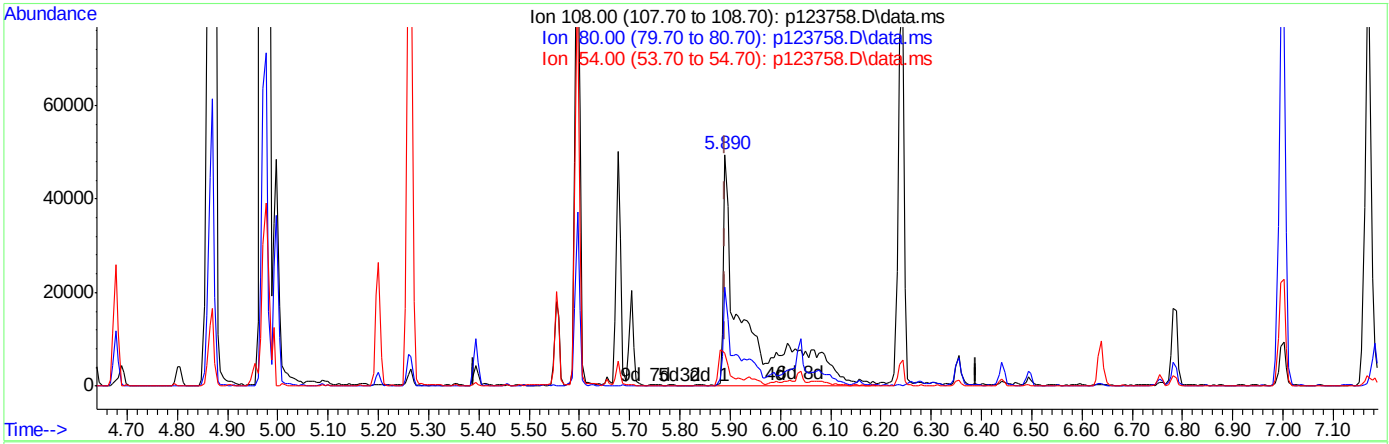
response 292341

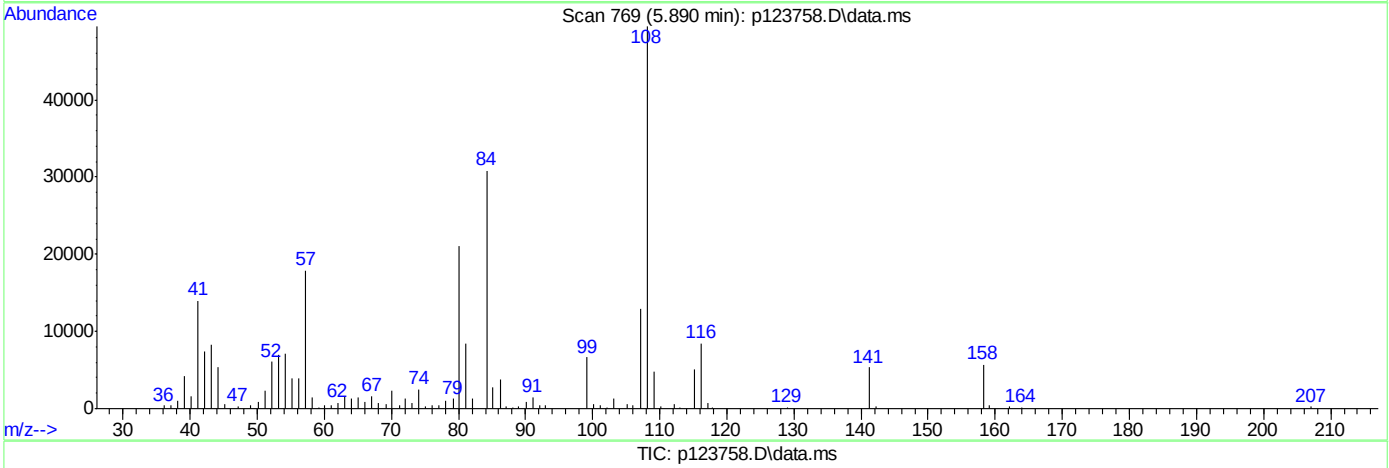
Ion	Exp%	Act%
272.00	100	100
275.00	5.50	5.54
237.00	49.90	50.29
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123758.D
Acq On : 21 Jun 2018 3:51 am
Operator : chriss2
Sample : icc5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 21 12:08:18 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123758.D\data.ms

(117) p-Phenylenediamine

5.890min (0.000) 50.14ppm m

response 146334

Ion	Exp%	Act%
108.00	100	100
80.00	42.60	42.59
54.00	14.20	14.24
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/25/18 12:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123759.D
Acq On : 21 Jun 2018 4:19 am
Operator : chriss2
Sample : ic5554-25
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 21 11:51:12 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	212705	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	816029	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	412895	40.00	ppm	0.00
69) Phenanthrene-d10	8.849	188	787179	40.00	ppm	0.00
83) Chrysene-d12	14.063	240	751086	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	743409	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4A	4.677	152	212705	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	816029	40.00	ppm	0.00
120) Acenaphthene-d10A	6.996	164	412895	40.00	ppm	0.00
131) Phenanthrene-d10A	8.849	188	787179	40.00	ppm	0.00
146) Chrysene-d12A	14.063	240	751086	40.00	ppm	0.00
153) Perylene-d12A	17.098	264	743409	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	212705	40.00	ppm	0.00
159) Phenanthrene-d10b	8.849	188	787179	40.00	ppm	0.00
161) Chrysene-d12b	14.063	240	751086	40.00	ppm	-0.01
163) Naphthalene-d8b	5.596	136	816029	40.00	ppm	0.00
165) Acenaphthene-d10b	6.996	164	412895	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	816029	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	212705	40.00	ppm	0.00
174) Chrysene-d12c	14.063	240	751086	40.00	ppm	0.00
176) Chrysene-d12d	14.063	240	751086	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	816029	40.00	ppm	0.00
180) Chrysene-d12D	14.063	240	751086	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) 2-Picoline	3.213	93	232032	25.48	ppm	100
103) Pentachloroethane	4.469	167	81279	25.93	ppm	98
104) Methyl methanesulfonate	3.550	80	123259	25.92	ppm	98
105) N-Nitrosodiethylamine	3.865	102	97867	25.88	ppm	91
106) N-Nitrosomethylethylamine	3.304	42	90984	26.25	ppm	99
107) Ethyl methanesulfonate	4.100	79	150967	26.37	ppm	100
108) N-Nitrosopyrrolidine	4.950	41	68630	25.78	ppm	97
109) N-Nitrosomorpholine	4.976	56	91915	29.65	ppm	98
110) o-Toluidine	4.992	106	281838	29.26	ppm	75
112) O,O,O-Triethyl phospho...	5.393	198	86947	26.21	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123759.D
Acq On : 21 Jun 2018 4:19 am
Operator : chriss2
Sample : ic5554-25
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 21 11:51:12 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration

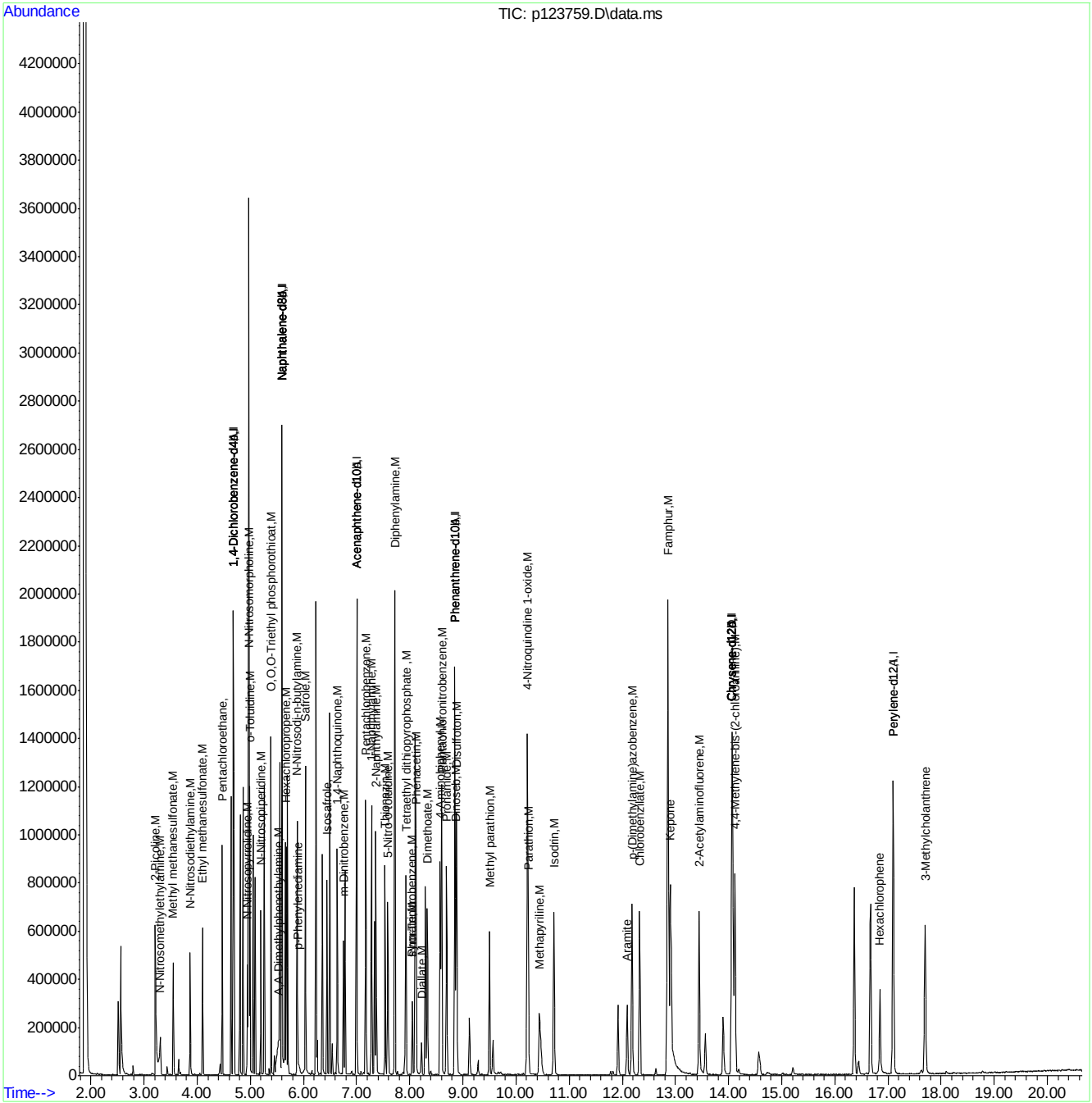
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
113) N-Nitrosopiperidine	5.195	42	109832	26.11	ppm	90
114) A,A-Dimethylphenethyla...	5.537	58	439568m	26.53	ppm	
115) Hexachloropropene	5.676	213	110309	24.88	ppm	100
116) N-Nitrosodi-n-butylamine	5.879	84	128066	25.46	ppm	97
117) p-Phenylenediamine	5.890	108	124224m	40.34	ppm	
118) Safrole	6.039	162	134056	25.52	ppm	97
119) Isosafrole	6.440	162	103929	25.88	ppm	98
121) Thionazin	7.541	143	49319	26.37	ppm	95
122) Tetraethyl dithiopyrop...	7.931	322	57012	25.42	ppm	100
123) Phorate	8.048	75	78459	22.89	ppm	100
124) Phenacetin	8.123	108	199186	27.12	ppm	98
125) 1,4-Naphthoquinone	6.638	158	131890	26.46	ppm	99
126) m-Dinitrobenzene	6.755	168	54166	24.90	ppm	86
127) Pentachlorobenzene	7.172	250	146821	25.94	ppm	98
128) 2-Naphthylamine	7.364	143	351281	28.17	ppm	99
129) 1-Naphthylamine	7.279	143	303585	27.32	ppm	98
130) 5-Nitro-o-toluidine	7.589	152	108894	26.42	ppm	98
132) Disulfoton	8.881	88	195523	27.93	ppm	99
133) Dinoseb	8.876	211	74169	23.36	ppm	99
134) Dimethoate	8.331	87	159484	27.27	ppm	98
135) 4-Aminobiphenyl	8.577	169	376039	26.04	ppm	99
136) Methyl parathion	9.501	125	103294	26.03	ppm	96
137) Parathion	10.233	109	82060	27.23	ppm	98
138) Diphenylamine	7.722	169	564958	54.28	ppm	99
139) Isodrin	10.714	193	64885	25.76	ppm	97
140) Diallate	8.224	86	25379	25.49	ppm	96
141) Pentachloronitrobenzene	8.604	295	41054	53.02	ppm	94
142) Pronamide	8.694	173	164355	25.75	ppm	99
143) 4-Nitroquinoline 1-oxide	10.217	190	190971	94.95	ppm	98
144) Methapyriline	10.441	58	192702	35.07	ppm	97
145) sym-Trinitrobenzene	8.048	213	29206	22.57	ppm	86
147) Aramite	12.092	185	39616	25.36	ppm	96
148) p-(Dimethylamine)azobe...	12.183	120	181151	25.30	ppm	97
149) Kepone	12.899	272	190658m	224.80	ppm	
150) Famphur	12.861	218	921467	204.05	ppm	100
151) 2-Acetylaminofluorene	13.449	181	243566	24.58	ppm	99
152) Chlorobenzilate	12.327	251	168284	25.29	ppm	96
154) 4,4-Methylene-bis-(2-c...	14.122	266	87922	27.76	ppm	94
155) Hexachlorophene	16.847	196	45010	62.38	ppm	98
156) 3-Methylcholanthrene	17.702	252	104278	25.68	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123759.D
Acq On : 21 Jun 2018 4:19 am
Operator : chriss2
Sample : ic5554-25
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 21 11:51:12 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration



Manual Integration Approval Summary

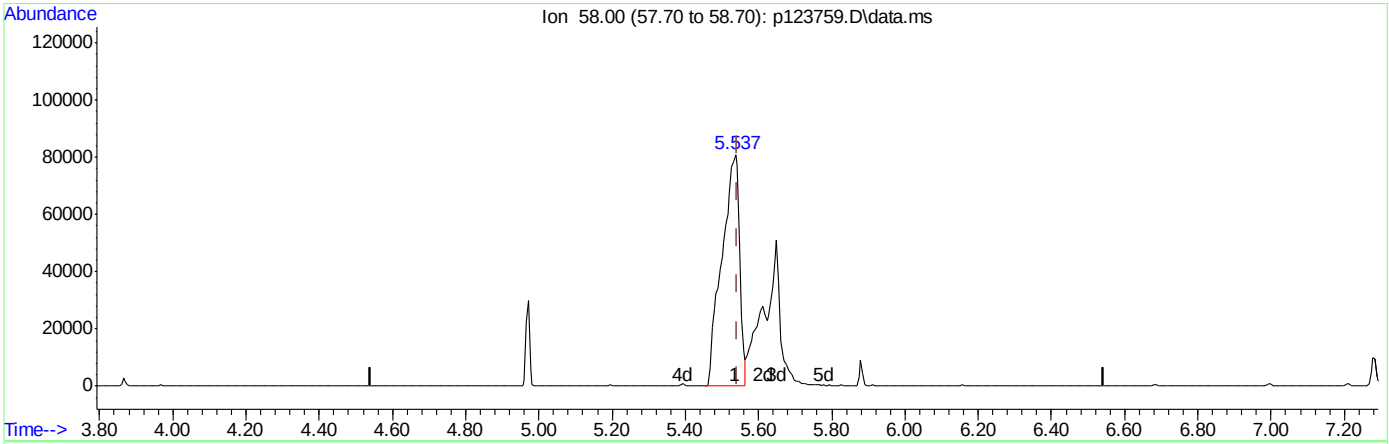
Sample Number:	EP5554-IC5554	**Method:**	SW846 8270D
Lab FileID:	P123759.D	**Analyst approved:**	06/21/18 13:12 Sean Block
Injection Time:	06/21/18 04:19	**Supervisor approved:**	06/25/18 12:07 Kristi Schollenberger

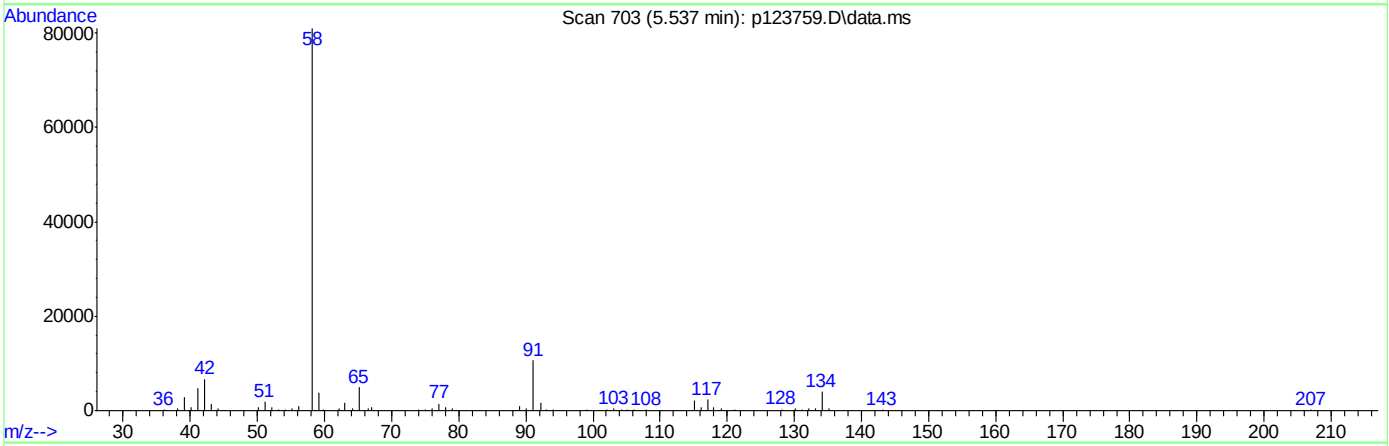
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		5.54	Split peak
p-Phenylenediamine	106-50-3		5.89	Split peak
Kepone	143-50-0		12.90	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123759.D
Acq On : 21 Jun 2018 4:19 am
Operator : chriss2
Sample : ic5554-25
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 21 11:36:49 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123759.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.537min (-0.006) 16.51ppm

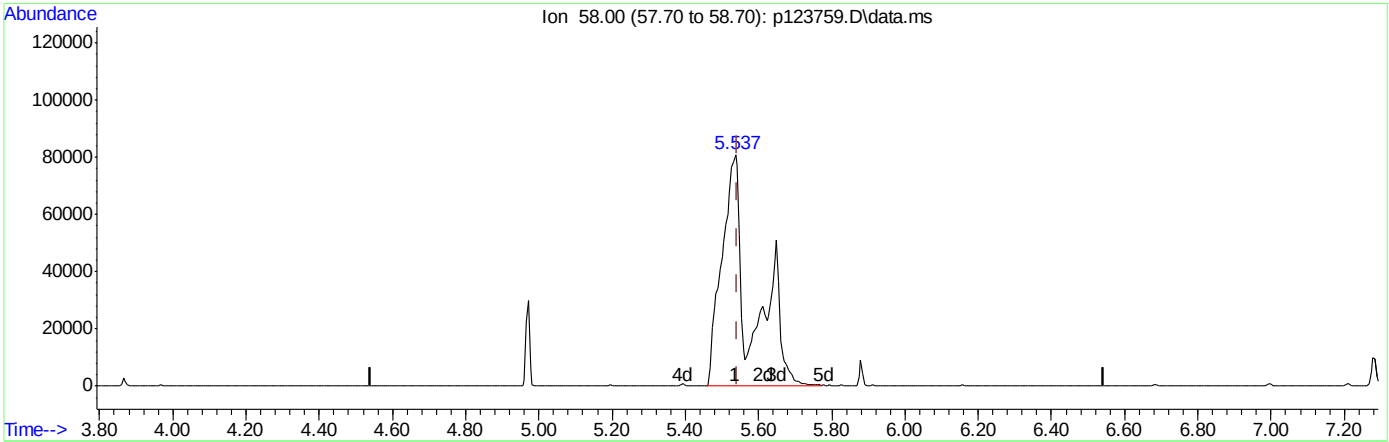
response 273486

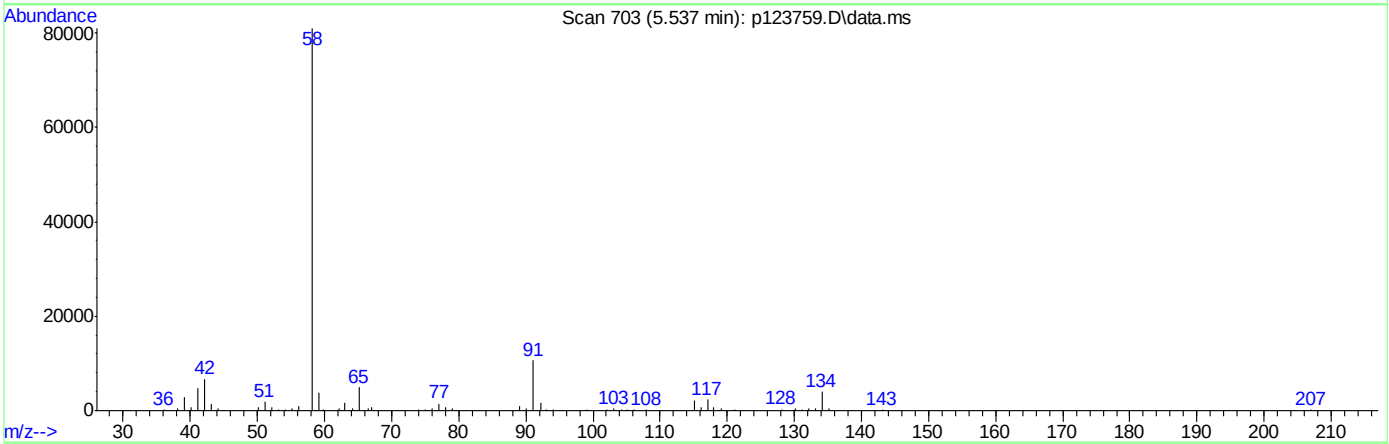
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123759.D
Acq On : 21 Jun 2018 4:19 am
Operator : chriss2
Sample : ic5554-25
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 21 11:36:49 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123759.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.537min (-0.006) 26.53ppm m

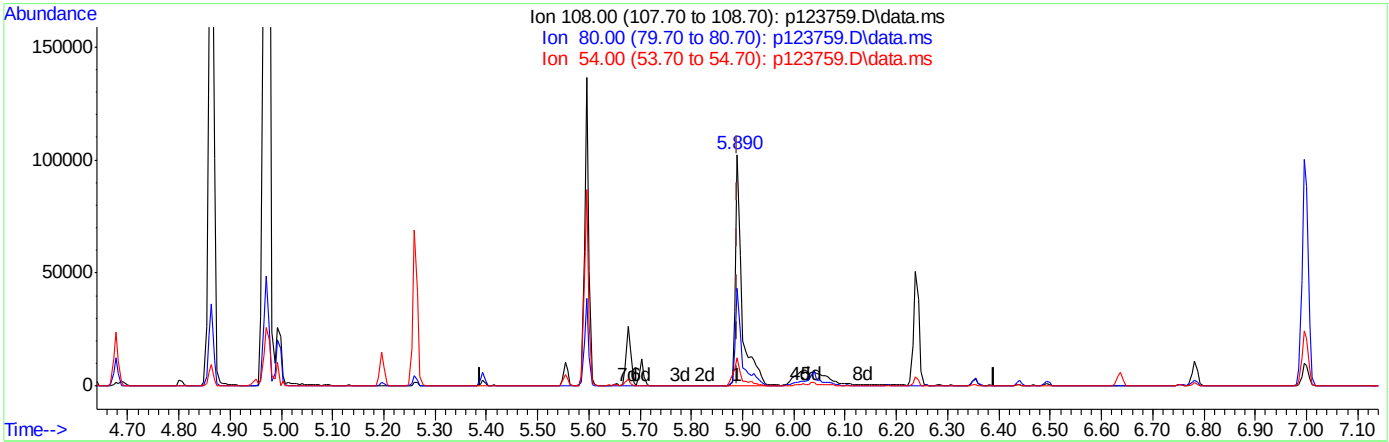
response 439568

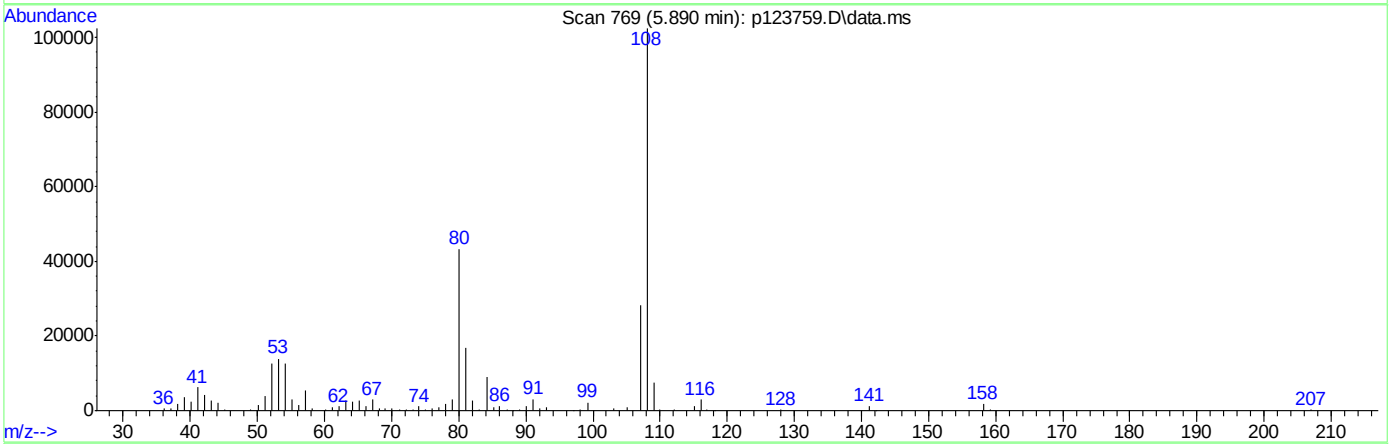
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123759.D
Acq On : 21 Jun 2018 4:19 am
Operator : chriss2
Sample : ic5554-25
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 21 11:36:49 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123759.D\data.ms

(117) p-Phenylenediamine

5.890min (-0.000) 30.48ppm

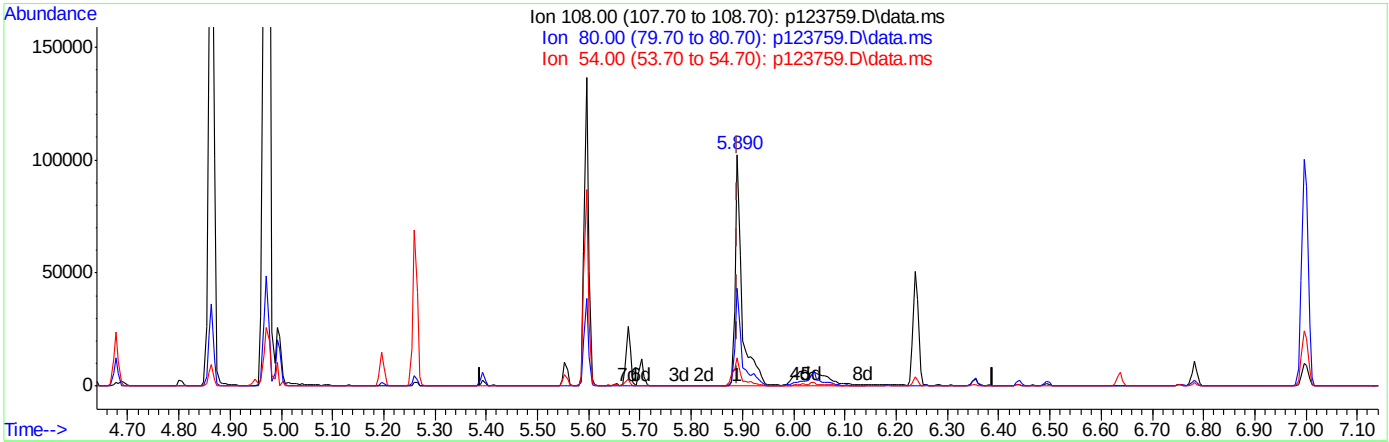
response 93866

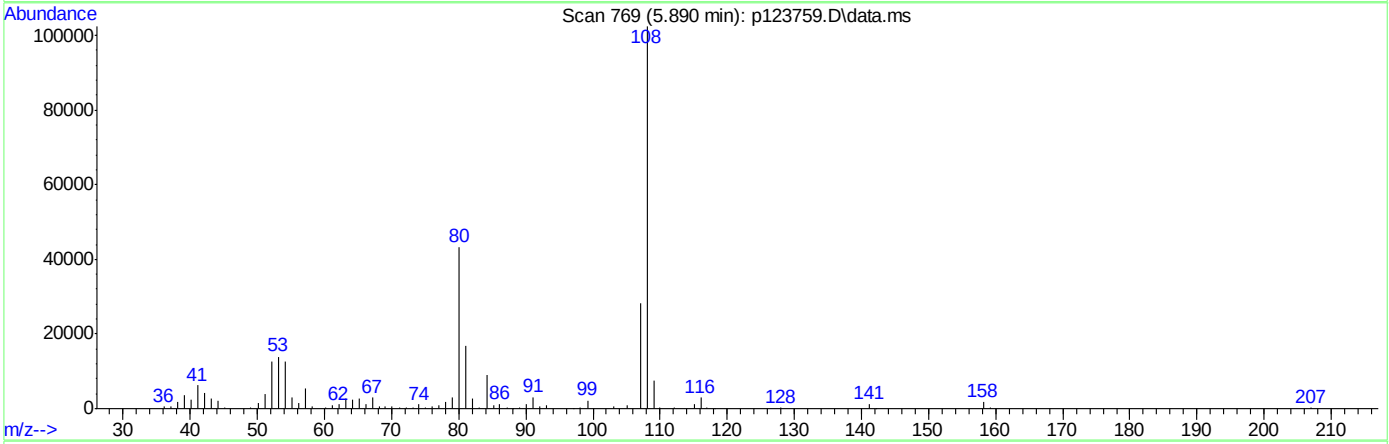
Ion	Exp%	Act%
108.00	100	100
80.00	42.60	42.26
54.00	14.20	12.27
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123759.D
Acq On : 21 Jun 2018 4:19 am
Operator : chriss2
Sample : ic5554-25
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 21 11:36:49 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123759.D\data.ms

(117) p-Phenylenediamine

5.890min (-0.000) 40.34ppm m

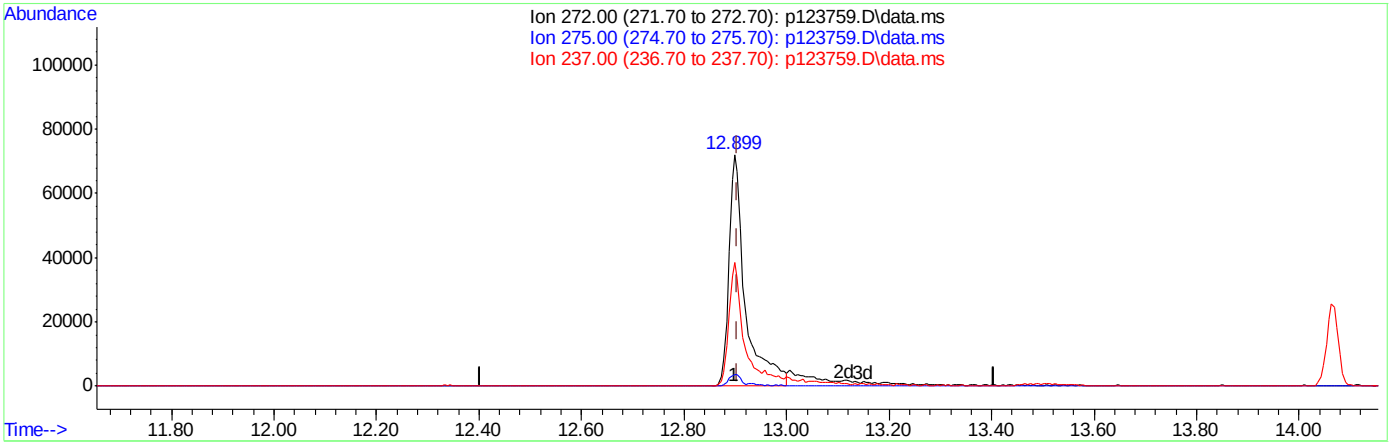
response 124224

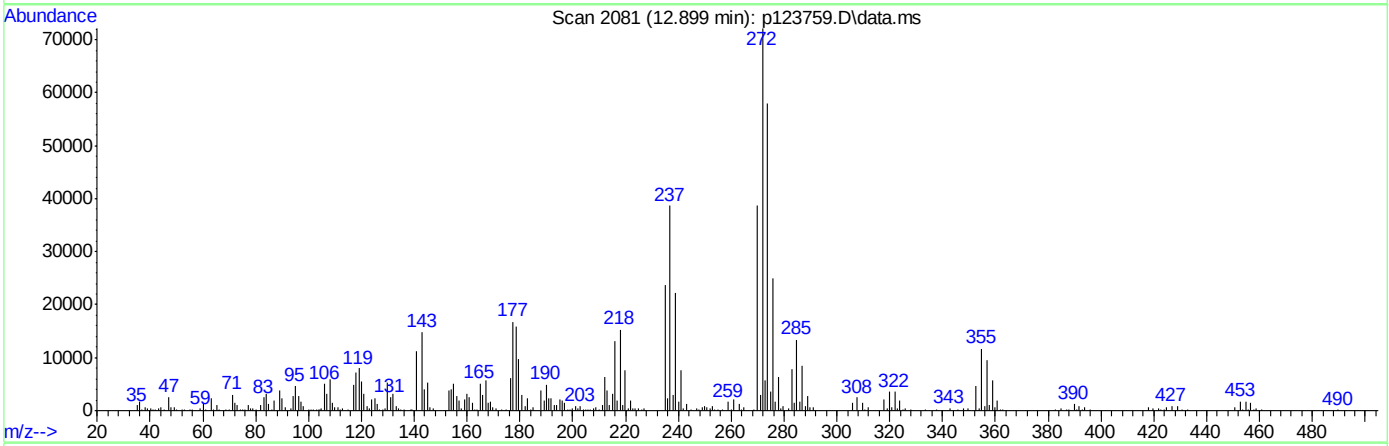
Ion	Exp%	Act%
108.00	100	100
80.00	42.60	42.31
54.00	14.20	12.25
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123759.D
Acq On : 21 Jun 2018 4:19 am
Operator : chriss2
Sample : ic5554-25
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 21 11:50:31 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123759.D\data.ms

(149) Kepone

12.899min (-0.006) 190.06ppm

response 161198

Ion	Exp%	Act%
272.00	100	100
275.00	5.50	4.99
237.00	49.90	52.97
0.00	0.00	0.00

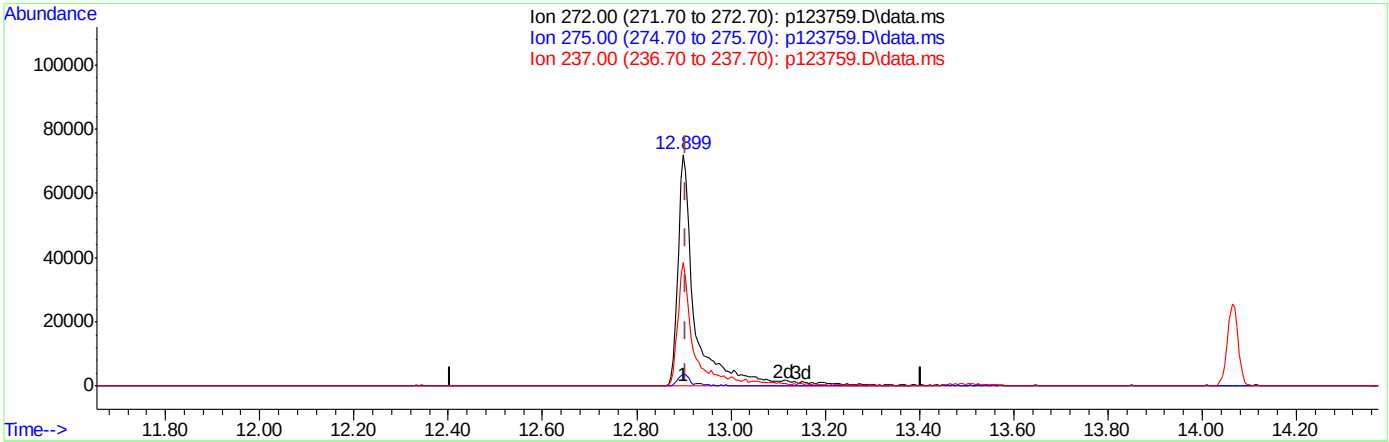
9.5.40.6

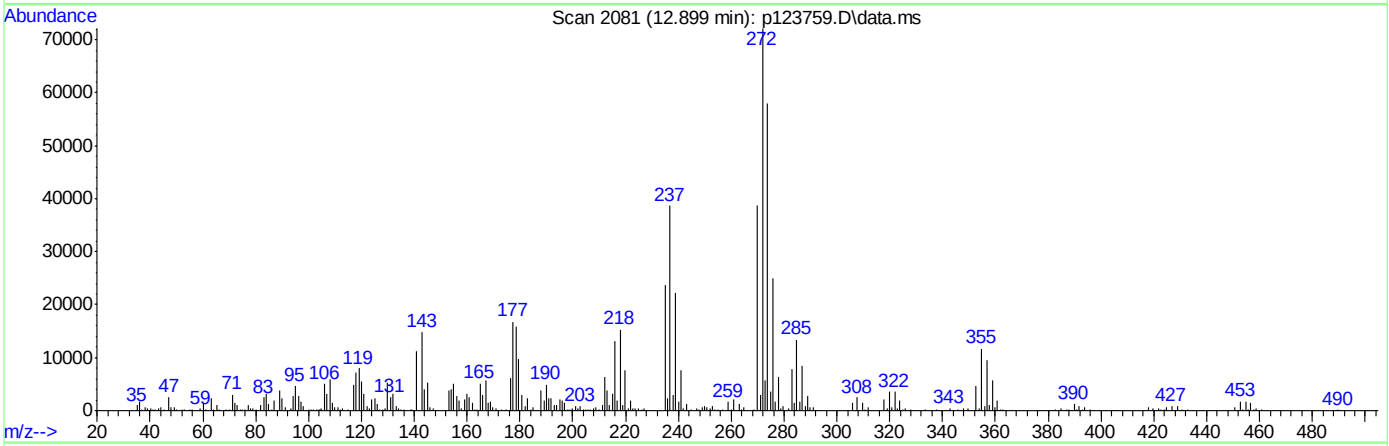
9

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123759.D
Acq On : 21 Jun 2018 4:19 am
Operator : chriss2
Sample : ic5554-25
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 21 11:50:31 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:30:44 2018
Response via : Initial Calibration





TIC: p123759.D\data.ms

(149) Kepone

12.899min (-0.006) 224.80ppm m

response 190658

Ion	Exp%	Act%
272.00	100	100
275.00	5.50	5.06
237.00	49.90	53.54
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/25/18 12:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123760.D
Acq On : 21 Jun 2018 4:47 am
Operator : chriss2
Sample : ic5554-10
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 21 11:49:15 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	223247	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	858704	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	421191	40.00	ppm	0.00
69) Phenanthrene-d10	8.850	188	798637	40.00	ppm	0.00
83) Chrysene-d12	14.064	240	746129	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	749143	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4A	4.677	152	223247	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	858704	40.00	ppm	0.00
120) Acenaphthene-d10A	6.996	164	421191	40.00	ppm	0.00
131) Phenanthrene-d10A	8.850	188	798637	40.00	ppm	0.00
146) Chrysene-d12A	14.064	240	746129	40.00	ppm	0.00
153) Perylene-d12A	17.098	264	749143	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	223247	40.00	ppm	0.00
159) Phenanthrene-d10b	8.850	188	798637	40.00	ppm	0.00
161) Chrysene-d12b	14.064	240	746129	40.00	ppm	-0.01
163) Naphthalene-d8b	5.596	136	858704	40.00	ppm	0.00
165) Acenaphthene-d10b	6.996	164	421191	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	858704	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	223247	40.00	ppm	0.00
174) Chrysene-d12c	14.064	240	746129	40.00	ppm	0.00
176) Chrysene-d12d	14.064	240	746129	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	858704	40.00	ppm	0.00
180) Chrysene-d12D	14.064	240	746129	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) 2-Picoline	3.219	93	94868	9.93	ppm	98
103) Pentachloroethane	4.469	167	32810	9.97	ppm	97
104) Methyl methanesulfonate	3.550	80	51035	10.22	ppm	95
105) N-Nitrosodiethylamine	3.871	102	40479	10.20	ppm	96
106) N-Nitrosomethylethylamine	3.304	42	38171	10.49	ppm	92
107) Ethyl methanesulfonate	4.100	79	62873	10.47	ppm	98
108) N-Nitrosopyrrolidine	4.944	41	27771	9.94	ppm	88
109) N-Nitrosomorpholine	4.971	56	43143	13.26	ppm	90
110) o-Toluidine	4.993	106	126674	12.53	ppm	98
112) O,O,O-Triethyl phospho...	5.393	198	35337	10.12	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123760.D
Acq On : 21 Jun 2018 4:47 am
Operator : chriss2
Sample : ic5554-10
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 21 11:49:15 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration

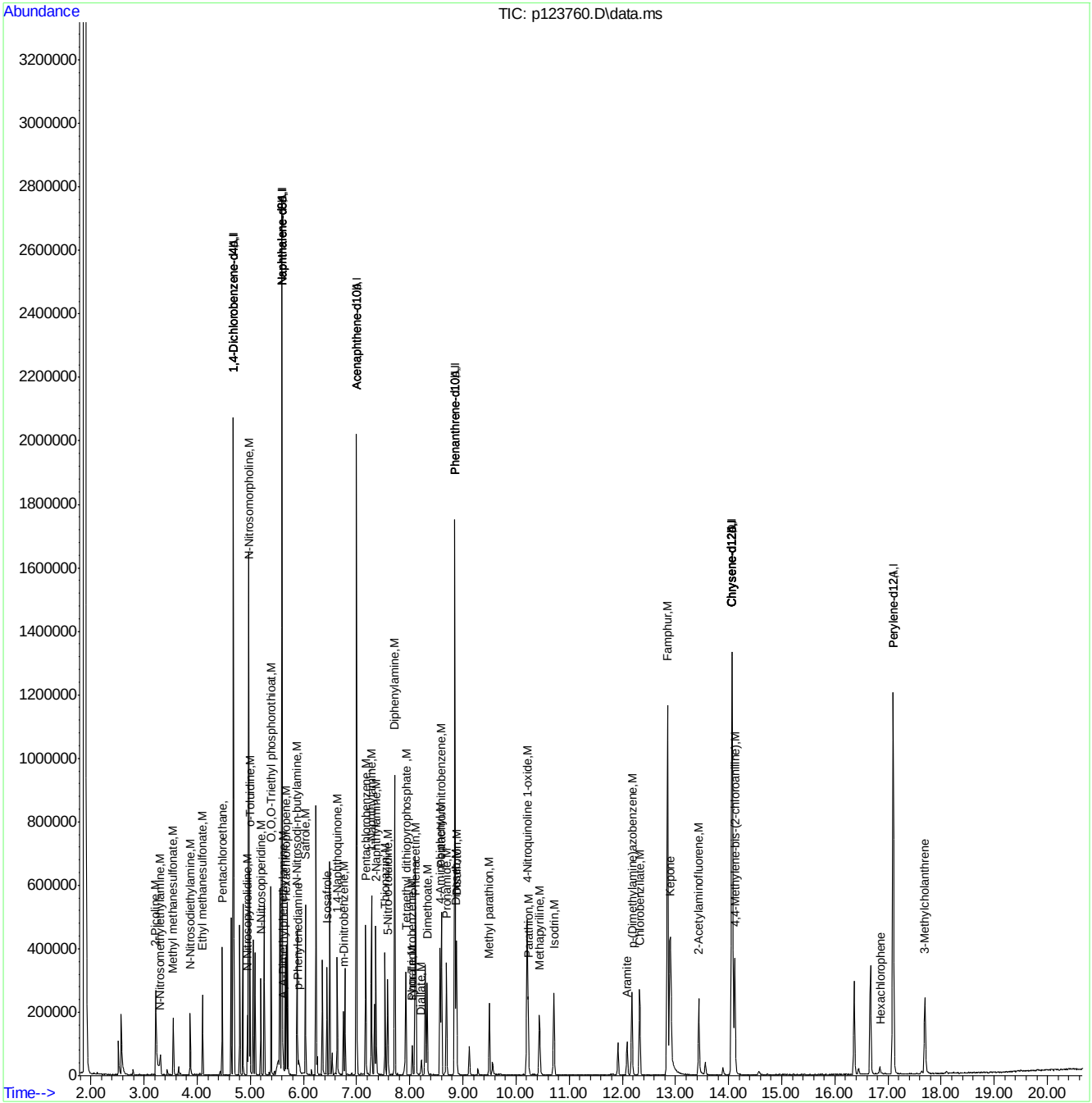
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
113) N-Nitrosopiperidine	5.196	42	46192	10.44	ppm		94
114) A,A-Dimethylphenethyla...	5.612	58	174337m	10.00	ppm		
115) Hexachloropropene	5.676	213	46285	9.92	ppm		93
116) N-Nitrosodi-n-butylamine	5.879	84	53503	10.11	ppm		98
117) p-Phenylenediamine	5.890	108	60358m	18.62	ppm		
118) Safrole	6.040	162	56403	10.20	ppm		95
119) Isosafrole	6.440	162	43163	10.21	ppm		99
121) Thionazin	7.535	143	19534	10.24	ppm		93
122) Tetraethyl dithiopyrop...	7.931	322	23308	10.19	ppm		100
123) Phorate	8.048	75	24557	7.02	ppm		100
124) Phenacetin	8.118	108	81305	10.85	ppm		97
125) 1,4-Naphthoquinone	6.638	158	52449	10.31	ppm		94
126) m-Dinitrobenzene	6.755	168	19486	8.78	ppm		78
127) Pentachlorobenzene	7.167	250	59132	10.24	ppm		99
128) 2-Naphthylamine	7.364	143	146535	11.52	ppm		97
129) 1-Naphthylamine	7.279	143	133840	11.81	ppm		99
130) 5-Nitro-o-toluidine	7.583	152	44599	10.61	ppm		99
132) Disulfoton	8.882	88	80662	11.36	ppm		95
133) Dinoseb	8.876	211	23686	7.35	ppm		97
134) Dimethoate	8.326	87	64746	10.91	ppm		98
135) 4-Aminobiphenyl	8.572	169	154449	10.54	ppm		99
136) Methyl parathion	9.496	125	38542	9.57	ppm		97
137) Parathion	10.233	109	31546	10.32	ppm		97
138) Diphenylamine	7.717	169	235697	22.32	ppm		99
139) Isodrin	10.714	193	26336	10.31	ppm		99
140) Diallate	8.219	86	9975	9.88	ppm		88
141) Pentachloronitrobenzene	8.599	295	16682	21.23	ppm		94
142) Pronamide	8.689	173	66496	10.27	ppm		99
143) 4-Nitroquinoline 1-oxide	10.212	190	55934	27.41	ppm		95
144) Methapyriline	10.436	58	87771	15.74	ppm		100
145) sym-Trinitrobenzene	8.048	213	8605	6.55	ppm		93
147) Aramite	12.092	185	13751	8.86	ppm		92
148) p-(Dimethylamine)azobe...	12.183	120	70334	9.89	ppm		98
149) Kepone	12.894	272	93626m	111.12	ppm		
150) Famphur	12.851	218	473088	105.45	ppm		95
151) 2-Acetylaminofluorene	13.439	181	88815	9.02	ppm		98
152) Chlorobenzilate	12.327	251	64896	9.82	ppm		97
154) 4,4-Methylene-bis-(2-c...	14.122	266	36497	11.44	ppm		88
155) Hexachlorophene	16.852	196	3535	4.86	ppm	#	83
156) 3-Methylcholanthrene	17.696	252	39159	9.57	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123760.D
Acq On : 21 Jun 2018 4:47 am
Operator : chriss2
Sample : ic5554-10
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 21 11:49:15 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration



Manual Integration Approval Summary

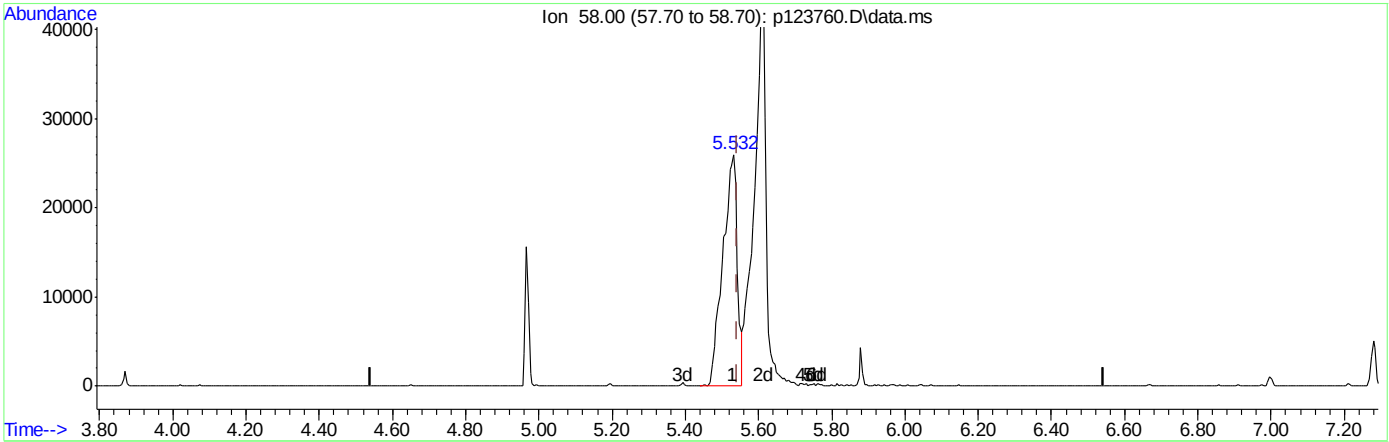
Sample Number: EP5554-IC5554 **Method:** SW846 8270D
Lab FileID: P123760.D **Analyst approved:** 06/21/18 13:12 Sean Block
Injection Time: 06/21/18 04:47 **Supervisor approved:** 06/25/18 12:07 Kristi Schollenberger

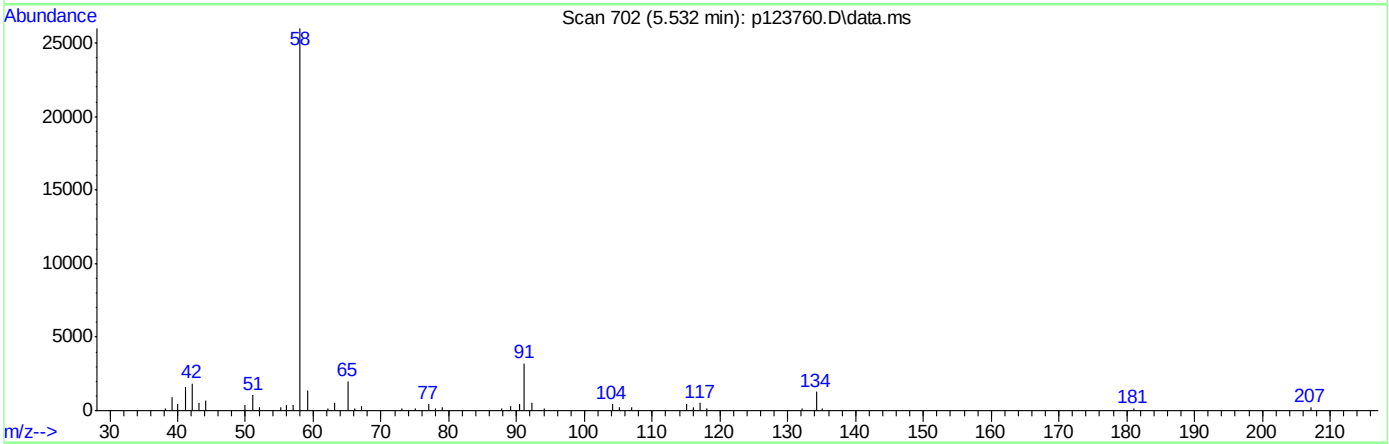
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		5.61	Split peak
p-Phenylenediamine	106-50-3		5.89	Split peak
Kepone	143-50-0		12.89	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123760.D
Acq On : 21 Jun 2018 4:47 am
Operator : chriss2
Sample : ic5554-10
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 21 11:40:14 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration





TIC: p123760.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.532min (-0.011) 4.15ppm

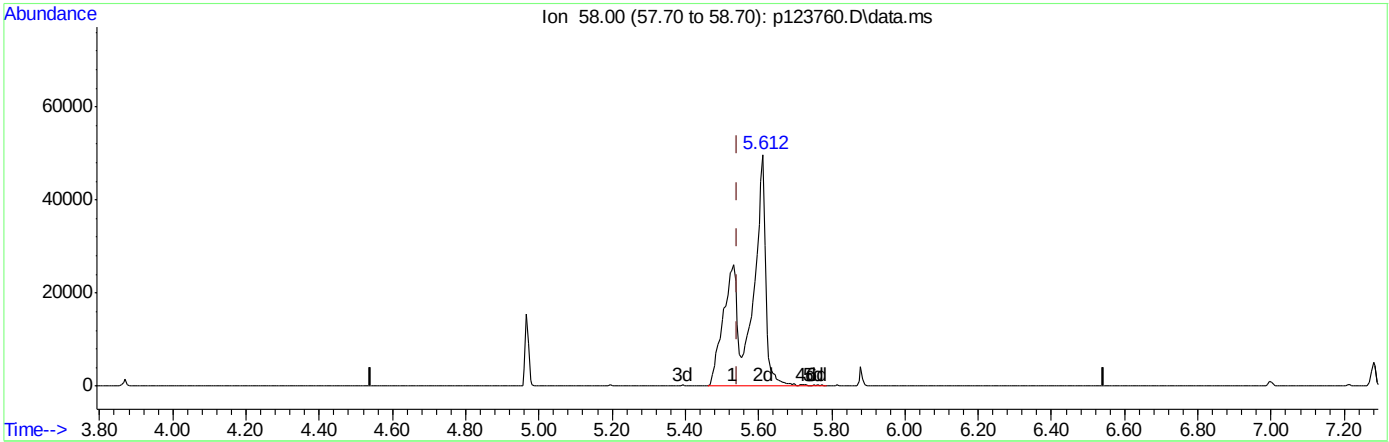
response 72319

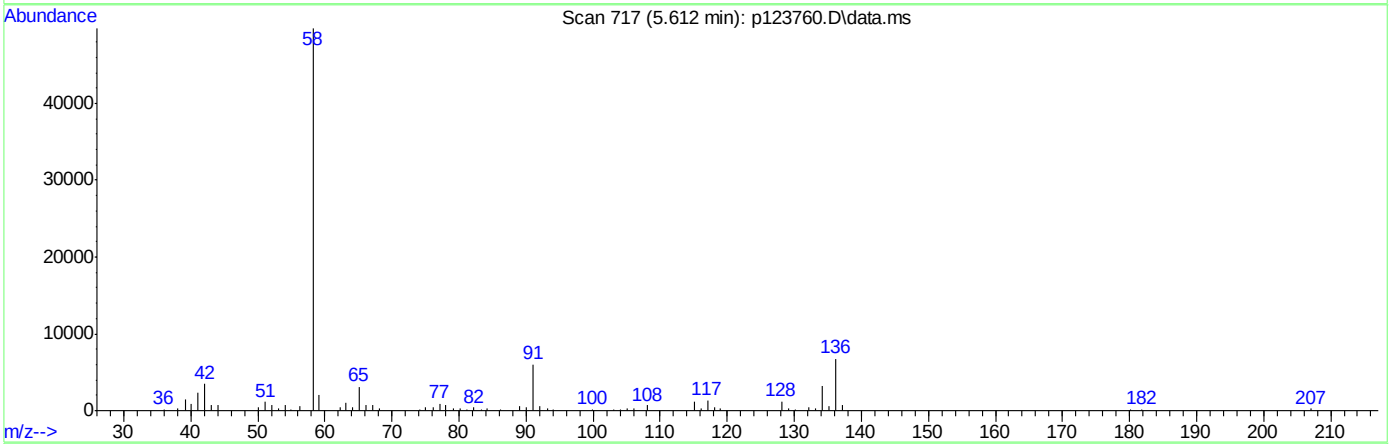
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123760.D
Acq On : 21 Jun 2018 4:47 am
Operator : chriss2
Sample : ic5554-10
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 21 11:40:14 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration





TIC: p123760.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.612min (+0.069) 10.00ppm m

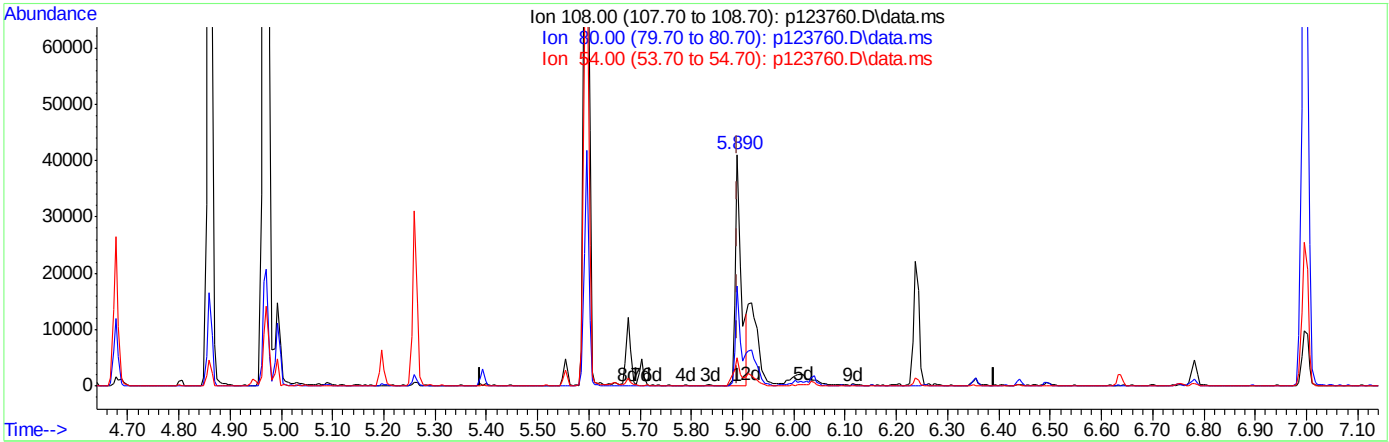
response 174337

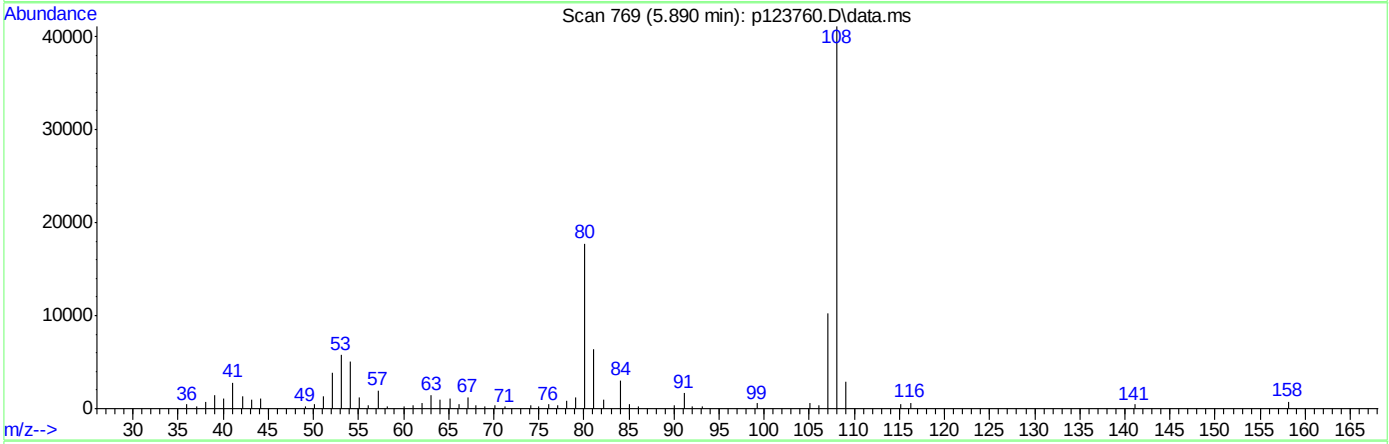
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123760.D
Acq On : 21 Jun 2018 4:47 am
Operator : chriss2
Sample : ic5554-10
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 21 11:40:14 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration





TIC: p123760.D\data.ms

(117) p-Phenylenediamine

5.890min (-0.000) 10.01ppm

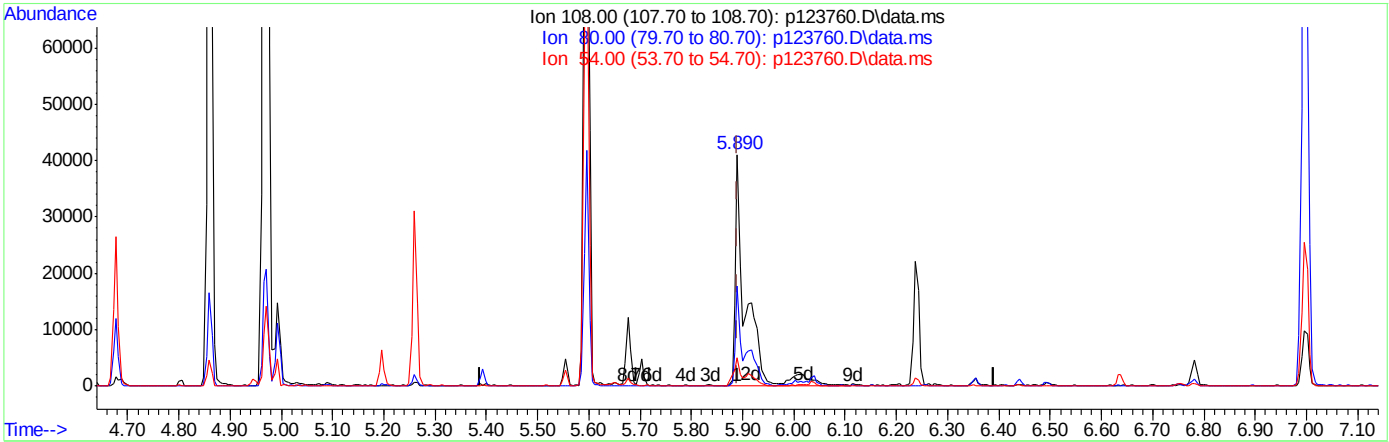
response 32442

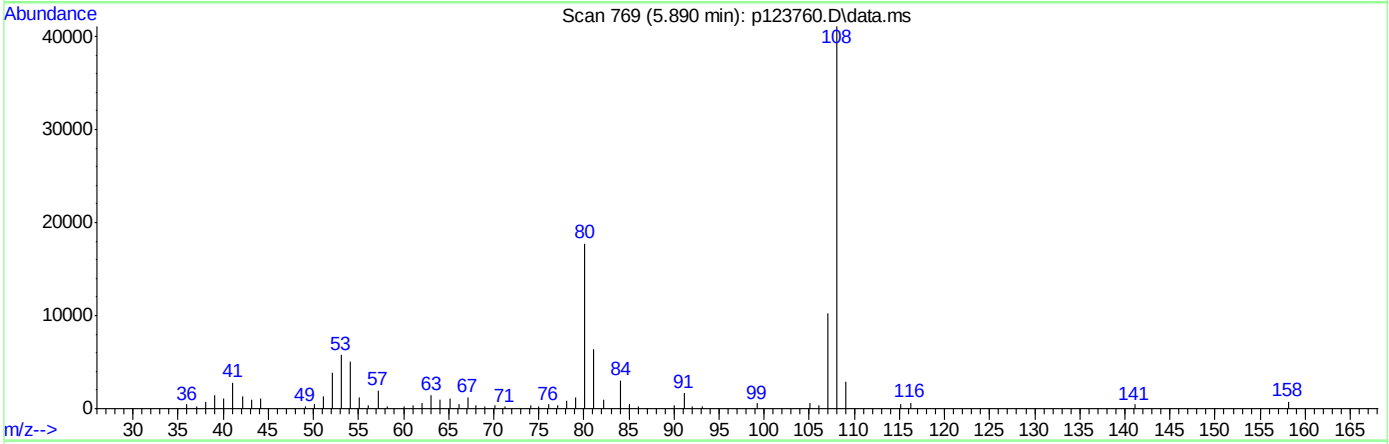
Ion	Exp%	Act%
108.00	100	100
80.00	42.60	42.79
54.00	14.20	12.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123760.D
Acq On : 21 Jun 2018 4:47 am
Operator : chriss2
Sample : ic5554-10
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 21 11:40:14 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration





TIC: p123760.D\data.ms

(117) p-Phenylenediamine

5.890min (-0.000) 18.62ppm m

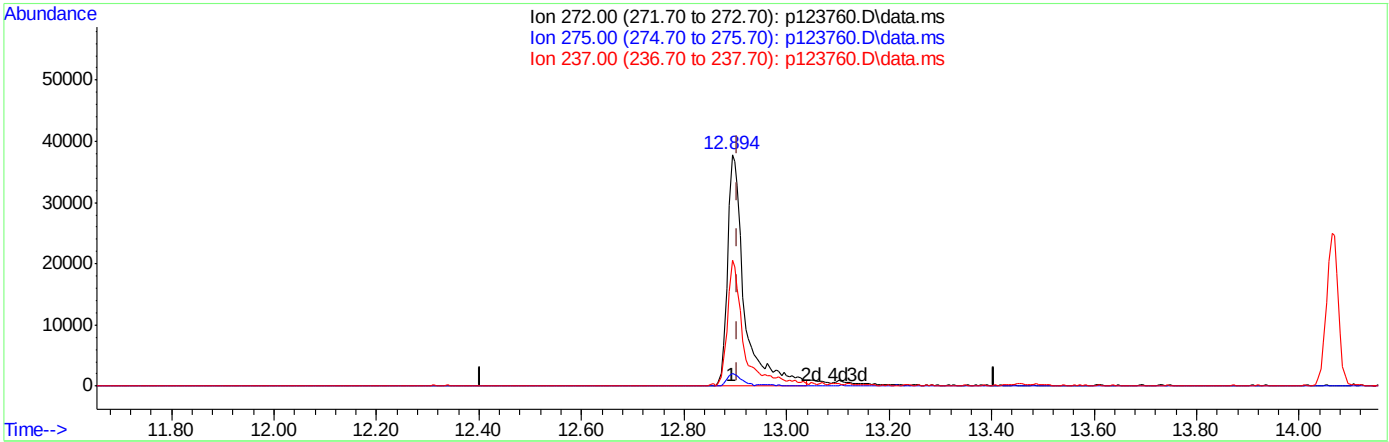
response 60358

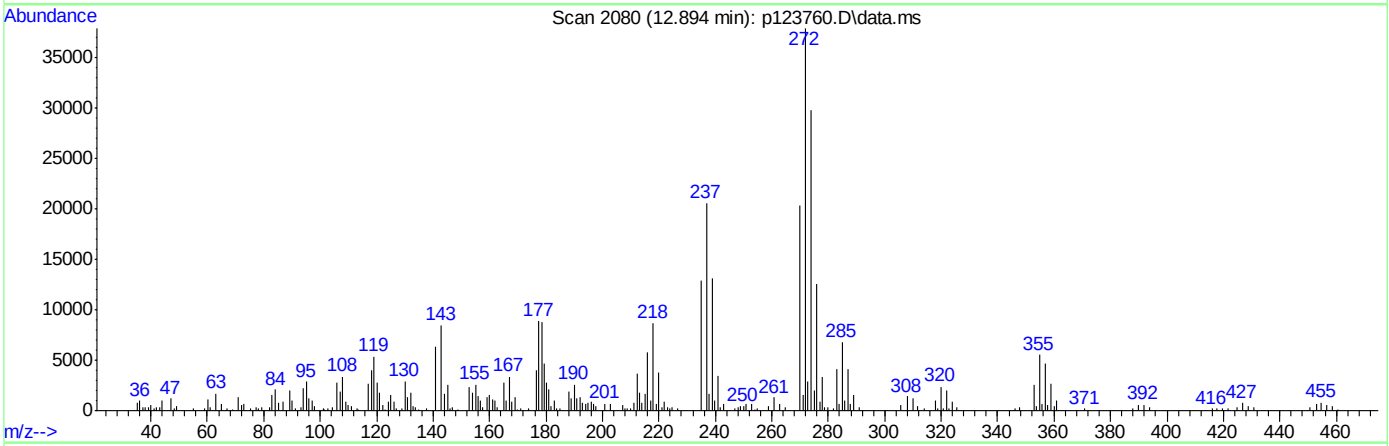
Ion	Exp%	Act%
108.00	100	100
80.00	42.60	43.17
54.00	14.20	12.28
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123760.D
Acq On : 21 Jun 2018 4:47 am
Operator : chriss2
Sample : ic5554-10
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 21 11:40:14 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration





TIC: p123760.D\data.ms

(149) Kepone

12.894min (-0.011) 104.10ppm

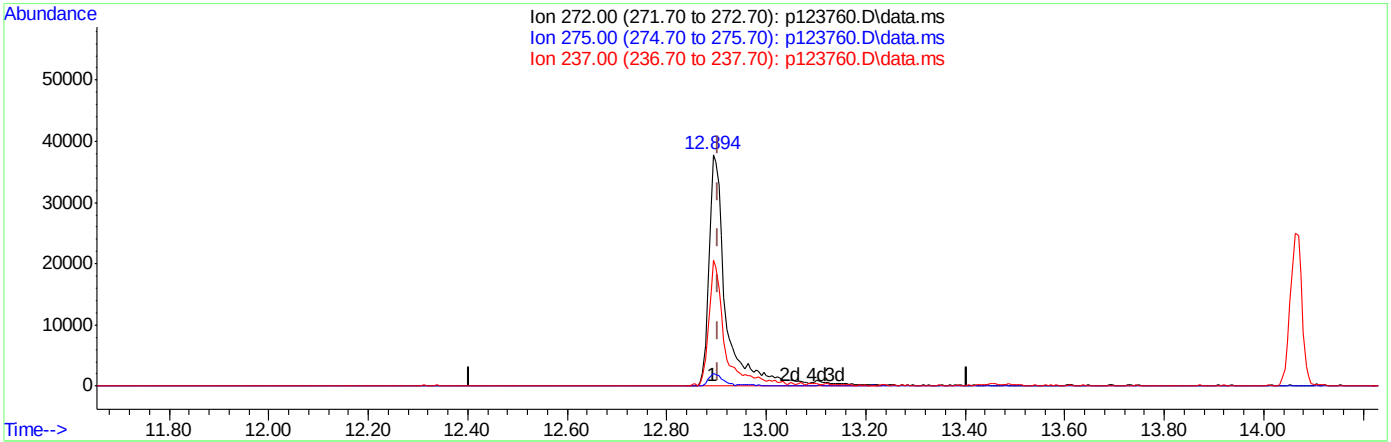
response 87709

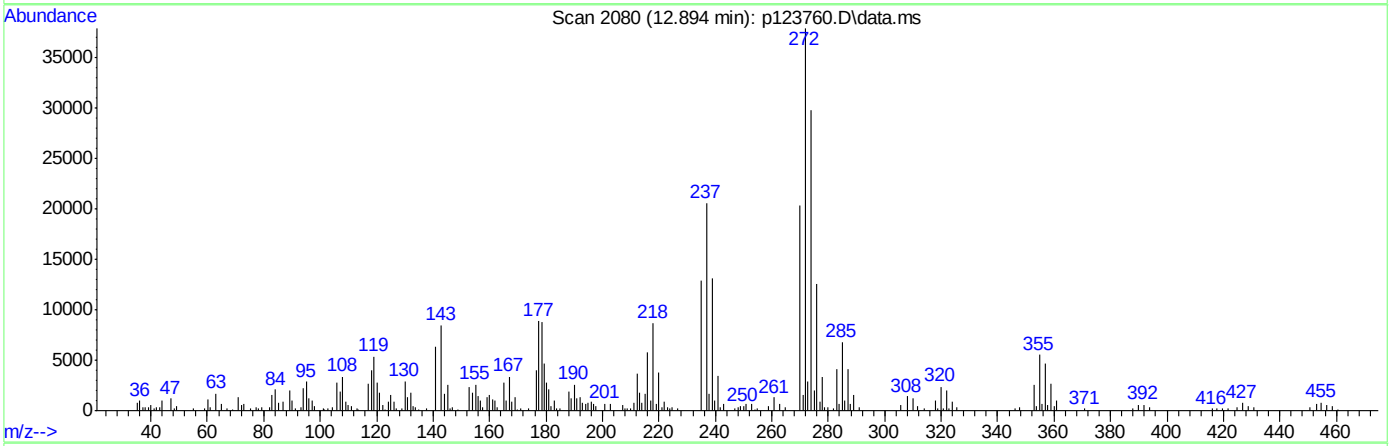
Ion	Exp%	Act%
272.00	100	100
275.00	5.50	5.51
237.00	49.90	53.92
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123760.D
Acq On : 21 Jun 2018 4:47 am
Operator : chriss2
Sample : ic5554-10
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 21 11:40:14 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration





TIC: p123760.D\data.ms

(149) Kepone

12.894min (-0.011) 111.12ppm m

response 93626

Ion	Exp%	Act%
272.00	100	100
275.00	5.50	5.43
237.00	49.90	54.27
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/25/18 12:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123761.D
Acq On : 21 Jun 2018 5:15 am
Operator : chriss2
Sample : ic5554-5
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 21 11:49:48 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	215036	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	814628	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	397473	40.00	ppm	0.00
69) Phenanthrene-d10	8.849	188	753449	40.00	ppm	0.00
83) Chrysene-d12	14.063	240	709486	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	711815	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4A	4.677	152	215036	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	814628	40.00	ppm	0.00
120) Acenaphthene-d10A	6.996	164	397473	40.00	ppm	0.00
131) Phenanthrene-d10A	8.849	188	753449	40.00	ppm	0.00
146) Chrysene-d12A	14.063	240	709486	40.00	ppm	0.00
153) Perylene-d12A	17.098	264	711815	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	215036	40.00	ppm	0.00
159) Phenanthrene-d10b	8.849	188	753449	40.00	ppm	0.00
161) Chrysene-d12b	14.063	240	709486	40.00	ppm	-0.01
163) Naphthalene-d8b	5.596	136	814628	40.00	ppm	0.00
165) Acenaphthene-d10b	6.996	164	397473	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	814628	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	215036	40.00	ppm	0.00
174) Chrysene-d12c	14.063	240	709486	40.00	ppm	0.00
176) Chrysene-d12d	14.063	240	709486	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	814628	40.00	ppm	0.00
180) Chrysene-d12D	14.063	240	709486	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
102) 2-Picoline	3.229	93	48867	5.31	ppm	100
103) Pentachloroethane	4.469	167	17470	5.51	ppm	94
104) Methyl methanesulfonate	3.555	80	25423	5.29	ppm	98
105) N-Nitrosodiethylamine	3.870	102	20110	5.26	ppm	94
106) N-Nitrosomethylethylamine	3.310	42	19931	5.69	ppm	83
107) Ethyl methanesulfonate	4.100	79	31756	5.49	ppm	98
108) N-Nitrosopyrrolidine	4.944	41	14132	5.25	ppm	85
109) N-Nitrosomorpholine	4.971	56	21819	6.96	ppm	89
110) o-Toluidine	4.992	106	66778	6.86	ppm	95
112) O,O,O-Triethyl phospho...	5.393	198	17633	5.32	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123761.D
Acq On : 21 Jun 2018 5:15 am
Operator : chriss2
Sample : ic5554-5
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 21 11:49:48 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration

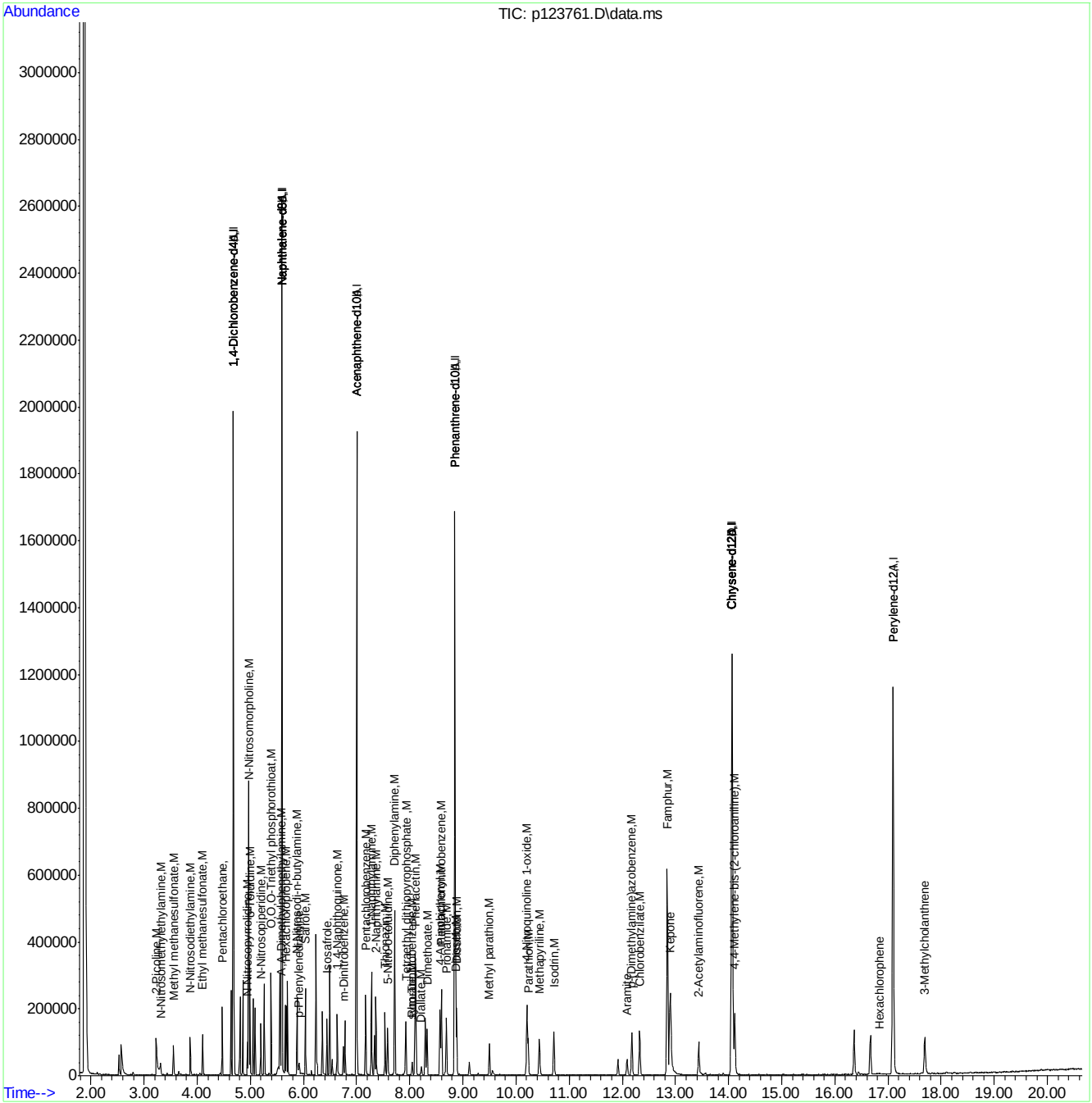
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
113) N-Nitrosopiperidine	5.195	42	23912	5.69	ppm		91
114) A,A-Dimethylphenethyla...	5.585	58	82778m	5.00	ppm		
115) Hexachloropropene	5.676	213	21707	4.90	ppm		98
116) N-Nitrosodi-n-butylamine	5.879	84	26299	5.24	ppm		99
117) p-Phenylenediamine	5.917	108	28795m	9.37	ppm		
118) Safrole	6.039	162	28321	5.40	ppm		93
119) Isosafrole	6.440	162	21847	5.45	ppm		93
121) Thionazin	7.535	143	9301	5.17	ppm		89
122) Tetraethyl dithiopyrop...	7.931	322	11377	5.27	ppm		100
123) Phorate	8.043	75	9474	2.87	ppm		100
124) Phenacetin	8.112	108	40160	5.68	ppm		98
125) 1,4-Naphthoquinone	6.638	158	25296	5.27	ppm		98
126) m-Dinitrobenzene	6.755	168	8691	4.15	ppm	#	72
127) Pentachlorobenzene	7.167	250	30137	5.53	ppm		93
128) 2-Naphthylamine	7.364	143	75042	6.25	ppm		98
129) 1-Naphthylamine	7.279	143	69983	6.54	ppm		97
130) 5-Nitro-o-toluidine	7.583	152	21018	5.30	ppm		98
132) Disulfoton	8.882	88	38178	5.70	ppm		98
133) Dinoseb	8.876	211	8913	2.93	ppm		95
134) Dimethoate	8.326	87	31615	5.65	ppm		95
135) 4-Aminobiphenyl	8.572	169	77032	5.57	ppm		98
136) Methyl parathion	9.496	125	16833	4.43	ppm		95
137) Parathion	10.228	109	14779	5.12	ppm		99
138) Diphenylamine	7.717	169	117014	11.75	ppm		96
139) Isodrin	10.714	193	12616	5.23	ppm		95
140) Diallate	8.219	86	5310	5.57	ppm		87
141) Pentachloronitrobenzene	8.598	295	8773	11.84	ppm		91
142) Pronamide	8.689	173	31541	5.16	ppm		93
143) 4-Nitroquinoline 1-oxide	10.206	190	17960	9.33	ppm		83
144) Methapyriline	10.436	58	44611	8.48	ppm		93
145) sym-Trinitrobenzene	8.048	213	3215	2.60	ppm		94
147) Aramite	12.087	185	6389	4.33	ppm		86
148) p-(Dimethylamine)azobe...	12.178	120	32971	4.87	ppm		98
149) Kepone	12.894	272	48446m	60.47	ppm		
150) Famphur	12.851	218	247939	58.12	ppm		98
151) 2-Acetylaminofluorene	13.438	181	38489	4.11	ppm		99
152) Chlorobenzilate	12.327	251	30737	4.89	ppm		98
154) 4,4-Methylene-bis-(2-c...	14.117	266	18264	6.02	ppm		94
155) Hexachlorophene	16.847	196	389	0.56	ppm	#	69
156) 3-Methylcholanthrene	17.696	252	17499	4.50	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123761.D
Acq On : 21 Jun 2018 5:15 am
Operator : chriss2
Sample : ic5554-5
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 21 11:49:48 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration



Manual Integration Approval Summary

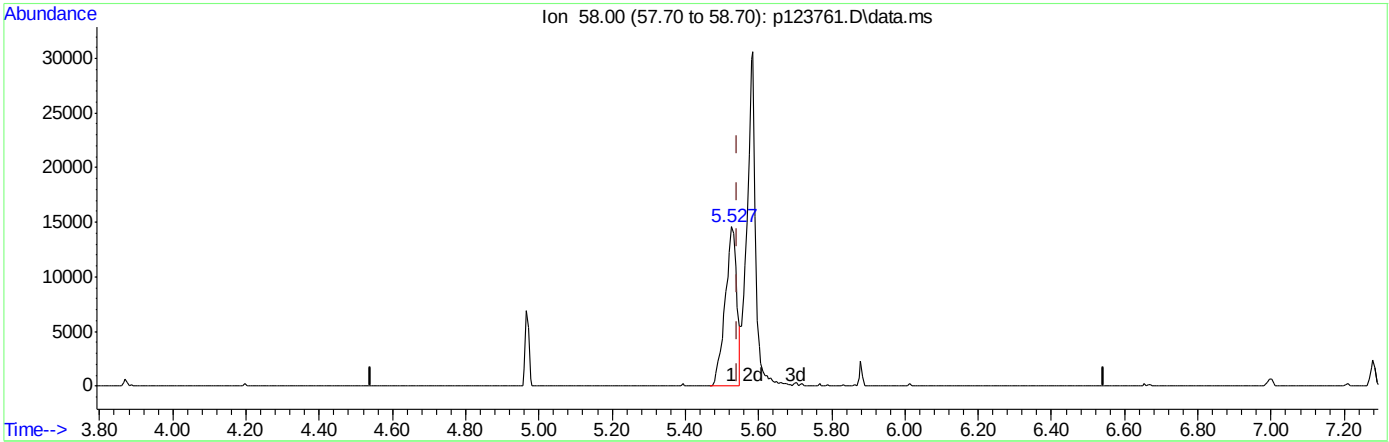
Sample Number:	EP5554-IC5554	**Method:**	SW846 8270D
Lab FileID:	P123761.D	**Analyst approved:**	06/21/18 13:12 Sean Block
Injection Time:	06/21/18 05:15	**Supervisor approved:**	06/25/18 12:07 Kristi Schollenberger

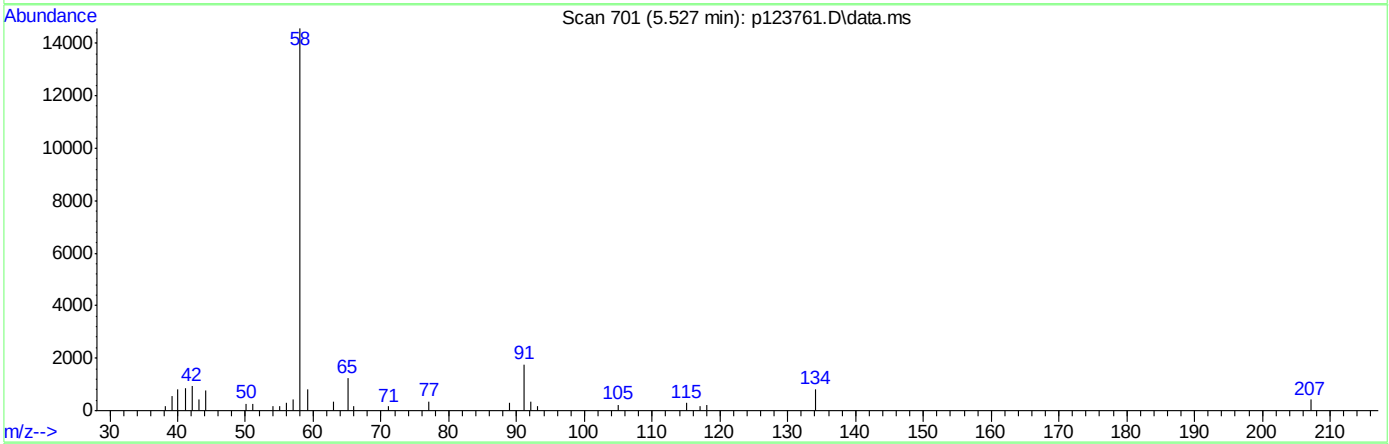
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		5.59	Split peak
p-Phenylenediamine	106-50-3		5.92	Split peak
Kepone	143-50-0		12.89	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123761.D
Acq On : 21 Jun 2018 5:15 am
Operator : chriss2
Sample : ic5554-5
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 21 11:41:23 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration





TIC: p123761.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.527min (-0.016) 1.96ppm

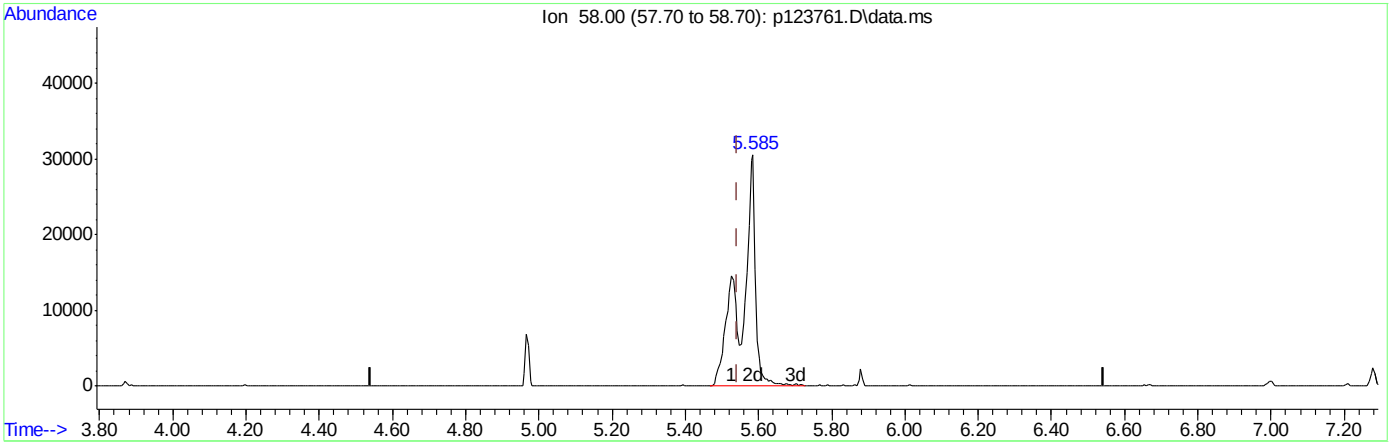
response 32373

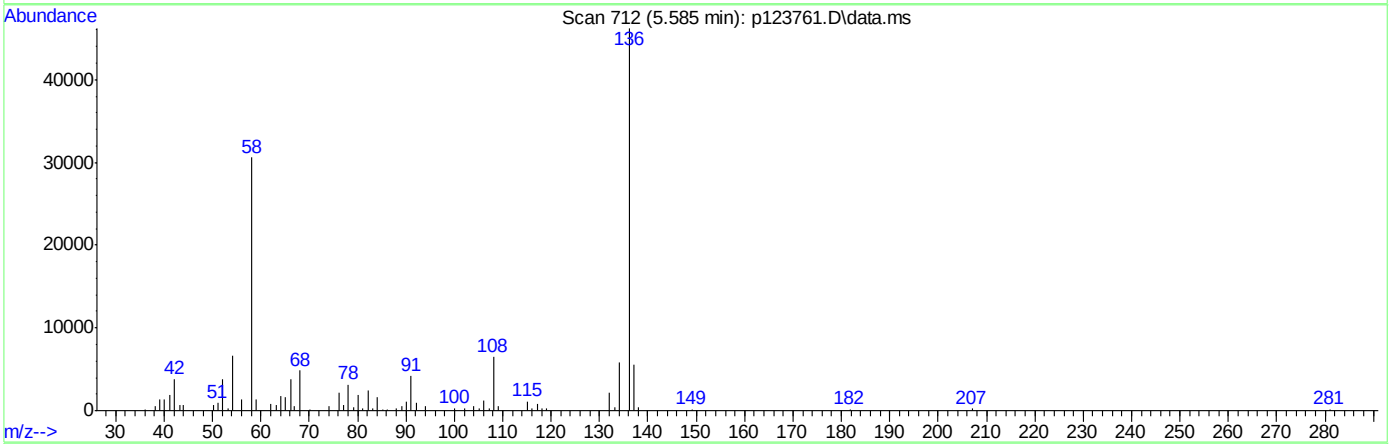
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123761.D
Acq On : 21 Jun 2018 5:15 am
Operator : chriss2
Sample : ic5554-5
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 21 11:41:23 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration





TIC: p123761.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.585min (+0.043) 5.00ppm m

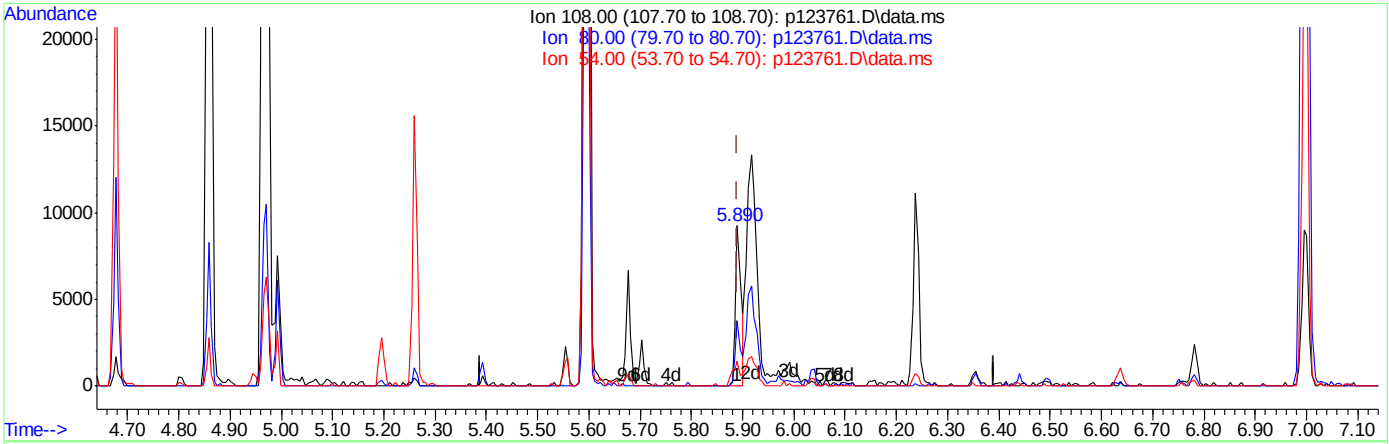
response 82778

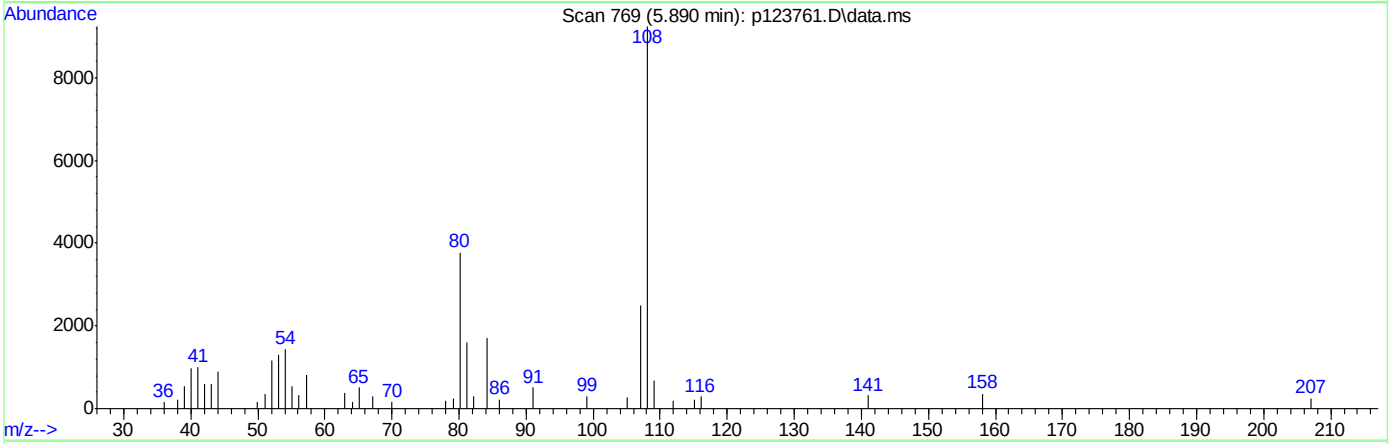
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123761.D
Acq On : 21 Jun 2018 5:15 am
Operator : chriss2
Sample : ic5554-5
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 21 11:41:23 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration





TIC: p123761.D\data.ms

(117) p-Phenylenediamine

5.890min (-0.000) 2.41ppm

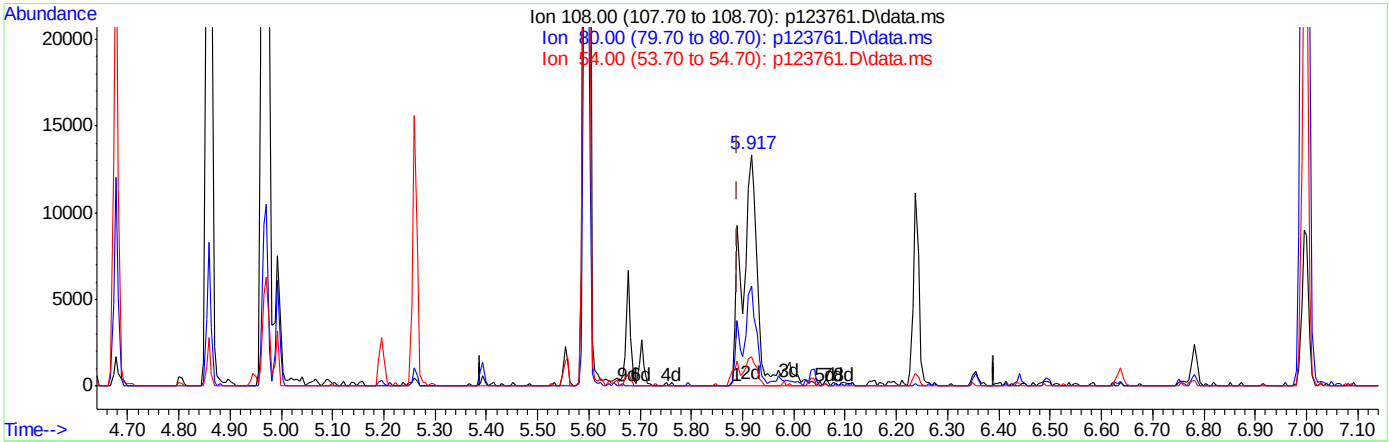
response 7413

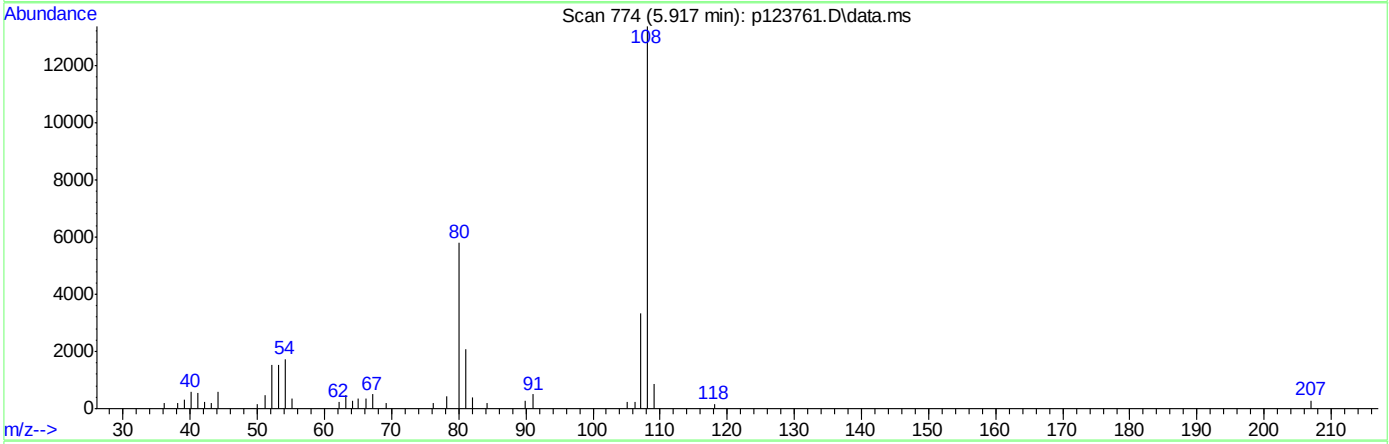
Ion	Exp%	Act%
108.00	100	100
80.00	42.60	40.86
54.00	14.20	15.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123761.D
Acq On : 21 Jun 2018 5:15 am
Operator : chriss2
Sample : ic5554-5
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 21 11:41:23 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration





TIC: p123761.D\data.ms

(117) p-Phenylenediamine

5.917min (+0.027) 9.37ppm m

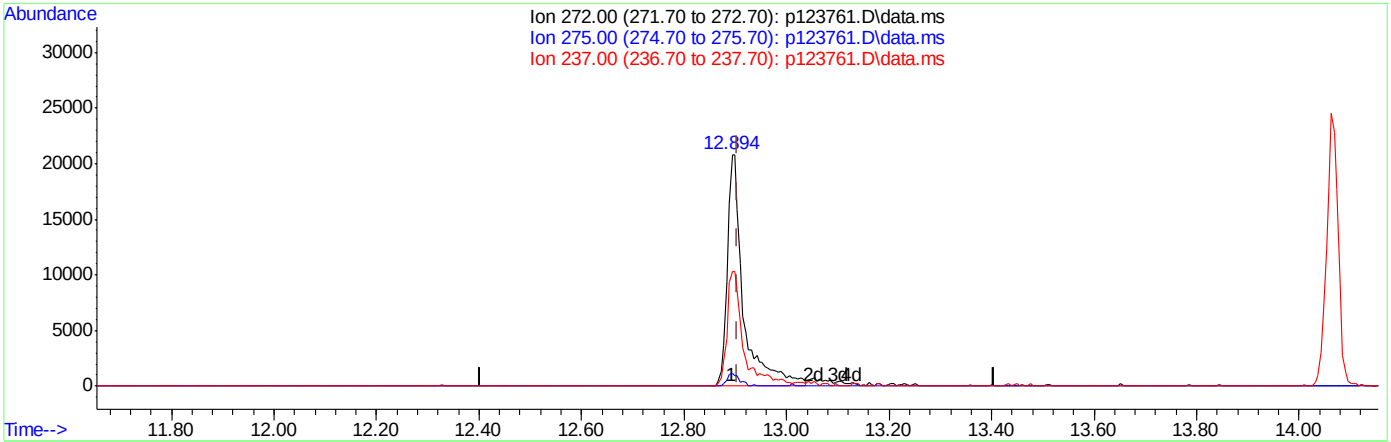
response 28795

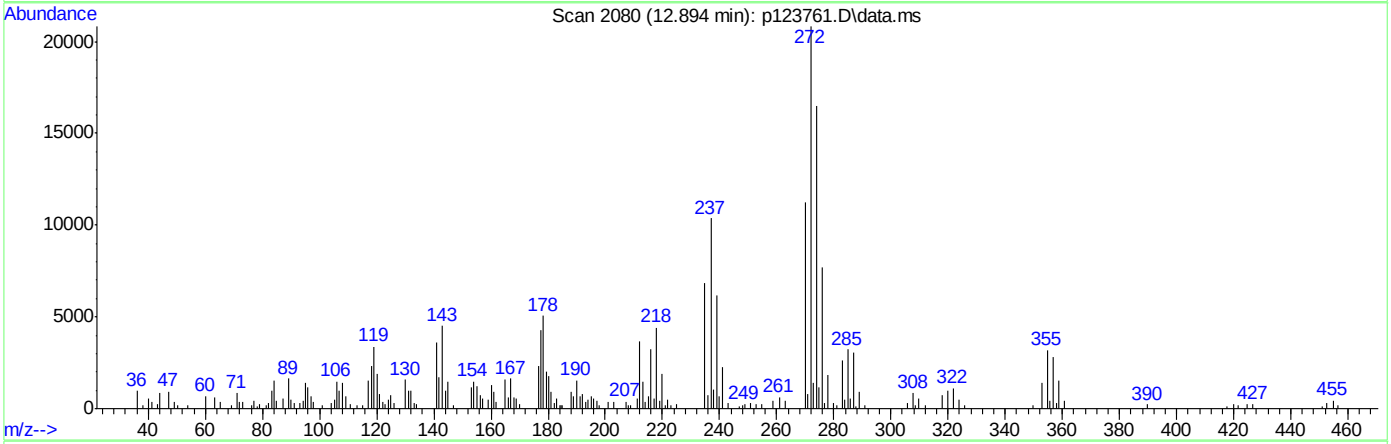
Ion	Exp%	Act%
108.00	100	100
80.00	42.60	43.36
54.00	14.20	12.99
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123761.D
Acq On : 21 Jun 2018 5:15 am
Operator : chriss2
Sample : ic5554-5
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 21 11:47:04 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration





TIC: p123761.D\data.ms

(149) Kepone

12.894min (-0.011) 57.41ppm

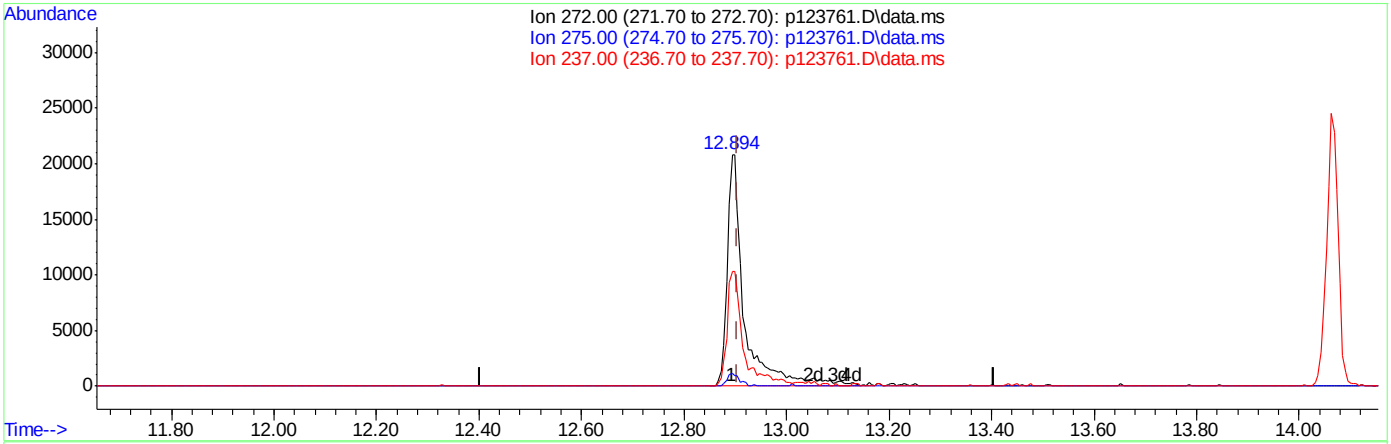
response 45995

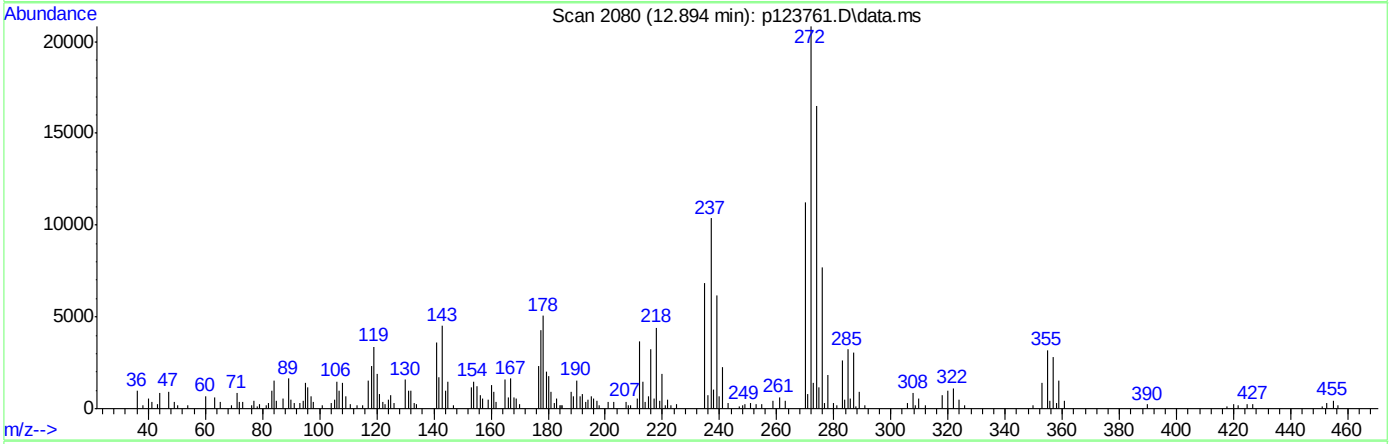
Ion	Exp%	Act%
272.00	100	100
275.00	5.50	5.78
237.00	49.90	49.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123761.D
Acq On : 21 Jun 2018 5:15 am
Operator : chriss2
Sample : ic5554-5
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 21 11:47:04 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:39:07 2018
Response via : Initial Calibration





TIC: p123761.D\data.ms

(149) Kepone

12.894min (-0.011) 60.47ppm m

response 48446

Ion	Exp%	Act%
272.00	100	100
275.00	5.50	5.72
237.00	49.90	49.74
0.00	0.00	0.00

P123762.D

Manual Integrations APPROVED (compounds with "m" flag)

Kristi Schollenberger 06/25/18 12:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123762.D
Acq On : 21 Jun 2018 5:43 am
Operator : chriss2
Sample : ic5554-2
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 21 11:46:00 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:42:20 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	219968	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	861310	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	413894	40.00	ppm	0.00
69) Phenanthrene-d10	8.850	188	790232	40.00	ppm	0.00
83) Chrysene-d12	14.064	240	728739	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	742267	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4A	4.677	152	219968	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	861310	40.00	ppm	0.00
120) Acenaphthene-d10A	6.996	164	413894	40.00	ppm	0.00
131) Phenanthrene-d10A	8.850	188	790232	40.00	ppm	0.00
146) Chrysene-d12A	14.064	240	728739	40.00	ppm	0.00
153) Perylene-d12A	17.098	264	742267	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	219968	40.00	ppm	0.00
159) Phenanthrene-d10b	8.850	188	790232	40.00	ppm	0.00
161) Chrysene-d12b	14.064	240	728739	40.00	ppm	-0.01
163) Naphthalene-d8b	5.596	136	861310	40.00	ppm	0.00
165) Acenaphthene-d10b	6.996	164	413894	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	861310	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	219968	40.00	ppm	0.00
174) Chrysene-d12c	14.064	240	728739	40.00	ppm	0.00
176) Chrysene-d12d	14.064	240	728739	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	861310	40.00	ppm	0.00
180) Chrysene-d12D	14.064	240	728739	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
102) 2-Picoline	3.240	93	20439	2.17	ppm	99
103) Pentachloroethane	4.469	167	6710	2.07	ppm	85
104) Methyl methanesulfonate	3.555	80	9978	2.03	ppm	87
105) N-Nitrosodiethylamine	3.871	102	8220	2.10	ppm	88
106) N-Nitrosomethylethylamine	3.310	42	8692	2.43	ppm	94
107) Ethyl methanesulfonate	4.106	79	12289	2.08	ppm	87
108) N-Nitrosopyrrolidine	4.944	41	5918	2.15	ppm	99
109) N-Nitrosomorpholine	4.971	56	9318	2.91	ppm	93
110) o-Toluidine	4.992	106	28083	2.82	ppm	99
112) O,O,O-Triethyl phospho...	5.393	198	7399	2.11	ppm	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123762.D
Acq On : 21 Jun 2018 5:43 am
Operator : chriss2
Sample : ic5554-2
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 21 11:46:00 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:42:20 2018
Response via : Initial Calibration

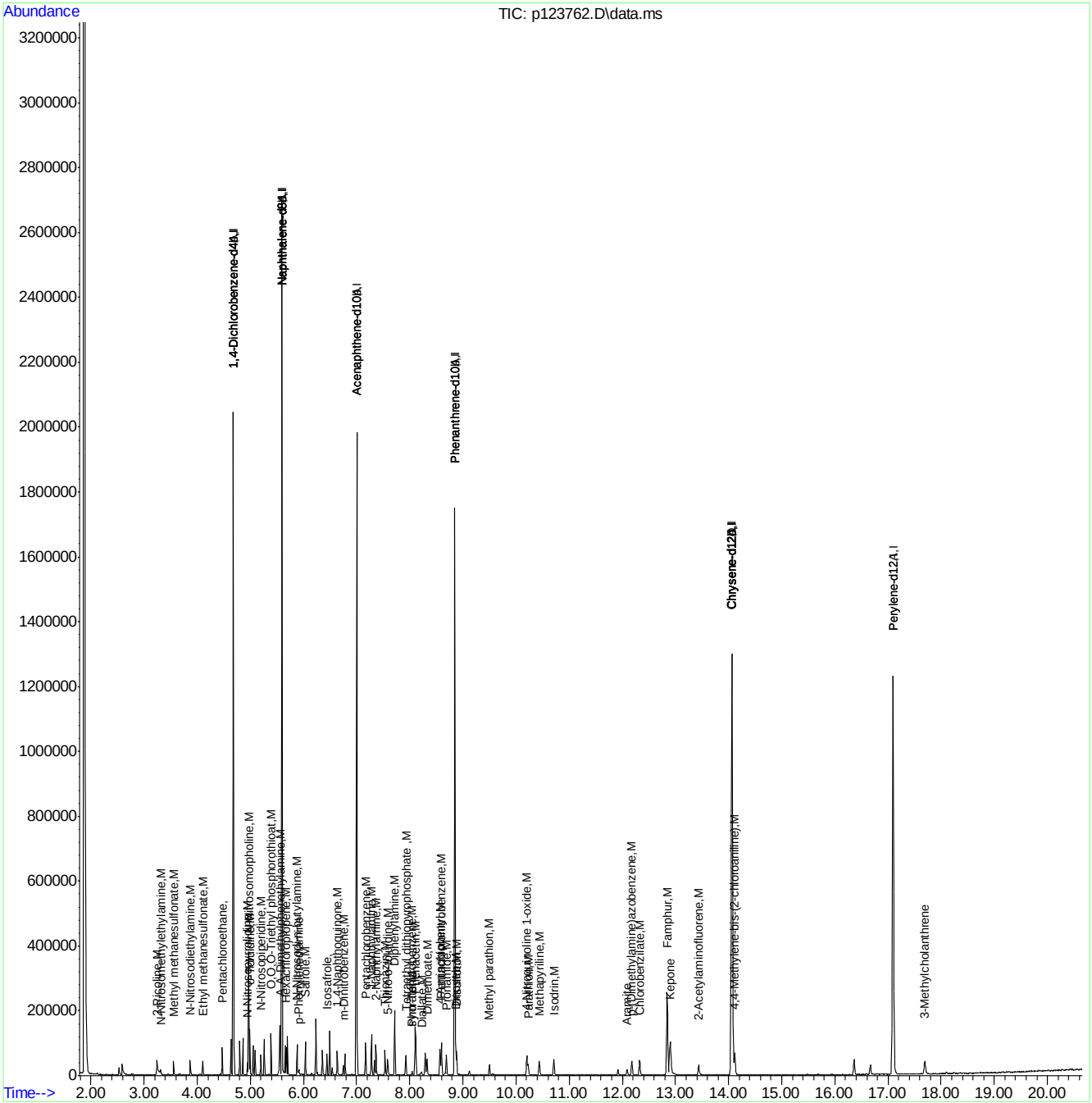
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
113) N-Nitrosopiperidine	5.196	42	9942	2.24	ppm		87
114) A,A-Dimethylphenethyla...	5.559	58	33604m	1.92	ppm		
115) Hexachloropropene	5.676	213	9170	1.96	ppm		98
116) N-Nitrosodi-n-butylamine	5.879	84	10964	2.06	ppm		95
117) p-Phenylenediamine	5.917	108	9205	2.83	ppm	#	87
118) Safrole	6.040	162	11046	1.99	ppm		93
119) Isosafrole	6.440	162	8250	1.95	ppm		96
121) Thionazin	7.535	143	3965	2.11	ppm		98
122) Tetraethyl dithiopyrop...	7.931	322	4601	2.05	ppm		100
123) Phorate	8.043	75	3016	0.88	ppm		100
124) Phenacetin	8.112	108	15293	2.08	ppm		98
125) 1,4-Naphthoquinone	6.638	158	9756	1.95	ppm		94
126) m-Dinitrobenzene	6.755	168	3232	1.48	ppm	#	71
127) Pentachlorobenzene	7.167	250	12778	2.25	ppm		95
128) 2-Naphthylamine	7.364	143	29867	2.39	ppm		96
129) 1-Naphthylamine	7.279	143	27305	2.45	ppm		93
130) 5-Nitro-o-toluidine	7.583	152	7458	1.81	ppm		94
132) Disulfoton	8.882	88	15326	2.18	ppm		96
133) Dinoseb	8.876	211	2003	0.63	ppm		73
134) Dimethoate	8.326	87	12792	2.18	ppm		92
135) 4-Aminobiphenyl	8.572	169	32242	2.22	ppm		97
136) Methyl parathion	9.496	125	5673	1.42	ppm	#	78
137) Parathion	10.228	109	5158	1.71	ppm		98
138) Diphenylamine	7.717	169	47603	4.56	ppm		96
139) Isodrin	10.714	193	5468	2.16	ppm		98
140) Diallate	8.225	86	1962	1.96	ppm		91
141) Pentachloronitrobenzene	8.599	295	3032	3.90	ppm		92
142) Pronamide	8.689	173	12295	1.92	ppm		96
143) 4-Nitroquinoline 1-oxide	10.207	190	3963	1.96	ppm	#	60
144) Methapyriline	10.436	58	17620	3.19	ppm		89
145) sym-Trinitrobenzene	8.043	213	1027	0.79	ppm		93
147) Aramite	12.092	185	2116	1.40	ppm		89
148) p-(Dimethylamine)azobe...	12.178	120	11341	1.63	ppm		91
149) Kepone	12.894	272	18028	21.91	ppm		90
150) Famphur	12.846	218	96993	22.14	ppm		96
151) 2-Acetylaminofluorene	13.439	181	12478	1.30	ppm		96
152) Chlorobenzilate	12.327	251	11497	1.78	ppm		98
154) 4,4-Methylene-bis-(2-c...	14.112	266	6857	2.17	ppm		83
156) 3-Methylcholanthrene	17.686	252	6543	1.61	ppm	#	67

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123762.D
Acq On : 21 Jun 2018 5:43 am
Operator : chriss2
Sample : ic5554-2
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 21 11:46:00 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:42:20 2018
Response via : Initial Calibration



Manual Integration Approval Summary

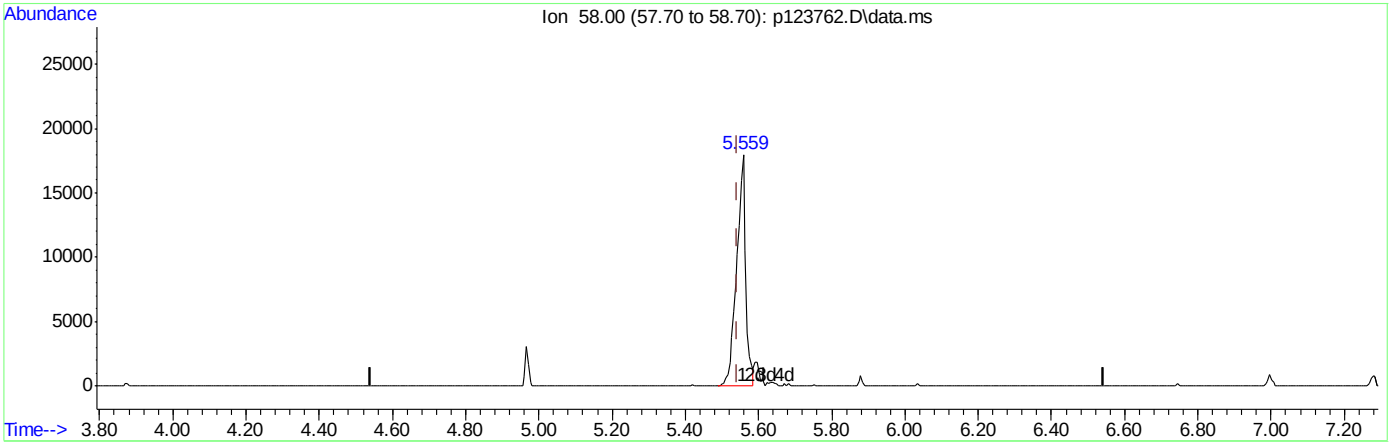
Sample Number:	EP5554-IC5554	**Method:**	SW846 8270D
Lab FileID:	P123762.D	**Analyst approved:**	06/21/18 13:12 Sean Block
Injection Time:	06/21/18 05:43	**Supervisor approved:**	06/25/18 12:07 Kristi Schollenberger

Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		5.56	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123762.D
Acq On : 21 Jun 2018 5:43 am
Operator : chriss2
Sample : ic5554-2
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 21 11:43:11 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:42:20 2018
Response via : Initial Calibration



TIC: p123762.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.559min (+0.016) 1.79ppm

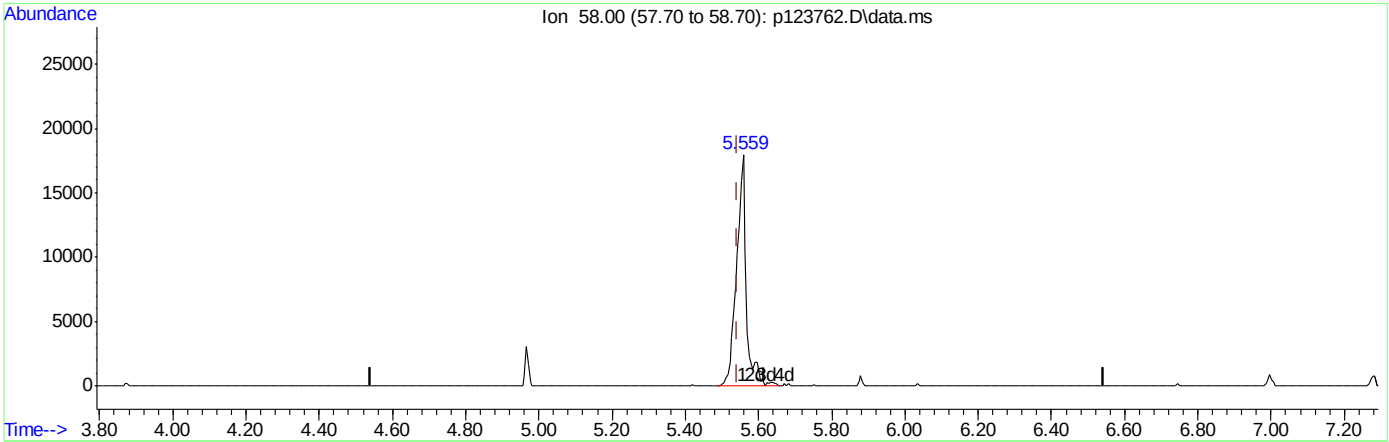
response 31382

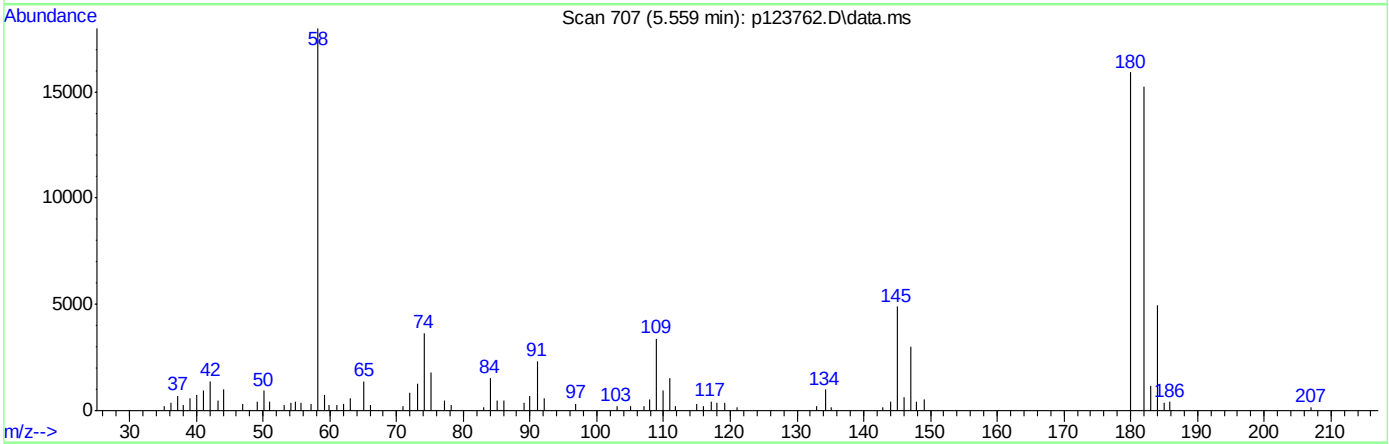
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123762.D
Acq On : 21 Jun 2018 5:43 am
Operator : chriss2
Sample : ic5554-2
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 21 11:43:11 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:42:20 2018
Response via : Initial Calibration





TIC: p123762.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.559min (+0.016) 1.92ppm m

response 33604

Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/25/18 12:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123763.D
Acq On : 21 Jun 2018 6:11 am
Operator : chriss2
Sample : ic5554-1
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 21 11:45:32 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:43:53 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	220177	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	862486	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	412342	40.00	ppm	0.00
69) Phenanthrene-d10	8.849	188	800765	40.00	ppm	0.00
83) Chrysene-d12	14.063	240	741272	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	748371	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4A	4.677	152	220177	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	862486	40.00	ppm	0.00
120) Acenaphthene-d10A	6.996	164	412342	40.00	ppm	0.00
131) Phenanthrene-d10A	8.849	188	800765	40.00	ppm	0.00
146) Chrysene-d12A	14.063	240	741272	40.00	ppm	0.00
153) Perylene-d12A	17.098	264	748371	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	220177	40.00	ppm	0.00
159) Phenanthrene-d10b	8.849	188	800765	40.00	ppm	0.00
161) Chrysene-d12b	14.063	240	741272	40.00	ppm	-0.01
163) Naphthalene-d8b	5.596	136	862486	40.00	ppm	0.00
165) Acenaphthene-d10b	6.996	164	412342	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	862486	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	220177	40.00	ppm	0.00
174) Chrysene-d12c	14.063	240	741272	40.00	ppm	0.00
176) Chrysene-d12d	14.063	240	741272	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	862486	40.00	ppm	0.00
180) Chrysene-d12D	14.063	240	741272	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) 2-Picoline	3.251	93	11192	1.19	ppm	88
103) Pentachloroethane	4.474	167	3680	1.13	ppm	88
104) Methyl methanesulfonate	3.561	80	5542	1.13	ppm	97
105) N-Nitrosodiethylamine	3.876	102	4176	1.07	ppm	91
106) N-Nitrosomethylethylamine	3.315	42	3666	1.02	ppm	87
107) Ethyl methanesulfonate	4.106	79	7660	1.29	ppm	87
108) N-Nitrosopyrrolidine	4.944	41	3238	1.18	ppm	93
109) N-Nitrosomorpholine	4.971	56	4929	1.54	ppm	87
110) o-Toluidine	4.992	106	14280	1.43	ppm	99
112) O,O,O-Triethyl phospho...	5.393	198	3553	1.01	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123763.D
Acq On : 21 Jun 2018 6:11 am
Operator : chriss2
Sample : ic5554-1
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 21 11:45:32 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:43:53 2018
Response via : Initial Calibration

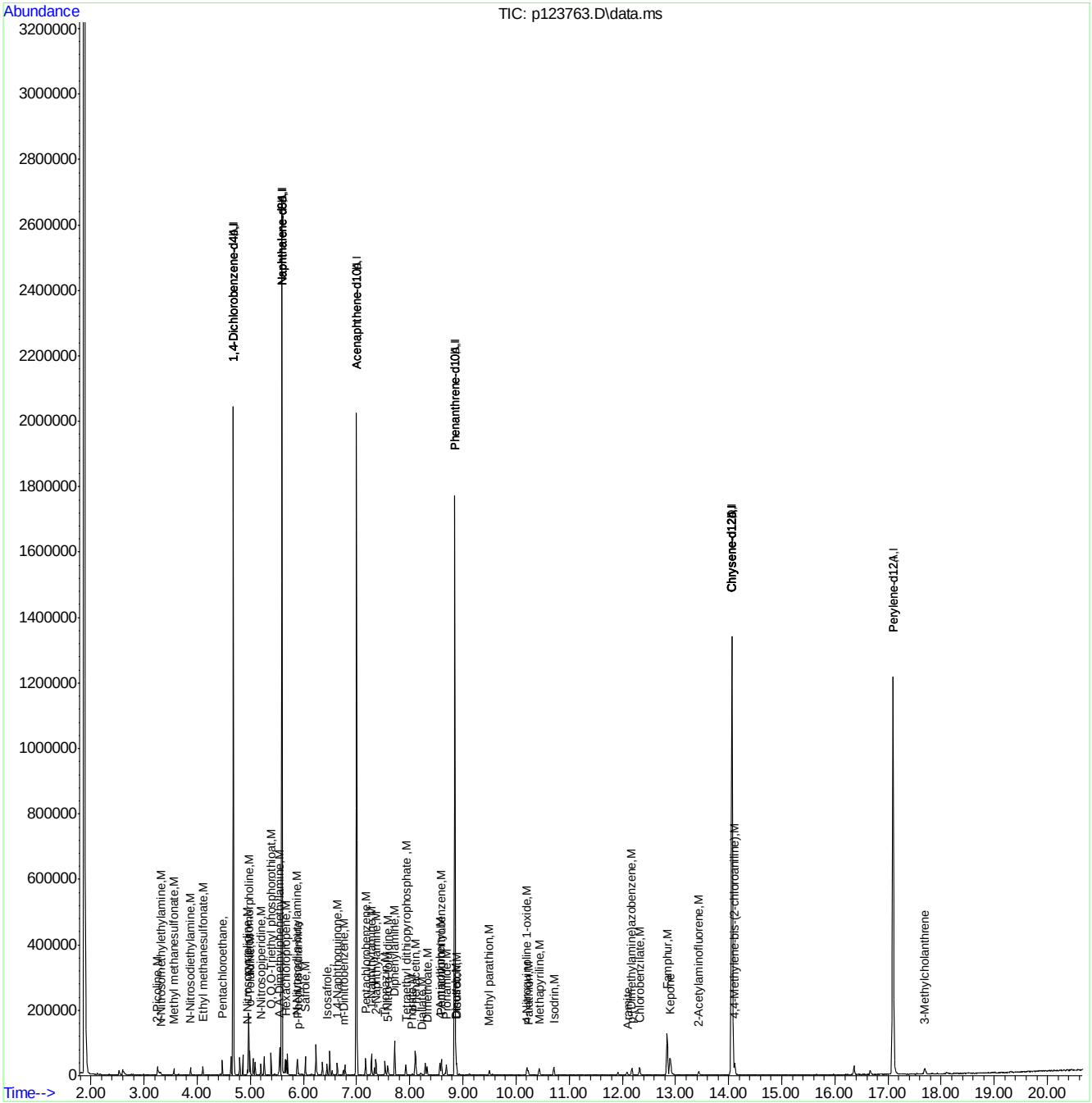
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
113) N-Nitrosopiperidine	5.195	42	5122	1.15	ppm		92
114) A,A-Dimethylphenethyla...	5.548	58	16735m	0.96	ppm		
115) Hexachloropropene	5.676	213	4504	0.96	ppm		87
116) N-Nitrosodi-n-butylamine	5.879	84	6099	1.15	ppm		93
117) p-Phenylenediamine	5.895	108	3979	1.22	ppm		91
118) Safrole	6.039	162	5995	1.08	ppm		96
119) Isosafrole	6.440	162	4552	1.07	ppm		98
121) Thionazin	7.535	143	2251	1.21	ppm		88
122) Tetraethyl dithiopyrop...	7.931	322	2298	1.03	ppm		100
123) Phorate	8.043	75	1356	0.40	ppm		100
124) Phenacetin	8.112	108	7750	1.06	ppm		86
125) 1,4-Naphthoquinone	6.638	158	4736	0.95	ppm		93
126) m-Dinitrobenzene	6.755	168	1714	0.79	ppm		79
127) Pentachlorobenzene	7.167	250	7105	1.26	ppm		95
128) 2-Naphthylamine	7.364	143	16135	1.30	ppm		93
129) 1-Naphthylamine	7.279	143	12900	1.16	ppm		87
130) 5-Nitro-o-toluidine	7.583	152	3592	0.87	ppm		93
132) Disulfoton	8.881	88	7979	1.12	ppm		84
133) Dinoseb	8.871	211	906	0.28	ppm	#	71
134) Dimethoate	8.326	87	6224	1.05	ppm		94
135) 4-Aminobiphenyl	8.572	169	15590	1.06	ppm		93
136) Methyl parathion	9.496	125	2481	0.61	ppm		94
137) Parathion	10.228	109	2221	0.72	ppm		98
138) Diphenylamine	7.717	169	25862	2.44	ppm		98
139) Isodrin	10.714	193	2783	1.09	ppm		95
140) Diallate	8.224	86	1182	1.17	ppm		76
141) Pentachloronitrobenzene	8.598	295	1591	2.02	ppm	#	73
142) Pronamide	8.689	173	5785	0.89	ppm		93
143) 4-Nitroquinoline 1-oxide	10.201	190	1403	0.69	ppm	#	46
144) Methapyriline	10.436	58	8510	1.52	ppm		96
147) Aramite	12.098	185	1307	0.85	ppm		87
148) p-(Dimethylamine)azobe...	12.178	120	5856	0.83	ppm		76
149) Kepone	12.894	272	9943	11.88	ppm		90
150) Famphur	12.840	218	49080	11.01	ppm		100
151) 2-Acetylaminofluorene	13.433	181	5153	0.53	ppm		94
152) Chlorobenzilate	12.327	251	5900	0.90	ppm		90
154) 4,4-Methylene-bis-(2-c...	14.117	266	3279	1.03	ppm		93
156) 3-Methylcholanthrene	17.696	252	3312	0.81	ppm	#	72

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123763.D
Acq On : 21 Jun 2018 6:11 am
Operator : chriss2
Sample : ic5554-1
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 21 11:45:32 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:43:53 2018
Response via : Initial Calibration



Manual Integration Approval Summary

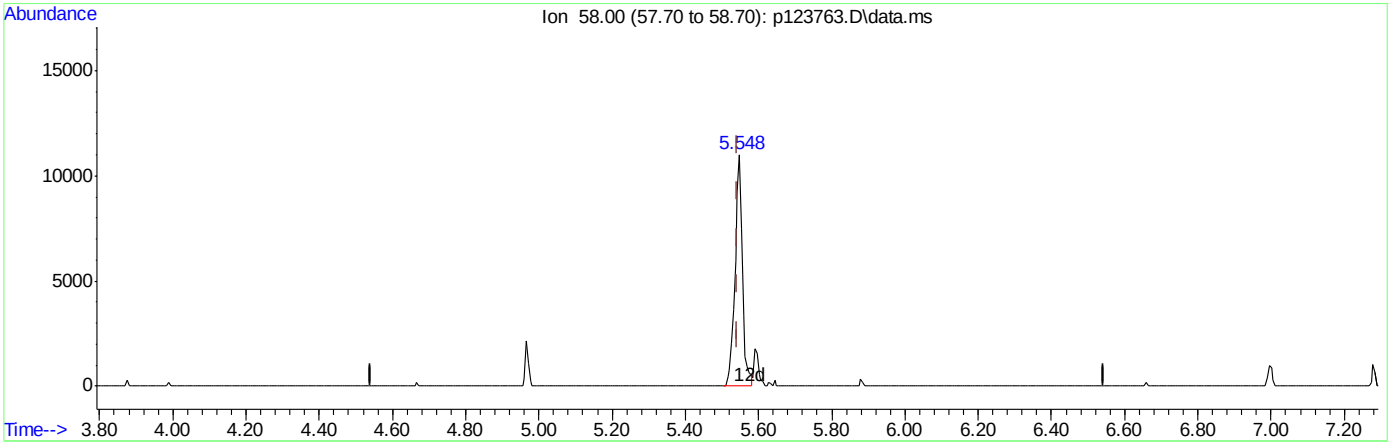
Sample Number:	EP5554-IC5554	**Method:**	SW846 8270D
Lab FileID:	P123763.D	**Analyst approved:**	06/21/18 13:12 Sean Block
Injection Time:	06/21/18 06:11	**Supervisor approved:**	06/25/18 12:07 Kristi Schollenberger

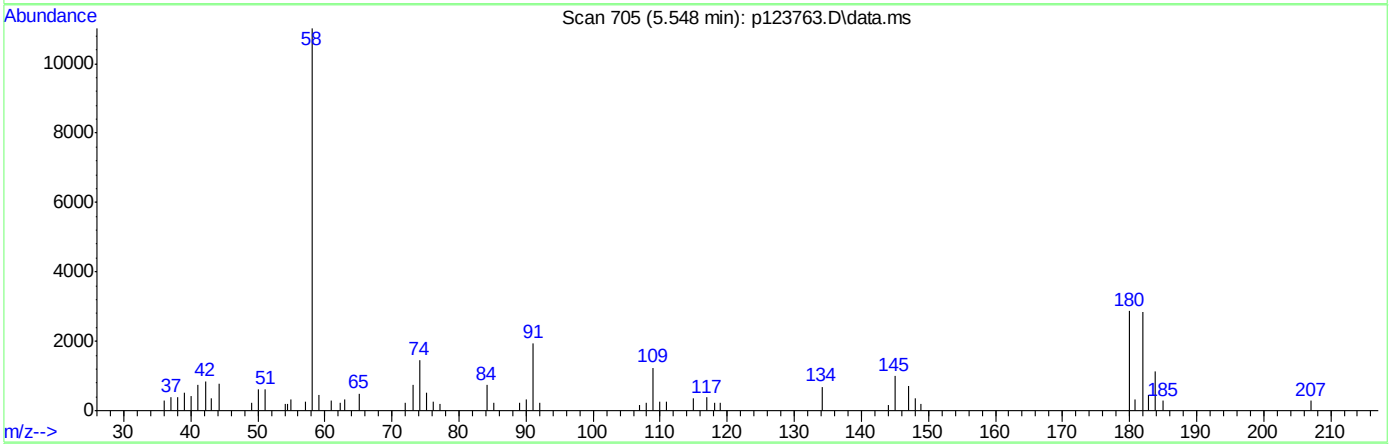
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		5.55	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123763.D
Acq On : 21 Jun 2018 6:11 am
Operator : chriss2
Sample : ic5554-1
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 21 11:44:40 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:43:53 2018
Response via : Initial Calibration





TIC: p123763.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.548min (+0.005) 0.87ppm

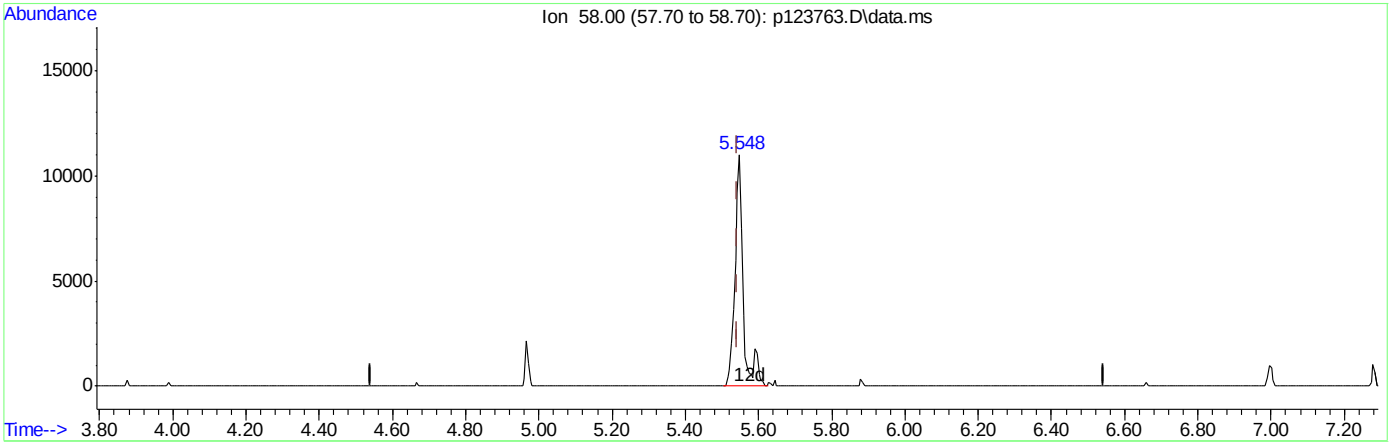
response 15189

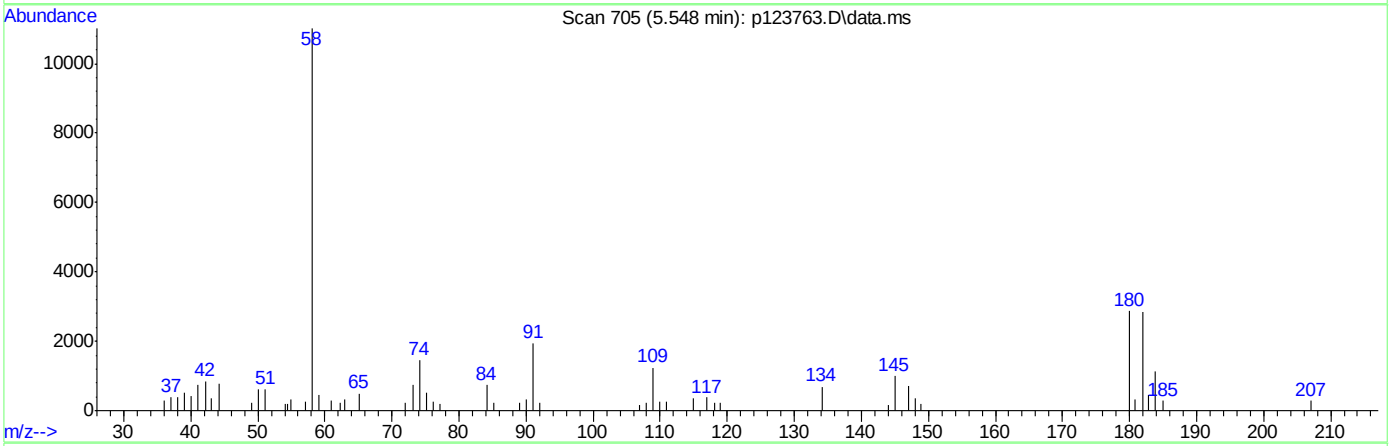
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123763.D
Acq On : 21 Jun 2018 6:11 am
Operator : chriss2
Sample : ic5554-1
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 21 11:44:40 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 11:43:53 2018
Response via : Initial Calibration





TIC: p123763.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.548min (+0.005) 0.96ppm m

response 16735

Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

P123763.D edits: A,A-Dimethylphenethylamine

Manual Integrations APPROVED
(compounds with "m" flag)
Kristi Schollenberger
06/25/18 12:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123765.D
Acq On : 21 Jun 2018 7:07 am
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 21 12:20:28 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:17:00 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	218479	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	832767	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	418223	40.00	ppm	0.00
69) Phenanthrene-d10	8.849	188	792086	40.00	ppm	0.00
83) Chrysene-d12	14.063	240	747782	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	772633	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4A	4.677	152	218479	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	832767	40.00	ppm	0.00
120) Acenaphthene-d10A	6.996	164	418223	40.00	ppm	0.00
131) Phenanthrene-d10A	8.849	188	792086	40.00	ppm	0.00
146) Chrysene-d12A	14.063	240	747782	40.00	ppm	0.00
153) Perylene-d12A	17.098	264	772633	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	218479	40.00	ppm	0.00
159) Phenanthrene-d10b	8.849	188	792086	40.00	ppm	0.00
161) Chrysene-d12b	14.063	240	747782	40.00	ppm	-0.01
163) Naphthalene-d8b	5.596	136	832767	40.00	ppm	0.00
165) Acenaphthene-d10b	6.996	164	418223	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	832767	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	218479	40.00	ppm	0.00
174) Chrysene-d12c	14.063	240	747782	40.00	ppm	0.00
176) Chrysene-d12d	14.063	240	747782	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	832767	40.00	ppm	0.00
180) Chrysene-d12D	14.063	240	747782	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) 2-Picoline	3.208	93	480440	49.62	ppm	99
105) N-Nitrosodiethylamine	3.870	102	191031	47.94	ppm	99
106) N-Nitrosomethylethylamine	3.304	42	173956	46.04	ppm	99
108) N-Nitrosopyrrolidine	4.950	41	132406	46.88	ppm	92
109) N-Nitrosomorpholine	4.976	56	203851	50.85	ppm	95
110) o-Toluidine	4.998	106	593728	50.53	ppm	84
113) N-Nitrosopiperidine	5.195	42	212888	47.15	ppm	91
114) A,A-Dimethylphenethyla...	5.521	58	909001m	53.66	ppm	
116) N-Nitrosodi-n-butylamine	5.879	84	248486	47.43	ppm	100
128) 2-Naphthylamine	7.370	143	750282	53.92	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123765.D
Acq On : 21 Jun 2018 7:07 am
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 21 12:20:28 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:17:00 2018
Response via : Initial Calibration

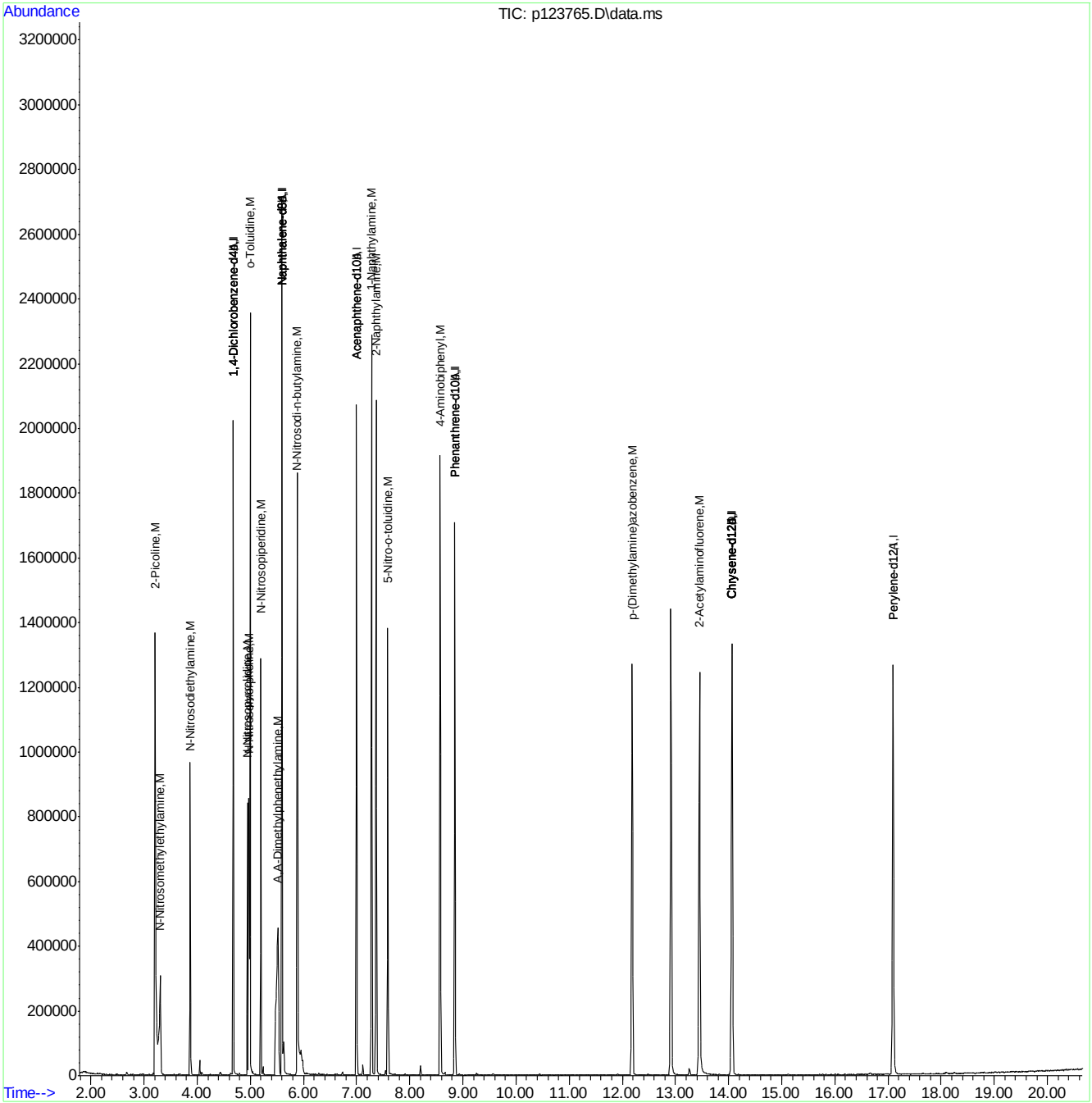
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
129) 1-Naphthylamine	7.284	143	756178	60.58	ppm	93
130) 5-Nitro-o-toluidine	7.589	152	223029	54.30	ppm	98
135) 4-Aminobiphenyl	8.577	169	831331	55.05	ppm	99
148) p-(Dimethylamine)azobe...	12.183	120	340507	50.64	ppm	97
151) 2-Acetylaminofluorene	13.454	181	494282	55.54	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123765.D
Acq On : 21 Jun 2018 7:07 am
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 21 12:20:28 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:17:00 2018
Response via : Initial Calibration



Manual Integration Approval Summary

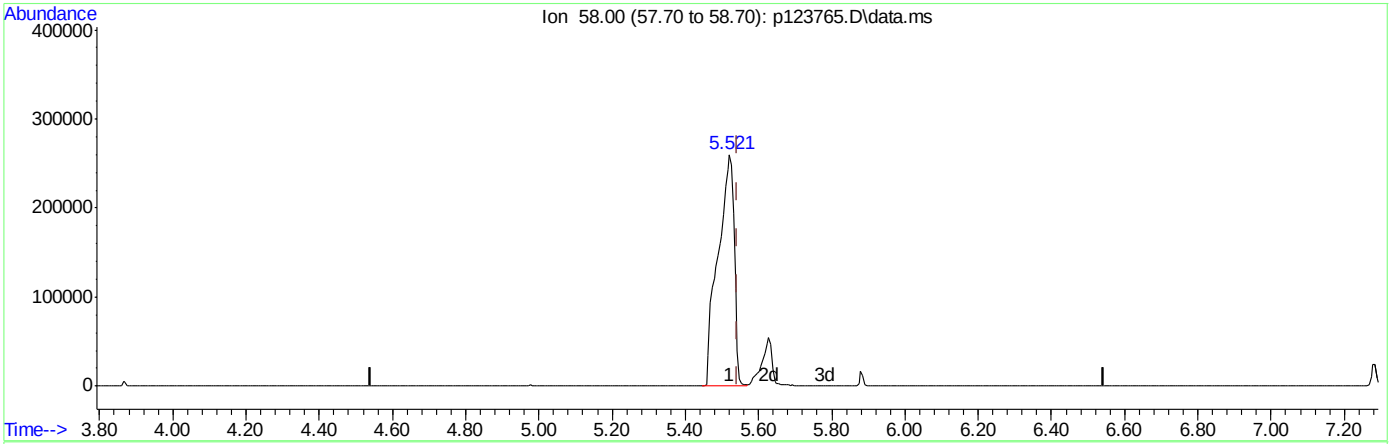
Sample Number:	EP5554-ICV5554	**Method:**	SW846 8270D
Lab FileID:	P123765.D	**Analyst approved:**	06/21/18 13:12 Sean Block
Injection Time:	06/21/18 07:07	**Supervisor approved:**	06/25/18 12:07 Kristi Schollenberger

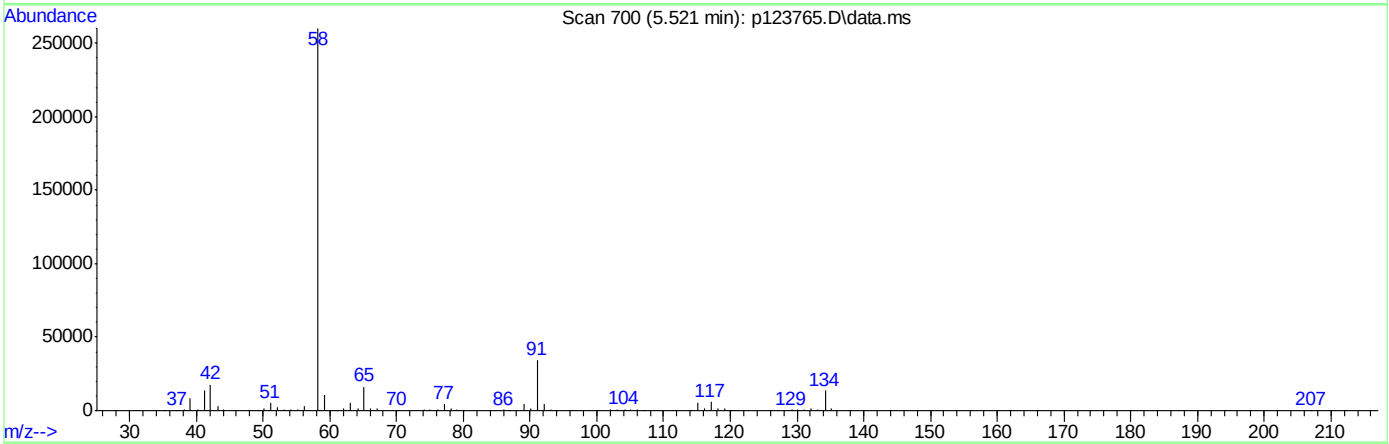
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		5.52	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123765.D
Acq On : 21 Jun 2018 7:07 am
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 21 12:18:05 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:17:00 2018
Response via : Initial Calibration





TIC: p123765.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.521min (-0.022) 47.29ppm

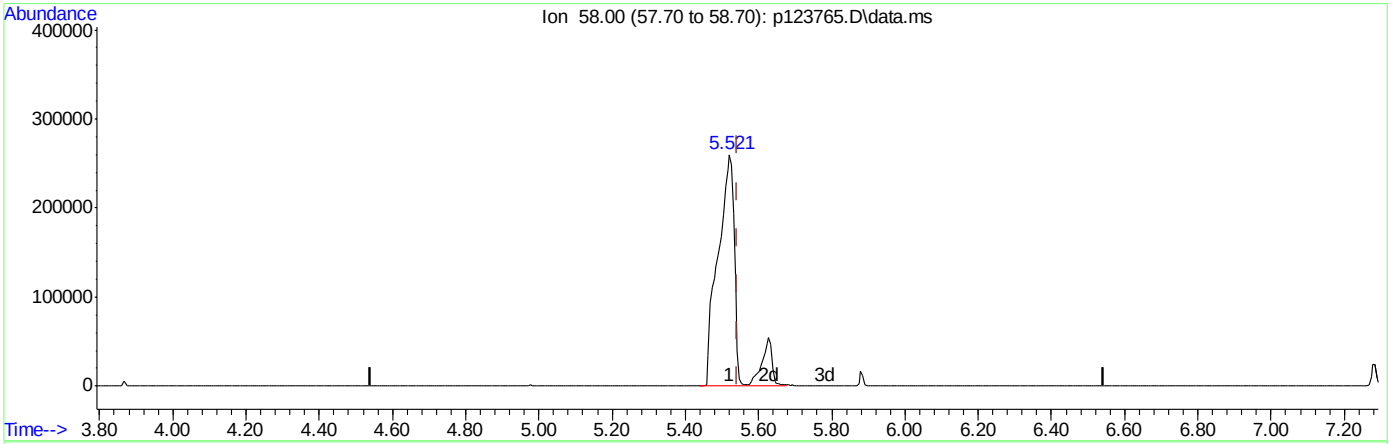
response 801056

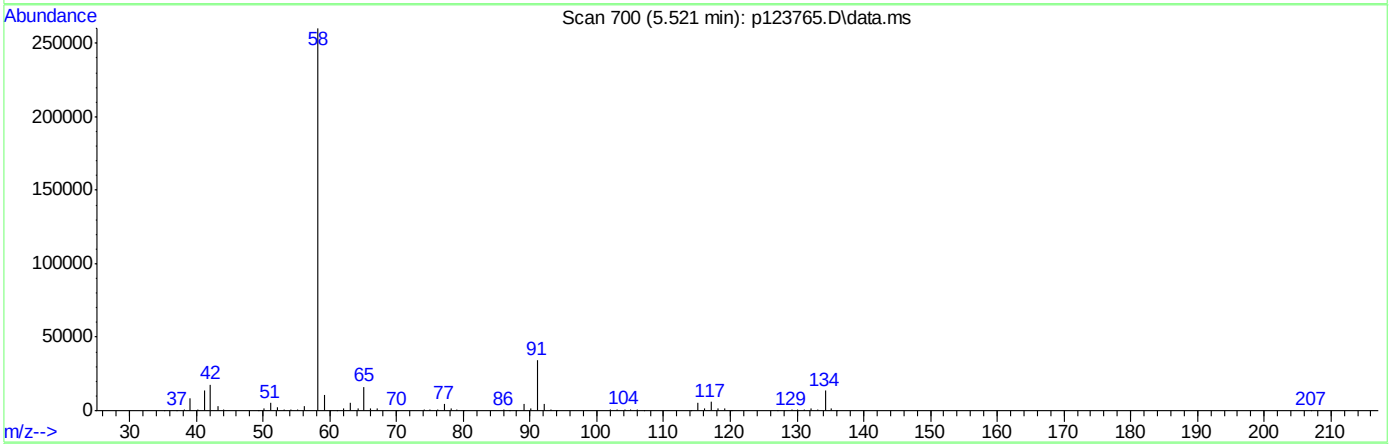
Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123765.D
Acq On : 21 Jun 2018 7:07 am
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 21 12:18:05 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:17:00 2018
Response via : Initial Calibration





TIC: p123765.D\data.ms

(114) A,A-Dimethylphenethylamine (M)

5.521min (-0.022) 53.66ppm m

response 909001

Ion	Exp%	Act%
58.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123766.D
Acq On : 21 Jun 2018 7:35 am
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 21 12:23:26 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:21:44 2018
Response via : Initial Calibration

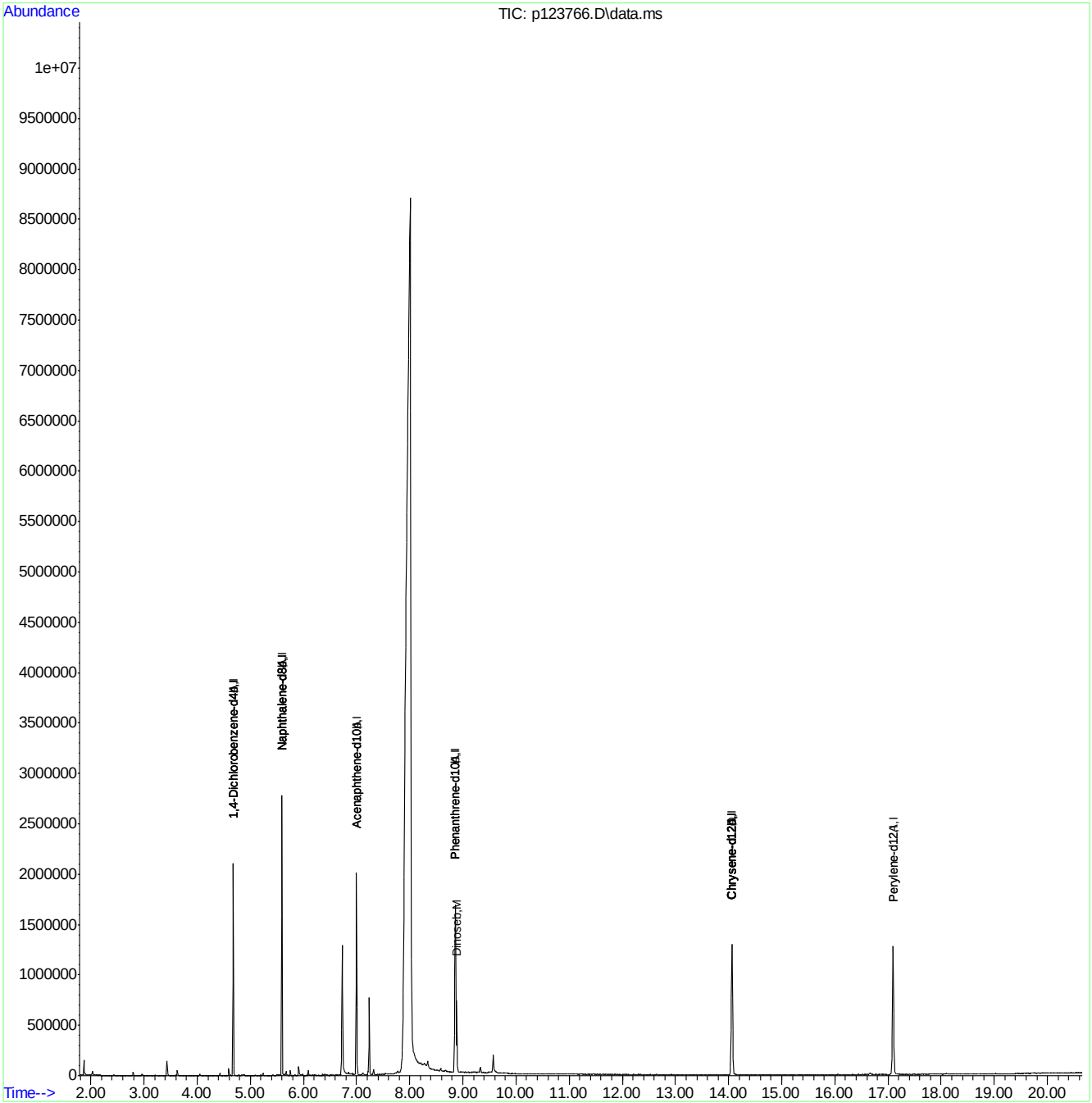
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	226560	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	885700	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	412541	40.00	ppm	0.00
69) Phenanthrene-d10	8.855	188	788755	40.00	ppm	0.00
83) Chrysene-d12	14.064	240	763136	40.00	ppm	-0.01
91) Perylene-d12	17.098	264	788929	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4A	4.677	152	226560	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	885700	40.00	ppm	0.00
120) Acenaphthene-d10A	6.996	164	412541	40.00	ppm	0.00
131) Phenanthrene-d10A	8.855	188	788755	40.00	ppm	0.00
146) Chrysene-d12A	14.064	240	763136	40.00	ppm	0.00
153) Perylene-d12A	17.098	264	788929	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	226560	40.00	ppm	0.00
159) Phenanthrene-d10b	8.855	188	788755	40.00	ppm	0.00
161) Chrysene-d12b	14.064	240	763136	40.00	ppm	-0.01
163) Naphthalene-d8b	5.596	136	885700	40.00	ppm	0.00
165) Acenaphthene-d10b	6.996	164	412541	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	885700	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	226560	40.00	ppm	0.00
174) Chrysene-d12c	14.064	240	763136	40.00	ppm	0.00
176) Chrysene-d12d	14.064	240	763136	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	885700	40.00	ppm	0.00
180) Chrysene-d12D	14.064	240	763136	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
133) Dinoseb	8.882	211	110108	35.97	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123766.D
Acq On : 21 Jun 2018 7:35 am
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 21 12:23:26 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:21:44 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123767.D
Acq On : 21 Jun 2018 8:03 am
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jun 21 12:25:44 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:21:44 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	227440	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	867081	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	415589	40.00	ppm	0.00
69) Phenanthrene-d10	8.850	188	790934	40.00	ppm	0.00
83) Chrysene-d12	14.064	240	733294	40.00	ppm	-0.01
91) Perylene-d12	17.093	264	751591	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4A	4.677	152	227440	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	867081	40.00	ppm	0.00
120) Acenaphthene-d10A	6.996	164	415589	40.00	ppm	0.00
131) Phenanthrene-d10A	8.850	188	790934	40.00	ppm	0.00
146) Chrysene-d12A	14.064	240	733294	40.00	ppm	0.00
153) Perylene-d12A	17.093	264	751591	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	227440	40.00	ppm	0.00
159) Phenanthrene-d10b	8.850	188	790934	40.00	ppm	0.00
161) Chrysene-d12b	14.064	240	733294	40.00	ppm	-0.01
163) Naphthalene-d8b	5.596	136	867081	40.00	ppm	0.00
165) Acenaphthene-d10b	6.996	164	415589	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	867081	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	227440	40.00	ppm	0.00
174) Chrysene-d12c	14.064	240	733294	40.00	ppm	0.00
176) Chrysene-d12d	14.064	240	733294	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	867081	40.00	ppm	0.00
180) Chrysene-d12D	14.064	240	733294	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
112) O,O,O-Triethyl phospho...	5.393	198	169066	47.19	ppm	94
121) Thionazin	7.535	143	92125	47.50	ppm	97
122) Tetraethyl dithiopyrop...	7.931	322	113671	49.93	ppm	100
132) Disulfoton	8.882	88	382234	50.61	ppm	92
134) Dimethoate	8.331	87	308326	50.91	ppm	98
136) Methyl parathion	9.501	125	200928	57.15	ppm	99
137) Parathion	10.233	109	154336	54.01	ppm	99
150) Famphur	12.851	218	413287	58.24	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123767.D
Acq On : 21 Jun 2018 8:03 am
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jun 21 12:25:44 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:21:44 2018
Response via : Initial Calibration

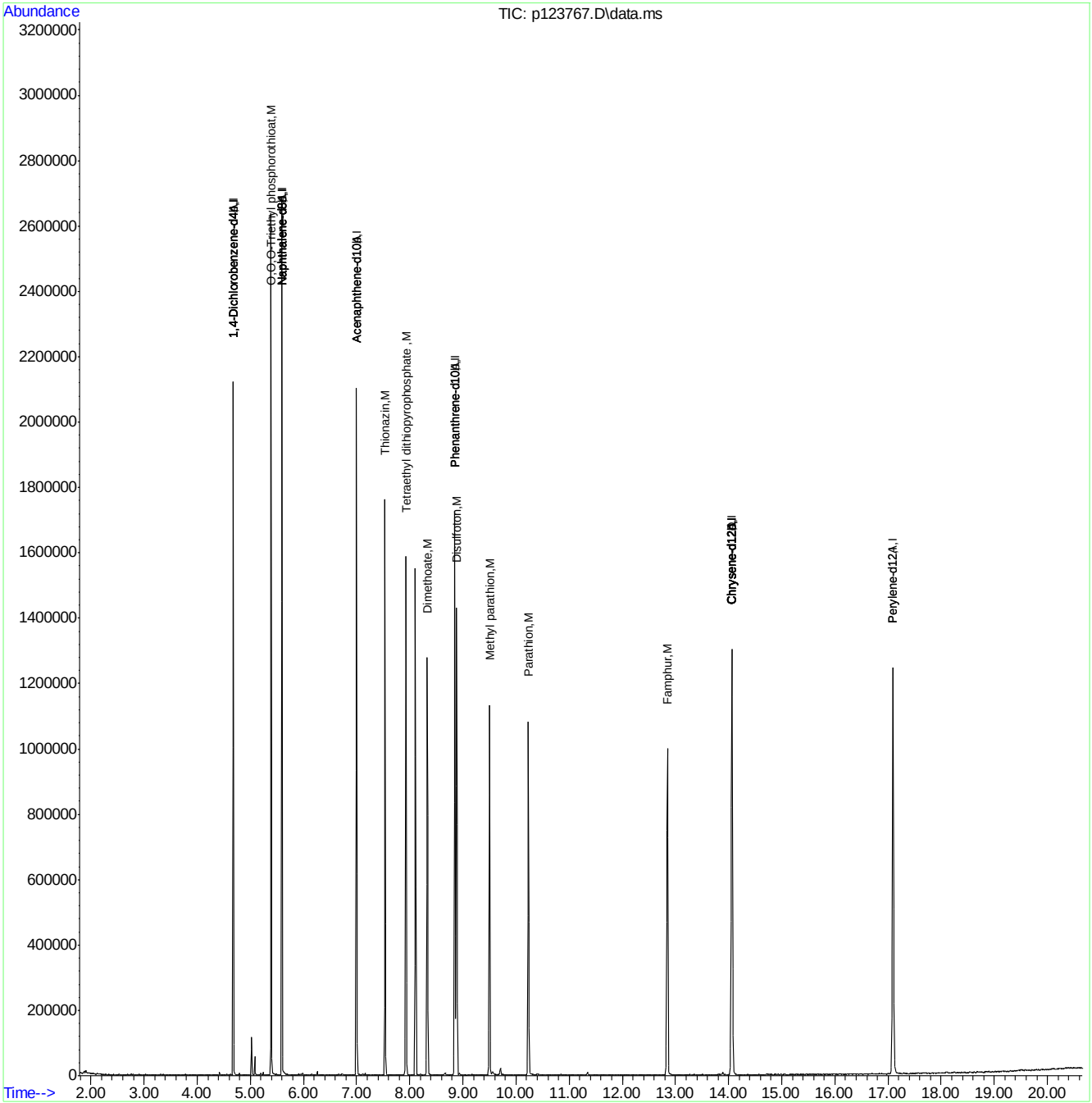
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123767.D
Acq On : 21 Jun 2018 8:03 am
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jun 21 12:25:44 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:21:44 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123768.D
Acq On : 21 Jun 2018 8:30 am
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 21 13:07:32 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:21:44 2018
Response via : Initial Calibration

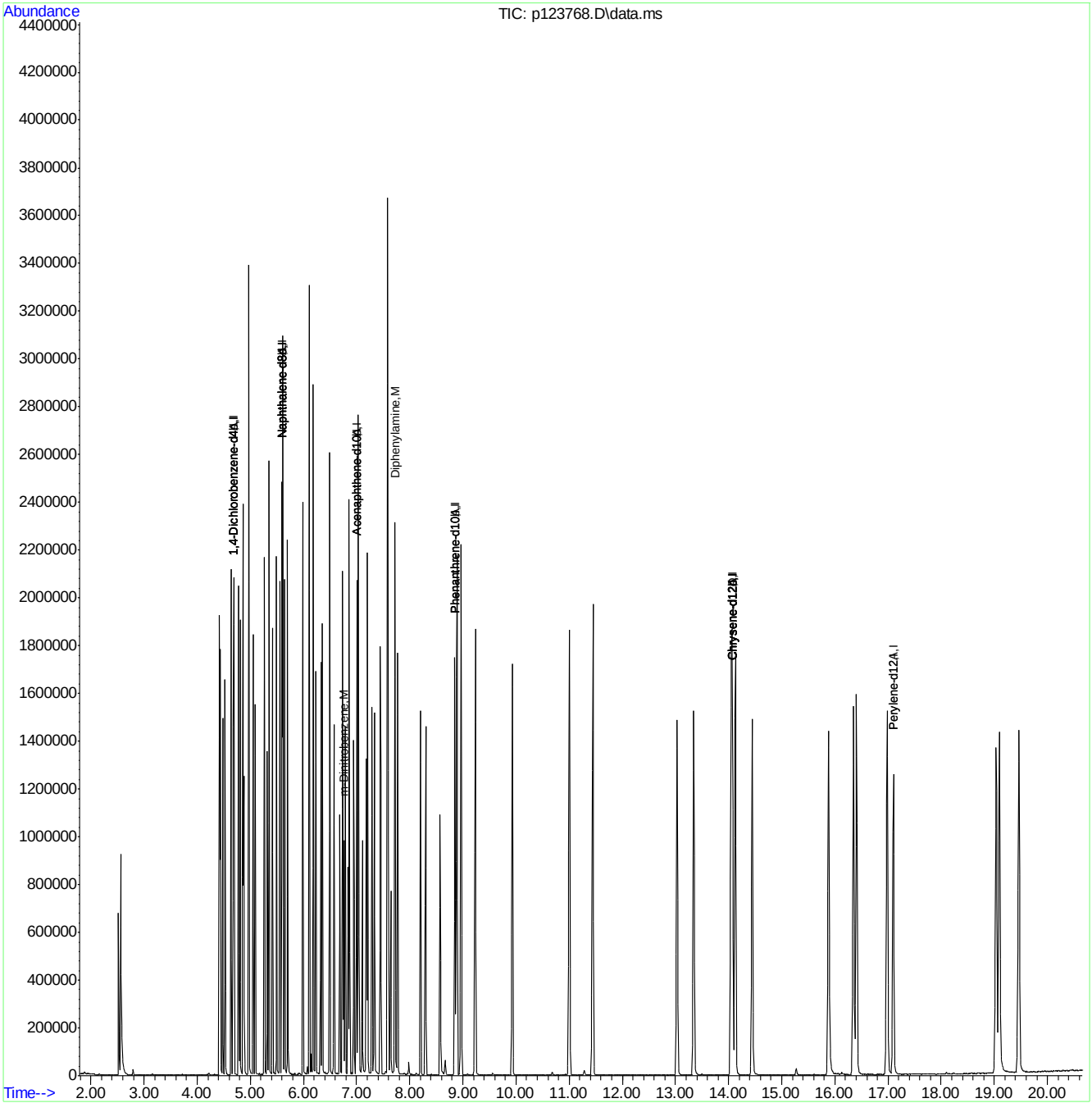
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	212223	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	817168	40.00	ppm	0.00
47) Acenaphthene-d10	7.001	164	404085	40.00	ppm	0.00
69) Phenanthrene-d10	8.850	188	819353	40.00	ppm	0.00
83) Chrysene-d12	14.074	240	739964	40.00	ppm	0.00
91) Perylene-d12	17.103	264	771201	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4A	4.677	152	212223	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	817168	40.00	ppm	0.00
120) Acenaphthene-d10A	7.001	164	404085	40.00	ppm	0.00
131) Phenanthrene-d10A	8.850	188	819353	40.00	ppm	0.00
146) Chrysene-d12A	14.074	240	739964	40.00	ppm	0.01
153) Perylene-d12A	17.103	264	771201	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	212223	40.00	ppm	0.00
159) Phenanthrene-d10b	8.850	188	819353	40.00	ppm	0.00
161) Chrysene-d12b	14.074	240	739964	40.00	ppm	0.00
163) Naphthalene-d8b	5.596	136	817168	40.00	ppm	0.00
165) Acenaphthene-d10b	7.001	164	404085	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	817168	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	212223	40.00	ppm	0.00
174) Chrysene-d12c	14.074	240	739964	40.00	ppm	0.00
176) Chrysene-d12d	14.074	240	739964	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	817168	40.00	ppm	0.00
180) Chrysene-d12D	14.074	240	739964	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
126) m-Dinitrobenzene	6.761	168	115727	59.96	ppm	# 69
138) Diphenylamine	7.722	169	602001	51.70	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5553\
Data File : p123768.D
Acq On : 21 Jun 2018 8:30 am
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jun 21 13:07:32 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:21:44 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5554\
Data File : p123769.D
Acq On : 21 Jun 2018 12:35 pm
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 21 12:58:49 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:21:44 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.677	152	246361	40.00	ppm	0.00
24) Naphthalene-d8	5.596	136	966259	40.00	ppm	0.00
47) Acenaphthene-d10	6.996	164	496588	40.00	ppm	0.00
69) Phenanthrene-d10	8.850	188	864026	40.00	ppm	0.00
83) Chrysene-d12	14.069	240	860717	40.00	ppm	0.00
91) Perylene-d12	17.103	264	854068	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4A	4.677	152	246361	40.00	ppm	0.00
111) Naphthalene-d8A	5.596	136	966259	40.00	ppm	0.00
120) Acenaphthene-d10A	6.996	164	496588	40.00	ppm	0.00
131) Phenanthrene-d10A	8.850	188	864026	40.00	ppm	0.00
146) Chrysene-d12A	14.069	240	860717	40.00	ppm	0.00
153) Perylene-d12A	17.103	264	854068	40.00	ppm	0.00
157) 1,4-Dichlorobenzene-d4b	4.677	152	246361	40.00	ppm	0.00
159) Phenanthrene-d10b	8.850	188	864026	40.00	ppm	0.00
161) Chrysene-d12b	14.069	240	860717	40.00	ppm	0.00
163) Naphthalene-d8b	5.596	136	966259	40.00	ppm	0.00
165) Acenaphthene-d10b	6.996	164	496588	40.00	ppm	0.00
167) Naphthalene-d8c	5.596	136	966259	40.00	ppm	0.00
172) 1,4-Dichlorobenzene-d4c	4.677	152	246361	40.00	ppm	0.00
174) Chrysene-d12c	14.069	240	860717	40.00	ppm	0.00
176) Chrysene-d12d	14.069	240	860717	40.00	ppm	0.00
178) Naphthalene-d8d	5.596	136	966259	40.00	ppm	0.00
180) Chrysene-d12D	14.069	240	860717	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Pentachloroethane	4.469	167	156448	41.98	ppm	98
104) Methyl methanesulfonate	3.550	80	262369	46.11	ppm	99
107) Ethyl methanesulfonate	4.100	79	327423	46.46	ppm	99
115) Hexachloropropene	5.676	213	219059	42.75	ppm	99
118) Safrole	6.040	162	293102	46.50	ppm	98
119) Isosafrole	6.440	162	294110	60.83	ppm	95
123) Phorate	8.048	75	186579	44.75	ppm	100
124) Phenacetin	8.128	108	413416	45.17	ppm	98
125) 1,4-Naphthoquinone	6.638	158	288505	49.18	ppm	98
127) Pentachlorobenzene	7.172	250	290363	40.30	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5554\
Data File : p123769.D
Acq On : 21 Jun 2018 12:35 pm
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 21 12:58:49 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:21:44 2018
Response via : Initial Calibration

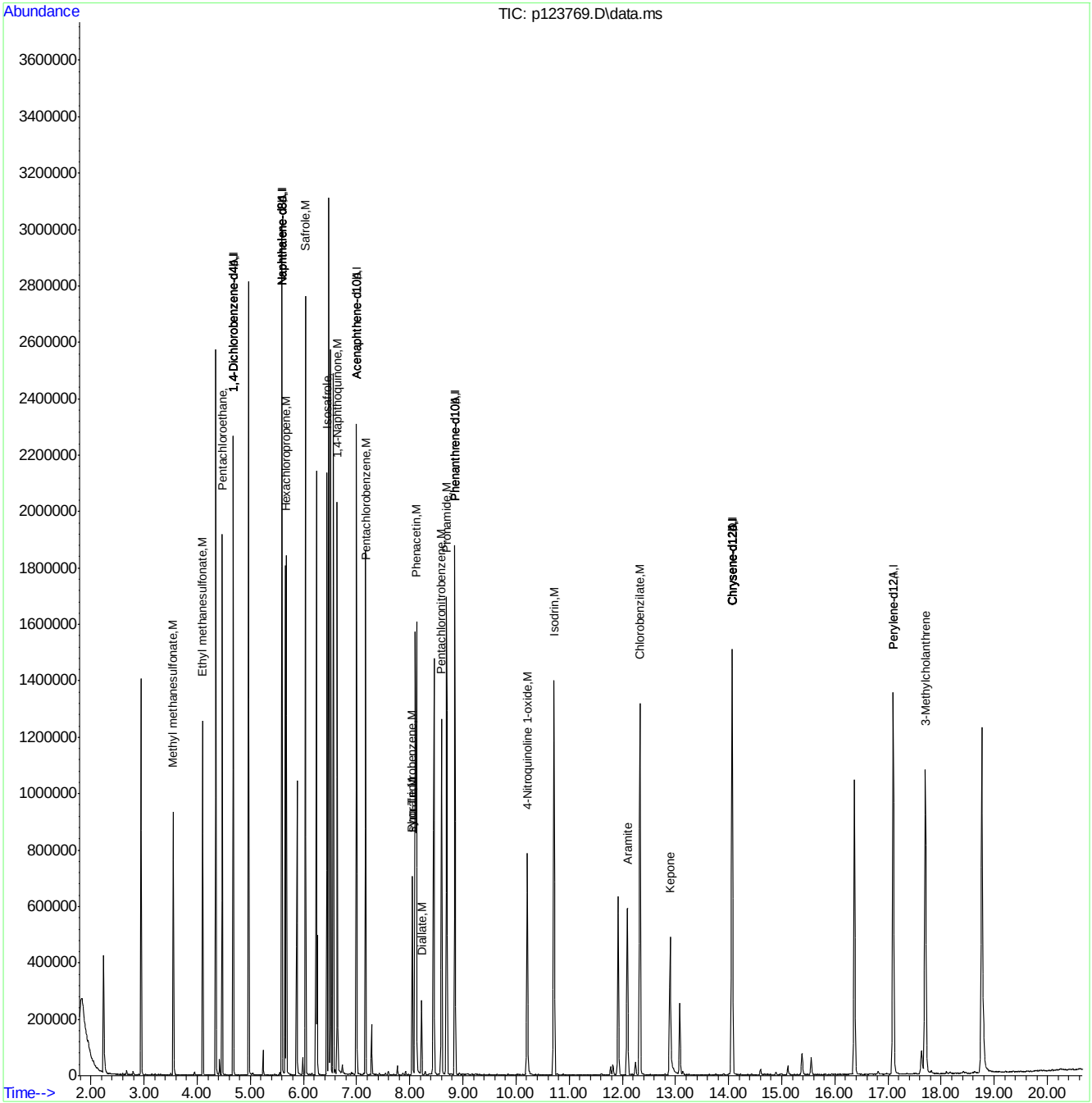
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
139) Isodrin	10.714	193	139149	49.25	ppm	98
140) Diallate	8.225	86	53363	47.32	ppm	96
141) Pentachloronitrobenzene	8.598	295	42013	48.12	ppm	94
142) Pronamide	8.695	173	331638	48.26	ppm	99
143) 4-Nitroquinoline 1-oxide	10.212	190	94087	47.13	ppm	90
145) sym-Trinitrobenzene	8.048	213	69594	48.26	ppm	83
147) Aramite	12.098	185	84172	51.62	ppm	94
149) Kepone	12.899	272	84802	51.69	ppm	100
152) Chlorobenzilate	12.333	251	338024	46.00	ppm	99
156) 3-Methylcholanthrene	17.702	252	186707	42.87	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5554\
Data File : p123769.D
Acq On : 21 Jun 2018 12:35 pm
Operator : chriss2
Sample : icv5554-50
Misc : op9039,ep5554,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 21 12:58:49 2018
Quant Method : C:\msdchem\1\METHODS\MP5552ap9.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jun 21 12:21:44 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124014.D
Acq On : 17 Jul 2018 10:13 am
Operator : christc2
Sample : ic5579-100
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 18 09:24:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.581	152	190795	40.00	ppm		0.00
24) Naphthalene-d8	5.500	136	749223	40.00	ppm		0.00
47) Acenaphthene-d10	6.873	164	374498	40.00	ppm		0.00
69) Phenanthrene-d10	8.684	188	750331	40.00	ppm		0.00
83) Chrysene-d12	13.855	240	668772	40.00	ppm		0.01
91) Perylene-d12	16.863	264	716163	40.00	ppm		0.00
101) 1,4-Dichlorobenzene-d4b	4.581	152	190795	40.00	ppm		-0.02
103) Phenanthrene-d10b	8.684	188	750331	40.00	ppm		-0.02
105) Chrysene-d12b	13.855	240	668772	40.00	ppm		-0.03
107) Naphthalene-d8b	5.500	136	749223	40.00	ppm		-0.02
109) Acenaphthene-d10b	6.873	164	374498	40.00	ppm		-0.02
System Monitoring Compounds							
5) 2-Fluorophenol	3.603	112	728664	93.30	ppm		0.00
Spiked Amount 50.000			Recovery = 186.60%				
8) Phenol-d5	4.325	99	827596	86.61	ppm		0.00
Spiked Amount 50.000			Recovery = 173.22%				
25) Nitrobenzene-d5	4.987	82	649543	79.58	ppm		0.00
Spiked Amount 50.000			Recovery = 159.16%				
51) 2-Fluorobiphenyl	6.285	172	1226680	80.09	ppm		0.00
Spiked Amount 50.000			Recovery = 160.18%				
73) 2,4,6-Tribromophenol	7.733	330	241584	103.53	ppm		0.00
Spiked Amount 50.000			Recovery = 207.06%				
85) Terphenyl-d14	11.670	244	1608526	100.39	ppm		0.01
Spiked Amount 50.000			Recovery = 200.78%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.118	88	331367	89.24	ppm		98
3) Pyridine	2.439	79	806154	85.05	ppm		99
4) N-Nitrosodimethylamine	2.407	42	359841	98.74	ppm		95
6) Indene	4.773	116	931874	77.44	ppm		99
7) Cumene	3.993	105	1586228	79.93	ppm		100
9) Phenol	4.341	94	798657	73.59	ppm		77
10) Aniline	4.341	93	704677	58.17	ppm	#	46
11) bis(2-Chloroethyl)ether	4.394	93	563203	81.34	ppm		98
12) 2-Chlorophenol	4.431	128	687917	86.42	ppm		97
13) Decane	4.474	43	465533	66.94	ppm		96
14) 1,3-Dichlorobenzene	4.544	146	711919	81.00	ppm		99
15) 1,4-Dichlorobenzene	4.597	146	683692	81.37	ppm		96
16) Benzyl alcohol	4.688	108	423793	84.21	ppm		98
17) 1,2-Dichlorobenzene	4.709	146	647043	79.97	ppm		97
18) Acetophenone	4.880	105	754829	73.51	ppm		97
19) 2-Methylphenol	4.773	108	476157	68.20	ppm		98
20) 2,2'-oxybis(1-Chloropr...	4.784	121	162467	78.03	ppm		94
21) 3&4-Methylphenol	4.886	108	492820	69.40	ppm		99
22) n-Nitroso-di-n-propyla...	4.886	70	318080	85.33	ppm		98
23) Hexachloroethane	4.955	201	249240	91.91	ppm		98
26) Nitrobenzene	5.003	77	597899	73.57	ppm		98
27) Quinoline	5.767	129	1323105	88.26	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124014.D
Acq On : 17 Jul 2018 10:13 am
Operator : christc2
Sample : ic5579-100
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 18 09:24:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28)	Isophorone	5.174	82	1081615	75.75	ppm		99
29)	2-Nitrophenol	5.233	139	366138	87.81	ppm		89
30)	2,4-Dimethylphenol	5.265	107	580063	75.09	ppm		97
31)	Benzoic acid	5.377	105	556679	106.53	ppm		97
32)	bis(2-Chloroethoxy)met...	5.324	93	602590	79.37	ppm		98
33)	2,4-Dichlorophenol	5.404	162	518788	85.65	ppm		98
34)	2,6-Dichlorophenol	5.564	162	457252	80.80	ppm		98
35)	1,3,5-Trichlorobenzene	5.238	180	573805	80.37	ppm		98
36)	1,2,4-Trichlorobenzene	5.463	180	574460	84.45	ppm		96
37)	1,2,3-Trichlorobenzene	5.623	180	530598	81.63	ppm		99
38)	Naphthalene	5.516	128	1662274	78.57	ppm		99
39)	4-Chloroaniline	5.559	127	688754	74.97	ppm		98
40)	2,3-Dichloroaniline	6.221	161	591212	82.66	ppm		97
41)	Caprolactam	5.826	55	276347	82.76	ppm		95
42)	Hexachlorobutadiene	5.612	225	325778	89.70	ppm		98
43)	4-Chloro-3-methylphenol	5.906	107	547891	82.81	ppm	#	27
44)	2-Methylnaphthalene	6.007	141	993885	81.56	ppm		99
45)	1-Methylnaphthalene	6.082	142	1206092	81.88	ppm		98
46)	Dimethylnaphthalene	6.499	156	1042964	83.51	ppm		98
48)	Hexachlorocyclopentadiene	6.130	237	675457	188.64	ppm		100
49)	2,4,6-Trichlorophenol	6.226	196	354211	81.62	ppm		99
50)	2,4,5-Trichlorophenol	6.259	196	410537	88.37	ppm		98
52)	2-Chloronaphthalene	6.387	162	1041257	77.35	ppm		99
53)	Biphenyl	6.371	154	1462287	79.84	ppm		99
54)	2-Nitroaniline	6.472	65	341592	80.78	ppm		87
55)	Dimethylphthalate	6.622	163	1285410	85.70	ppm		99
56)	Acenaphthylene	6.745	152	1810438	80.37	ppm		100
57)	2,6-Dinitrotoluene	6.675	165	310913	96.28	ppm		97
58)	3-Nitroaniline	6.836	138	379790	92.67	ppm		93
59)	Acenaphthene	6.910	153	1105408	80.98	ppm		98
60)	2,4-Dinitrophenol	6.932	184	370803	221.44	ppm		90
61)	4-Nitrophenol	7.001	109	206317	97.22	ppm		98
62)	Dibenzofuran	7.081	168	1534926	80.15	ppm		99
63)	2,4-Dinitrotoluene	7.060	165	427708	101.15	ppm		92
64)	2,3,4,6-Tetrachlorophenol	7.209	232	387574	102.24	ppm		93
65)	Diethylphthalate	7.322	149	1311981	85.96	ppm		98
66)	Fluorene	7.450	166	1176254	79.03	ppm		100
67)	4-Chlorophenyl-phenyle...	7.445	204	579194	84.62	ppm		97
68)	4-Nitroaniline	7.482	138	374805	93.80	ppm		99
70)	4,6-Dinitro-2-methylph...	7.509	198	271301	103.45	ppm		99
71)	n-Nitrosodiphenylamine	7.589	169	975705	86.95	ppm		99
72)	1,2-Diphenylhydrazine	7.632	77	1160754	70.34	ppm		100
74)	4-Bromophenyl-phenylether	8.054	248	432272	96.52	ppm		97
75)	Hexachlorobenzene	8.144	284	462086	95.60	ppm		99
76)	Pentachlorophenol	8.422	266	611587	208.40	ppm		98
77)	Phenanthrene	8.721	178	1882352	82.12	ppm		99
78)	Anthracene	8.801	178	1913487	82.41	ppm		100
79)	Carbazole	9.069	167	1830811	85.18	ppm		99
80)	Di-n-butylphthalate	9.752	149	2359566	89.03	ppm		100
81)	Fluoranthene	10.810	202	2218114	92.87	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124014.D
Acq On : 17 Jul 2018 10:13 am
Operator : christc2
Sample : ic5579-100
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 18 09:24:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82) Octadecane	8.598	57	739707	74.37	ppm	97
84) Pyrene	11.243	202	2249656	91.62	ppm	100
86) Butylbenzylphthalate	12.829	149	1058105	93.14	ppm	96
87) Benzo[a]anthracene	13.834	228	2166325	96.63	ppm	99
88) 3,3'-Dichlorobenzidine	13.882	252	742541	96.98	ppm	94
89) Chrysene	13.914	228	1923369	90.90	ppm	100
90) bis(2-Ethylhexyl)phtha...	14.235	149	1370259	91.80	ppm	100
92) Di-n-octylphthalate	15.672	149	2403713	91.39	ppm	100
93) Benzo[b]fluoranthene	16.126	252	2213139	96.25	ppm	99
94) Benzo[k]fluoranthene	16.200	252	1953832	88.87	ppm	100
95) Benzo[a]pyrene	16.756	252	1961681	94.61	ppm	99
96) Indeno[1,2,3-cd]pyrene	18.807	276	1936249	98.03	ppm	97
97) Dibenz(a,h)acridine	18.444	279	1872206	103.72	ppm	99
98) Dibenz[a,h]anthracene	18.872	278	1954545	96.48	ppm	99
99) 7,12-Dimethylbenz(a)an...	16.158	256	921342	89.91	ppm	97
100) Benzo[g,h,i]perylene	19.235	276	1971584	99.59	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

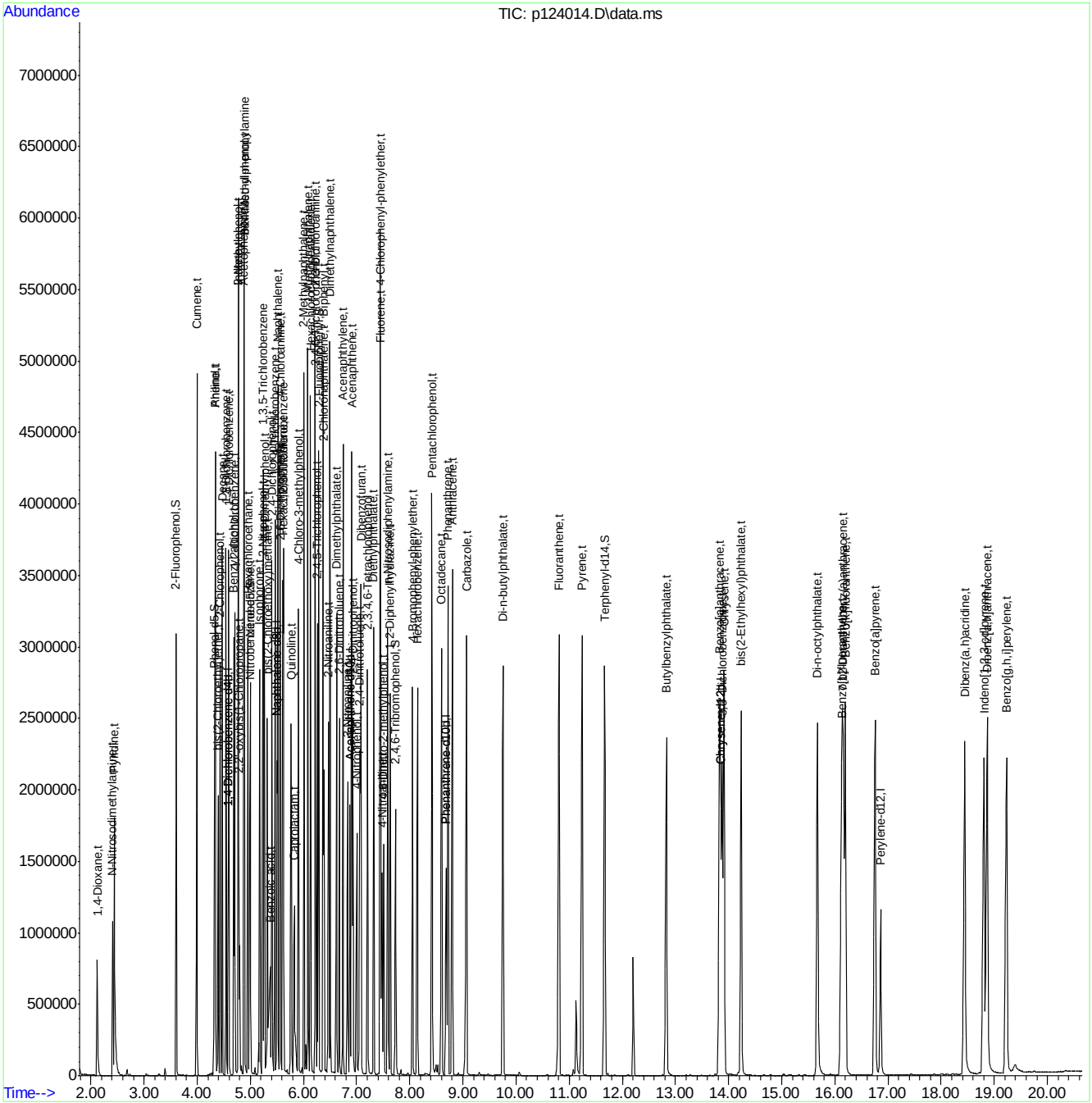
9.5.50

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124014.D
Acq On : 17 Jul 2018 10:13 am
Operator : christc2
Sample : ic5579-100
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 18 09:24:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124015.D
Acq On : 17 Jul 2018 10:41 am
Operator : christc2
Sample : ic5579-80
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 18 09:24:48 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.581	152	193118	40.00	ppm	0.00
24) Naphthalene-d8	5.500	136	742498	40.00	ppm	0.00
47) Acenaphthene-d10	6.873	164	373839	40.00	ppm	0.00
69) Phenanthrene-d10	8.679	188	746993	40.00	ppm	0.00
83) Chrysene-d12	13.850	240	679207	40.00	ppm	0.00
91) Perylene-d12	16.858	264	724941	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.581	152	193118	40.00	ppm	-0.02
103) Phenanthrene-d10b	8.679	188	746993	40.00	ppm	-0.03
105) Chrysene-d12b	13.850	240	679207	40.00	ppm	-0.03
107) Naphthalene-d8b	5.500	136	742498	40.00	ppm	-0.02
109) Acenaphthene-d10b	6.873	164	373839	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.603	112	588369	74.43	ppm	0.00
Spiked Amount 50.000			Recovery = 148.86%			
8) Phenol-d5	4.325	99	675480	69.84	ppm	0.00
Spiked Amount 50.000			Recovery = 139.68%			
25) Nitrobenzene-d5	4.987	82	523798	64.75	ppm	0.00
Spiked Amount 50.000			Recovery = 129.50%			
51) 2-Fluorobiphenyl	6.285	172	1003552	65.64	ppm	0.00
Spiked Amount 50.000			Recovery = 131.28%			
73) 2,4,6-Tribromophenol	7.728	330	190741	82.11	ppm	0.00
Spiked Amount 50.000			Recovery = 164.22%			
85) Terphenyl-d14	11.665	244	1319935	81.12	ppm	0.00
Spiked Amount 50.000			Recovery = 162.24%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.118	88	261896	69.68	ppm	99
3) Pyridine	2.433	79	642142	66.94	ppm	97
4) N-Nitrosodimethylamine	2.407	42	280358	76.00	ppm	98
6) Indene	4.773	116	771755	63.37	ppm	99
7) Cumene	3.993	105	1315472	65.49	ppm	99
9) Phenol	4.335	94	662862	60.35	ppm	88
10) Aniline	4.341	93	597343	48.72	ppm	79
11) bis(2-Chloroethyl)ether	4.389	93	454714	64.88	ppm	98
12) 2-Chlorophenol	4.431	128	565799	70.22	ppm	98
13) Decane	4.474	43	391797	55.66	ppm	98
14) 1,3-Dichlorobenzene	4.544	146	586282	65.91	ppm	99
15) 1,4-Dichlorobenzene	4.597	146	566740	66.64	ppm	96
16) Benzyl alcohol	4.688	108	340758	66.89	ppm	97
17) 1,2-Dichlorobenzene	4.709	146	542194	66.21	ppm	97
18) Acetophenone	4.875	105	619830	59.63	ppm	95
19) 2-Methylphenol	4.773	108	396725	56.14	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.784	121	134766	63.95	ppm	98
21) 3&4-Methylphenol	4.886	108	417247	58.05	ppm	99
22) n-Nitroso-di-n-propyla...	4.880	70	269137	69.04	ppm	96
23) Hexachloroethane	4.955	201	203949	74.31	ppm	99
26) Nitrobenzene	4.998	77	490495	60.90	ppm	94
27) Quinoline	5.767	129	1070101	72.03	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124015.D
Acq On : 17 Jul 2018 10:41 am
Operator : christc2
Sample : ic5579-80
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 18 09:24:48 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28)	Isophorone	5.174	82	879169	62.13	ppm		98
29)	2-Nitrophenol	5.227	139	300167	72.64	ppm		95
30)	2,4-Dimethylphenol	5.260	107	473454	61.85	ppm		94
31)	Benzoic acid	5.366	105	441044	85.17	ppm		97
32)	bis(2-Chloroethoxy)met...	5.324	93	485399	64.52	ppm		99
33)	2,4-Dichlorophenol	5.404	162	430482	71.72	ppm		95
34)	2,6-Dichlorophenol	5.564	162	381907	68.10	ppm		98
35)	1,3,5-Trichlorobenzene	5.238	180	474927	67.13	ppm		98
36)	1,2,4-Trichlorobenzene	5.463	180	475301	70.51	ppm		97
37)	1,2,3-Trichlorobenzene	5.623	180	436630	67.78	ppm		97
38)	Naphthalene	5.516	128	1370600	65.37	ppm		99
39)	4-Chloroaniline	5.553	127	576956	63.37	ppm		97
40)	2,3-Dichloroaniline	6.221	161	490817	69.24	ppm		97
41)	Caprolactam	5.820	55	220919	66.76	ppm		98
42)	Hexachlorobutadiene	5.607	225	262376	72.90	ppm		99
43)	4-Chloro-3-methylphenol	5.901	107	452529	69.02	ppm	#	27
44)	2-Methylnaphthalene	6.007	141	825017	68.32	ppm		100
45)	1-Methylnaphthalene	6.082	142	1002556	68.68	ppm		97
46)	Dimethylnaphthalene	6.499	156	866125	69.98	ppm		97
48)	Hexachlorocyclopentadiene	6.130	237	554512	155.14	ppm		98
49)	2,4,6-Trichlorophenol	6.226	196	292911	67.61	ppm		97
50)	2,4,5-Trichlorophenol	6.259	196	332797	71.76	ppm		100
52)	2-Chloronaphthalene	6.387	162	848792	63.17	ppm		97
53)	Biphenyl	6.365	154	1209075	66.13	ppm		99
54)	2-Nitroaniline	6.467	65	277822	65.81	ppm		95
55)	Dimethylphthalate	6.622	163	1064052	71.07	ppm		99
56)	Acenaphthylene	6.739	152	1475768	65.63	ppm		99
57)	2,6-Dinitrotoluene	6.675	165	248569	77.11	ppm		99
58)	3-Nitroaniline	6.830	138	304833	74.51	ppm		96
59)	Acenaphthene	6.905	153	902091	66.20	ppm		99
60)	2,4-Dinitrophenol	6.926	184	295731	172.99	ppm		93
61)	4-Nitrophenol	6.996	109	165140	77.95	ppm		98
62)	Dibenzofuran	7.076	168	1267576	66.30	ppm		98
63)	2,4-Dinitrotoluene	7.060	165	346927	82.19	ppm		99
64)	2,3,4,6-Tetrachlorophenol	7.204	232	310767	82.13	ppm		98
65)	Diethylphthalate	7.322	149	1089904	71.53	ppm		100
66)	Fluorene	7.445	166	975964	65.69	ppm		100
67)	4-Chlorophenyl-phenyle...	7.445	204	480352	70.31	ppm		96
68)	4-Nitroaniline	7.477	138	299425	75.07	ppm		98
70)	4,6-Dinitro-2-methylph...	7.509	198	219335	83.65	ppm		93
71)	n-Nitrosodiphenylamine	7.583	169	795989	71.25	ppm		100
72)	1,2-Diphenylhydrazine	7.632	77	952079	57.95	ppm		99
74)	4-Bromophenyl-phenylether	8.054	248	351284	78.79	ppm		95
75)	Hexachlorobenzene	8.139	284	375375	78.01	ppm		97
76)	Pentachlorophenol	8.417	266	487078	166.72	ppm		99
77)	Phenanthrene	8.721	178	1538885	67.44	ppm		99
78)	Anthracene	8.796	178	1565200	67.71	ppm		99
79)	Carbazole	9.063	167	1504942	70.33	ppm		98
80)	Di-n-butylphthalate	9.752	149	1929617	73.14	ppm		100
81)	Fluoranthene	10.805	202	1834485	77.15	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124015.D
Acq On : 17 Jul 2018 10:41 am
Operator : christc2
Sample : ic5579-80
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 18 09:24:48 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82) Octadecane	8.598	57	614373	62.04	ppm	97
84) Pyrene	11.238	202	1851344	74.24	ppm	100
86) Butylbenzylphthalate	12.824	149	853921	74.01	ppm	97
87) Benzo[a]anthracene	13.829	228	1769959	77.73	ppm	99
88) 3,3'-Dichlorobenzidine	13.877	252	618078	79.48	ppm	97
89) Chrysene	13.909	228	1569067	73.01	ppm	99
90) bis(2-Ethylhexyl)phtha...	14.235	149	1123749	74.13	ppm	100
92) Di-n-octylphthalate	15.666	149	1957358	73.52	ppm	99
93) Benzo[b]fluoranthene	16.120	252	1786109	76.73	ppm	99
94) Benzo[k]fluoranthene	16.190	252	1635232	73.48	ppm	100
95) Benzo[a]pyrene	16.751	252	1618451	77.11	ppm	99
96) Indeno[1,2,3-cd]pyrene	18.797	276	1594471	79.75	ppm	98
97) Dibenz(a,h)acridine	18.439	279	1528952	83.68	ppm	100
98) Dibenz[a,h]anthracene	18.861	278	1597854	77.91	ppm	99
99) 7,12-Dimethylbenz(a)an...	16.152	256	753578	72.65	ppm	97
100) Benzo[g,h,i]perylene	19.224	276	1610277	80.36	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

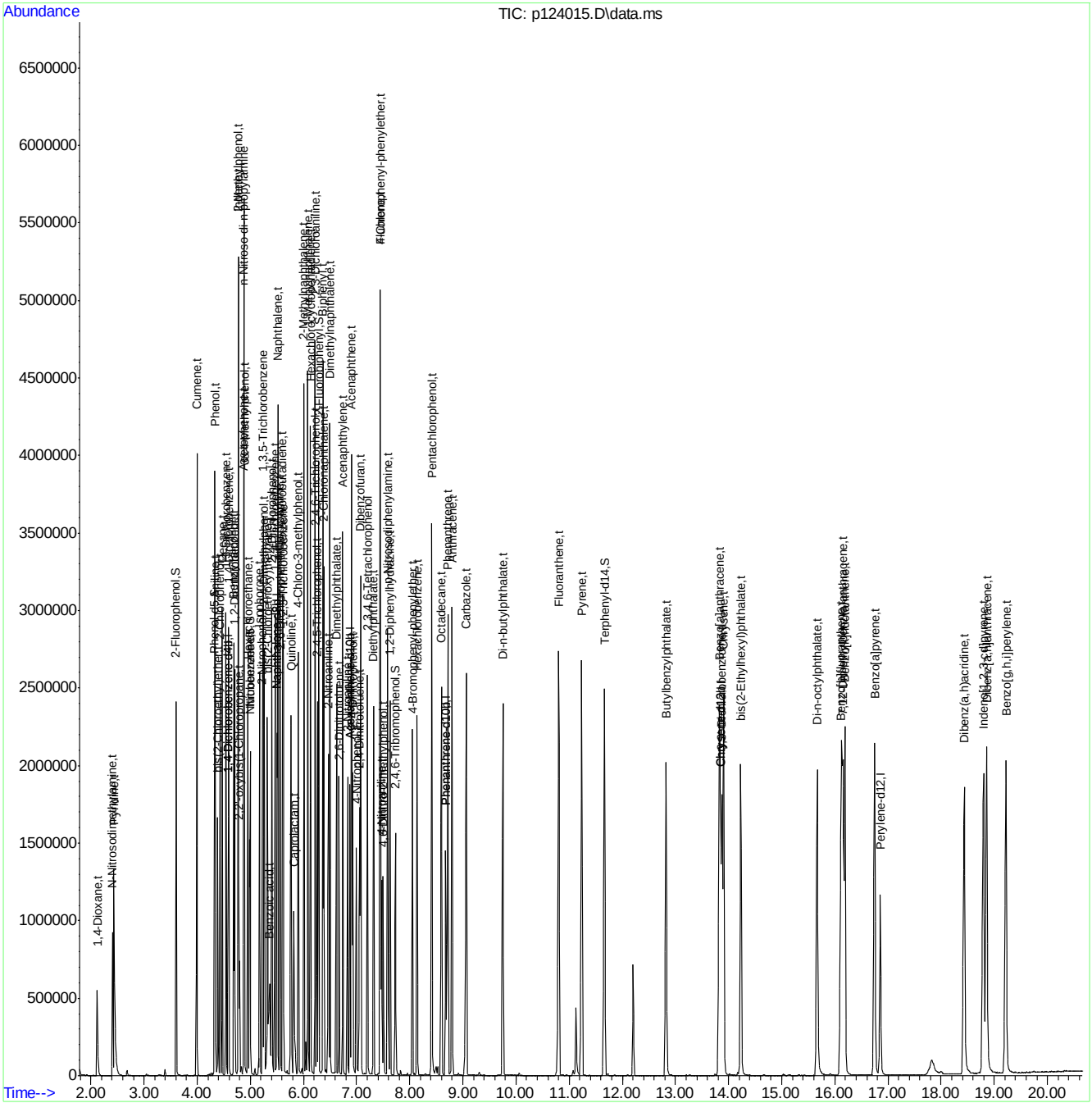
9.5.51

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124015.D
Acq On : 17 Jul 2018 10:41 am
Operator : christc2
Sample : ic5579-80
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 18 09:24:48 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124016.D
Acq On : 17 Jul 2018 11:09 am
Operator : christc2
Sample : icc5579-50
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 18 09:22:21 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jul 12 17:36:51 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.581	152	205587	40.00	ppm	-0.02
24) Naphthalene-d8	5.500	136	790281	40.00	ppm	-0.02
47) Acenaphthene-d10	6.873	164	394250	40.00	ppm	-0.02
69) Phenanthrene-d10	8.679	188	791481	40.00	ppm	-0.03
83) Chrysene-d12	13.845	240	751569	40.00	ppm	-0.04
91) Perylene-d12	16.858	264	778678	40.00	ppm	-0.04
101) 1,4-Dichlorobenzene-d4b	4.581	152	205587	40.00	ppm	-0.02
103) Phenanthrene-d10b	8.679	188	791481	40.00	ppm	-0.03
105) Chrysene-d12b	13.845	240	751569	40.00	ppm	-0.04
107) Naphthalene-d8b	5.500	136	790281	40.00	ppm	-0.02
109) Acenaphthene-d10b	6.873	164	394250	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.603	112	393484	46.69	ppm	-0.03
Spiked Amount 50.000			Recovery = 93.38%			
8) Phenol-d5	4.319	99	457678	44.16	ppm	-0.02
Spiked Amount 50.000			Recovery = 88.32%			
25) Nitrobenzene-d5	4.982	82	358695	41.27	ppm	-0.02
Spiked Amount 50.000			Recovery = 82.54%			
51) 2-Fluorobiphenyl	6.285	172	697798	43.17	ppm	0.00
Spiked Amount 50.000			Recovery = 86.34%			
73) 2,4,6-Tribromophenol	7.728	330	128943	53.21	ppm	-0.02
Spiked Amount 50.000			Recovery = 106.42%			
85) Terphenyl-d14	11.660	244	899131	50.18	ppm	-0.05
Spiked Amount 50.000			Recovery = 100.36%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.118	88	172899	42.81	ppm	99
3) Pyridine	2.439	79	438729	42.42	ppm	94
4) N-Nitrosodimethylamine	2.407	42	185457	47.36	ppm	91
6) Indene	4.768	116	545024	41.88	ppm	98
7) Cumene	3.993	105	920955	42.75	ppm	96
9) Phenol	4.330	94	477119	40.26	ppm	93
10) Aniline	4.341	93	432427	32.06	ppm	82
11) bis(2-Chloroethyl)ether	4.389	93	311527	41.28	ppm	98
12) 2-Chlorophenol	4.432	128	389424	45.39	ppm	96
13) Decane	4.474	43	284633	37.48	ppm	97
14) 1,3-Dichlorobenzene	4.544	146	409388	43.09	ppm	99
15) 1,4-Dichlorobenzene	4.592	146	393368	43.32	ppm	96
16) Benzyl alcohol	4.683	108	233552	42.53	ppm	98
17) 1,2-Dichlorobenzene	4.704	146	382017	43.73	ppm	98
18) Acetophenone	4.875	105	439881	39.44	ppm	89
19) 2-Methylphenol	4.773	108	284365	37.08	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.784	121	93454	41.42	ppm #	79
21) 3&4-Methylphenol	4.880	108	299464	38.71	ppm	100
22) n-Nitroso-di-n-propyla...	4.880	70	199657	42.78	ppm	96
23) Hexachloroethane	4.955	201	139322	47.82	ppm	91
26) Nitrobenzene	4.998	77	339937	39.17	ppm	94
27) Quinoline	5.756	129	726062	45.98	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124016.D
Acq On : 17 Jul 2018 11:09 am
Operator : christc2
Sample : icc5579-50
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 18 09:22:21 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jul 12 17:36:51 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Isophorone	5.169	82	616061	40.42	ppm	96
29) 2-Nitrophenol	5.228	139	205374	46.70	ppm	95
30) 2,4-Dimethylphenol	5.260	107	313090	37.88	ppm	90
31) Benzoic acid	5.356	105	284708	51.55	ppm	95
32) bis(2-Chloroethoxy)met...	5.324	93	337004	41.77	ppm	98
33) 2,4-Dichlorophenol	5.398	162	298314	46.82	ppm	99
34) 2,6-Dichlorophenol	5.559	162	263459	44.15	ppm	98
35) 1,3,5-Trichlorobenzene	5.238	180	341131	45.41	ppm	98
36) 1,2,4-Trichlorobenzene	5.457	180	332401	46.61	ppm	97
37) 1,2,3-Trichlorobenzene	5.617	180	308009	44.99	ppm	98
38) Naphthalene	5.516	128	956317	42.76	ppm	99
39) 4-Chloroaniline	5.553	127	403513	41.30	ppm	99
40) 2,3-Dichloroaniline	6.216	161	340839	45.33	ppm	98
41) Caprolactam	5.810	55	148086	41.77	ppm	94
42) Hexachlorobutadiene	5.607	225	183233	48.27	ppm	98
43) 4-Chloro-3-methylphenol	5.901	107	310235	44.27	ppm	88
44) 2-Methylnaphthalene	6.007	141	579709	45.19	ppm	97
45) 1-Methylnaphthalene	6.082	142	696469	44.94	ppm	99
46) Dimethylnaphthalene	6.494	156	599531	45.71	ppm	98
48) Hexachlorocyclopentadiene	6.130	237	386226	102.66	ppm	97
49) 2,4,6-Trichlorophenol	6.221	196	205720	45.06	ppm	98
50) 2,4,5-Trichlorophenol	6.253	196	229472	47.08	ppm	98
52) 2-Chloronaphthalene	6.381	162	603166	42.39	ppm	98
53) Biphenyl	6.365	154	843273	43.61	ppm	99
54) 2-Nitroaniline	6.462	65	190809	42.40	ppm	97
55) Dimethylphthalate	6.616	163	718549	45.43	ppm	100
56) Acenaphthylene	6.739	152	1038353	43.62	ppm	99
57) 2,6-Dinitrotoluene	6.670	165	169981	50.17	ppm	86
58) 3-Nitroaniline	6.825	138	207120	47.85	ppm	96
59) Acenaphthene	6.905	153	631414	43.83	ppm	100
60) 2,4-Dinitrophenol	6.921	184	193708	112.84	ppm	89
61) 4-Nitrophenol	6.990	109	108899	48.61	ppm	86
62) Dibenzofuran	7.076	168	885663	43.83	ppm	98
63) 2,4-Dinitrotoluene	7.055	165	232954	52.58	ppm	84
64) 2,3,4,6-Tetrachlorophenol	7.199	232	204521	51.69	ppm	98
65) Diethylphthalate	7.316	149	745564	46.45	ppm	99
66) Fluorene	7.439	166	692305	44.27	ppm	98
67) 4-Chlorophenyl-phenyle...	7.439	204	335583	46.75	ppm	99
68) 4-Nitroaniline	7.466	138	201441	47.82	ppm	95
70) 4,6-Dinitro-2-methylph...	7.498	198	143255	53.73	ppm	91
71) n-Nitrosodiphenylamine	7.578	169	543484	45.88	ppm	99
72) 1,2-Diphenylhydrazine	7.626	77	666190	37.58	ppm	96
74) 4-Bromophenyl-phenylether	8.048	248	237128	50.76	ppm	99
75) Hexachlorobenzene	8.139	284	254556	50.61	ppm	88
76) Pentachlorophenol	8.411	266	332774	108.68	ppm	99
77) Phenanthrene	8.716	178	1062111	43.85	ppm	99
78) Anthracene	8.791	178	1081212	43.96	ppm	99
79) Carbazole	9.058	167	1025875	45.13	ppm	99
80) Di-n-butylphthalate	9.747	149	1316280	46.94	ppm	100
81) Fluoranthene	10.799	202	1256226	50.23	ppm	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124016.D
Acq On : 17 Jul 2018 11:09 am
Operator : christc2
Sample : icc5579-50
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 18 09:22:21 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jul 12 17:36:51 2018
Response via : Initial Calibration

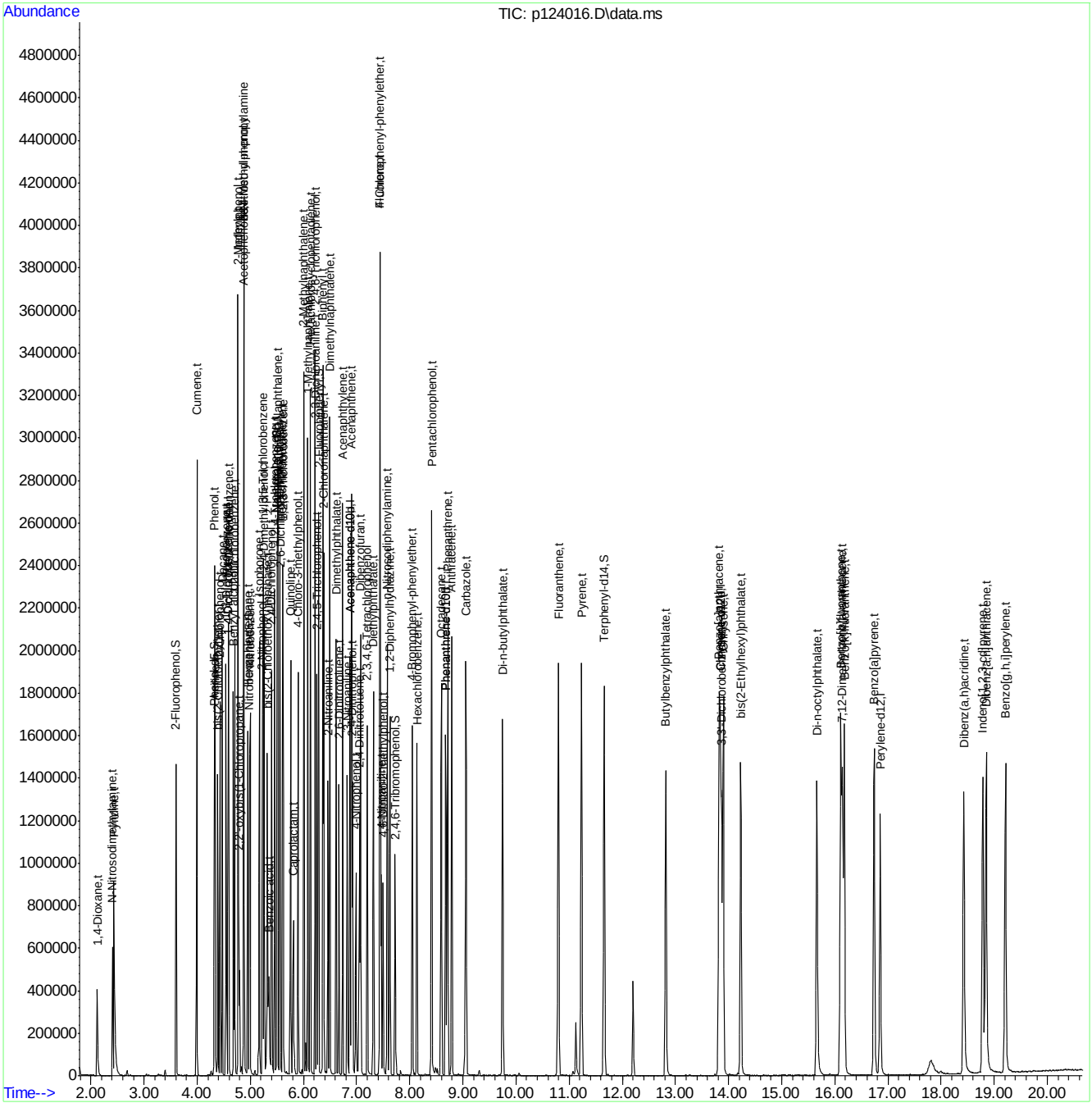
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82) Octadecane	8.593	57	430402	40.41	ppm	95
84) Pyrene	11.232	202	1286243	46.54	ppm	96
86) Butylbenzylphthalate	12.819	149	580313	44.91	ppm	96
87) Benzo[a]anthracene	13.823	228	1202733	47.88	ppm	98
88) 3,3'-Dichlorobenzidine	13.866	252	422382	49.27	ppm	99
89) Chrysene	13.903	228	1093682	45.92	ppm	99
90) bis(2-Ethylhexyl)phtha...	14.229	149	763718	44.96	ppm	99
92) Di-n-octylphthalate	15.661	149	1306027	44.93	ppm	99
93) Benzo[b]fluoranthene	16.115	252	1220407	48.97	ppm	97
94) Benzo[k]fluoranthene	16.179	252	1149707	48.39	ppm	98
95) Benzo[a]pyrene	16.740	252	1083835	48.12	ppm	99
96) Indeno[1,2,3-cd]pyrene	18.786	276	1059485	49.65	ppm	94
97) Dibenz(a,h)acridine	18.428	279	1022491	52.85	ppm	99
98) Dibenz[a,h]anthracene	18.850	278	1097304	50.36	ppm	97
99) 7,12-Dimethylbenz(a)an...	16.142	256	518401	46.43	ppm	99
100) Benzo[g,h,i]perylene	19.214	276	1090894	51.28	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124016.D
Acq On : 17 Jul 2018 11:09 am
Operator : christc2
Sample : icc5579-50
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 18 09:22:21 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Jul 12 17:36:51 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124017.D
Acq On : 17 Jul 2018 11:37 am
Operator : christc2
Sample : ic5579-25
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 18 09:25:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.581	152	226655	40.00	ppm	0.00
24) Naphthalene-d8	5.500	136	853246	40.00	ppm	0.00
47) Acenaphthene-d10	6.867	164	422731	40.00	ppm	0.00
69) Phenanthrene-d10	8.678	188	853803	40.00	ppm	0.00
83) Chrysene-d12	13.839	240	835017	40.00	ppm	0.00
91) Perylene-d12	16.852	264	850452	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.581	152	226655	40.00	ppm	-0.02
103) Phenanthrene-d10b	8.678	188	853803	40.00	ppm	-0.03
105) Chrysene-d12b	13.839	240	835017	40.00	ppm	-0.04
107) Naphthalene-d8b	5.500	136	853246	40.00	ppm	-0.02
109) Acenaphthene-d10b	6.867	164	422731	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.598	112	214768	23.15	ppm	0.00
Spiked Amount 50.000			Recovery = 46.30%			
8) Phenol-d5	4.319	99	257580	22.69	ppm	0.00
Spiked Amount 50.000			Recovery = 45.38%			
25) Nitrobenzene-d5	4.982	82	203917	21.94	ppm	0.00
Spiked Amount 50.000			Recovery = 43.88%			
51) 2-Fluorobiphenyl	6.280	172	407443	23.57	ppm	0.00
Spiked Amount 50.000			Recovery = 47.14%			
73) 2,4,6-Tribromophenol	7.722	330	69255	26.08	ppm	0.00
Spiked Amount 50.000			Recovery = 52.16%			
85) Terphenyl-d14	11.654	244	499045	24.95	ppm	0.00
Spiked Amount 50.000			Recovery = 49.90%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.118	88	96751	21.93	ppm	99
3) Pyridine	2.439	79	227845	20.24	ppm	100
4) N-Nitrosodimethylamine	2.407	42	103467	23.90	ppm	98
6) Indene	4.768	116	323018	22.60	ppm	97
7) Cumene	3.993	105	538130	22.83	ppm	99
9) Phenol	4.330	94	279058	21.65	ppm	99
10) Aniline	4.341	93	273523	19.01	ppm	98
11) bis(2-Chloroethyl)ether	4.389	93	177478	21.58	ppm	98
12) 2-Chlorophenol	4.431	128	222760	23.56	ppm	98
13) Decane	4.469	43	174660	21.14	ppm	93
14) 1,3-Dichlorobenzene	4.538	146	241564	23.14	ppm	98
15) 1,4-Dichlorobenzene	4.592	146	230157	23.06	ppm	98
16) Benzyl alcohol	4.683	108	127241	21.28	ppm	99
17) 1,2-Dichlorobenzene	4.704	146	222437	23.14	ppm	99
18) Acetophenone	4.875	105	263911	21.63	ppm	76
19) 2-Methylphenol	4.768	108	168390	20.30	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.784	121	54150	21.89	ppm	97
21) 3&4-Methylphenol	4.875	108	174291	20.66	ppm	97
22) n-Nitroso-di-n-propyla...	4.875	70	122277	23.65	ppm	95
23) Hexachloroethane	4.955	201	80119	24.87	ppm	97
26) Nitrobenzene	4.992	77	198574	21.46	ppm	93
27) Quinoline	5.751	129	403406	23.63	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124017.D
Acq On : 17 Jul 2018 11:37 am
Operator : christc2
Sample : ic5579-25
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 18 09:25:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Isophorone	5.163	82	345119	21.22	ppm	96
29) 2-Nitrophenol	5.227	139	117704	24.79	ppm	98
30) 2,4-Dimethylphenol	5.254	107	168404	19.14	ppm	96
31) Benzoic acid	5.334	105	138383	23.25	ppm	94
32) bis(2-Chloroethoxy)met...	5.318	93	193407	22.37	ppm	99
33) 2,4-Dichlorophenol	5.398	162	166450	24.13	ppm	98
34) 2,6-Dichlorophenol	5.559	162	154353	23.95	ppm	98
35) 1,3,5-Trichlorobenzene	5.238	180	200905	24.71	ppm	99
36) 1,2,4-Trichlorobenzene	5.457	180	191124	24.67	ppm	99
37) 1,2,3-Trichlorobenzene	5.617	180	180805	24.42	ppm	99
38) Naphthalene	5.516	128	553431	22.97	ppm	99
39) 4-Chloroaniline	5.548	127	244989	23.42	ppm	95
40) 2,3-Dichloroaniline	6.216	161	197116	24.20	ppm	99
41) Caprolactam	5.794	55	83457	21.95	ppm	94
42) Hexachlorobutadiene	5.607	225	104037	25.15	ppm	99
43) 4-Chloro-3-methylphenol	5.895	107	173019	22.96	ppm	97
44) 2-Methylnaphthalene	6.007	141	338457	24.39	ppm	97
45) 1-Methylnaphthalene	6.077	142	404114	24.09	ppm	98
46) Dimethylnaphthalene	6.494	156	348635	24.51	ppm	100
48) Hexachlorocyclopentadiene	6.130	237	219368	54.27	ppm	99
49) 2,4,6-Trichlorophenol	6.221	196	119174	24.33	ppm	100
50) 2,4,5-Trichlorophenol	6.248	196	129773	24.75	ppm	96
52) 2-Chloronaphthalene	6.381	162	350841	23.09	ppm	99
53) Biphenyl	6.360	154	490854	23.74	ppm	100
54) 2-Nitroaniline	6.461	65	105112	22.02	ppm	90
55) Dimethylphthalate	6.611	163	408757	24.14	ppm	100
56) Acenaphthylene	6.739	152	595250	23.41	ppm	100
57) 2,6-Dinitrotoluene	6.664	165	93572	25.67	ppm	93
58) 3-Nitroaniline	6.819	138	115211	24.90	ppm	99
59) Acenaphthene	6.900	153	363315	23.58	ppm	97
60) 2,4-Dinitrophenol	6.921	184	95710	50.39	ppm	82
61) 4-Nitrophenol	6.985	109	58535	24.43	ppm	97
62) Dibenzofuran	7.070	168	511558	23.66	ppm	97
63) 2,4-Dinitrotoluene	7.049	165	128528	26.93	ppm	91
64) 2,3,4,6-Tetrachlorophenol	7.199	232	112949	26.40	ppm	98
65) Diethylphthalate	7.311	149	418800	24.31	ppm	98
66) Fluorene	7.439	166	405240	24.12	ppm	99
67) 4-Chlorophenyl-phenyle...	7.439	204	195041	25.25	ppm	99
68) 4-Nitroaniline	7.455	138	111152	24.64	ppm	98
70) 4,6-Dinitro-2-methylph...	7.493	198	72915	24.90	ppm	99
71) n-Nitrosodiphenylamine	7.573	169	306775	24.02	ppm	99
72) 1,2-Diphenylhydrazine	7.626	77	377967	20.13	ppm	98
74) 4-Bromophenyl-phenylether	8.048	248	128394	25.19	ppm	96
75) Hexachlorobenzene	8.134	284	141788	25.78	ppm	92
76) Pentachlorophenol	8.406	266	178995	53.60	ppm	98
77) Phenanthrene	8.711	178	602870	23.11	ppm	99
78) Anthracene	8.791	178	613340	23.21	ppm	100
79) Carbazole	9.052	167	577162	23.60	ppm	99
80) Di-n-butylphthalate	9.747	149	726010	24.07	ppm	99
81) Fluoranthene	10.794	202	696201	25.62	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124017.D
Acq On : 17 Jul 2018 11:37 am
Operator : christc2
Sample : ic5579-25
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 18 09:25:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82) Octadecane	8.593	57	248633	21.97	ppm	98
84) Pyrene	11.227	202	721808	23.54	ppm	99
86) Butylbenzylphthalate	12.819	149	309941	21.85	ppm	98
87) Benzo[a]anthracene	13.818	228	661028	23.61	ppm	98
88) 3,3'-Dichlorobenzidine	13.866	252	226411	23.68	ppm	98
89) Chrysene	13.893	228	625725	23.68	ppm	99
90) bis(2-Ethylhexyl)phtha...	14.229	149	406857	21.83	ppm	98
92) Di-n-octylphthalate	15.661	149	669110	21.42	ppm	100
93) Benzo[b]fluoranthene	16.104	252	690529	25.29	ppm	99
94) Benzo[k]fluoranthene	16.168	252	640607	24.54	ppm	100
95) Benzo[a]pyrene	16.735	252	594451	24.14	ppm	99
96) Indeno[1,2,3-cd]pyrene	18.775	276	568895	24.26	ppm	99
97) Dibenz(a,h)acridine	18.417	279	543095	25.34	ppm	98
98) Dibenz[a,h]anthracene	18.839	278	598989	24.90	ppm	97
99) 7,12-Dimethylbenz(a)an...	16.131	256	287320	23.61	ppm	100
100) Benzo[g,h,i]perylene	19.203	276	585053	24.89	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

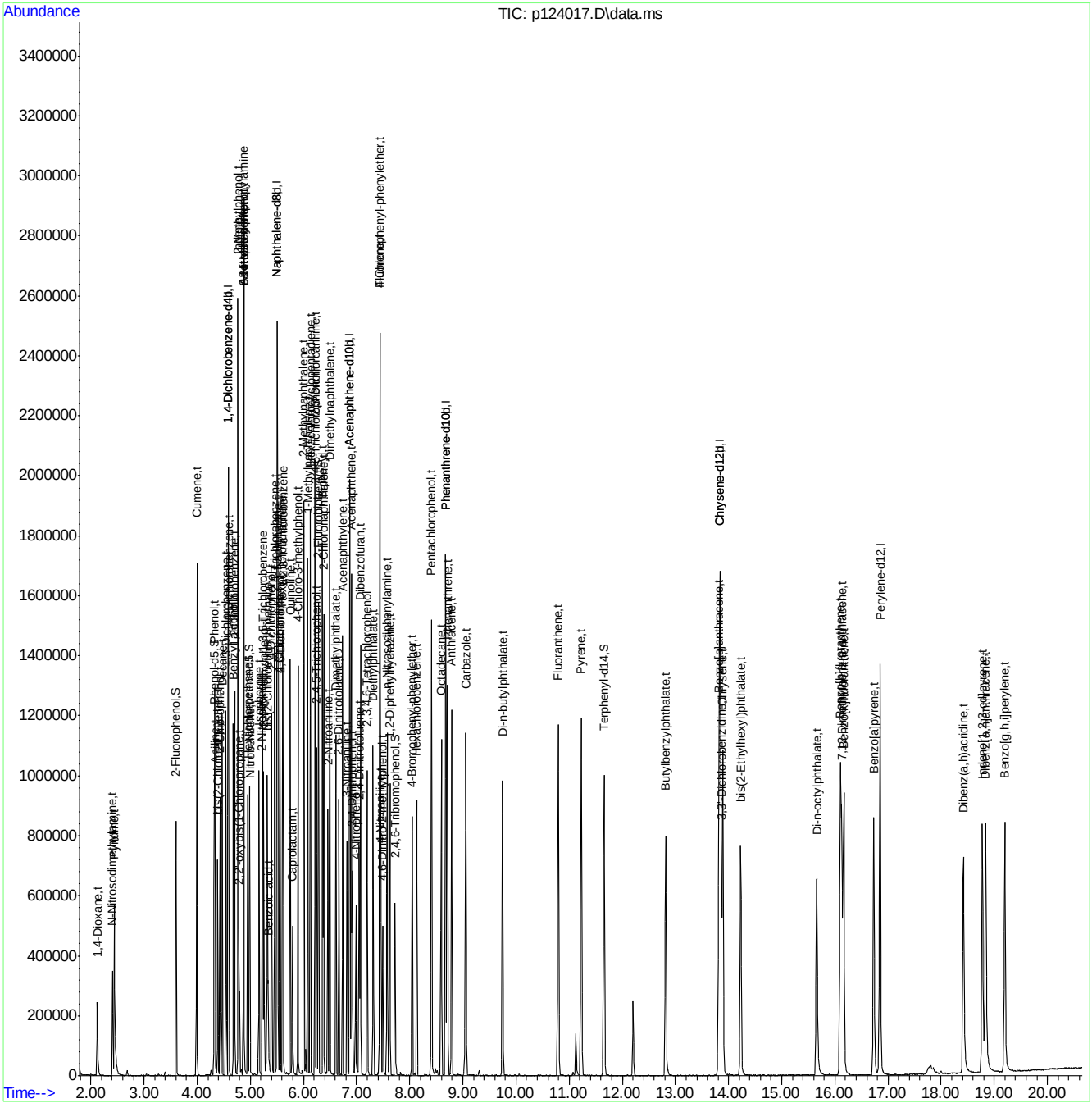
9.5.53

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124017.D
Acq On : 17 Jul 2018 11:37 am
Operator : christc2
Sample : ic5579-25
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 18 09:25:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124018.D
Acq On : 17 Jul 2018 12:04 pm
Operator : christc2
Sample : ic5579-10
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 18 09:26:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.581	152	231735	40.00	ppm	0.00
24) Naphthalene-d8	5.500	136	869748	40.00	ppm	0.00
47) Acenaphthene-d10	6.867	164	423281	40.00	ppm	0.00
69) Phenanthrene-d10	8.673	188	848785	40.00	ppm	0.00
83) Chrysene-d12	13.834	240	836638	40.00	ppm	-0.01
91) Perylene-d12	16.852	264	836464	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.581	152	231735	40.00	ppm	-0.02
103) Phenanthrene-d10b	8.673	188	848785	40.00	ppm	-0.03
105) Chrysene-d12b	13.834	240	836638	40.00	ppm	-0.05
107) Naphthalene-d8b	5.500	136	869748	40.00	ppm	-0.02
109) Acenaphthene-d10b	6.867	164	423281	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.598	112	89801	9.47	ppm	0.00
Spiked Amount 50.000			Recovery = 18.94%			
8) Phenol-d5	4.319	99	108886	9.38	ppm	0.00
Spiked Amount 50.000			Recovery = 18.76%			
25) Nitrobenzene-d5	4.982	82	88394	9.33	ppm	0.00
Spiked Amount 50.000			Recovery = 18.66%			
51) 2-Fluorobiphenyl	6.280	172	179458	10.37	ppm	0.00
Spiked Amount 50.000			Recovery = 20.74%			
73) 2,4,6-Tribromophenol	7.722	330	27166	10.29	ppm	0.00
Spiked Amount 50.000			Recovery = 20.58%			
85) Terphenyl-d14	11.654	244	204018	10.18	ppm	0.00
Spiked Amount 50.000			Recovery = 20.36%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.124	88	39459	8.75	ppm	99
3) Pyridine	2.444	79	98331	8.54	ppm	96
4) N-Nitrosodimethylamine	2.407	42	42729	9.65	ppm	88
6) Indene	4.768	116	146833	10.05	ppm	99
7) Cumene	3.993	105	231058	9.59	ppm	99
9) Phenol	4.325	94	123574	9.38	ppm	96
10) Aniline	4.335	93	137041	9.31	ppm	96
11) bis(2-Chloroethyl)ether	4.383	93	79660	9.47	ppm	96
12) 2-Chlorophenol	4.426	128	96595	9.99	ppm	94
13) Decane	4.469	43	80872	9.57	ppm	93
14) 1,3-Dichlorobenzene	4.538	146	107926	10.11	ppm	97
15) 1,4-Dichlorobenzene	4.592	146	102113	10.01	ppm	97
16) Benzyl alcohol	4.682	108	52454	8.58	ppm	99
17) 1,2-Dichlorobenzene	4.704	146	98887	10.06	ppm	99
18) Acetophenone	4.869	105	119538	9.58	ppm	98
19) 2-Methylphenol	4.768	108	77570	9.15	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.779	121	23273	9.20	ppm #	85
21) 3&4-Methylphenol	4.875	108	77137	8.94	ppm	98
22) n-Nitroso-di-n-propyla...	4.869	70	56736	9.47	ppm	85
23) Hexachloroethane	4.955	201	34219	10.39	ppm	98
26) Nitrobenzene	4.992	77	87919	9.32	ppm	95
27) Quinoline	5.746	129	172057	9.89	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124018.D
Acq On : 17 Jul 2018 12:04 pm
Operator : christc2
Sample : ic5579-10
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 18 09:26:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Isophorone	5.163	82	149199	9.00	ppm	98
29) 2-Nitrophenol	5.222	139	48165	9.95	ppm	87
30) 2,4-Dimethylphenol	5.254	107	73717	8.22	ppm	97
31) Benzoic acid	5.313	105	48642	8.02	ppm	93
32) bis(2-Chloroethoxy)met...	5.318	93	85376	9.69	ppm	99
33) 2,4-Dichlorophenol	5.398	162	73172	10.41	ppm	98
34) 2,6-Dichlorophenol	5.559	162	67958	10.34	ppm	97
35) 1,3,5-Trichlorobenzene	5.233	180	91538	11.04	ppm	95
36) 1,2,4-Trichlorobenzene	5.457	180	86677	10.98	ppm	99
37) 1,2,3-Trichlorobenzene	5.617	180	81284	10.77	ppm	99
38) Naphthalene	5.511	128	247995	10.10	ppm	100
39) 4-Chloroaniline	5.548	127	109232	10.24	ppm	98
40) 2,3-Dichloroaniline	6.216	161	89009	10.72	ppm	98
41) Caprolactam	5.783	55	34892	9.00	ppm	96
42) Hexachlorobutadiene	5.607	225	45566	10.81	ppm	98
43) 4-Chloro-3-methylphenol	5.890	107	71807	9.35	ppm	92
44) 2-Methylnaphthalene	6.007	141	147533	10.43	ppm	97
45) 1-Methylnaphthalene	6.077	142	178478	10.44	ppm	96
46) Dimethylnaphthalene	6.494	156	154195	10.64	ppm	99
48) Hexachlorocyclopentadiene	6.130	237	88145	21.78	ppm	97
49) 2,4,6-Trichlorophenol	6.216	196	51381	10.47	ppm	98
50) 2,4,5-Trichlorophenol	6.248	196	54751	10.43	ppm	98
52) 2-Chloronaphthalene	6.381	162	159372	10.47	ppm	97
53) Biphenyl	6.360	154	213700	10.32	ppm	99
54) 2-Nitroaniline	6.456	65	44105	9.23	ppm	94
55) Dimethylphthalate	6.611	163	172448	10.17	ppm	99
56) Acenaphthylene	6.734	152	253628	9.96	ppm	99
57) 2,6-Dinitrotoluene	6.664	165	37862	10.37	ppm	92
58) 3-Nitroaniline	6.819	138	48632	10.50	ppm	96
59) Acenaphthene	6.899	153	157899	10.23	ppm	96
60) 2,4-Dinitrophenol	6.916	184	29873	19.54	ppm	83
61) 4-Nitrophenol	6.980	109	23290	9.71	ppm	98
62) Dibenzofuran	7.070	168	224974	10.39	ppm	97
63) 2,4-Dinitrotoluene	7.044	165	53772	11.25	ppm	87
64) 2,3,4,6-Tetrachlorophenol	7.199	232	45649	10.65	ppm	98
65) Diethylphthalate	7.311	149	177034	10.26	ppm	99
66) Fluorene	7.439	166	178777	10.63	ppm	99
67) 4-Chlorophenyl-phenyle...	7.439	204	85063	11.00	ppm	99
68) 4-Nitroaniline	7.450	138	47376	10.49	ppm	95
70) 4,6-Dinitro-2-methylph...	7.492	198	25445	9.72	ppm	93
71) n-Nitrosodiphenylamine	7.573	169	130215	10.26	ppm	99
72) 1,2-Diphenylhydrazine	7.621	77	164533	8.81	ppm	98
74) 4-Bromophenyl-phenylether	8.043	248	51961	10.26	ppm	96
75) Hexachlorobenzene	8.134	284	61080	11.17	ppm	99
76) Pentachlorophenol	8.406	266	67239	20.25	ppm	98
77) Phenanthrene	8.711	178	257573	9.93	ppm	98
78) Anthracene	8.785	178	265912	10.12	ppm	100
79) Carbazole	9.052	167	246214	10.13	ppm	99
80) Di-n-butylphthalate	9.742	149	284813	9.50	ppm	99
81) Fluoranthene	10.789	202	282078	10.44	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124018.D
Acq On : 17 Jul 2018 12:04 pm
Operator : christc2
Sample : ic5579-10
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 18 09:26:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

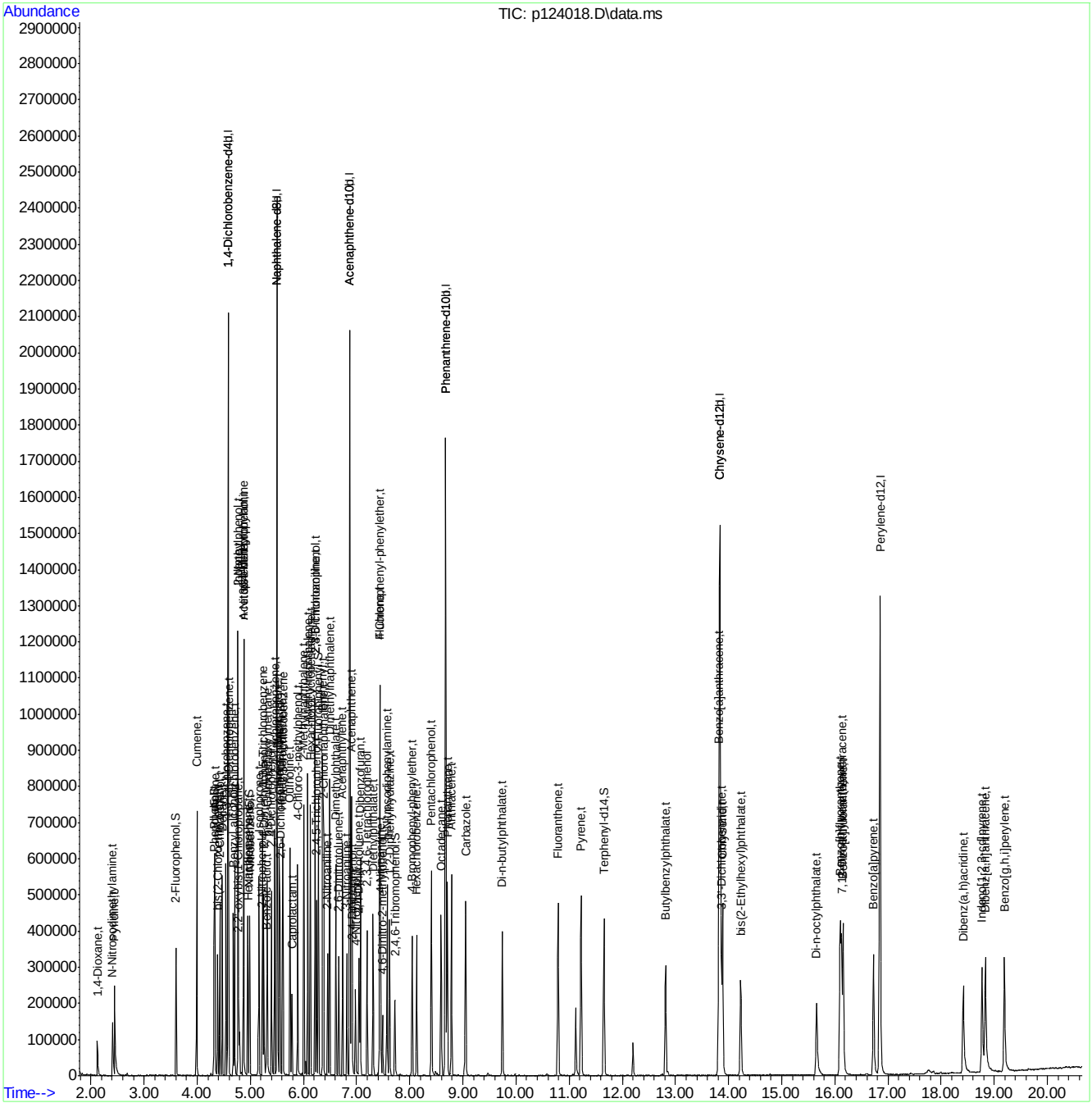
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82) Octadecane	8.588	57	103117	9.16	ppm	99
84) Pyrene	11.221	202	304452	9.91	ppm	97
86) Butylbenzylphthalate	12.813	149	115702	8.14	ppm	97
87) Benzo[a]anthracene	13.818	228	262208	9.35	ppm	99
88) 3,3'-Dichlorobenzidine	13.860	252	85834	8.96	ppm	96
89) Chrysene	13.887	228	268731	10.15	ppm	99
90) bis(2-Ethylhexyl)phtha...	14.229	149	145691	7.80	ppm	100
92) Di-n-octylphthalate	15.655	149	211065	6.87	ppm	99
93) Benzo[b]fluoranthene	16.099	252	271906	10.12	ppm	97
94) Benzo[k]fluoranthene	16.158	252	272771	10.62	ppm	99
95) Benzo[a]pyrene	16.729	252	233555	9.64	ppm	99
96) Indeno[1,2,3-cd]pyrene	18.770	276	208476	9.04	ppm	99
97) Dibenz(a,h)acridine	18.417	279	196002	9.30	ppm	95
98) Dibenz[a,h]anthracene	18.834	278	232672	9.83	ppm	97
99) 7,12-Dimethylbenz(a)an...	16.126	256	111955	9.35	ppm	99
100) Benzo[g,h,i]perylene	19.192	276	229928	9.94	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124018.D
Acq On : 17 Jul 2018 12:04 pm
Operator : christc2
Sample : ic5579-10
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 18 09:26:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124019.D
Acq On : 17 Jul 2018 12:32 pm
Operator : christc2
Sample : ic5579-5
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 18 09:26:51 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.581	152	227861	40.00	ppm	0.00
24) Naphthalene-d8	5.495	136	864090	40.00	ppm	0.00
47) Acenaphthene-d10	6.867	164	415557	40.00	ppm	0.00
69) Phenanthrene-d10	8.673	188	836452	40.00	ppm	0.00
83) Chrysene-d12	13.834	240	808106	40.00	ppm	-0.01
91) Perylene-d12	16.852	264	810951	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.581	152	227861	40.00	ppm	-0.02
103) Phenanthrene-d10b	8.673	188	836452	40.00	ppm	-0.03
105) Chrysene-d12b	13.834	240	808106	40.00	ppm	-0.05
107) Naphthalene-d8b	5.495	136	864090	40.00	ppm	-0.02
109) Acenaphthene-d10b	6.867	164	415557	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.598	112	43220	4.63	ppm	0.00
Spiked Amount 50.000			Recovery = 9.26%			
8) Phenol-d5	4.314	99	53667	4.70	ppm	0.00
Spiked Amount 50.000			Recovery = 9.40%			
25) Nitrobenzene-d5	4.982	82	44087	4.68	ppm	0.00
Spiked Amount 50.000			Recovery = 9.36%			
51) 2-Fluorobiphenyl	6.280	172	93434	5.50	ppm	0.00
Spiked Amount 50.000			Recovery = 11.00%			
73) 2,4,6-Tribromophenol	7.722	330	12949	4.98	ppm	0.00
Spiked Amount 50.000			Recovery = 9.96%			
85) Terphenyl-d14	11.654	244	98221	5.07	ppm	0.00
Spiked Amount 50.000			Recovery = 10.14%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.124	88	19885	4.48	ppm	93
3) Pyridine	2.449	79	49388	4.36	ppm	95
4) N-Nitrosodimethylamine	2.412	42	21744	5.00	ppm	98
6) Indene	4.768	116	75984	5.29	ppm	98
7) Cumene	3.993	105	118273	4.99	ppm	97
9) Phenol	4.325	94	61795	4.77	ppm	96
10) Aniline	4.335	93	68911	4.76	ppm	93
11) bis(2-Chloroethyl)ether	4.383	93	41614	5.03	ppm	95
12) 2-Chlorophenol	4.426	128	48467	5.10	ppm	93
13) Decane	4.469	43	41718	5.02	ppm	92
14) 1,3-Dichlorobenzene	4.538	146	54525	5.19	ppm	100
15) 1,4-Dichlorobenzene	4.592	146	53834	5.36	ppm	97
16) Benzyl alcohol	4.682	108	25963	4.32	ppm	95
17) 1,2-Dichlorobenzene	4.704	146	51455	5.33	ppm	99
18) Acetophenone	4.869	105	62777	5.12	ppm	98
19) 2-Methylphenol	4.768	108	40796	4.89	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.779	121	12953	5.21	ppm #	86
21) 3&4-Methylphenol	4.875	108	41376	4.88	ppm	99
22) n-Nitroso-di-n-propyla...	4.869	70	29212	4.03	ppm	86
23) Hexachloroethane	4.950	201	17746	5.48	ppm	80
26) Nitrobenzene	4.992	77	45011	4.80	ppm	95
27) Quinoline	5.746	129	85934	4.97	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124019.D
Acq On : 17 Jul 2018 12:32 pm
Operator : christc2
Sample : ic5579-5
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 18 09:26:51 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Isophorone	5.163	82	75590	4.59	ppm	99
29) 2-Nitrophenol	5.222	139	23174	4.82	ppm	89
30) 2,4-Dimethylphenol	5.254	107	36156	4.06	ppm	94
31) Benzoic acid	5.302	105	20206	3.35	ppm	92
32) bis(2-Chloroethoxy)met...	5.318	93	43808	5.00	ppm	98
33) 2,4-Dichlorophenol	5.398	162	36017	5.16	ppm	95
34) 2,6-Dichlorophenol	5.559	162	34764	5.33	ppm	98
35) 1,3,5-Trichlorobenzene	5.233	180	48110	5.84	ppm	97
36) 1,2,4-Trichlorobenzene	5.457	180	45480	5.80	ppm	97
37) 1,2,3-Trichlorobenzene	5.617	180	42940	5.73	ppm	94
38) Naphthalene	5.511	128	127430	5.22	ppm	98
39) 4-Chloroaniline	5.548	127	54747	5.17	ppm	98
40) 2,3-Dichloroaniline	6.216	161	46412	5.63	ppm	97
41) Caprolactam	5.778	55	16492	4.28	ppm	98
42) Hexachlorobutadiene	5.607	225	23866	5.70	ppm	97
43) 4-Chloro-3-methylphenol	5.890	107	35344	4.63	ppm	94
44) 2-Methylnaphthalene	6.002	141	75961	5.41	ppm	95
45) 1-Methylnaphthalene	6.077	142	91088	5.36	ppm	94
46) Dimethylnaphthalene	6.494	156	79829	5.54	ppm	99
48) Hexachlorocyclopentadiene	6.130	237	41801	10.52	ppm	97
49) 2,4,6-Trichlorophenol	6.216	196	25505	5.30	ppm	92
50) 2,4,5-Trichlorophenol	6.248	196	27224	5.28	ppm	96
52) 2-Chloronaphthalene	6.381	162	83272	5.57	ppm	96
53) Biphenyl	6.360	154	112471	5.53	ppm	99
54) 2-Nitroaniline	6.456	65	21875	4.66	ppm	95
55) Dimethylphthalate	6.611	163	88260	5.30	ppm	99
56) Acenaphthylene	6.734	152	126048	5.04	ppm	99
57) 2,6-Dinitrotoluene	6.664	165	17356	4.84	ppm	89
58) 3-Nitroaniline	6.819	138	22310	4.91	ppm	97
59) Acenaphthene	6.900	153	81905	5.41	ppm	97
60) 2,4-Dinitrophenol	6.916	184	9338	10.23	ppm	76
61) 4-Nitrophenol	6.980	109	9747	4.14	ppm	94
62) Dibenzofuran	7.070	168	114780	5.40	ppm	97
63) 2,4-Dinitrotoluene	7.044	165	24434	5.21	ppm	99
64) 2,3,4,6-Tetrachlorophenol	7.199	232	21370	5.08	ppm	94
65) Diethylphthalate	7.306	149	86545	5.11	ppm	99
66) Fluorene	7.439	166	89486	5.42	ppm	98
67) 4-Chlorophenyl-phenyle...	7.434	204	43429	5.72	ppm	94
68) 4-Nitroaniline	7.450	138	23180	5.23	ppm	98
70) 4,6-Dinitro-2-methylph...	7.487	198	9893	4.79	ppm	95
71) n-Nitrosodiphenylamine	7.573	169	66479	5.31	ppm	97
72) 1,2-Diphenylhydrazine	7.621	77	81123	4.41	ppm	98
74) 4-Bromophenyl-phenylether	8.043	248	25728	5.15	ppm	92
75) Hexachlorobenzene	8.128	284	30039	5.57	ppm	88
76) Pentachlorophenol	8.406	266	28835	8.81	ppm	96
77) Phenanthrene	8.705	178	131442	5.14	ppm	98
78) Anthracene	8.785	178	131903	5.10	ppm	99
79) Carbazole	9.047	167	120700	5.04	ppm	100
80) Di-n-butylphthalate	9.742	149	129092	4.37	ppm	100
81) Fluoranthene	10.789	202	133420	5.01	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124019.D
Acq On : 17 Jul 2018 12:32 pm
Operator : christc2
Sample : ic5579-5
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 18 09:26:51 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82) Octadecane	8.593	57	48591	4.38	ppm	96
84) Pyrene	11.221	202	147810	4.98	ppm	98
86) Butylbenzylphthalate	12.813	149	47963	3.49	ppm	97
87) Benzo[a]anthracene	13.818	228	123829	4.57	ppm	99
88) 3,3'-Dichlorobenzidine	13.860	252	37579	4.06	ppm	93
89) Chrysene	13.887	228	132620	5.19	ppm	99
90) bis(2-Ethylhexyl)phtha...	14.229	149	56364	3.12	ppm	99
92) Di-n-octylphthalate	15.655	149	73660	2.47	ppm	99
93) Benzo[b]fluoranthene	16.099	252	121658	4.67	ppm	97
94) Benzo[k]fluoranthene	16.152	252	135908	5.46	ppm	99
95) Benzo[a]pyrene	16.724	252	101913	4.34	ppm	98
96) Indeno[1,2,3-cd]pyrene	18.765	276	85853	3.84	ppm	99
97) Dibenz(a,h)acridine	18.412	279	76507	3.74	ppm	99
98) Dibenz[a,h]anthracene	18.834	278	100708	4.39	ppm	97
99) 7,12-Dimethylbenz(a)an...	16.120	256	46513	4.01	ppm	98
100) Benzo[g,h,i]perylene	19.187	276	106907	4.77	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

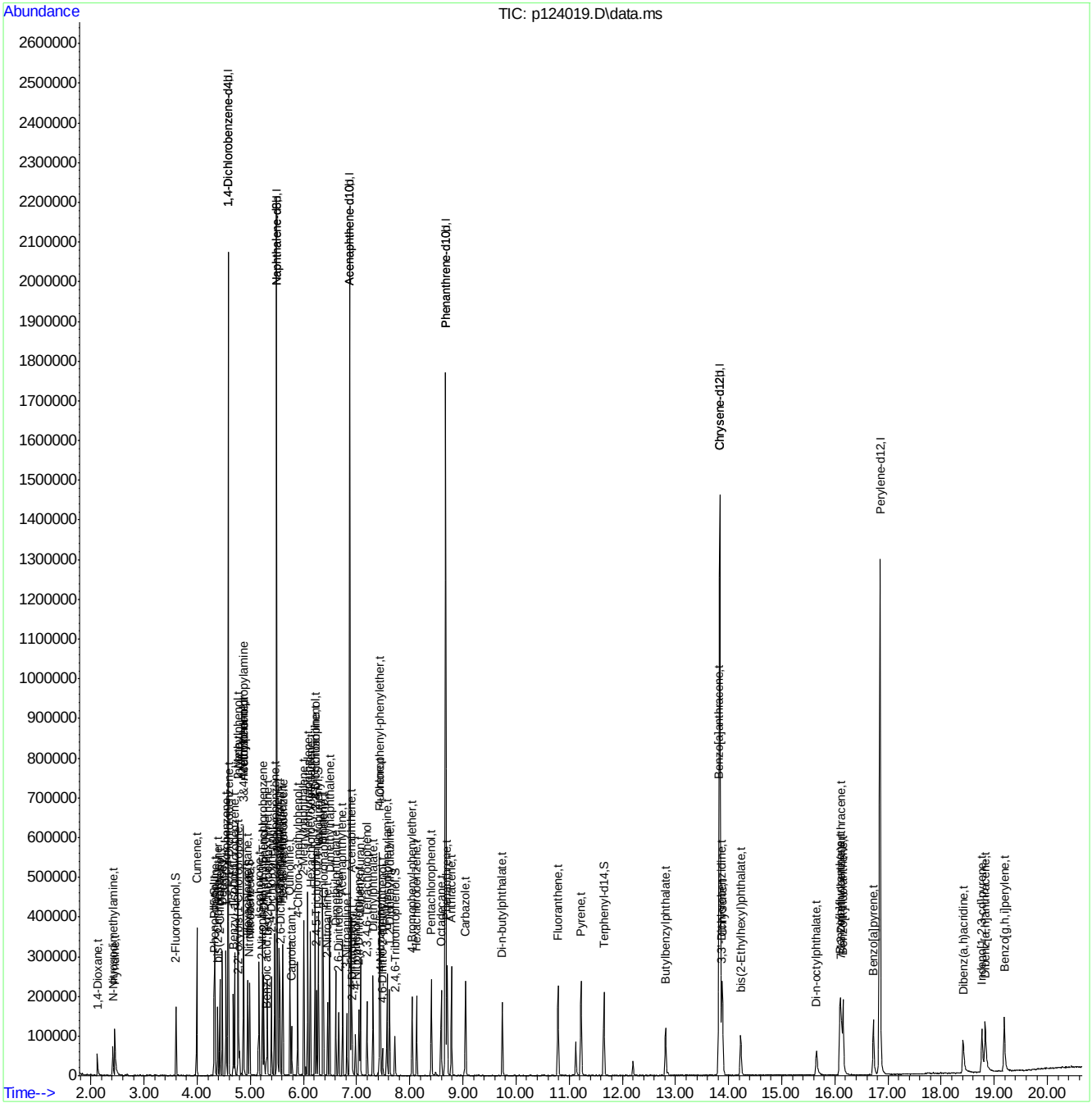
9.5.55

6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124019.D
Acq On : 17 Jul 2018 12:32 pm
Operator : christc2
Sample : ic5579-5
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 18 09:26:51 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124020.D
Acq On : 17 Jul 2018 1:01 pm
Operator : christc2
Sample : ic5579-2
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 18 09:27:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.581	152	230859	40.00	ppm		0.00
24) Naphthalene-d8	5.500	136	864920	40.00	ppm		0.00
47) Acenaphthene-d10	6.867	164	410103	40.00	ppm		0.00
69) Phenanthrene-d10	8.673	188	837566	40.00	ppm		0.00
83) Chrysene-d12	13.834	240	813490	40.00	ppm		-0.01
91) Perylene-d12	16.852	264	813867	40.00	ppm		0.00
101) 1,4-Dichlorobenzene-d4b	4.581	152	230859	40.00	ppm		-0.02
103) Phenanthrene-d10b	8.673	188	837566	40.00	ppm		-0.03
105) Chrysene-d12b	13.834	240	813490	40.00	ppm		-0.05
107) Naphthalene-d8b	5.500	136	864920	40.00	ppm		-0.02
109) Acenaphthene-d10b	6.867	164	410103	40.00	ppm		-0.03
System Monitoring Compounds							
5) 2-Fluorophenol	3.603	112	17068	1.81	ppm		0.00
Spiked Amount 50.000			Recovery = 3.62%				
8) Phenol-d5	4.319	99	21185	1.83	ppm		0.00
Spiked Amount 50.000			Recovery = 3.66%				
25) Nitrobenzene-d5	4.982	82	18768	1.99	ppm		0.00
Spiked Amount 50.000			Recovery = 3.98%				
51) 2-Fluorobiphenyl	6.280	172	39518	2.36	ppm		0.00
Spiked Amount 50.000			Recovery = 4.72%				
73) 2,4,6-Tribromophenol	7.722	330	4365	1.68	ppm		0.00
Spiked Amount 50.000			Recovery = 3.36%				
85) Terphenyl-d14	11.654	244	36895	1.89	ppm		0.00
Spiked Amount 50.000			Recovery = 3.78%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.124	88	8062	1.79	ppm		95
3) Pyridine	2.460	79	19506	1.70	ppm		98
4) N-Nitrosodimethylamine	2.412	42	8630	1.96	ppm		89
6) Indene	4.768	116	32734	2.25	ppm		99
7) Cumene	3.993	105	47373	1.97	ppm		96
9) Phenol	4.325	94	25580	1.95	ppm		94
10) Aniline	4.335	93	29213	1.99	ppm		93
11) bis(2-Chloroethyl)ether	4.383	93	16790	2.00	ppm		99
12) 2-Chlorophenol	4.426	128	19872	2.06	ppm		94
13) Decane	4.469	43	17472	2.08	ppm		88
14) 1,3-Dichlorobenzene	4.538	146	23742	2.23	ppm		94
15) 1,4-Dichlorobenzene	4.592	146	22435	2.21	ppm		98
16) Benzyl alcohol	4.683	108	10015	1.64	ppm		86
17) 1,2-Dichlorobenzene	4.704	146	21467	2.19	ppm		96
18) Acetophenone	4.869	105	26887	2.16	ppm		99
19) 2-Methylphenol	4.768	108	16232	1.92	ppm		97
20) 2,2'-oxybis(1-Chloropr...	4.779	121	5332	2.12	ppm	#	60
21) 3&4-Methylphenol	4.875	108	17154	2.00	ppm		95
22) n-Nitroso-di-n-propyla...	4.869	70	11875	0.50	ppm	#	81
23) Hexachloroethane	4.955	201	7608	2.32	ppm		95
26) Nitrobenzene	4.992	77	18814	2.01	ppm		93
27) Quinoline	5.746	129	35596	2.06	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124020.D
Acq On : 17 Jul 2018 1:01 pm
Operator : christc2
Sample : ic5579-2
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 18 09:27:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) Isophorone	5.163	82	29680	1.80	ppm		98
29) 2-Nitrophenol	5.222	139	8387	1.74	ppm		86
30) 2,4-Dimethylphenol	5.254	107	14244	1.60	ppm		91
31) Benzoic acid	5.292	105	5831	0.97	ppm		87
32) bis(2-Chloroethoxy)met...	5.318	93	18593	2.12	ppm		96
33) 2,4-Dichlorophenol	5.398	162	14396	2.06	ppm		96
34) 2,6-Dichlorophenol	5.559	162	13738	2.10	ppm		99
35) 1,3,5-Trichlorobenzene	5.233	180	19970	2.42	ppm		98
36) 1,2,4-Trichlorobenzene	5.457	180	18876	2.40	ppm		98
37) 1,2,3-Trichlorobenzene	5.617	180	17306	2.31	ppm		99
38) Naphthalene	5.511	128	53469	2.19	ppm		99
39) 4-Chloroaniline	5.548	127	22415	2.11	ppm		95
40) 2,3-Dichloroaniline	6.216	161	19718	2.39	ppm		96
41) Caprolactam	5.772	55	6383	1.66	ppm		92
42) Hexachlorobutadiene	5.607	225	10492	2.50	ppm		92
43) 4-Chloro-3-methylphenol	5.890	107	13857	1.81	ppm		95
44) 2-Methylnaphthalene	6.007	141	31720	2.25	ppm		97
45) 1-Methylnaphthalene	6.077	142	38227	2.25	ppm		93
46) Dimethylnaphthalene	6.494	156	32310	2.24	ppm		99
48) Hexachlorocyclopentadiene	6.130	237	14160	3.61	ppm		93
49) 2,4,6-Trichlorophenol	6.216	196	10040	2.11	ppm		95
50) 2,4,5-Trichlorophenol	6.248	196	10993	2.16	ppm		98
52) 2-Chloronaphthalene	6.381	162	33857	2.30	ppm		96
53) Biphenyl	6.360	154	47740	2.38	ppm		99
54) 2-Nitroaniline	6.456	65	7632	1.65	ppm		95
55) Dimethylphthalate	6.611	163	35235	2.15	ppm		100
56) Acenaphthylene	6.734	152	50438	2.04	ppm		99
57) 2,6-Dinitrotoluene	6.664	165	6443	1.82	ppm		94
58) 3-Nitroaniline	6.814	138	8296	1.85	ppm		89
59) Acenaphthene	6.900	153	34533	2.31	ppm		97
60) 2,4-Dinitrophenol	6.916	184	1643	6.68	ppm	#	23
61) 4-Nitrophenol	6.980	109	3509	1.51	ppm	#	82
62) Dibenzofuran	7.071	168	49713	2.37	ppm		97
63) 2,4-Dinitrotoluene	7.044	165	8837	1.91	ppm		95
64) 2,3,4,6-Tetrachlorophenol	7.199	232	7862	1.89	ppm		98
65) Diethylphthalate	7.306	149	36612	2.19	ppm		98
66) Fluorene	7.439	166	35963	2.21	ppm		99
67) 4-Chlorophenyl-phenyle...	7.439	204	18593	2.48	ppm		96
68) 4-Nitroaniline	7.450	138	8708	1.99	ppm		92
70) 4,6-Dinitro-2-methylph...	7.487	198	2247	2.31	ppm		93
71) n-Nitrosodiphenylamine	7.573	169	25978	2.07	ppm		99
72) 1,2-Diphenylhydrazine	7.621	77	33654	1.83	ppm		97
74) 4-Bromophenyl-phenylether	8.043	248	10371	2.07	ppm		93
75) Hexachlorobenzene	8.134	284	13222	2.45	ppm		99
76) Pentachlorophenol	8.406	266	8647	2.64	ppm		94
77) Phenanthrene	8.705	178	56239	2.20	ppm		98
78) Anthracene	8.785	178	52538	2.03	ppm		98
79) Carbazole	9.047	167	47900	2.00	ppm		98
80) Di-n-butylphthalate	9.742	149	44700	1.51	ppm		99
81) Fluoranthene	10.789	202	50707	1.90	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124020.D
Acq On : 17 Jul 2018 1:01 pm
Operator : christc2
Sample : ic5579-2
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 18 09:27:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82) Octadecane	8.593	57	18077	1.63	ppm	96
84) Pyrene	11.227	202	56891	1.90	ppm	98
86) Butylbenzylphthalate	12.813	149	14273	1.03	ppm	95
87) Benzo[a]anthracene	13.818	228	47579	1.74	ppm	96
88) 3,3'-Dichlorobenzidine	13.860	252	11783	1.27	ppm	92
89) Chrysene	13.887	228	55305	2.15	ppm	100
90) bis(2-Ethylhexyl)phtha...	14.224	149	15488	0.85	ppm	96
92) Di-n-octylphthalate	15.650	149	17893	0.60	ppm	94
93) Benzo[b]fluoranthene	16.099	252	41725	1.60	ppm	98
94) Benzo[k]fluoranthene	16.152	252	49865	2.00	ppm	94
95) Benzo[a]pyrene	16.729	252	33182	1.41	ppm	98
96) Indeno[1,2,3-cd]pyrene	18.765	276	27509	1.23	ppm	91
97) Dibenz(a,h)acridine	18.412	279	21773	1.06	ppm	89
98) Dibenz[a,h]anthracene	18.834	278	33630	1.46	ppm	98
99) 7,12-Dimethylbenz(a)an...	16.120	256	14858	1.28	ppm	88
100) Benzo[g,h,i]perylene	19.192	276	36617	1.63	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

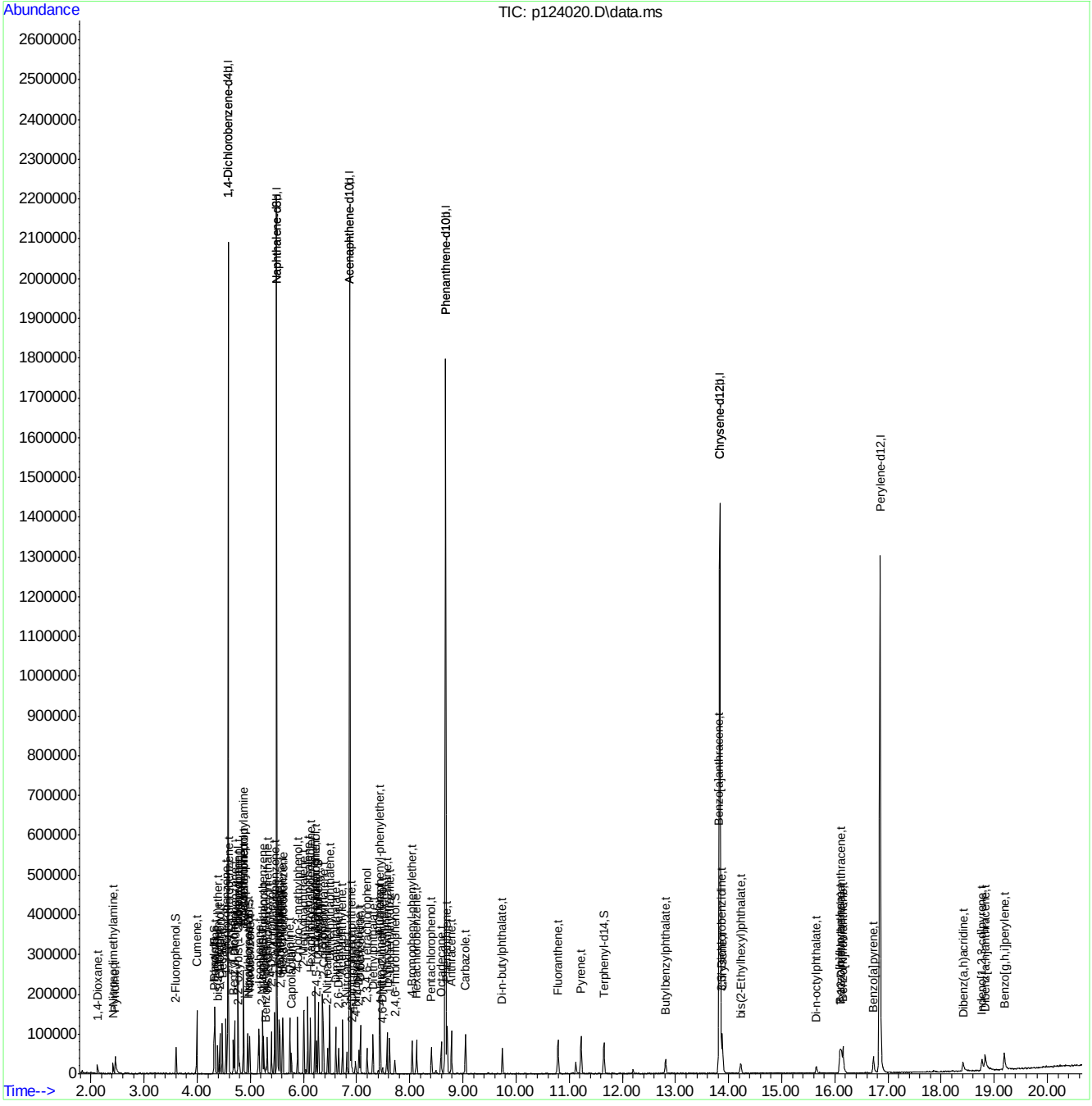
9.5.56

6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124020.D
Acq On : 17 Jul 2018 1:01 pm
Operator : christc2
Sample : ic5579-2
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 18 09:27:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:23:18 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124021.D
Acq On : 17 Jul 2018 1:28 pm
Operator : christc2
Sample : ic5579-1
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 18 09:28:34 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:27:55 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.581	152	239224	40.00	ppm		0.00
24) Naphthalene-d8	5.495	136	883193	40.00	ppm		0.00
47) Acenaphthene-d10	6.868	164	420175	40.00	ppm		0.00
69) Phenanthrene-d10	8.673	188	842391	40.00	ppm		0.00
83) Chrysene-d12	13.834	240	798366	40.00	ppm		-0.01
91) Perylene-d12	16.852	264	803601	40.00	ppm		0.00
101) 1,4-Dichlorobenzene-d4b	4.581	152	239224	40.00	ppm		-0.02
103) Phenanthrene-d10b	8.673	188	842391	40.00	ppm		-0.03
105) Chrysene-d12b	13.834	240	798366	40.00	ppm		-0.05
107) Naphthalene-d8b	5.495	136	883193	40.00	ppm		-0.02
109) Acenaphthene-d10b	6.868	164	420175	40.00	ppm		-0.03
System Monitoring Compounds							
5) 2-Fluorophenol	3.603	112	8862	0.90	ppm		0.00
Spiked Amount 50.000			Recovery = 1.80%				
8) Phenol-d5	4.319	99	10616	0.89	ppm		0.00
Spiked Amount 50.000			Recovery = 1.78%				
25) Nitrobenzene-d5	4.982	82	9410	0.98	ppm		0.00
Spiked Amount 50.000			Recovery = 1.96%				
51) 2-Fluorobiphenyl	6.280	172	20588	1.20	ppm		0.00
Spiked Amount 50.000			Recovery = 2.40%				
73) 2,4,6-Tribromophenol	7.717	330	1851	0.71	ppm		-0.01
Spiked Amount 50.000			Recovery = 1.42%				
85) Terphenyl-d14	11.654	244	17692	0.92	ppm		0.00
Spiked Amount 50.000			Recovery = 1.84%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.129	88	4545	0.98	ppm		89
3) Pyridine	2.466	79	11468	0.97	ppm		90
4) N-Nitrosodimethylamine	2.418	42	4791	1.05	ppm		97
6) Indene	4.768	116	16708	1.11	ppm		94
7) Cumene	3.993	105	25887	1.04	ppm		99
9) Phenol	4.325	94	12990	0.95	ppm		96
10) Aniline	4.335	93	15169	1.00	ppm		96
11) bis(2-Chloroethyl)ether	4.383	93	8893	1.02	ppm		88
12) 2-Chlorophenol	4.426	128	10110	1.01	ppm		92
13) Decane	4.469	43	9388	1.08	ppm		96
14) 1,3-Dichlorobenzene	4.538	146	12146	1.10	ppm		97
15) 1,4-Dichlorobenzene	4.592	146	11411	1.08	ppm		91
16) Benzyl alcohol	4.683	108	5092	0.81	ppm		93
17) 1,2-Dichlorobenzene	4.704	146	11611	1.14	ppm		98
18) Acetophenone	4.870	105	13585	1.06	ppm		97
19) 2-Methylphenol	4.768	108	8064	0.92	ppm		93
20) 2,2'-oxybis(1-Chloropr...	4.779	121	2681	1.03	ppm	#	40
21) 3&4-Methylphenol	4.875	108	8244	0.93	ppm		99
22) n-Nitroso-di-n-propyla...	4.870	70	5991	0.94	ppm		89
23) Hexachloroethane	4.950	201	3826	1.13	ppm	#	78
26) Nitrobenzene	4.992	77	10116	1.06	ppm		90
27) Quinoline	5.746	129	18681	1.06	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124021.D
Acq On : 17 Jul 2018 1:28 pm
Operator : christc2
Sample : ic5579-1
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 18 09:28:34 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:27:55 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) Isophorone	5.163	82	14523	0.86	ppm		95
29) 2-Nitrophenol	5.222	139	4117	0.84	ppm		95
30) 2,4-Dimethylphenol	5.254	107	7251	0.80	ppm		90
31) Benzoic acid	5.292	105	2024	0.33	ppm		75
32) bis(2-Chloroethoxy)met...	5.318	93	9685	1.08	ppm		97
33) 2,4-Dichlorophenol	5.398	162	6814	0.95	ppm		94
34) 2,6-Dichlorophenol	5.559	162	6959	1.04	ppm		97
35) 1,3,5-Trichlorobenzene	5.233	180	10211	1.21	ppm		95
36) 1,2,4-Trichlorobenzene	5.457	180	9986	1.25	ppm		100
37) 1,2,3-Trichlorobenzene	5.617	180	9533	1.24	ppm		98
38) Naphthalene	5.511	128	29105	1.17	ppm		99
39) 4-Chloroaniline	5.548	127	10993	1.02	ppm		96
40) 2,3-Dichloroaniline	6.216	161	9261	1.10	ppm		96
41) Caprolactam	5.767	55	2789	0.71	ppm		88
42) Hexachlorobutadiene	5.607	225	5368	1.25	ppm		97
43) 4-Chloro-3-methylphenol	5.890	107	6173	0.79	ppm		97
44) 2-Methylnaphthalene	6.002	141	16342	1.14	ppm		94
45) 1-Methylnaphthalene	6.077	142	20091	1.16	ppm		94
46) Dimethylnaphthalene	6.494	156	16421	1.12	ppm		96
48) Hexachlorocyclopentadiene	6.130	237	7010	1.74	ppm		94
49) 2,4,6-Trichlorophenol	6.216	196	4766	0.98	ppm		88
50) 2,4,5-Trichlorophenol	6.248	196	5010	0.96	ppm		98
52) 2-Chloronaphthalene	6.376	162	18307	1.21	ppm		98
53) Biphenyl	6.360	154	24145	1.18	ppm		99
54) 2-Nitroaniline	6.456	65	3401	0.72	ppm		99
55) Dimethylphthalate	6.611	163	18523	1.10	ppm		98
56) Acenaphthylene	6.734	152	25746	1.02	ppm		99
57) 2,6-Dinitrotoluene	6.659	165	2787	0.77	ppm		90
58) 3-Nitroaniline	6.820	138	3700	0.80	ppm		89
59) Acenaphthene	6.900	153	17339	1.13	ppm		94
61) 4-Nitrophenol	6.980	109	1103	0.46	ppm	#	81
62) Dibenzofuran	7.065	168	25220	1.17	ppm		96
63) 2,4-Dinitrotoluene	7.044	165	3275	0.69	ppm		95
64) 2,3,4,6-Tetrachlorophenol	7.199	232	3484	0.82	ppm		97
65) Diethylphthalate	7.306	149	17589	1.03	ppm		98
66) Fluorene	7.434	166	18527	1.11	ppm		97
67) 4-Chlorophenyl-phenyle...	7.434	204	9161	1.19	ppm		90
68) 4-Nitroaniline	7.445	138	3508	0.78	ppm		95
71) n-Nitrosodiphenylamine	7.573	169	12397	0.98	ppm		98
72) 1,2-Diphenylhydrazine	7.621	77	15785	0.85	ppm		97
74) 4-Bromophenyl-phenylether	8.043	248	5122	1.02	ppm		90
75) Hexachlorobenzene	8.128	284	6639	1.22	ppm		86
76) Pentachlorophenol	8.406	266	3289	1.00	ppm		93
77) Phenanthrene	8.705	178	28898	1.12	ppm		95
78) Anthracene	8.785	178	24853	0.95	ppm		97
79) Carbazole	9.047	167	21879	0.91	ppm		98
80) Di-n-butylphthalate	9.742	149	18925	0.64	ppm		97
81) Fluoranthene	10.789	202	24296	0.91	ppm		97
82) Octadecane	8.588	57	8405	0.75	ppm		93
84) Pyrene	11.222	202	27592	0.94	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124021.D
Acq On : 17 Jul 2018 1:28 pm
Operator : christc2
Sample : ic5579-1
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 18 09:28:34 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:27:55 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
86) Butylbenzylphthalate	12.808	149	5657	0.42	ppm	97
87) Benzo[a]anthracene	13.818	228	24038	0.90	ppm	95
88) 3,3'-Dichlorobenzidine	13.855	252	4159	0.46	ppm	92
89) Chrysene	13.887	228	28012	1.11	ppm	97
90) bis(2-Ethylhexyl)phtha...	14.224	149	5439	0.31	ppm	96
92) Di-n-octylphthalate	15.656	149	8603	0.29	ppm	93
93) Benzo[b]fluoranthene	16.094	252	19892	0.77	ppm	98
94) Benzo[k]fluoranthene	16.152	252	23240	0.94	ppm	95
95) Benzo[a]pyrene	16.729	252	20313	0.87	ppm	91
96) Indeno[1,2,3-cd]pyrene	18.770	276	11855	0.53	ppm	86
97) Dibenz(a,h)acridine	18.412	279	8830	0.44	ppm	97
98) Dibenz[a,h]anthracene	18.829	278	12795	0.56	ppm	88
99) 7,12-Dimethylbenz(a)an...	16.115	256	7149	0.62	ppm	89
100) Benzo[g,h,i]perylene	19.187	276	15813	0.71	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

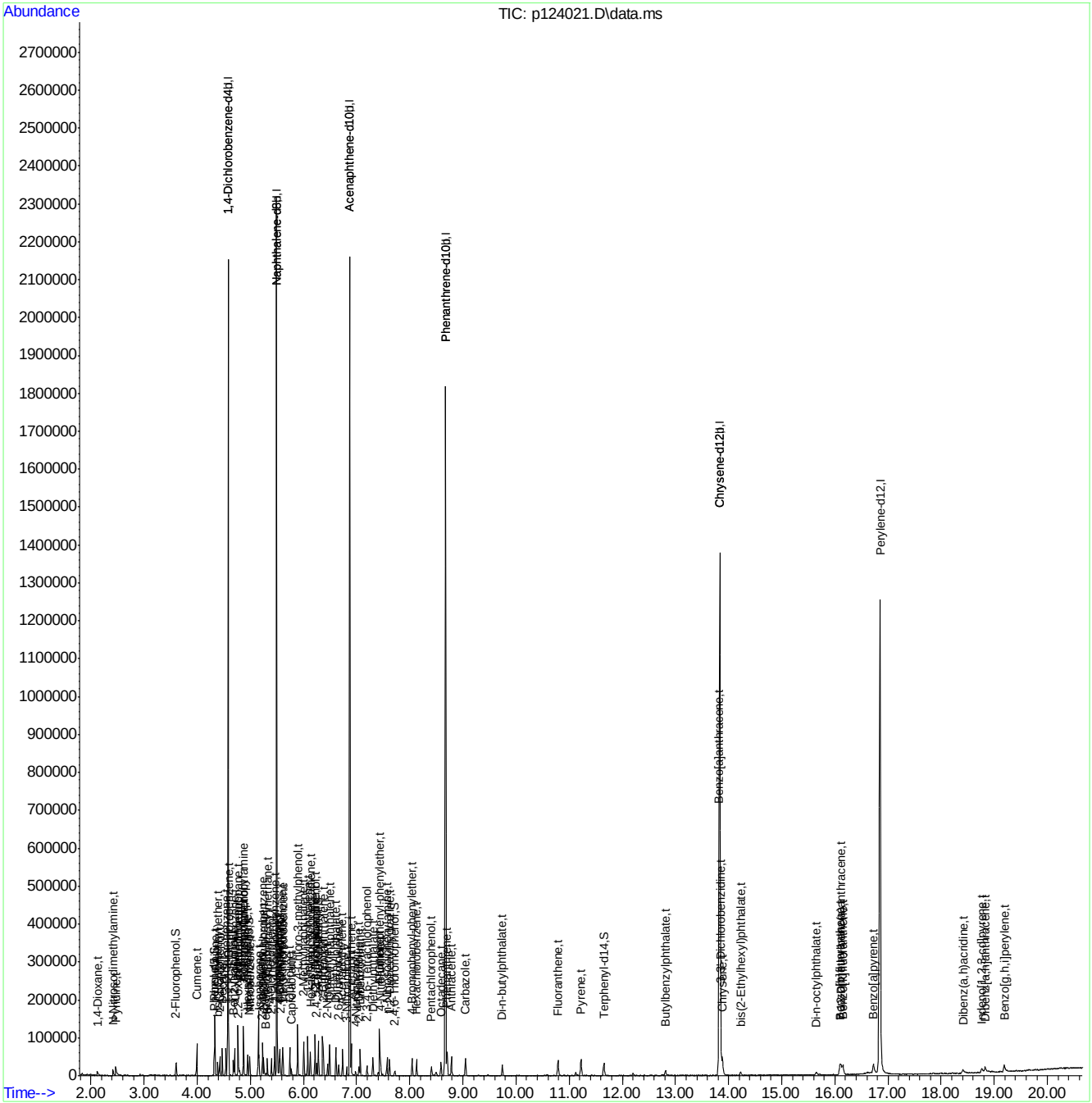
9.5.57

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124021.D
Acq On : 17 Jul 2018 1:28 pm
Operator : christc2
Sample : ic5579-1
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 18 09:28:34 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:27:55 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124022.D
Acq On : 17 Jul 2018 1:57 pm
Operator : christc2
Sample : icv5579-50
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 18 09:48:10 2018
Quant Method : C:\msdchem\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:36:44 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.581	152	175211	40.00	ppm	0.00
24) Naphthalene-d8	5.500	136	660362	40.00	ppm	0.00
47) Acenaphthene-d10	6.873	164	325277	40.00	ppm	0.00
69) Phenanthrene-d10	8.679	188	665088	40.00	ppm	0.00
83) Chrysene-d12	13.839	240	607330	40.00	ppm	0.00
91) Perylene-d12	16.852	264	638381	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.581	152	175211	40.00	ppm	-0.02
103) Phenanthrene-d10b	8.679	188	665088	40.00	ppm	-0.03
105) Chrysene-d12b	13.839	240	607330	40.00	ppm	-0.04
107) Naphthalene-d8b	5.500	136	660362	40.00	ppm	-0.02
109) Acenaphthene-d10b	6.873	164	325277	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.118	88	136385	44.75	ppm	94
3) Pyridine	2.439	79	357118	47.58	ppm	99
4) N-Nitrosodimethylamine	2.407	42	150633	45.99	ppm	96
9) Phenol	4.330	94	378311	43.43	ppm	99
10) Aniline	4.341	93	425188	45.26	ppm	96
11) bis(2-Chloroethyl)ether	4.389	93	256550	44.20	ppm	99
12) 2-Chlorophenol	4.431	128	303125	43.33	ppm	99
14) 1,3-Dichlorobenzene	4.538	146	339479	43.74	ppm	97
15) 1,4-Dichlorobenzene	4.592	146	320391	43.15	ppm	99
16) Benzyl alcohol	4.683	108	190865	49.00	ppm	97
17) 1,2-Dichlorobenzene	4.704	146	306222	42.59	ppm	98
18) Acetophenone	4.875	105	359713	42.03	ppm	99
19) 2-Methylphenol	4.768	108	256650	47.60	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.784	121	84830	48.38	ppm	98
21) 3&4-Methylphenol	4.880	108	245495	44.14	ppm	90
22) n-Nitroso-di-n-propyla...	4.875	70	160671	41.69	ppm	94
23) Hexachloroethane	4.955	201	112145	43.85	ppm	97
26) Nitrobenzene	4.998	77	270387	42.54	ppm	98
28) Isophorone	5.169	82	515313	48.30	ppm	98
29) 2-Nitrophenol	5.227	139	158197	46.67	ppm	95
30) 2,4-Dimethylphenol	5.260	107	281047	52.53	ppm	99
32) bis(2-Chloroethoxy)met...	5.318	93	316093	50.73	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124022.D
Acq On : 17 Jul 2018 1:57 pm
Operator : christc2
Sample : icv5579-50
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 18 09:48:10 2018
Quant Method : C:\msdchem\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:36:44 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 2,4-Dichlorophenol	5.398	162	235638	45.81	ppm	98
34) 2,6-Dichlorophenol	5.559	162	211658	44.12	ppm	99
36) 1,2,4-Trichlorobenzene	5.457	180	270702	43.29	ppm	100
38) Naphthalene	5.516	128	783186	43.67	ppm	100
39) 4-Chloroaniline	5.548	127	336789	44.72	ppm	94
41) Caprolactam	5.794	55	117326	47.79	ppm	95
42) Hexachlorobutadiene	5.607	225	142890	42.03	ppm	99
43) 4-Chloro-3-methylphenol	5.895	107	237856	46.23	ppm	95
44) 2-Methylnaphthalene	6.007	141	462420	43.40	ppm	99
45) 1-Methylnaphthalene	6.082	142	535280	41.57	ppm	99
48) Hexachlorocyclopentadiene	6.130	237	164009	53.14	ppm	97
49) 2,4,6-Trichlorophenol	6.221	196	167554	46.32	ppm	100
50) 2,4,5-Trichlorophenol	6.253	196	175841	44.41	ppm	98
52) 2-Chloronaphthalene	6.381	162	493821	42.98	ppm	98
53) Biphenyl	6.365	154	646824	40.90	ppm	99
54) 2-Nitroaniline	6.462	65	159482	51.35	ppm	94
55) Dimethylphthalate	6.616	163	559745	43.66	ppm	99
56) Acenaphthylene	6.739	152	775845	42.40	ppm	99
57) 2,6-Dinitrotoluene	6.670	165	131878	49.24	ppm	100
58) 3-Nitroaniline	6.825	138	157096	46.61	ppm	96
59) Acenaphthene	6.905	153	487253	41.87	ppm	96
60) 2,4-Dinitrophenol	6.921	184	64519	43.64	ppm	80
61) 4-Nitrophenol	6.985	109	79894	47.02	ppm	94
62) Dibenzofuran	7.071	168	683998	41.46	ppm	96
63) 2,4-Dinitrotoluene	7.049	165	172259	47.06	ppm	89
64) 2,3,4,6-Tetrachlorophenol	7.199	232	154960	47.20	ppm	96
65) Diethylphthalate	7.316	149	580693	44.78	ppm	99
66) Fluorene	7.439	166	548909	43.44	ppm	100
67) 4-Chlorophenyl-phenyle...	7.439	204	270017	43.55	ppm	98
68) 4-Nitroaniline	7.460	138	157071	47.07	ppm	97
70) 4,6-Dinitro-2-methylph...	7.498	198	91259	38.25	ppm	96
71) n-Nitrosodiphenylamine	7.578	169	498887	51.78	ppm	99
72) 1,2-Diphenylhydrazine	7.626	77	533384	44.69	ppm	98
74) 4-Bromophenyl-phenylether	8.048	248	174234	43.49	ppm	98
75) Hexachlorobenzene	8.134	284	192213	41.53	ppm	88
76) Pentachlorophenol	8.411	266	122430	48.56	ppm	99
77) Phenanthrene	8.716	178	861347	43.98	ppm	100
78) Anthracene	8.791	178	888958	46.19	ppm	100
79) Carbazole	9.058	167	823922	46.10	ppm	99
80) Di-n-butylphthalate	9.747	149	1028131	50.56	ppm	99
81) Fluoranthene	10.794	202	970844	46.92	ppm	100
84) Pyrene	11.232	202	957576	45.21	ppm	100
86) Butylbenzylphthalate	12.819	149	432582	51.77	ppm	99
87) Benzo[a]anthracene	13.823	228	936024	49.32	ppm	99
88) 3,3'-Dichlorobenzidine	13.866	252	320094	51.70	ppm	97
89) Chrysene	13.898	228	839643	44.11	ppm	99
90) bis(2-Ethylhexyl)phtha...	14.229	149	572518	46.49	ppm	100
92) Di-n-octylphthalate	15.661	149	942904	44.63	ppm	99
93) Benzo[b]fluoranthene	16.110	252	953645	50.12	ppm	100
94) Benzo[k]fluoranthene	16.174	252	868887	45.21	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124022.D
Acq On : 17 Jul 2018 1:57 pm
Operator : christc2
Sample : icv5579-50
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 18 09:48:10 2018
Quant Method : C:\msdchem\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:36:44 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) Benzo[a]pyrene	16.735	252	883885	52.79	ppm	99
96) Indeno[1,2,3-cd]pyrene	18.786	276	798273	46.27	ppm	99
97) Dibenz(a,h)acridine	18.514	279	745577	44.61	ppm	100
98) Dibenz[a,h]anthracene	18.845	278	820834	51.32	ppm	99
99) 7,12-Dimethylbenz(a)an...	16.136	256	418715	54.91	ppm	99
100) Benzo[g,h,i]perylene	19.208	276	880905	53.37	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

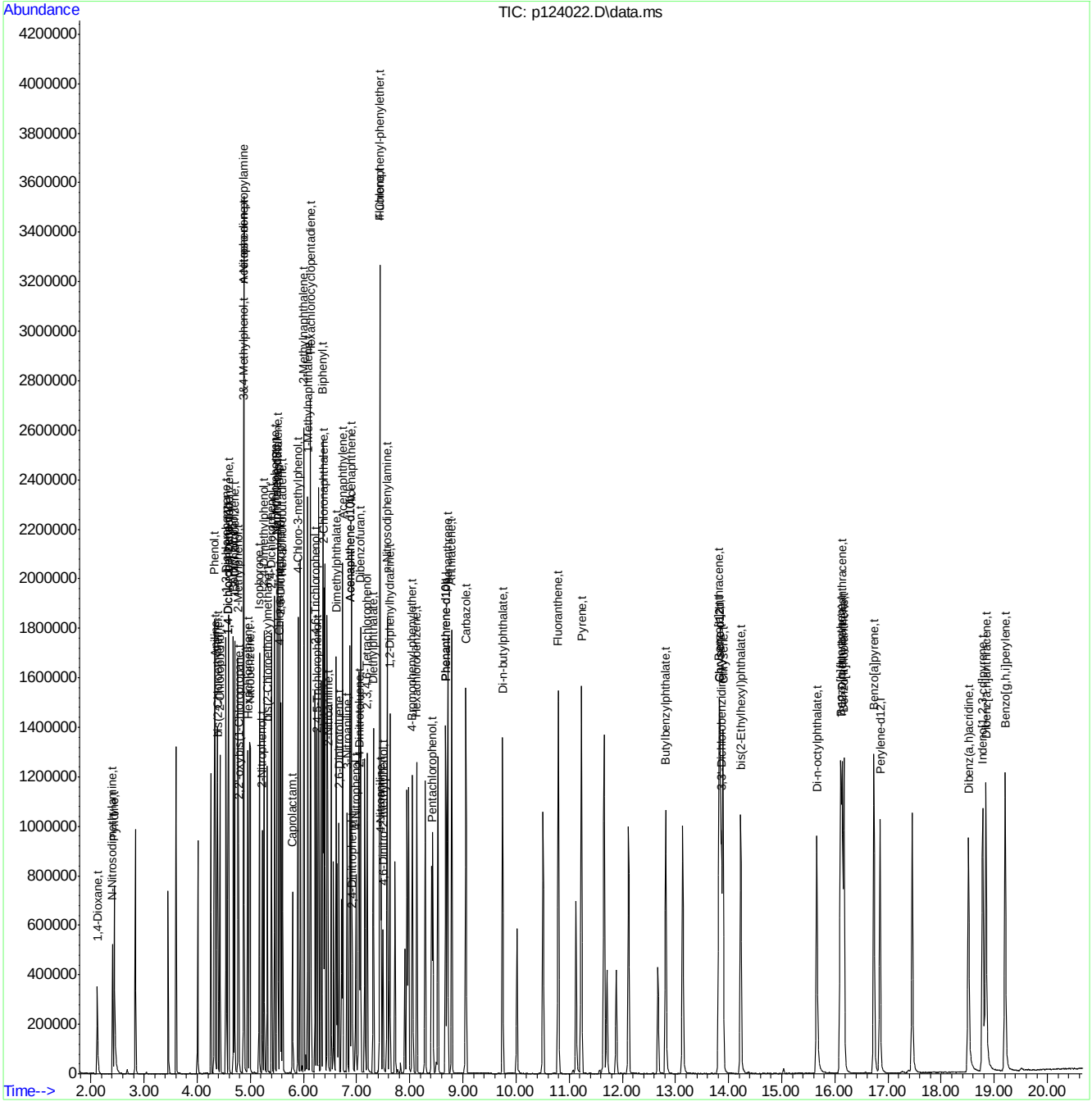
9.5.58

6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124022.D
Acq On : 17 Jul 2018 1:57 pm
Operator : christc2
Sample : icv5579-50
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 18 09:48:10 2018
Quant Method : C:\msdchem\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:36:44 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124023.D
Acq On : 17 Jul 2018 2:25 pm
Operator : christc2
Sample : icv5579-50
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 18 09:50:25 2018
Quant Method : C:\msdchem\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:36:44 2018
Response via : Initial Calibration

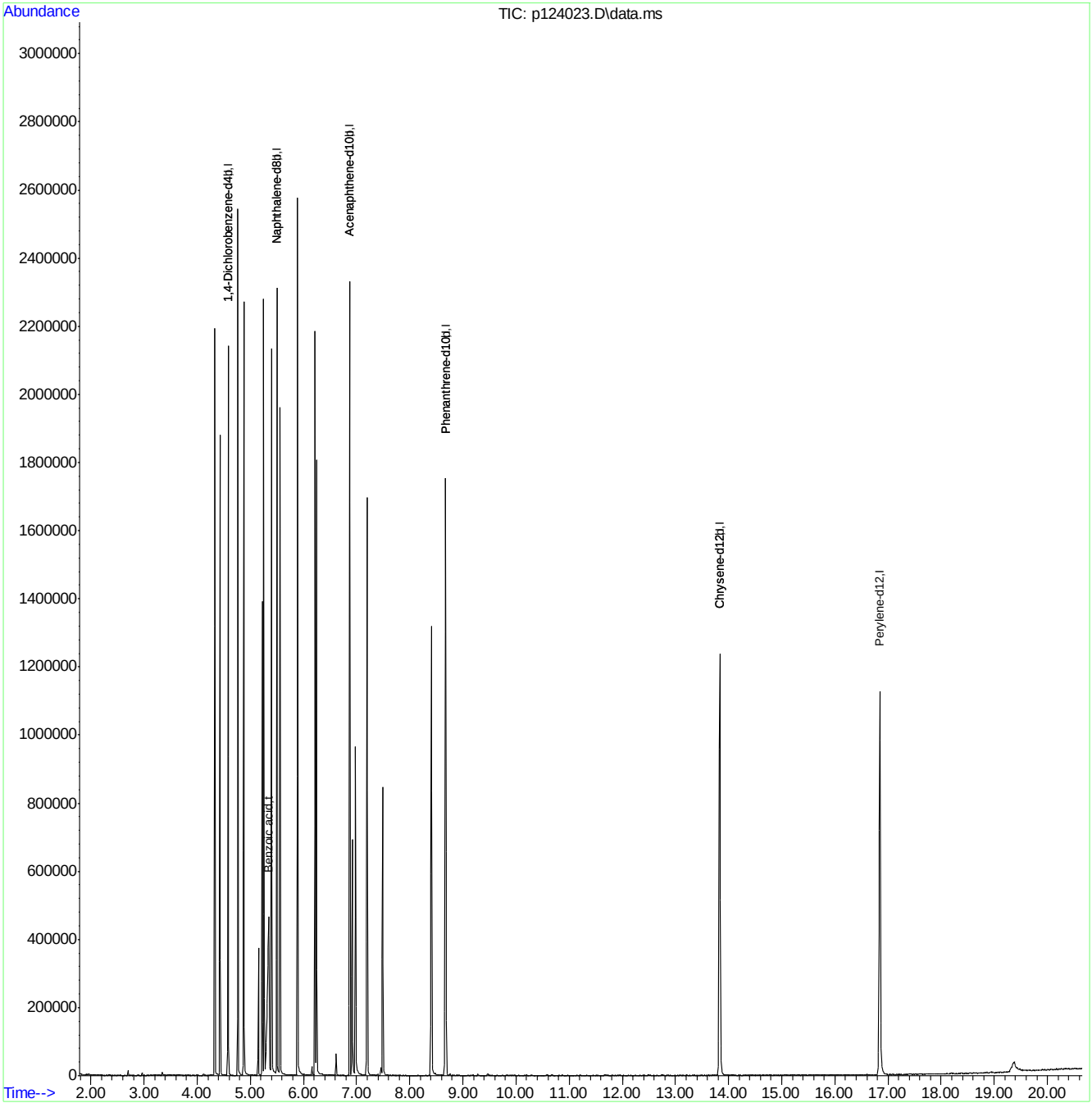
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.581	152	236644	40.00	ppm	0.00
24) Naphthalene-d8	5.500	136	828046	40.00	ppm	0.00
47) Acenaphthene-d10	6.868	164	452070	40.00	ppm	0.00
69) Phenanthrene-d10	8.673	188	804029	40.00	ppm	0.00
83) Chrysene-d12	13.834	240	729523	40.00	ppm	-0.01
91) Perylene-d12	16.847	264	683538	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4b	4.581	152	236644	40.00	ppm	-0.02
103) Phenanthrene-d10b	8.673	188	804029	40.00	ppm	-0.03
105) Chrysene-d12b	13.834	240	729523	40.00	ppm	-0.05
107) Naphthalene-d8b	5.500	136	828046	40.00	ppm	-0.02
109) Acenaphthene-d10b	6.868	164	452070	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
31) Benzoic acid	5.345	105	256000	47.79	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124023.D
Acq On : 17 Jul 2018 2:25 pm
Operator : christc2
Sample : icv5579-50
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 18 09:50:25 2018
Quant Method : C:\msdchem\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:36:44 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124024a.D
Acq On : 17 Jul 2018 3:57 pm
Operator : christc2
Sample : icv5579-50
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 18 09:51:13 2018
Quant Method : C:\msdchem\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:36:44 2018
Response via : Initial Calibration

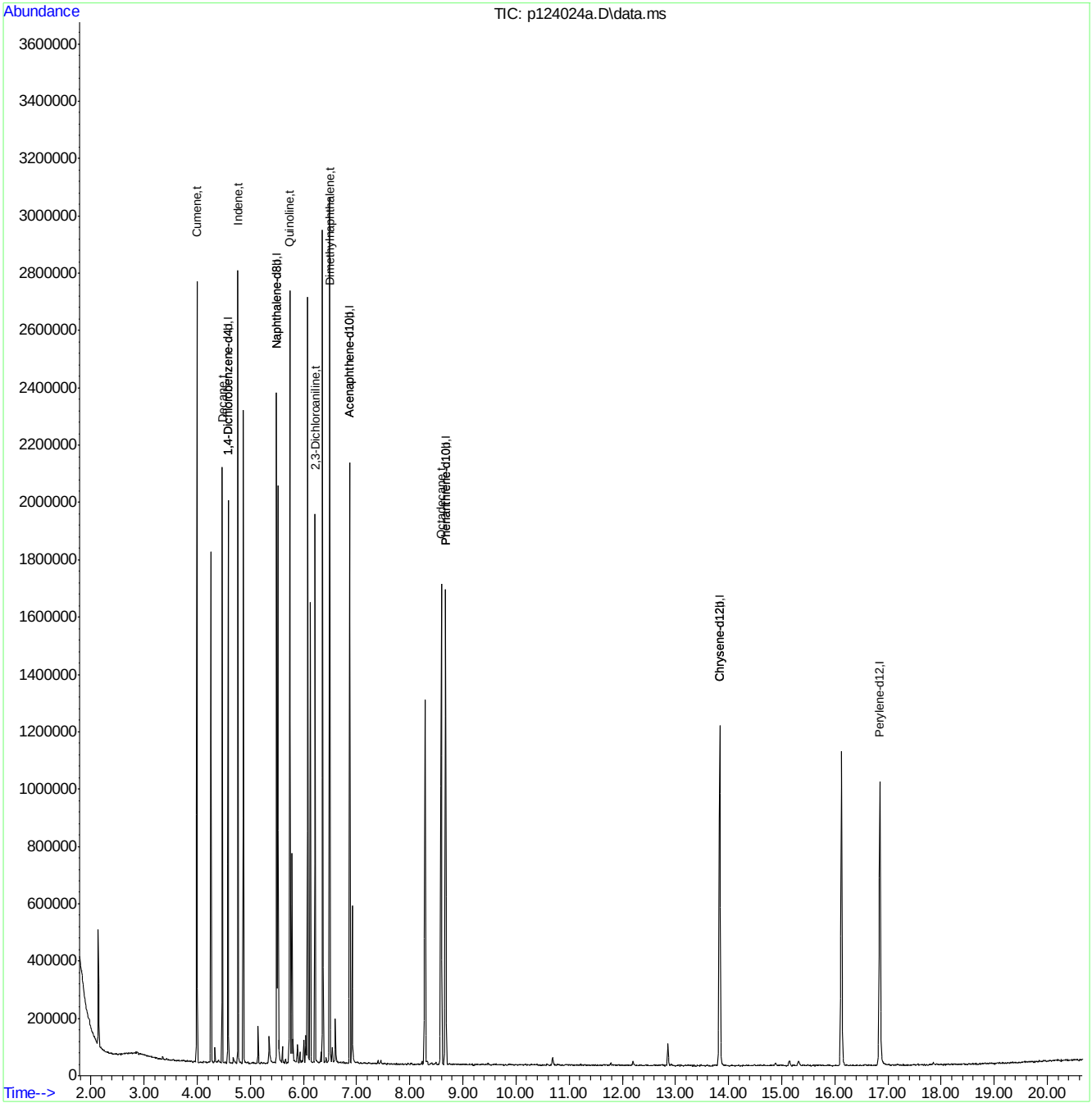
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.581	152	211391	40.00	ppm	0.00
24) Naphthalene-d8	5.495	136	833809	40.00	ppm	0.00
47) Acenaphthene-d10	6.867	164	399226	40.00	ppm	0.00
69) Phenanthrene-d10	8.673	188	762318	40.00	ppm	0.00
83) Chrysene-d12	13.834	240	702972	40.00	ppm	-0.01
91) Perylene-d12	16.847	264	664392	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4b	4.581	152	211391	40.00	ppm	-0.02
103) Phenanthrene-d10b	8.673	188	762318	40.00	ppm	-0.03
105) Chrysene-d12b	13.834	240	702972	40.00	ppm	-0.05
107) Naphthalene-d8b	5.495	136	833809	40.00	ppm	-0.02
109) Acenaphthene-d10b	6.867	164	399226	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
6) Indene	4.768	116	603933	47.65	ppm	99
7) Cumene	3.993	105	786674	38.81	ppm	98
13) Decane	4.474	43	265377	39.10	ppm	98
27) Quinoline	5.746	129	681129	42.34	ppm	98
40) 2,3-Dichloroaniline	6.216	161	315385	39.36	ppm	99
46) Dimethylnaphthalene	6.494	156	575244	41.34	ppm	99
82) Octadecane	8.593	57	405863	48.84	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5579\
Data File : p124024a.D
Acq On : 17 Jul 2018 3:57 pm
Operator : christc2
Sample : icv5579-50
Misc : op9039,ep5579,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 18 09:51:13 2018
Quant Method : C:\msdchem\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:36:44 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5580\
Data File : p124026.D
Acq On : 18 Jul 2018 10:24 am
Operator : seanb1
Sample : icv5579-50
Misc : op9039,ep5580,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 18 10:46:51 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:36:44 2018
Response via : Initial Calibration

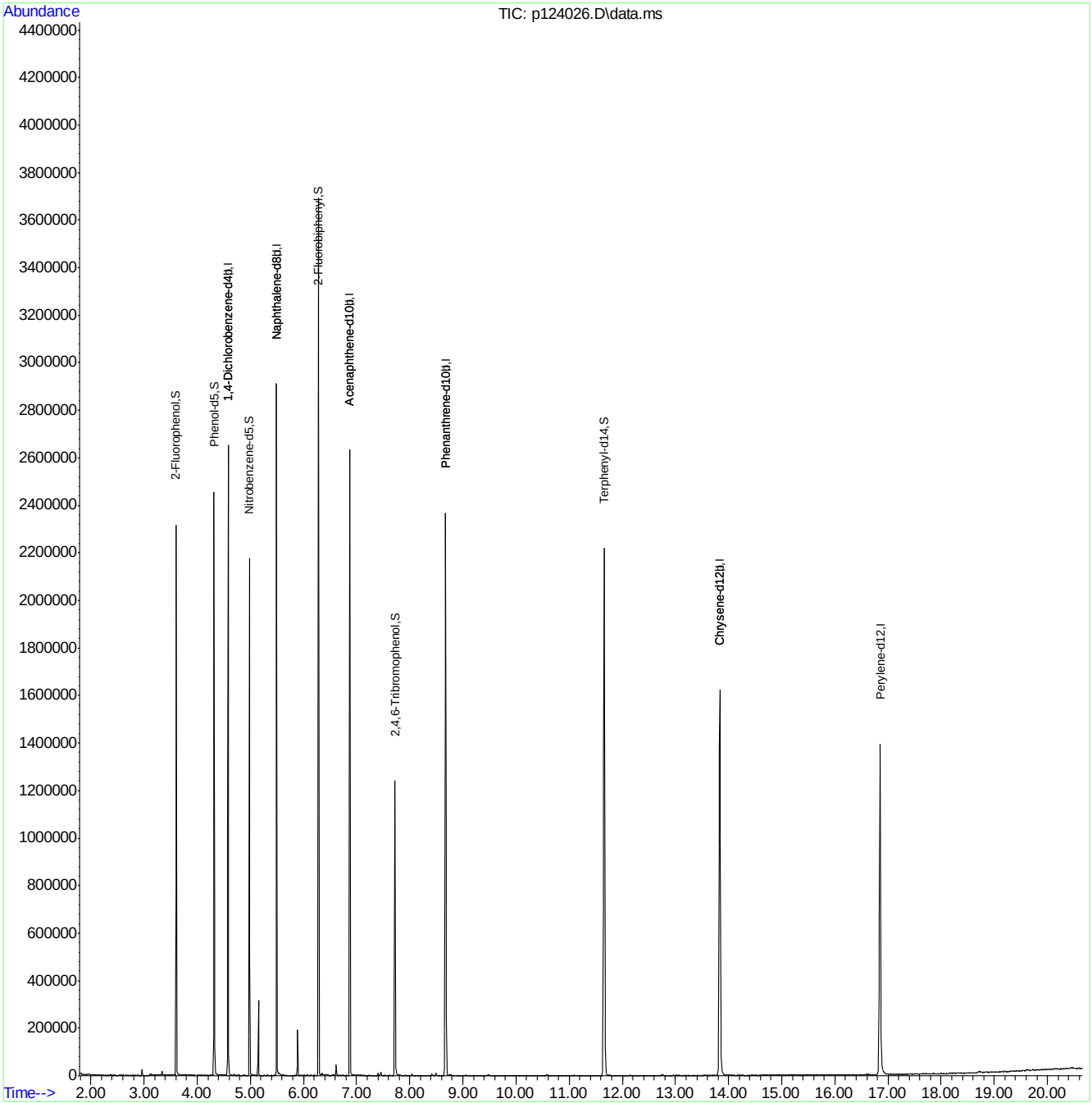
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.581	152	276945	40.00	ppm	0.00
24) Naphthalene-d8	5.495	136	1107378	40.00	ppm	0.00
47) Acenaphthene-d10	6.868	164	539990	40.00	ppm	0.00
69) Phenanthrene-d10	8.673	188	1079697	40.00	ppm	0.00
83) Chrysene-d12	13.834	240	955413	40.00	ppm	-0.01
91) Perylene-d12	16.852	264	873414	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.581	152	276945	40.00	ppm	-0.02
103) Phenanthrene-d10b	8.673	188	1079697	40.00	ppm	-0.03
105) Chrysene-d12b	13.834	240	955413	40.00	ppm	-0.05
107) Naphthalene-d8b	5.495	136	1107378	40.00	ppm	-0.02
109) Acenaphthene-d10b	6.868	164	539990	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.603	112	487169	46.42	ppm	0.00
Spiked Amount 50.000			Recovery = 92.84%			
8) Phenol-d5	4.319	99	588197	47.01	ppm	0.00
Spiked Amount 50.000			Recovery = 94.02%			
25) Nitrobenzene-d5	4.982	82	484477	44.87	ppm	0.00
Spiked Amount 50.000			Recovery = 89.74%			
51) 2-Fluorobiphenyl	6.280	172	936267	42.70	ppm	0.00
Spiked Amount 50.000			Recovery = 85.40%			
73) 2,4,6-Tribromophenol	7.722	330	154232	47.59	ppm	0.00
Spiked Amount 50.000			Recovery = 95.18%			
85) Terphenyl-d14	11.660	244	1182391	52.19	ppm	0.00
Spiked Amount 50.000			Recovery = 104.38%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EP5580\
Data File : p124026.D
Acq On : 18 Jul 2018 10:24 am
Operator : seanb1
Sample : icv5579-50
Misc : op9039,ep5580,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 18 10:46:51 2018
Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 18 09:36:44 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124720.d
Acq On : 10 Aug 2018 10:11 pm
Operator : chriss2
Sample : cc5579-50 Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 12 23:05:15 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Aug 12 23:02:14 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.367	152	202589	40.00	ppm	0.00
24) Naphthalene-d8	5.286	136	733741	40.00	ppm	0.00
47) Acenaphthene-d10	6.606	164	395385	40.00	ppm	0.00
69) Phenanthrene-d10	8.315	188	858998	40.00	ppm	0.00
83) Chrysene-d12	13.380	240	881723	40.00	ppm	0.00
91) Perylene-d12	16.382	264	979513	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.367	152	202589	40.00	ppm	0.00
103) Phenanthrene-d10b	8.315	188	858998	40.00	ppm	0.00
105) Chrysene-d12b	13.380	240	881723	40.00	ppm	0.00
107) Naphthalene-d8b	5.286	136	733741	40.00	ppm	0.00
109) Acenaphthene-d10b	6.606	164	395385	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.400	112	346897	45.19	ppm	-0.03
Spiked Amount 50.000			Recovery = 90.38%			
8) Phenol-d5	4.143	99	382501	41.79	ppm	0.03
Spiked Amount 50.000			Recovery = 83.58%			
25) Nitrobenzene-d5	4.773	82	292651	40.91	ppm	-0.01
Spiked Amount 50.000			Recovery = 81.82%			
51) 2-Fluorobiphenyl	6.055	172	706568	44.01	ppm	0.01
Spiked Amount 50.000			Recovery = 88.02%			
73) 2,4,6-Tribromophenol	7.418	330	141543	54.89	ppm	0.01
Spiked Amount 50.000			Recovery = 109.78%			
85) Terphenyl-d14	11.221	244	967803	46.29	ppm	-0.05
Spiked Amount 50.000			Recovery = 92.58%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.830	88	144110	40.89	ppm	90
3) Pyridine	2.172	79	374827	43.19	ppm	88
4) N-Nitrosodimethylamine	2.134	42	127091	33.56	ppm	92
6) Indene	4.560	116	526389	43.34	ppm	94
7) Cumene	3.769	105	797012	41.02	ppm	99
9) Phenol	4.148	94	436296	43.32	ppm	91
10) Aniline	4.132	93	431910	39.76	ppm	76
11) bis(2-Chloroethyl)ether	4.180	93	269834	40.21	ppm	90
12) 2-Chlorophenol	4.228	128	354308	43.80	ppm	95
13) Decane	4.260	43	230892	35.49	ppm	95
14) 1,3-Dichlorobenzene	4.330	146	396672	44.21	ppm	100
15) 1,4-Dichlorobenzene	4.383	146	381006	44.38	ppm	96
16) Benzyl alcohol	4.485	108	209650	46.55	ppm	89
17) 1,2-Dichlorobenzene	4.496	146	362643	43.62	ppm	98
18) Acetophenone	4.667	105	430629	43.52	ppm	77
19) 2-Methylphenol	4.581	108	276948	44.43	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.576	121	83377	41.13	ppm #	81
21) 3&4-Methylphenol	4.693	108	292485	45.48	ppm	98
22) n-Nitroso-di-n-propyla...	4.672	70	194235	43.59	ppm	97
23) Hexachloroethane	4.736	201	136930	46.31	ppm	96
26) Nitrobenzene	4.789	77	288745	40.88	ppm	94
27) Quinoline	5.548	129	689451	48.70	ppm	99
28) Isophorone	4.960	82	534921	45.12	ppm	98
29) 2-Nitrophenol	5.019	139	202336	53.72	ppm	92
30) 2,4-Dimethylphenol	5.067	107	291178	48.98	ppm	98
31) Benzoic acid	5.174	105	251706	53.02	ppm	95
32) bis(2-Chloroethoxy)met...	5.115	93	296725	42.86	ppm	97
33) 2,4-Dichlorophenol	5.201	162	298623	52.25	ppm	97
34) 2,6-Dichlorophenol	5.356	162	273384	51.29	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124720.d
Acq On : 10 Aug 2018 10:11 pm
Operator : chriss2
Sample : cc5579-50 Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 12 23:05:15 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Aug 12 23:02:14 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 1,3,5-Trichlorobenzene	5.024	180	343347	47.71	ppm		96
36) 1,2,4-Trichlorobenzene	5.249	180	322388	46.40	ppm		97
37) 1,2,3-Trichlorobenzene	5.409	180	301310	46.41	ppm		99
38) Naphthalene	5.302	128	888284	44.57	ppm		99
39) 4-Chloroaniline	5.350	127	396056	47.33	ppm		97
40) 2,3-Dichloroaniline	5.997	161	361599	51.28	ppm		96
41) Caprolactam	5.601	55	113328	41.54	ppm		95
42) Hexachlorobutadiene	5.393	225	176093	46.62	ppm		99
43) 4-Chloro-3-methylphenol	5.714	107	290012	50.73	ppm		94
44) 2-Methylnaphthalene	5.794	141	572127	48.33	ppm		96
45) 1-Methylnaphthalene	5.863	142	665232	46.49	ppm		97
46) Dimethylnaphthalene	6.253	156	595045	48.60	ppm		99
48) Hexachlorocyclopentadiene	5.906	237	372793	99.37	ppm		98
49) 2,4,6-Trichlorophenol	6.007	196	216303	49.20	ppm		98
50) 2,4,5-Trichlorophenol	6.045	196	238867	49.63	ppm		100
52) 2-Chloronaphthalene	6.146	162	597364	42.78	ppm		99
53) Biphenyl	6.130	154	821101	42.71	ppm		98
54) 2-Nitroaniline	6.232	65	163424	43.29	ppm		86
55) Dimethylphthalate	6.376	163	739165	47.43	ppm		99
56) Acenaphthylene	6.483	152	1030218	46.32	ppm		99
57) 2,6-Dinitrotoluene	6.424	165	176088	54.08	ppm		96
58) 3-Nitroaniline	6.579	138	205338	50.12	ppm		82
59) Acenaphthene	6.638	153	639692	45.23	ppm		97
60) 2,4-Dinitrophenol	6.675	184	210921	109.28	ppm	#	78
61) 4-Nitrophenol	6.766	109	88587	42.89	ppm	#	76
62) Dibenzofuran	6.798	168	912198	45.49	ppm		88
63) 2,4-Dinitrotoluene	6.793	165	227009	51.02	ppm		94
64) 2,3,4,6-Tetrachlorophenol	6.932	232	214838	53.83	ppm		89
65) Diethylphthalate	7.033	149	717945	45.55	ppm		98
66) Fluorene	7.145	166	727615	47.38	ppm		97
67) 4-Chlorophenyl-phenyle...	7.145	204	369511	49.03	ppm		89
68) 4-Nitroaniline	7.183	138	190985	47.08	ppm		86
70) 4,6-Dinitro-2-methylph...	7.215	198	153880	49.54	ppm	#	68
71) n-Nitrosodiphenylamine	7.279	169	560156	45.02	ppm		98
72) 1,2-Diphenylhydrazine	7.322	77	573599	37.21	ppm		92
74) 4-Bromophenyl-phenylether	7.717	248	250305	48.37	ppm		95
75) Hexachlorobenzene	7.802	284	280994	47.01	ppm		97
76) Pentachlorophenol	8.080	266	346662	106.45	ppm		98
77) Phenanthrene	8.353	178	1074517	42.48	ppm		99
78) Anthracene	8.427	178	1113276	44.79	ppm		99
79) Carbazole	8.695	167	1103343	47.80	ppm		99
80) Di-n-butylphthalate	9.357	149	1331034	50.68	ppm		99
81) Fluoranthene	10.372	202	1354147	50.68	ppm		98
82) Octadecane	8.240	57	349993	37.38	ppm		93
84) Pyrene	10.794	202	1351329	43.94	ppm		96
86) Butylbenzylphthalate	12.375	149	598184	49.31	ppm		90
87) Benzo[a]anthracene	13.358	228	1268824	46.05	ppm		99
88) 3,3'-Dichlorobenzidine	13.417	252	478573	53.24	ppm		97
89) Chrysene	13.438	228	1138020	41.18	ppm		99
90) bis(2-Ethylhexyl)phtha...	13.780	149	801612	44.88	ppm		98
92) Di-n-octylphthalate	15.207	149	1405054	43.39	ppm		97
93) Benzo[b]fluoranthene	15.645	252	1353107	46.35	ppm		98
94) Benzo[k]fluoranthene	15.709	252	1231611	41.77	ppm		98
95) Benzo[a]pyrene	16.270	252	1220667	47.52	ppm		99
96) Indeno[1,2,3-cd]pyrene	18.316	276	1177260	44.50	ppm		96
97) Dibenz(a,h)acridine	17.958	279	1155251	45.04	ppm		100
98) Dibenz[a,h]anthracene	18.375	278	1225422	49.93	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124720.d
Acq On : 10 Aug 2018 10:11 pm
Operator : chriss2
Sample : cc5579-50 Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 12 23:05:15 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Aug 12 23:02:14 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	7,12-Dimethylbenz(a)an...	15.666	256	594632	50.82	ppm	99
100)	Benzo[g,h,i]perylene	18.738	276	1186526	46.85	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

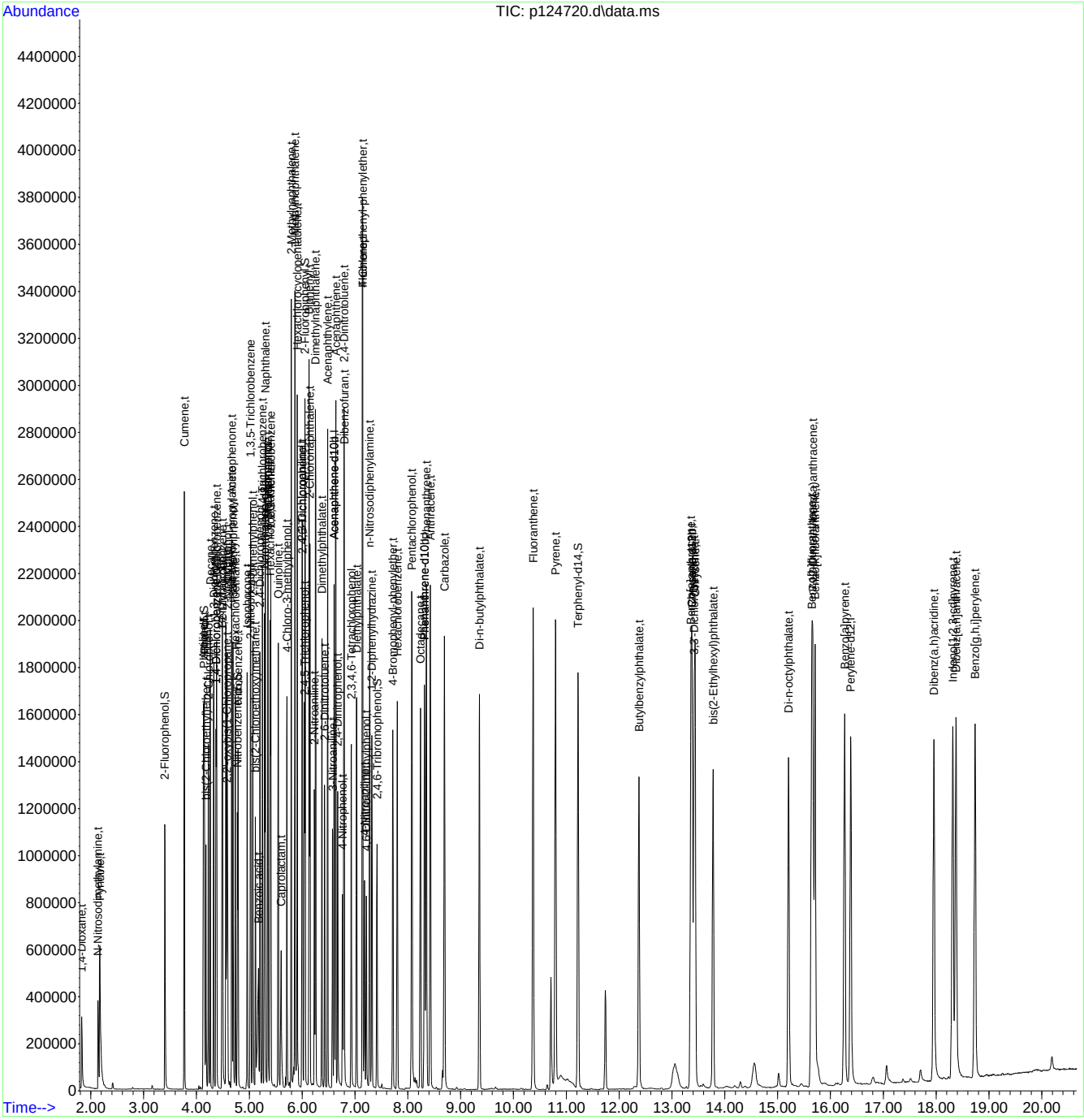
9.5.62

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124720.d
Acq On : 10 Aug 2018 10:11 pm
Operator : chriss2
Sample : cc5579-50 Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 12 23:05:15 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Aug 12 23:02:14 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124723a.d
Acq On : 10 Aug 2018 11:34 pm
Operator : chriss2
Sample : cc5553-50 Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\mp5579ap9.m
Quant Results File: mp5579ap9.RES
Quant Time: Aug 12 23:32:19 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Aug 12 23:26:03 2018
Response via : Initial Calibration

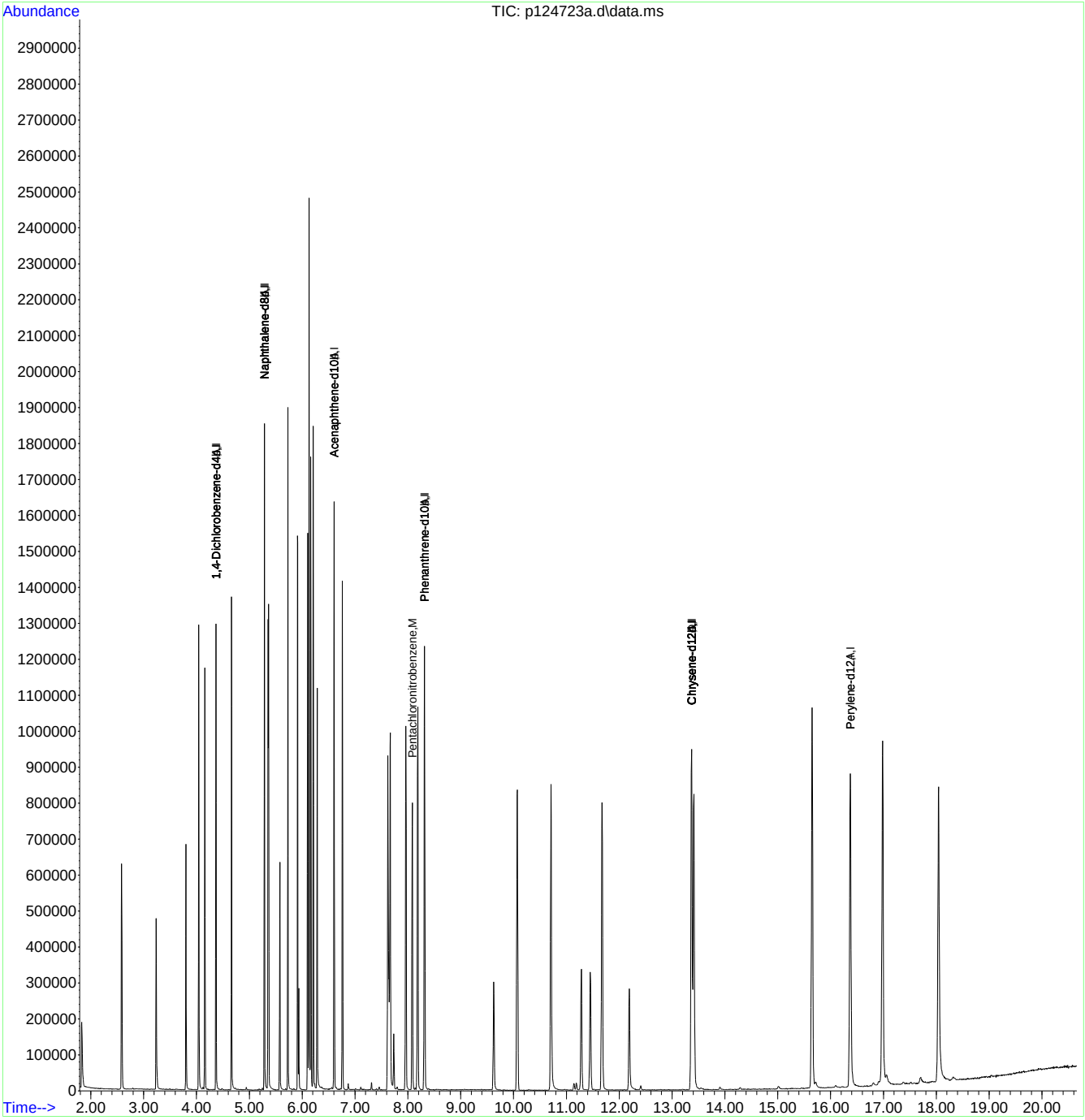
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.367	152	158138	40.00	ppm		0.00
24) Naphthalene-d8	5.286	136	609983	40.00	ppm		0.00
47) Acenaphthene-d10	6.606	164	294362	40.00	ppm		0.00
69) Phenanthrene-d10	8.315	188	576124	40.00	ppm		0.00
83) Chrysene-d12	13.369	240	580886	40.00	ppm		0.00
91) Perylene-d12	16.371	264	591504	40.00	ppm		0.00
101) 1,4-Dichlorobenzene-d4A	4.367	152	158138	40.00	ppm		0.00
111) Naphthalene-d8A	5.286	136	609983	40.00	ppm		0.00
120) Acenaphthene-d10A	6.606	164	294362	40.00	ppm		0.00
131) Phenanthrene-d10A	8.315	188	576124	40.00	ppm		0.00
146) Chrysene-d12A	13.369	240	580886	40.00	ppm		0.00
153) Perylene-d12A	16.371	264	591504	40.00	ppm		0.00
157) 1,4-Dichlorobenzene-d4b	4.367	152	158138	40.00	ppm		0.00
159) Phenanthrene-d10b	8.315	188	576124	40.00	ppm		0.00
161) Chrysene-d12b	13.369	240	580886	40.00	ppm		0.00
163) Naphthalene-d8b	5.286	136	609983	40.00	ppm		0.00
165) Acenaphthene-d10b	6.606	164	294362	40.00	ppm		0.00
167) Naphthalene-d8c	5.286	136	609983	40.00	ppm		0.00
172) 1,4-Dichlorobenzene-d4c	4.367	152	158138	40.00	ppm	#	0.00
174) Chrysene-d12c	13.369	240	580886	40.00	ppm		0.00
176) Chrysene-d12d	13.369	240	580886	40.00	ppm		0.00
178) Naphthalene-d8d	5.286	136	609983	40.00	ppm		0.00
180) Chrysene-d12D	13.369	240	580886	40.00	ppm		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	0.000	112	0	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
Target Compounds							Qvalue
141) Pentachloronitrobenzene	8.085	295	32010	54.99	ppm		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124723a.d
Acq On : 10 Aug 2018 11:34 pm
Operator : chriss2
Sample : cc5553-50 Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\mp5579ap9.m
Quant Results File: mp5579ap9.RES
Quant Time: Aug 12 23:32:19 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Aug 12 23:26:03 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124723.d
Acq On : 10 Aug 2018 11:34 pm
Operator : chriss2
Sample : cc5553-50 Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 12 23:15:41 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Aug 12 23:09:03 2018
Response via : Initial Calibration

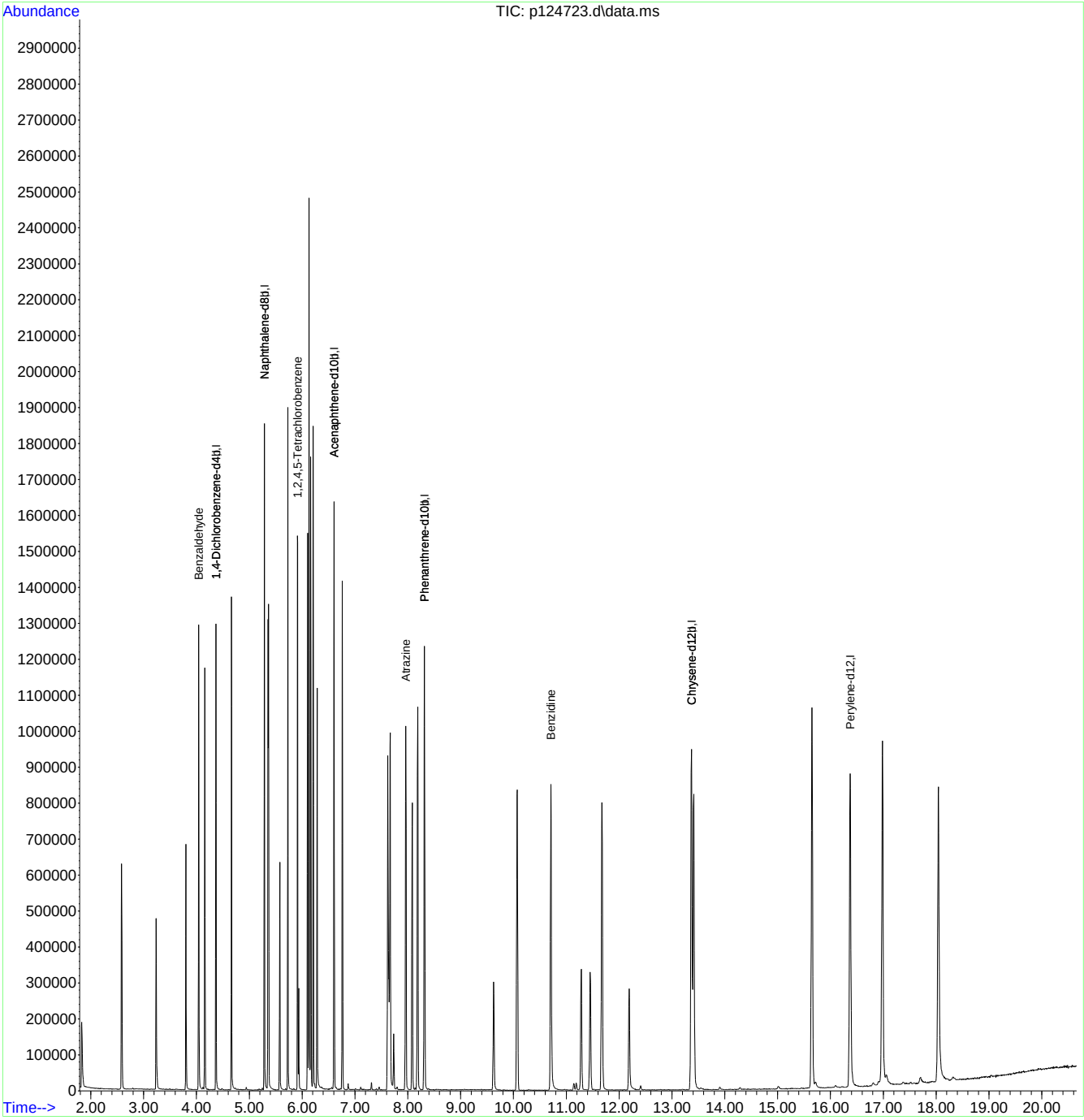
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.367	152	158138	40.00	ppm	0.00
24) Naphthalene-d8	5.286	136	609983	40.00	ppm	0.00
47) Acenaphthene-d10	6.606	164	294362	40.00	ppm	0.00
69) Phenanthrene-d10	8.315	188	576124	40.00	ppm	0.00
83) Chrysene-d12	13.369	240	580886	40.00	ppm	0.00
91) Perylene-d12	16.371	264	591504	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4b	4.367	152	158138	40.00	ppm	0.00
103) Phenanthrene-d10b	8.315	188	576124	40.00	ppm	0.00
105) Chrysene-d12b	13.369	240	580886	40.00	ppm	0.00
107) Naphthalene-d8b	5.286	136	609983	40.00	ppm	0.00
109) Acenaphthene-d10b	6.606	164	294362	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) Benzaldehyde	4.041	105	202884	40.06	ppm	95
104) Atrazine	7.963	200	157345	51.32	ppm	83
106) Benzidine	10.709	184	528936	50.91	ppm	100
110) 1,2,4,5-Tetrachloroben...	5.917	216	251532	55.07	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\ep5612\
Data File : p124723.d
Acq On : 10 Aug 2018 11:34 pm
Operator : chriss2
Sample : cc5553-50 Inst : MSVOAMSP
Misc : op13894,ep5612,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP5579.M
Quant Results File: MP5579.RES
Quant Time: Aug 12 23:15:41 2018
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Sun Aug 12 23:09:03 2018
Response via : Initial Calibration



GCMS Semi Volatile Run Log

Instrument ID: GCMS2P

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
DFTPP	sv182451-29	50ppm	ISTD	351634	4000ppm
			DCM- fisher	189589	---

Column	il MS 30m x 0.25 mm x (	Initial Calib Date	8/9/2018	Sequence Loaded By:	seanb1	Quant Method/s	M2P3595
Batch ID	E2P3595	Analysis Date	8/9/2018	Data Processed By:	seanb1	Injection Volume	1 uL
Approved By:	KRISTIS	Approved Date	15/2018 1:02:44 F				

☑ SW846 8270 D
☑ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
2P	81615	DFTPP				1					OK	2:38pm
2P	81616	IC3595-100		BNA		2					OK	SV182451-89A
2P	81617	IC3595-80				3					OK	SV182451-89B
2P	81618	ICC3595-50				4					OK	SV182451-89C
2P	81619	IC3595-25				5					OK	SV182451-89D
2P	81620	IC3595-10				6					OK	SV182451-89E
2P	81621	IC3595-5				7					OK	SV182451-89G
2P	81622	IC3595-2				8					OK	SV182451-89H
2P	81623	IC3595-1				9					OK	SV182451-89I
2P	81624	ICV3595-50		ABN Surrogate		10					RR	OP182231-09; Areas fail high

GCMS Semi Volatile Run Log

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
2P	81625	ICV3595-50		625.1		11					OK	SV182451-79B
2P	81626	ICV3595-50		Acids		12					OK	OP182158-79
2P	81627	ICV3595-50		BN2		13					RR	OP182158-77; Areas fail high; 6:58pm

GCMS Semi Volatile Run Log

Instrument ID: GCMS2P

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
DFTPP	sv182451-29	50ppm	ISTD	351634	4000ppm
			DCM- fisher	189589	---

Column	il MS 30m x 0.25 mm x (	Initial Calib Date	8/9/2018	Sequence Loaded By:	seanb1	Quant Method/s	M2P3595
Batch ID	E2P3596	Analysis Date	8/9/2018	Data Processed By:		Injection Volume	1 uL
Approved By:	KRISTIS	Approved Date	15/2018 1:04:20 F				

☑ SW846 8270 D
☑ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
2P	81628	DFTPP				1					OK	8:47pm
2P	81629	IC3596-100		TCL42		2					OK	SV182451-92A
2P	81630	IC3596-80				3					OK	SV182451-92B
2P	81631	ICC3596-50				4					OK	SV182451-92C
2P	81632	IC3596-25				5					OK	SV182451-92D
2P	81633	IC3596-10				6					OK	SV182451-92E
2P	81634	IC3596-5				7					OK	SV182451-92G
2P	81635	IC3596-2				8					OK	SV182451-92H
2P	81636	IC3596-1				9					OK	SV182451-92I
2P	81637	ICV3596-50		AP9 Mix #2		10					OK	SV172359-102

GCMS Semi Volatile Run Log

Data File		Sample ID	OP Batch ID	Test	MTX	A L S	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
2P	81638	ICV3596-50		HQ		11					OK	OP182158-42
2P	81639	ICV3596-50		BN1		12					OK	OP182158-101; 12:44am

GCMS Semi Volatile Run Log

Instrument ID: GCMS2P

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
DFTPP	sv182451-29	50ppm	ISTD	351634	4000ppm
			DCM- fisher	189589	---

Column	il MS 30m x 0.25 mm x (	Initial Calib Date	8/9/2018	Sequence Loaded By:	seanb1	Quant Method/s	M2P3595
Batch ID	E2P3597	Analysis Date	8/10/2018	Data Processed By:	seanb1	Injection Volume	1 uL
Approved By:	KRISTIS	Approved Date	15/2018 1:03:13 F				

☑ SW846 8270 D
☑ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
2P	81640	DFTPP				1					OK	3:36pm
2P	81641	ICV3595-50		BN2		2					RR	op182231-67; Areas out
2P	81642	ICV3595-50		ABN Surrogate		3					RR	op182231-84; Areas out
2P	81643	ICV3595-50		BN1		4					OK	op182158-101; 4:43pm

GCMS Semi Volatile Run Log

Instrument ID: GCMS2P

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
DFTPP	sv182451-29	50ppm	ISTD	351634	4000ppm
			DCM- fisher	189589	--

Column: Sil MS 30m x 0.25 mm x
Batch ID: ~~E5P3598~~ E2P
Approved By:
8/7/18
Initial Calib Date: 8/9/2018
Analysis Date: 8/10/2018
Approved Date:
Sequence Loaded By: seanb1
Data Processed By: seanb1
Quant Method/s: M2P3595
Injection Volume: 1 uL
☐ SW846 8270 D
☐ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
2P	81644	DFTPP				1					NO	441 high; re-inject
2P	81645	DFTPP				1					OK	5:22pm
2P	81646	ICV3595-50		ABN Surrogate		2					OK	OP182231-84
2P	81647	ICV3595-50		BN2		3					OK	OP182231-67; 5:55pm

GCMS Semi Volatile Run Log

Instrument ID: GCMS2P

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
DFTPP	sv182451-29	50ppm	ISTD	EN180125008	4000ppm
BNA	sv182451-91c	50ppm	DCM- fisher	185095	---
TCL42	sv182451-85c	50ppm			

Column	il MS 30m x 0.25 mm x (	Initial Calib Date	8/9/2018	Sequence Loaded By:	Angela	Quant Method/s	M2P3595
Batch ID	E2P3603	Analysis Date	8/15/2018	Data Processed By:	Dipap	Injection Volume	1 uL
Approved By:	NINAP	Approved Date	16/2018 4:34:52 F				

☐ SW846 8270 D

☐ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
2P	81772	DFTPP				1					ok	8:50am
2P	81773	CC3595-50		bna		2					ok	5,7,29,31,48,60,61,64,86,92 high
2P	81774	CC3596-50		tcl42		3					ok	104,109,113 high
	81775	OP14037-MB	OP14037	AB8270SL3,BMS+MNAP	AQ	4		X			not run	sequence cut
	81776	OP14037-BS	OP14037	AB8270SL3,BMS+MNAP	AQ	5		X			not run	sequence cut
2P	81777	OP14152-MB1	OP14152	AB8270TCL20+,B8270PAH	SO	4		X	x	x	ok	
	81778	OP14177-MB	OP14177		AQ	5		X	x	x	ok	
	81779	OP14057-MB	OP14057		SO	6		X		2,3 high	not using	rerun for internal
2P	81780	JC71584-3	OP14177	AB8270TCL20	AQ	7			y	y	ok	
	81781	OP14177-BS	OP14177		AQ	8		X	y	y	ok	ran after 2p81778

GCMS Semi Volatile Run Log

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
2P	81782	OP14177-BSD	OP14177		AQ	9		X	y	y	ok	ran after 2p81778
	81783	JC71575-6	OP14177	AB8270RCP-PAH	AQ	10			y	y	ok	
	81784	JC71575-7	OP14177	AB8270RCP-PAH	AQ	11			y	y	ok	
	81785	JC71575-8	OP14177	AB8270RCP-PAH	AQ	12			y	3rd high	ok	rerun for internal
	81786	JC71575-9	OP14177	AB8270RCP-PAH	AQ	13			y	y	ok	
2P	81787	JC71604-1	OP14177	AB8270STD	AQ	14			y	y	ok	ran after 2p81794
	81788	JC71518-12	OP14161		SO	15	50	X			not run	cut from sequence, moved to F-core
2P	81789	JC71501-10	OP14152	AB8270TCL20+	SO	16	5	X	y	y	ok	
2P	81790	JC71518-5	OP14161	B8270BAPYRN,BMS+NAP	SO	17	20	X			not run	cut from sequence, moved to F-core
	81791	JC71518-15	OP14161	B8270BAPYRN,BMS+NAP	SO	18	10	X			not run	cut from sequence, moved to F-core
	81792	JC71518-2	OP14161	B8270BAPYRN,BMS+BANTH,BMS+I123PYR,BMS+NAP	SO	19	10	X			not run	cut from sequence, moved to F-core
2P	81793	JC71239-3	OP14057	B8270PAH	SO	20	5		x	x	not needed	see p-core data
2P	81794	JC70240-1R	OP13687A	B8270EPHNAP+2MNAP	SO	21	5	X	high	x	cfs	
	81795	OP14057-MB	OP14057		SO	6		X	x	high	not needed	ran after 2p81786 see p-core data
2P	81796	JC71575-8	OP14177	AB8270RCP-PAH	AQ	12				1-5 high	not using	rerun bad injection
	81797	JC71575-8	OP14177	AB8270RCP-PAH	AQ	12			y	y	ok	4:23pm

GCMS Semi Volatile Run Log

Instrument ID: GCMSP

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
dftpp	sv182451-29	50ppm	int std	A0136190	4000ppm
			dcm-fisher	183545	---

Column	5silms30mx0.25mmx0.25	Initial Calib Date	6-20-18	Sequence Loaded By:	chriss2	Quant Method/s	MP5552
Batch ID	EP5553	Analysis Date	6/20/2018	Data Processed By:	seanb1	Injection Volume	1.0ul
Approved By:		Approved Date					

☐ SW846 8270 D

☐ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
P	123743	DFTPP				1					OK	8:53pm
P	123744	IC5553-100		TCL42		2					OK	sv182451-31a
P	123745	IC5553-80				3					OK	sv182451-31b
P	123746	ICC5553-50				4					OK	sv182451-31c
P	123747	IC5553-25				5					OK	sv182451-31d
P	123748	IC5553-10				6					OK	sv182451-31e
P	123749	IC5553-5				7					OK	sv182451-31g
P	123750	IC5553-2				8					OK	sv182451-31h
P	123751	IC5553-1				9					OK	sv182451-31i
P	123752	ICV5553-50		AP9 MIX #2		10					OK	sv172359-102

GCMS Semi Volatile Run Log

Data File		Sample ID	OP Batch ID	Test	MTX	A L S	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
P	123753	ICV5553-50		Bzd 3rd		11					OK	sv172359-37
P	123754	ICV5553-50		HQ 2nd		12					OK	op18215842; 2:19am

GCMS Semi Volatile Run Log

Instrument ID: GCMSP

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
dftpp	sv182451-29	50ppm	int std	A0136190	4000ppm
			dcm-fisher	183545	---

Column	5silms30mx0.25mmx0.25	Initial Calib Date	6-20-18	Sequence Loaded By:	chriss2	Quant Method/s	MP5552
Batch ID	EP5554	Analysis Date	6/21/2018	Data Processed By:	seanb1	Injection Volume	1.0ul
Approved By:		Approved Date					

☐ SW846 8270 D

☐ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	A L S	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
P	123755	DFTPP				1					OK	2:42am
P	123756	IC5554-100		AP9		13					OK	sv182451-32a
P	123757	IC5554-80				14					OK	sv182451-32b
P	123758	ICC5554-50				15					OK	sv182451-32c
P	123759	IC5554-25				16					OK	sv182451-32d
P	123760	IC5554-10				17					OK	sv182451-32e
P	123761	IC5554-5				18					OK	sv182451-32g
P	123762	IC5554-2				19					OK	sv182451-32h
P	123763	IC5554-1				20					OK	sv182451-32i
P	123764	ICV5554-50		AP9 mix #2		10					RR	sv172359-102; Injected 100ppm point instead

GCMS Semi Volatile Run Log

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
P	123765	ICV5554-50		AP9 mix #1		21					OK	sv172359-109
P	123766	ICV5554-50		dinoseb 2nd		22					OK	sv182451-21b
P	123767	ICV5554-50		organophos. Mix		23					OK	sv172359-85
P	123768	ICV5554-50		Megamix		24					OK	sv182451-20
P	123769	ICV5554-50		AP9 Mix #2		10					OK	sv172359-102; 12:35pm

GCMS Semi Volatile Run Log

Instrument ID: GCMSP

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
dftpp	sv182451-29	50ppm	int std	A0136190	4000ppm
625.1	sv182451-48a	50ppm	dcm-fisher	183545	---

Column	5silms30mx0.25mmx0.25	Initial Calib Date	6-20-18	Sequence Loaded By:	christc2	Quant Method/s	MP5579
Batch ID	EP5579	Analysis Date	7/17/2018	Data Processed By:	seanb1	Injection Volume	1.0ul
Approved By:		Approved Date					

☐ SW846 8270 D

☐ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
P	124012	DFTPP				1					OK	8:48am
P	124013	CC5552-50		625.1		2					NO	Recalibrate
P	124014	IC5579-100		bna		3					OK	sv182451-44a
P	124015	IC5579-80				4					OK	sv182451-44b
P	124016	ICC5579-50				5					OK	sv182451-44c
P	124017	IC5579-25				6					OK	sv182451-44d
P	124018	IC5579-10				7					OK	sv182451-44e
P	124019	IC5579-5				8					OK	sv182451-44g
P	124020	IC5579-2				9					OK	sv182451-44h
P	124021	IC5579-1				10					OK	sv182451-44i

GCMS Semi Volatile Run Log

Data File		Sample ID	OP Batch ID	Test	MTX	A L S	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
P	124022	ICV5579-50		625.1		11					OK	sv182451-33c
P	124023	ICV5579-50		acids		12					OK	op18215879
P	124024	ICV5579-50		bn2		13					OK	op182158-78; 3:57pm

GCMS Semi Volatile Run Log

Instrument ID: GCMSP

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
dftpp	sv182451-29	50ppm	int std	A0136190	4000ppm
625.1	sv182451-48B	25ppm	dcm-fisher	183545	---
BNA	sv182451-71E	1ppm			

Column	5silms30mx0.25mmx0.25	Initial Calib Date	6-20-18	Sequence Loaded By:	seanb1	Quant Method/s	MP5579
Batch ID	EP5580	Analysis Date	7/18/2018	Data Processed By:	Seanb1	Injection Volume	1.0ul
Approved By:	NINAP	Approved Date	5/2018 12:07:05 I				

☐ SW846 8270 D

☐ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
P	124025	DFTPP				1					OK	10:10am
P	124026	ICV5579-50		ABN Surr		2					OK	op182231-09
P	124027	CC5579-25		625.1		3					NO	#70 low
P	124028	CC5554-25		AP9		4					NO	
P	124029	CC5555-25		AP9SL		5					NO	
P	124030	CC5556-25		TOLIDINE		6					NO	Not using; checks fail.

GCMS Semi Volatile Run Log

Instrument ID: GCMSP

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
dftpp	sv182451-29	50ppm	int std	A0136190	4000ppm
bna	sv182451-91c	50ppm	dcm-fisher	184589	---
tcl42	sv182451-85b	50ppm			
tcl42 verif	sv182451-71h	2ppm			

Column	5silms30mx0.25mmx0.25	Initial Calib Date	6-20-18	Sequence Loaded By:	chriss2	Quant Method/s	MP5579
Batch ID	EP5612	Analysis Date	8/10/2018	Data Processed By:	JERYLLR	Injection Volume	1.0ul
Approved By:	KRISTIS	Approved Date	5/2018 10:12:12 A				

☑ SW846 8270 D
☐ EPA 625

	Data File	Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
P	124719	DFTPP				1					OK	9:59pm
P	124720	CC5579-50				2					OK	LOW: 4,10,13,72,82
P	124721	CC5553-50				3					N	needs bzd, try newer lot#
P	124722	TCL42 VERIF-2PPM				4					N	rerun after p124723
P	124723	CC5553-50				5					OK	LOW: 108,141
P	124724	TCL42 VERIF-2PPM				6					OK	
P	124725	OP14177-MB	OP14177		AQ	7		X	Y	Y	OK	HIT: ACETOPHENONE; BIS (2-ETHYLHEXYL) PHTHALATE
P	124726	OP14177-BS	OP14177		AQ	8		X	Y	Y	OK	
	124727	OP14177-BSD	OP14177		AQ	9		X	Y	Y	OK	
	124728	JC71575-6	OP14177	AB8270RCP-PAH	AQ	10			Y	Y	RR	RR:no verification for aniline

GCMS Semi Volatile Run Log

	Data File	Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
	124729	JC71575-7	OP14177	AB8270RCP-PAH	AQ	11			Y	Y	RR	RR:no verification for aniline
	124730	JC71575-8	OP14177	AB8270RCP-PAH	AQ	12			Y	Y	RR	RR:no verification for aniline
	124731	JC71575-9	OP14177	AB8270RCP-PAH	AQ	13			Y	Y	RR	RR:no verification for aniline
P	124732	JC71584-1	OP14177	AB8270TCL20	AQ	14			Y	Y	RX	RX: MB HIT
P	124733	JC71584-3	OP14177	AB8270TCL20	AQ	15			Y	N	RR	CORR: ISTD OUT
P	124734	JC71597-9	OP14177	B8270PAH	AQ	16			Y	Y	OK	
	124735	JC71600-1	OP14177	B8270NJTCL20+	AQ	17		X	Y	Y	RX	RX: MB HIT
	124736	JC71600-2	OP14177	B8270NJTCL20+	AQ	18		X	Y	Y	OK	
	124737	JC71600-3	OP14177	B8270NJTCL20+	AQ	19		X	Y	Y	OK	
	124738	JC71600-4	OP14177	B8270NJTCL20+	AQ	20		X	Y	Y	OK	
	124739	JC71600-5	OP14177	B8270NJTCL20+	AQ	21		X	Y	Y	OK	
P	124740	JC71604-1	OP14177	AB8270STD	AQ	22			Y	Y	OK	07:23AM

Acid Base/Neutrals Extraction Log - Aqueous (MS)

Date Started: 8/10/2018 Time Started: 06:40

Date Finished: 8/10/18 Time Finished: 2:30 PM

Batch # OP14177	Rack # Orange (R-46)
Set-up by:	LT, SA(W), BOJ
Extracted By:	SA(W), BOJ
Concentrated By:	LT, SA(W)
Final Vol. Top-up:	BOJ
Vialed By:	BOJ
Supervisor Review:	8/10/18

Extraction Method:

Seperatory Funnel: SW846 3510C/CLP/other ☑ 3510C SIM ☐

Continuous Liquid Liquid: SW846 3520C/CLP/other ☐ EPA 625 ☐

Special Client Spike Instructions

QC ID # for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt Spiked

Sample #	Analysis Type	Samp Bot #	Sample Description	Sample Vol (mL)	Res. Chlorine (+/-, 0.1 mg/L)	pH Adjust (mL) <2 H2SO4	pH Adjust (mL) >11 NaOH	Final extract Color	Final extract Vol (ml)	Misc. Cleanup	Misc. Comments
OP14155-MB	ABN		DIH2O	1000		1.0	4.0	Clear	1.0		
OP14155-BS			DIH2O	1000		1.0	4.0	Yellow	1.0		
OP14155-BSD			DIH2O	1000		1.0	4.0	Yellow	1.0		

Acid Base/Neutrals Extraction Log - Aqueous (MS)

Sample #	Analysis Type	Samp Bot #	Sample Description	Sample Vol (mL)	Res. Chlorine (+ or -)	pH Adjust (mL) <2 H2SO4	pH Adjust (mL) >11 NaOH	Final extract Color	Final extract Vol (ml)	Misc. Cleanup	Misc. Comments
OP14155A-BS1			DIH2O	1000		1.0	4.0	Lt. Yellow	1.0		
OP14155A-BSD			DIH2O	1000		1.0	4.0	Lt. Yellow	1.0		
JC71518-9		4	CLEAR	1000		1.0	4.0	Clear	1.0		
JC71543-1		1	CLEAR	1000		1.0	4.0	Clear	1.0		
JC71543-2		1	LT YELLOW	1000		1.0	4.0	Clear	1.0		
JC71543-3		2	LT YELLOW	1000		1.0	4.0	Clear	1.0		
JC71543-4		2	CLEAR	1000		1.0	4.0	Clear	1.0		
JC71565-1		2	CLEAR	1000		1.0	4.0	Lt. Yellow	1.0		
JC71565-2		1	YELLOW	1000		1.0	4.0	Clear	1.0		
JC71565-3		2	LT YELLOW	1000		1.0	4.0	Clear	1.0		

Acid Base/Neutrals Extraction Log - Aqueous (MS)

Sample #	Analysis Type	Samp Bot #	Sample Description	Sample Vol (mL)	Res. Chlorine (+ or -)	pH Adjust (mL) <2 H2SO4	pH Adjust (mL) >11 NaOH	Final extract Color	Final extract Vol (ml)	Misc. Cleanup	Misc. Comments
JC71565-4		1	CLEAR	1000		1.0	4.0	Clear	1.0		
JC71565-5		1	YELLOW	1000		1.0	4.0	Lt. Yellow	1.0		
JC71565-6		1	CLEAR	1000		1.0	4.0	Clear	1.0		
JC71565-7		1	YELLOW	1000		1.0	4.0	Lt. Yellow	1.0		
JC71565-8		2	LT YELLOW	1000		1.0	4.0	Clear	1.0		
JC71565-9		1	LT YELLOW	1000		1.0	4.0	Clear	1.0		
JC71565-10		2	LT YELLOW	1000		1.0	4.0	Lt. Yellow	1.0		
JC71568-1		1	YELLOW	1000		1.0	4.0	Clear	1.0		
JC71568-2		1	YELLOW	1000		1.0	4.0	Clear	1.0		
JC71568-3		1	YELLOW	1000		1.0	4.0	Clear	1.0		

Acid Base/Neutrals Extraction Log - Aqueous (MS)

Sample #	Analysis Type	Samp Bot #	Sample Description	Sample Vol (mL)	Res. Chlorine (+, or -)	pH Adjust (mL)		Final extract		Misc.	
						<2 H2SO4	>11 NaOH	Color	Vol (ml)	Cleanup	Comments
JC71568-4		1	GOLD	1000		1.0	4.0	Clear	1.0		

Acid Base/Neutrals Extraction Log - Aqueous (MS)

Equipment/Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	5,6	71.9,66	4,1	75.9, 67	-
Waterbath Chiller (GPM)	F3	35.7	-	-	2
NEVAP (32-38°C, LPM)	4	35.7	-	--	10

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	OP18223163	50	1.0
ABN DOD SIM			
WITNESS SIGN:	SA(W)	SPIKE SIGN:	BOJ
Reagent	**LOT #**		**Brand**
NaOH	184437		Fisher
H2SO4	2806558		Ricca
Sodium Sulfate	178434	8-3-18A	Fisher
Glass Wool	04T04		Lab
Filter Paper			
pH Strips	215316		Hydrion
Chlorine Strips			
MATRIX SPIKE	**LOT #**	**CONC (ppm)**	**AMT (mL)**
Acid	OP18223112	50	1.0
Acid (for SIM)	OP18223112	50	0.1
Base #1	OP182158174	50	1
Base #2	OP18223167	50	1
Aniline	OP18223160	50	1
BSIM	OP18223140	1	1
WITNESS SIGN:	SA(W)	SPIKE SIGN:	BOJ
SOLVENT	**LOT #**	**Brand**	**AMT (mL)**
METH CHLOR	85094	Fisher	60x6

Special Processing Instructions

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Batch Comments:

Acid Base/Neutrals Extraction Log - Aqueous (MS)

Approved By: _____ Approval Date: _____

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14250-MB	XX233810.D	1	08/15/18	SK	08/14/18	OP14250	GXX6439

The QC reported here applies to the following samples: **Method:** SW846 8082A

JC71604-1

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.098	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.21	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.063	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.21	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.076	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	0.087	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	0.097	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	130%	11-166%
877-09-8	Tetrachloro-m-xylene	122%	11-166%
2051-24-3	Decachlorobiphenyl	61%	10-150%
2051-24-3	Decachlorobiphenyl	62%	10-150%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14250-BS	XX233811.D	1	08/15/18	SK	08/14/18	OP14250	GXX6439
OP14250-BSD	XX233812.D	1	08/15/18	SK	08/14/18	OP14250	GXX6439

The QC reported here applies to the following samples: **Method:** SW846 8082A

JC71604-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	2	2.8	140	2.9	145	4	37-164/43
11104-28-2	Aroclor 1221		ND		ND		nc	70-130/20
11141-16-5	Aroclor 1232		ND		ND		nc	70-130/20
53469-21-9	Aroclor 1242		ND		ND		nc	70-130/20
12672-29-6	Aroclor 1248		ND		ND		nc	70-130/20
11097-69-1	Aroclor 1254		ND		ND		nc	70-130/20
11096-82-5	Aroclor 1260	2	2.8	140	2.9	145	4	36-155/46
11100-14-4	Aroclor 1268		ND		ND		nc	-/20
37324-23-5	Aroclor 1262		ND		ND		nc	-/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	105%	110%	11-166%
877-09-8	Tetrachloro-m-xylene	101%	105%	11-166%
2051-24-3	Decachlorobiphenyl	76%	80%	10-150%
2051-24-3	Decachlorobiphenyl	77%	80%	10-150%

* = Outside of Control Limits.

GC Identification Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Check Std:	GXX6439-CC6423	**Injection Date:**	08/15/18
Lab File ID:	XX233808.D	**Injection Time:**	03:54
Instrument ID:	GCXX	**Method:**	SW846 8082A

Sample ID:	OP14250-BS	**Injection Date:**	08/15/18
Lab File ID:	XX233811.D	**Injection Time:**	04:49
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1			3.0		ug/l	6.9
Aroclor 1016	2 [a]			2.8		ug/l	
AR1016-A	1	3.84	3.84	3.3		ug/l	
AR1016-A	2	4.85	4.85	2.8		ug/l	
AR1016-B	1	4.28	4.28	2.8		ug/l	
AR1016-B	2	5.43	5.43	3.0		ug/l	
AR1016-C	1	4.87	4.87	2.9		ug/l	
AR1016-C	2	6.09	6.09	2.8		ug/l	
AR1016-D	1	5.05	5.05	2.9		ug/l	
AR1016-D	2	6.29	6.29	2.8		ug/l	
AR1016-E	1	5.59	5.59	2.9		ug/l	
AR1016-E	2	6.97	6.97	2.6		ug/l	
Aroclor 1260	1			2.9		ug/l	3.5
Aroclor 1260	2 [a]			2.8		ug/l	
AR1260-A	1	8.03	8.03	2.6		ug/l	
AR1260-A	2	8.80	8.80	2.6		ug/l	
AR1260-B	1	8.19	8.20	3.0		ug/l	
AR1260-B	2	9.74	9.74	2.9		ug/l	
AR1260-C	1	8.54	8.54	3.0		ug/l	
AR1260-C	2	10.19	10.19	2.8		ug/l	
AR1260-D	1	8.98	8.98	3.0		ug/l	
AR1260-D	2	10.53	10.53	2.9		ug/l	
AR1260-E	1	9.38	9.38	2.9		ug/l	
AR1260-E	2	11.08	11.08	2.7		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Check Std:	GXX6439-CC6423	**Injection Date:**	08/15/18
Lab File ID:	XX233808.D	**Injection Time:**	03:54
Instrument ID:	GCXX	**Method:**	SW846 8082A

Sample ID:	OP14250-BSD	**Injection Date:**	08/15/18
Lab File ID:	XX233812.D	**Injection Time:**	05:08
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1			3.0		ug/l	3.4
Aroclor 1016	2 [a]			2.9		ug/l	
AR1016-A	1	3.84	3.84	3.3		ug/l	
AR1016-A	2	4.84	4.85	2.9		ug/l	
AR1016-B	1	4.27	4.28	2.8		ug/l	
AR1016-B	2	5.43	5.43	3.1		ug/l	
AR1016-C	1	4.87	4.87	3.0		ug/l	
AR1016-C	2	6.09	6.09	2.8		ug/l	
AR1016-D	1	5.05	5.05	3.0		ug/l	
AR1016-D	2	6.29	6.29	2.9		ug/l	
AR1016-E	1	5.59	5.59	3.0		ug/l	
AR1016-E	2	6.97	6.97	2.7		ug/l	
Aroclor 1260	1			3.0		ug/l	3.4
Aroclor 1260	2 [a]			2.9		ug/l	
AR1260-A	1	8.03	8.03	2.7		ug/l	
AR1260-A	2	8.80	8.80	2.7		ug/l	
AR1260-B	1	8.19	8.20	3.1		ug/l	
AR1260-B	2	9.74	9.74	3.0		ug/l	
AR1260-C	1	8.54	8.54	3.1		ug/l	
AR1260-C	2	10.19	10.19	2.9		ug/l	
AR1260-D	1	8.98	8.98	3.1		ug/l	
AR1260-D	2	10.53	10.53	3.0		ug/l	
AR1260-E	1	9.38	9.38	3.0		ug/l	
AR1260-E	2	11.08	11.08	2.8		ug/l	

(a) QC results reported from this column.

Surrogate Recovery Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Method: SW846 8082A **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JC71604-1	XX233813.D	111	108	105	109
OP14250-BS	XX233811.D	105	101	76	77
OP14250-BSD	XX233812.D	110	105	80	80
OP14250-MB	XX233810.D	130	122	61	62

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	11-166%
S2 = Decachlorobiphenyl	10-150%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Check Std:	GXX6439-CC6423	**Injection Date:**	08/15/18
Lab File ID:	XX233808.D	**Injection Time:**	03:54
Instrument ID:	GCXX	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	3.42	4.15	10.94	12.79

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP14250-MB	XX233810.D	08/15/18	04:31	3.42	4.15	10.94	12.78
OP14250-BS	XX233811.D	08/15/18	04:49	3.42	4.15	10.94	12.78
OP14250-BSD	XX233812.D	08/15/18	05:08	3.42	4.15	10.94	12.78
JC71604-1	XX233813.D	08/15/18	05:26	3.42	4.15	10.94	12.78
ZZZZZZ	XX233814.D	08/15/18	05:45	3.42	4.15	10.94	12.79
ZZZZZZ	XX233815.D	08/15/18	06:03	3.42	4.15	10.94	12.79

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICC6423
Lab FileID: XX232900.D

Response Factor Report HP G1530A

Method : C:\MSDCHEM\1\METHODS\PCB6423.M (Chemstation Integrator)
Title :
Last Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration

Calibration Files
50 =xx232897.D 250 =xx232898.D 500 =xx232899.D 1000=xx232900.D
2000 =xx232901.D 3000 =xx232902.D

	Compound	50	250	500	1000	2000	3000	Avg	%RSD
1) S	Tetrachloro-m-xylen	1.310	1.164	1.198	1.277	1.350	1.340	1.273 E7	6.00
2)	AR1221-A				7.545			7.545 E4	0.00
3)	AR1221-B				1.318			1.318 E5	0.00
4)	AR1221-C				4.029			4.029 E5	0.00
5)	AR1221-D				4.922			4.922 E4	0.00
6)	AR1221-E				4.466			4.466 E4	0.00
7)	AR1232-A				2.978			2.978 E5	0.00
8)	AR1232-B				1.951			1.951 E5	0.00
9)	AR1232-C				4.275			4.275 E5	0.00
10)	AR1232-D				1.609			1.609 E5	0.00
11)	AR1232-E				1.545			1.545 E5	0.00
12)	AR1242-A				3.523			3.523 E5	0.00
13)	AR1242-B				8.065			8.065 E5	0.00
14)	AR1242-C				3.032			3.032 E5	0.00
15)	AR1242-D				3.221			3.221 E5	0.00
16)	AR1242-E				3.017			3.017 E5	0.00
17)	AR1248-A				1.841			1.841 E5	0.00
18)	AR1248-B				5.489			5.489 E5	0.00
19)	AR1248-C				5.000			5.000 E5	0.00
20)	AR1248-D				5.147			5.147 E5	0.00
21)	AR1248-E				4.720			4.720 E5	0.00
22)	AR1248-F				4.976			4.976 E5	0.00
23)	AR1248-G				3.870			3.870 E5	0.00
24)	AR1254-A				4.026			4.026 E5	0.00
25)	AR1254-B				5.991			5.991 E5	0.00
26)	AR1254-C				4.575			4.575 E5	0.00
27)	AR1254-D				8.926			8.926 E5	0.00
28)	AR1254-E				6.042			6.042 E5	0.00
29)	AR1254-F				5.584			5.584 E5	0.00
30)	AR1254-G				8.494			8.494 E5	0.00
31)	AR1262-A				6.699			6.699 E5	0.00
32)	AR1262-B				9.557			9.557 E5	0.00
33)	AR1262-C				8.266			8.266 E5	0.00
34)	AR1262-D				1.954			1.954 E6	0.00
35)	AR1262-E				2.336			2.336 E6	0.00
36)	AR1268-A				2.319			2.319 E6	0.00
37)	AR1268-B				2.457			2.457 E6	0.00
38)	AR1268-C				2.004			2.004 E6	0.00
39)	AR1268-D				8.275			8.275 E5	0.00
40)	AR1268-E				6.913			6.913 E6	0.00
41)	AR1016-A	2.265	2.332	2.350	2.327	2.262	2.207	2.291 E5	2.39
42)	AR1016-B	4.515	4.370	4.304	4.242	4.145	4.054	4.272 E5	3.83
43)	AR1016-C	1.058	0.992	0.978	0.992	0.997	0.987	1.001 E6	2.86
44)	AR1016-D	3.926	3.780	3.710	3.763	3.718	3.678	3.762 E5	2.35
45)	AR1016-E	4.066	3.949	3.862	3.982	3.961	3.926	3.958 E5	1.70
46)	AR1260-A	1.140	1.105	1.112	1.149	1.179	1.175	1.143 E6	2.70
47)	AR1260-B	6.094	5.621	5.603	5.615	5.851	5.794	5.763 E5	3.34

Initial Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICC6423
Lab FileID: XX232900.D

48)		AR1260-C	5.934	5.597	5.700	6.066	6.230	6.260	5.965 E5	4.59
49)		AR1260-D	1.460	1.454	1.510	1.557	1.604	1.588	1.529 E6	4.19
50)		AR1260-E	1.543	1.514	1.518	1.550	1.627	1.584	1.556 E6	2.78
51)	S	Decachlorobiphenyl	1.568	1.540	1.563	1.585	1.616	1.625	1.583 E7	2.05

Signal #2

1)	S	Tetrachloro-m-xylen	0.979	1.031	1.032	1.041	1.052	1.046	1.030 E7	2.58
2)		AR1221-A				6.272			6.272 E4	0.00
3)		AR1221-B				1.074			1.074 E5	0.00
4)		AR1221-C				2.636			2.636 E5	0.00
5)		AR1221-D				4.819			4.819 E4	0.00
6)		AR1221-E				3.168			3.168 E4	0.00
7)		AR1232-A				2.065			2.065 E5	0.00
8)		AR1232-B				1.557			1.557 E5	0.00
9)		AR1232-C				3.372			3.372 E5	0.00
10)		AR1232-D				1.341			1.341 E5	0.00
11)		AR1232-E				9.021			9.021 E4	0.00
12)		AR1242-A				2.894			2.894 E5	0.00
13)		AR1242-B				6.292			6.292 E5	0.00
14)		AR1242-C				2.485			2.485 E5	0.00
15)		AR1242-D				1.851			1.851 E5	0.00
16)		AR1242-E				2.390			2.390 E5	0.00
17)		AR1248-A				1.490			1.490 E5	0.00
18)		AR1248-B				4.095			4.095 E5	0.00
19)		AR1248-C				2.225			2.225 E5	0.00
20)		AR1248-D				3.048			3.048 E5	0.00
21)		AR1248-E				3.459			3.459 E5	0.00
22)		AR1248-F				4.241			4.241 E5	0.00
23)		AR1248-G				4.137			4.137 E5	0.00
24)		AR1254-A				3.682			3.682 E5	0.00
25)		AR1254-B				4.159			4.159 E5	0.00
26)		AR1254-C				3.523			3.523 E5	0.00
27)		AR1254-D				7.521			7.521 E5	0.00
28)		AR1254-E				5.505			5.505 E5	0.00
29)		AR1254-F				5.815			5.815 E5	0.00
30)		AR1254-G				6.916			6.916 E5	0.00
31)		AR1262-A				5.151			5.151 E5	0.00
32)		AR1262-B				8.306			8.306 E5	0.00
33)		AR1262-C				6.768			6.768 E5	0.00
34)		AR1262-D				1.701			1.701 E6	0.00
35)		AR1262-E				1.862			1.862 E6	0.00
36)		AR1268-A				2.059			2.059 E6	0.00
37)		AR1268-B				1.902			1.902 E6	0.00
38)		AR1268-C				1.662			1.662 E6	0.00
39)		AR1268-D				6.484			6.484 E5	0.00
40)		AR1268-E				4.941			4.941 E6	0.00
41)		AR1016-A	2.163	1.817	1.765	1.702	1.645	1.603	1.782 E5	11.33
42)		AR1016-B	4.048	3.694	3.599	3.482	3.392	3.304	3.587 E5	7.41
43)		AR1016-C	8.666	7.776	7.762	7.716	7.722	7.659	7.883 E5	4.89
44)		AR1016-D	3.111	2.973	2.939	2.886	2.859	2.852	2.937 E5	3.32
45)		AR1016-E	2.474	2.283	2.299	2.262	2.226	2.195	2.290 E5	4.28
46)		AR1260-A	5.305	4.846	5.016	5.050	5.068	5.033	5.053 E5	2.92
47)		AR1260-B	5.026	4.810	5.244	5.252	5.267	5.259	5.143 E5	3.64
48)		AR1260-C	5.322	5.210	5.245	5.247	5.283	5.249	5.260 E5	0.73
49)		AR1260-D	1.334	1.317	1.351	1.406	1.410	1.389	1.368 E6	2.88
50)		AR1260-E	1.458	1.258	1.263	1.257	1.268	1.261	1.294 E6	6.21
51)	S	Decachlorobiphenyl	1.080	1.117	1.122	1.128	1.145	1.149	1.123 E7	2.19

(#) = Out of Range

Initial Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICC6423
Lab FileID: XX232900.D

PCB6423.M Tue Jul 31 17:04:12 2018

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232911.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\gx...3\xx232911.D\ECD1A.CH Vial: 17
Signal #2 : C:\msdchem\1\DATA\gxx6423\xx232911.D\ECD2B.CH
Acq On    : 28 Jul 2018   5:32 am                    Operator: carolb
Sample    : icv6423-1000                            Inst    : HP G1530A
Misc      : op13739,GXX6423,1000,,,5,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\PCB6423.M (Chemstation Integrator)
Title        :
Last Update  : Tue Jul 31 16:48:22 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	12.732	15.053 E6	-18.2	118	0.00	3.38- 3.44
2		AR1221-A	75.452	69.181 E3	8.3	92	0.00	2.73- 2.93
3		AR1221-B	131.807	117.768 E3	10.7	89	0.00	3.51- 3.71
4		AR1221-C	402.908	366.757 E3	9.0	91	0.00	3.73- 3.93
5		AR1221-D	49.215	43.908 E3	10.8	89	0.00	4.17- 4.37
6		AR1221-E	44.659	37.910 E3	15.1	85	0.00	4.43- 4.63
7		AR1232-A	----------	NA	----------			
8		AR1232-B	----------	NA	----------			
9		AR1232-C	----------	NA	----------			
10		AR1232-D	----------	NA	----------			
11		AR1232-E	----------	NA	----------			
12		AR1242-A	----------	NA	----------			
13		AR1242-B	----------	NA	----------			
14		AR1242-C	----------	NA	----------			
15		AR1242-D	----------	NA	----------			
16		AR1242-E	----------	NA	----------			
17		AR1248-A	----------	NA	----------			
18		AR1248-B	----------	NA	----------			
19		AR1248-C	----------	NA	----------			
20		AR1248-D	----------	NA	----------			
21		AR1248-E	----------	NA	----------			
22		AR1248-F	----------	NA	----------			
23		AR1248-G	----------	NA	----------			
24		AR1254-A	----------	NA	----------			
25		AR1254-B	----------	NA	----------			
26		AR1254-C	----------	NA	----------			
27		AR1254-D	----------	NA	----------			
28		AR1254-E	----------	NA	----------			
29		AR1254-F	----------	NA	----------			
30		AR1254-G	----------	NA	----------			
31		AR1262-A	----------	NA	----------			
32		AR1262-B	----------	NA	----------			
33		AR1262-C	----------	NA	----------			
34		AR1262-D	----------	NA	----------			
35		AR1262-E	----------	NA	----------			
36		AR1268-A	----------	NA	----------			
37		AR1268-B	----------	NA	----------			
38		AR1268-C	----------	NA	----------			
39		AR1268-D	----------	NA	----------			
40		AR1268-E	----------	NA	----------			
41		AR1016-A	----------	NA	----------			

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232911.D

42		AR1016-B		----------NA----------				
43		AR1016-C		----------NA----------				
44		AR1016-D		----------NA----------				
45		AR1016-E		----------NA----------				
46		AR1260-A		----------NA----------				
47		AR1260-B		----------NA----------				
48		AR1260-C		----------NA----------				
49		AR1260-D		----------NA----------				
50		AR1260-E		----------NA----------				
51	S	Decachlorobiphenyl	15.827	17.247 E6	-9.0	109	0.00	10.91-10.98
*****		Signal #2 *****						
1	S	Tetrachloro-m-xylene	10.300	11.482 E6	-11.5	110	0.00	4.11- 4.17
2		AR1221-A	62.725	66.657 E3	-6.3	106	0.00	3.49- 3.55
3		AR1221-B	107.366	103.660 E3	3.5	97	0.00	4.45- 4.65
4		AR1221-C	263.568	253.380 E3	3.9	96	0.00	4.75- 4.95
5		AR1221-D	48.187	41.644 E3	13.6	86	0.00	5.32- 5.52
6		AR1221-E	31.677	33.053 E3	-4.3	104	0.00	5.41- 5.61
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A		----------NA----------				
42		AR1016-B		----------NA----------				
43		AR1016-C		----------NA----------				
44		AR1016-D		----------NA----------				
45		AR1016-E		----------NA----------				
46		AR1260-A		----------NA----------				
47		AR1260-B		----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232911.D

48		AR1260-C				----------NA----------			
49		AR1260-D				----------NA----------			
50		AR1260-E				----------NA----------			
51	S	Decachlorobiphenyl	11.234	12.441	E6	-10.7	110	0.00	12.76-12.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx232900.D PCB6423.M Tue Jul 31 16:55:29 2018

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Sample: GXX6423-ICV6423
Lab FileID: XX232912.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\gx...3\xx232912.D\ECD1A.CH Vial: 18
Signal #2 : C:\msdchem\1\DATA\gxx6423\xx232912.D\ECD2B.CH
Acq On    : 28 Jul 2018   5:51 am                    Operator: carolb
Sample    : icv6423-1000                            Inst    : HP G1530A
Misc      : op13739,GXX6423,1000,,,5,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\PCB6423.M (Chemstation Integrator)
Title        :
Last Update  : Tue Jul 31 16:48:22 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	12.732	14.449 E6	-13.5	113	0.00	3.38- 3.44
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A	297.793	294.759 E3	1.0	99	0.00	3.74- 3.94
8		AR1232-B	195.149	197.412 E3	-1.2	101	0.00	4.18- 4.38
9		AR1232-C	427.536	428.797 E3	-0.3	100	0.00	4.78- 4.98
10		AR1232-D	160.944	162.325 E3	-0.9	101	0.00	4.95- 5.15
11		AR1232-E	154.501	155.440 E3	-0.6	101	0.00	5.49- 5.69
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A		----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232912.D

42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				
48		AR1260-C			----------NA----------				
49		AR1260-D			----------NA----------				
50		AR1260-E			----------NA----------				
51	S	Decachlorobiphenyl	15.827	17.810	E6	-12.5	112	0.00	10.91-10.98
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	10.300	11.417	E6	-10.8	110	0.00	4.11- 4.17
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A	206.485	211.172	E3	-2.3	102	0.00	4.75- 4.95
8		AR1232-B	155.728	158.084	E3	-1.5	102	0.00	5.33- 5.53
9		AR1232-C	337.211	344.392	E3	-2.1	102	0.00	5.99- 6.19
10		AR1232-D	134.103	133.294	E3	0.6	99	0.00	6.19- 6.39
11		AR1232-E	90.210	92.231	E3	-2.2	102	0.00	6.87- 7.07
12		AR1242-A			----------NA----------				
13		AR1242-B			----------NA----------				
14		AR1242-C			----------NA----------				
15		AR1242-D			----------NA----------				
16		AR1242-E			----------NA----------				
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1262-A			----------NA----------				
32		AR1262-B			----------NA----------				
33		AR1262-C			----------NA----------				
34		AR1262-D			----------NA----------				
35		AR1262-E			----------NA----------				
36		AR1268-A			----------NA----------				
37		AR1268-B			----------NA----------				
38		AR1268-C			----------NA----------				
39		AR1268-D			----------NA----------				
40		AR1268-E			----------NA----------				
41		AR1016-A			----------NA----------				
42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232912.D

48		AR1260-C				----------NA----------			
49		AR1260-D				----------NA----------			
50		AR1260-E				----------NA----------			
51	S	Decachlorobiphenyl	11.234	12.835	E6	-14.3	114	0.00	12.76-12.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx232900.D PCB6423.M Tue Jul 31 16:55:30 2018

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Sample: GXX6423-ICV6423
Lab FileID: XX232913.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\gx...3\xx232913.D\ECD1A.CH Vial: 19
Signal #2 : C:\msdchem\1\DATA\gxx6423\xx232913.D\ECD2B.CH
Acq On : 28 Jul 2018 6:09 am Operator: carolb
Sample : icv6423-1000 Inst : HP G1530A
Misc : op13739,GXX6423,1000,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\PCB6423.M (Chemstation Integrator)
Title :
Last Update : Tue Jul 31 16:48:22 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	12.732	13.446 E6	-5.6	105	0.00	3.38- 3.44
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A	352.311	355.085 E3	-0.8	101	0.00	4.18- 4.38
13	AR1242-B	806.506	804.474 E3	0.3	100	0.00	4.78- 4.97
14	AR1242-C	303.155	303.518 E3	-0.1	100	0.00	4.95- 5.15
15	AR1242-D	322.137	322.980 E3	-0.3	100	0.00	5.49- 5.69
16	AR1242-E	301.692	301.184 E3	0.2	100	0.00	6.10- 6.30
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1262-A		----------NA----------				
32	AR1262-B		----------NA----------				
33	AR1262-C		----------NA----------				
34	AR1262-D		----------NA----------				
35	AR1262-E		----------NA----------				
36	AR1268-A		----------NA----------				
37	AR1268-B		----------NA----------				
38	AR1268-C		----------NA----------				
39	AR1268-D		----------NA----------				
40	AR1268-E		----------NA----------				
41	AR1016-A		----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232913.D

42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				
48		AR1260-C			----------NA----------				
49		AR1260-D			----------NA----------				
50		AR1260-E			----------NA----------				
51	S	Decachlorobiphenyl	15.827	16.992 E6	-7.4	107	0.00	10.91-10.98	
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	10.300	11.041 E6	-7.2	106	0.00	4.11- 4.17	
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A	289.444	295.211 E3	-2.0	102	0.00	5.33- 5.53	
13		AR1242-B	629.246	639.013 E3	-1.6	102	0.00	5.99- 6.19	
14		AR1242-C	248.490	242.795 E3	2.3	98	0.00	6.19- 6.39	
15		AR1242-D	185.087	188.033 E3	-1.6	102	0.00	6.87- 7.07	
16		AR1242-E	238.993	243.675 E3	-2.0	102	0.00	7.48- 7.68	
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1262-A			----------NA----------				
32		AR1262-B			----------NA----------				
33		AR1262-C			----------NA----------				
34		AR1262-D			----------NA----------				
35		AR1262-E			----------NA----------				
36		AR1268-A			----------NA----------				
37		AR1268-B			----------NA----------				
38		AR1268-C			----------NA----------				
39		AR1268-D			----------NA----------				
40		AR1268-E			----------NA----------				
41		AR1016-A			----------NA----------				
42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232913.D

48		AR1260-C				----------NA----------			
49		AR1260-D				----------NA----------			
50		AR1260-E				----------NA----------			
51	S	Decachlorobiphenyl	11.234	12.255	E6	-9.1	109	0.00	12.76-12.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx232900.D PCB6423.M Tue Jul 31 17:02:29 2018

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Sample: GXX6423-ICV6423
Lab FileID: XX232914.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\gx...3\xx232914.D\ECD1A.CH Vial: 20
Signal #2 : C:\msdchem\1\DATA\gxx6423\xx232914.D\ECD2B.CH
Acq On : 28 Jul 2018 6:28 am Operator: carolb
Sample : icv6423-1000 Inst : HP G1530A
Misc : op13739,GXX6423,1000,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\PCB6423.M (Chemstation Integrator)
Title :
Last Update : Tue Jul 31 16:48:22 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	12.732	14.797 E6	-16.2	116	0.00	3.39- 3.45
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A	184.110	162.408 E3	11.8	88	0.00	4.17- 4.37
18		AR1248-B	548.929	510.933 E3	6.9	93	0.00	4.77- 4.97
19		AR1248-C	500.006	500.542 E3	-0.1	100	0.03	5.22- 5.42
20		AR1248-D	514.715	510.235 E3	0.9	99	0.00	5.49- 5.69
21		AR1248-E	472.029	476.206 E3	-0.9	101	0.00	5.61- 5.81
22		AR1248-F	497.614	505.053 E3	-1.5	101	0.00	6.10- 6.30
23		AR1248-G	386.959	382.592 E3	1.1	99	0.00	6.37- 6.57
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A		----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232914.D

42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				
48		AR1260-C			----------NA----------				
49		AR1260-D			----------NA----------				
50		AR1260-E			----------NA----------				
51	S	Decachlorobiphenyl	15.827	17.876 E6	-12.9	113	0.00	10.91-10.98	
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	10.300	12.063 E6	-17.1	116	0.00	4.12- 4.18	
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A			----------NA----------				
13		AR1242-B			----------NA----------				
14		AR1242-C			----------NA----------				
15		AR1242-D			----------NA----------				
16		AR1242-E			----------NA----------				
17		AR1248-A	149.000	132.373 E3	11.2	89	0.00	5.33- 5.53	
18		AR1248-B	409.517	388.545 E3	5.1	95	0.00	5.99- 6.19	
19		AR1248-C	222.512	222.834 E3	-0.1	100	0.00	6.47- 6.67	
20		AR1248-D	304.755	304.522 E3	0.1	100	0.00	6.87- 7.07	
21		AR1248-E	345.935	348.535 E3	-0.8	101	0.00	7.05- 7.25	
22		AR1248-F	424.121	434.276 E3	-2.4	102	0.00	7.48- 7.68	
23		AR1248-G	413.671	428.212 E3	-3.5	104	0.00	7.83- 8.03	
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1262-A			----------NA----------				
32		AR1262-B			----------NA----------				
33		AR1262-C			----------NA----------				
34		AR1262-D			----------NA----------				
35		AR1262-E			----------NA----------				
36		AR1268-A			----------NA----------				
37		AR1268-B			----------NA----------				
38		AR1268-C			----------NA----------				
39		AR1268-D			----------NA----------				
40		AR1268-E			----------NA----------				
41		AR1016-A			----------NA----------				
42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232914.D

48		AR1260-C				----------NA----------			
49		AR1260-D				----------NA----------			
50		AR1260-E				----------NA----------			
51	S	Decachlorobiphenyl	11.234	12.929	E6	-15.1	115	0.00	12.76-12.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx232900.D PCB6423.M Tue Jul 31 17:02:30 2018

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Sample: GXX6423-ICV6423
Lab FileID: XX232915.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\gx...3\xx232915.D\ECD1A.CH Vial: 21
Signal #2 : C:\msdchem\1\DATA\gxx6423\xx232915.D\ECD2B.CH
Acq On : 28 Jul 2018 6:46 am Operator: carolb
Sample : icv6423-1000 Inst : HP G1530A
Misc : op13739,GXX6423,1000,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\PCB6423.M (Chemstation Integrator)
Title :
Last Update : Tue Jul 31 16:48:22 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	12.732	15.214 E6	-19.5	119	0.00	3.38- 3.44
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A	402.637	406.700 E3	-1.0	101	0.00	6.00- 6.20
25	AR1254-B	599.054	650.607 E3	-8.6	109	0.00	6.36- 6.56
26	AR1254-C	457.510	453.311 E3	0.9	99	0.00	6.74- 6.94
27	AR1254-D	892.599	894.776 E3	-0.2	100	0.00	6.91- 7.11
28	AR1254-E	604.176	640.520 E3	-6.0	106	0.00	7.30- 7.50
29	AR1254-F	558.414	584.077 E3	-4.6	105	0.00	7.55- 7.75
30	AR1254-G	849.369	878.041 E3	-3.4	103	0.00	7.94- 8.14
31	AR1262-A		----------NA----------				
32	AR1262-B		----------NA----------				
33	AR1262-C		----------NA----------				
34	AR1262-D		----------NA----------				
35	AR1262-E		----------NA----------				
36	AR1268-A		----------NA----------				
37	AR1268-B		----------NA----------				
38	AR1268-C		----------NA----------				
39	AR1268-D		----------NA----------				
40	AR1268-E		----------NA----------				
41	AR1016-A		----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232915.D

42		AR1016-B							
43		AR1016-C							
44		AR1016-D							
45		AR1016-E							
46		AR1260-A							
47		AR1260-B							
48		AR1260-C							
49		AR1260-D							
50		AR1260-E							
51	S	Decachlorobiphenyl	15.827	18.413	E6	-16.3	116	0.00	10.91-10.98
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	10.300	12.300	E6	-19.4	118	0.00	4.11- 4.17
2		AR1221-A							
3		AR1221-B							
4		AR1221-C							
5		AR1221-D							
6		AR1221-E							
7		AR1232-A							
8		AR1232-B							
9		AR1232-C							
10		AR1232-D							
11		AR1232-E							
12		AR1242-A							
13		AR1242-B							
14		AR1242-C							
15		AR1242-D							
16		AR1242-E							
17		AR1248-A							
18		AR1248-B							
19		AR1248-C							
20		AR1248-D							
21		AR1248-E							
22		AR1248-F							
23		AR1248-G							
24		AR1254-A	368.249	370.254	E3	-0.5	101	0.00	7.48- 7.68
25		AR1254-B	415.880	416.173	E3	-0.1	100	0.00	7.74- 7.94
26		AR1254-C	352.301	348.860	E3	1.0	99	0.00	8.26- 8.46
27		AR1254-D	752.143	740.979	E3	1.5	99	0.00	8.42- 8.62
28		AR1254-E	550.540	537.974	E3	2.3	98	0.00	8.74- 8.94
29		AR1254-F	581.546	582.437	E3	-0.2	100	0.00	9.26- 9.46
30		AR1254-G	691.640	713.389	E3	-3.1	103	0.00	9.53- 9.73
31		AR1262-A							
32		AR1262-B							
33		AR1262-C							
34		AR1262-D							
35		AR1262-E							
36		AR1268-A							
37		AR1268-B							
38		AR1268-C							
39		AR1268-D							
40		AR1268-E							
41		AR1016-A							
42		AR1016-B							
43		AR1016-C							
44		AR1016-D							
45		AR1016-E							
46		AR1260-A							
47		AR1260-B							

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232915.D

48		AR1260-C				----------NA----------			
49		AR1260-D				----------NA----------			
50		AR1260-E				----------NA----------			
51	S	Decachlorobiphenyl	11.234	13.335 E6	-18.7	118	0.00	12.76-12.82	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx232900.D PCB6423.M Tue Jul 31 17:02:31 2018

10.6.6 10

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232916.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\gx...3\xx232916.D\ECD1A.CH Vial: 22
Signal #2 : C:\msdchem\1\DATA\gxx6423\xx232916.D\ECD2B.CH
Acq On    : 28 Jul 2018   7:05 am                    Operator: carolb
Sample    : icv6423-1000                            Inst    : HP G1530A
Misc      : op13739,GXX6423,1000,,,5,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\PCB6423.M (Chemstation Integrator)
Title        :
Last Update  : Tue Jul 31 16:48:22 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	12.732	15.290 E6	-20.1#	120	0.00	3.38- 3.44
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A	669.857	662.267 E3	1.1	99	0.00	7.55- 7.75
32		AR1262-B	955.677	955.830 E3	-0.0	100	0.00	8.10- 8.30
33		AR1262-C	826.606	826.933 E3	-0.0	100	0.00	8.44- 8.64
34		AR1262-D	1.954	1.968 E6	-0.7	101	0.00	8.88- 9.08
35		AR1262-E	2.336	2.335 E6	0.0	100	0.00	9.33- 9.53
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A		----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232916.D

42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				
48		AR1260-C			----------NA----------				
49		AR1260-D			----------NA----------				
50		AR1260-E			----------NA----------				
51	S	Decachlorobiphenyl	15.827	18.757	E6	-18.5	118	0.00	10.91-10.98
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	10.300	12.403	E6	-20.4#	119	0.00	4.11- 4.17
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A			----------NA----------				
13		AR1242-B			----------NA----------				
14		AR1242-C			----------NA----------				
15		AR1242-D			----------NA----------				
16		AR1242-E			----------NA----------				
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1262-A	515.094	516.942	E3	-0.4	100	0.00	8.99- 9.19
32		AR1262-B	830.614	832.884	E3	-0.3	100	0.00	9.65- 9.85
33		AR1262-C	676.819	685.423	E3	-1.3	101	0.00	10.09-10.29
34		AR1262-D	1.701	1.717	E6	-0.9	101	0.00	10.44-10.64
35		AR1262-E	1.862	1.909	E6	-2.5	103	0.00	10.96-11.16
36		AR1268-A			----------NA----------				
37		AR1268-B			----------NA----------				
38		AR1268-C			----------NA----------				
39		AR1268-D			----------NA----------				
40		AR1268-E			----------NA----------				
41		AR1016-A			----------NA----------				
42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232916.D

48		AR1260-C				----------NA----------			
49		AR1260-D				----------NA----------			
50		AR1260-E				----------NA----------			
51	S	Decachlorobiphenyl	11.234	13.475 E6	-19.9	119	0.00	12.76-12.82	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx232900.D PCB6423.M Tue Jul 31 17:02:32 2018

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Sample: GXX6423-ICV6423
Lab FileID: XX232917.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\gx...3\xx232917.D\ECD1A.CH Vial: 23
Signal #2 : C:\msdchem\1\DATA\gxx6423\xx232917.D\ECD2B.CH
Acq On : 28 Jul 2018 7:23 am Operator: carolb
Sample : icv6423-1000 Inst : HP G1530A
Misc : op13739,GXX6423,1000,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\PCB6423.M (Chemstation Integrator)
Title :
Last Update : Tue Jul 31 16:48:22 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	12.732	14.856 E6	-16.7	116	0.00	3.38- 3.44
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A	2.319	2.324 E6	-0.2	100	0.00	9.33- 9.53
37		AR1268-B	2.457	2.427 E6	1.2	99	0.00	9.39- 9.59
38		AR1268-C	2.004	2.053 E6	-2.4	102	0.00	9.66- 9.86
39		AR1268-D	827.451	825.951 E3	0.2	100	0.00	10.16-10.36
40		AR1268-E	6.913	6.751 E6	2.3	98	0.00	10.57-10.77
41		AR1016-A		----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232917.D

42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				
48		AR1260-C			----------NA----------				
49		AR1260-D			----------NA----------				
50		AR1260-E			----------NA----------				
51	S	Decachlorobiphenyl	15.827	48.948	E6	-209.3#	309#	0.00	10.91-10.98
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	10.300	12.017	E6	-16.7	115	0.00	4.11- 4.17
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A			----------NA----------				
13		AR1242-B			----------NA----------				
14		AR1242-C			----------NA----------				
15		AR1242-D			----------NA----------				
16		AR1242-E			----------NA----------				
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1262-A			----------NA----------				
32		AR1262-B			----------NA----------				
33		AR1262-C			----------NA----------				
34		AR1262-D			----------NA----------				
35		AR1262-E			----------NA----------				
36		AR1268-A	2.059	2.003	E6	2.7	97	0.00	10.96-11.16
37		AR1268-B	1.902	1.882	E6	1.1	99	0.00	11.03-11.23
38		AR1268-C	1.662	1.625	E6	2.2	98	0.00	11.41-11.61
39		AR1268-D	648.448	661.424	E3	-2.0	102	0.00	11.81-12.01
40		AR1268-E	4.941	4.835	E6	2.1	98	0.00	12.30-12.50
41		AR1016-A			----------NA----------				
42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232917.D

48		AR1260-C			----------NA----------			
49		AR1260-D			----------NA----------			
50		AR1260-E			----------NA----------			
51	S	Decachlorobiphenyl	11.234	35.148 E6	-212.9#	312#	0.00	12.76-12.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx232900.D PCB6423.M Tue Jul 31 17:02:33 2018

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232919.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\gx...3\xx232919.D\ECD1A.CH Vial: 25
Signal #2 : C:\msdchem\1\DATA\gxx6423\xx232919.D\ECD2B.CH
Acq On : 28 Jul 2018 10:50 am Operator: carolb
Sample : icv6423-1000 Inst : HP G1530A
Misc : op13739,GXX6423,1000,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\PCB6423.M (Chemstation Integrator)
Title :
Last Update : Tue Jul 31 16:48:22 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	12.732	14.113 E6	-10.8	111	0.00	3.39- 3.45
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A	229.065	215.429 E3	6.0	93	0.01	3.82- 3.88

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232919.D

42		AR1016-B	427.167	427.484	E3	-0.1	101	0.01	4.26- 4.32
43		AR1016-C	1.001	0.978	E6	2.3	99	0.01	4.86- 4.92
44		AR1016-D	376.229	370.249	E3	1.6	98	0.01	5.04- 5.10
45		AR1016-E	395.764	374.527	E3	5.4	94	0.01	5.57- 5.64
46		AR1260-A	1.143	1.123	E6	1.7	98	0.02	8.02- 8.08
47		AR1260-B	576.304	506.964	E3	12.0	90	0.02	8.18- 8.24
48		AR1260-C	596.452	535.301	E3	10.3	88	0.02	8.52- 8.59
49		AR1260-D	1.529	1.406	E6	8.0	90	0.02	8.97- 9.03
50		AR1260-E	1.556	1.425	E6	8.4	92	0.02	9.37- 9.43
51	S	Decachlorobiphenyl	15.827	17.294	E6	-9.3	109	0.02	10.92-10.99
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	10.300	11.510	E6	-11.7	111	0.00	4.11- 4.17
2		AR1221-A	----------NA----------						
3		AR1221-B	----------NA----------						
4		AR1221-C	----------NA----------						
5		AR1221-D	----------NA----------						
6		AR1221-E	----------NA----------						
7		AR1232-A	----------NA----------						
8		AR1232-B	----------NA----------						
9		AR1232-C	----------NA----------						
10		AR1232-D	----------NA----------						
11		AR1232-E	----------NA----------						
12		AR1242-A	----------NA----------						
13		AR1242-B	----------NA----------						
14		AR1242-C	----------NA----------						
15		AR1242-D	----------NA----------						
16		AR1242-E	----------NA----------						
17		AR1248-A	----------NA----------						
18		AR1248-B	----------NA----------						
19		AR1248-C	----------NA----------						
20		AR1248-D	----------NA----------						
21		AR1248-E	----------NA----------						
22		AR1248-F	----------NA----------						
23		AR1248-G	----------NA----------						
24		AR1254-A	----------NA----------						
25		AR1254-B	----------NA----------						
26		AR1254-C	----------NA----------						
27		AR1254-D	----------NA----------						
28		AR1254-E	----------NA----------						
29		AR1254-F	----------NA----------						
30		AR1254-G	----------NA----------						
31		AR1262-A	----------NA----------						
32		AR1262-B	----------NA----------						
33		AR1262-C	----------NA----------						
34		AR1262-D	----------NA----------						
35		AR1262-E	----------NA----------						
36		AR1268-A	----------NA----------						
37		AR1268-B	----------NA----------						
38		AR1268-C	----------NA----------						
39		AR1268-D	----------NA----------						
40		AR1268-E	----------NA----------						
41		AR1016-A	178.248	167.986	E3	5.8	99	0.00	4.81- 4.87
42		AR1016-B	358.665	356.290	E3	0.7	102	0.00	5.40- 5.46
43		AR1016-C	788.344	788.289	E3	0.0	102	0.00	6.06- 6.12
44		AR1016-D	293.669	297.757	E3	-1.4	103	0.00	6.26- 6.32
45		AR1016-E	228.984	223.404	E3	2.4	99	0.00	6.94- 7.00
46		AR1260-A	505.303	477.907	E3	5.4	95	0.00	8.78- 8.84
47		AR1260-B	514.295	475.587	E3	7.5	91	0.00	9.72- 9.78

Initial Calibration Verification

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6423-ICV6423
Lab FileID: XX232919.D

48		AR1260-C	525.950	493.619	E3	6.1	94	0.00	10.17-10.23
49		AR1260-D	1.368	1.318	E6	3.7	94	0.00	10.51-10.57
50		AR1260-E	1.294	1.091	E6	15.7	87	0.00	11.06-11.12
51	S	Decachlorobiphenyl	11.234	12.522	E6	-11.5	111	0.00	12.77-12.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx232900.D PCB6423.M Tue Jul 31 17:02:34 2018

Continuing Calibration Summary

Job Number: JC71604 **Sample:** GXX6439-CC6423
Account: TCMAW Tantara Corporation **Lab FileID:** XX233808.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\gx...9\xx233808.D\ECD1A.CH Vial: 17
Signal #2 : C:\msdchem\1\DATA\gxx6439\xx233808.D\ECD2B.CH
Acq On    : 15 Aug 2018   3:54 am                    Operator: summerk
Sample    : cc6423-500                               Inst    : HP G1530A
Misc      : op14212,GXX6439,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\PCB6423.M (Chemstation Integrator)
Title        :
Last Update  : Tue Jul 31 16:48:22 2018
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	12.732	14.043 E6	-10.3	117	0.00	3.39- 3.45
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A	229.065	271.450 E3	-18.5	116	0.00	3.81- 3.87

Continuing Calibration Summary

Job Number: JC71604 **Sample:** GXX6439-CC6423
Account: TCMAW Tantara Corporation **Lab FileID:** XX233808.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

42		AR1016-B	427.167	464.174	E3	-8.7	108	0.00	4.25- 4.31
43		AR1016-C	1.001	1.076	E6	-7.5	110	0.00	4.84- 4.90
44		AR1016-D	376.229	409.612	E3	-8.9	110	0.00	5.02- 5.08
45		AR1016-E	395.764	424.623	E3	-7.3	110	0.00	5.55- 5.62
46		AR1260-A	1.143	1.123	E6	1.7	101	0.00	8.00- 8.06
47		AR1260-B	576.304	559.078	E3	3.0	100	0.00	8.17- 8.23
48		AR1260-C	596.452	591.455	E3	0.8	104	0.00	8.51- 8.58
49		AR1260-D	1.529	1.471	E6	3.8	97	0.00	8.95- 9.01
50		AR1260-E	1.556	1.484	E6	4.6	98	0.00	9.35- 9.41
51	S	Decachlorobiphenyl	15.827	14.088	E6	11.0	90	0.00	10.90-10.97
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	10.300	10.095	E6	2.0	98	0.00	4.12- 4.18
2		AR1221-A	----------NA----------						
3		AR1221-B	----------NA----------						
4		AR1221-C	----------NA----------						
5		AR1221-D	----------NA----------						
6		AR1221-E	----------NA----------						
7		AR1232-A	----------NA----------						
8		AR1232-B	----------NA----------						
9		AR1232-C	----------NA----------						
10		AR1232-D	----------NA----------						
11		AR1232-E	----------NA----------						
12		AR1242-A	----------NA----------						
13		AR1242-B	----------NA----------						
14		AR1242-C	----------NA----------						
15		AR1242-D	----------NA----------						
16		AR1242-E	----------NA----------						
17		AR1248-A	----------NA----------						
18		AR1248-B	----------NA----------						
19		AR1248-C	----------NA----------						
20		AR1248-D	----------NA----------						
21		AR1248-E	----------NA----------						
22		AR1248-F	----------NA----------						
23		AR1248-G	----------NA----------						
24		AR1254-A	----------NA----------						
25		AR1254-B	----------NA----------						
26		AR1254-C	----------NA----------						
27		AR1254-D	----------NA----------						
28		AR1254-E	----------NA----------						
29		AR1254-F	----------NA----------						
30		AR1254-G	----------NA----------						
31		AR1262-A	----------NA----------						
32		AR1262-B	----------NA----------						
33		AR1262-C	----------NA----------						
34		AR1262-D	----------NA----------						
35		AR1262-E	----------NA----------						
36		AR1268-A	----------NA----------						
37		AR1268-B	----------NA----------						
38		AR1268-C	----------NA----------						
39		AR1268-D	----------NA----------						
40		AR1268-E	----------NA----------						
41		AR1016-A	178.248	180.589	E3	-1.3	102	0.00	4.82- 4.88
42		AR1016-B	358.665	362.455	E3	-1.1	101	0.00	5.40- 5.46
43		AR1016-C	788.344	775.744	E3	1.6	100	0.00	6.06- 6.12
44		AR1016-D	293.669	296.041	E3	-0.8	101	0.00	6.26- 6.32
45		AR1016-E	228.984	223.463	E3	2.4	97	0.00	6.94- 7.00
46		AR1260-A	505.303	448.989	E3	11.1	90	0.00	8.77- 8.83
47		AR1260-B	514.295	473.708	E3	7.9	90	0.00	9.71- 9.77

Continuing Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6439-CC6423
Lab FileID: XX233808.D

48		AR1260-C	525.950	474.608	E3	9.8	90	0.00	10.16-10.22
49		AR1260-D	1.368	1.241	E6	9.3	92	0.00	10.50-10.56
50		AR1260-E	1.294	1.126	E6	13.0	89	0.00	11.05-11.11
51	S	Decachlorobiphenyl	11.234	9.361	E6	16.7	83	0.00	12.76-12.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx232899.D PCB6423.M Wed Aug 15 08:19:44 2018

10.6.10
10

Continuing Calibration Summary

Job Number: JC71604 **Sample:** GXX6439-CC6423
Account: TCMAW Tantara Corporation **Lab FileID:** XX233818.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\gx...9\xx233818.D\ECD1A.CH Vial: 25
Signal #2 : C:\msdchem\1\DATA\gxx6439\xx233818.D\ECD2B.CH
Acq On : 15 Aug 2018 6:59 am Operator: summerk
Sample : cc6423-1000 Inst : HP G1530A
Misc : op14250,GXX6439,900,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\PCB6423.M (Chemstation Integrator)
Title :
Last Update : Tue Jul 31 16:48:22 2018
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	12.732	13.937 E6	-9.5	109	0.00	3.39- 3.45
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A	229.065	259.764 E3	-13.4	112	0.00	3.81- 3.87

Continuing Calibration Summary

Job Number: JC71604 **Sample:** GXX6439-CC6423
Account: TCMAW Tantara Corporation **Lab FileID:** XX233818.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

42		AR1016-B	427.167	448.036	E3	-4.9	106	0.00	4.25- 4.31
43		AR1016-C	1.001	1.062	E6	-6.1	107	0.00	4.84- 4.90
44		AR1016-D	376.229	399.950	E3	-6.3	106	0.00	5.02- 5.08
45		AR1016-E	395.764	419.470	E3	-6.0	105	0.00	5.55- 5.62
46		AR1260-A	1.143	1.171	E6	-2.4	102	0.00	8.01- 8.07
47		AR1260-B	576.304	578.934	E3	-0.5	103	0.00	8.17- 8.23
48		AR1260-C	596.452	625.019	E3	-4.8	103	0.00	8.51- 8.58
49		AR1260-D	1.529	1.575	E6	-3.0	101	0.00	8.95- 9.01
50		AR1260-E	1.556	1.581	E6	-1.6	102	0.00	9.35- 9.41
51	S	Decachlorobiphenyl	15.827	15.341	E6	3.1	97	0.00	10.90-10.97
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	10.300	10.583	E6	-2.7	102	0.00	4.12- 4.18
2		AR1221-A	----------NA----------						
3		AR1221-B	----------NA----------						
4		AR1221-C	----------NA----------						
5		AR1221-D	----------NA----------						
6		AR1221-E	----------NA----------						
7		AR1232-A	----------NA----------						
8		AR1232-B	----------NA----------						
9		AR1232-C	----------NA----------						
10		AR1232-D	----------NA----------						
11		AR1232-E	----------NA----------						
12		AR1242-A	----------NA----------						
13		AR1242-B	----------NA----------						
14		AR1242-C	----------NA----------						
15		AR1242-D	----------NA----------						
16		AR1242-E	----------NA----------						
17		AR1248-A	----------NA----------						
18		AR1248-B	----------NA----------						
19		AR1248-C	----------NA----------						
20		AR1248-D	----------NA----------						
21		AR1248-E	----------NA----------						
22		AR1248-F	----------NA----------						
23		AR1248-G	----------NA----------						
24		AR1254-A	----------NA----------						
25		AR1254-B	----------NA----------						
26		AR1254-C	----------NA----------						
27		AR1254-D	----------NA----------						
28		AR1254-E	----------NA----------						
29		AR1254-F	----------NA----------						
30		AR1254-G	----------NA----------						
31		AR1262-A	----------NA----------						
32		AR1262-B	----------NA----------						
33		AR1262-C	----------NA----------						
34		AR1262-D	----------NA----------						
35		AR1262-E	----------NA----------						
36		AR1268-A	----------NA----------						
37		AR1268-B	----------NA----------						
38		AR1268-C	----------NA----------						
39		AR1268-D	----------NA----------						
40		AR1268-E	----------NA----------						
41		AR1016-A	178.248	176.314	E3	1.1	104	0.00	4.82- 4.88
42		AR1016-B	358.665	356.482	E3	0.6	102	0.00	5.40- 5.46
43		AR1016-C	788.344	784.622	E3	0.5	102	0.00	6.06- 6.12
44		AR1016-D	293.669	298.910	E3	-1.8	104	0.00	6.26- 6.32
45		AR1016-E	228.984	230.523	E3	-0.7	102	0.00	6.94- 7.00
46		AR1260-A	505.303	509.453	E3	-0.8	101	0.00	8.77- 8.83
47		AR1260-B	514.295	525.950	E3	-2.3	100	0.00	9.71- 9.77

Continuing Calibration Summary

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: GXX6439-CC6423
Lab FileID: XX233818.D

48		AR1260-C	525.950	523.958	E3	0.4	100	0.00	10.16-10.22
49		AR1260-D	1.368	1.396	E6	-2.0	99	0.00	10.50-10.56
50		AR1260-E	1.294	1.214	E6	6.2	97	0.00	11.05-11.11
51	S	Decachlorobiphenyl	11.234	11.095	E6	1.2	98	0.00	12.76-12.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx232900.D PCB6423.M Wed Aug 15 08:19:25 2018

10.6.11
10

GC/LC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233813.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 5:26 am
Operator : summerk
Sample : jc71604-1
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 16:12:22 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.418	4.147	1134.3E6	889.4E6	89.094	86.356
	Spiked Amount 40.000			Recovery	=	222.73%	215.89%
51) S	Decachlor...	10.938	12.784	1329.9E6	975.7E6	84.027	86.852
	Spiked Amount 40.000			Recovery	=	210.07%	217.13%
	Target Compounds						

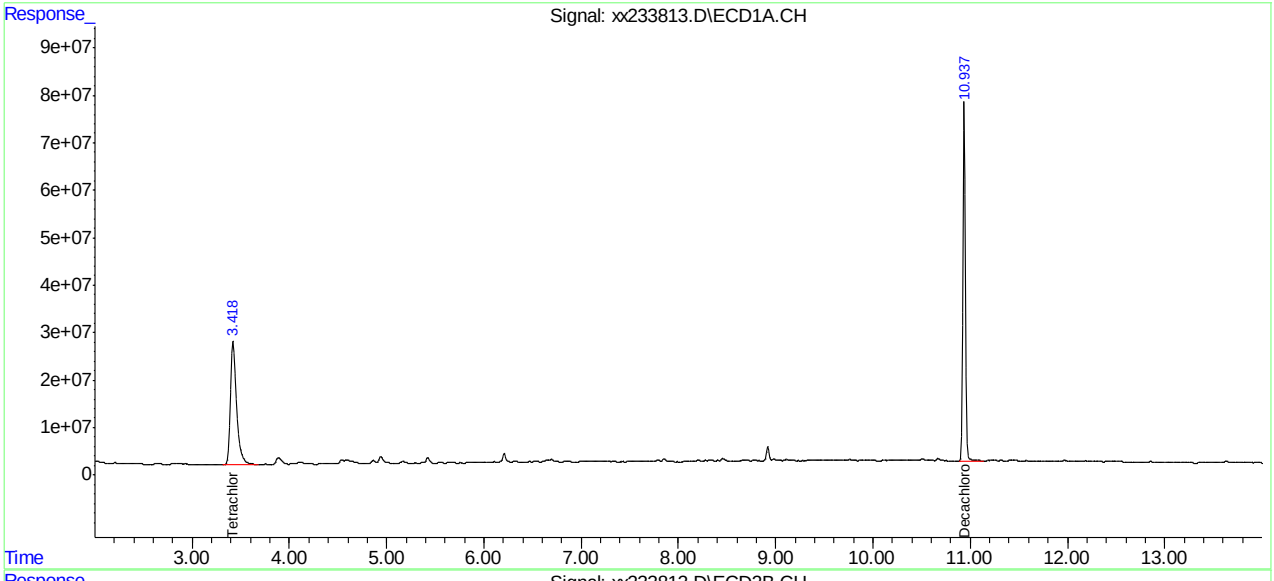
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

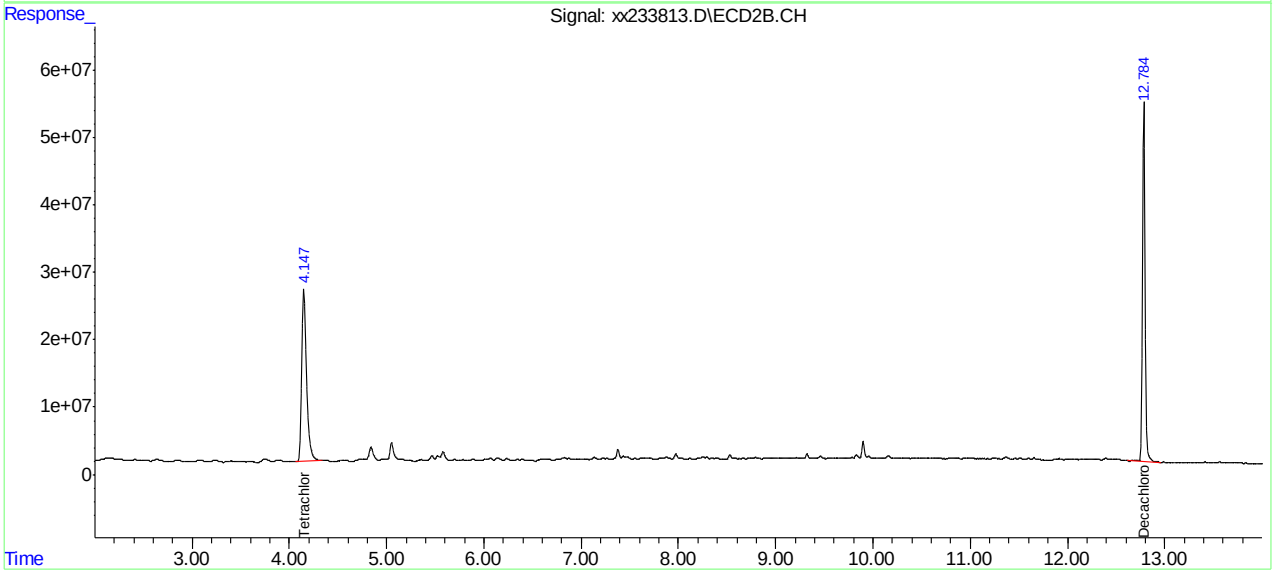
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233813.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 5:26 am
Operator : summerk
Sample : jc71604-1
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 16:12:22 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233810.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:31 am
Operator : summerk
Sample : op14250-mb
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:19 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.418	4.148	1325.1E6	1006.4E6	104.079	97.706
	Spiked Amount 40.000			Recovery	=	260.20%	244.26%
51) S	Decachlor...	10.937	12.784	773.7E6	553.6E6	48.886	49.276
	Spiked Amount 40.000			Recovery	=	122.22%	123.19%
	Target Compounds						

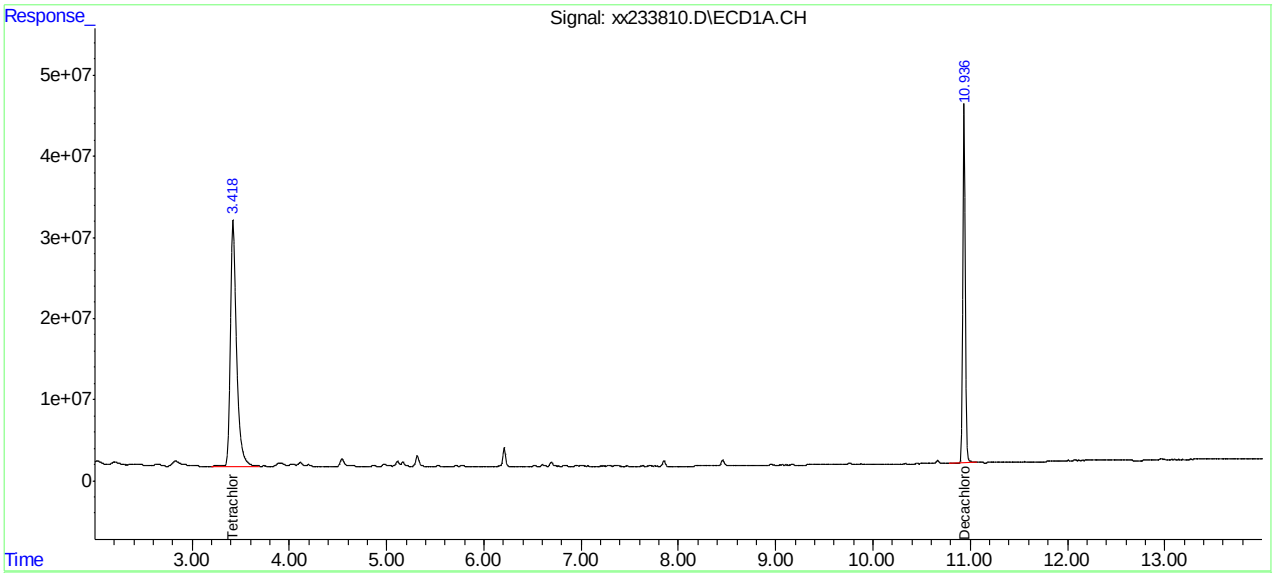
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

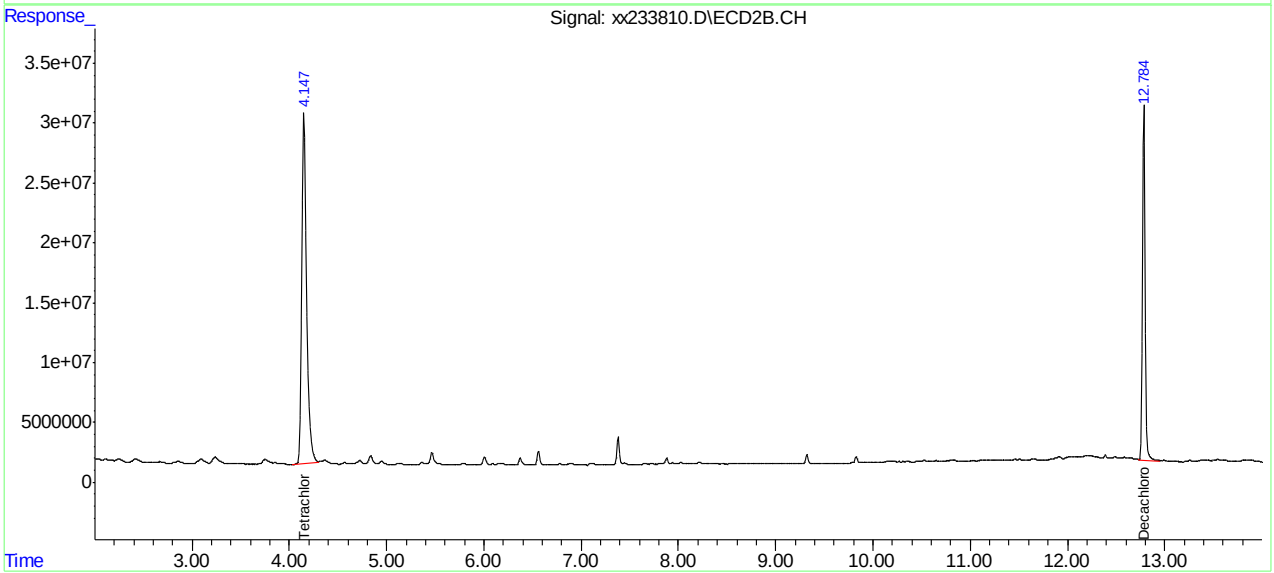
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233810.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:31 am
Operator : summerk
Sample : op14250-mb
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:19 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
08/15/18 16:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:12:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.418	4.148	1071.5E6	835.2E6	84.158	81.086
	Spiked Amount 40.000			Recovery	=	210.40%	202.71%
51)	S Decachlor...	10.936	12.783	967.5E6	691.3E6	61.129	61.536
	Spiked Amount 40.000			Recovery	=	152.82%	153.84%
	Target Compounds						
41)	AR1016-A	3.837	4.845	149.2E6	99662143	651.242	559.121
42)	AR1016-B	4.275	5.429	236.4E6	214.5E6	553.392	598.055
43)	AR1016-C	4.874	6.091	581.7E6	434.2E6	581.227	550.781m
44)	AR1016-D	5.048	6.288	220.6E6	166.5E6	586.454	566.921
45)	AR1016-E	5.587	6.968	229.2E6	118.0E6	579.040	515.420m
46)	AR1260-A	8.034	8.800	595.2E6	266.8E6	520.620	528.091m
47)	AR1260-B	8.194	9.744	342.8E6	295.5E6	594.910m	574.635
48)	AR1260-C	8.540	10.186	353.6E6	296.4E6	592.777	563.508
49)	AR1260-D	8.977	10.529	907.4E6	795.6E6	593.578m	581.600
50)	AR1260-E	9.377	11.084	890.9E6	700.5E6	572.570m	541.191m

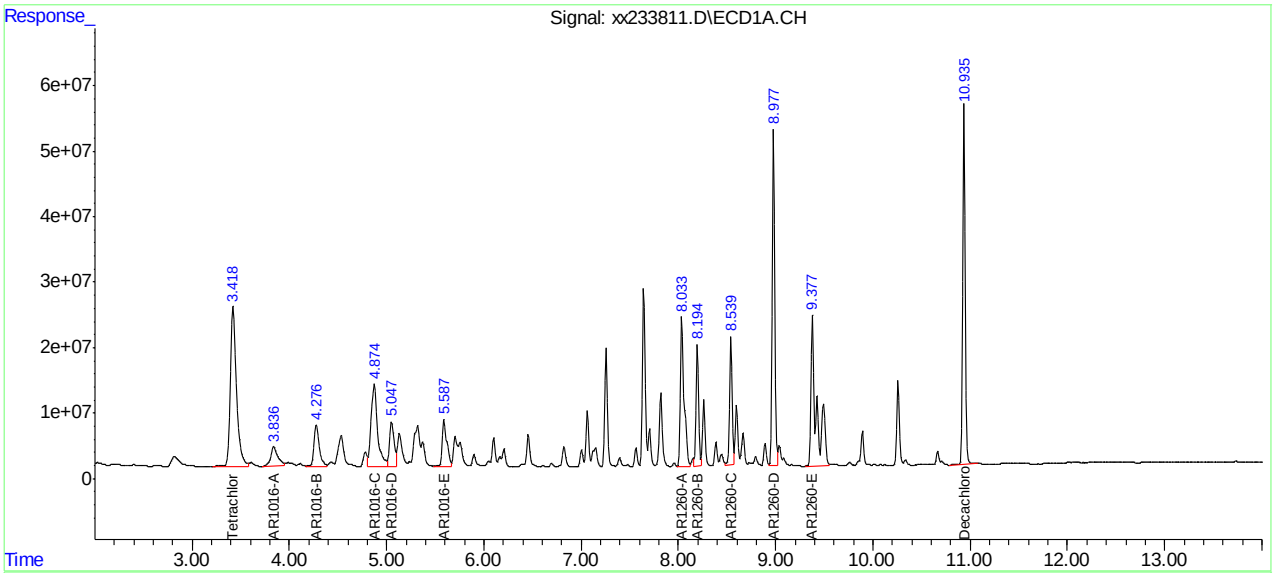
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

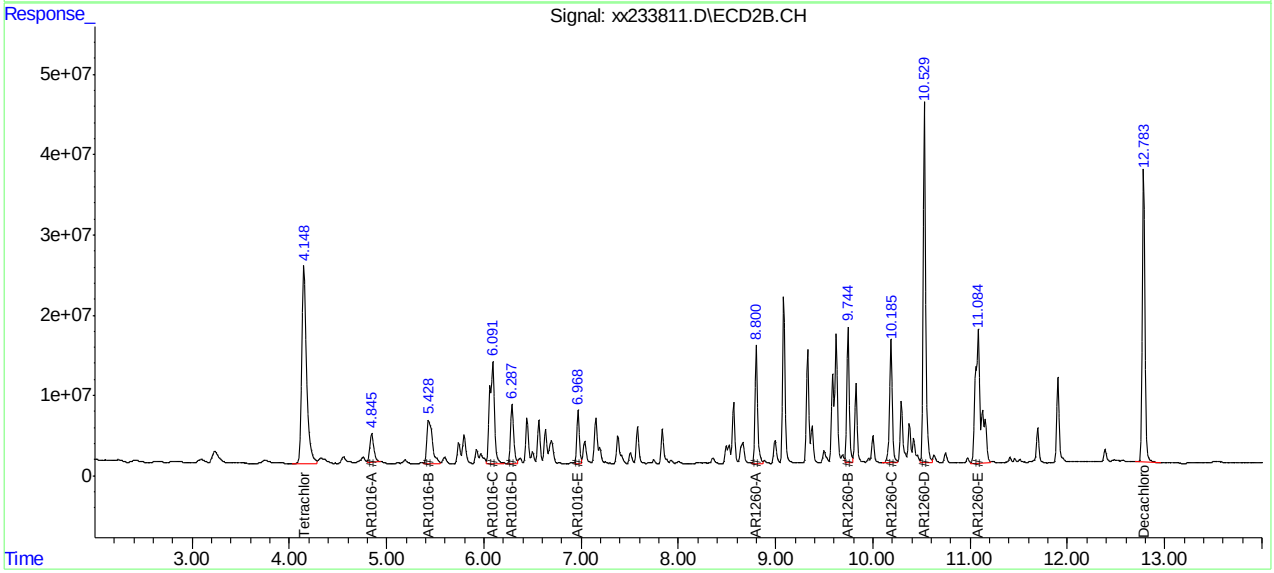
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:12:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: OP14250-BS
Lab FileID: XX233811.D
Injection Time: 08/15/18 04:49
Method: SW846 8082A
Analyst approved: 08/15/18 15:16 Summer Kotb
Supervisor approved: 08/15/18 16:33 Gwendolyn Burns

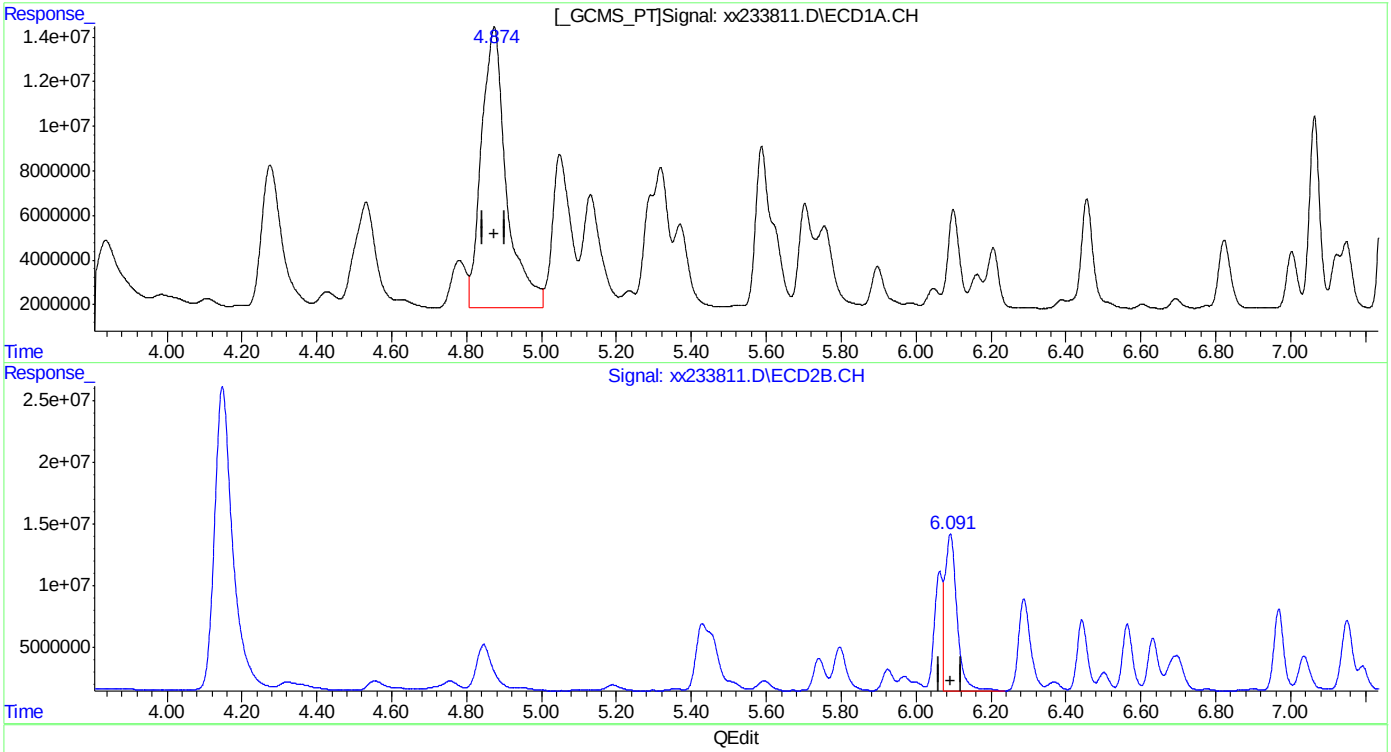
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1016-C		2	6.09	Split peak
AR1016-E		2	6.97	Split peak
AR1260-B		1	8.19	Split peak
AR1260-A		2	8.80	Split peak
AR1260-D		1	8.98	Split peak
AR1260-E		1	9.38	Split peak
AR1260-E		2	11.08	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(43) AR1016-C
4.874min 581.227PPB
response 581675865

(43) AR1016-C #2
6.091min 364.620PPB
response 287445853

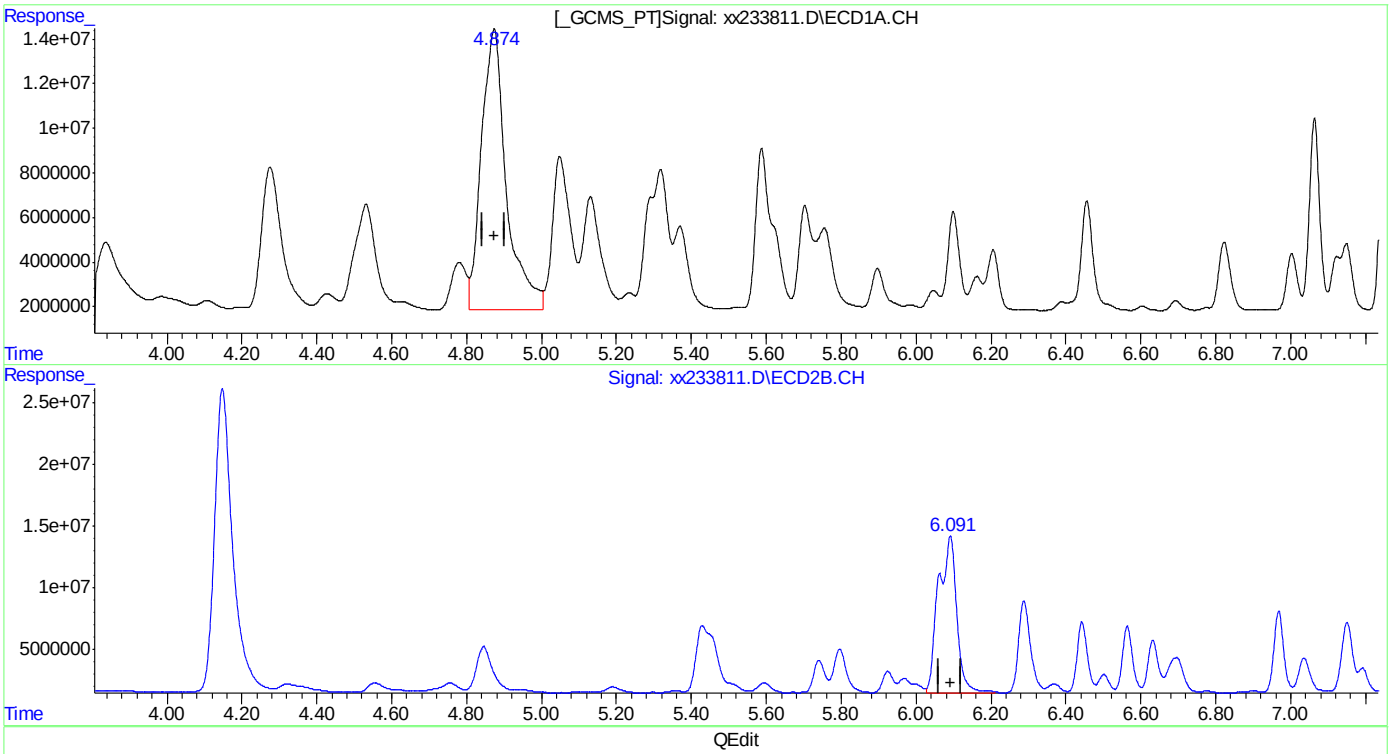
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:10:51 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(43) AR1016-C
4.874min 581.227PPB
response 581675865

(43) AR1016-C #2
6.091min 550.781PPB m
response 434204348

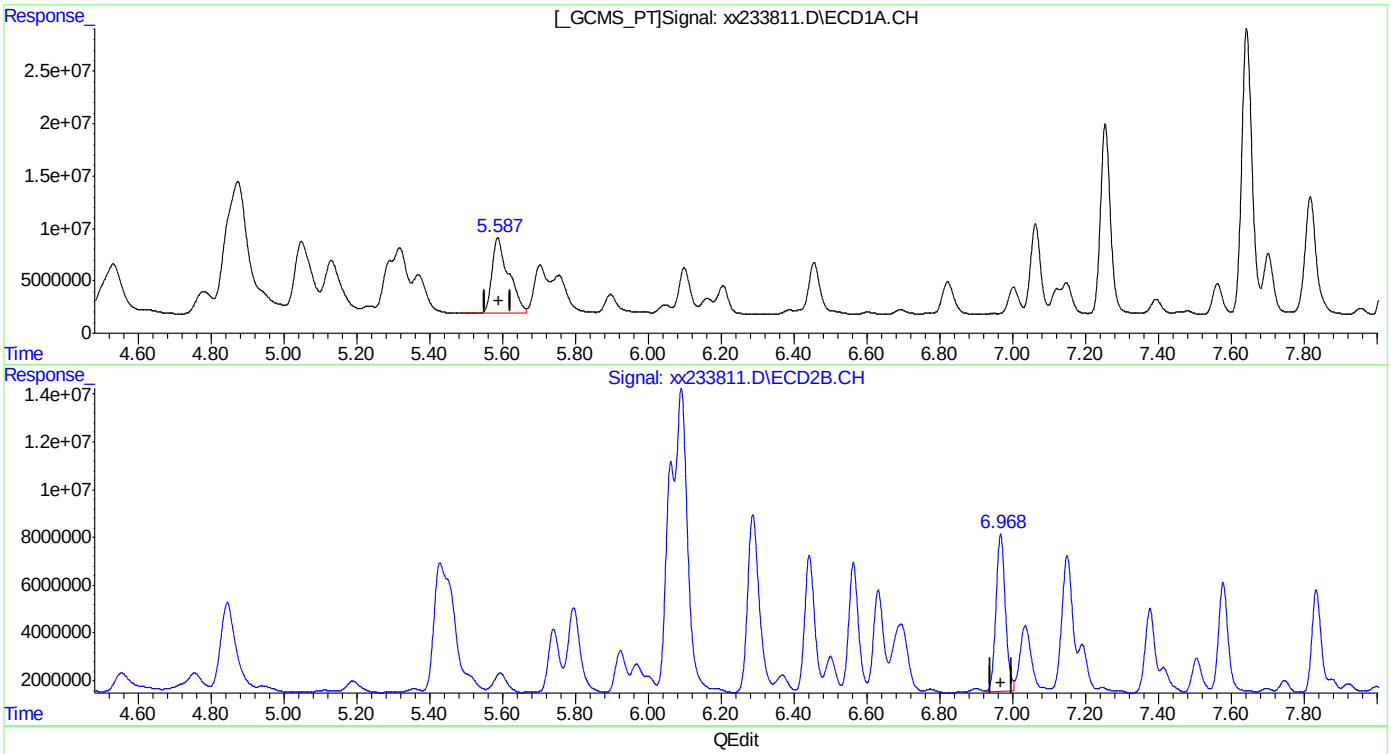
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(45) AR1016-E
5.587min 579.040PPB
response 229163472

(45) AR1016-E #2
6.968min 517.385PPB
response 118472723

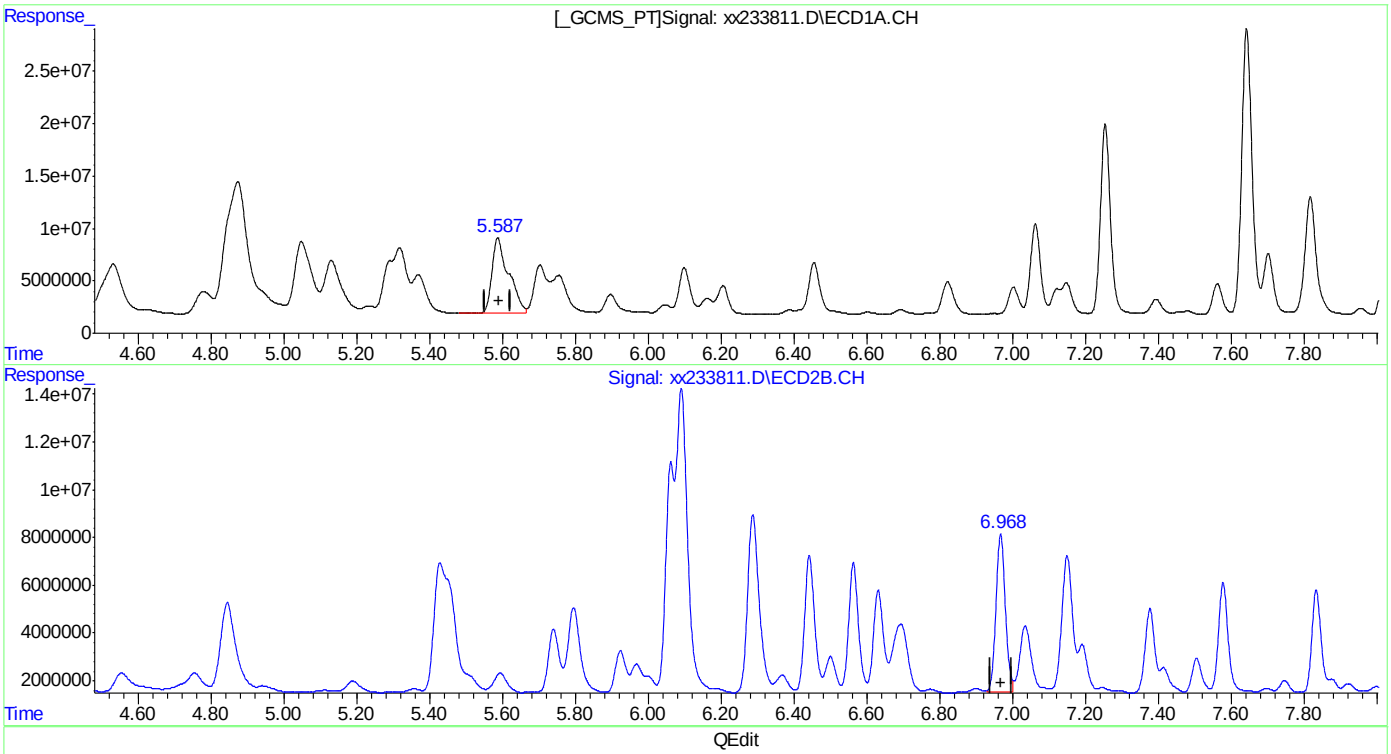
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:11:04 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(45) AR1016-E
5.587min 579.040PPB
response 229163472

(45) AR1016-E #2
6.968min 515.420PPB m
response 118022883

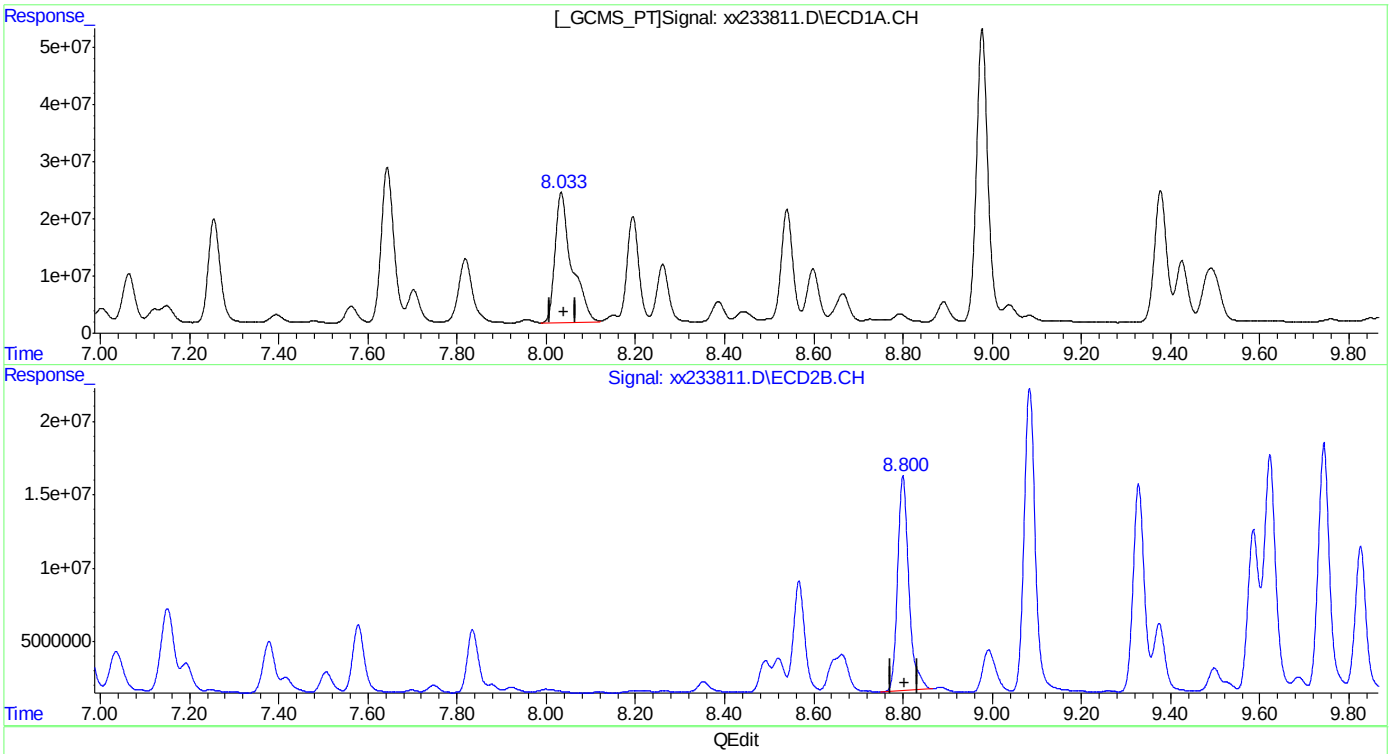
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:11:25 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(46) AR1260-A
8.034min 520.620PPB
response 595232077

(46) AR1260-A #2
8.800min 510.313PPB
response 257863072

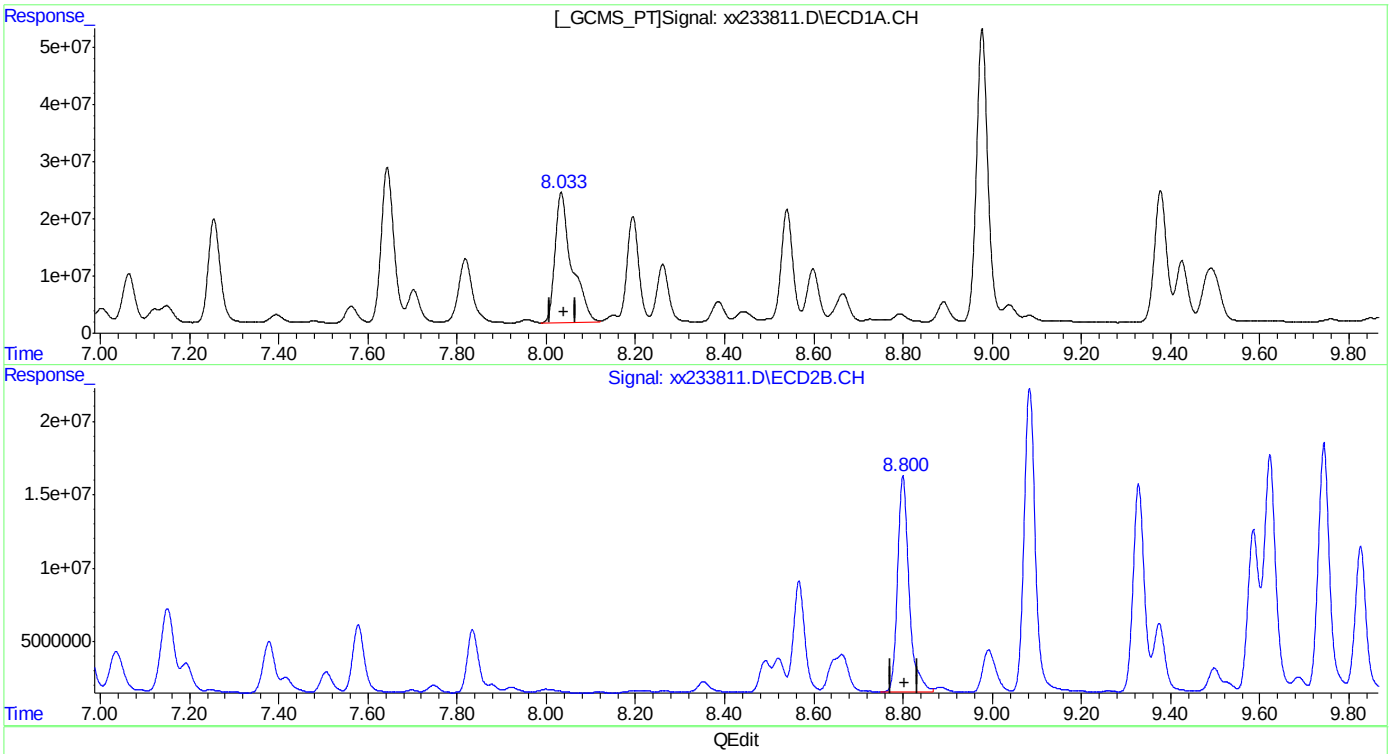
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(46) AR1260-A
8.034min 520.620PPB
response 595232077

(46) AR1260-A #2
8.800min 528.091PPB m
response 266846369

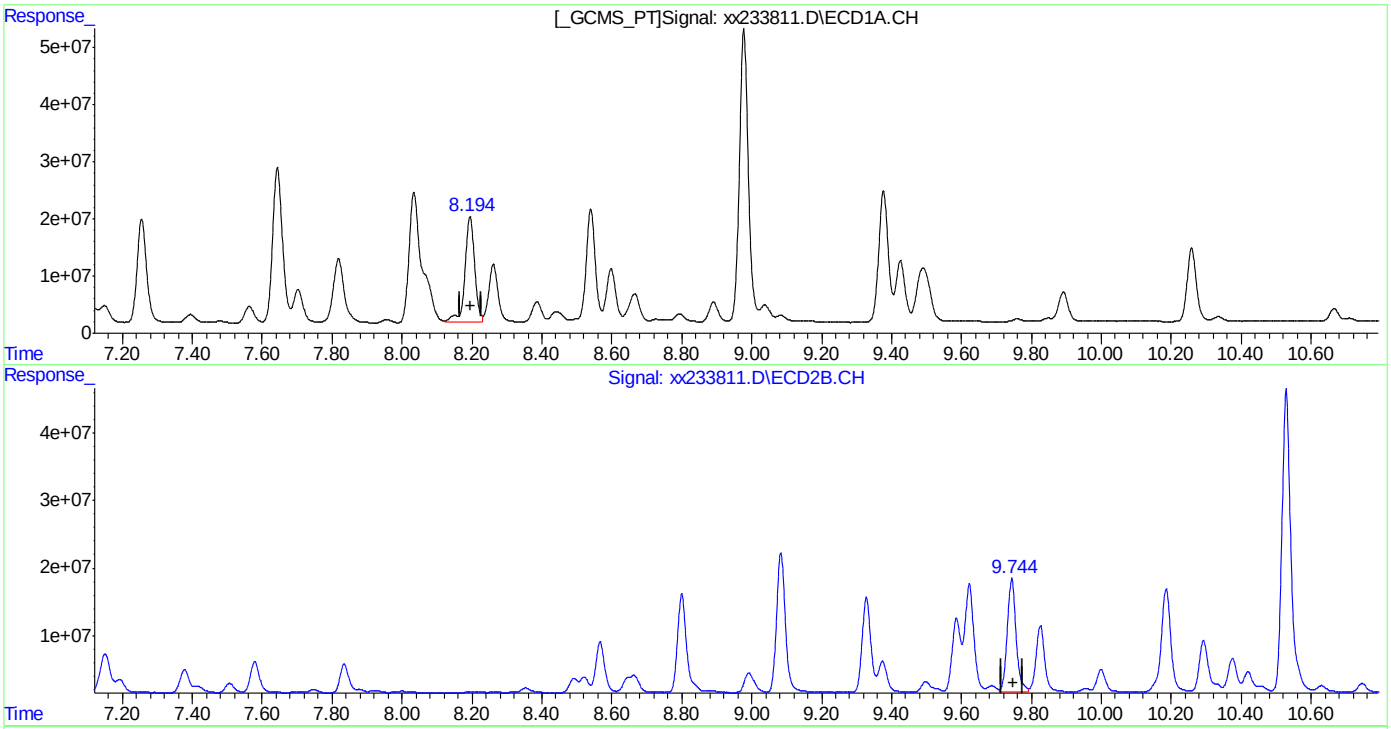
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:11:41 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(47) AR1260-B
8.194min 622.997PPB
response 359035349

(47) AR1260-B #2
9.744min 574.635PPB
response 295531913

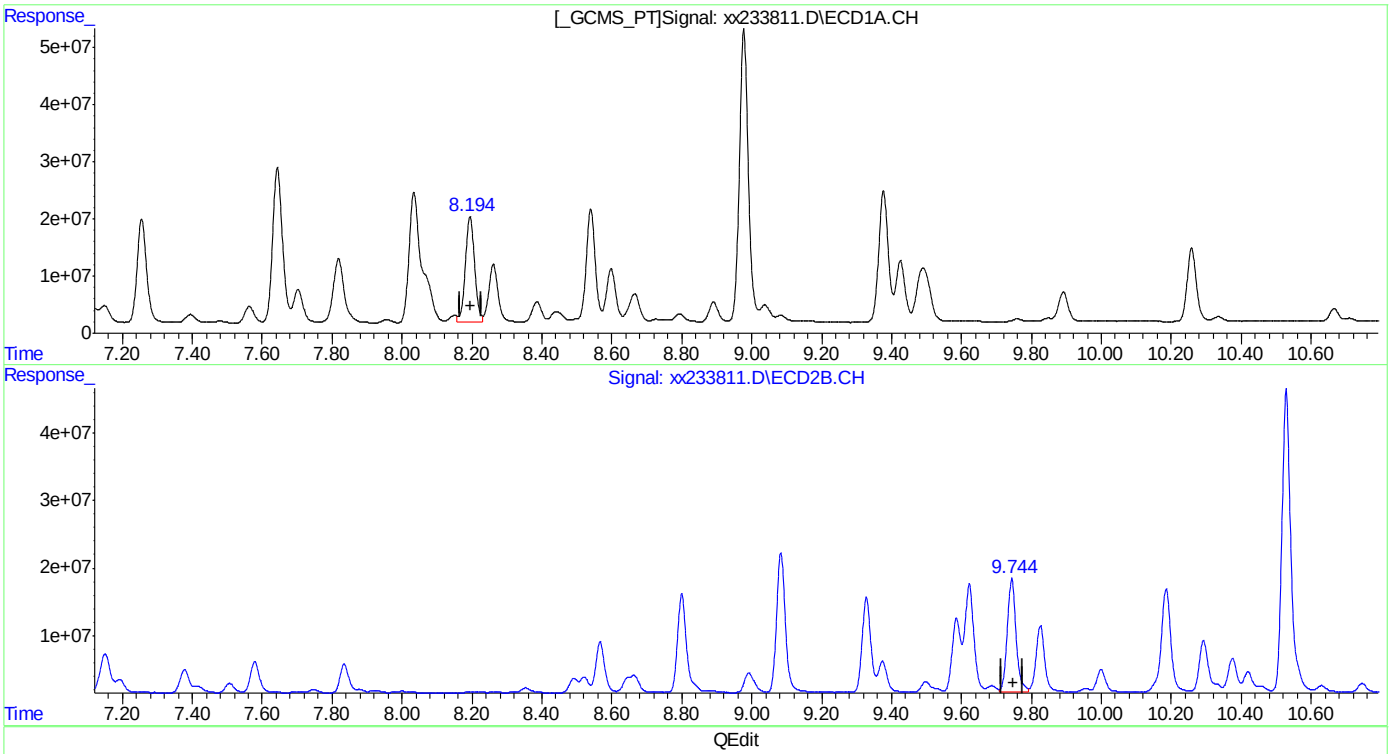
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.194min 594.910PPB m
response 342849089

(47) AR1260-B #2
9.744min 574.635PPB
response 295531913

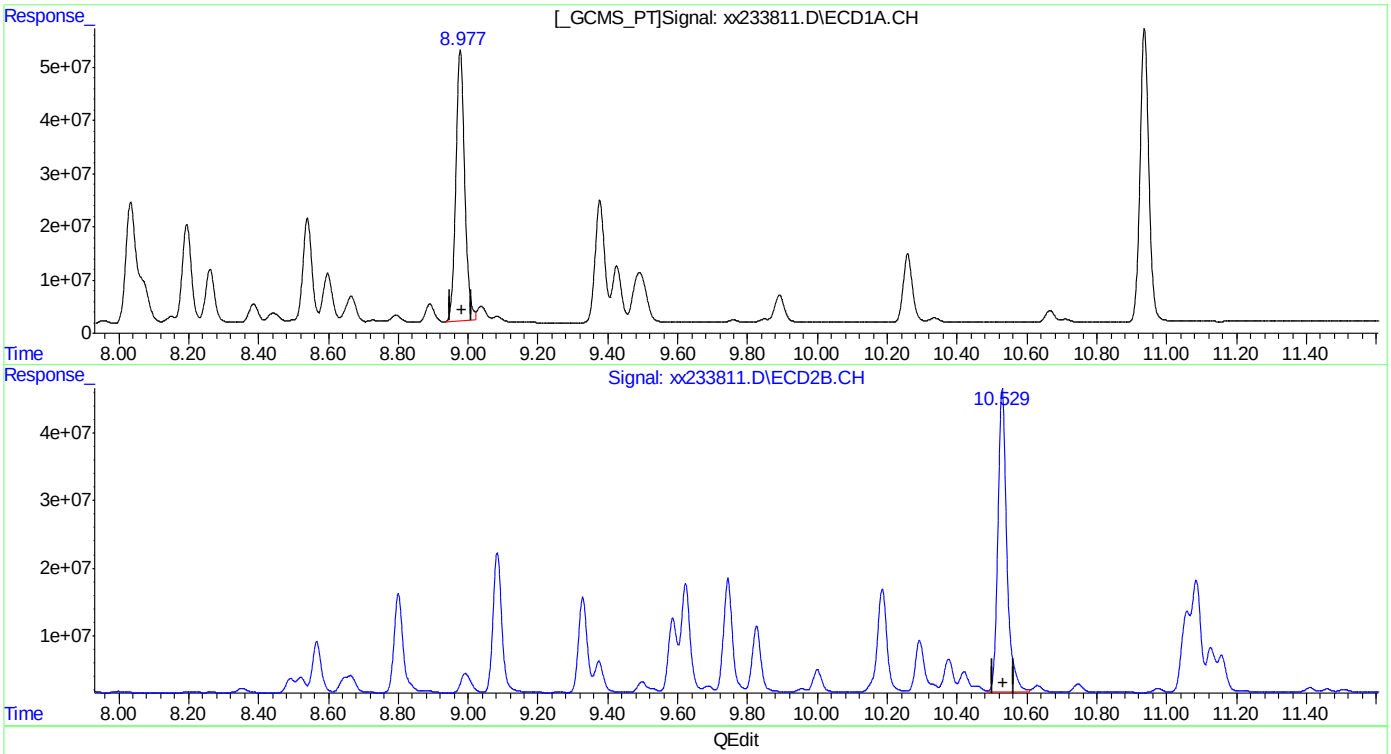
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D
8.977min 583.718PPB
response 892293294

(49) AR1260-D #2
10.529min 581.600PPB
response 795570588

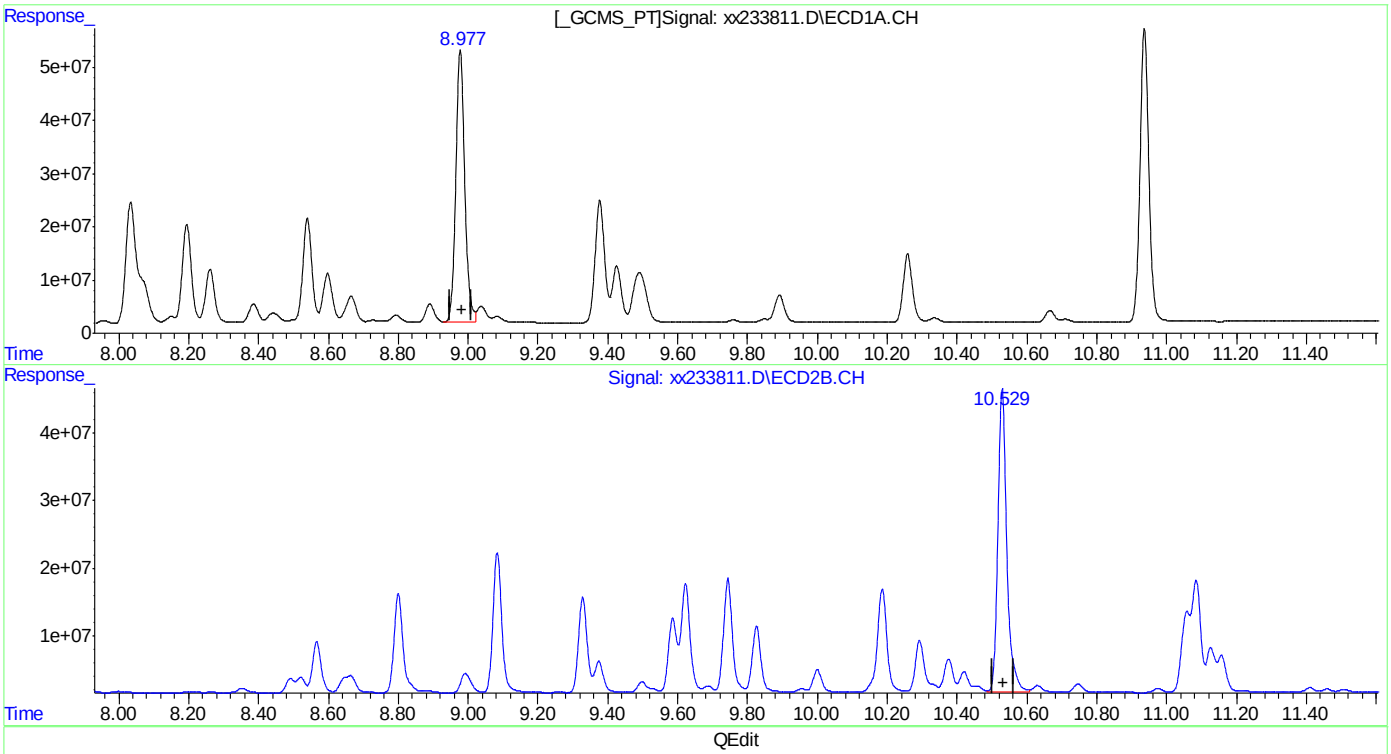
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:11:55 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D

8.977min 593.578PPB m

response 907365576

(49) AR1260-D #2

10.529min 581.600PPB

response 795570588

(+) = Expected Retention Time

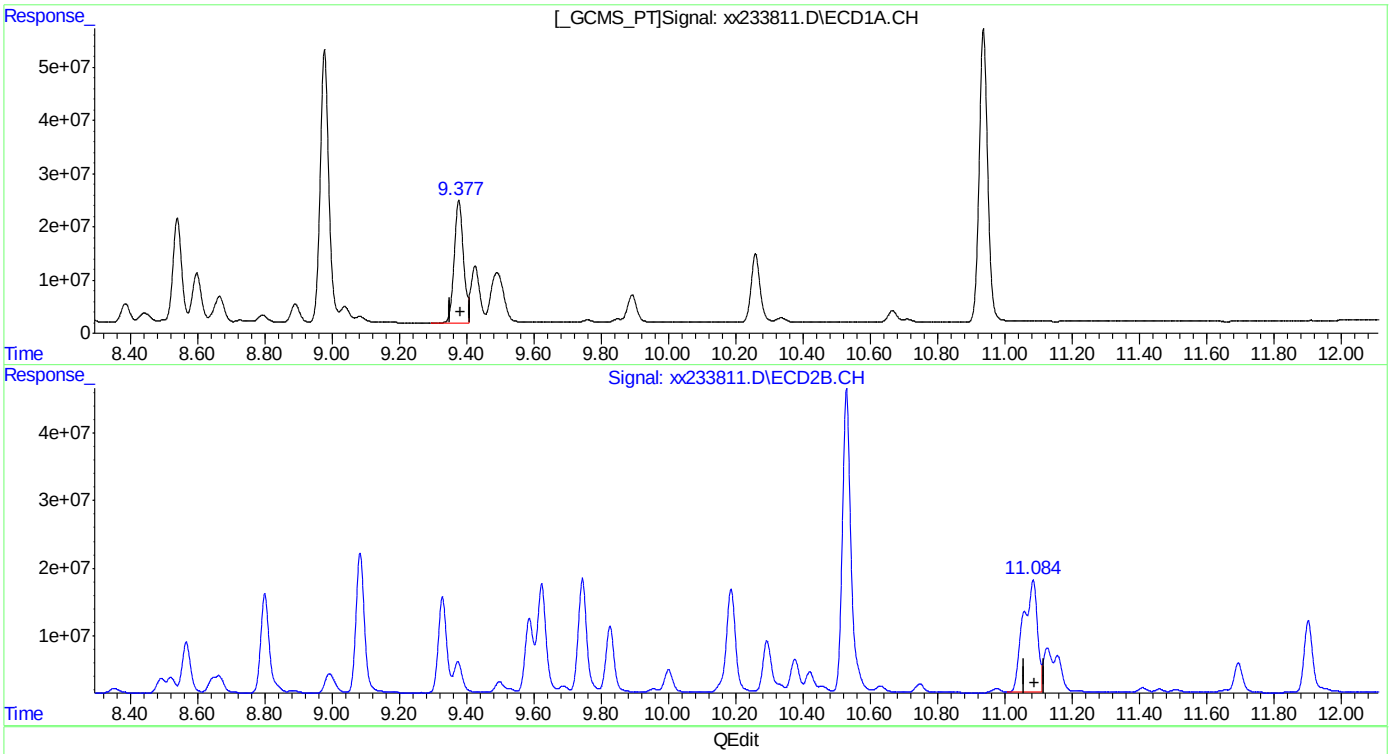
PCB6423.M Wed Aug 15 15:12:09 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E
9.377min 279.573PPB
response 435016126

(50) AR1260-E #2
11.084min 377.304PPB
response 488402261

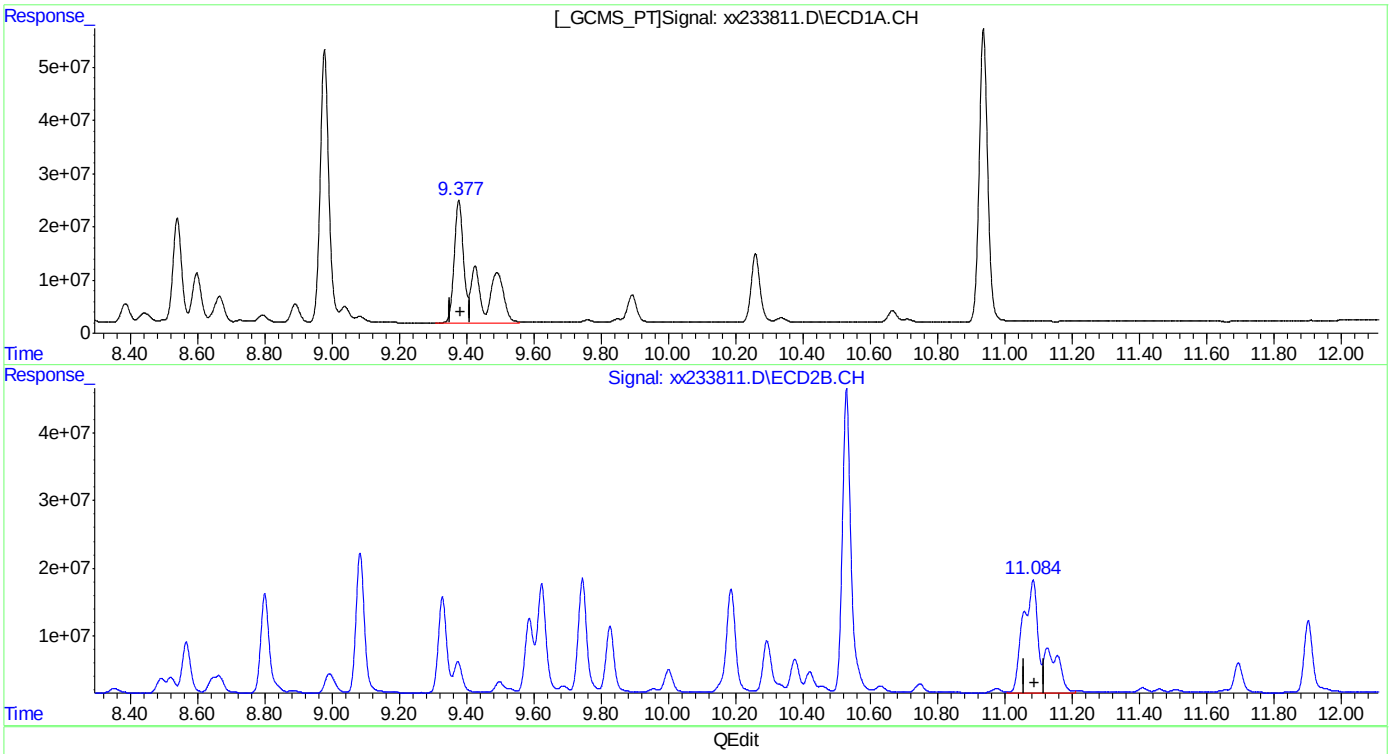
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233811.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 4:49 am
Operator : summerk
Sample : op14250-bs
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:10:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E
9.377min 572.570PPB m
response 890920974

(50) AR1260-E #2
11.084min 541.191PPB m
response 700546107

(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:12:27 2018

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 08/15/18 16:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233812.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 5:08 am
Operator : summerk
Sample : op14250-bsd
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:13:57 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.419	4.147	1115.5E6	863.5E6	87.619	83.832
	Spiked Amount 40.000			Recovery	=	219.05%	209.58%
51)	S Decachlor...	10.938	12.784	1011.4E6	719.0E6	63.902	64.001
	Spiked Amount 40.000			Recovery	=	159.76%	160.00%
	Target Compounds						
41)	AR1016-A	3.836	4.845	152.7E6	102.0E6	666.457	572.473
42)	AR1016-B	4.275	5.430	242.9E6	219.4E6	568.520	611.756
43)	AR1016-C	4.873	6.091	596.6E6	446.6E6	596.177	566.464m
44)	AR1016-D	5.049	6.288	227.3E6	171.5E6	604.072	583.839
45)	AR1016-E	5.587	6.967	235.5E6	122.0E6	595.083	532.738
46)	AR1260-A	8.034	8.800	613.3E6	273.0E6	536.443	540.268m
47)	AR1260-B	8.194	9.744	352.1E6	306.7E6	610.953	596.428
48)	AR1260-C	8.540	10.186	364.9E6	303.6E6	611.820	577.219
49)	AR1260-D	8.976	10.530	954.9E6	824.3E6	624.673m	602.634
50)	AR1260-E	9.377	11.082	924.3E6	714.8E6	593.992m	552.210m

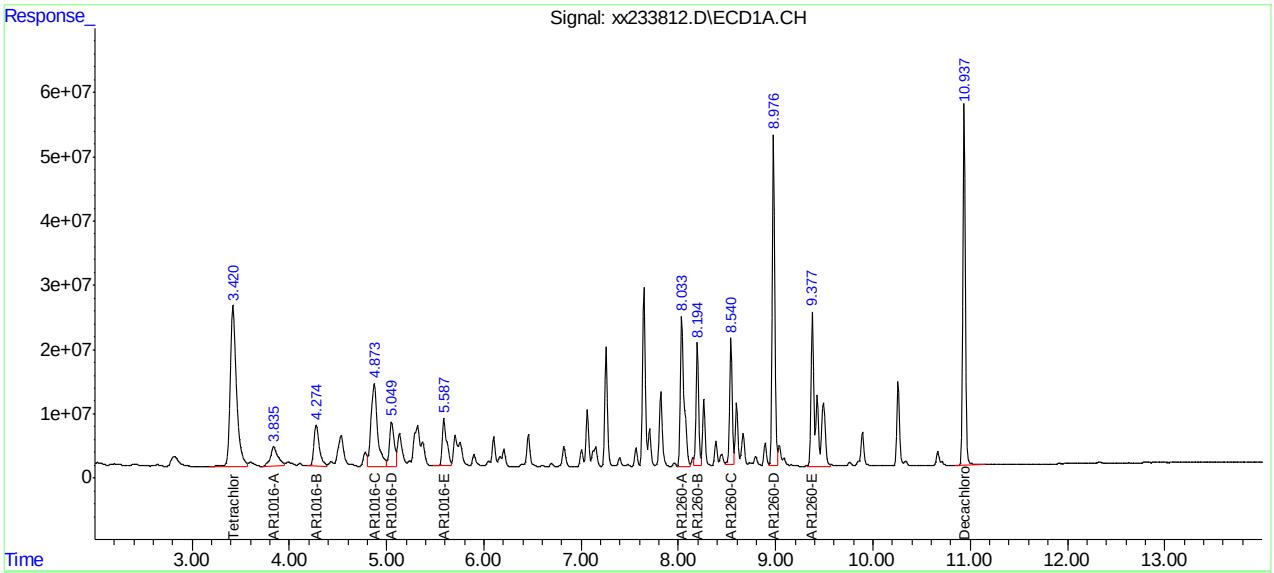
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

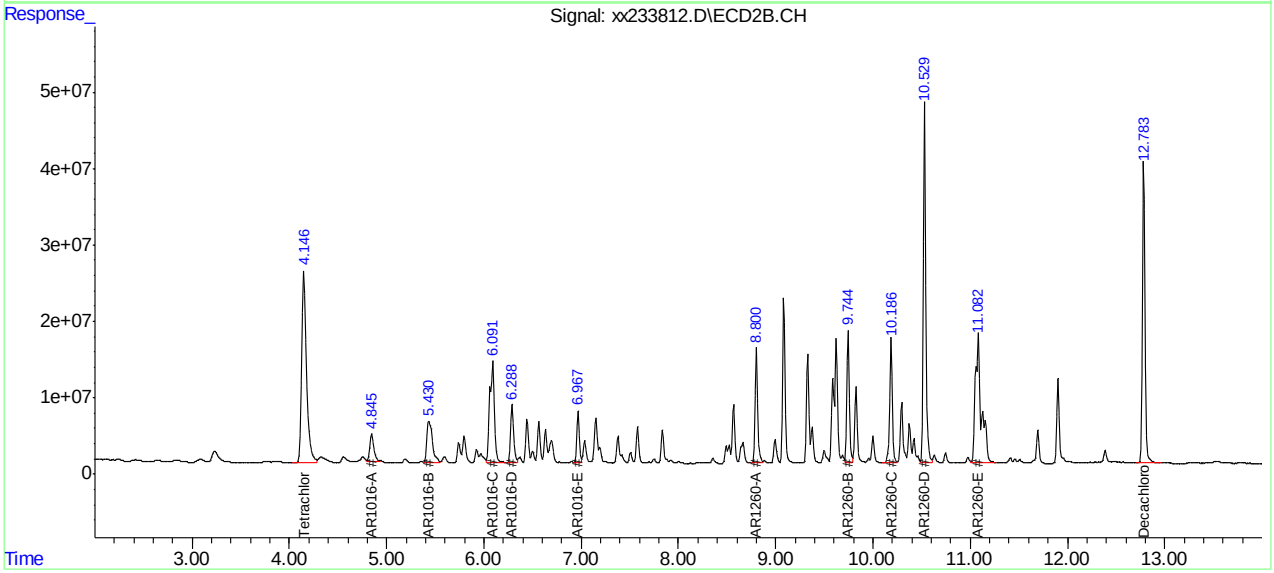
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233812.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 5:08 am
Operator : summerk
Sample : op14250-bsd
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:13:57 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	OP14250-BSD	**Method:**	SW846 8082A
Lab FileID:	XX233812.D	**Analyst approved:**	08/15/18 15:16 Summer Kotb
Injection Time:	08/15/18 05:08	**Supervisor approved:**	08/15/18 16:33 Gwendolyn Burns

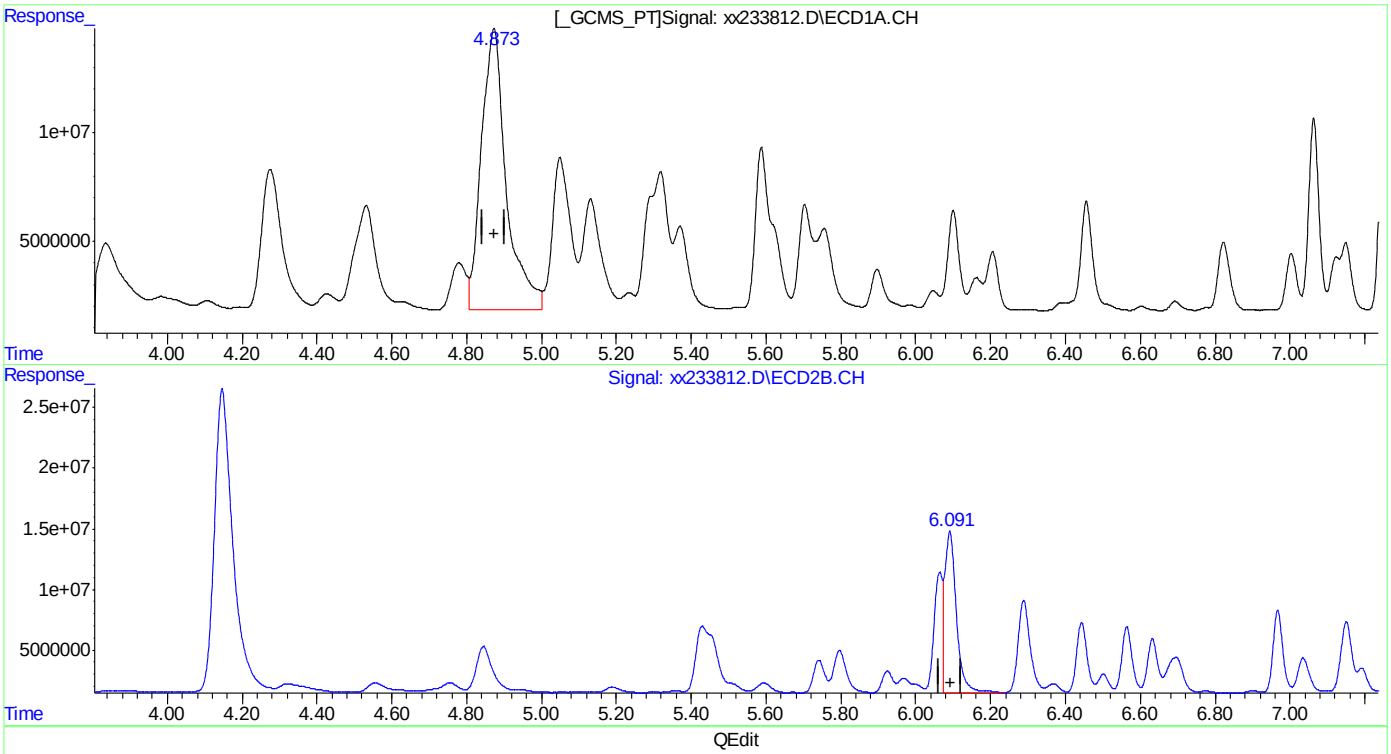
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1016-C		2	6.09	Split peak
AR1260-A		2	8.80	Split peak
AR1260-D		1	8.98	Split peak
AR1260-E		1	9.38	Split peak
AR1260-E		2	11.08	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233812.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 5:08 am
Operator : summerk
Sample : op14250-bsd
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:12:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(43) AR1016-C
4.873min 596.177PPB
response 596637293

(43) AR1016-C #2
6.091min 373.429PPB
response 294390441

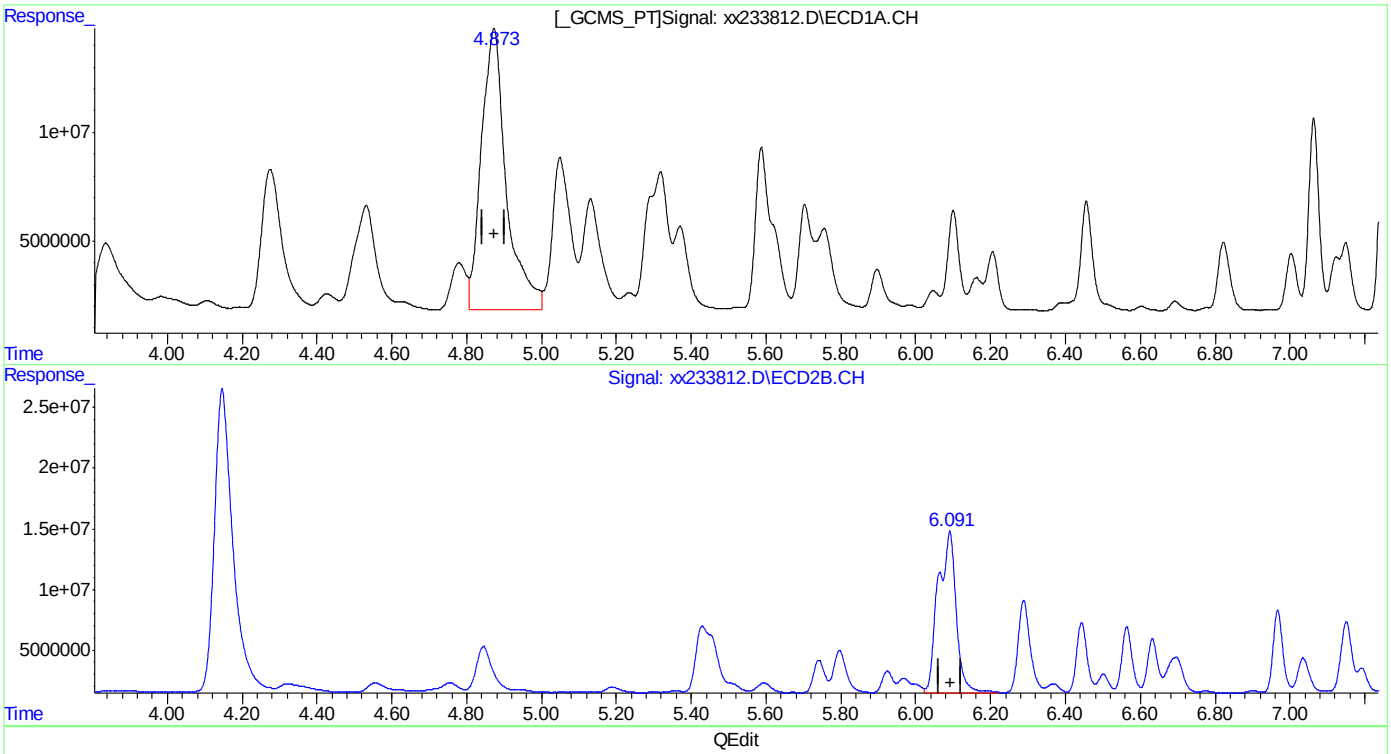
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:12:54 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233812.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 5:08 am
Operator : summerk
Sample : op14250-bsd
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:12:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(43) AR1016-C
4.873min 596.177PPB
response 596637293

(43) AR1016-C #2
6.091min 566.464PPB m
response 446568030

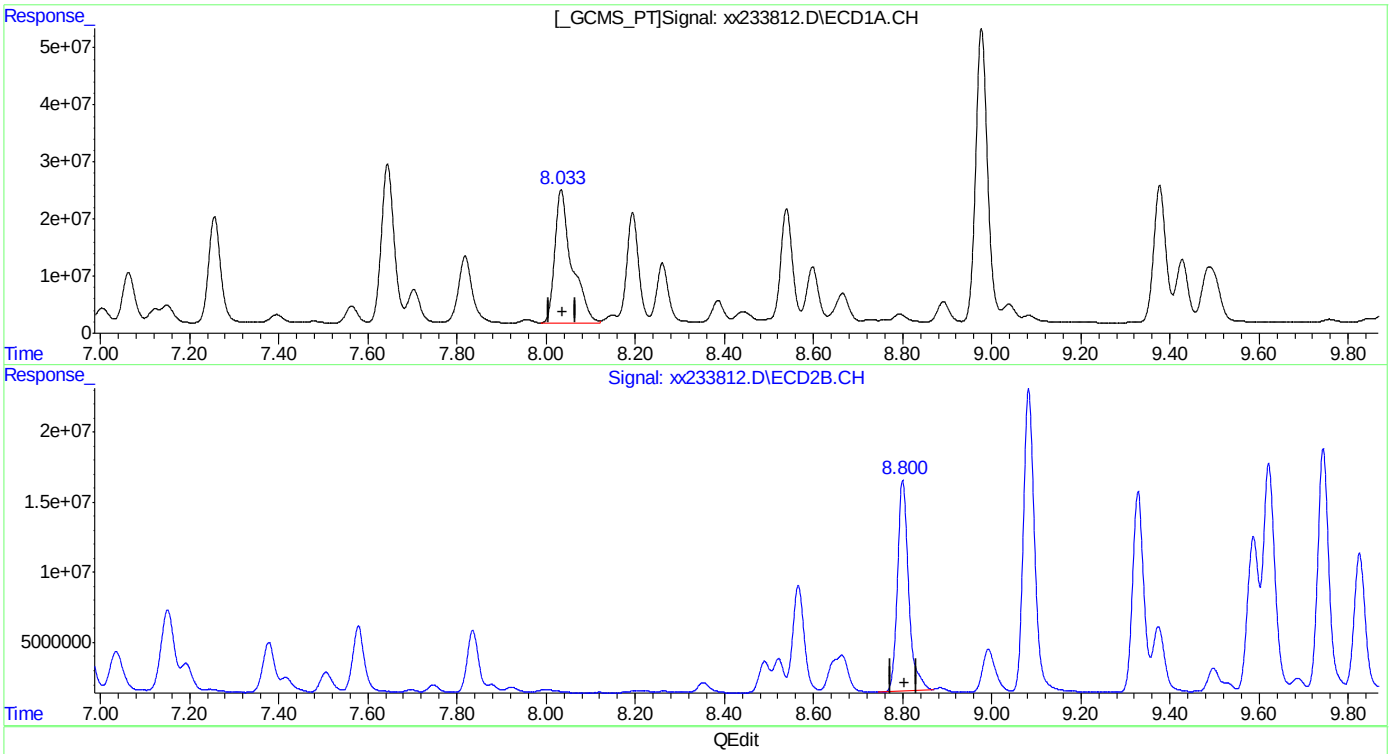
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:13:00 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233812.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 5:08 am
Operator : summerk
Sample : op14250-bsd
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:12:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(46) AR1260-A
8.034min 536.443PPB
response 613322474

(46) AR1260-A #2
8.800min 525.588PPB
response 265581280

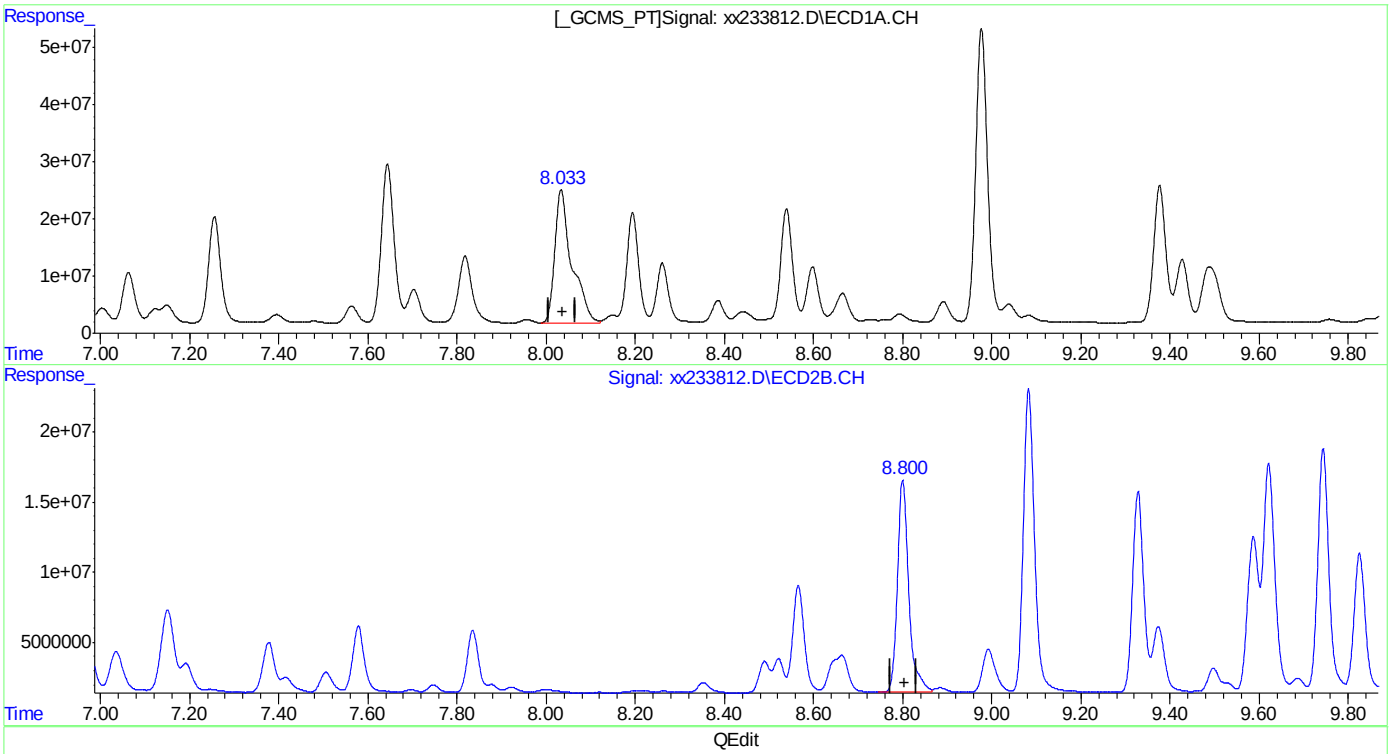
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:13:06 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233812.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 5:08 am
Operator : summerk
Sample : op14250-bsd
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:12:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(46) AR1260-A
8.034min 536.443PPB
response 613322474

(46) AR1260-A #2
8.800min 540.268PPB m
response 272999386

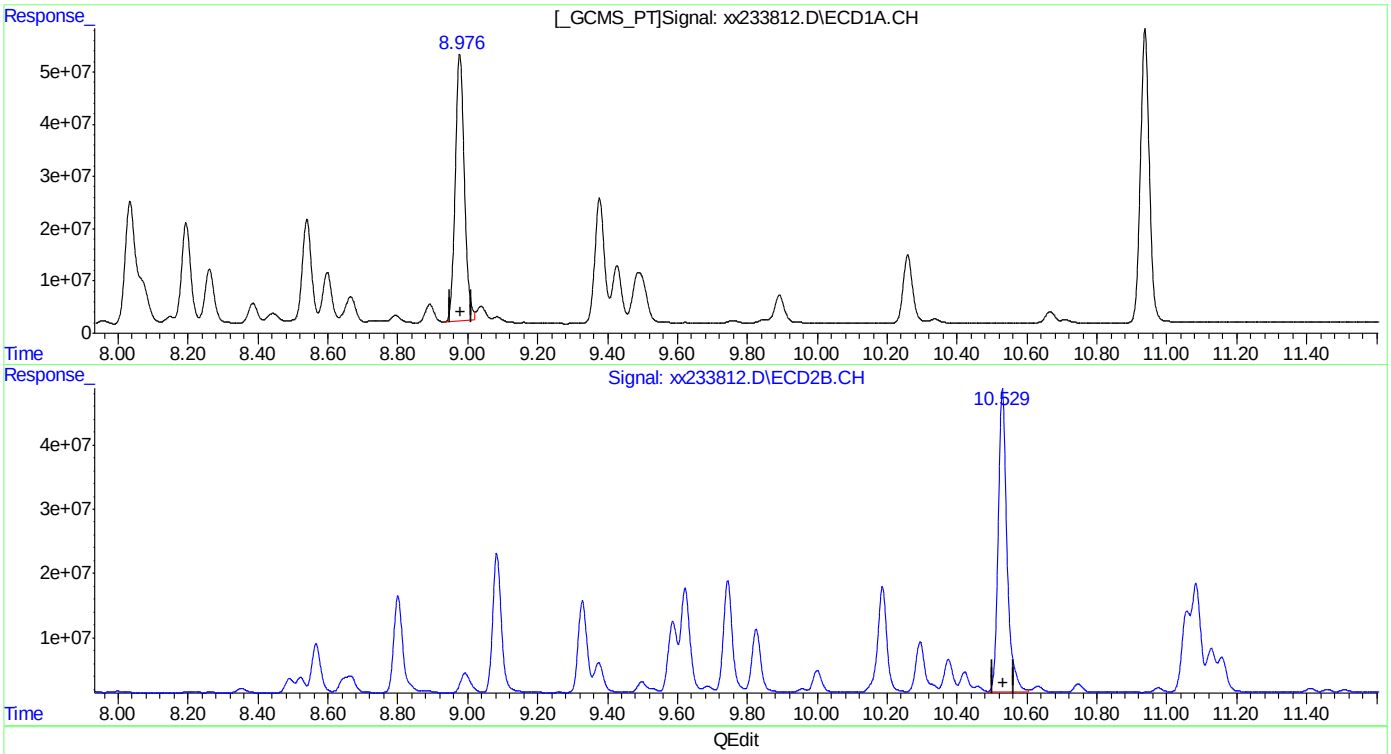
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:13:15 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233812.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 5:08 am
Operator : summerk
Sample : op14250-bsd
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:12:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D
8.977min 607.285PPB
response 928318486

(49) AR1260-D #2
10.530min 602.634PPB
response 824342874

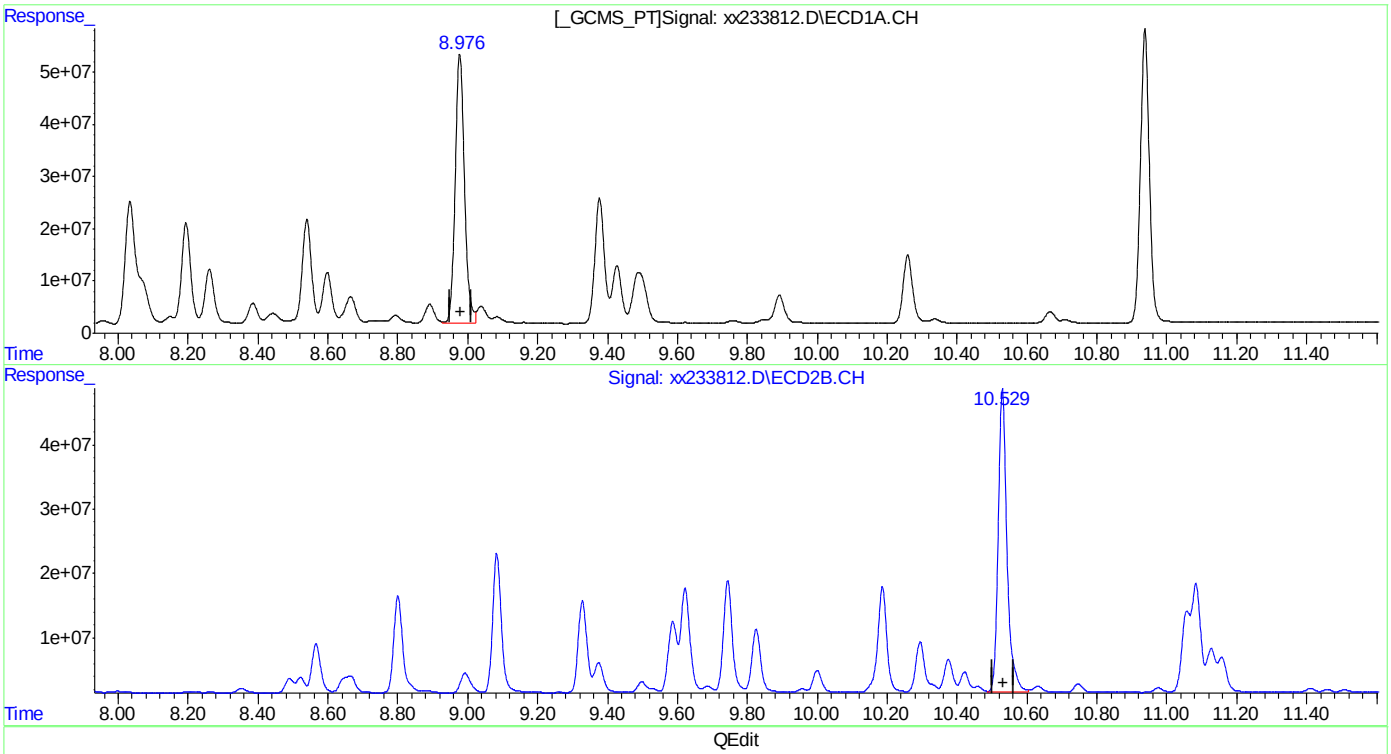
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:13:20 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233812.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 5:08 am
Operator : summerk
Sample : op14250-bsd
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:12:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D
8.976min 624.673PPB m
response 954899666

(49) AR1260-D #2
10.530min 602.634PPB
response 824342874

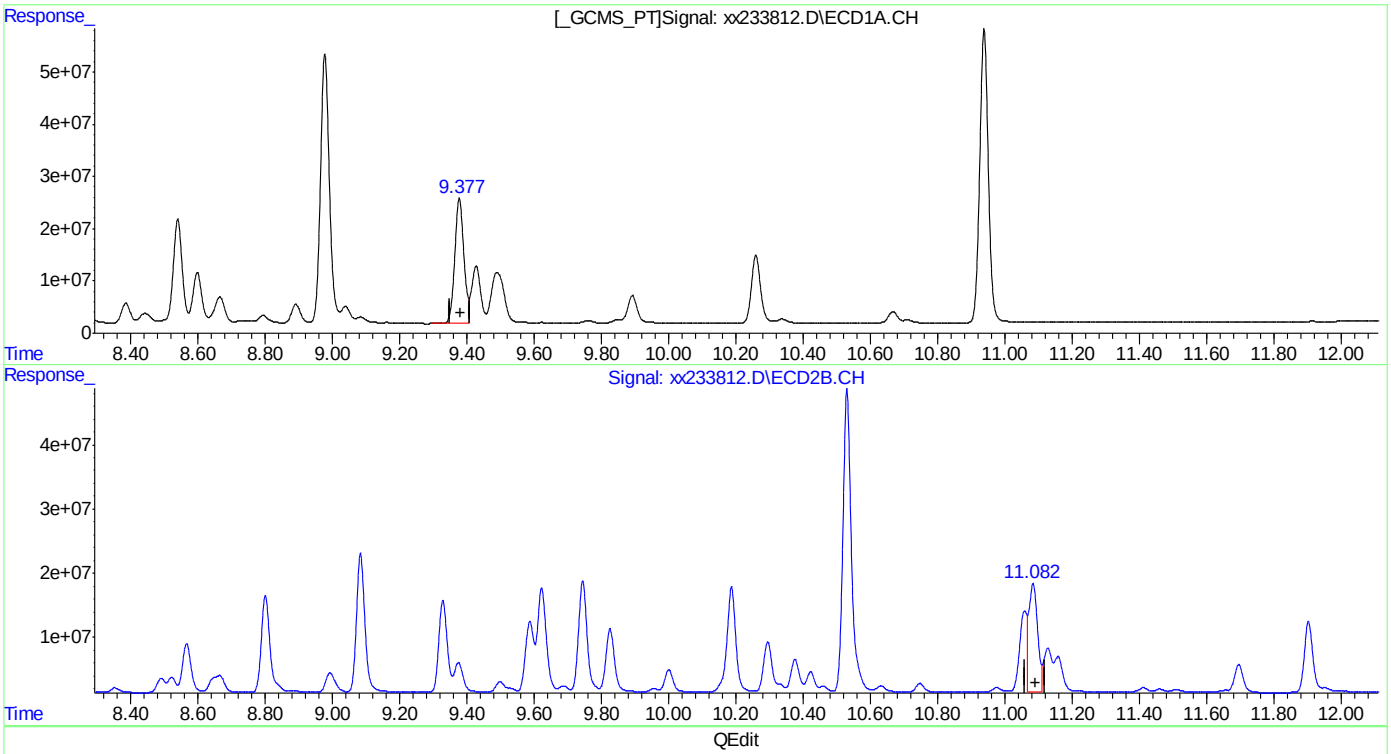
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:13:38 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233812.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 5:08 am
Operator : summerk
Sample : op14250-bsd
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:12:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E
9.377min 289.736PPB
response 450829960

(50) AR1260-E #2
11.083min 241.979PPB
response 313230367

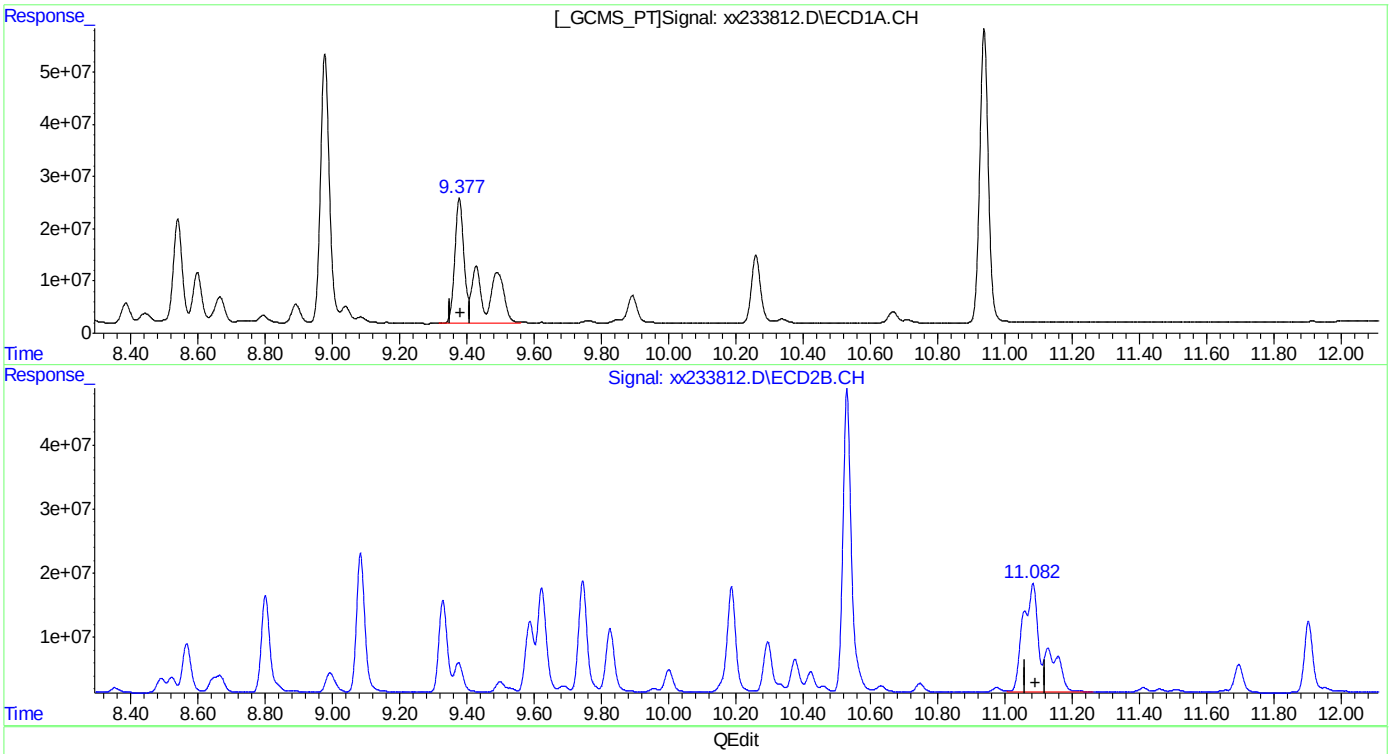
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:13:40 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233812.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 5:08 am
Operator : summerk
Sample : op14250-bsd
Misc : op14250,GXX6439,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 15:12:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E
9.377min 593.992PPB m
response 924254054

(50) AR1260-E #2
11.082min 552.210PPB m
response 714809713

(+) = Expected Retention Time
PCB6423.M Wed Aug 15 15:13:59 2018

Manual Integrations APPROVED (compounds with "m" flag)
Carol Boykin 07/31/18 17:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:44:19 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.413	4.143	26205834	19570527	3.648	3.524
	Spiked Amount 40.000			Recovery	=	9.12%	8.81%
51) S	Decachlor...	10.939	12.790	31360331	21598704	3.840m	3.821
	Spiked Amount 40.000			Recovery	=	9.60%	9.55%
	Target Compounds						
41)	AR1016-A	3.835	4.844	11326718	10815083	90.135	105.236
42)	AR1016-B	4.276	5.431	22572568	20239488	93.833	99.028m
43)	AR1016-C	4.875	6.092	52883268	43327845	100.385m	110.300
44)	AR1016-D	5.051	6.288	19630129	15554514	94.489m	94.717m
45)	AR1016-E	5.589	6.971	20330046	12371244	90.980	97.133
46)	AR1260-A	8.037	8.804	56989056	26527007	93.863	98.654
47)	AR1260-B	8.196	9.746	30469302	25128089	92.279m	89.351m
48)	AR1260-C	8.543	10.190	29667901	26609116	94.785m	97.486
49)	AR1260-D	8.980	10.533	73020703	66694933	93.410m	98.176m
50)	AR1260-E	9.380	11.086	77172174	72921040	92.590m	106.744m

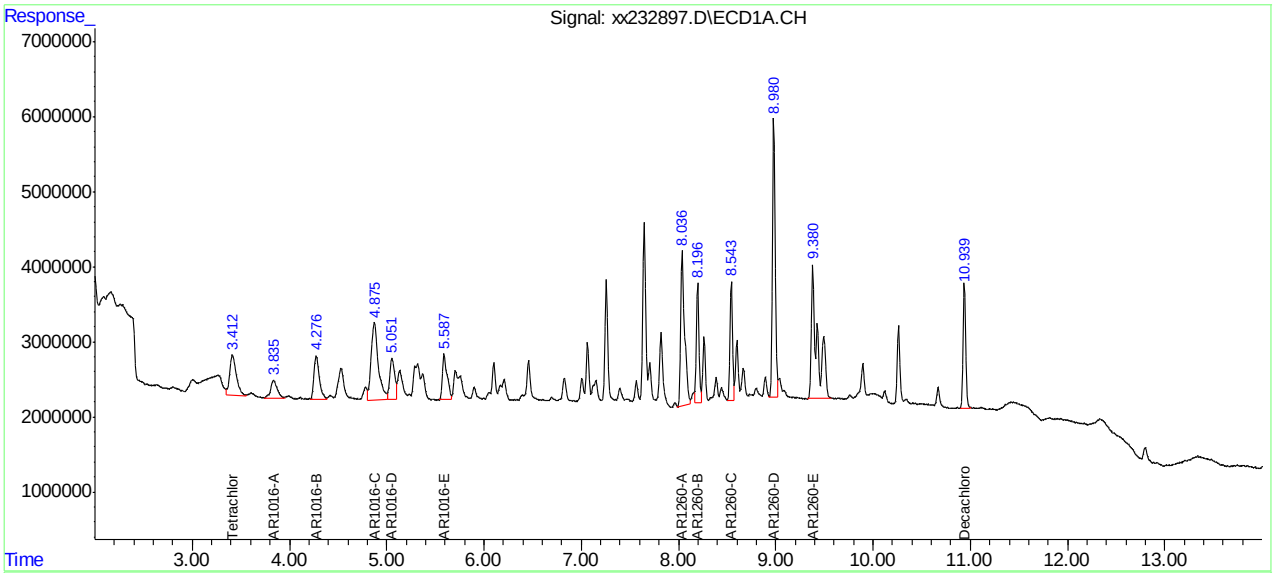
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

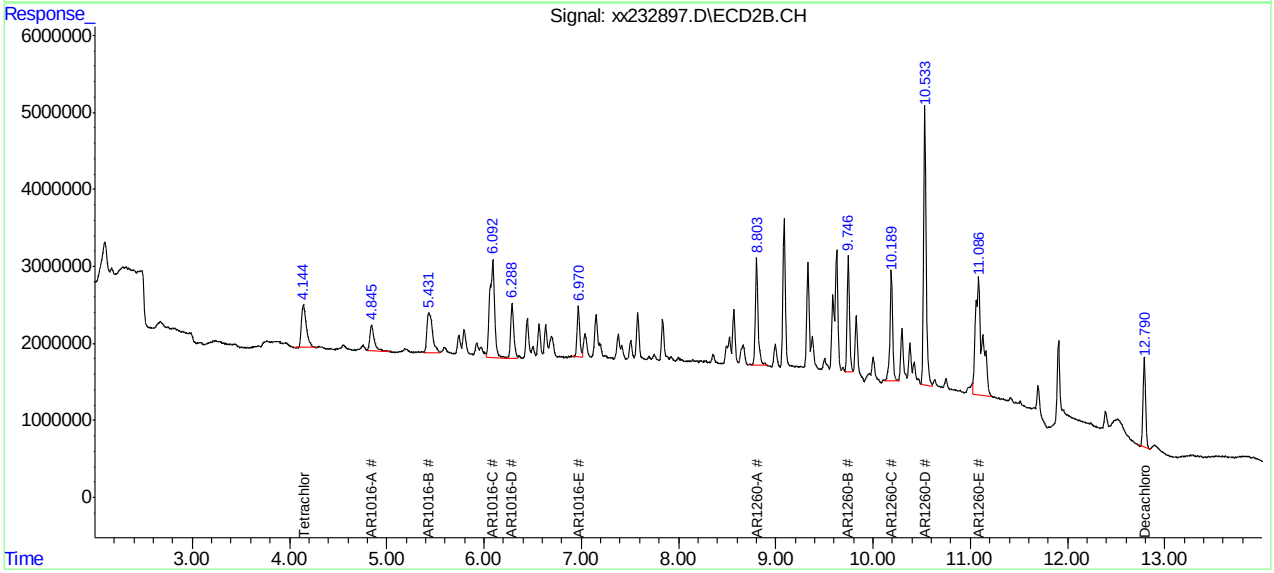
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:44:19 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GXX6423-IC6423 **Method:** SW846 8082A
Lab FileID: XX232897.D **Analyst approved:** 07/31/18 17:06 Summer Kotb
Injection Time: 07/28/18 01:13 **Supervisor approved:** 07/31/18 17:30 Carol Boykin

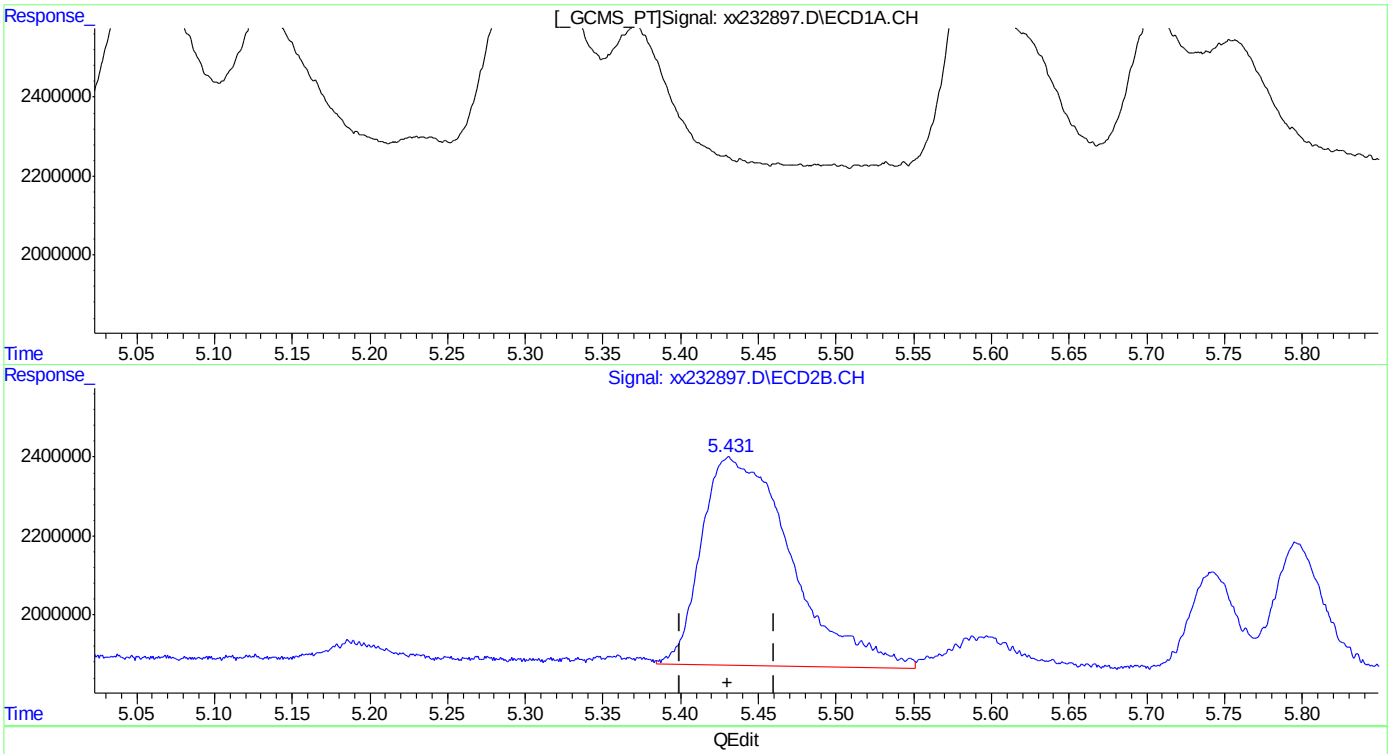
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1016-C		1	4.87	Split peak
AR1016-D		1	5.05	Split peak
AR1016-B		2	5.43	Split peak
AR1016-D		2	6.29	Split peak
AR1260-B		1	8.20	Split peak
AR1260-C		1	8.54	Split peak
AR1260-D		1	8.98	Split peak
AR1260-E		1	9.38	Split peak
AR1260-B		2	9.75	Split peak
AR1260-D		2	10.53	Split peak
Decachlorobiphenyl	2051-24-3	1	10.94	Poorly defined baseline
AR1260-E		2	11.09	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(42) AR1016-B
4.276min 93.833PPB
response 22572568

(42) AR1016-B #2
5.431min 104.102PPB
response 21276498

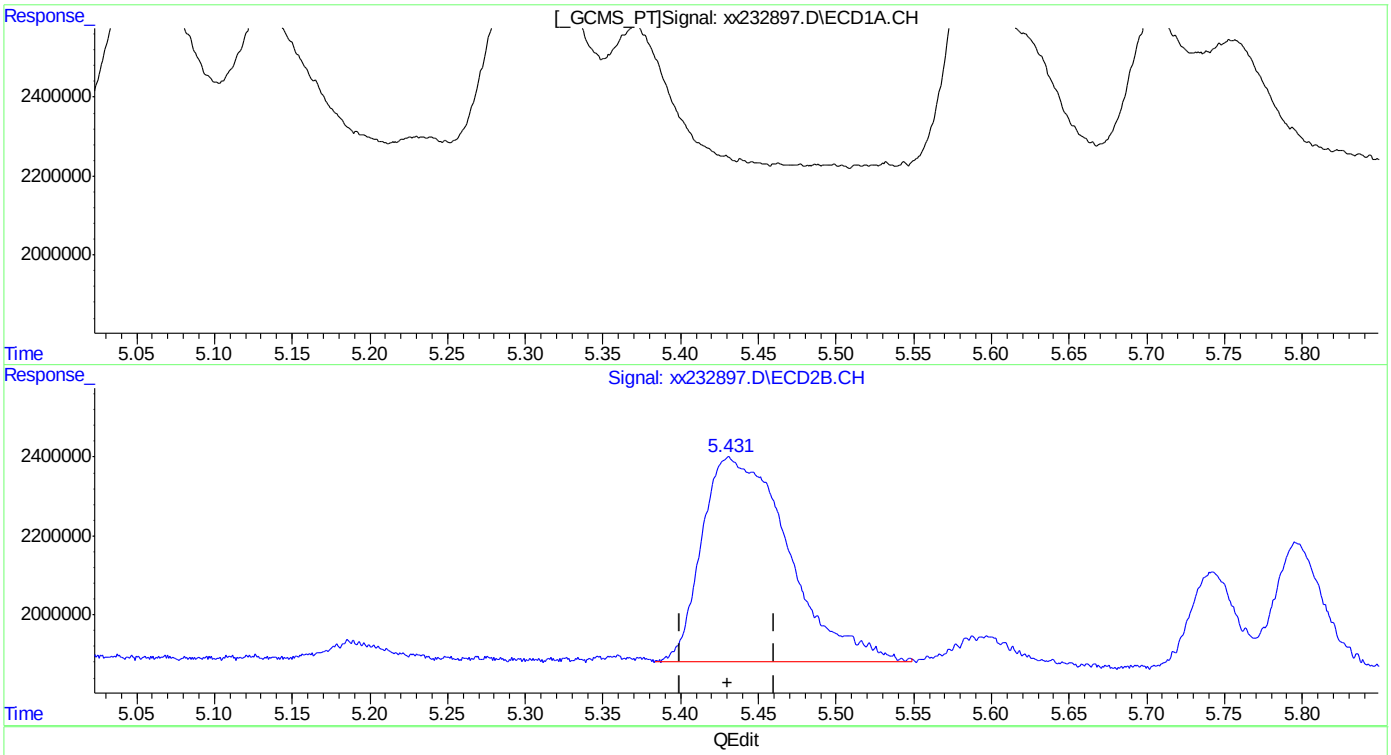
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 09:49:10 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(42) AR1016-B
4.276min 93.833PPB
response 22572568

(42) AR1016-B #2
5.431min 99.028PPB m
response 20239488

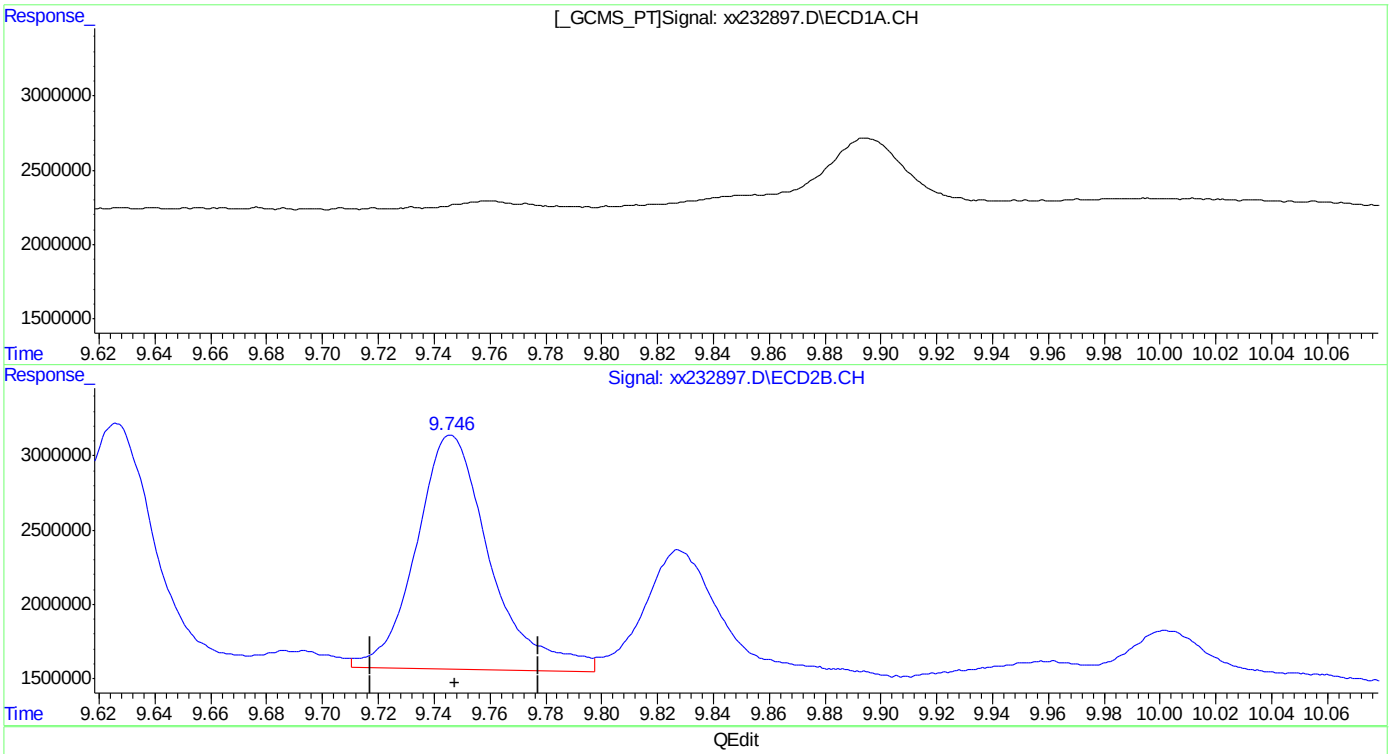
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 09:49:18 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.197min 100.005PPB
response 33020353

(47) AR1260-B #2
9.746min 102.615PPB
response 28858374

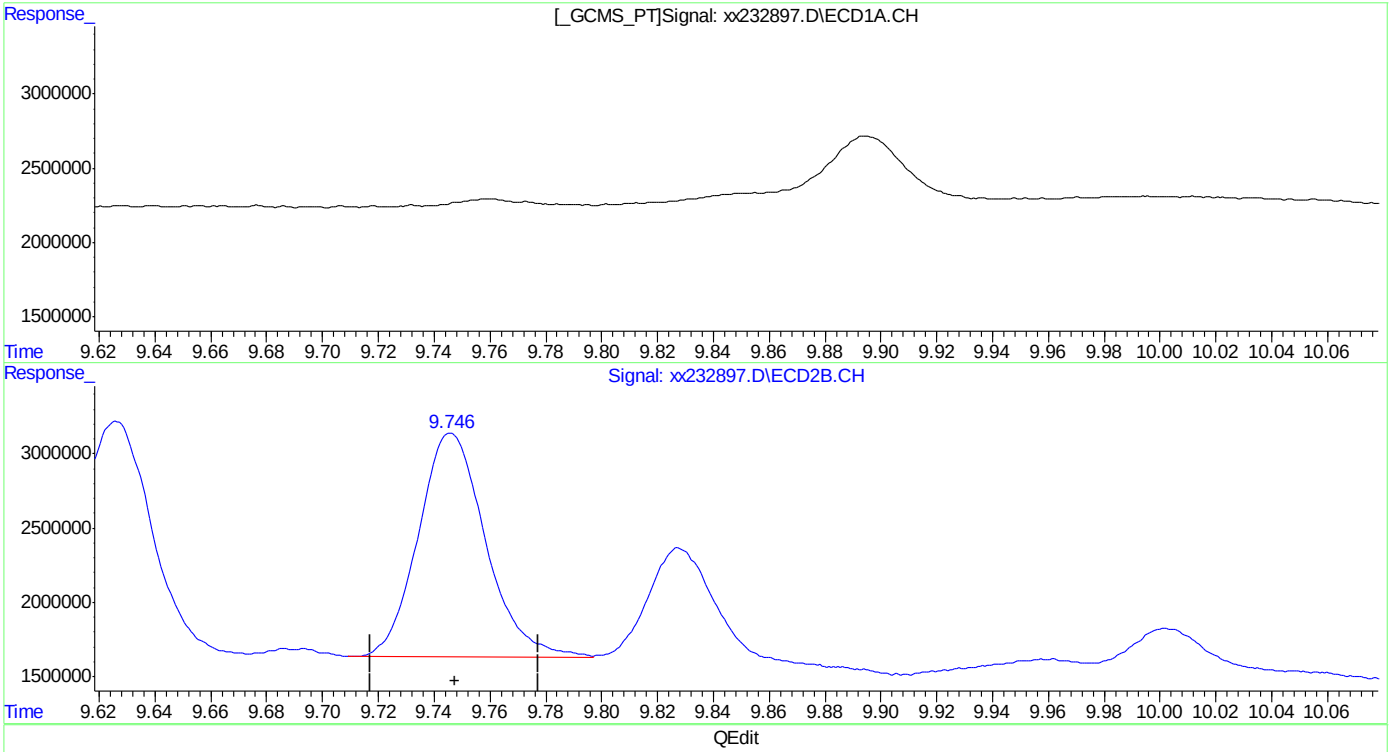
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.197min 100.005PPB
response 33020353

(47) AR1260-B #2
9.746min 89.351PPB m
response 25128089

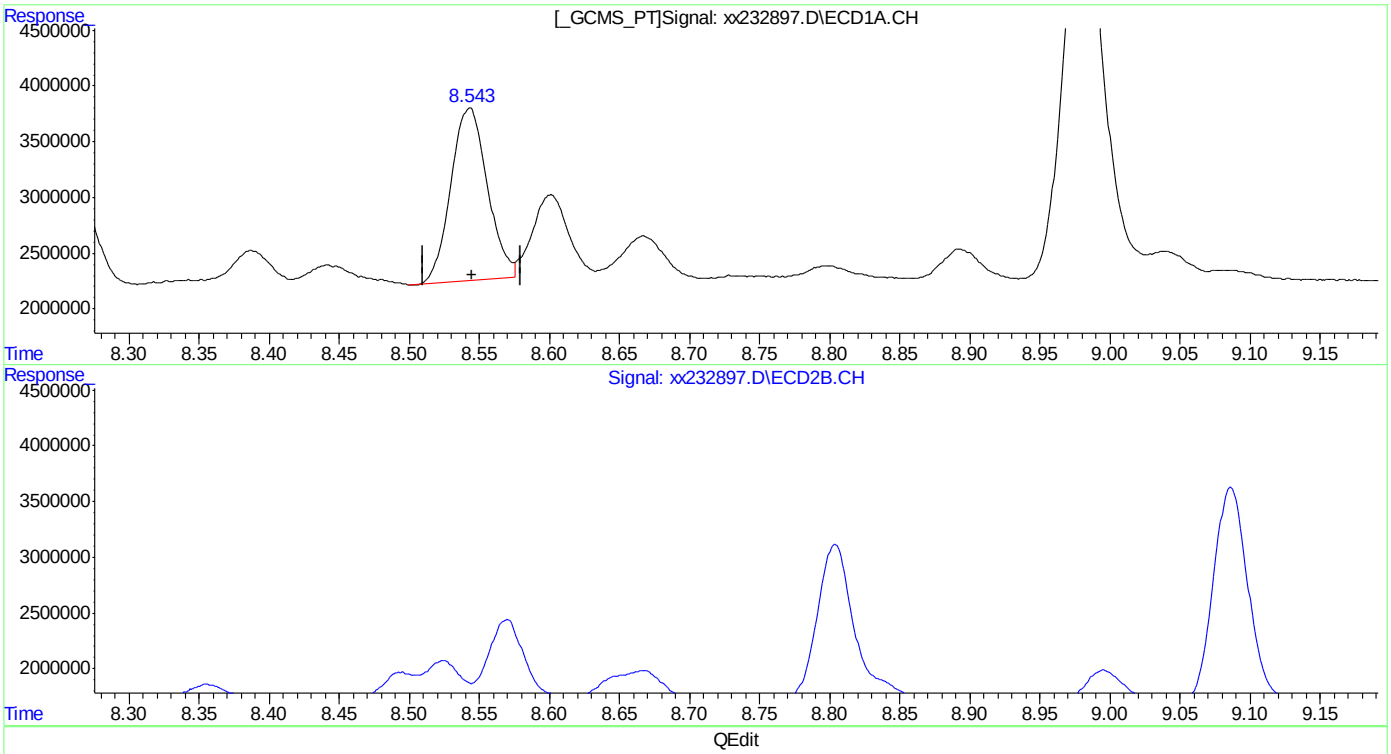
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(48) AR1260-C
8.543min 89.193PPB
response 27917557

(48) AR1260-C #2
10.190min 97.486PPB
response 26609116

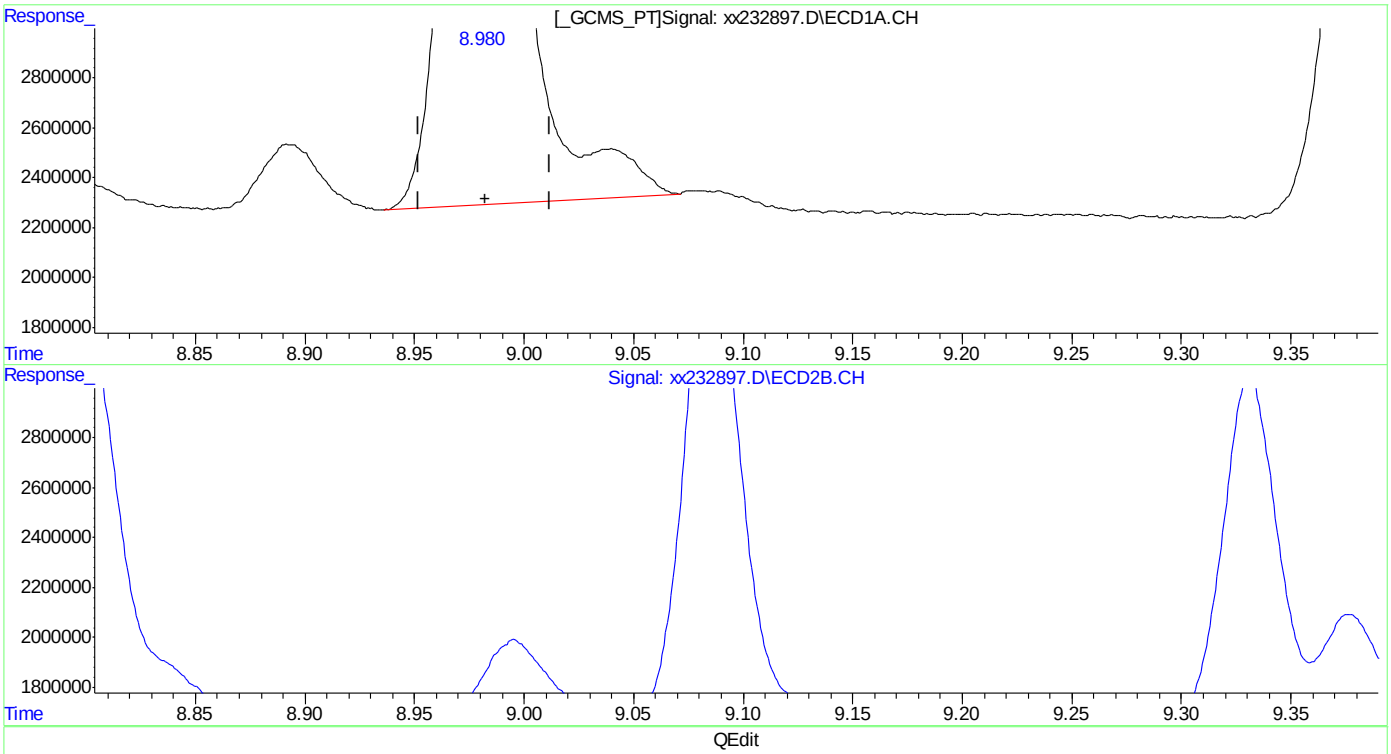
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D
8.980min 95.873PPB
response 74945832

(49) AR1260-D #2
10.533min 95.240PPB
response 64700666

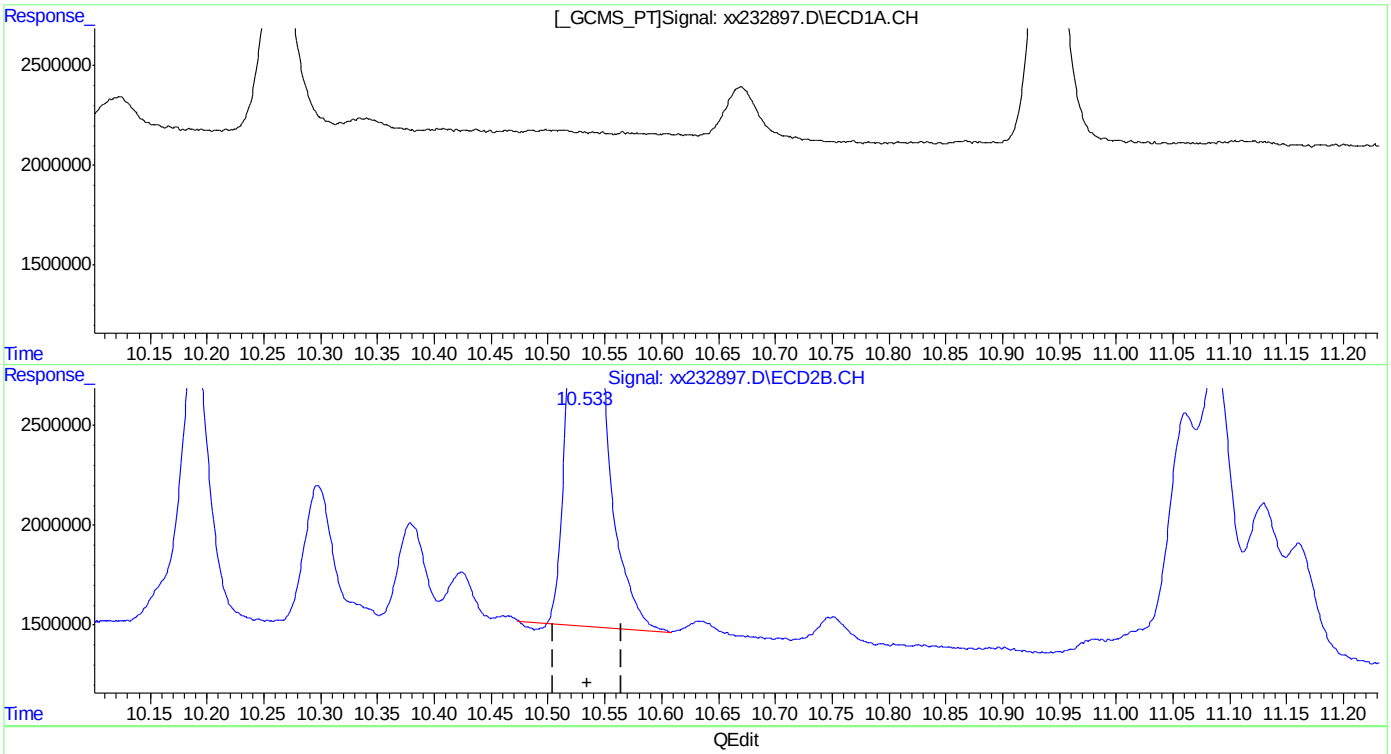
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D
8.980min 100.247PPB m
response 78365322

(49) AR1260-D #2
10.533min 95.240PPB
response 64700666

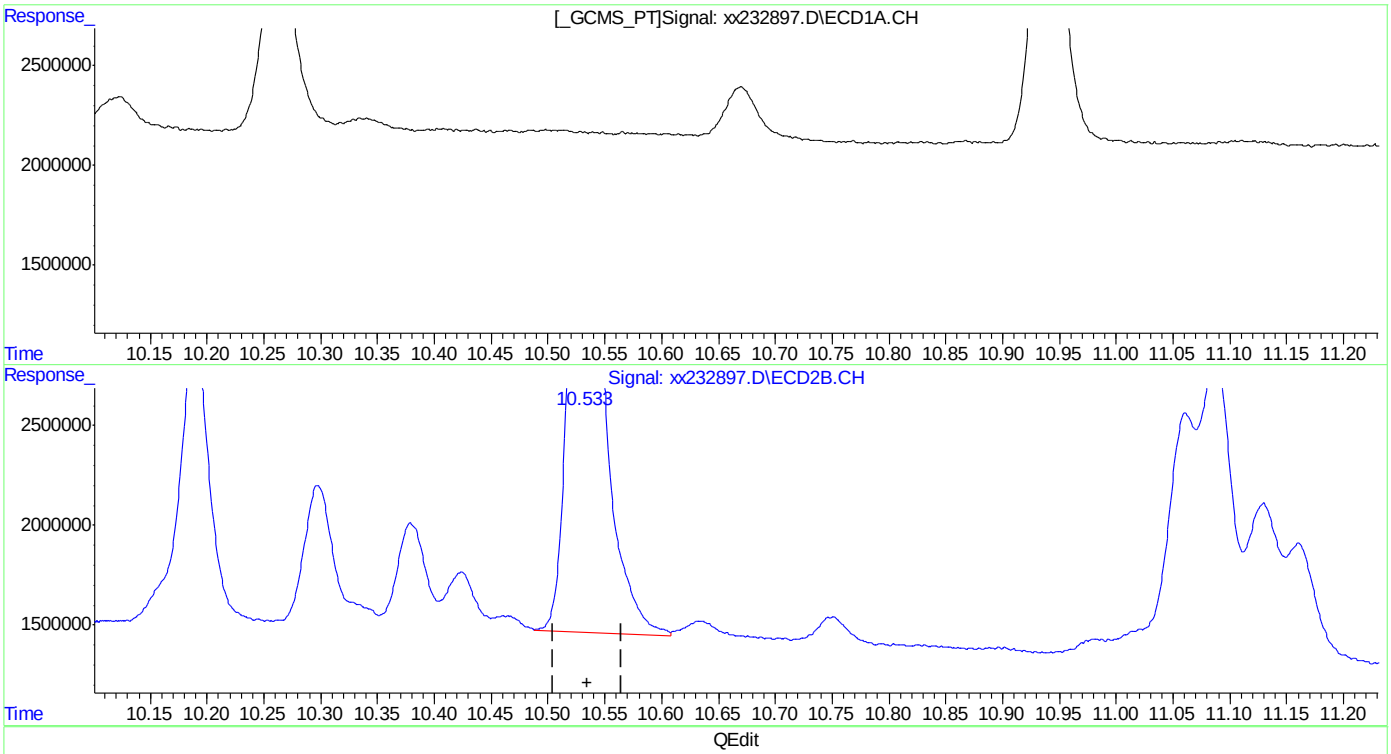
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 09:52:53 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D
8.980min 100.247PPB m
response 78365322

(49) AR1260-D #2
10.533min 98.176PPB m
response 66694933

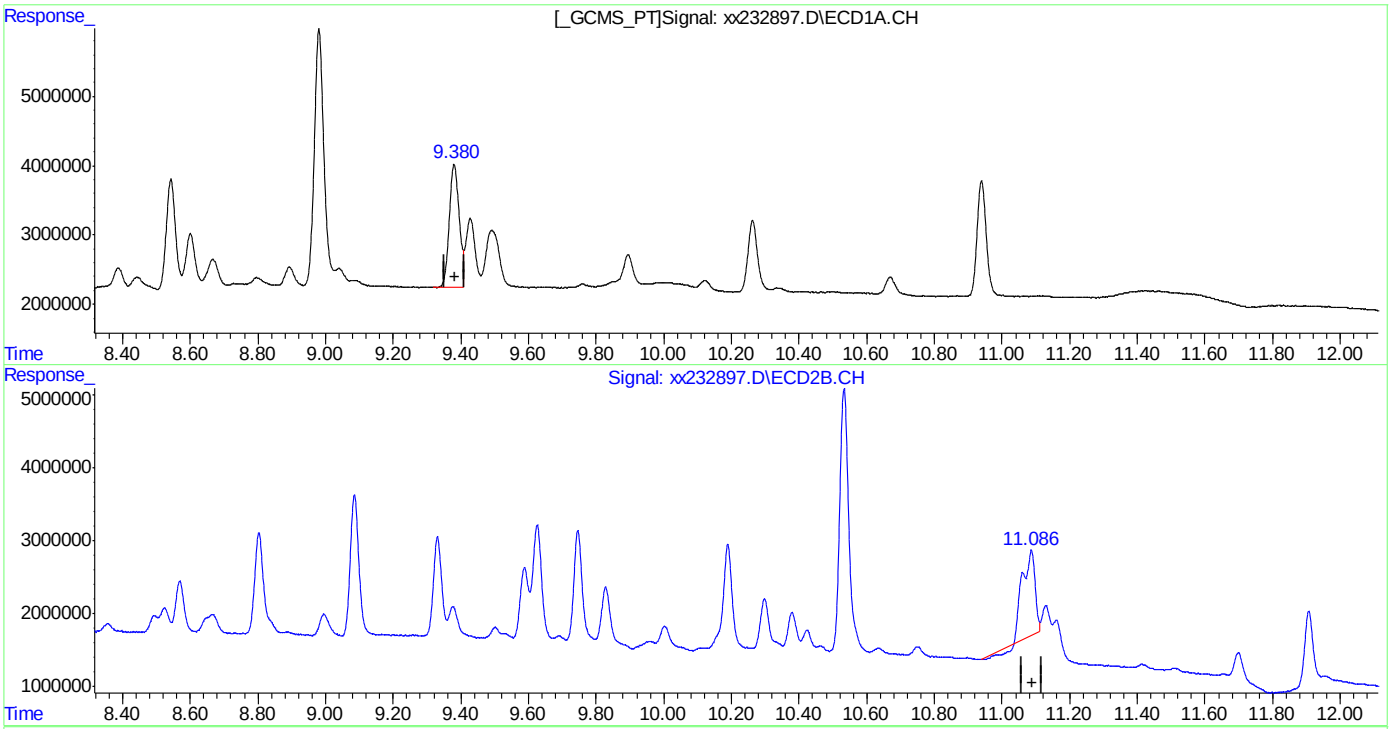
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E
9.381min 43.101PPB
response 35923920

(50) AR1260-E #2
11.087min 42.361PPB
response 28938535

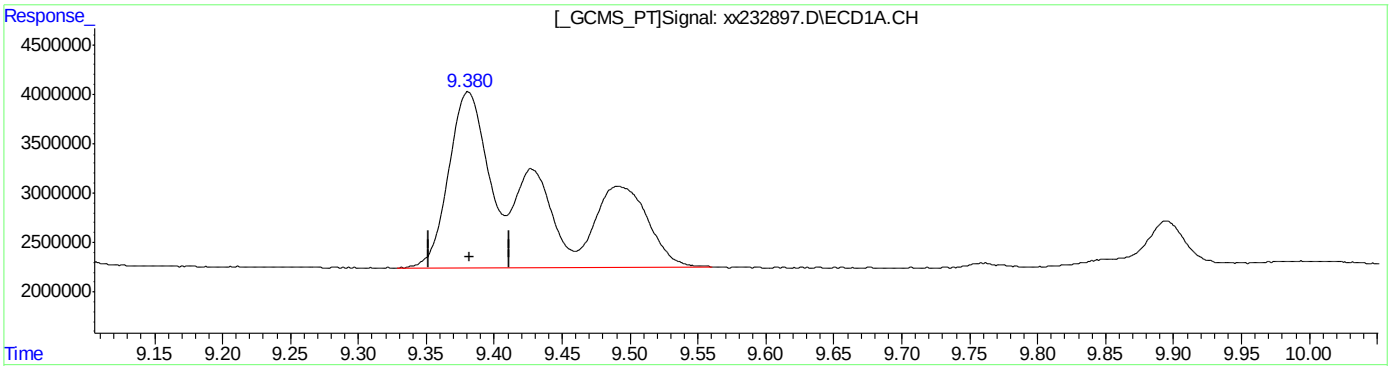
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.380min 92.590PPB m
response 77172174

(50) AR1260-E #2
11.087min 42.361PPB
response 28938535

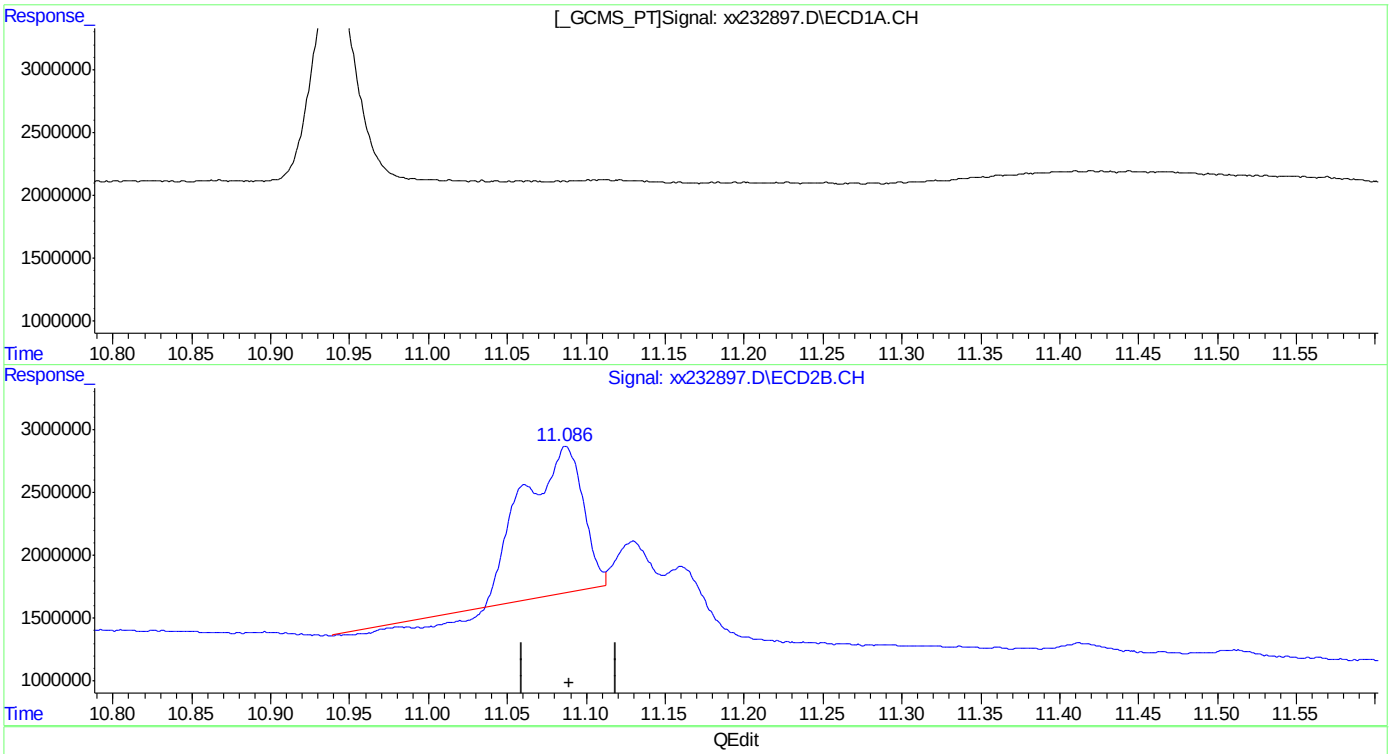
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.380min 92.590PPB m
response 77172174

(50) AR1260-E #2
11.087min 42.361PPB
response 28938535

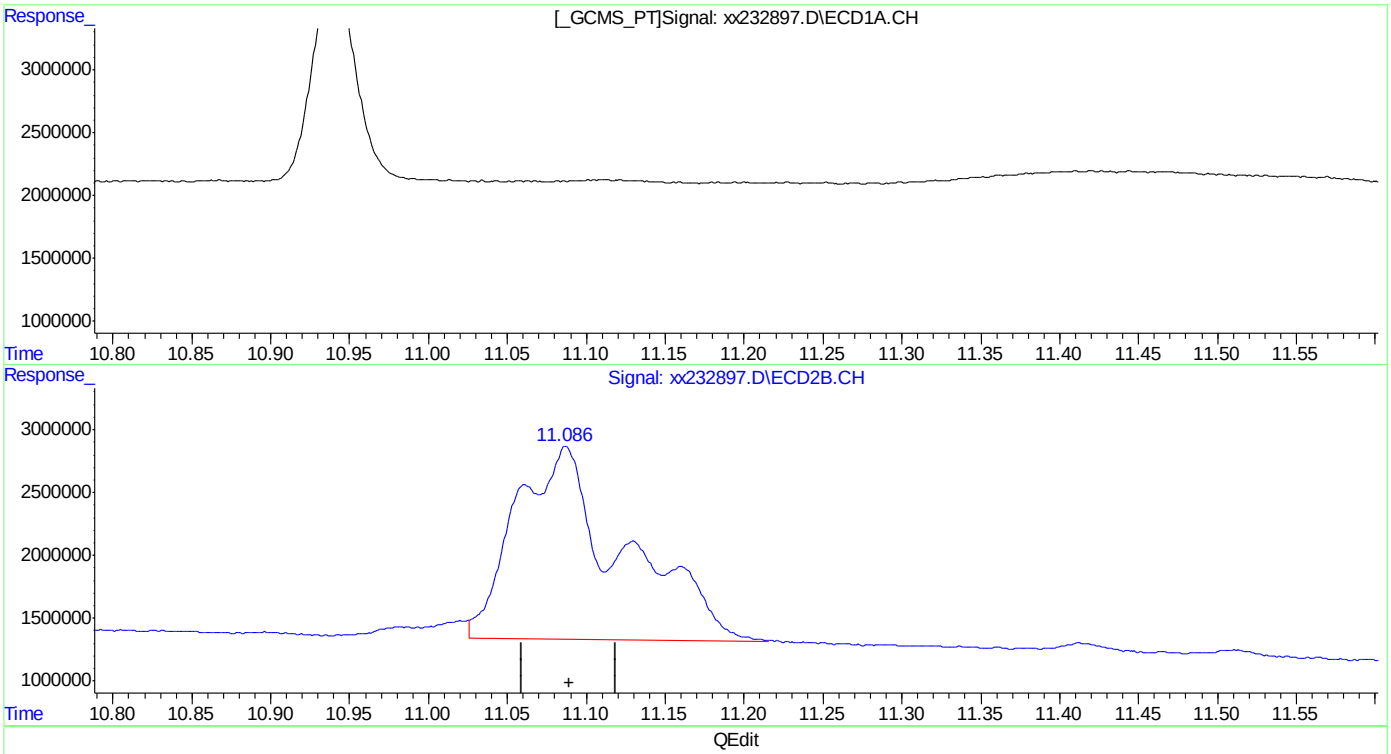
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.380min 92.590PPB m
response 77172174

(50) AR1260-E #2
11.086min 106.744PPB m
response 72921040

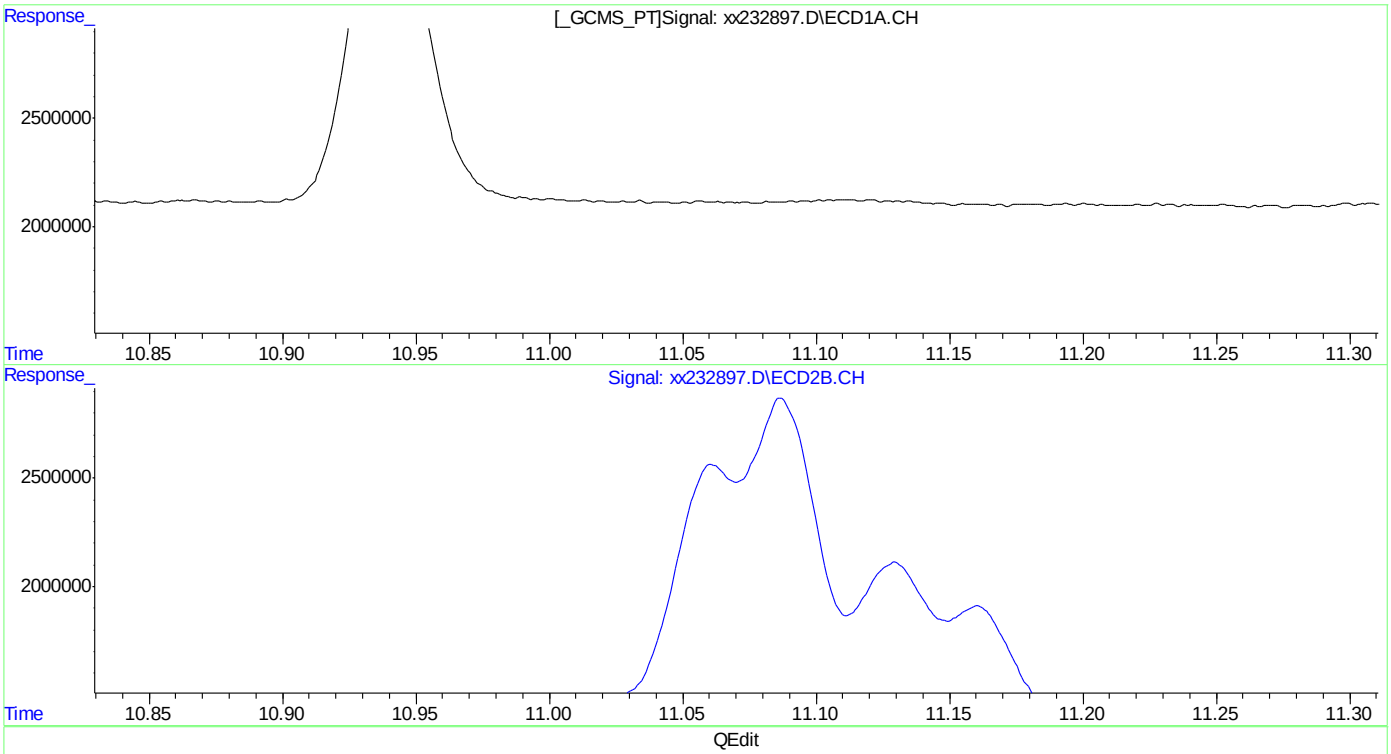
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(51) Decachlorobiphenyl (S)
0.000min 0.000ppb
response 0

(51) Decachlorobiphenyl #2 (S)
12.790min 3.821ppb
response 21598704

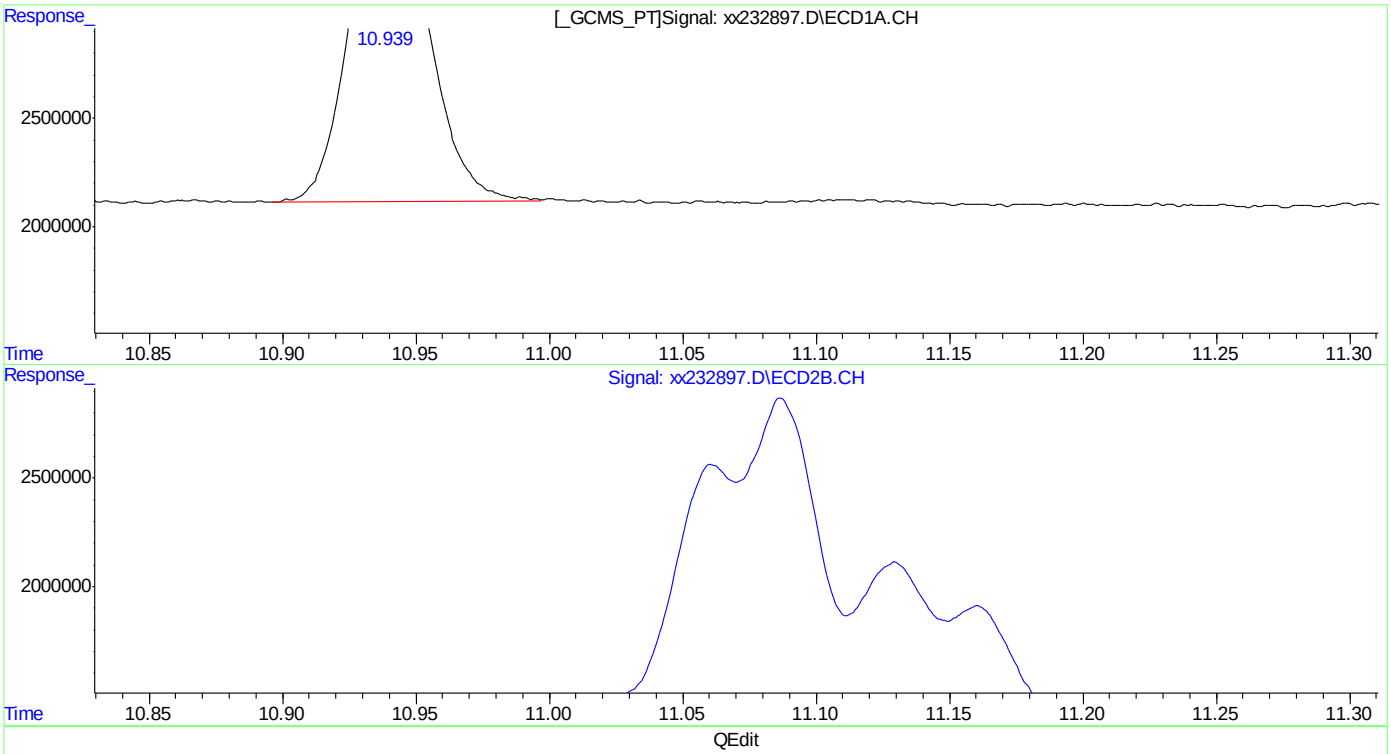
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:48:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(51) Decachlorobiphenyl (S)
10.939min 3.840ppb m
response 31360331

(51) Decachlorobiphenyl #2 (S)
12.790min 3.821ppb
response 21598704

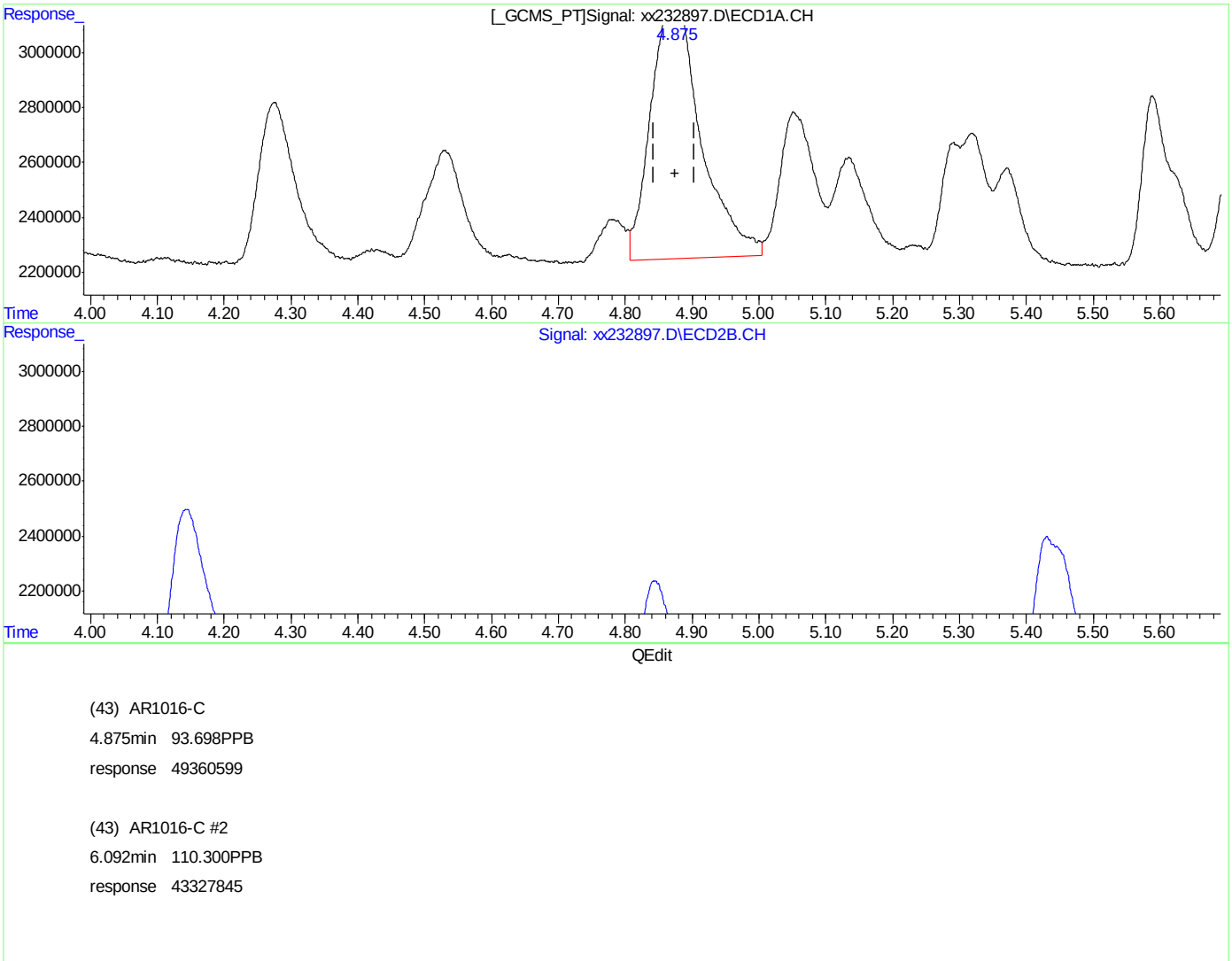
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 09:54:56 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:54:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(43) AR1016-C
4.875min 93.698PPB
response 49360599

(43) AR1016-C #2
6.092min 110.300PPB
response 43327845

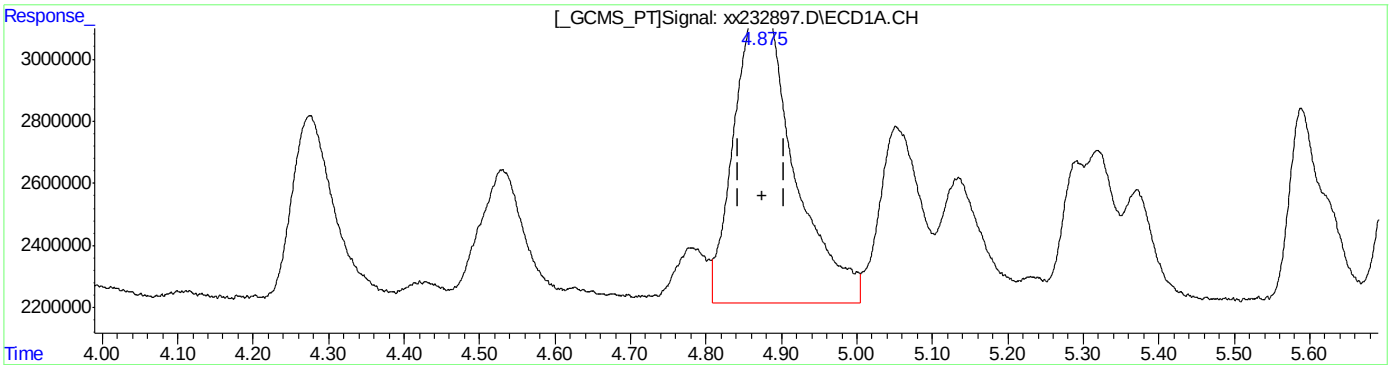
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:16:33 2018

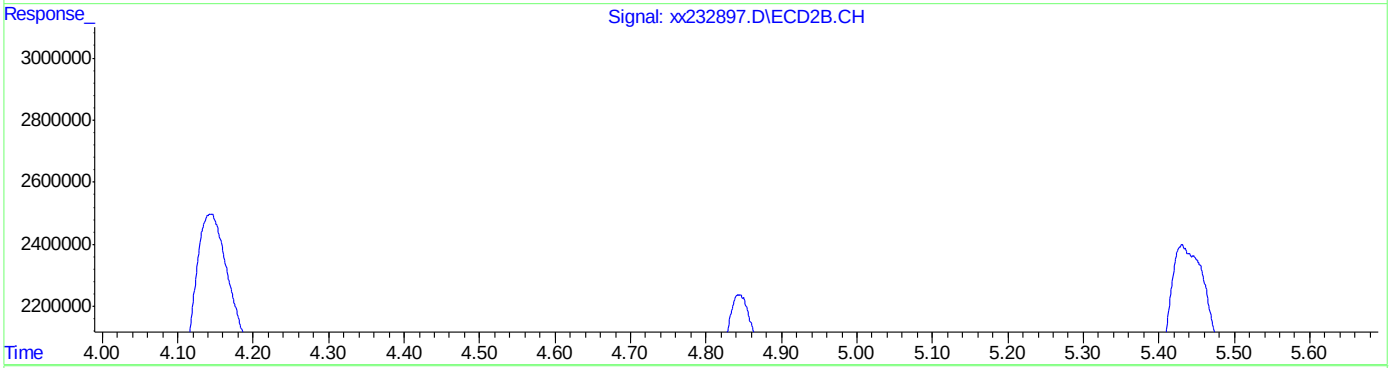
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:54:52 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(43) AR1016-C
4.875min 100.385PPB m
response 53920245

(43) AR1016-C #2
6.092min 110.300PPB
response 43327845

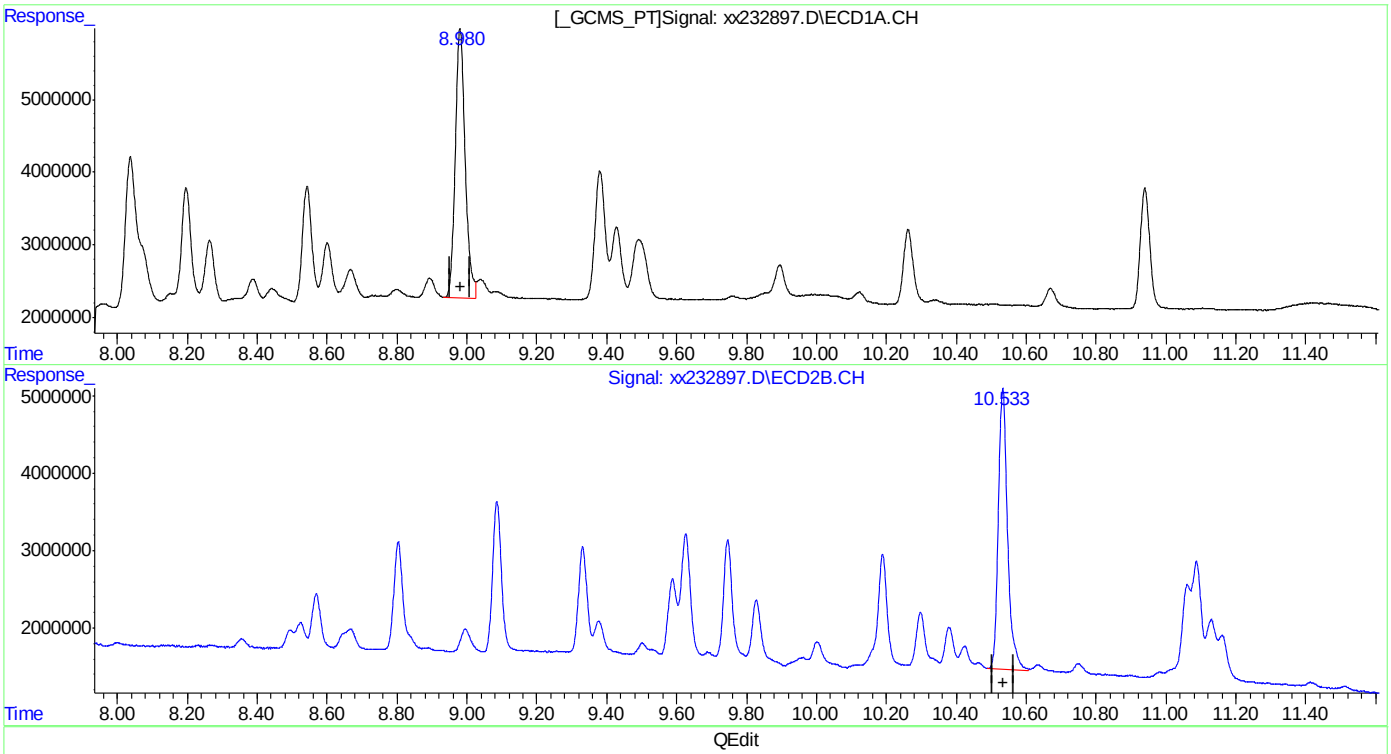
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:16:38 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D
8.980min 93.410PPB m
response 73020703

(49) AR1260-D #2
10.533min 98.176PPB m
response 66694933

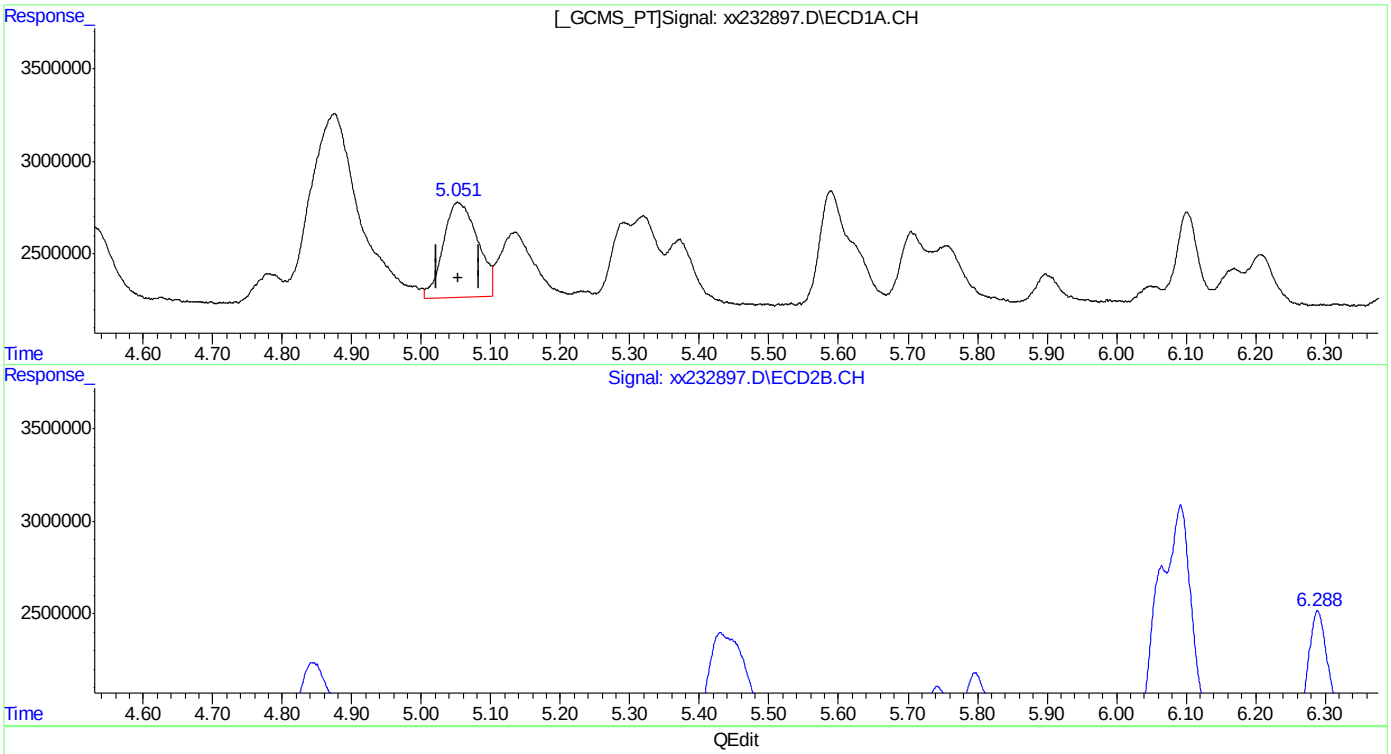
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:22:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.052min 85.111PPB
response 17681785

(44) AR1016-D #2
6.289min 92.812PPB
response 15241576

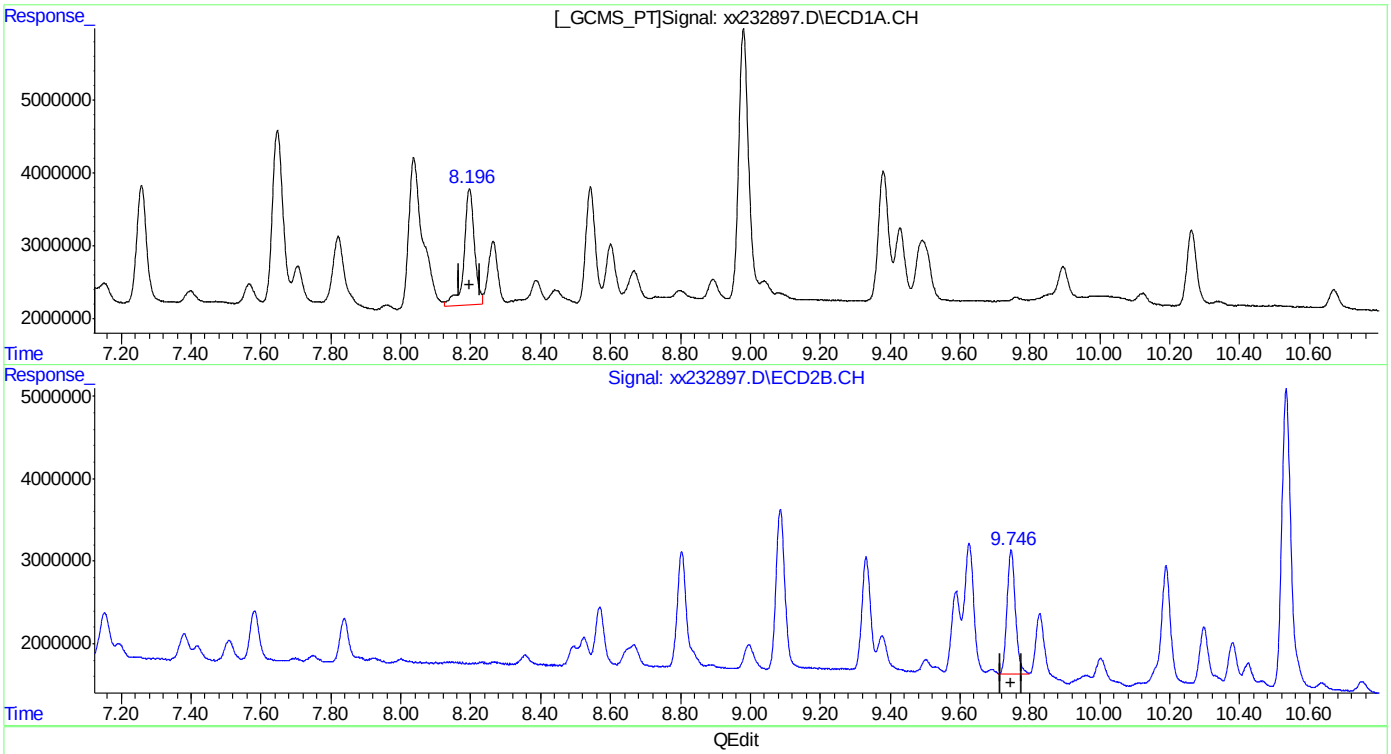
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:34:30 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(47) AR1260-B
8.197min 100.005PPB
response 33020353

(47) AR1260-B #2
9.746min 89.351PPB m
response 25128089

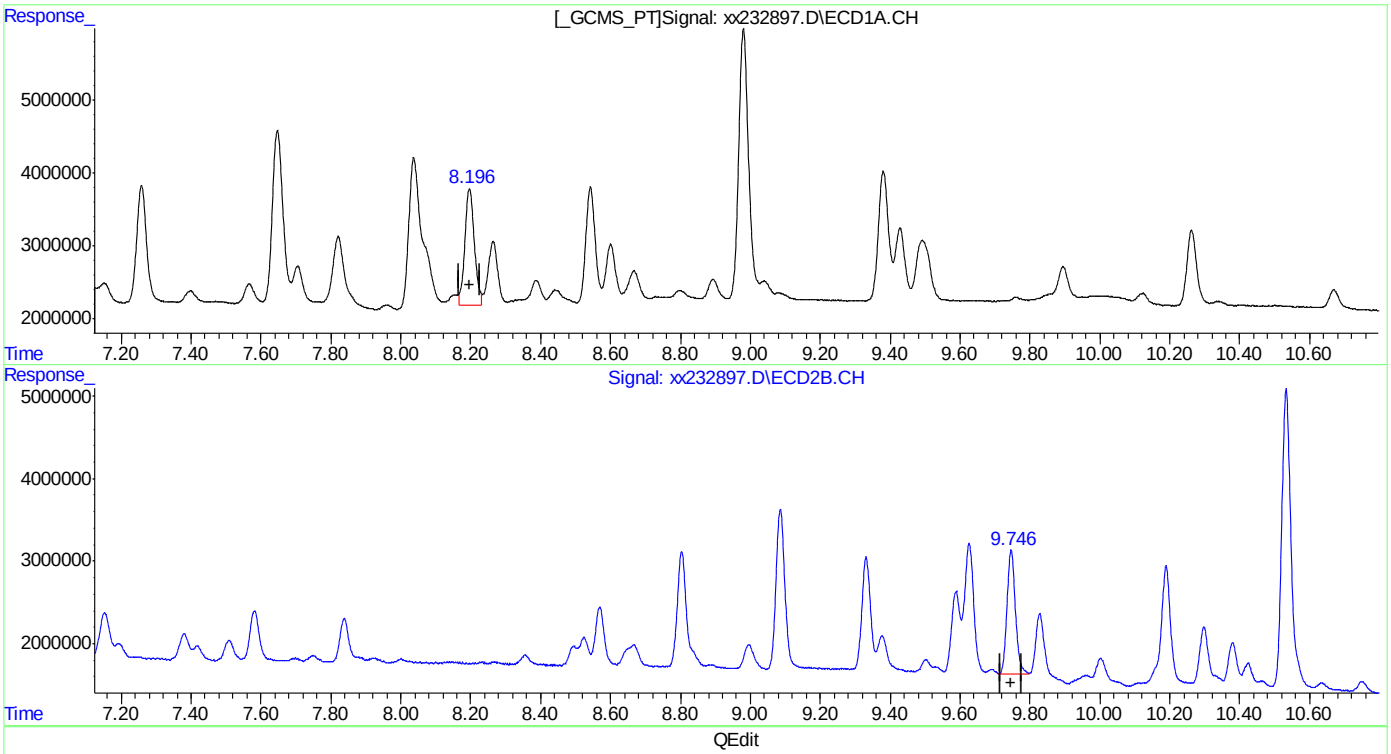
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:34:30 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.196min 92.279PPB m
response 30469302

(47) AR1260-B #2
9.746min 89.351PPB m
response 25128089

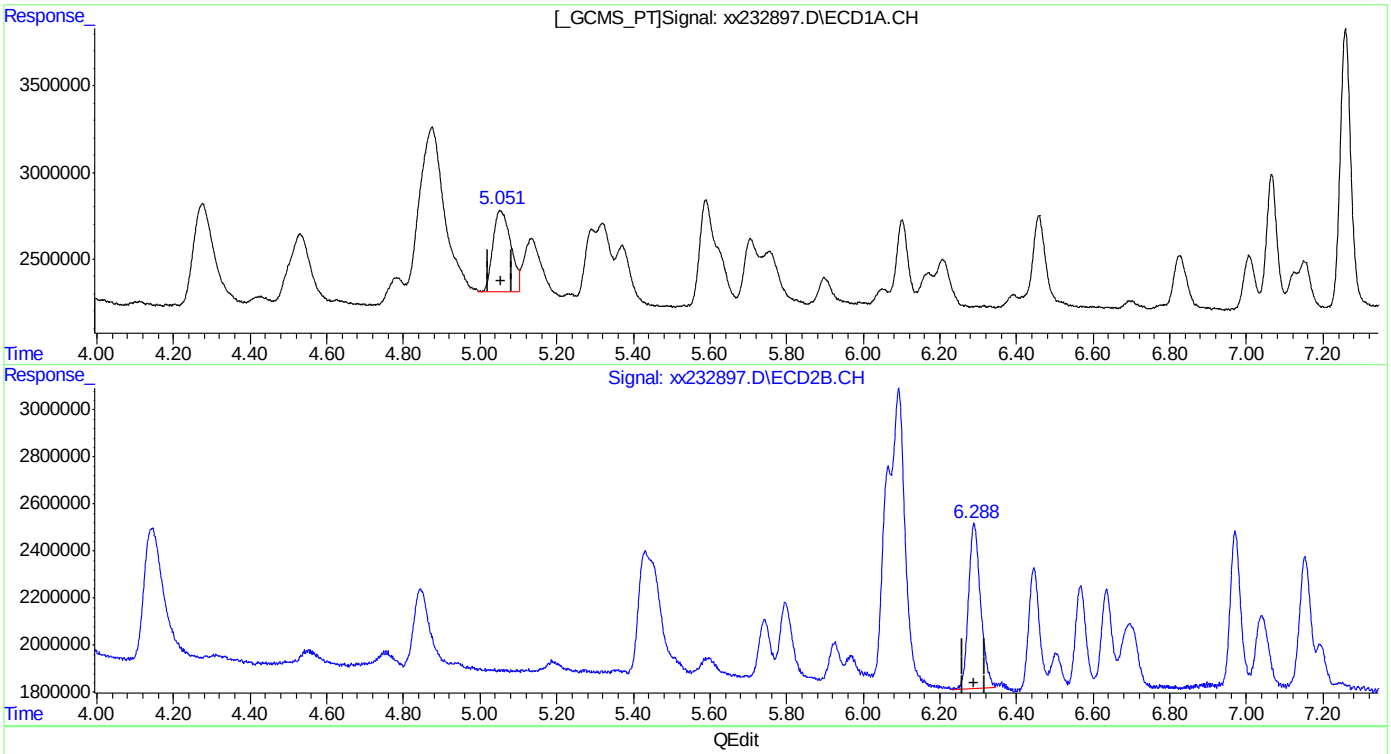
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:30:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.051min 73.854PPB m
response 15343147

(44) AR1016-D #2
6.289min 92.812PPB
response 15241576

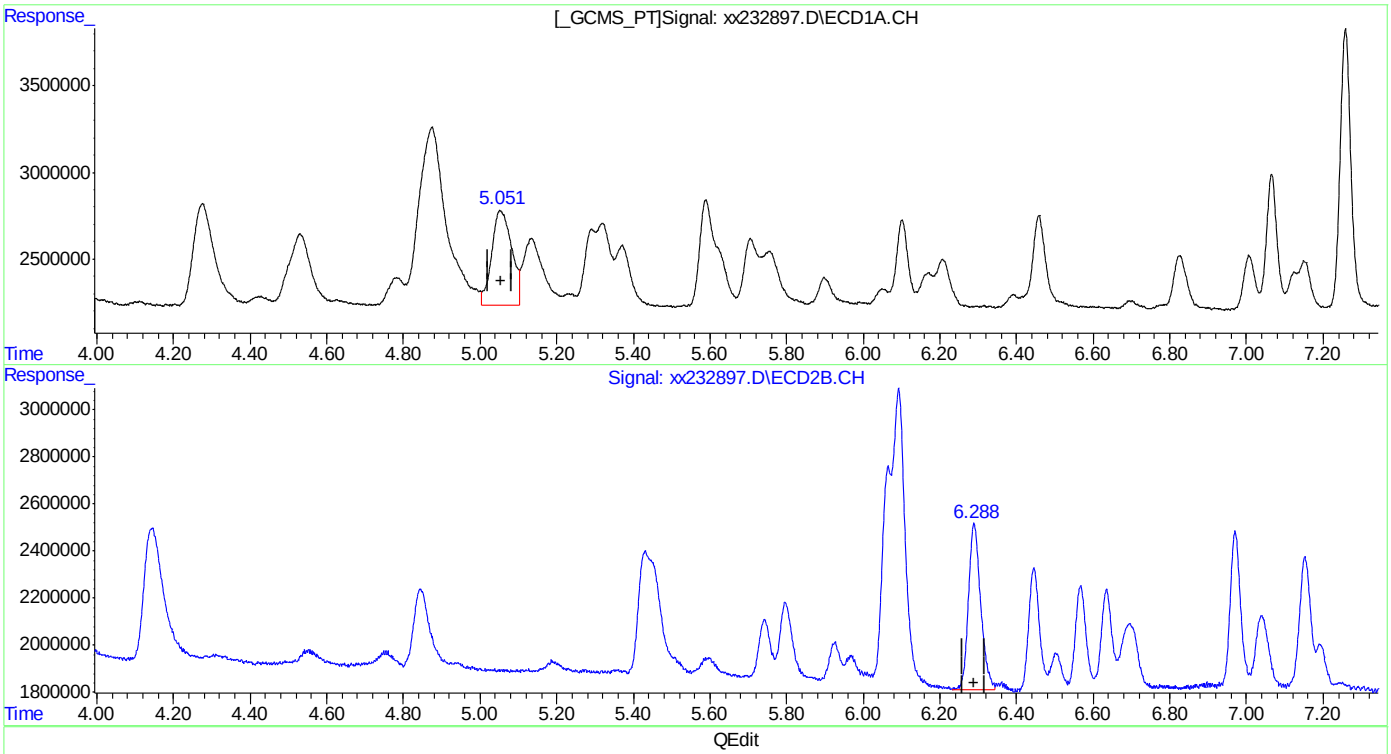
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:30:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.051min 94.489PPB m
response 19630129

(44) AR1016-D #2
6.288min 94.717PPB m
response 15554514

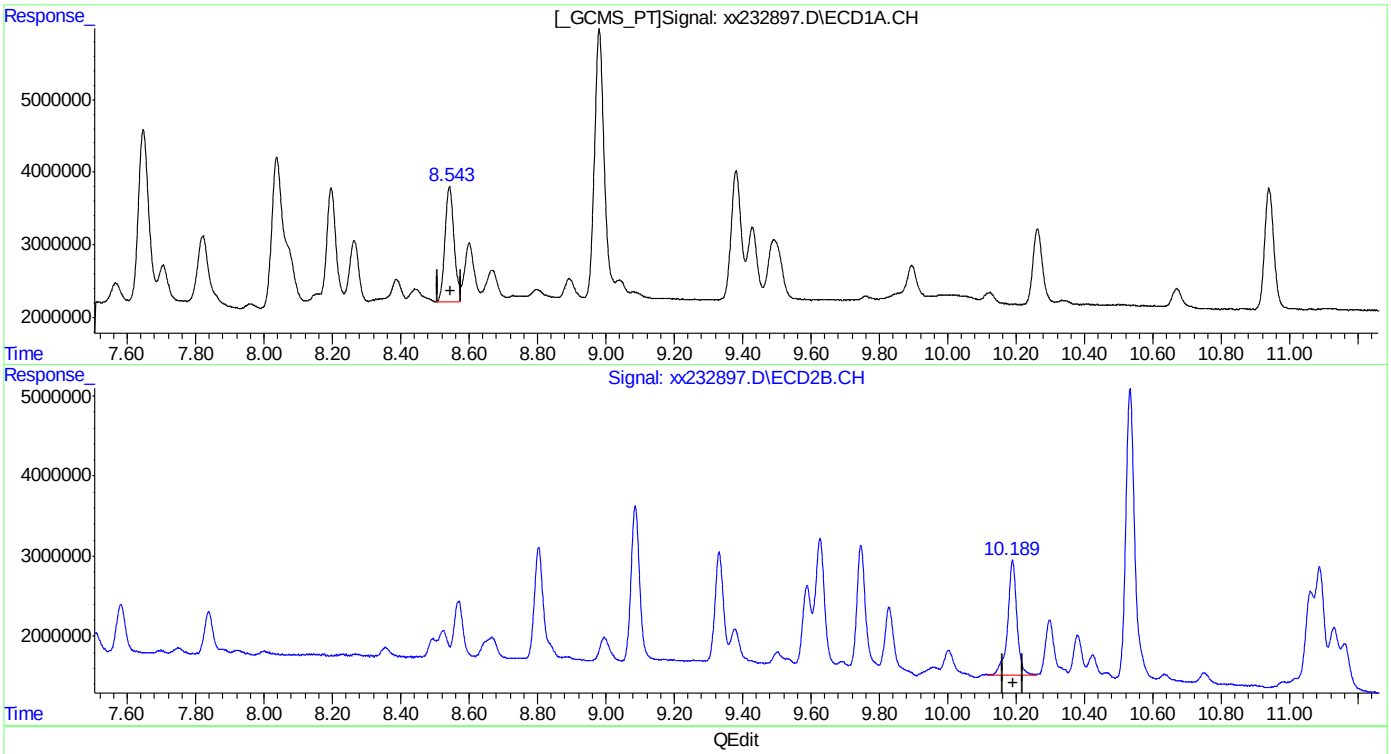
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:13 am
Operator : carolb
Sample : ic6423-50
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:30:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(48) AR1260-C
8.543min 94.785PPB m
response 29667901

(48) AR1260-C #2
10.190min 97.486PPB
response 26609116

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Carol Boykin
07/31/18 17:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:33:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.415	4.145	116.4E6	103.1E6	16.208m	18.556
	Spiked Amount 40.000			Recovery	=	40.52%	46.39%
51)	S Decachlor...	10.943	12.794	154.0E6	111.7E6	18.865	19.765
	Spiked Amount 40.000			Recovery	=	47.16%	49.41%
	Target Compounds						
41)	AR1016-A	3.837	4.844	58297987	45421993	463.919	441.978
42)	AR1016-B	4.275	5.431	109.2E6	92351113	454.123	451.858
43)	AR1016-C	4.875	6.092	248.1E6	194.4E6	470.951	494.882m
44)	AR1016-D	5.054	6.289	94489906	74321121	454.825	452.569m
45)	AR1016-E	5.590	6.971	98720361	57070115	441.790	448.087
46)	AR1260-A	8.039	8.803	276.3E6	121.2E6	455.148	450.583
47)	AR1260-B	8.198	9.747	140.5E6	120.3E6	425.584m	427.611m
48)	AR1260-C	8.544	10.190	139.9E6	130.3E6	447.025	477.217
49)	AR1260-D	8.981	10.535	363.4E6	329.3E6	464.919m	484.712
50)	AR1260-E	9.382	11.089	378.4E6	314.6E6	453.991m	460.451m

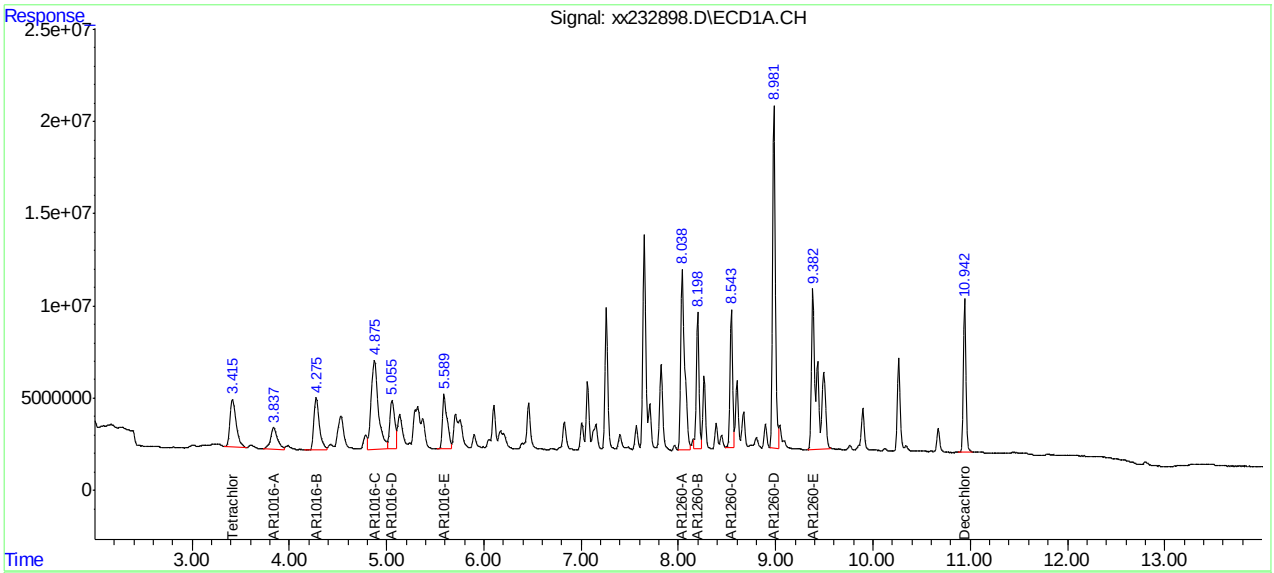
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

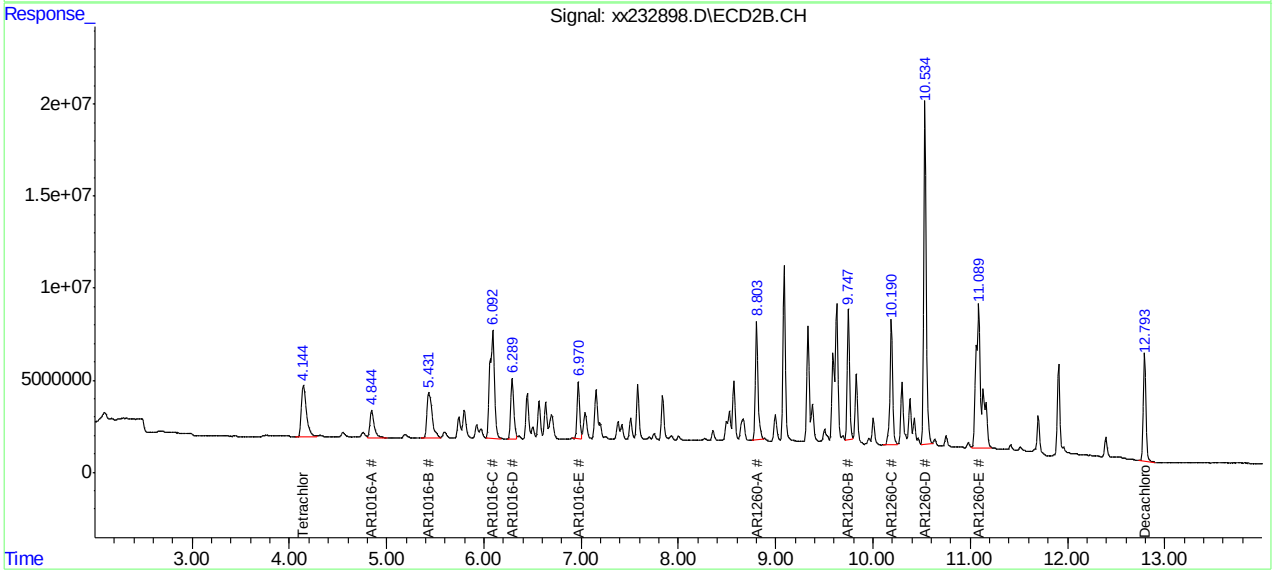
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:33:44 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GXX6423-IC6423 **Method:** SW846 8082A
Lab FileID: XX232898.D **Analyst approved:** 07/31/18 17:06 Summer Kotb
Injection Time: 07/28/18 01:32 **Supervisor approved:** 07/31/18 17:30 Carol Boykin

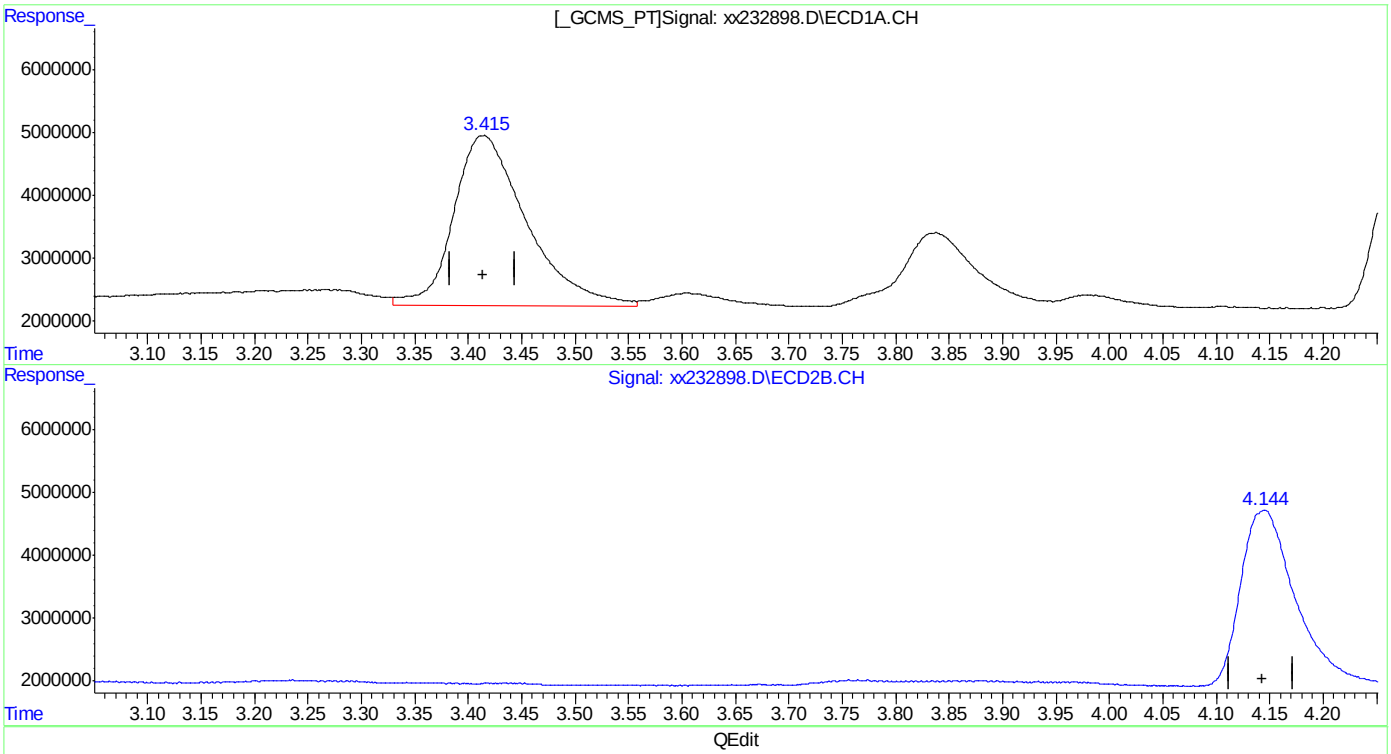
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	3.41	Poorly defined baseline
AR1016-C		2	6.09	Split peak
AR1016-D		2	6.29	Split peak
AR1260-B		1	8.20	Split peak
AR1260-D		1	8.98	Split peak
AR1260-E		1	9.38	Split peak
AR1260-B		2	9.75	Split peak
AR1260-E		2	11.09	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:55:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.414min 17.811ppb
response 127955848

(1) Tetrachloro-m-xylene #2 (S)
4.145min 18.556ppb
response 103054903

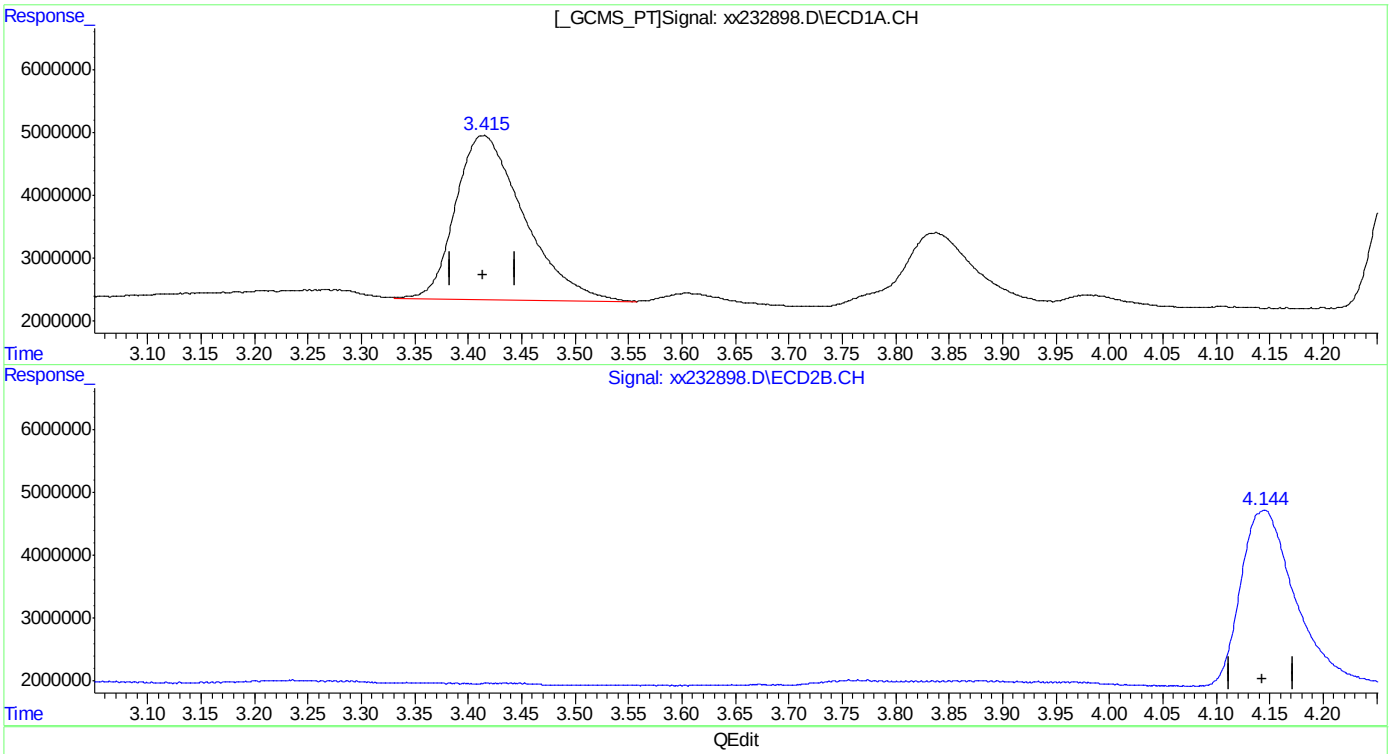
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 09:55:41 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:55:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.415min 16.208ppb m
response 116440743

(1) Tetrachloro-m-xylene #2 (S)
4.145min 18.556ppb
response 103054903

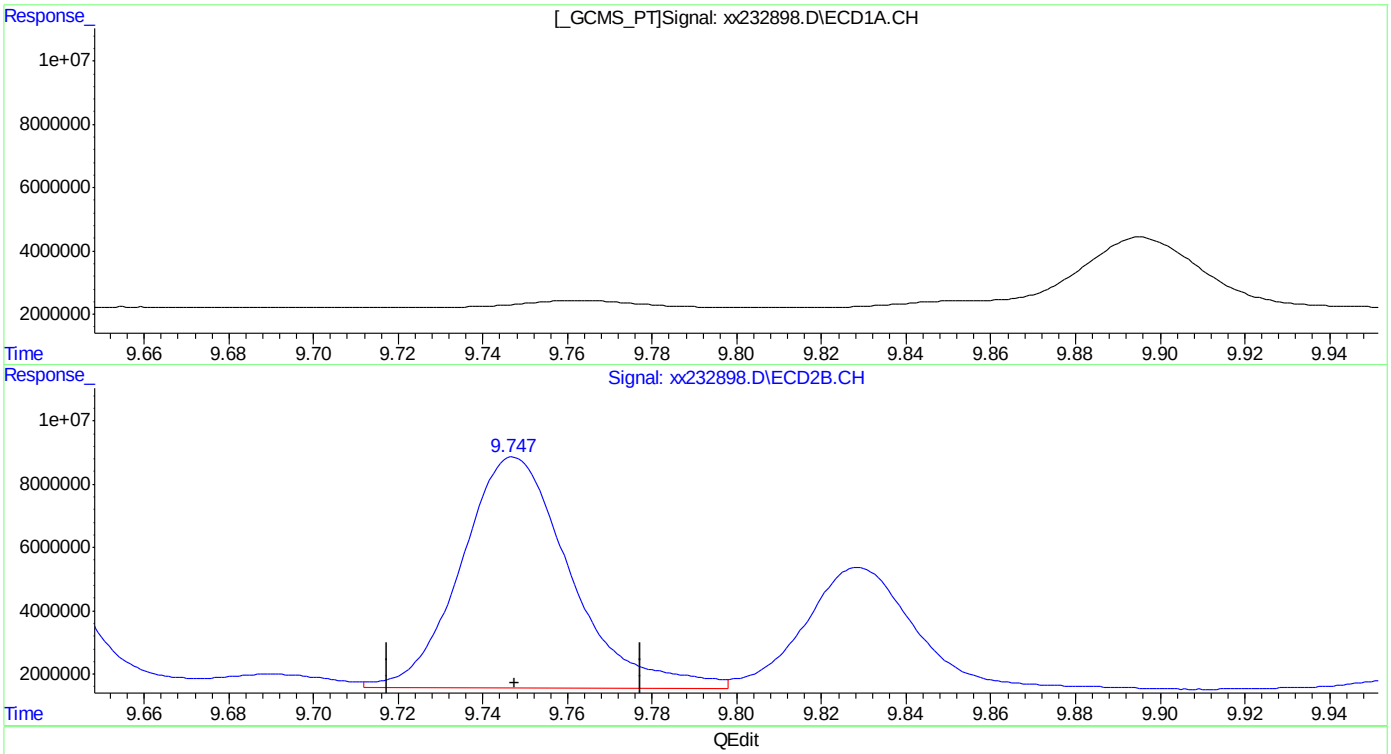
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:55:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.198min 453.587PPB
response 149768715

(47) AR1260-B #2
9.747min 465.651PPB
response 130954845

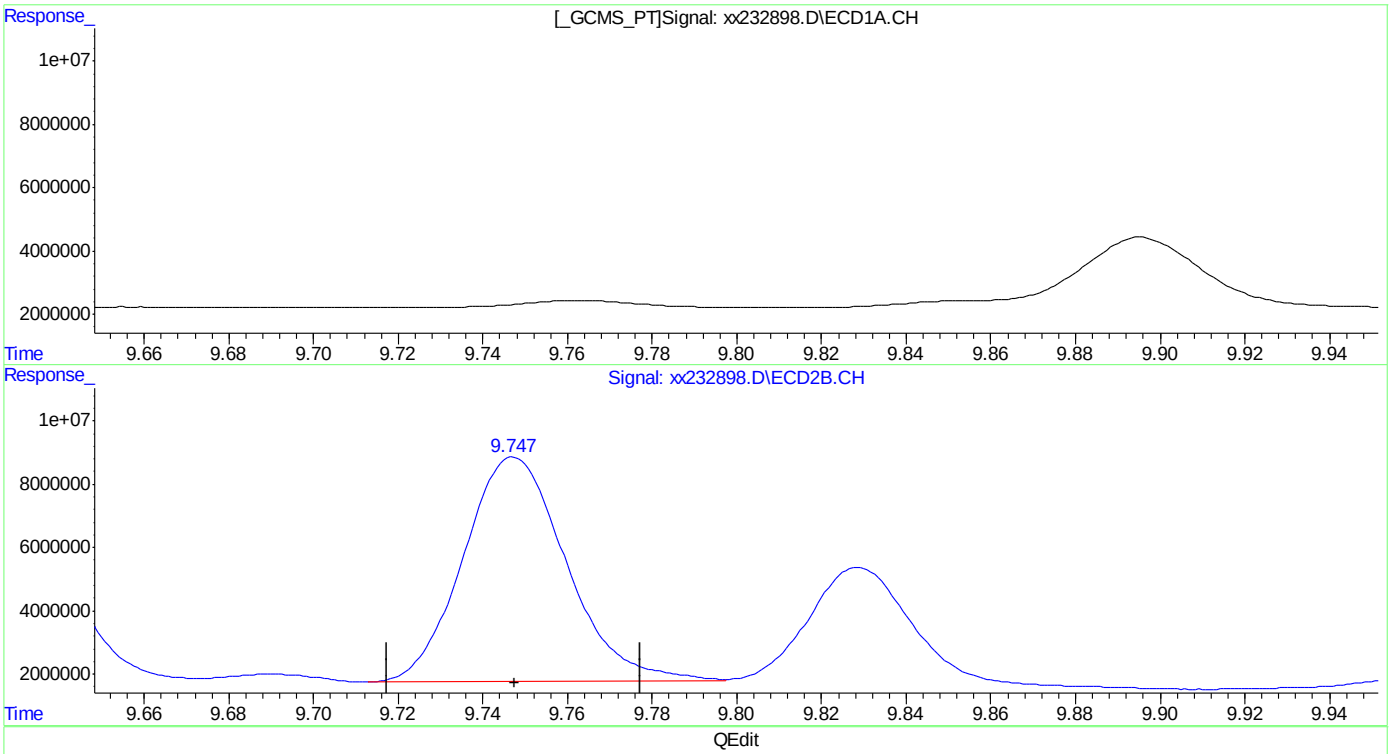
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:55:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.198min 453.587PPB
response 149768715

(47) AR1260-B #2
9.747min 427.611PPB m
response 120256722

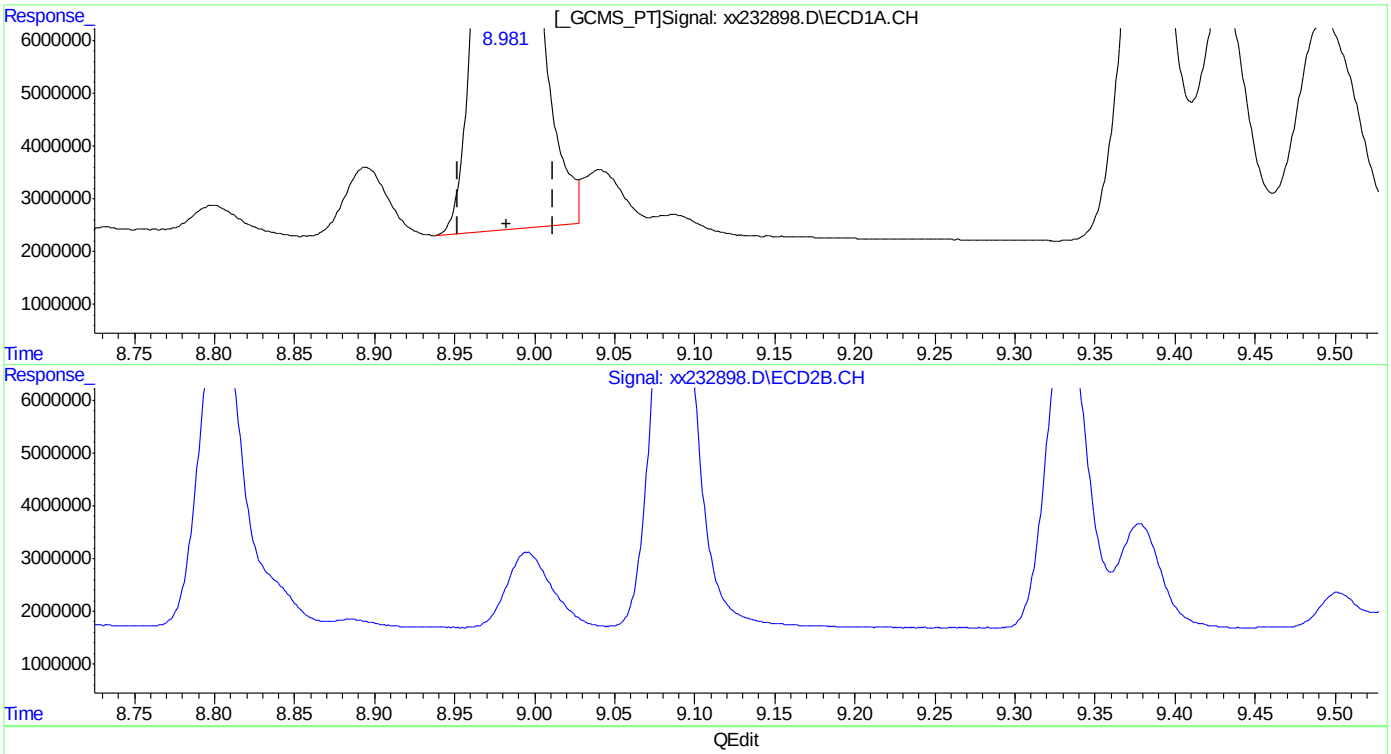
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:55:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D
8.981min 455.020PPB
response 355697752

(49) AR1260-D #2
10.535min 484.712PPB
response 329285239

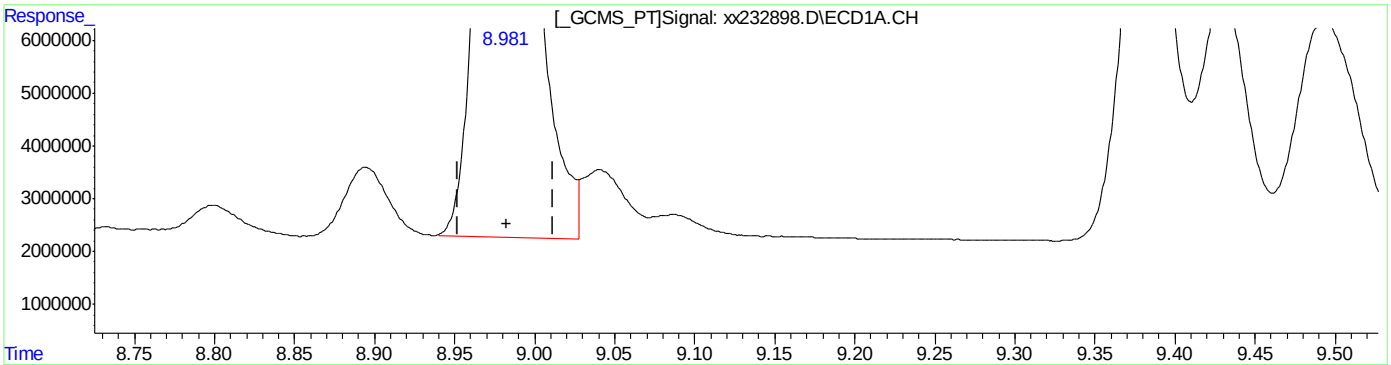
(+) = Expected Retention Time

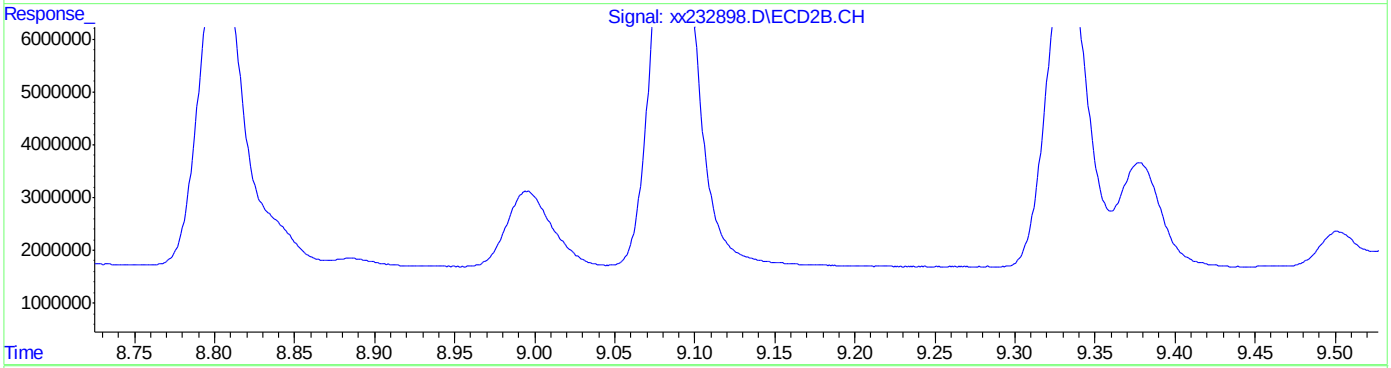
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:55:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(49) AR1260-D
8.981min 464.919PPB m
response 363436091

(49) AR1260-D #2
10.535min 484.712PPB
response 329285239

(+) = Expected Retention Time
PCB6423.M Sat Jul 28 09:57:57 2018 Page: 1

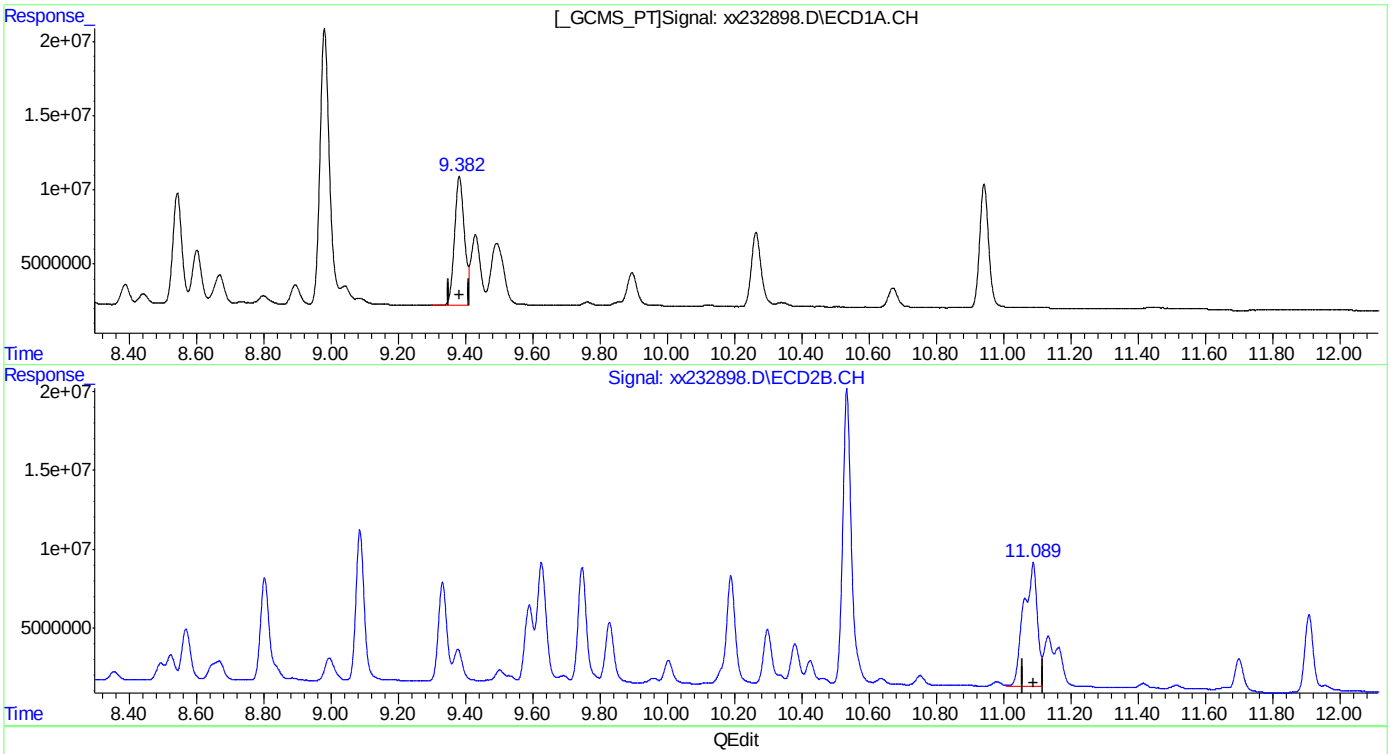
11.4.2.7 11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:55:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.382min 210.913PPB
response 175791779

(50) AR1260-E #2
11.089min 321.196PPB
response 219421876

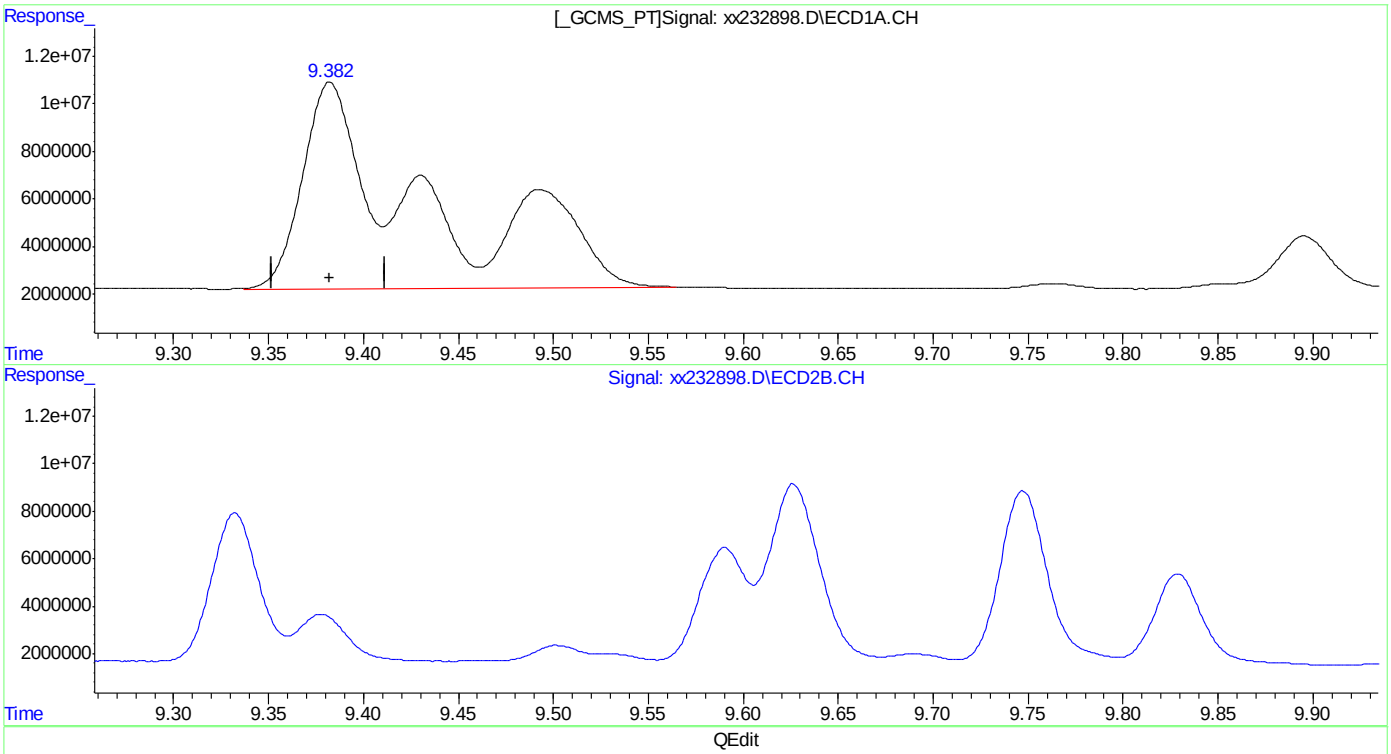
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:55:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E
9.382min 453.991PPB m
response 378393464

(50) AR1260-E #2
11.089min 321.196PPB
response 219421876

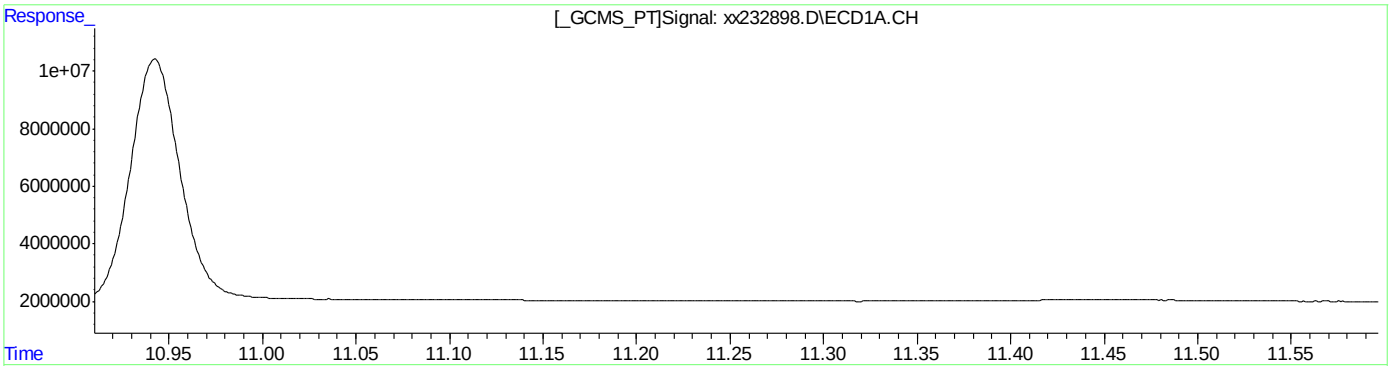
(+) = Expected Retention Time

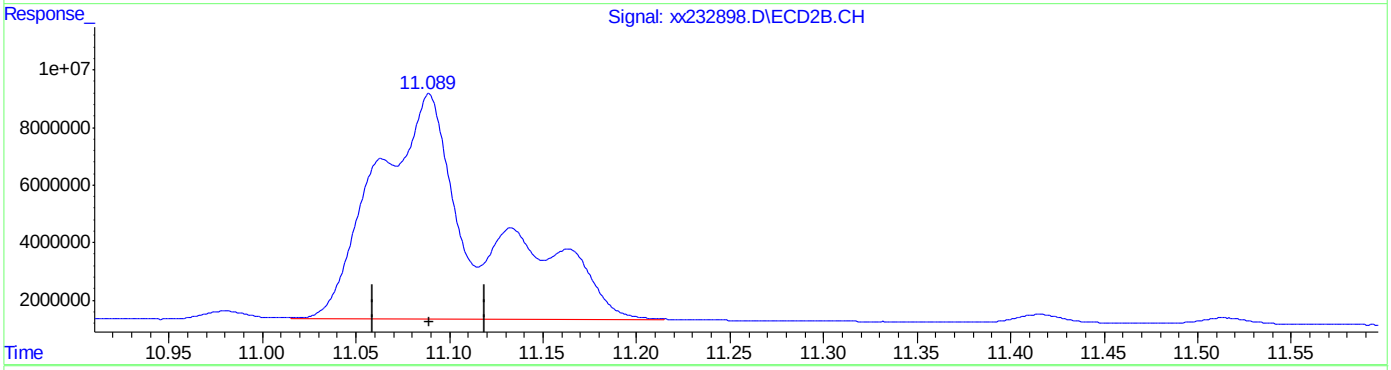
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:55:23 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E
9.382min 453.991PPB m
response 378393464

(50) AR1260-E #2
11.089min 460.451PPB m
response 314552365

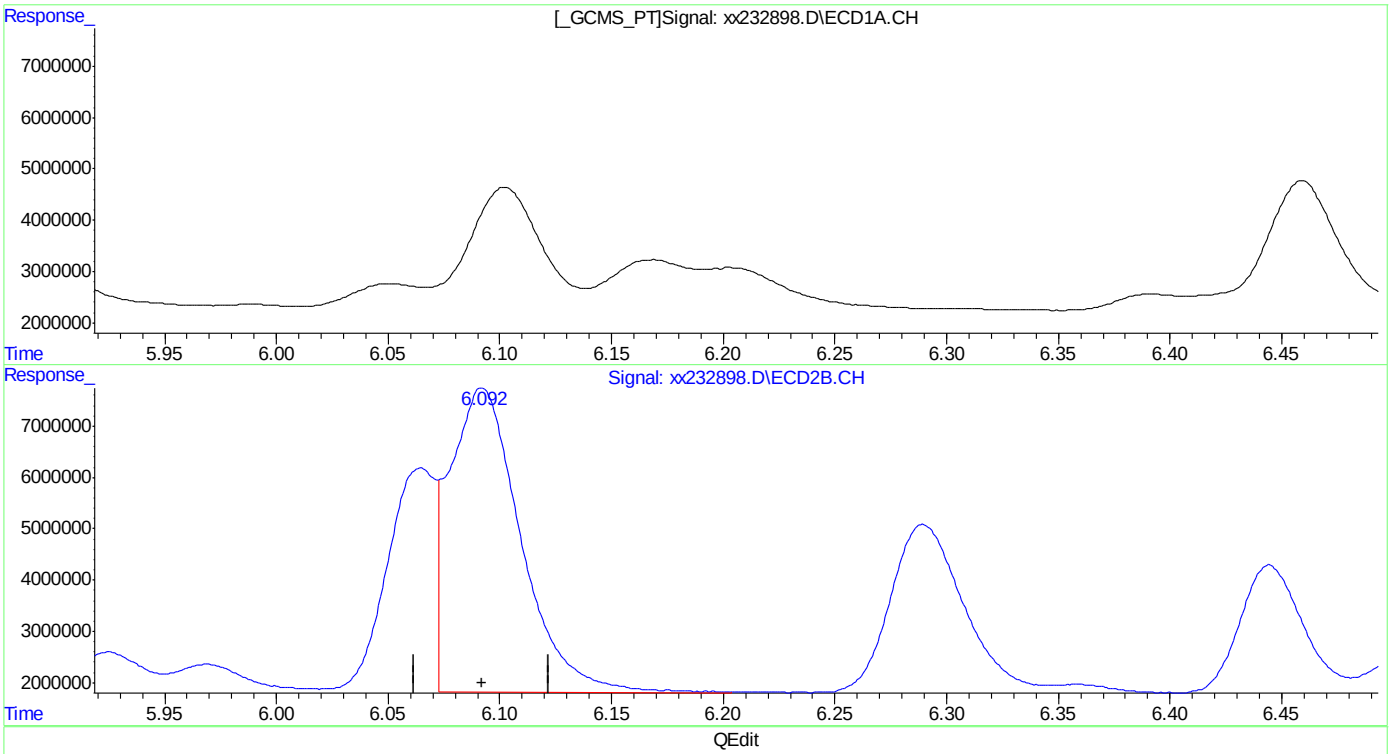
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:14 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(43) AR1016-C
4.875min 470.951PPB
response 248098673

(43) AR1016-C #2
6.092min 335.344PPB
response 131729308

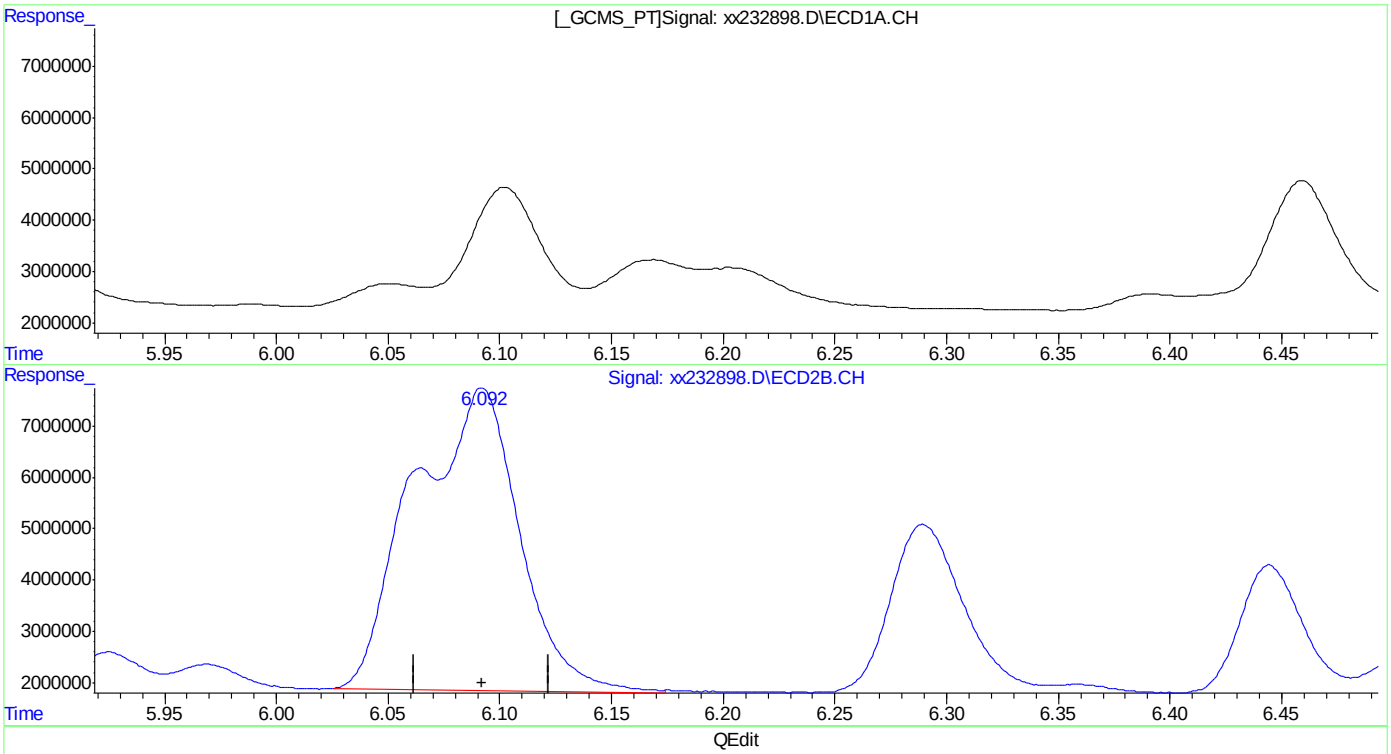
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:14 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(43) AR1016-C
4.875min 470.951PPB
response 248098673

(43) AR1016-C #2
6.092min 494.882PPB m
response 194398888

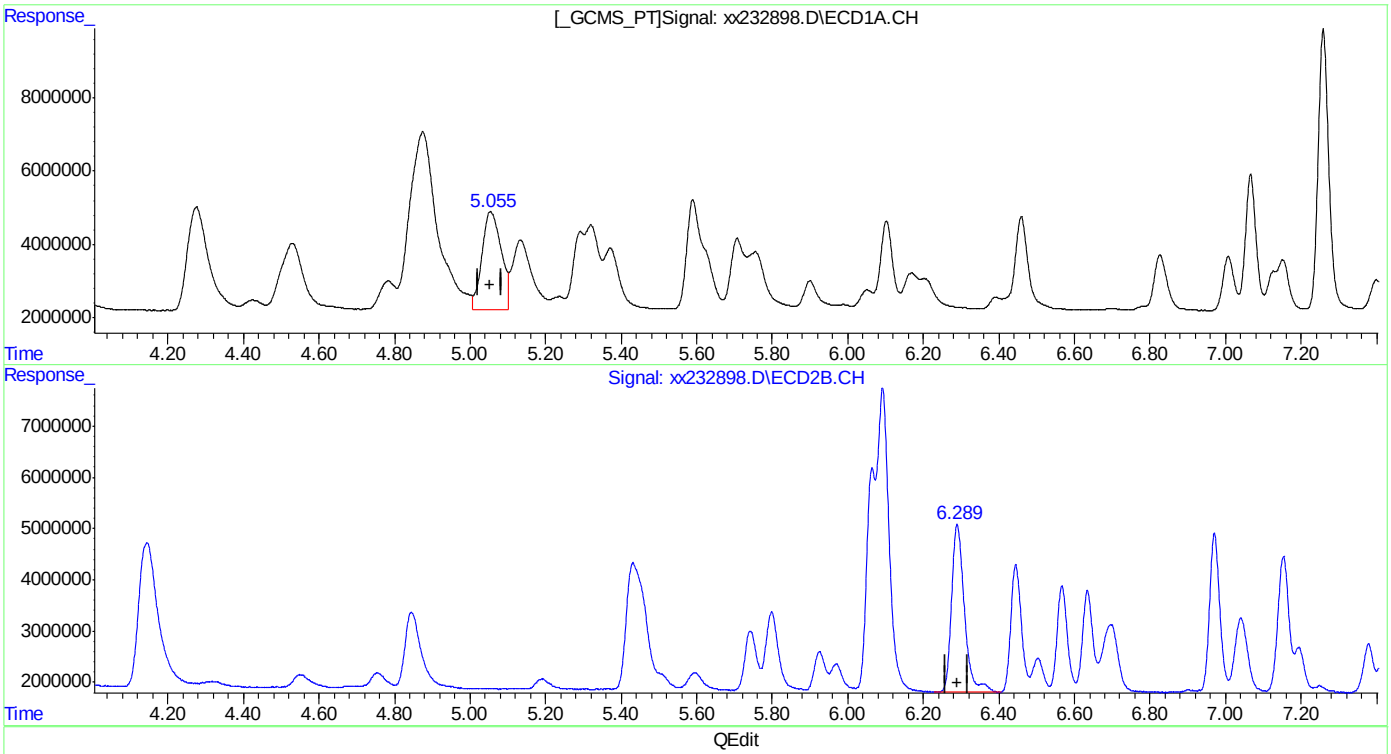
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:17:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.054min 454.825PPB
response 94489906

(44) AR1016-D #2
6.289min 474.452PPB
response 77914612

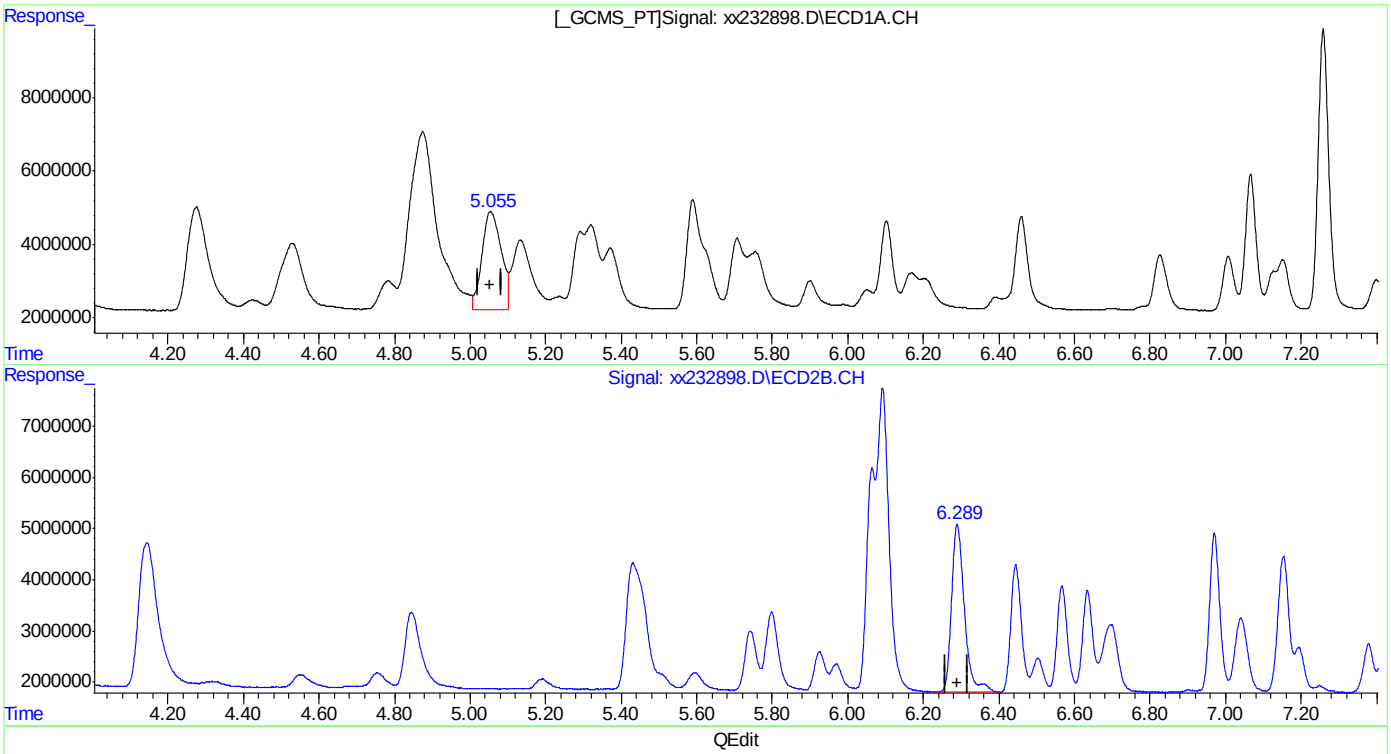
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:17:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.054min 454.825PPB
response 94489906

(44) AR1016-D #2
6.289min 471.643PPB m
response 77453463

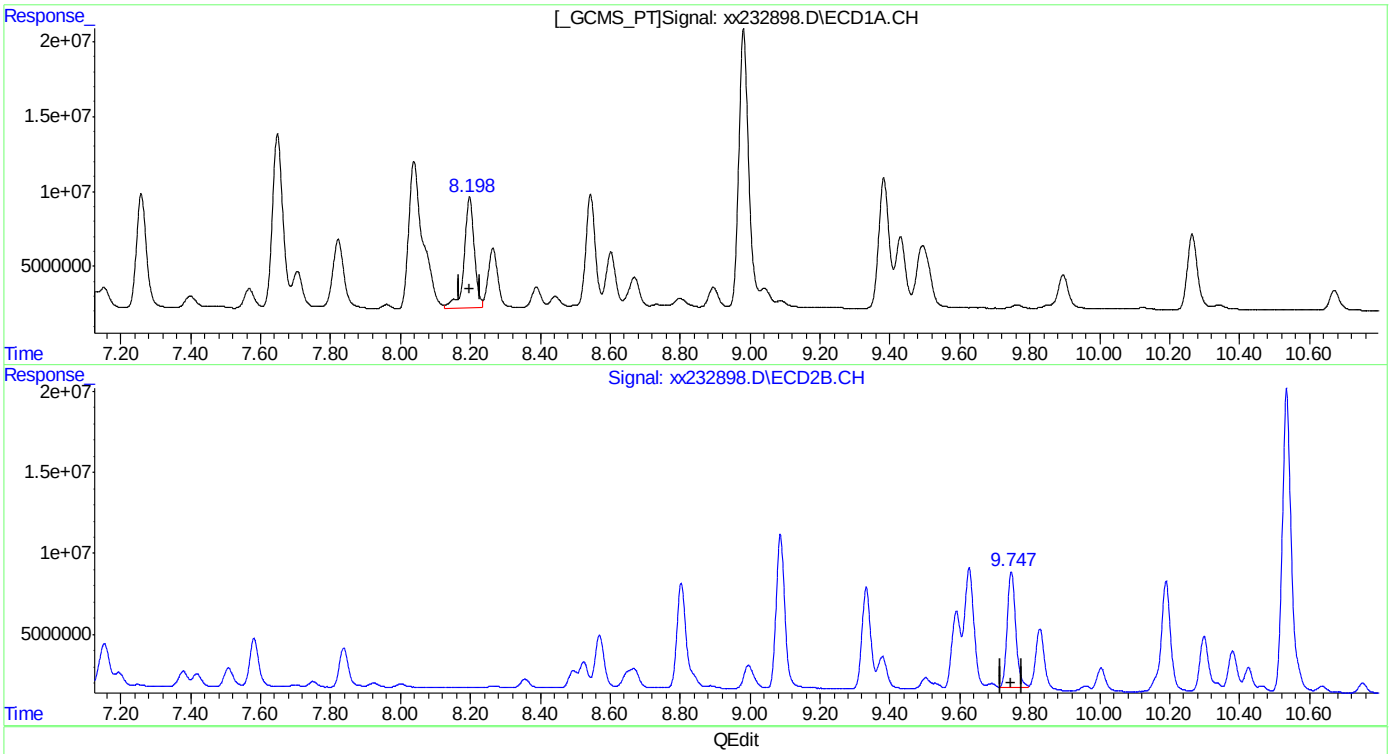
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:32:08 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:17:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.198min 453.587PPB
response 149768715

(47) AR1260-B #2
9.747min 427.611PPB m
response 120256722

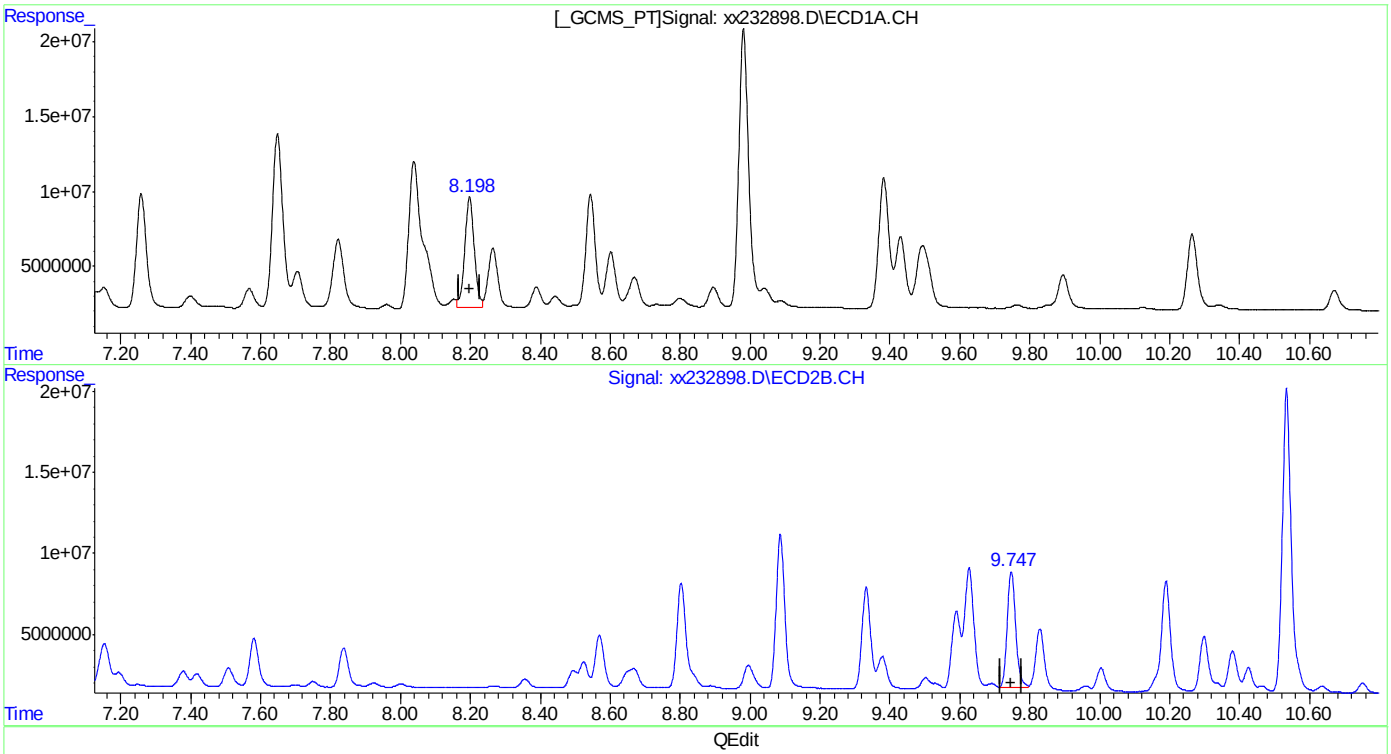
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:17:31 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.198min 425.584PPB m
response 140522658

(47) AR1260-B #2
9.747min 427.611PPB m
response 120256722

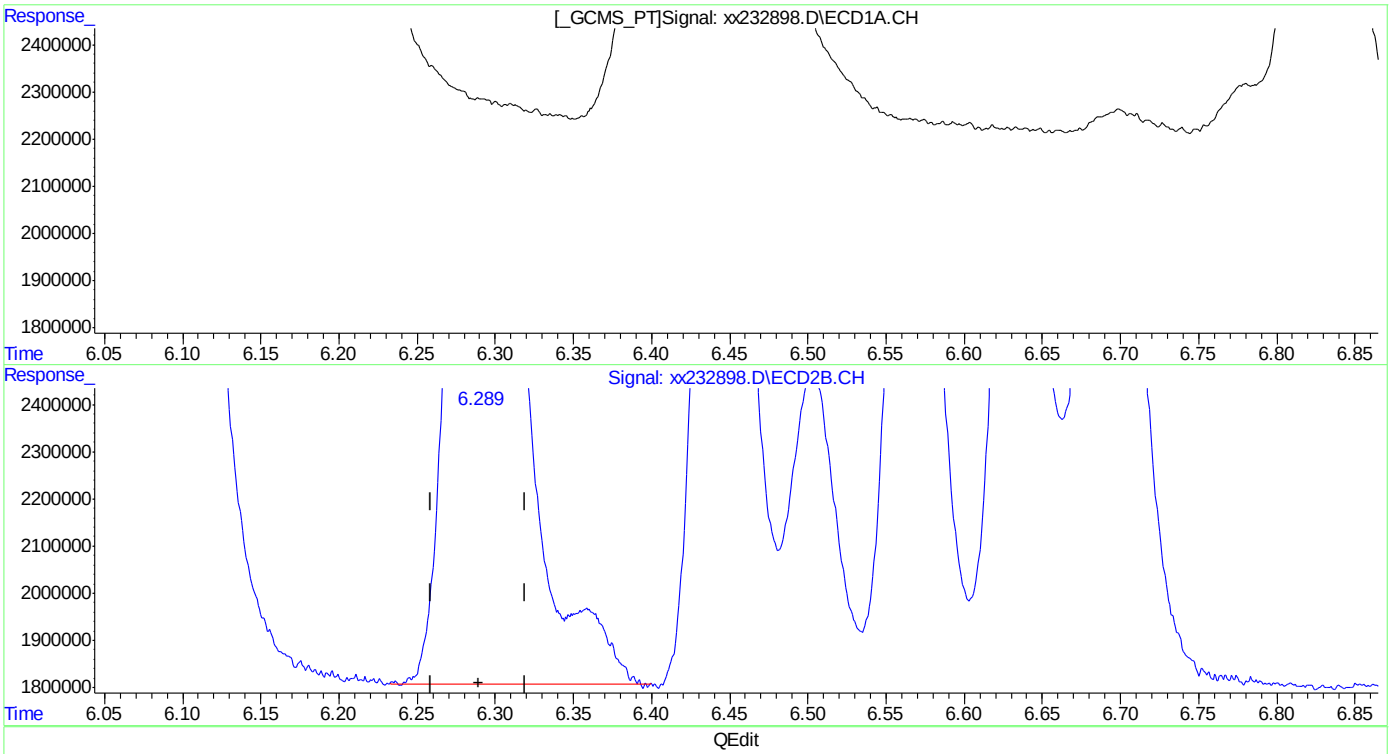
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:32:22 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:32:20 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.054min 454.825PPB
response 94489906

(44) AR1016-D #2
6.289min 471.643PPB m
response 77453463

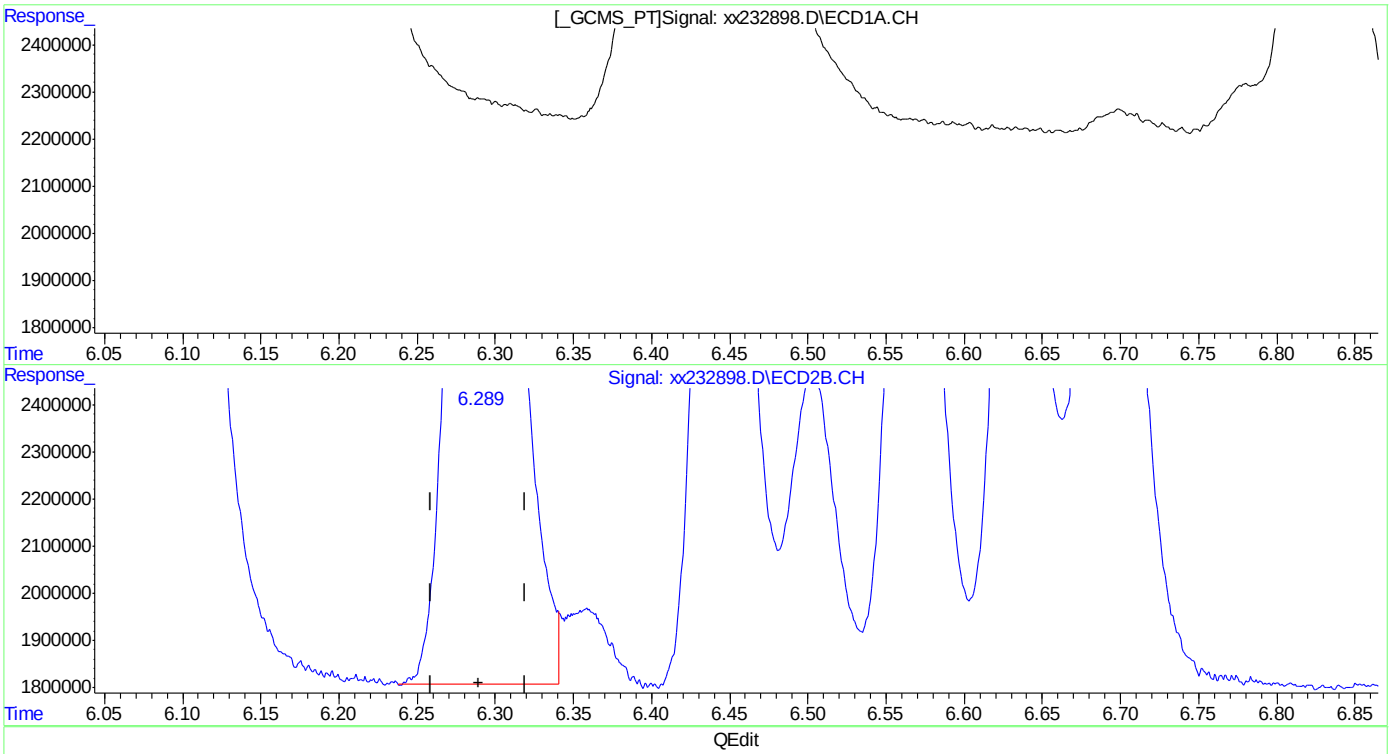
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:32 am
Operator : carolb
Sample : ic6423-250
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:32:20 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.054min 454.825PPB
response 94489906

(44) AR1016-D #2
6.289min 452.569PPB m
response 74321121

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Carol Boykin 07/31/18 17:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:45:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.414	4.143	239.6E6	206.3E6	33.347m	37.148
	Spiked Amount 40.000			Recovery	=	83.37%	92.87%
51)	S Decachlor...	10.941	12.793	312.5E6	224.5E6	38.274m	39.713m
	Spiked Amount 40.000			Recovery	=	95.69%	99.28%
	Target Compounds						
41)	AR1016-A	3.836	4.845	117.5E6	88227903	934.991	858.500
42)	AR1016-B	4.275	5.430	215.2E6	180.0E6	894.639	880.571
43)	AR1016-C	4.874	6.092	489.0E6	388.1E6	928.279	987.929
44)	AR1016-D	5.054	6.290	185.5E6	147.0E6	892.875	894.851
45)	AR1016-E	5.589	6.971	193.1E6	115.0E6	864.217	902.673
46)	AR1260-A	8.039	8.804	555.8E6	250.8E6	915.369	932.646m
47)	AR1260-B	8.198	9.747	280.2E6	262.2E6	848.532m	932.256
48)	AR1260-C	8.545	10.191	285.0E6	262.3E6	910.561	960.827
49)	AR1260-D	8.982	10.534	754.8E6	675.4E6	965.567m	994.124m
50)	AR1260-E	9.382	11.089	758.8E6	631.6E6	910.404m	924.485m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

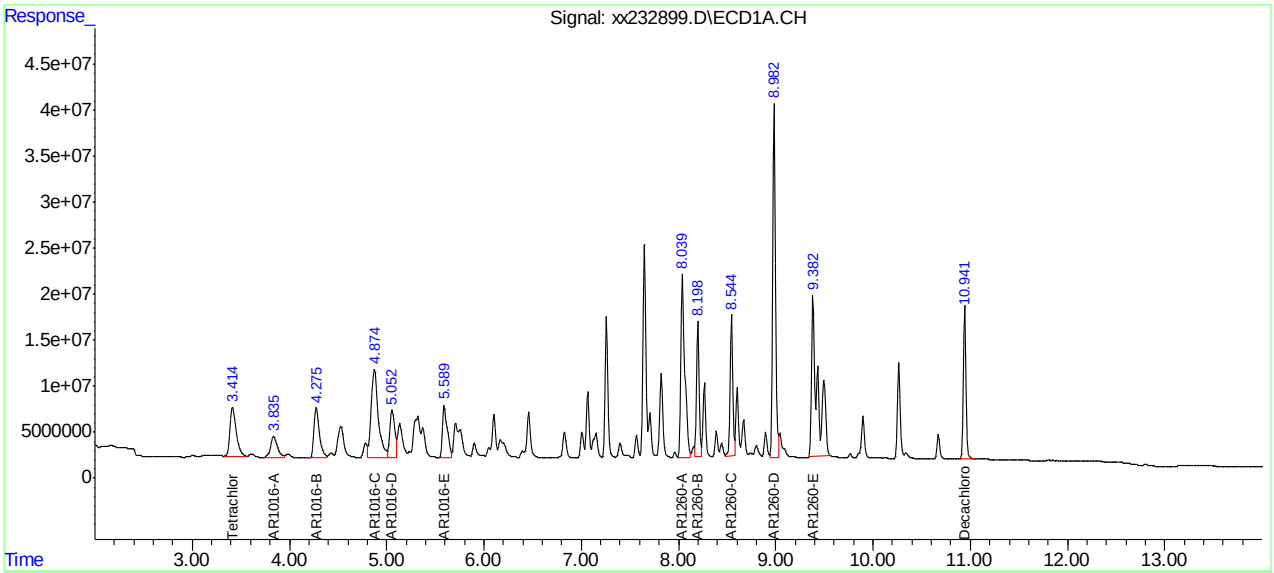
11.4.3 11

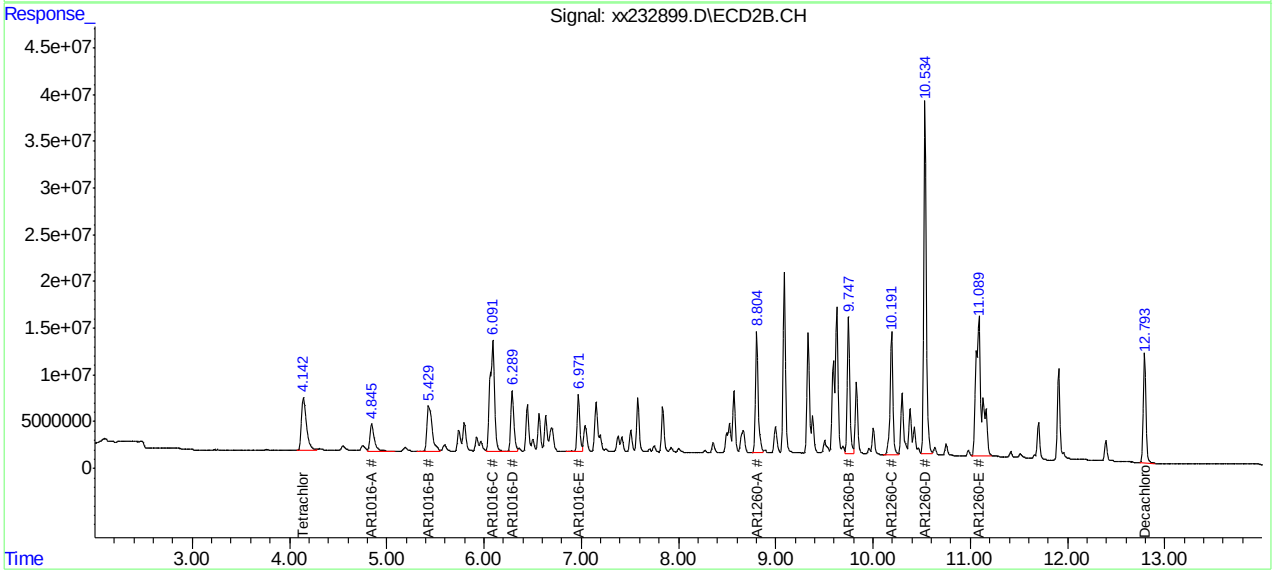
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:45:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GXX6423-IC6423 **Method:** SW846 8082A
Lab FileID: XX232899.D **Analyst approved:** 07/31/18 17:06 Summer Kotb
Injection Time: 07/28/18 01:50 **Supervisor approved:** 07/31/18 17:30 Carol Boykin

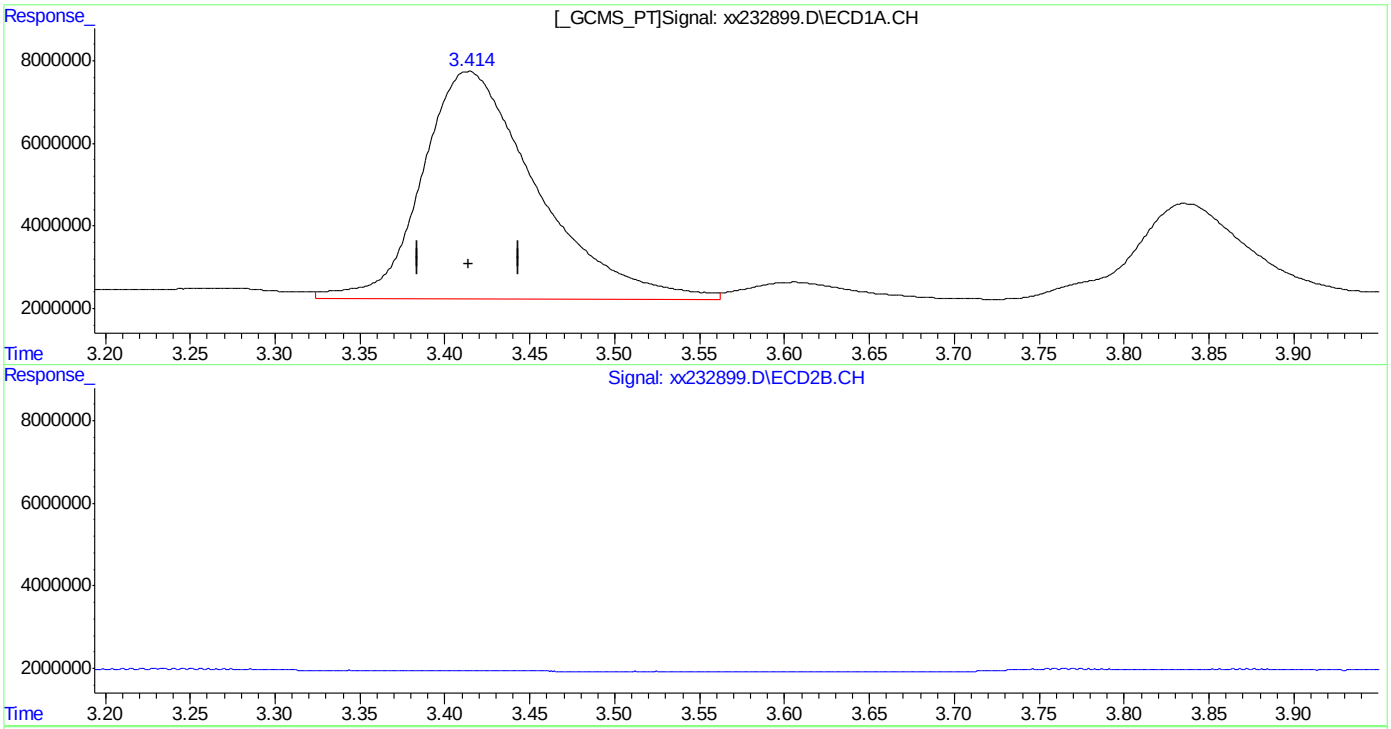
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	3.41	Poorly defined baseline
AR1260-B		1	8.20	Split peak
AR1260-A		2	8.80	Split peak
AR1260-D		1	8.98	Split peak
AR1260-E		1	9.38	Split peak
AR1260-D		2	10.53	Split peak
Decachlorobiphenyl	2051-24-3	1	10.94	Poorly defined baseline
AR1260-E		2	11.09	Split peak
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.414min 36.064ppb
response 259085259

(1) Tetrachloro-m-xylene #2 (S)
4.143min 37.148ppb
response 206307460

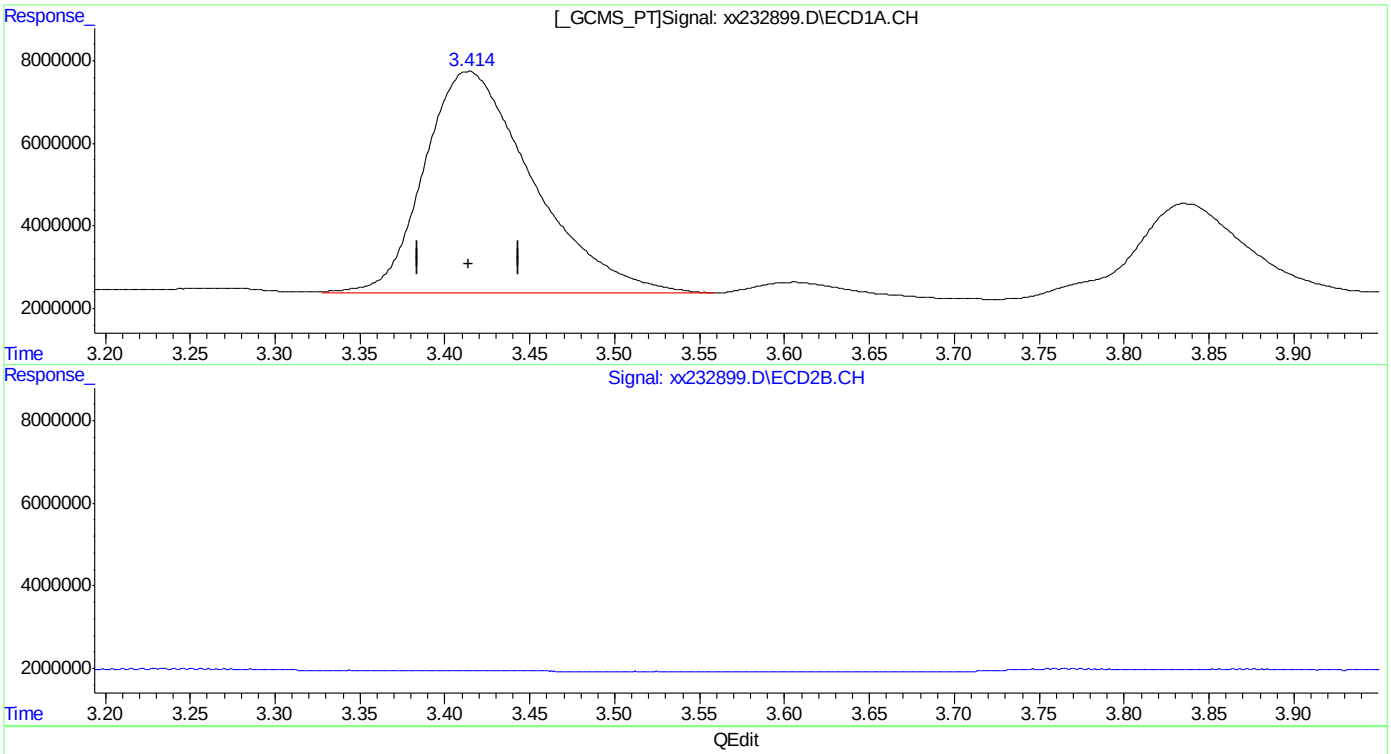
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:00:01 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.414min 33.347ppb m
response 239565525

(1) Tetrachloro-m-xylene #2 (S)
4.143min 37.148ppb
response 206307460

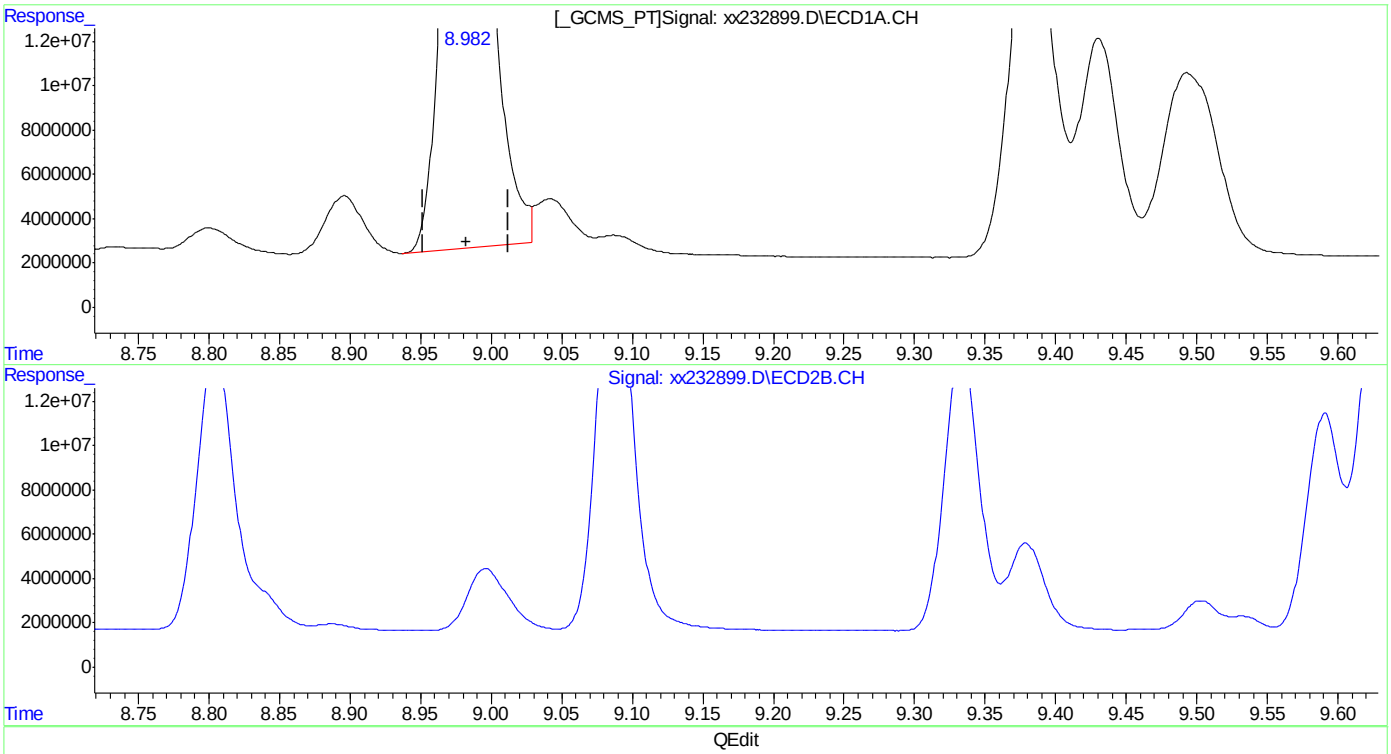
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:00:06 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D
8.982min 940.305PPB
response 735054919

(49) AR1260-D #2
10.535min 1007.252PPB
response 684268157

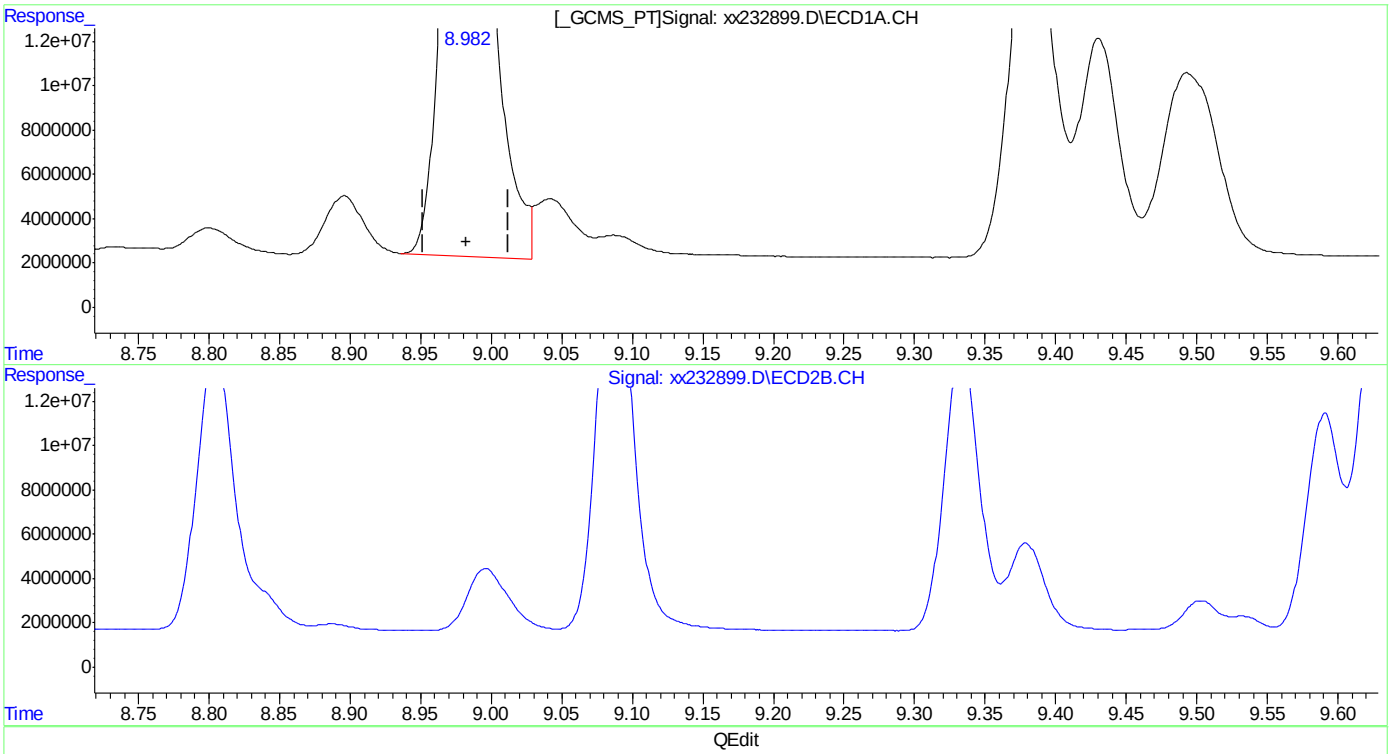
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D
8.982min 968.089PPB m
response 756774279

(49) AR1260-D #2
10.535min 1007.252PPB
response 684268157

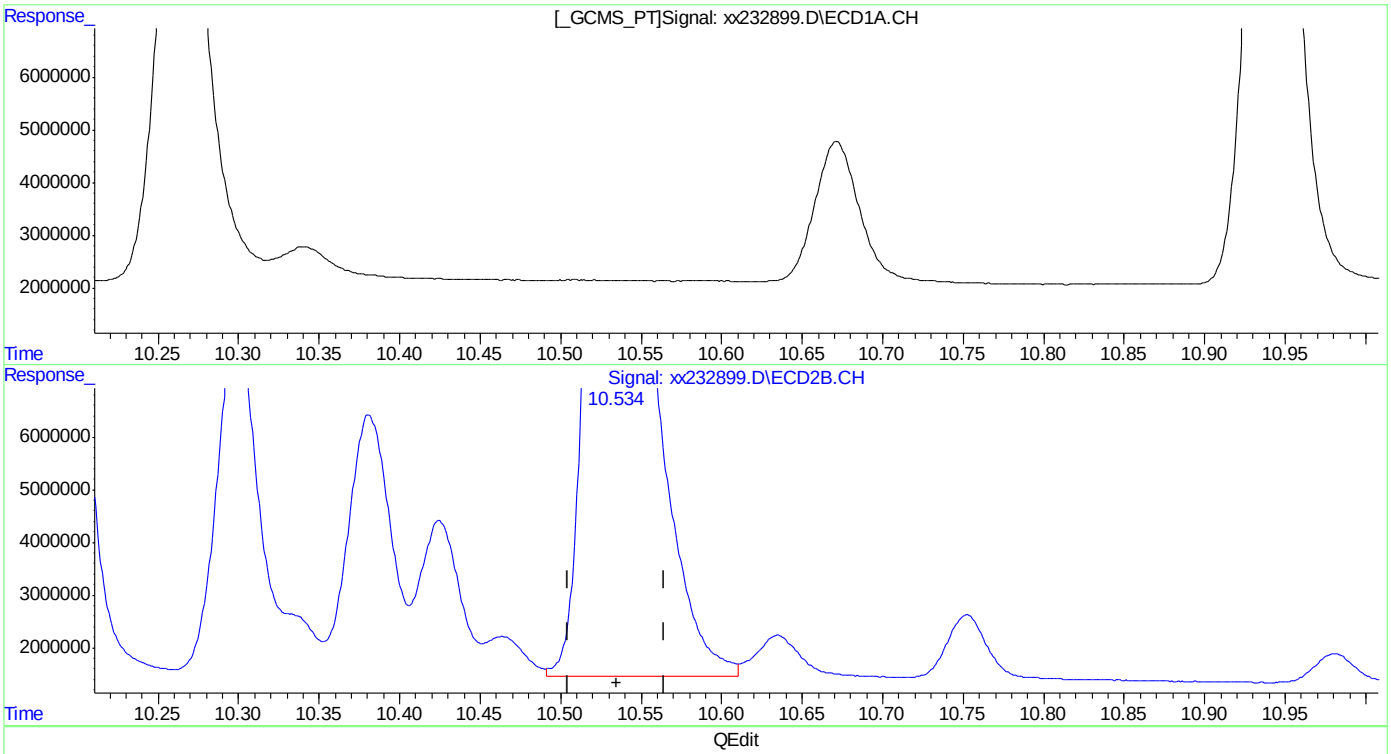
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:02:23 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D
8.982min 968.089PPB m
response 756774279

(49) AR1260-D #2
10.535min 1007.252PPB
response 684268157

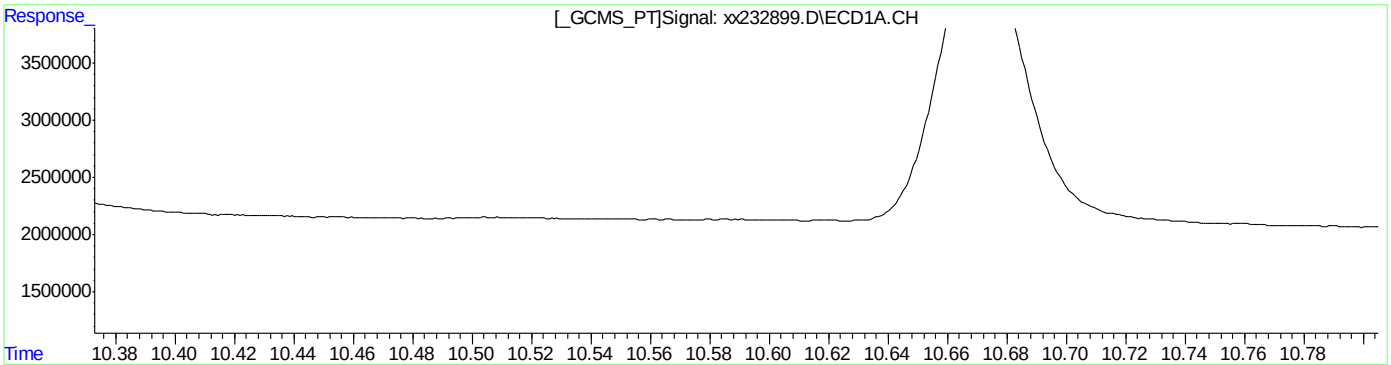
(+) = Expected Retention Time

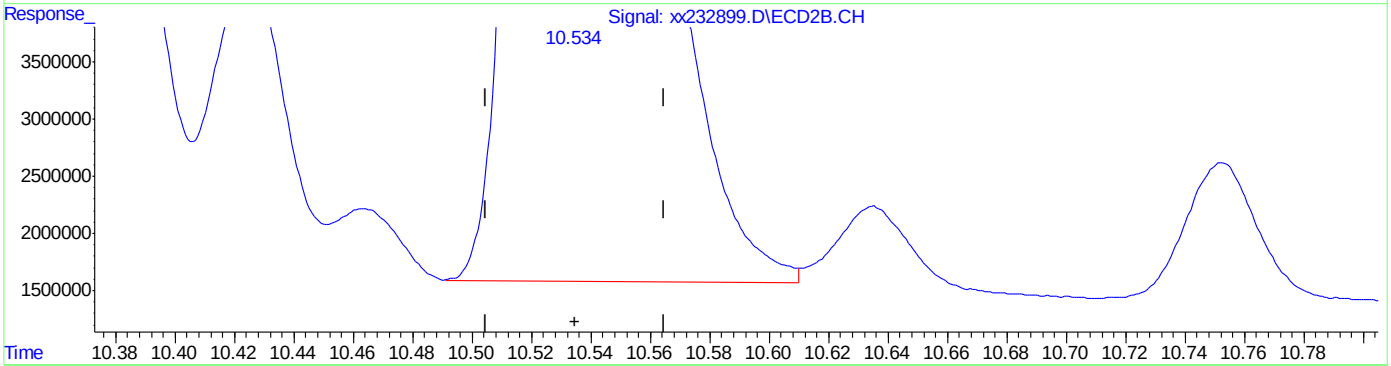
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(49) AR1260-D
8.982min 968.089PPB m
response 756774279

(49) AR1260-D #2
10.534min 994.124PPB m
response 675350100

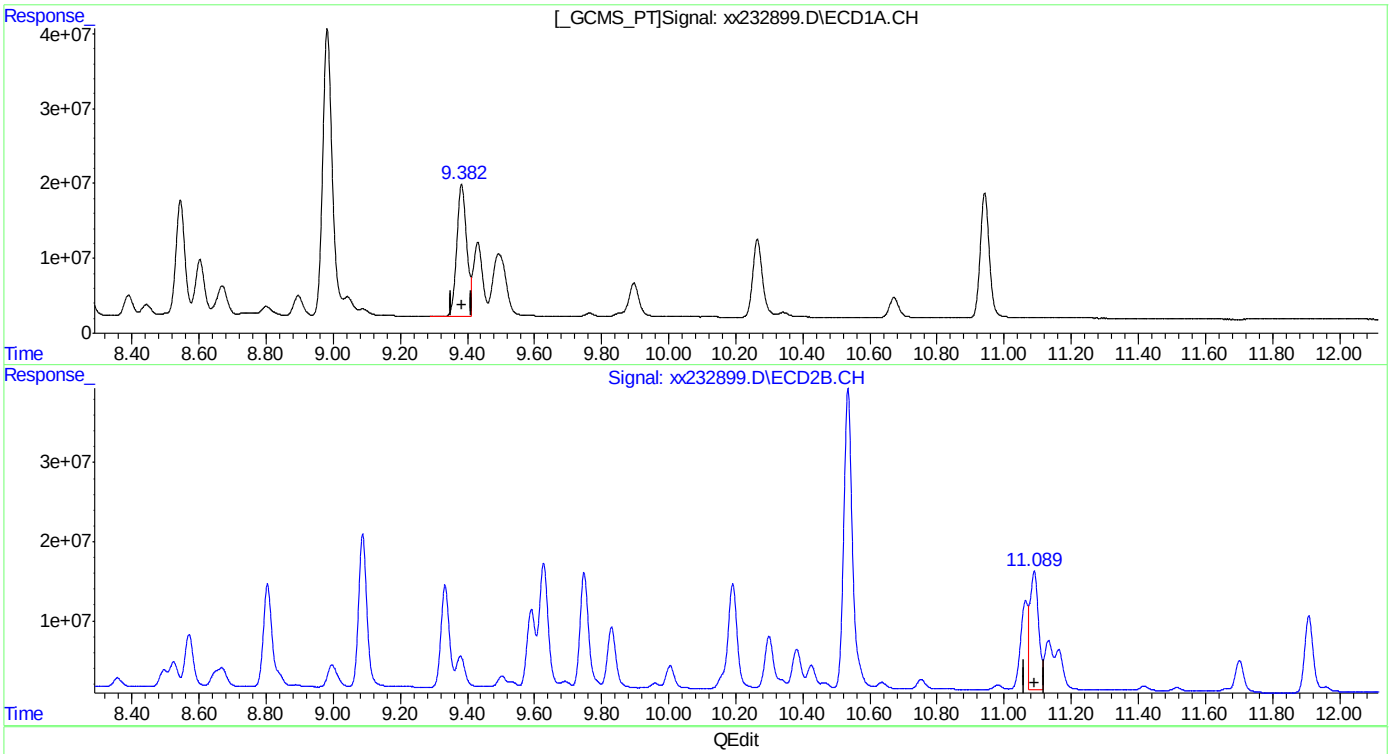
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:02:42 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.383min 429.737PPB
response 358178040

(50) AR1260-E #2
11.090min 400.062PPB
response 273298204

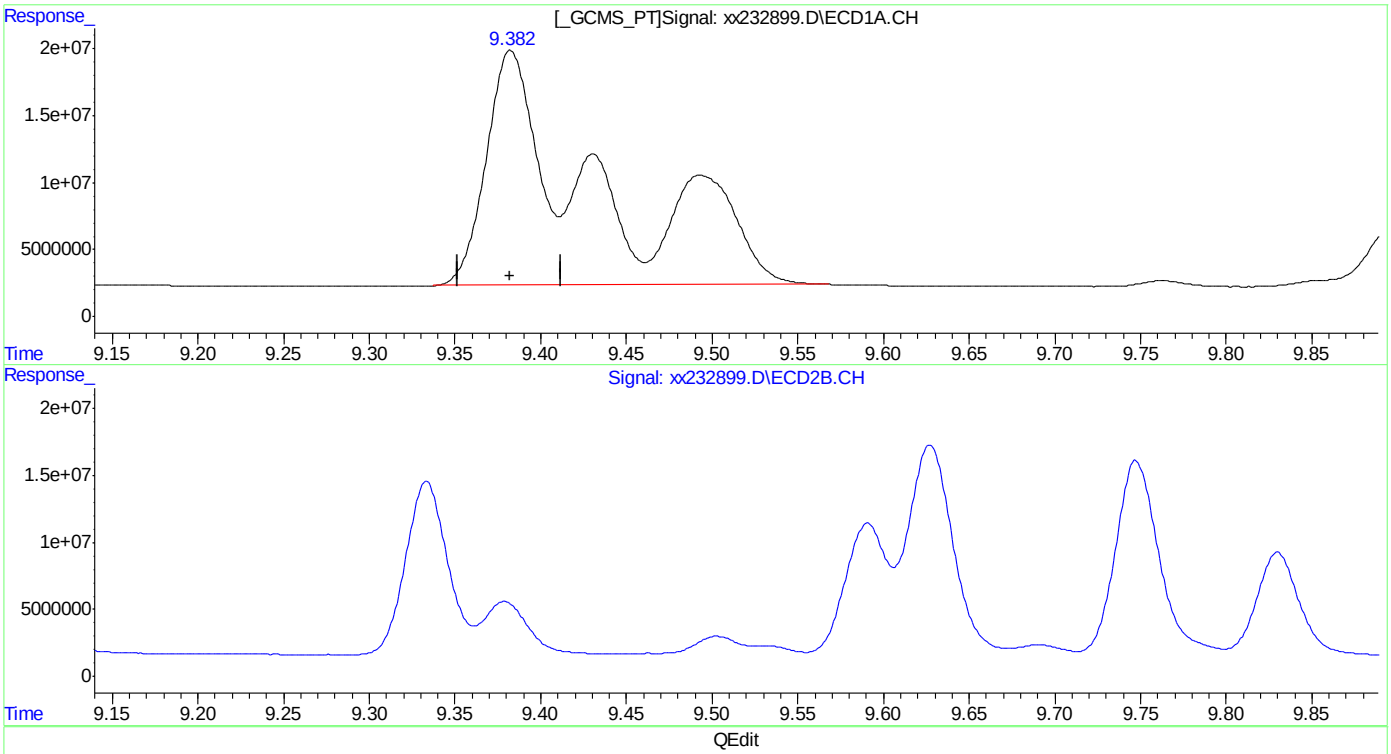
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:02:48 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.382min 910.404PPB m
response 758805356

(50) AR1260-E #2
11.090min 400.062PPB
response 273298204

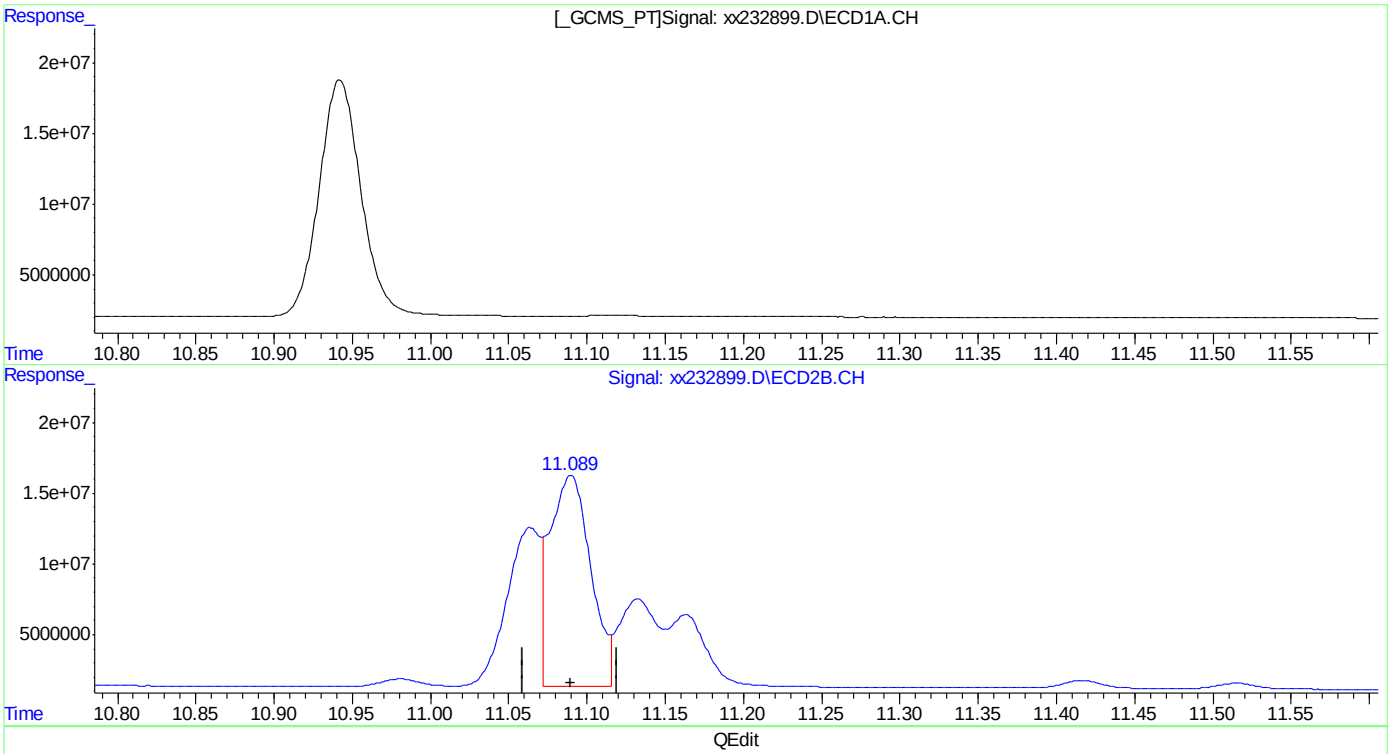
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:02:55 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.382min 910.404PPB m
response 758805356

(50) AR1260-E #2
11.090min 400.062PPB
response 273298204

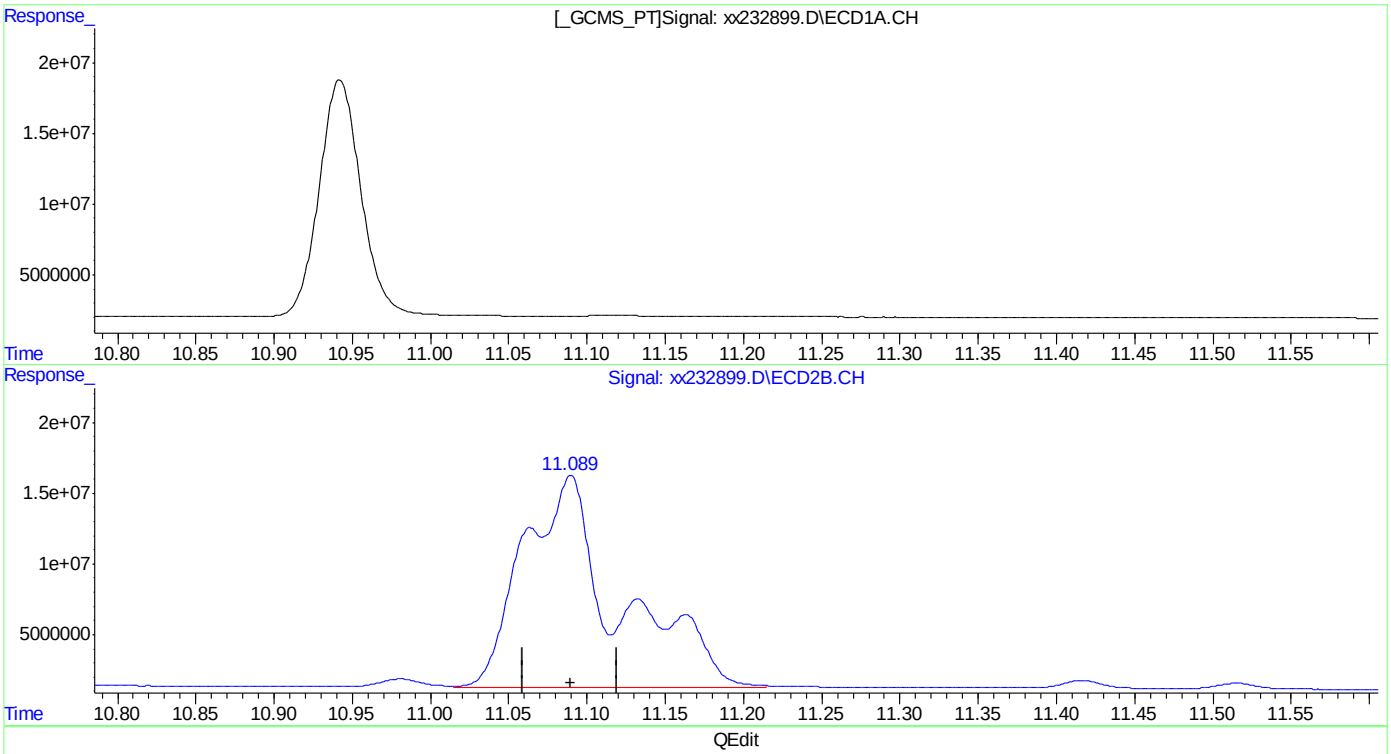
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.382min 910.404PPB m
response 758805356

(50) AR1260-E #2
11.089min 924.485PPB m
response 631552067

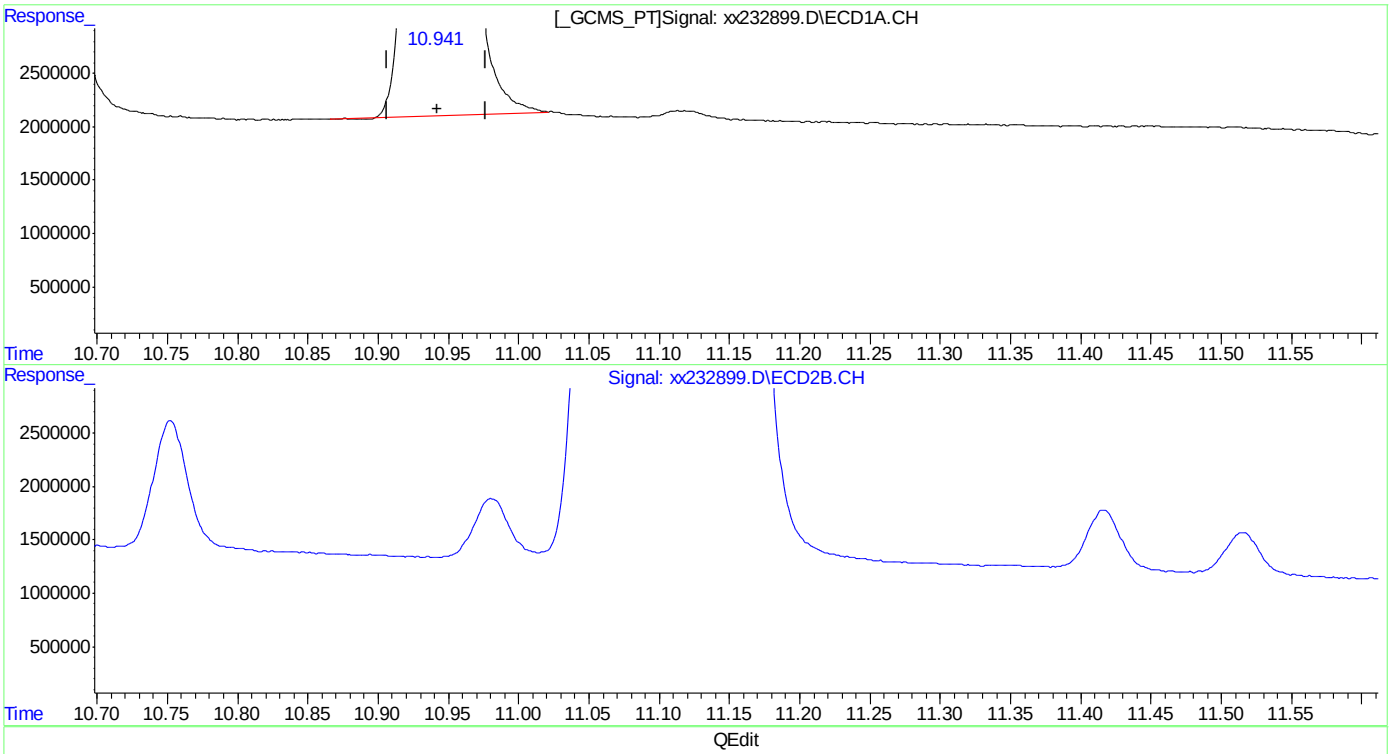
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:03:12 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(51) Decachlorobiphenyl (S)
10.942min 37.909ppb
response 309557549

(51) Decachlorobiphenyl #2 (S)
12.793min 39.649ppb
response 224106584

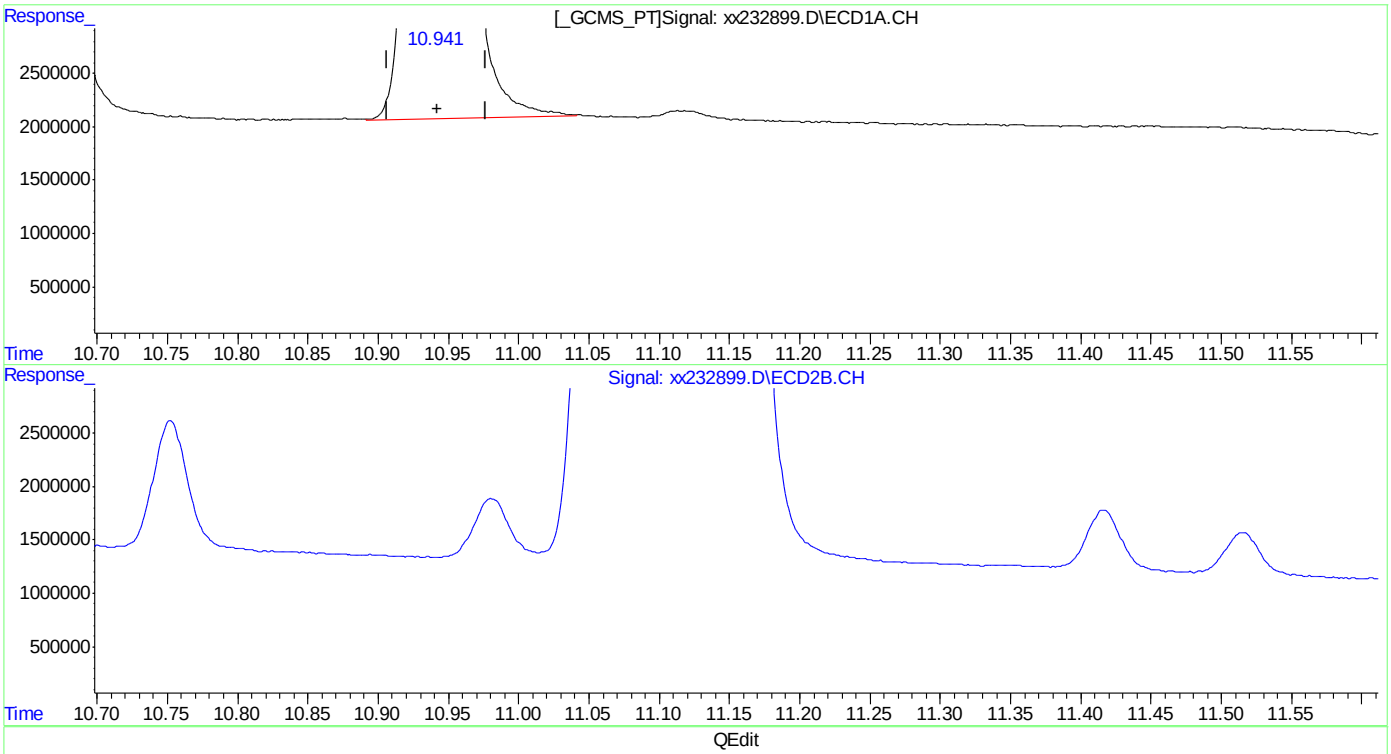
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:03:22 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(51) Decachlorobiphenyl (S)
10.941min 38.274ppb m
response 312537316

(51) Decachlorobiphenyl #2 (S)
12.793min 39.649ppb
response 224106584

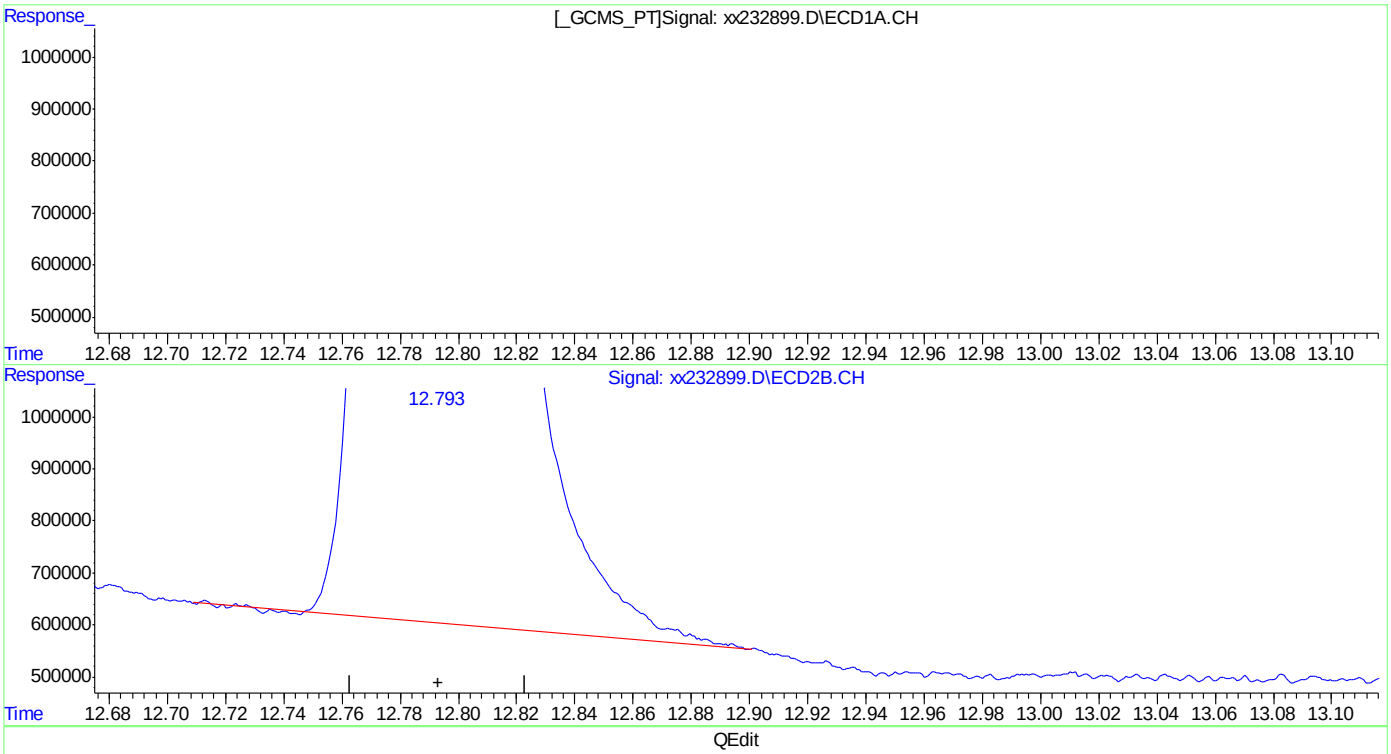
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:03:28 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(51) Decachlorobiphenyl (S)
10.941min 38.274ppb m
response 312537316

(51) Decachlorobiphenyl #2 (S)
12.793min 39.649ppb
response 224106584

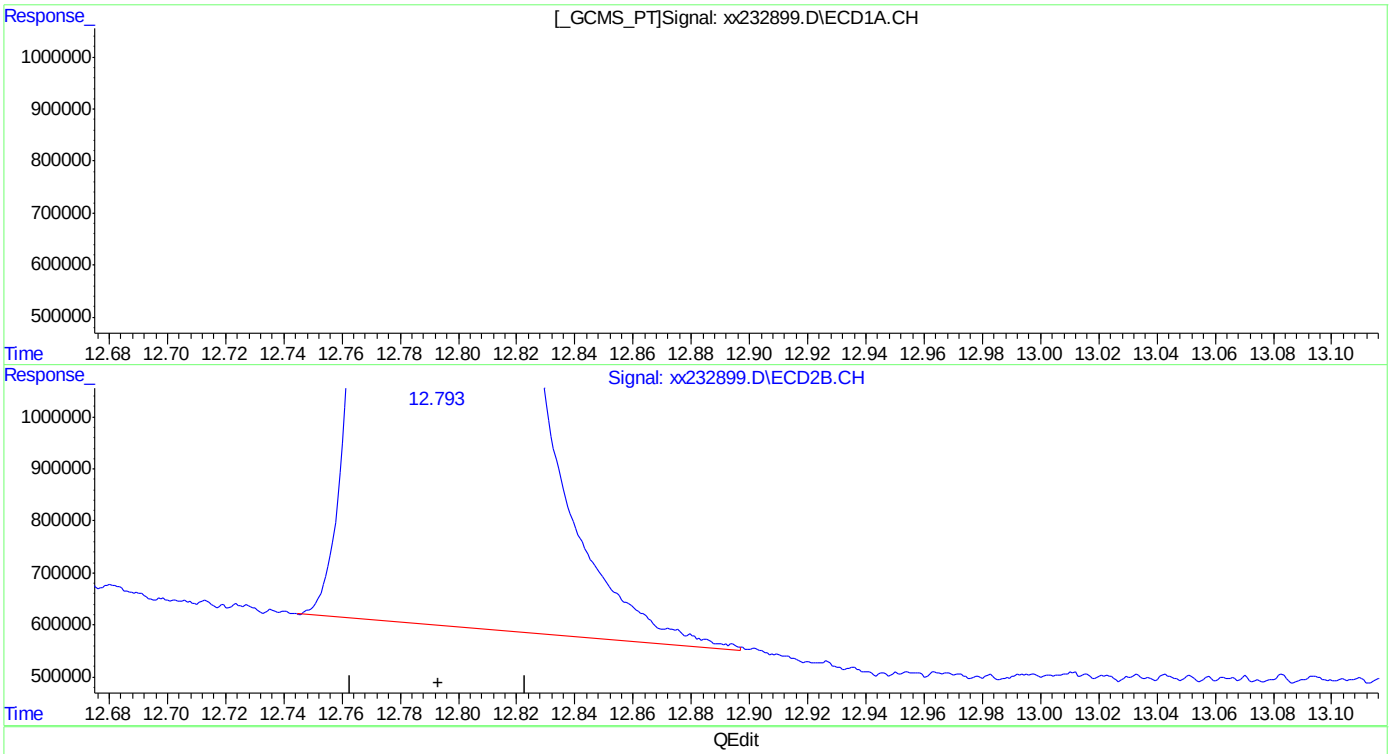
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:03:36 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 09:59:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(51) Decachlorobiphenyl (S)
10.941min 38.274ppb m
response 312537316

(51) Decachlorobiphenyl #2 (S)
12.793min 39.713ppb m
response 224471048

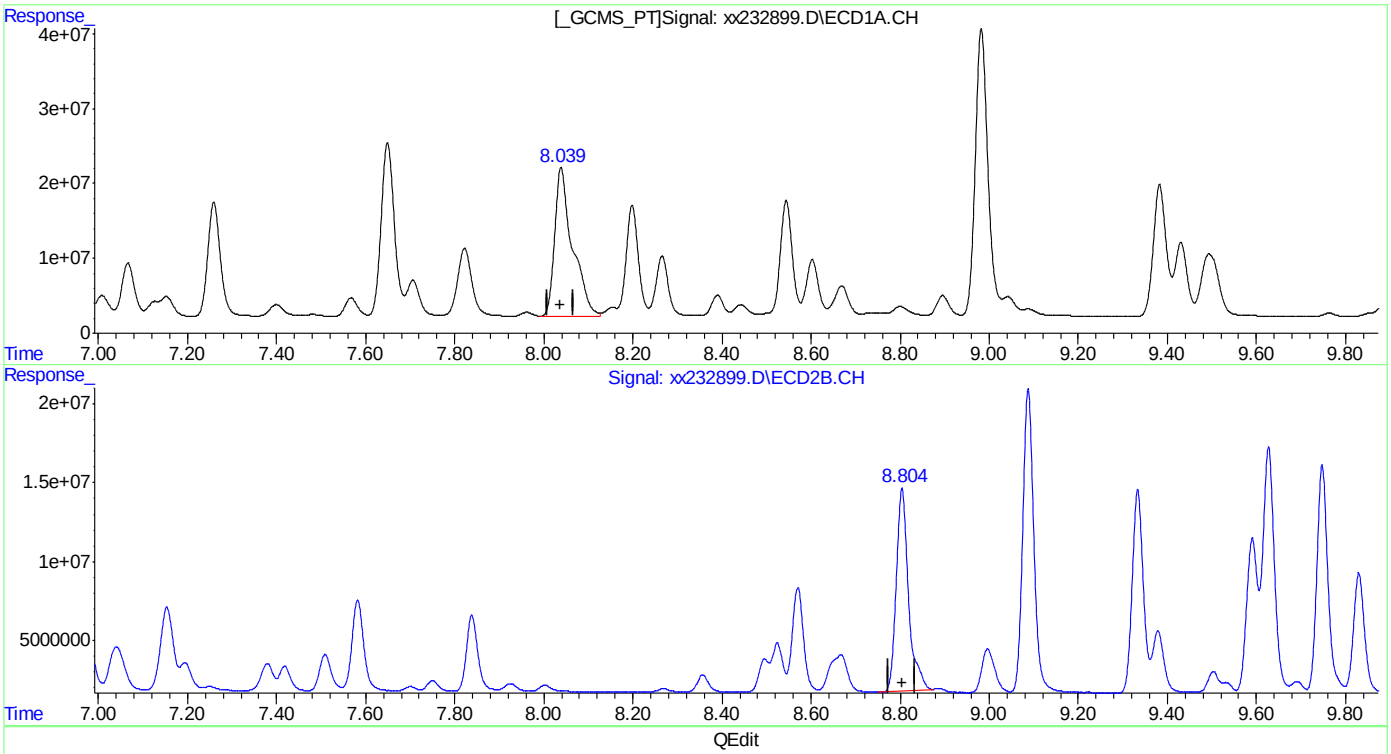
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:03:43 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:03:40 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(46) AR1260-A
8.039min 915.369PPB
response 555765282

(46) AR1260-A #2
8.805min 908.304PPB
response 244234120

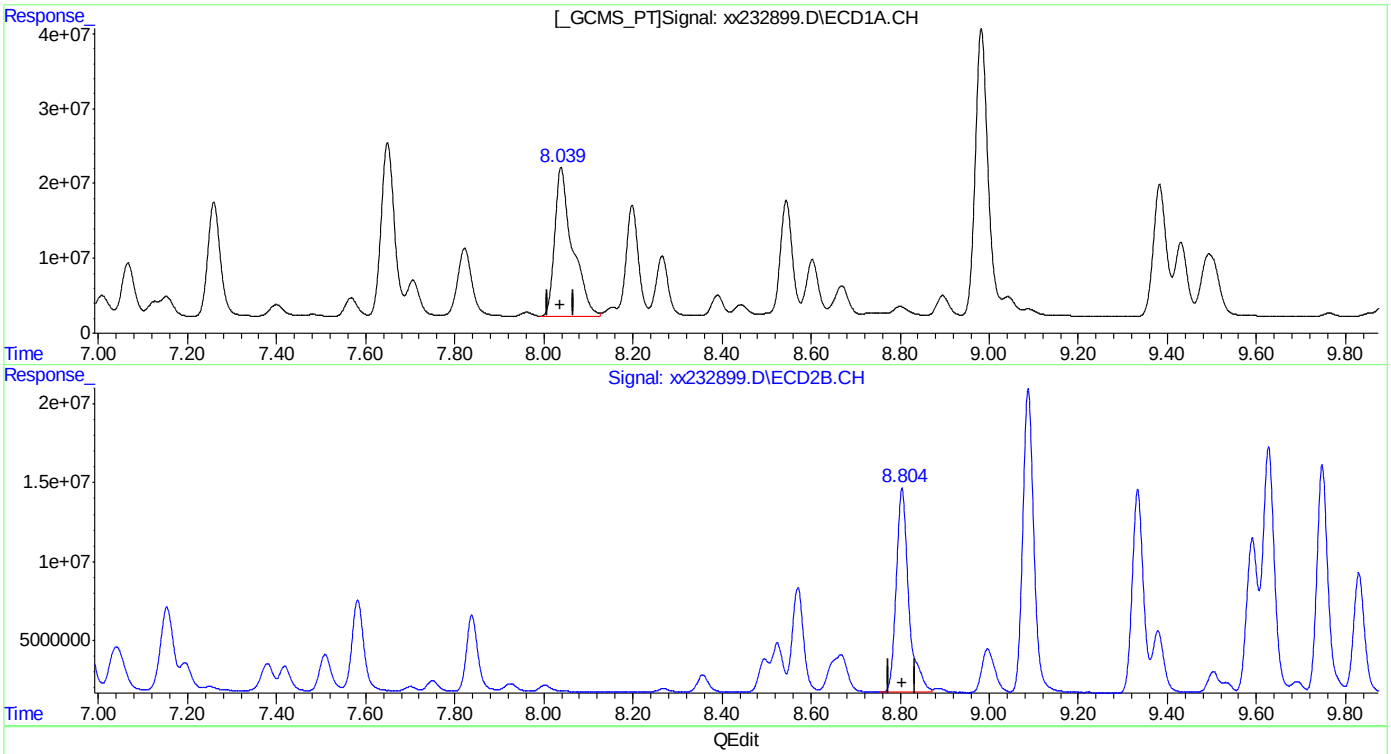
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:32:45 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:03:40 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(46) AR1260-A
8.039min 915.369PPB
response 555765282

(46) AR1260-A #2
8.804min 932.646PPB m
response 250779332

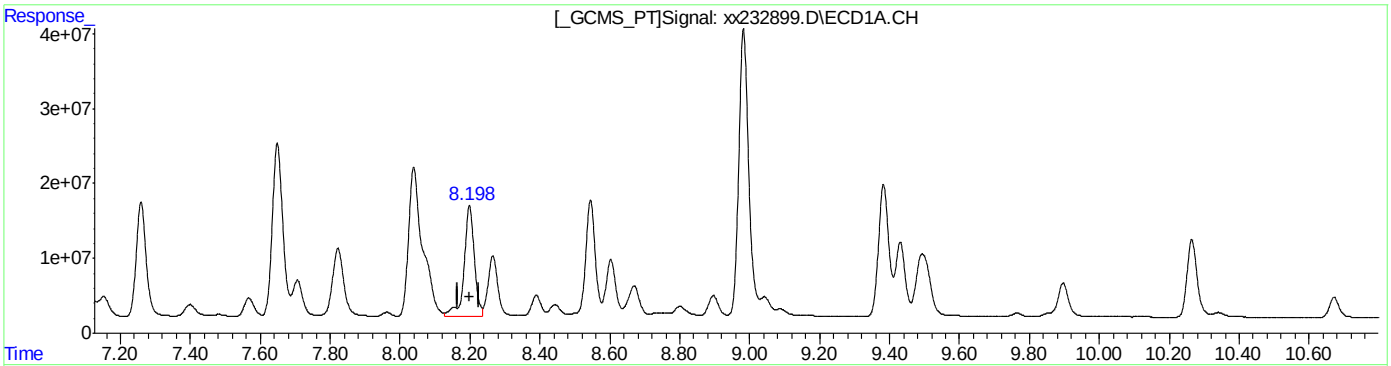
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:32:51 2018 Page: 1

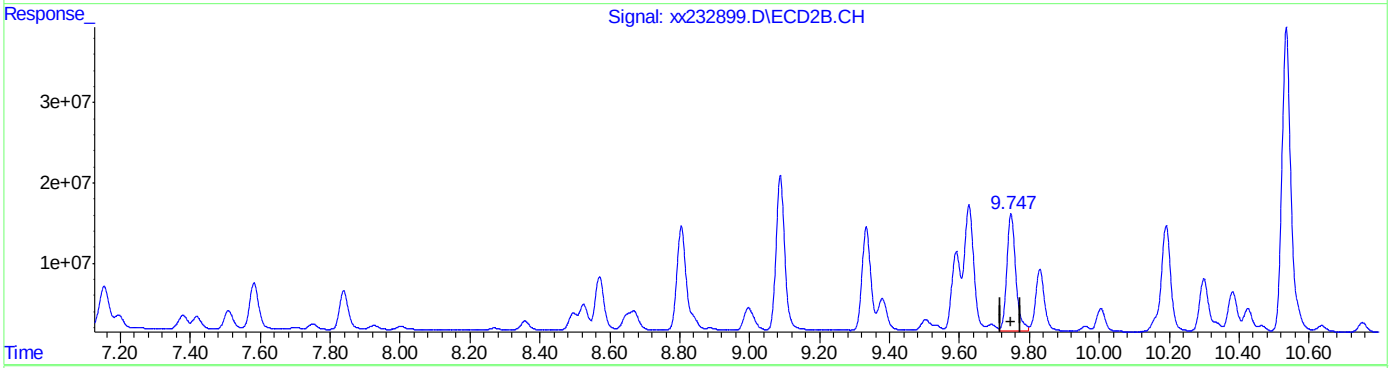
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:03:40 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(47) AR1260-B
8.198min 909.011PPB
response 300144298

(47) AR1260-B #2
9.747min 932.256PPB
response 262177634

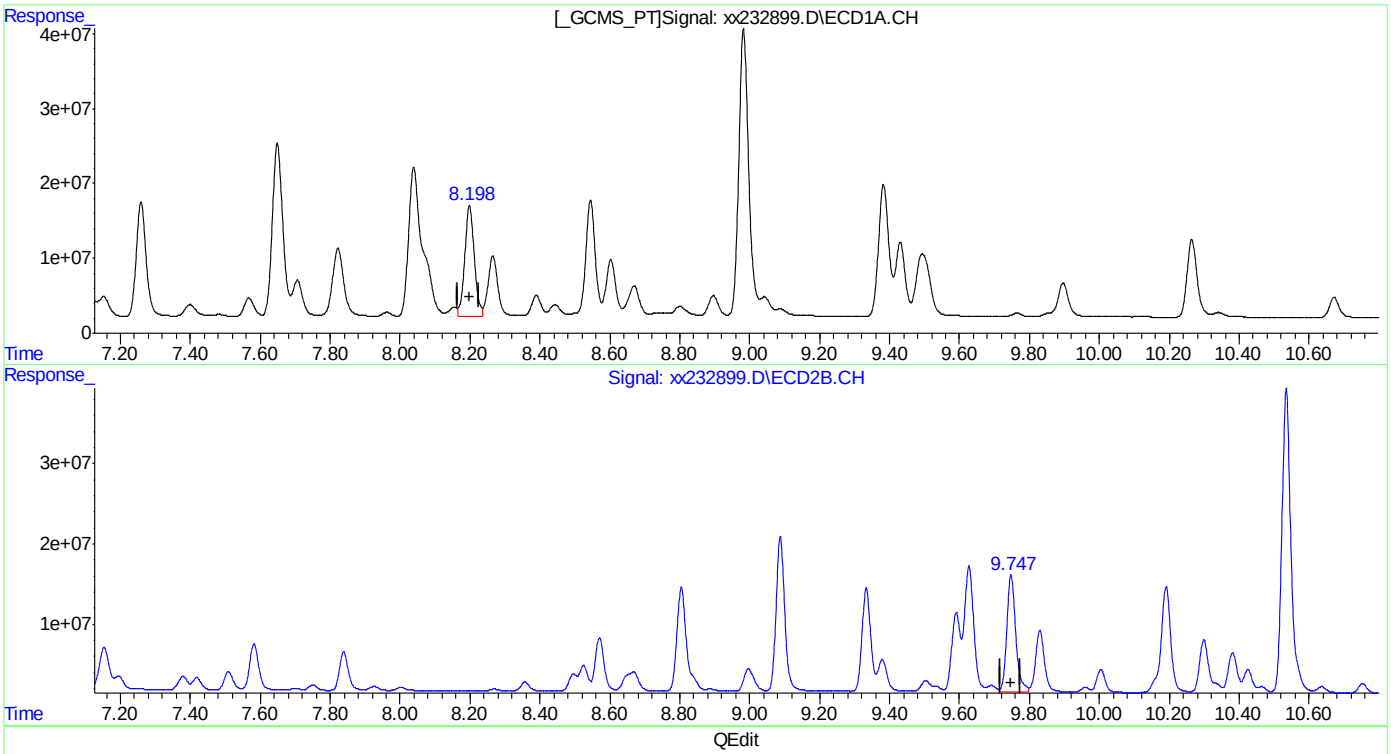
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:32:55 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:03:40 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.198min 848.532PPB m
response 280174999

(47) AR1260-B #2
9.747min 932.256PPB
response 262177634

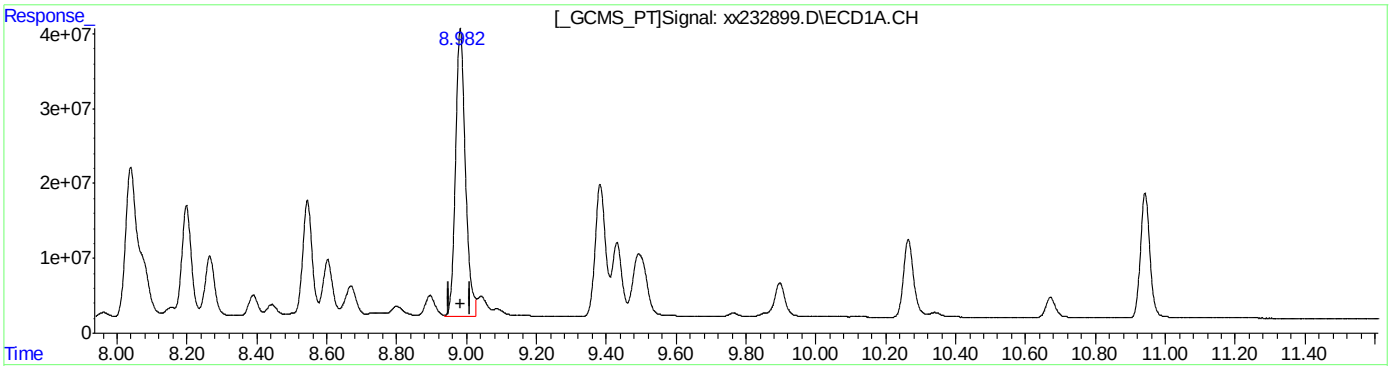
(+) = Expected Retention Time

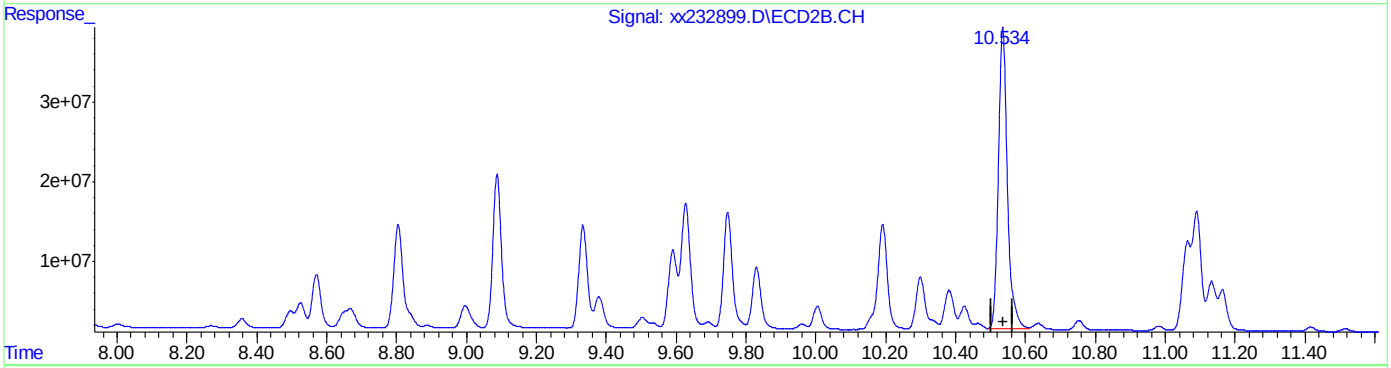
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 1:50 am
Operator : carolb
Sample : ic6423-500
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:32:59 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(49) AR1260-D
8.982min 965.567PPB m
response 754802935

(49) AR1260-D #2
10.534min 994.124PPB m
response 675350100

(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:45:10 2018

Manual Integrations APPROVED (compounds with "m" flag)
Carol Boykin 07/31/18 17:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:34:29 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.414	4.143	510.7E6	416.5E6	71.090m	74.998
	Spiked Amount 40.000			Recovery	=	177.72%	187.50%
51) S	Decachlor...	10.942	12.792	633.8E6	451.2E6	77.622	79.820
	Spiked Amount 40.000			Recovery	=	194.06%	199.55%
	Target Compounds						
41)	AR1016-A	3.835	4.845	232.7E6	170.2E6	1852.069	1656.257
42)	AR1016-B	4.275	5.431	424.2E6	348.2E6	1763.556	1703.909
43)	AR1016-C	4.874	6.092	992.4E6	771.6E6	1883.860	1964.294
44)	AR1016-D	5.053	6.289	376.3E6	288.6E6	1811.208	1757.687m
45)	AR1016-E	5.589	6.971	398.2E6	226.2E6	1782.199	1775.686
46)	AR1260-A	8.038	8.803	1149.1E6	505.0E6	1892.608	1878.106
47)	AR1260-B	8.198	9.747	561.5E6	525.2E6	1700.522m	1867.475
48)	AR1260-C	8.543	10.190	606.6E6	524.7E6	1938.039	1922.467
49)	AR1260-D	8.981	10.533	1556.9E6	1406.4E6	1991.572	2070.236
50)	AR1260-E	9.382	11.090	1550.3E6	1257.3E6	1860.008m	1840.474m

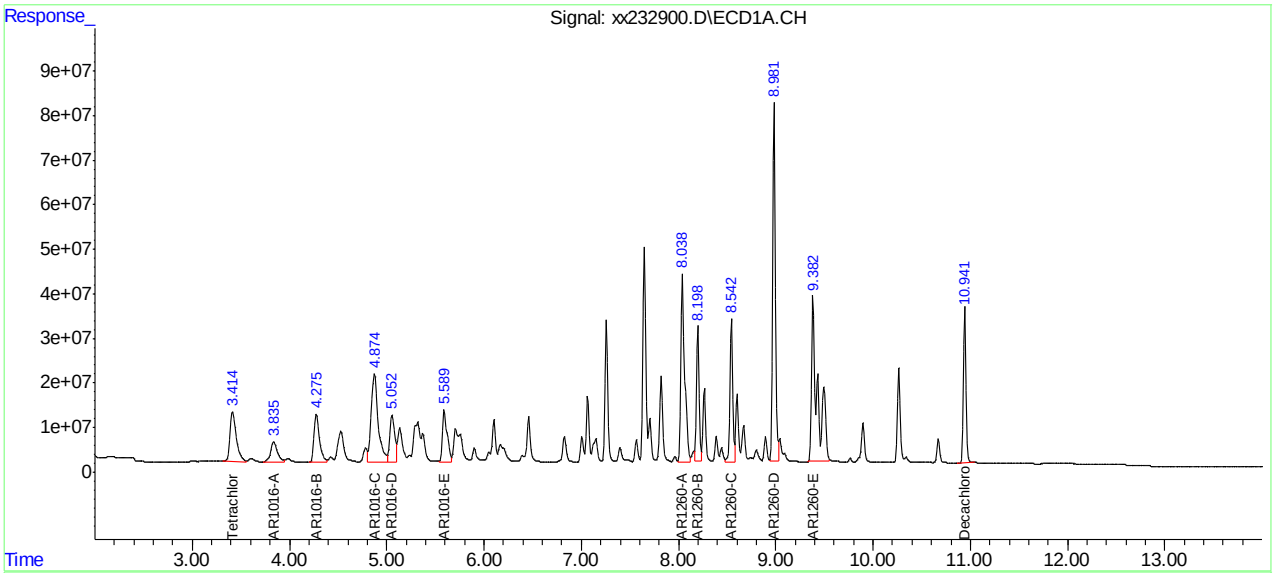
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

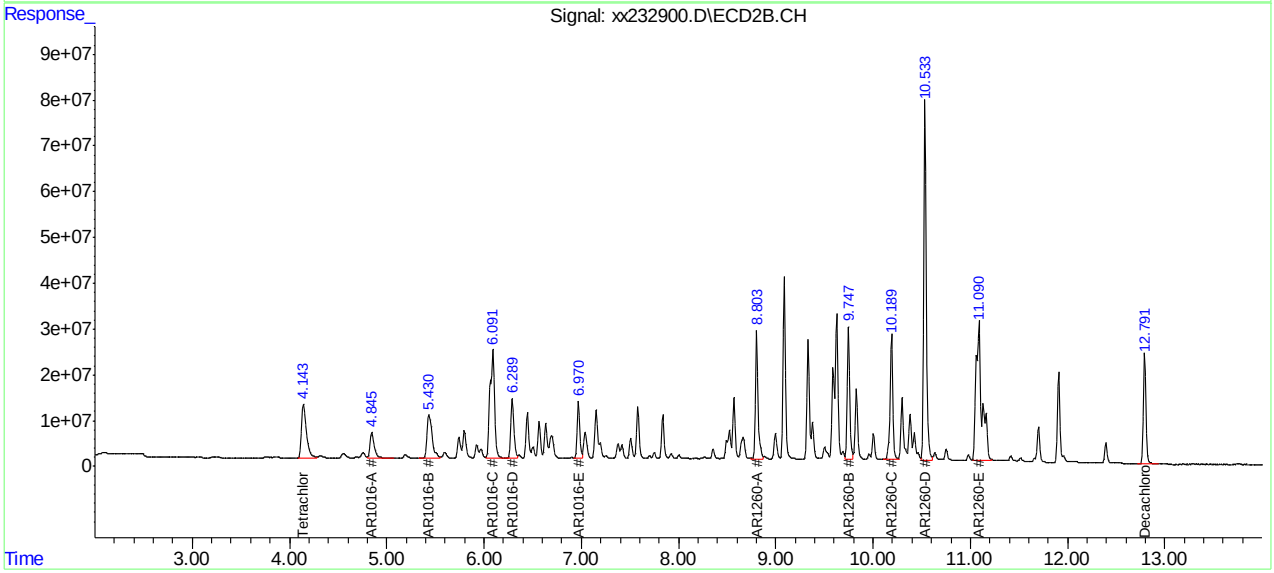
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:34:29 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6423-ICC6423	**Method:**	SW846 8082A	
Lab FileID:	XX232900.D	**Analyst approved:**	07/31/18 17:06	Summer Kotb
Injection Time:	07/28/18 02:09	**Supervisor approved:**	07/31/18 17:30	Carol Boykin

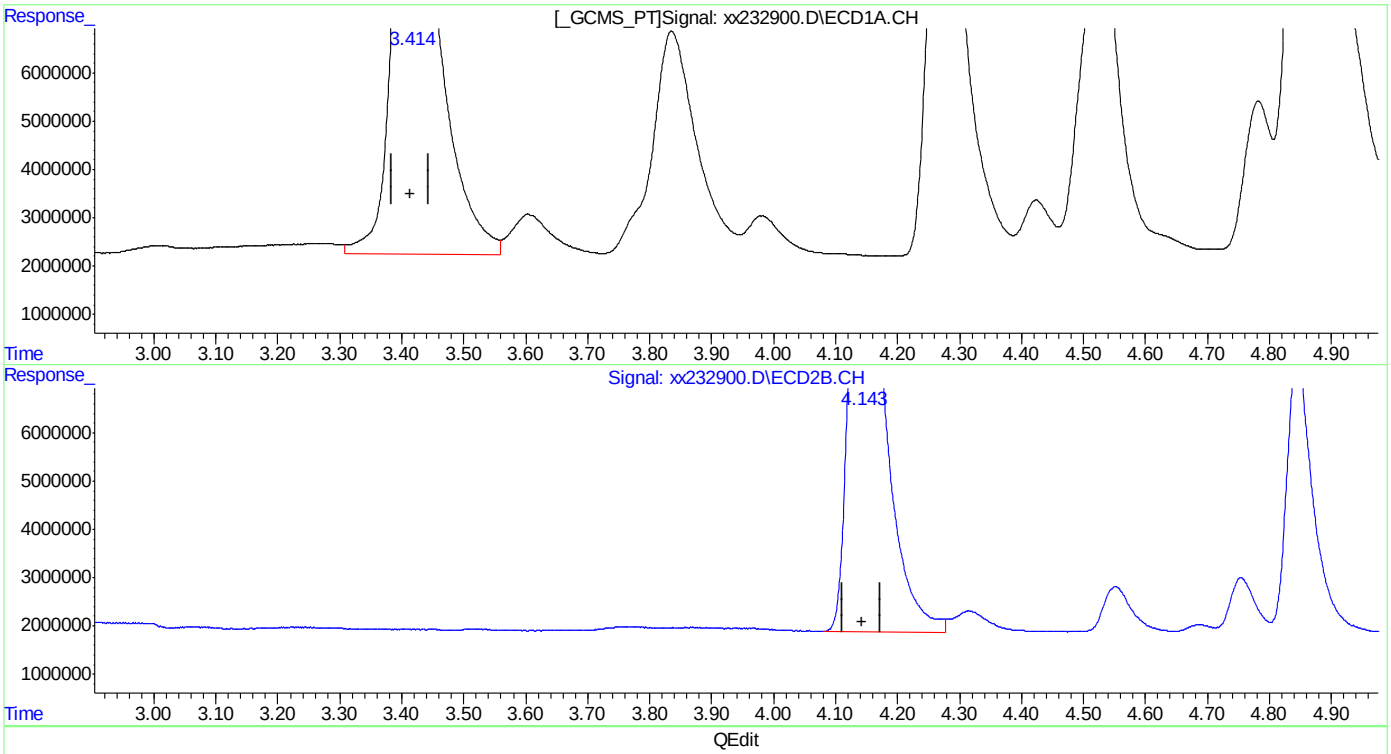
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	3.41	Poorly defined baseline
AR1016-D		2	6.29	Split peak
AR1260-B		1	8.20	Split peak
AR1260-E		1	9.38	Split peak
AR1260-E		2	11.09	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:05:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.414min 73.396ppb
response 527281480

(1) Tetrachloro-m-xylene #2 (S)
4.143min 74.998ppb
response 416507655

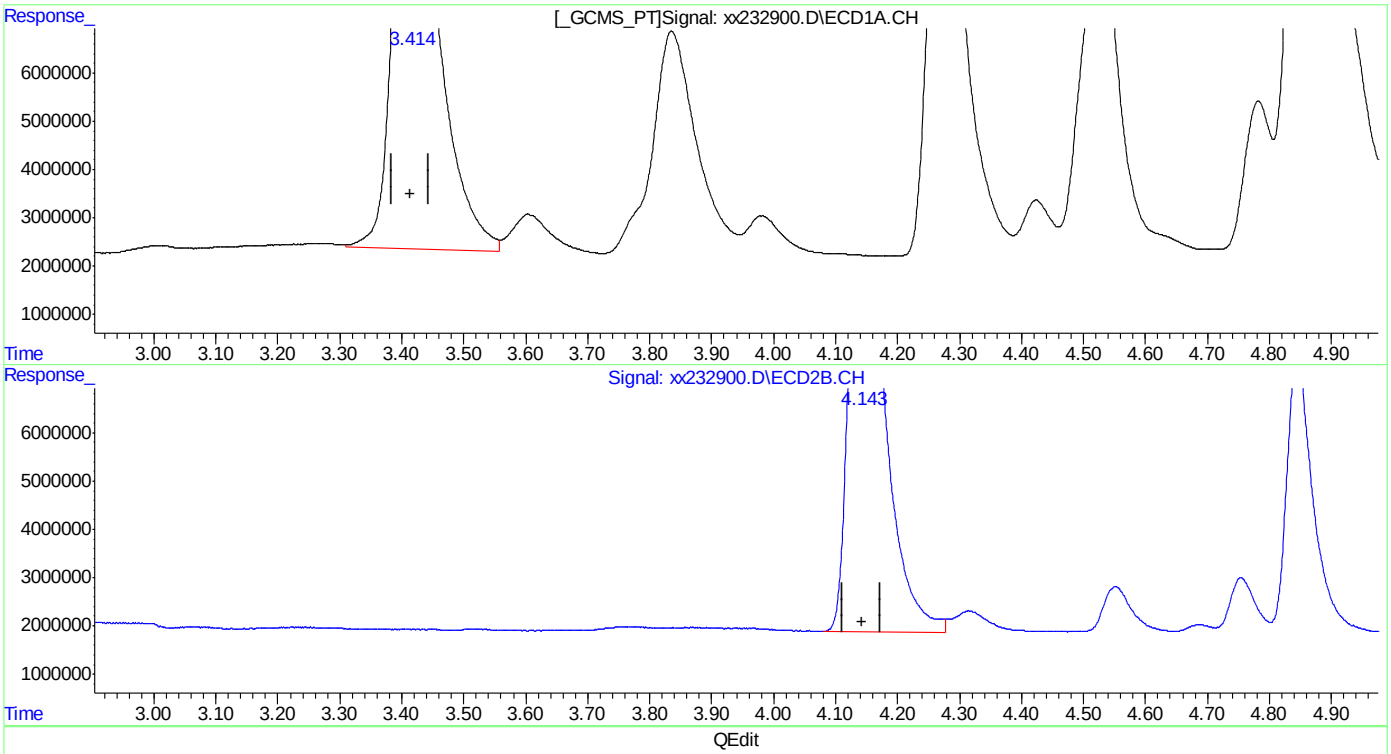
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:05:37 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:05:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.414min 71.090ppb m
response 510718703

(1) Tetrachloro-m-xylene #2 (S)
4.143min 74.998ppb
response 416507655

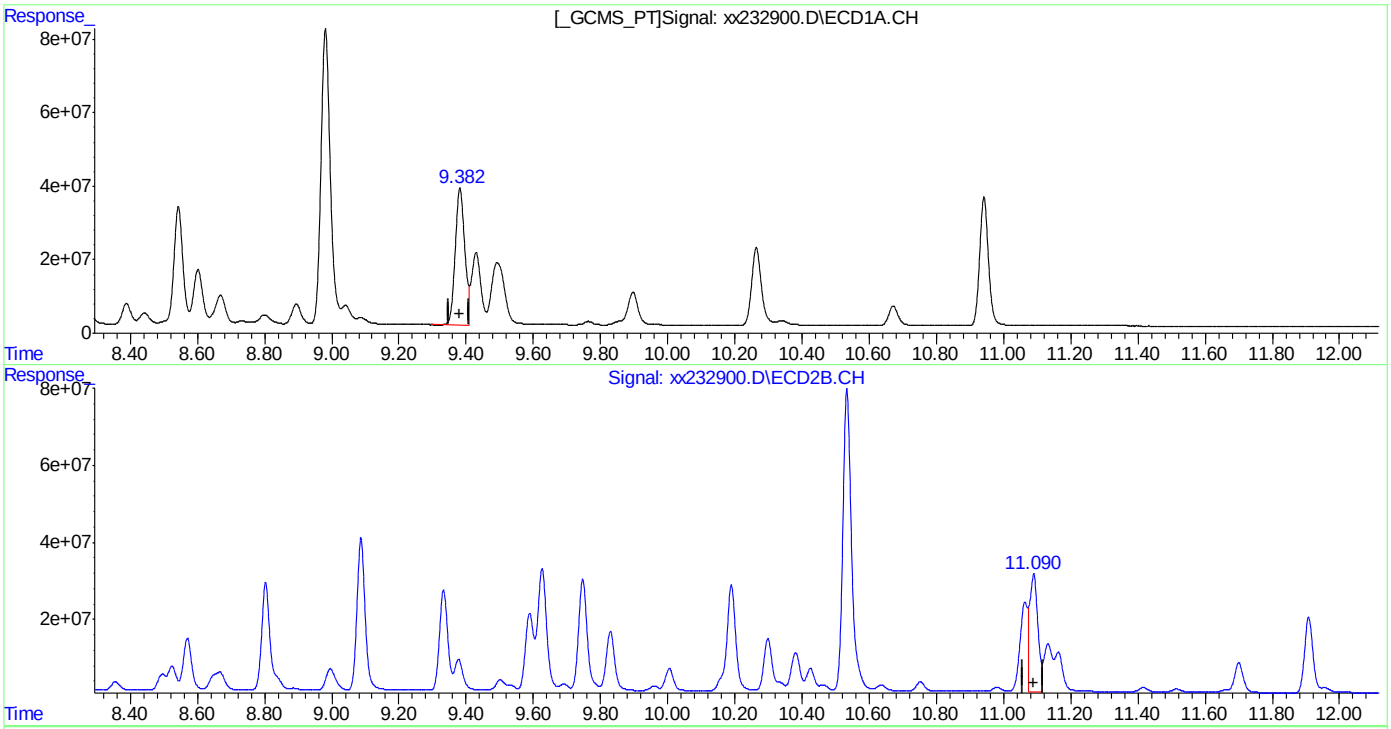
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:05:43 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:05:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.382min 888.056PPB
response 740178651

(50) AR1260-E #2
11.090min 791.996PPB
response 541043835

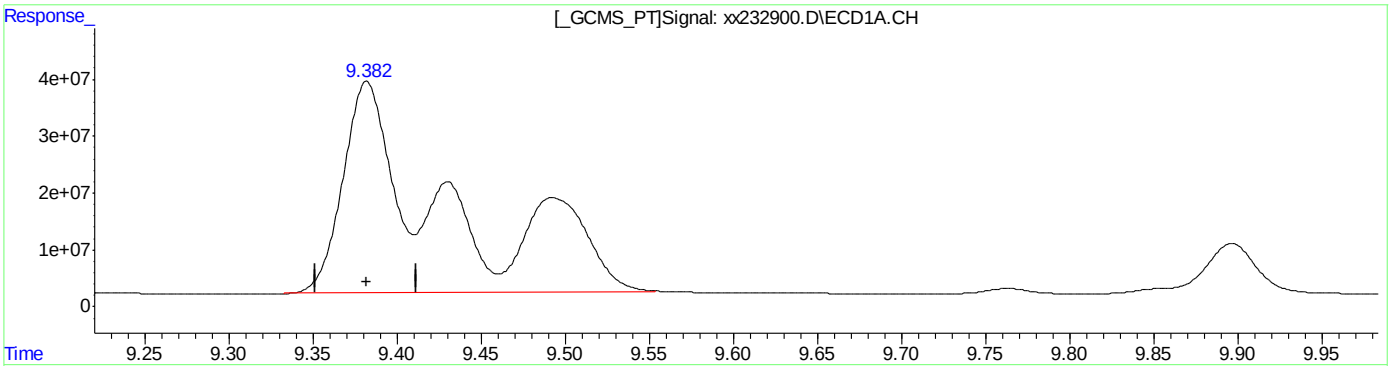
(+) = Expected Retention Time

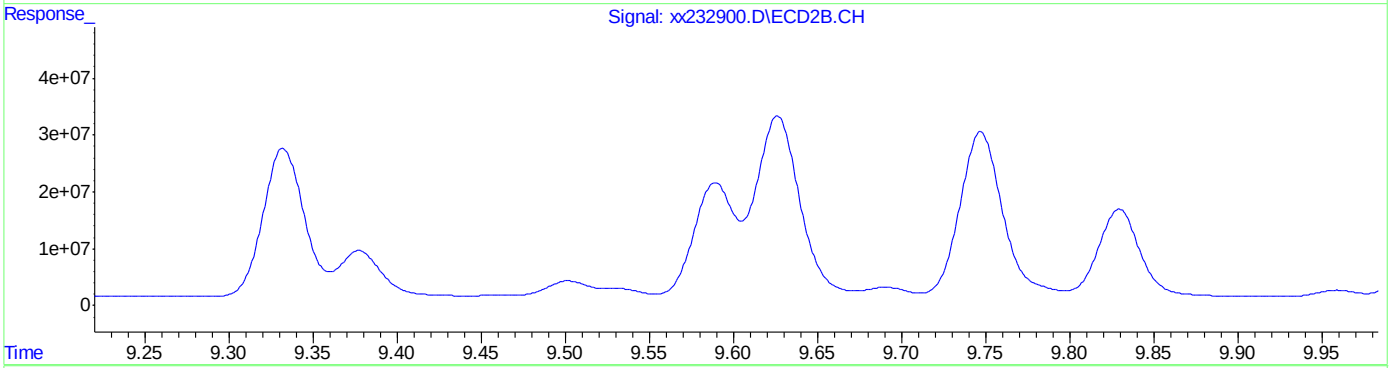
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:05:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E
9.382min 1860.008PPB m
response 1550282179

(50) AR1260-E #2
11.090min 791.996PPB
response 541043835

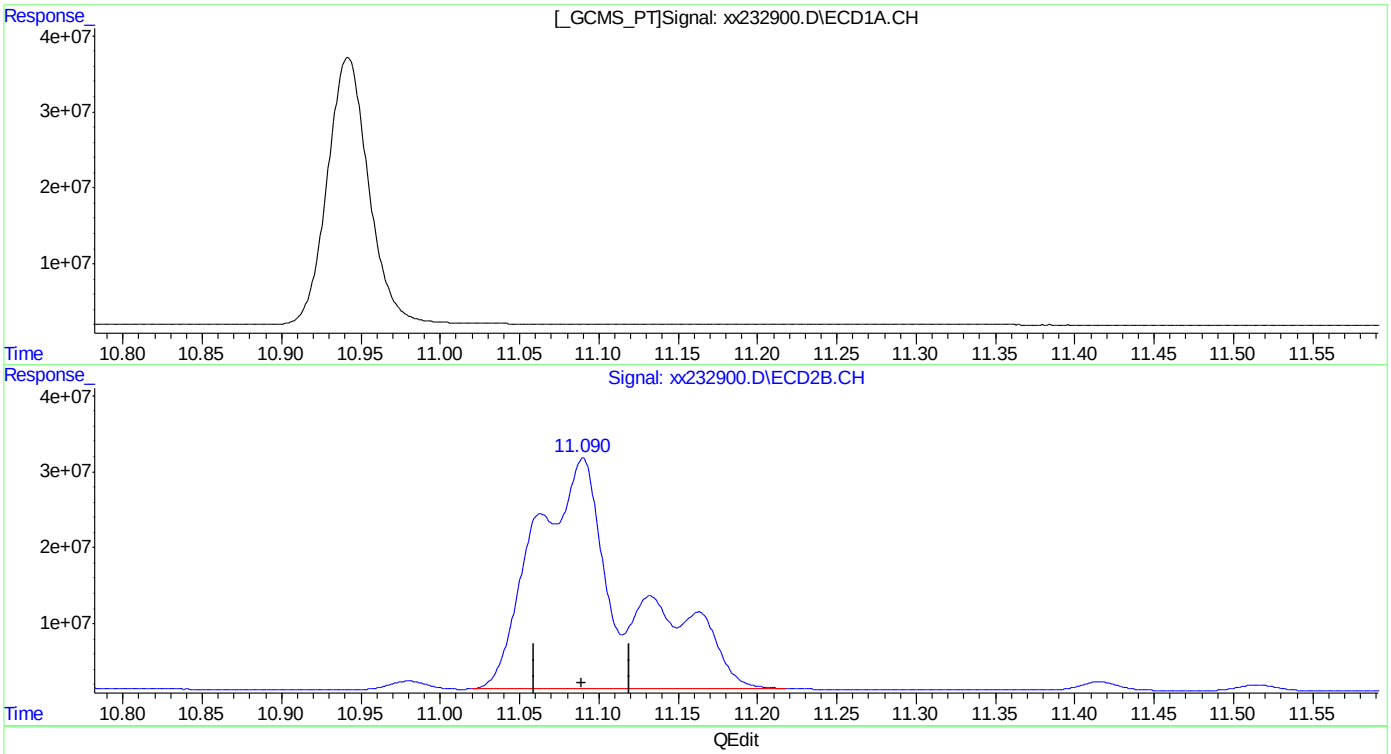
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:07:33 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:05:06 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.382min 1860.008PPB m
response 1550282179

(50) AR1260-E #2
11.090min 1840.474PPB m
response 1257300189

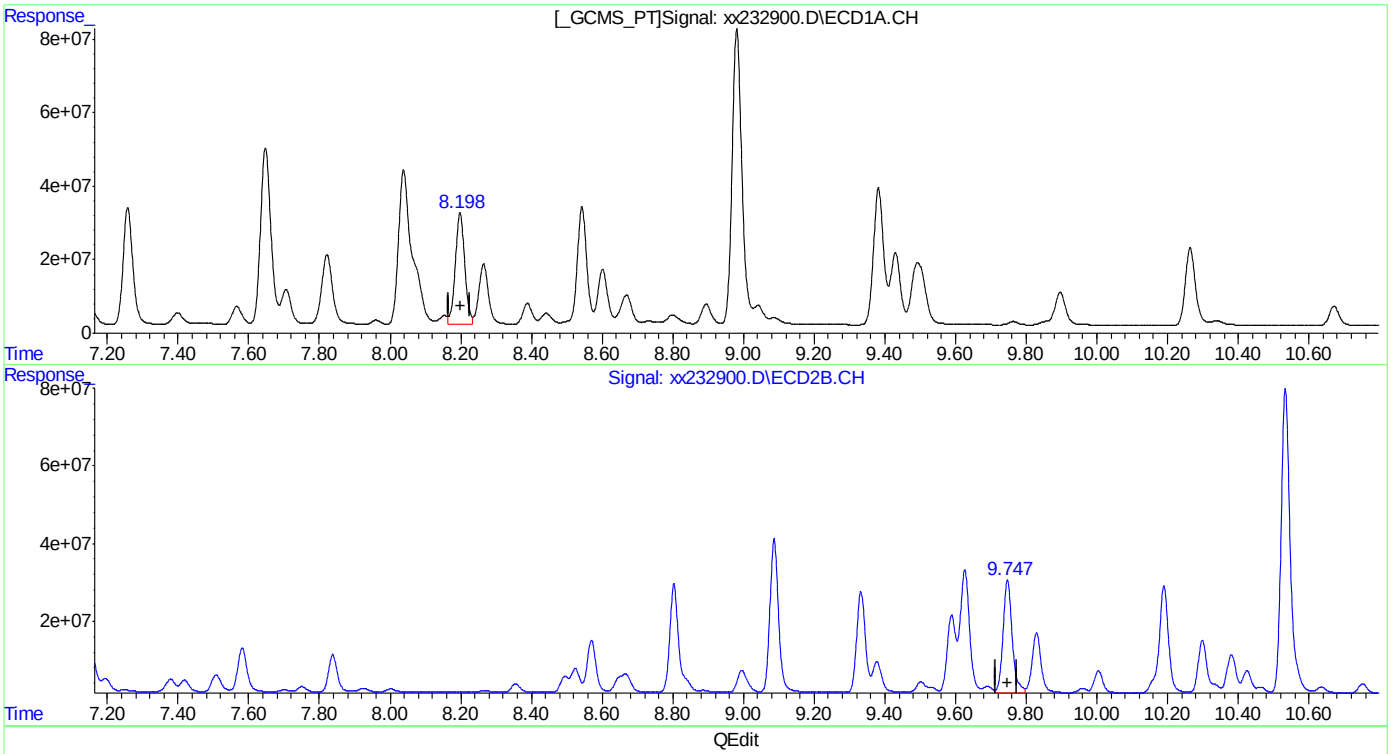
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:07:44 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:07:41 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.198min 1733.029PPB
response 572224975

(47) AR1260-B #2
9.747min 1867.475PPB
response 525188657

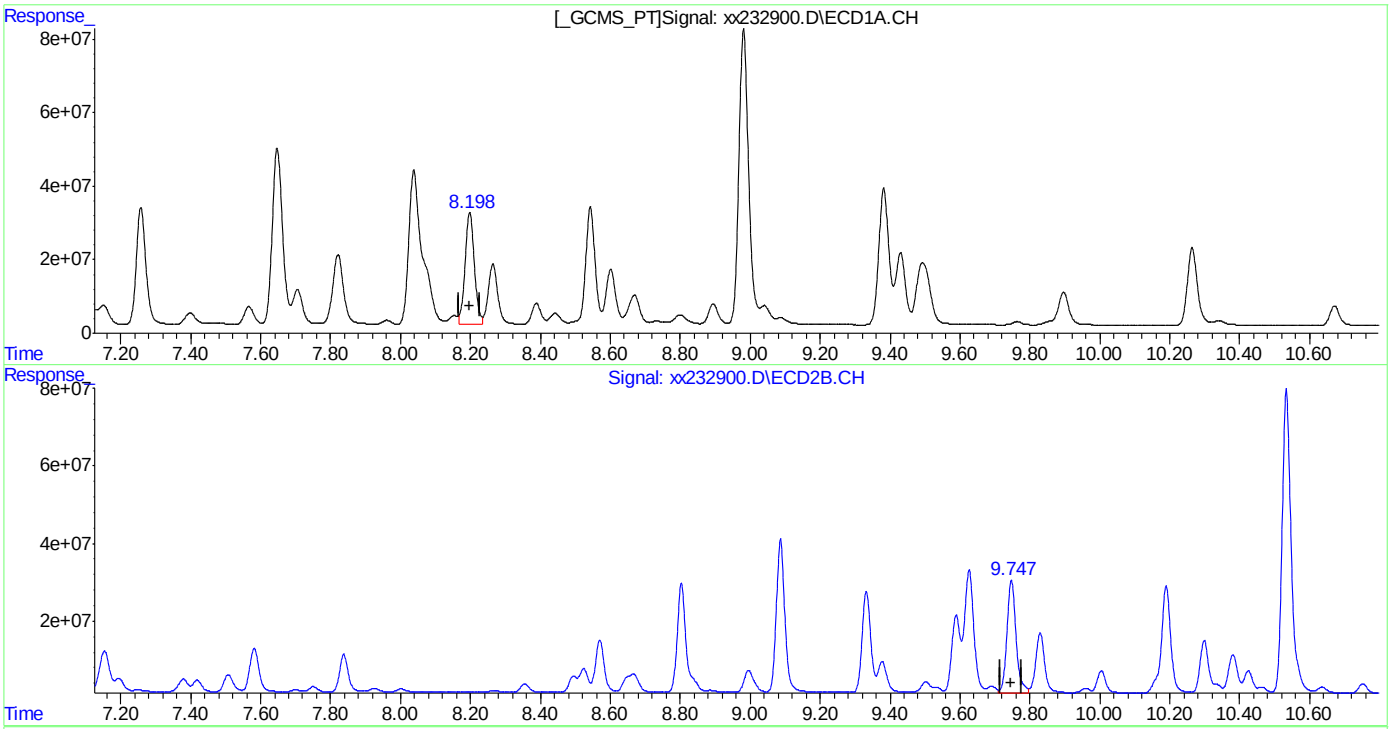
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 10:25:50 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:26:00 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.198min 1700.522PPB m
response 561491371

(47) AR1260-B #2
9.747min 1867.475PPB
response 525188657

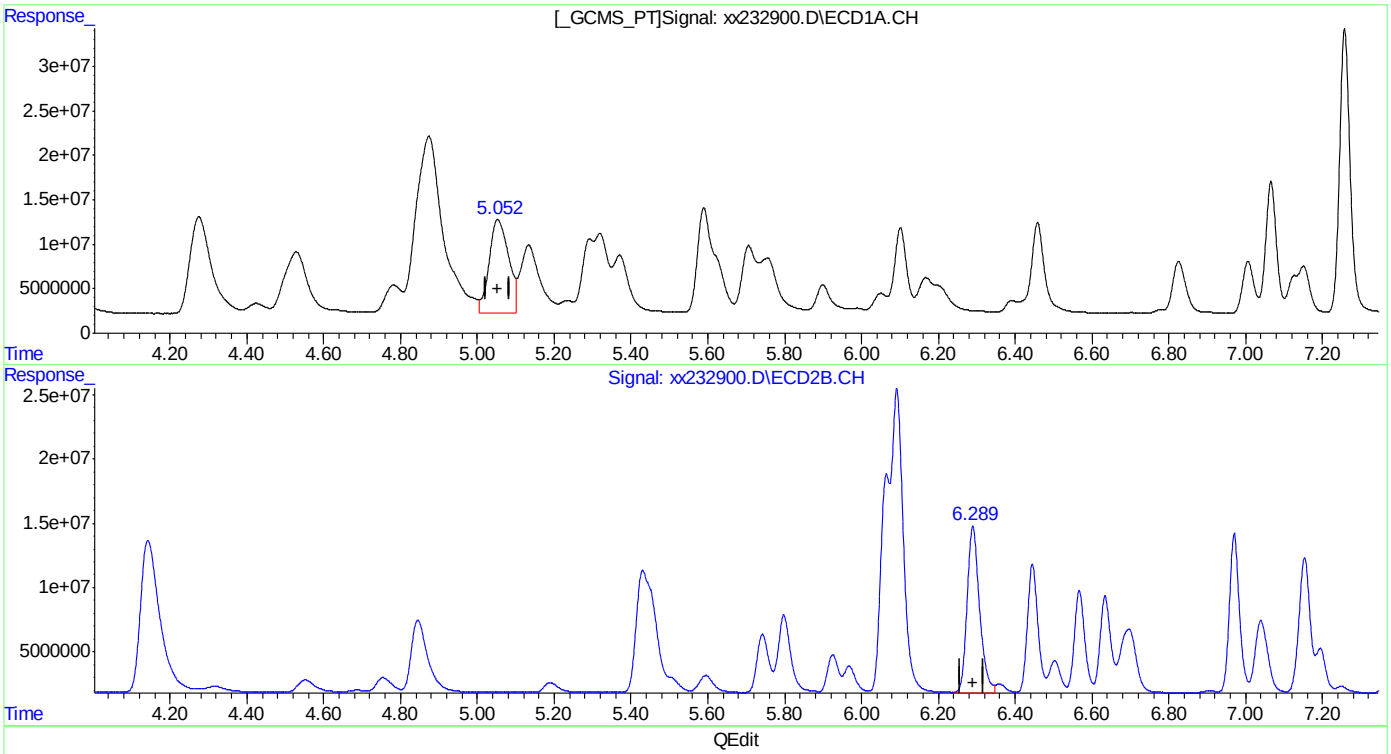
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:33:34 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:33:32 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.053min 1811.208PPB
response 376278379

(44) AR1016-D #2
6.290min 1774.346PPB
response 291383687

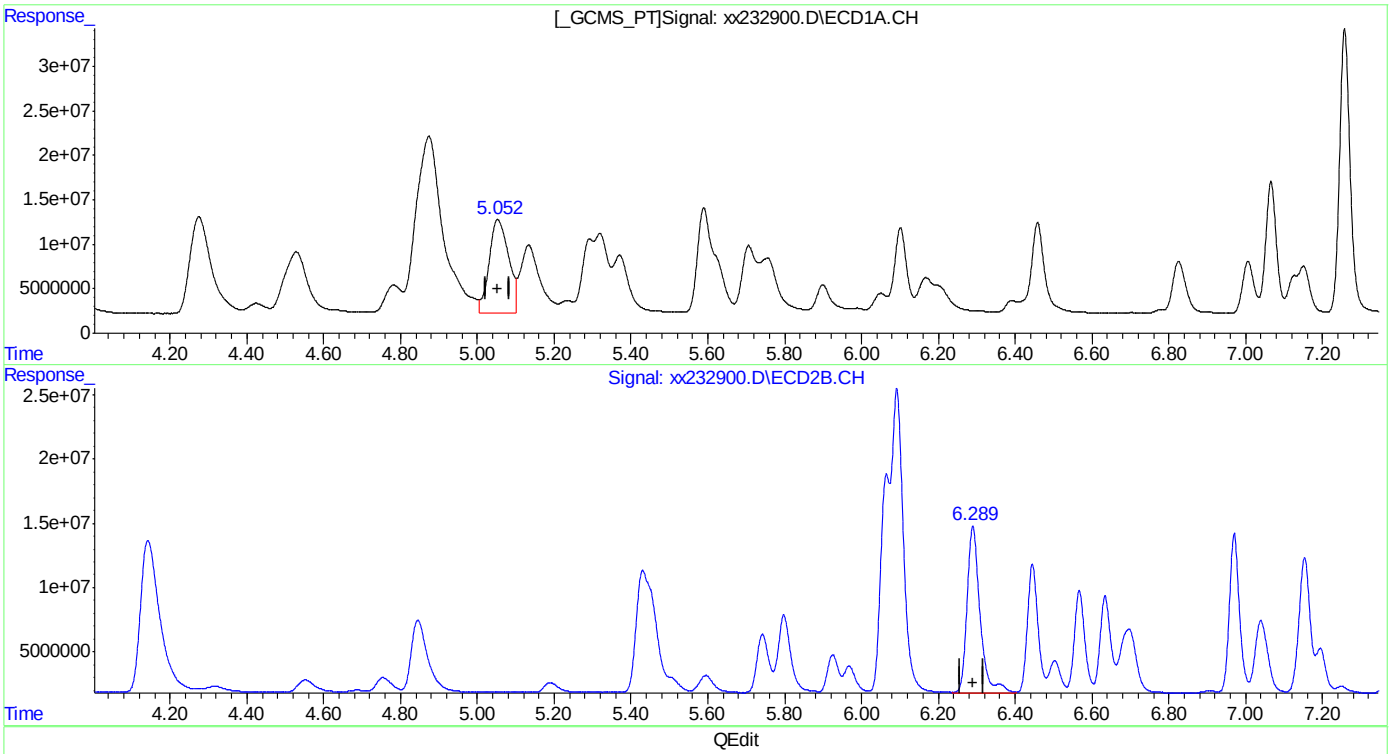
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:45:29 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:33:32 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.053min 1811.208PPB
response 376278379

(44) AR1016-D #2
6.289min 1849.015PPB m
response 303645980

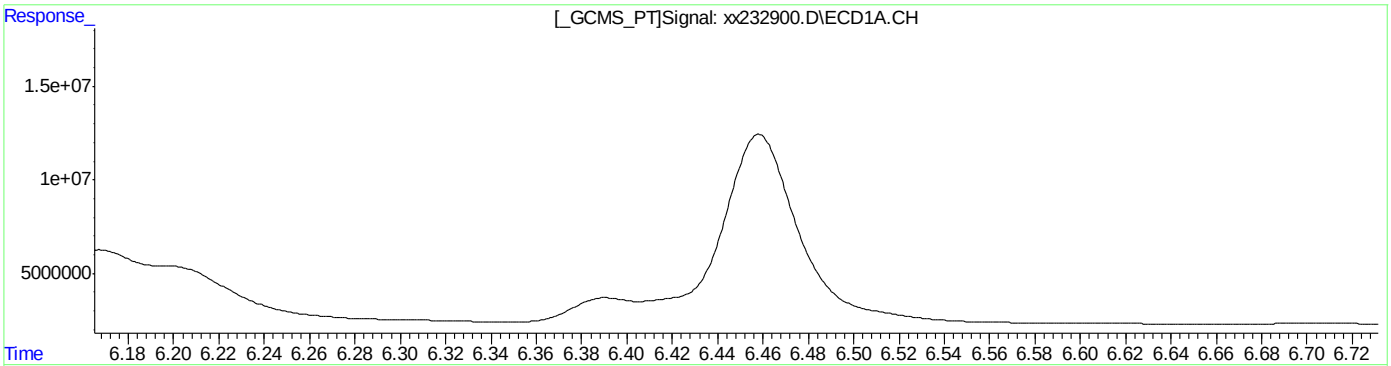
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:45:33 2018

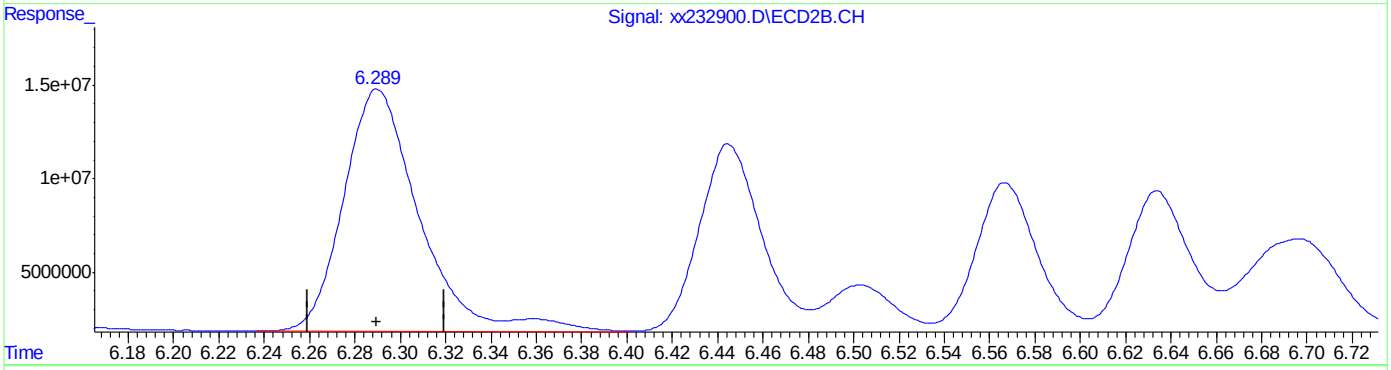
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:45:32 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(44) AR1016-D
5.053min 1811.208PPB
response 376278379

(44) AR1016-D #2
6.289min 1849.015PPB m
response 303645980

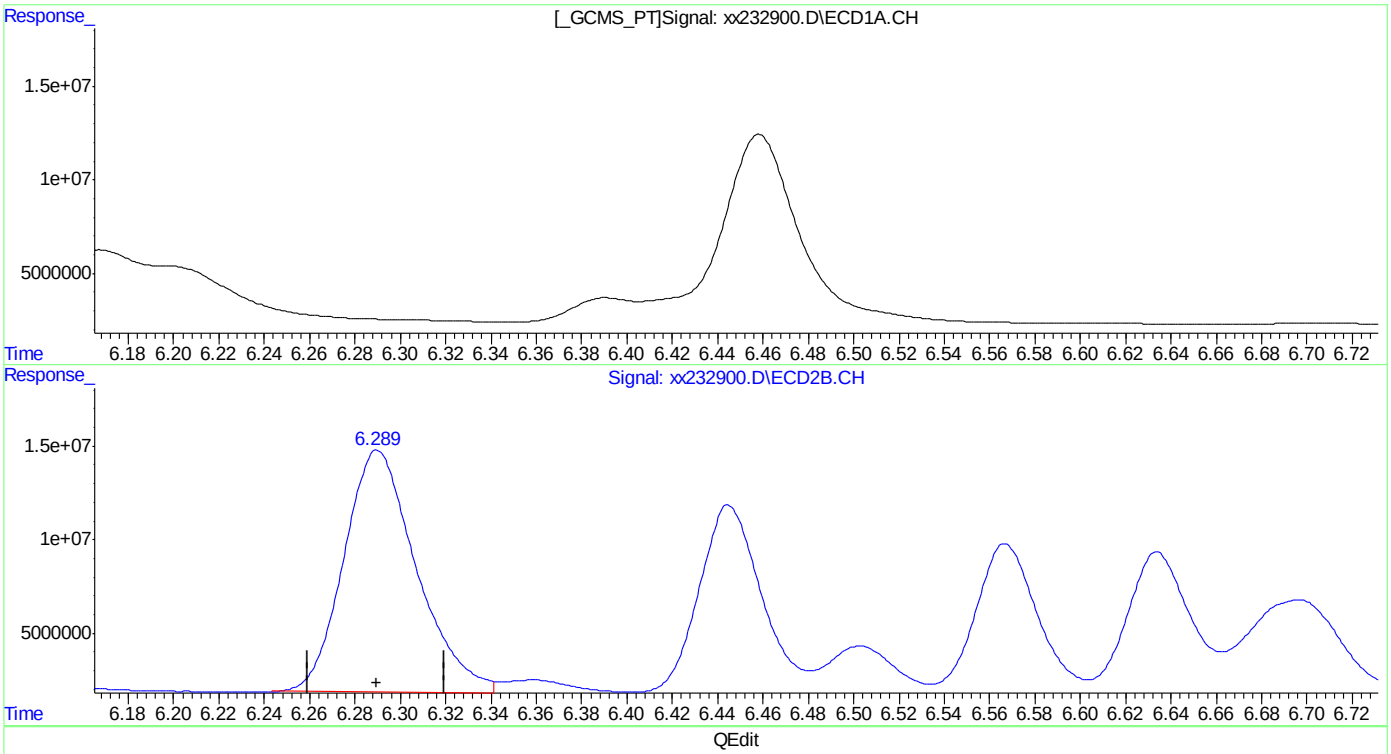
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 16:34:26 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:09 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:45:32 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.053min 1811.208PPB
response 376278379

(44) AR1016-D #2
6.289min 1757.687PPB m
response 288647962

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Carol Boykin
07/31/18 17:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232901.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:27 am
Operator : carolb
Sample : ic6423-2000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:35:13 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.414	4.143	1079.7E6	841.4E6	150.290	151.503
	Spiked Amount 40.000			Recovery	=	375.73%	378.76%
51)	S Decachlor...	10.940	12.791	1292.7E6	915.6E6	158.308	161.991
	Spiked Amount 40.000			Recovery	=	395.77%	404.98%
	Target Compounds						
41)	AR1016-A	3.835	4.845	452.4E6	329.0E6	3599.868	3201.785
42)	AR1016-B	4.274	5.430	829.0E6	678.4E6	3446.080	3319.505
43)	AR1016-C	4.873	6.092	1994.8E6	1544.4E6	3786.684	3931.687
44)	AR1016-D	5.052	6.288	743.5E6	571.8E6	3578.937	3482.131m
45)	AR1016-E	5.589	6.971	792.1E6	445.3E6	3544.939	3496.096
46)	AR1260-A	8.037	8.803	2357.2E6	1013.6E6	3882.464	3769.718
47)	AR1260-B	8.197	9.746	1170.2E6	1053.4E6	3544.170m	3745.673
48)	AR1260-C	8.542	10.189	1246.0E6	1056.6E6	3980.922	3871.039
49)	AR1260-D	8.980	10.533	3207.1E6	2820.2E6	4102.679	4151.441
50)	AR1260-E	9.379	11.088	3254.9E6	2536.4E6	3905.133m	3712.872m

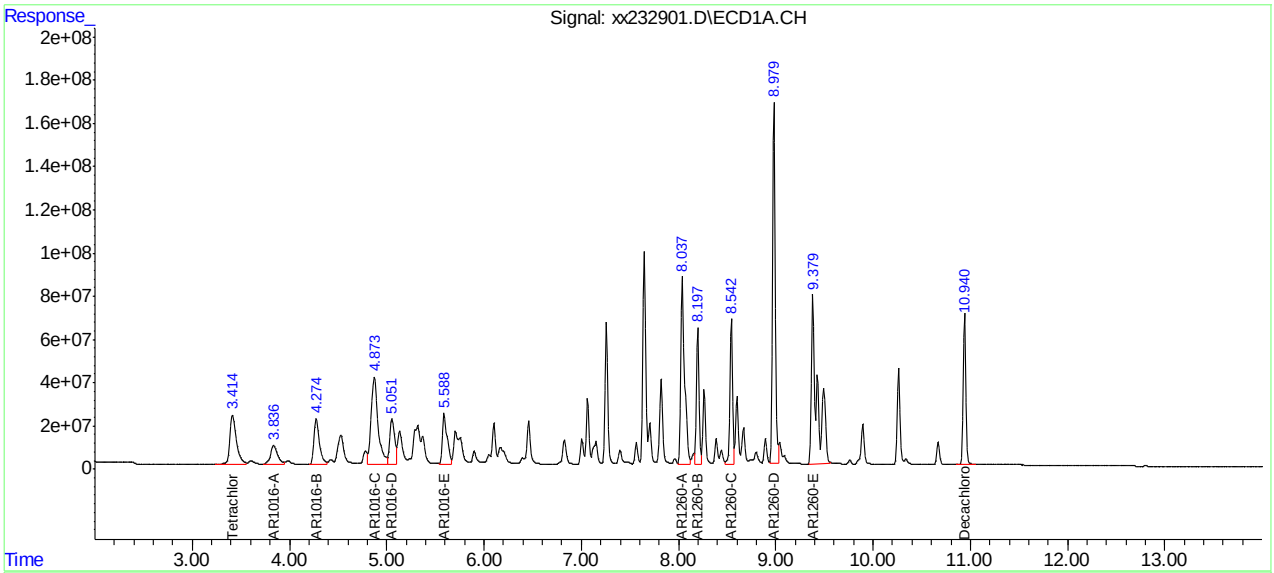
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

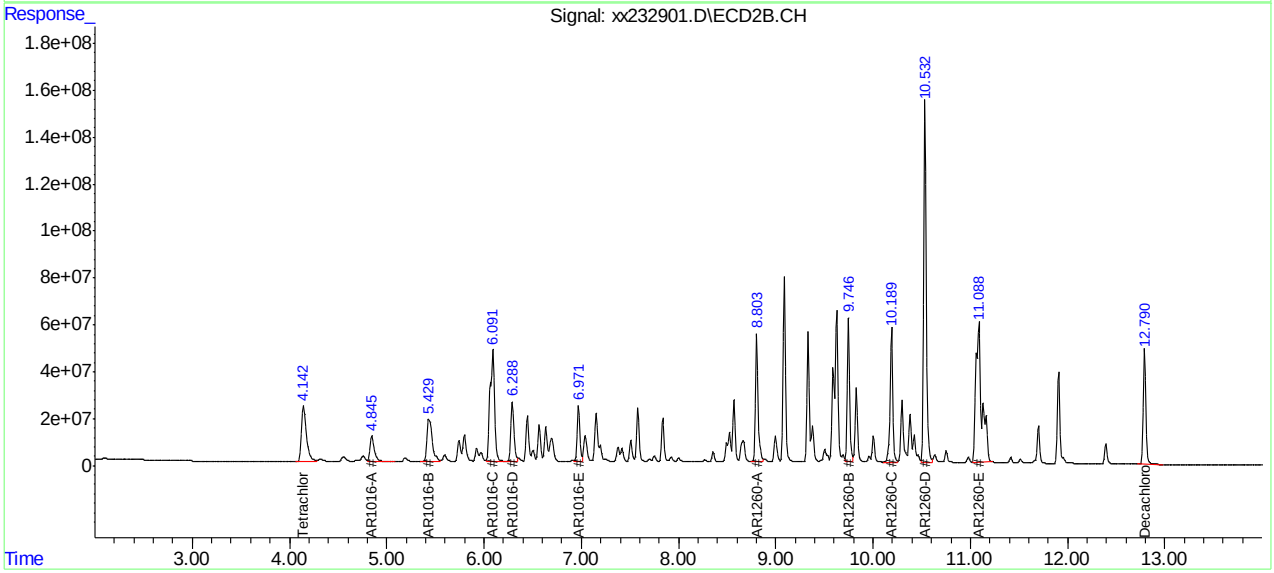
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232901.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:27 am
Operator : carolb
Sample : ic6423-2000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:35:13 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6423-IC6423	**Method:**	SW846 8082A
Lab FileID:	XX232901.D	**Analyst approved:**	07/31/18 17:06 Summer Kotb
Injection Time:	07/28/18 02:27	**Supervisor approved:**	07/31/18 17:30 Carol Boykin

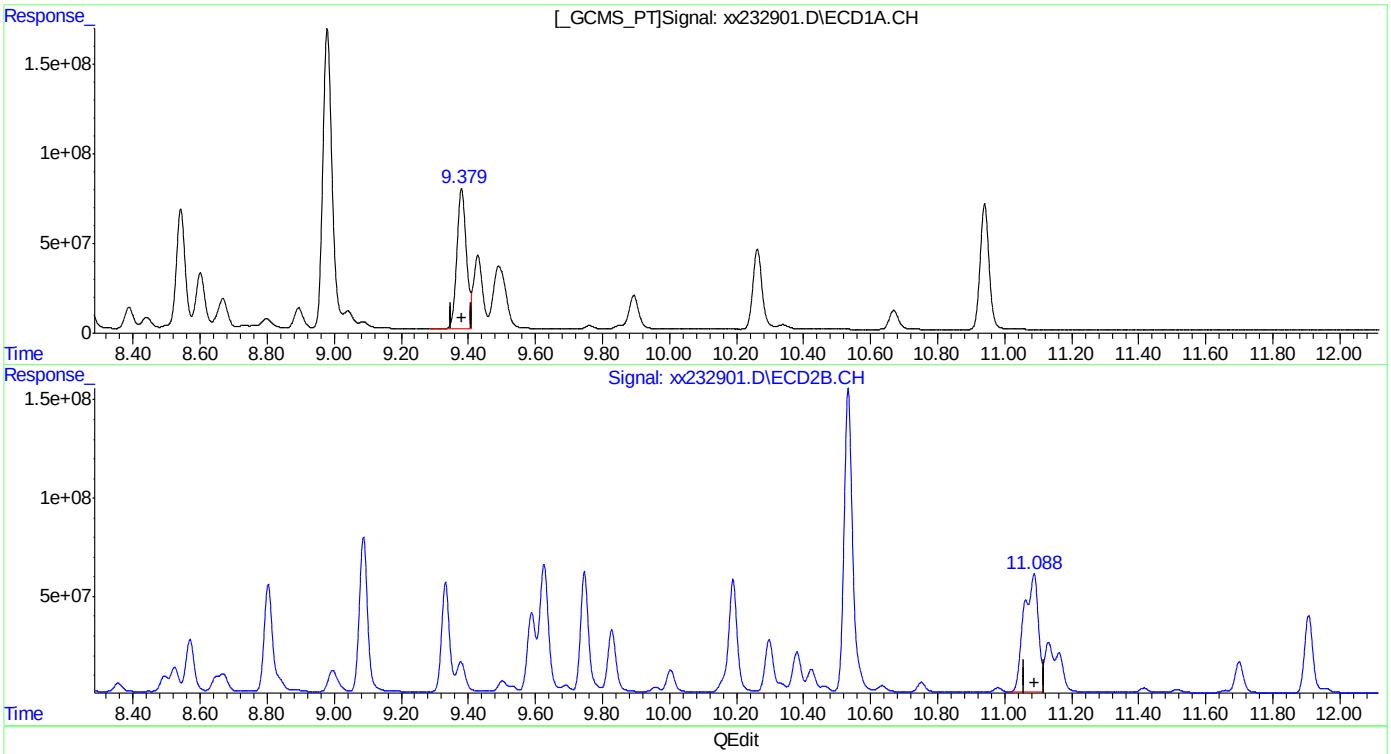
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1016-D		2	6.29	Split peak
AR1260-B		1	8.20	Split peak
AR1260-E		1	9.38	Split peak
AR1260-E		2	11.09	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232901.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:27 am
Operator : carolb
Sample : ic6423-2000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:08:00 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.380min 1835.751PPB
response 1530064639

(50) AR1260-E #2
11.088min 2646.106PPB
response 1807658768

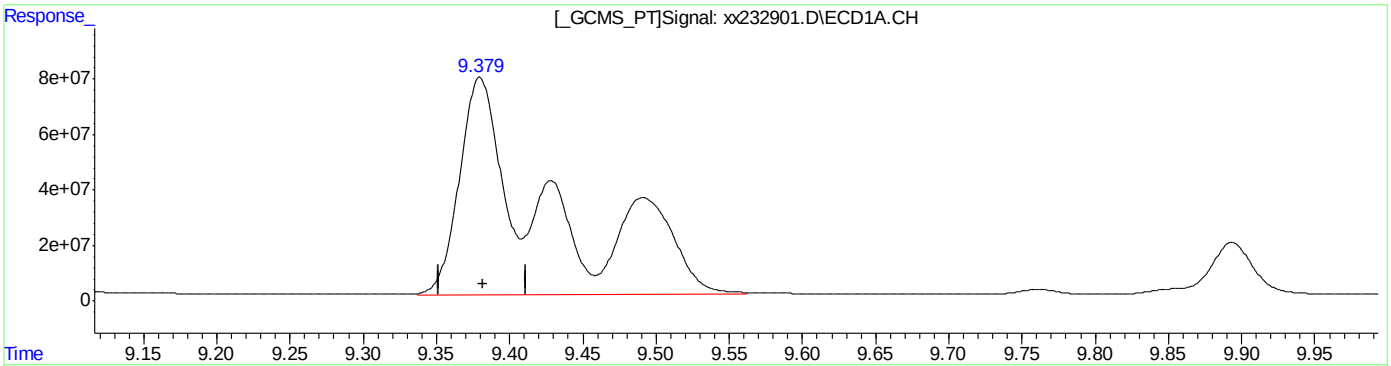
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:09:05 2018

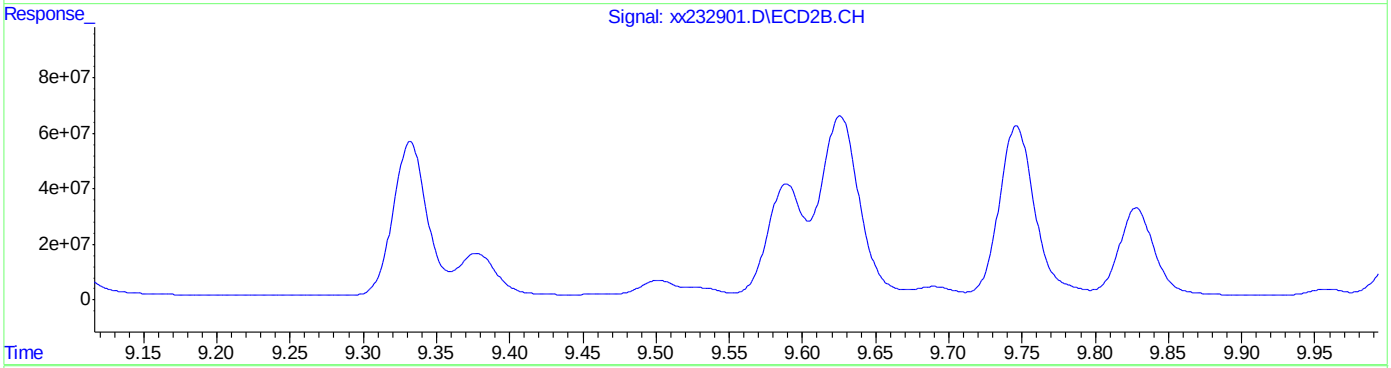
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232901.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:27 am
Operator : carolb
Sample : ic6423-2000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:08:00 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E
9.379min 3905.133PPB m
response 3254856616

(50) AR1260-E #2
11.088min 2646.106PPB
response 1807658768

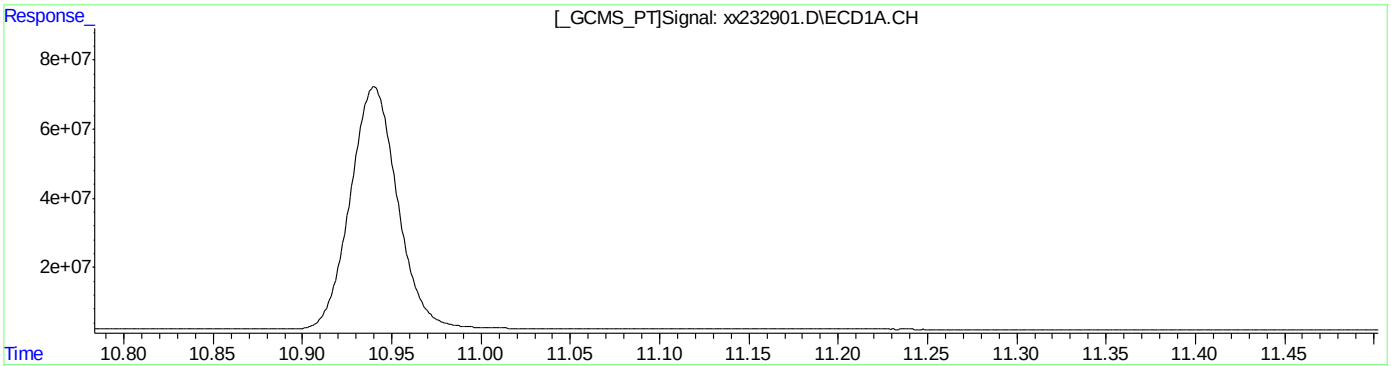
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:09:15 2018 Page: 1

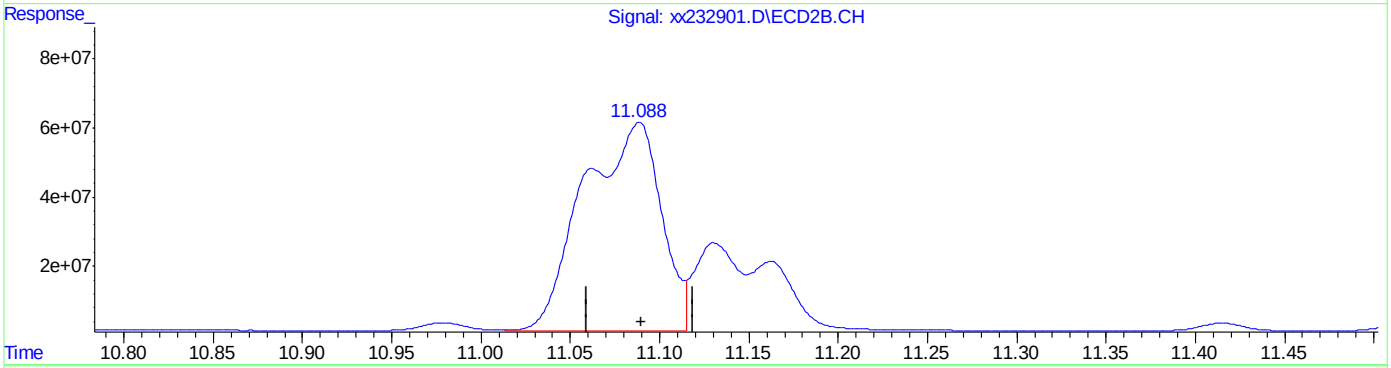
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232901.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:27 am
Operator : carolb
Sample : ic6423-2000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:08:00 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E
9.379min 3905.133PPB m
response 3254856616

(50) AR1260-E #2
11.088min 2646.106PPB
response 1807658768

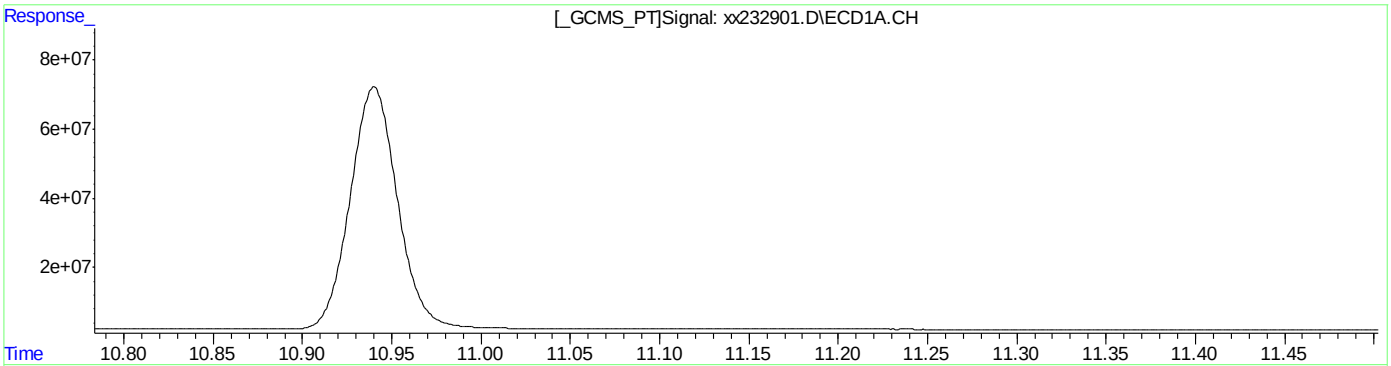
(+) = Expected Retention Time

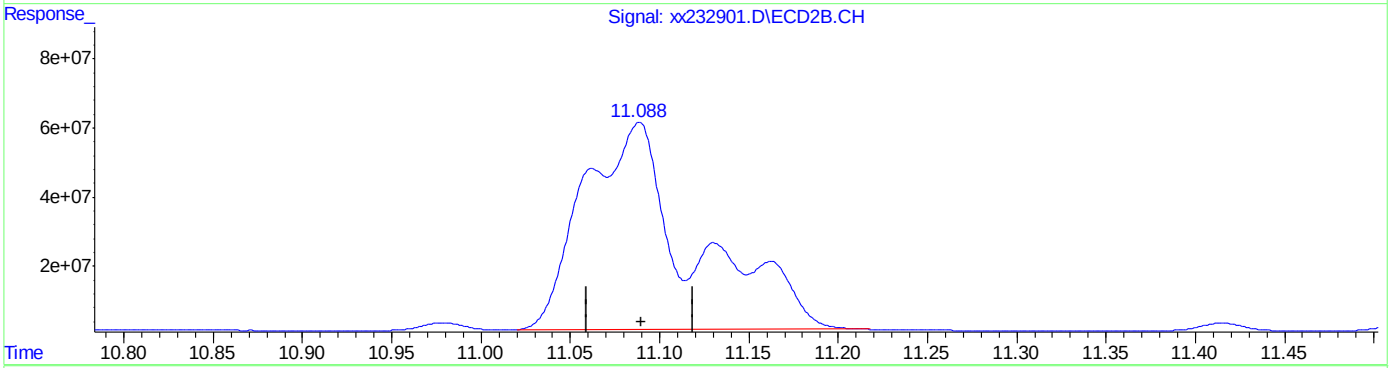
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232901.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:27 am
Operator : carolb
Sample : ic6423-2000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:08:00 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E
9.379min 3905.133PPB m
response 3254856616

(50) AR1260-E #2
11.088min 3712.872PPB m
response 2536408492

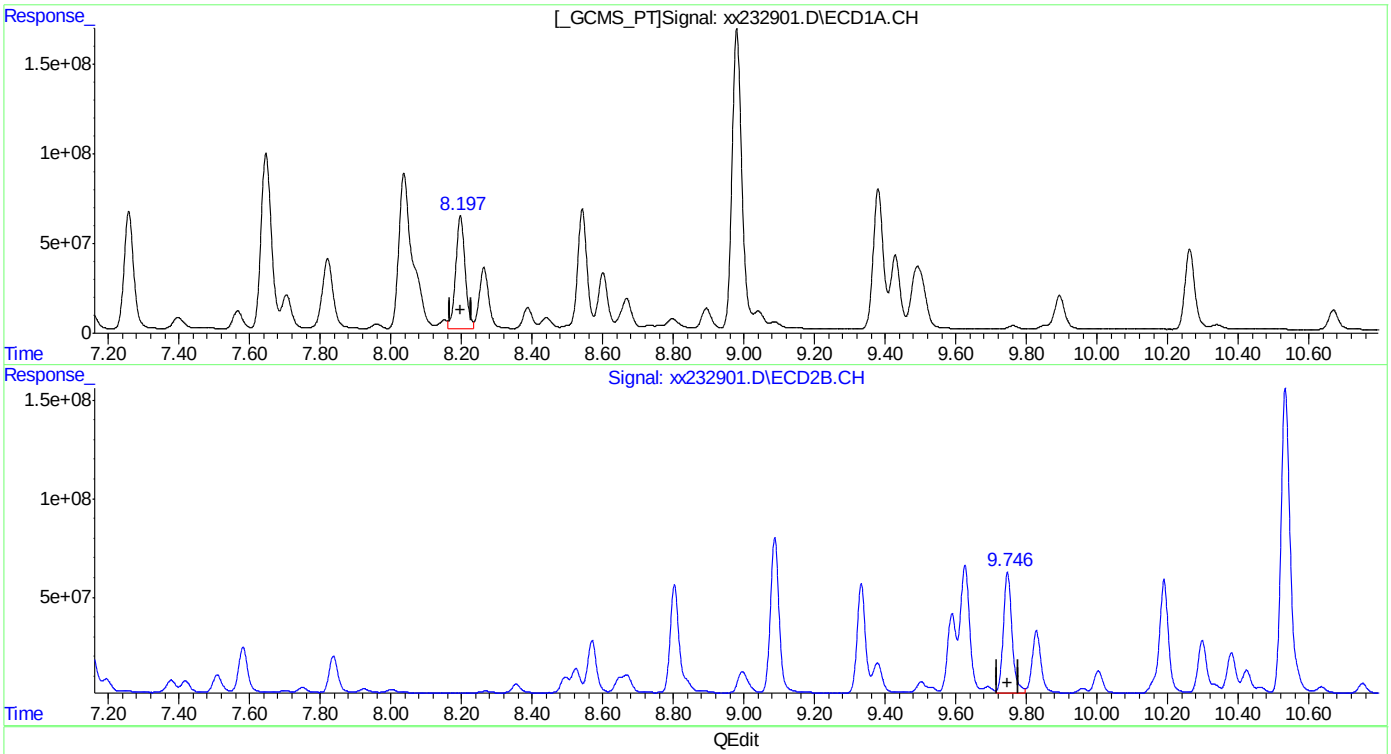
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:09:33 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232901.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:27 am
Operator : carolb
Sample : ic6423-2000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:09:30 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.197min 3558.471PPB
response 1174963606

(47) AR1260-B #2
9.746min 3745.673PPB
response 1053392923

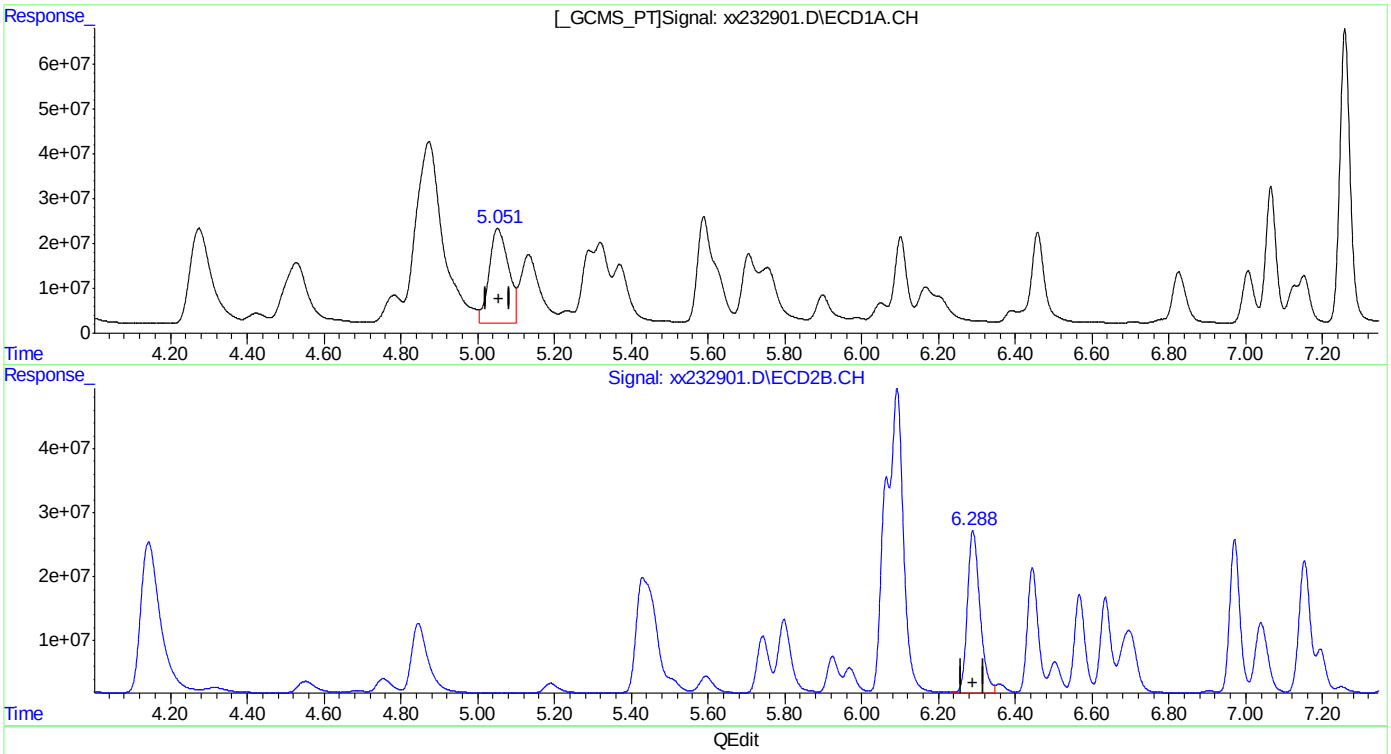
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 10:26:19 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232901.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:27 am
Operator : carolb
Sample : ic6423-2000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:26:25 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.052min 3578.937PPB
response 743524102

(44) AR1016-D #2
6.290min 3515.545PPB
response 577324098

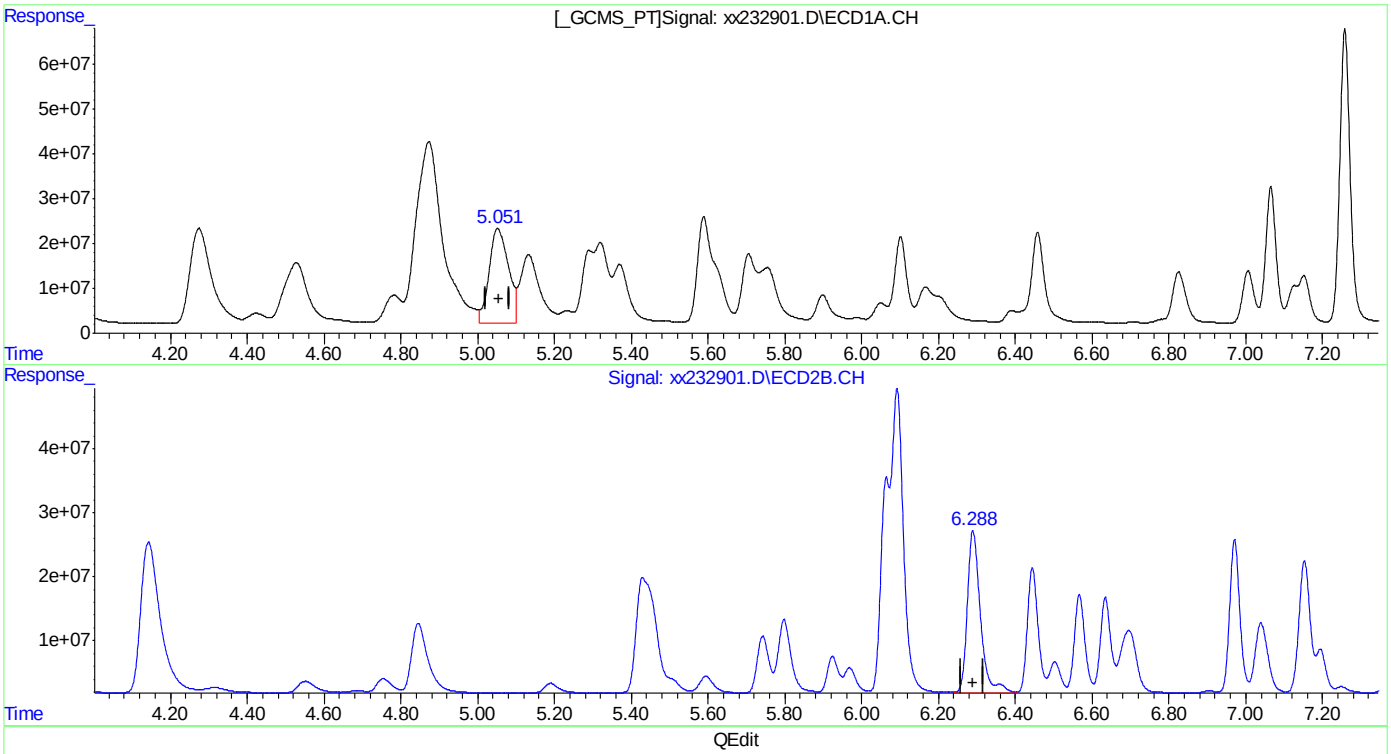
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:34:01 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232901.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:27 am
Operator : carolb
Sample : ic6423-2000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:26:25 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.052min 3578.937PPB
response 743524102

(44) AR1016-D #2
6.288min 3664.173PPB m
response 601731854

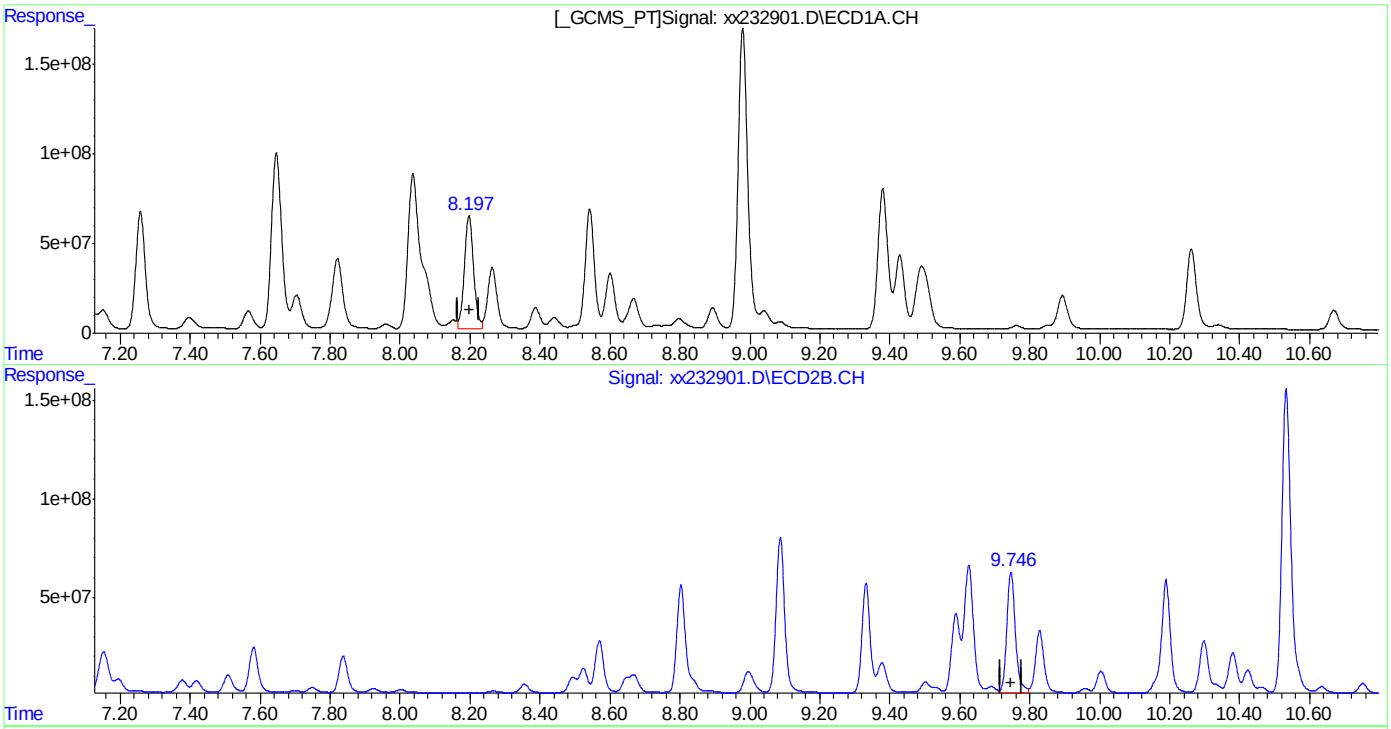
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232901.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:27 am
Operator : carolb
Sample : ic6423-2000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:26:25 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.197min 3544.170PPB m
response 1170241374

(47) AR1260-B #2
9.746min 3745.673PPB
response 1053392923

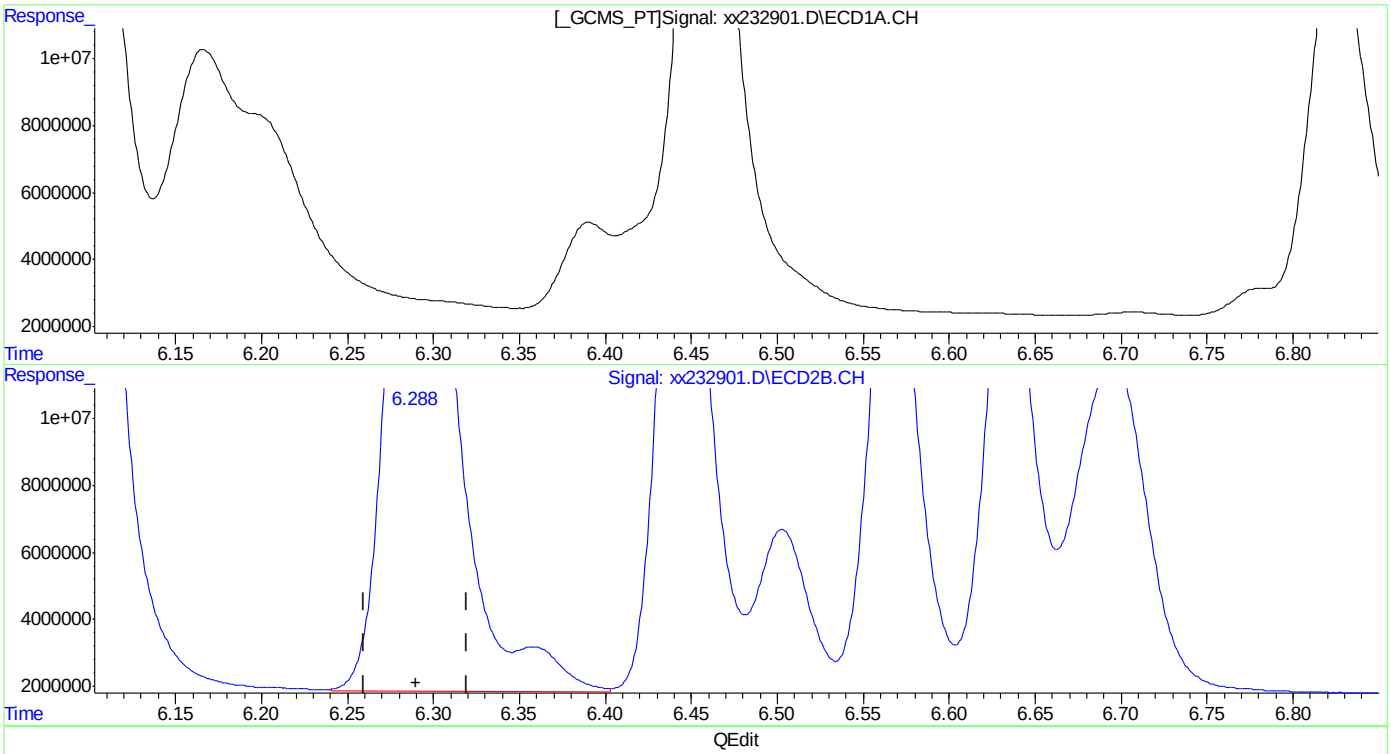
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:34:31 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232901.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:27 am
Operator : carolb
Sample : ic6423-2000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:34:29 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.052min 3578.937PPB
response 743524102

(44) AR1016-D #2
6.288min 3664.173PPB m
response 601731854

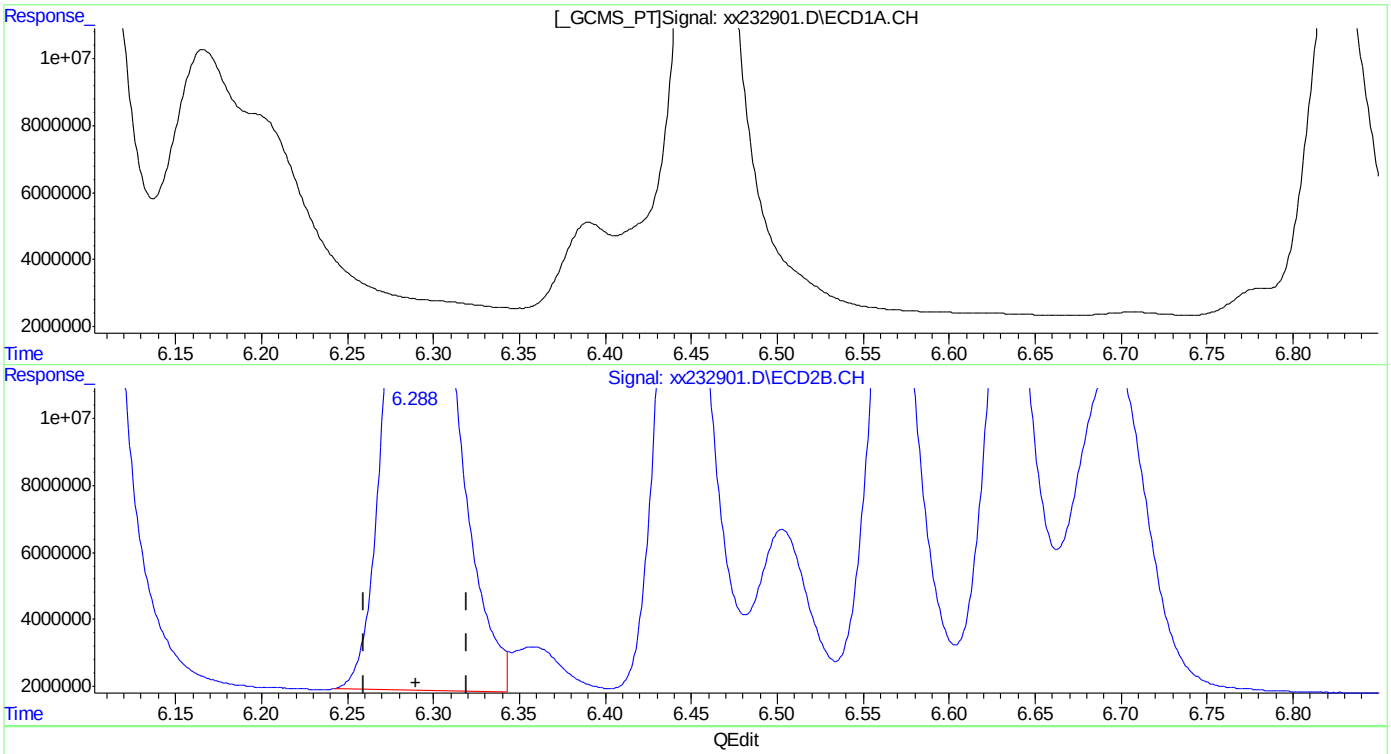
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232901.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:27 am
Operator : carolb
Sample : ic6423-2000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:34:29 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 09:38:44 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1016-D
5.052min 3578.937PPB
response 743524102

(44) AR1016-D #2
6.288min 3482.131PPB m
response 571836838

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Carol Boykin 07/31/18 17:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:46 am
Operator : carolb
Sample : ic6423-3000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:35:04 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 10:30:05 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.415	4.143	1608.1E6	1255.6E6	126.305	121.901
	Spiked Amount 40.000			Recovery	=	315.76%	304.75%
51)	S Decachlor...	10.942	12.792	1949.7E6	1378.5E6	123.184	122.702
	Spiked Amount 40.000			Recovery	=	307.96%	306.76%
	Target Compounds						
41)	AR1016-A	3.836	4.846	662.2E6	480.9E6	2891.091	2698.011
42)	AR1016-B	4.275	5.431	1216.2E6	991.2E6	2847.090	2763.458
43)	AR1016-C	4.875	6.094	2960.1E6	2297.8E6	2957.782	2914.678
44)	AR1016-D	5.053	6.290	1103.4E6	855.5E6	2984.172	2890.831
45)	AR1016-E	5.589	6.972	1177.7E6	658.4E6	2975.746	2875.301
46)	AR1260-A	8.039	8.805	3526.5E6	1509.8E6	3084.416	3000.872
47)	AR1260-B	8.199	9.749	1738.2E6	1577.8E6	2857.980m	3067.924
48)	AR1260-C	8.544	10.191	1878.1E6	1574.8E6	3129.448	2994.143
49)	AR1260-D	8.982	10.536	4762.9E6	4167.4E6	3078.593	3046.583
50)	AR1260-E	9.382	11.090	4751.1E6	3784.4E6	3346.749m	3213.590m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

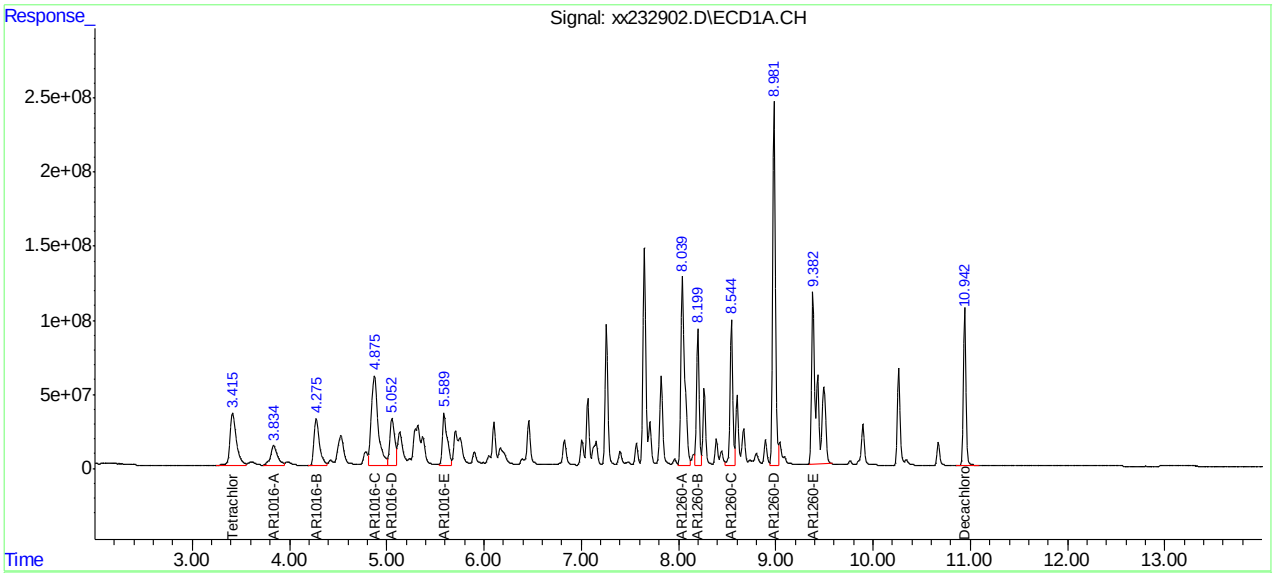
11.4.6 11

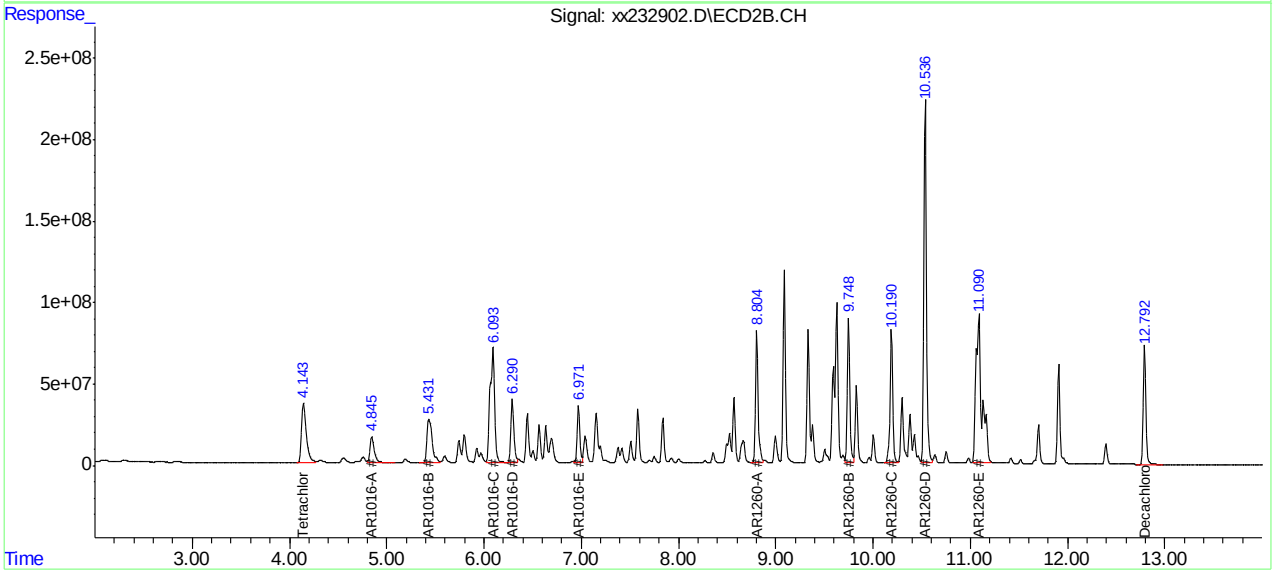
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:46 am
Operator : carolb
Sample : ic6423-3000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:35:04 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 10:30:05 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6423-IC6423	**Method:**	SW846 8082A	
Lab FileID:	XX232902.D	**Analyst approved:**	07/31/18 17:06	Summer Kotb
Injection Time:	07/28/18 02:46	**Supervisor approved:**	07/31/18 17:30	Carol Boykin

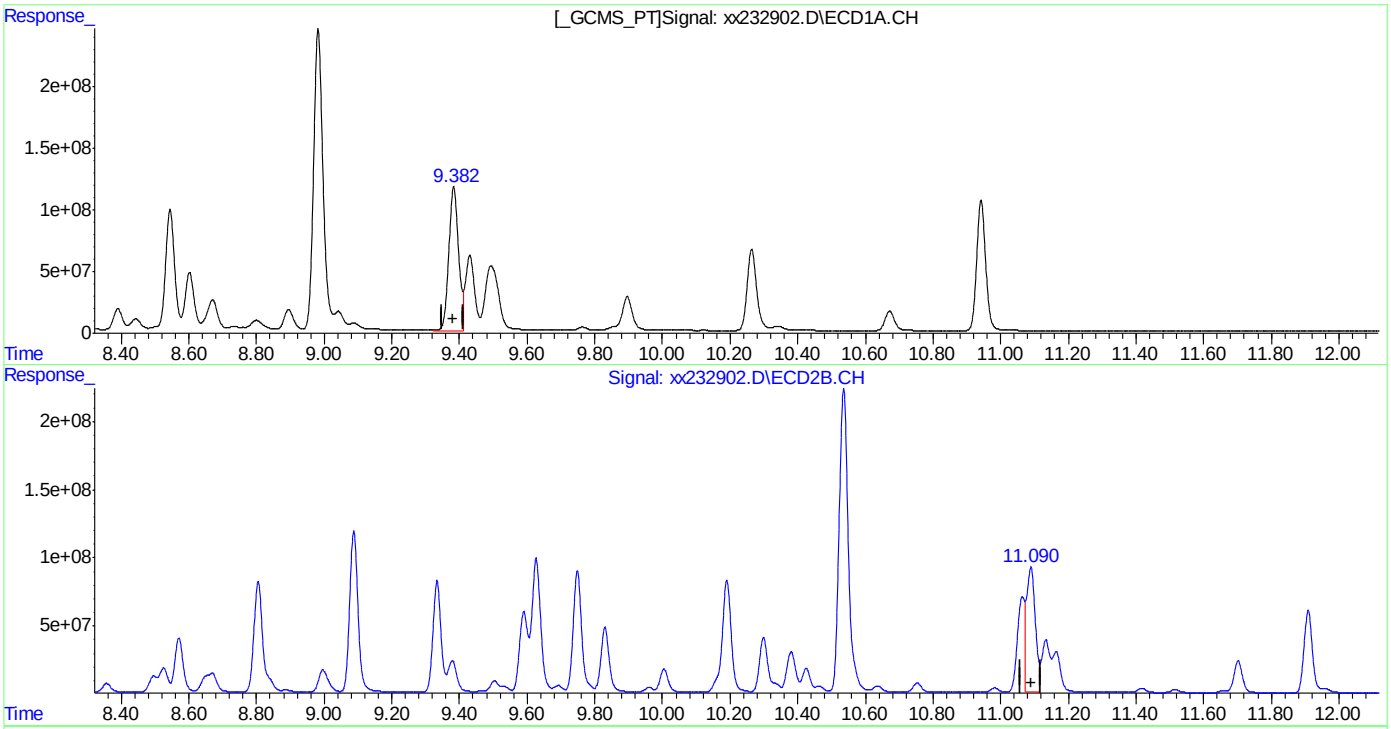
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-B		1	8.20	Split peak
AR1260-E		1	9.38	Split peak
AR1260-E		2	11.09	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:46 am
Operator : carolb
Sample : ic6423-3000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:30:21 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 10:30:05 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E
9.383min 1617.283PPB
response 2295905721

(50) AR1260-E #2
11.090min 1427.995PPB
response 1681651833

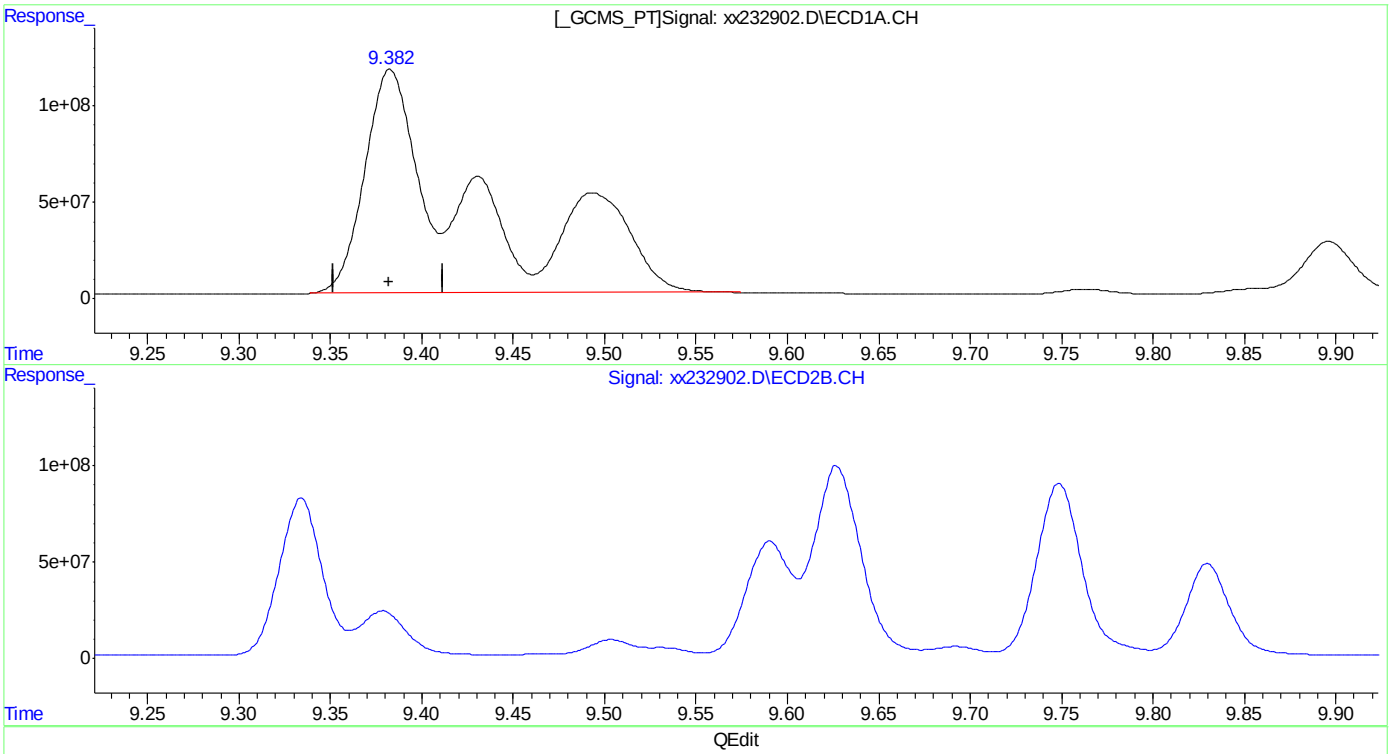
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:46 am
Operator : carolb
Sample : ic6423-3000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:30:21 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 10:30:05 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.382min 3346.749PPB m
response 4751067735

(50) AR1260-E #2
11.090min 1427.995PPB
response 1681651833

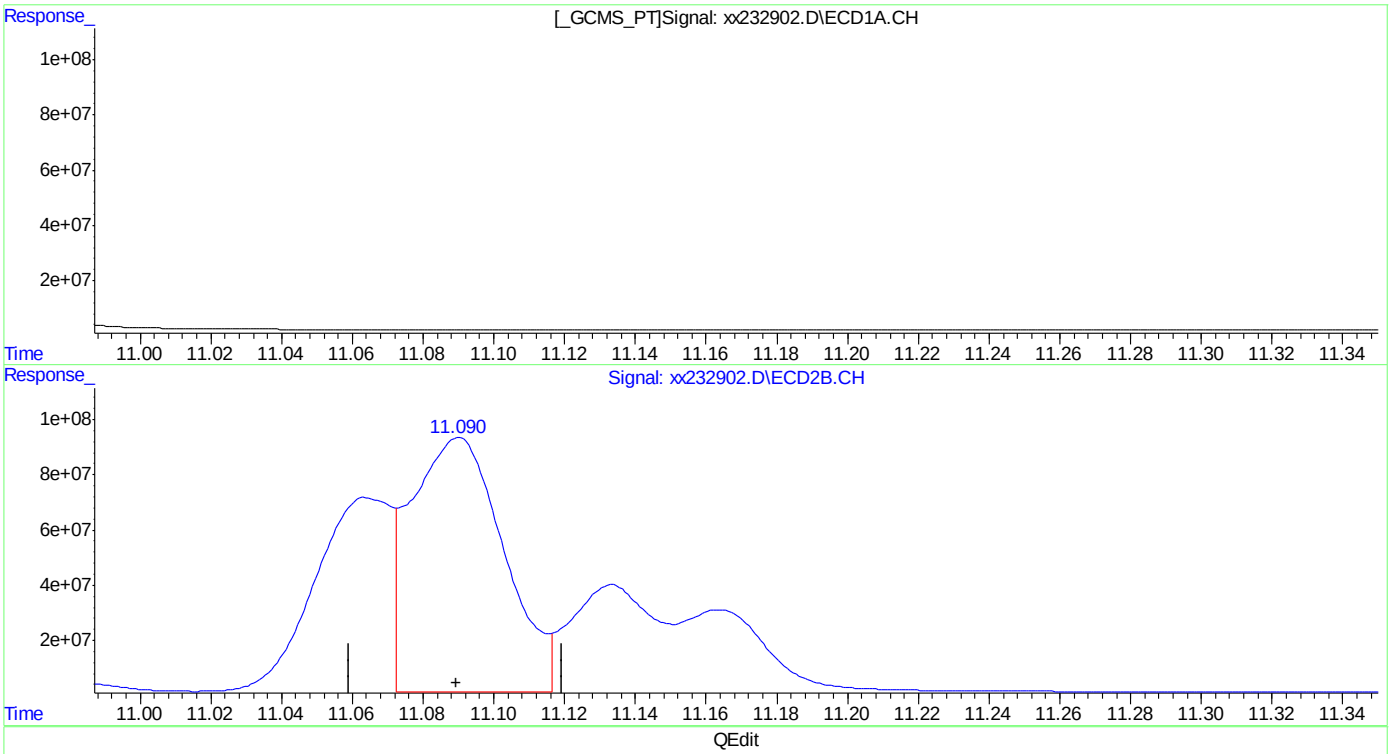
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:31:20 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:46 am
Operator : carolb
Sample : ic6423-3000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:30:21 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 10:30:05 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.382min 3346.749PPB m
response 4751067735

(50) AR1260-E #2
11.090min 1427.995PPB
response 1681651833

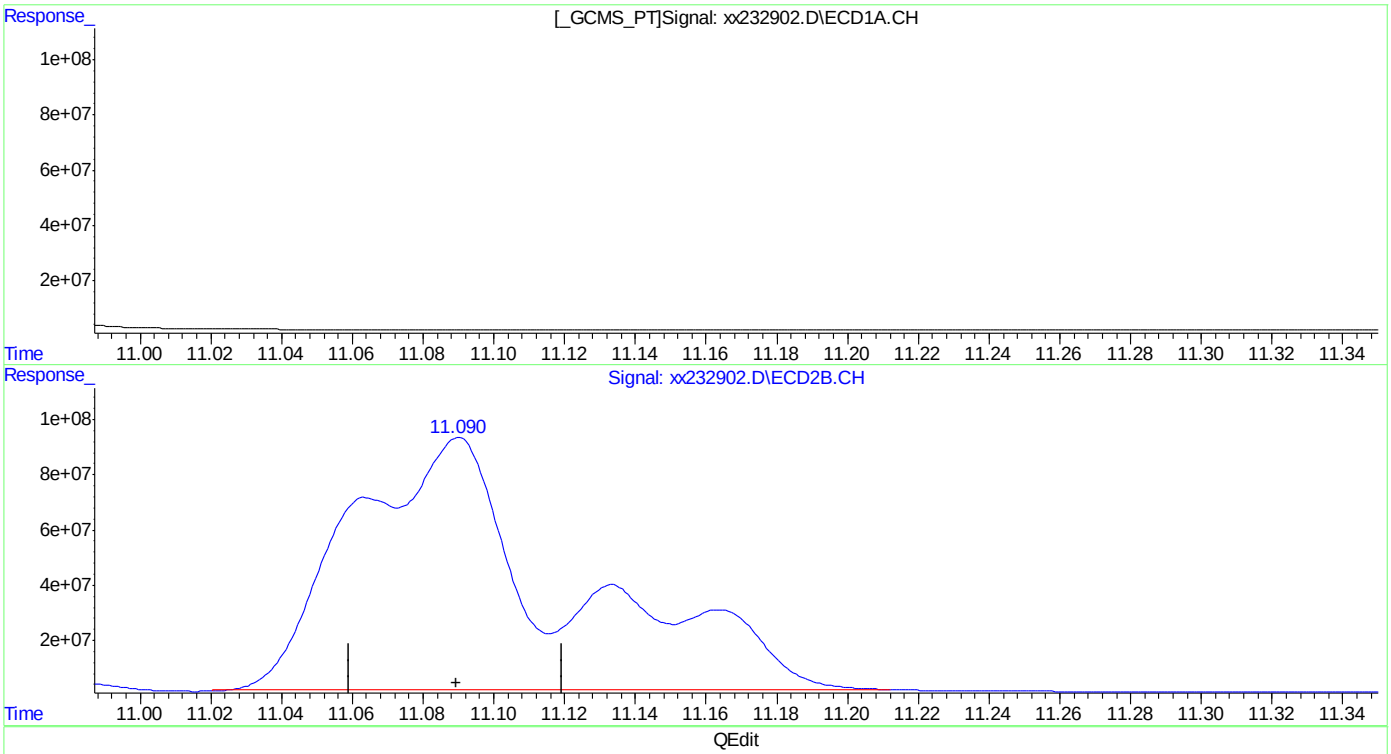
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:31:26 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:46 am
Operator : carolb
Sample : ic6423-3000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 10:30:21 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 10:30:05 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.382min 3346.749PPB m
response 4751067735

(50) AR1260-E #2
11.090min 3213.590PPB m
response 3784424967

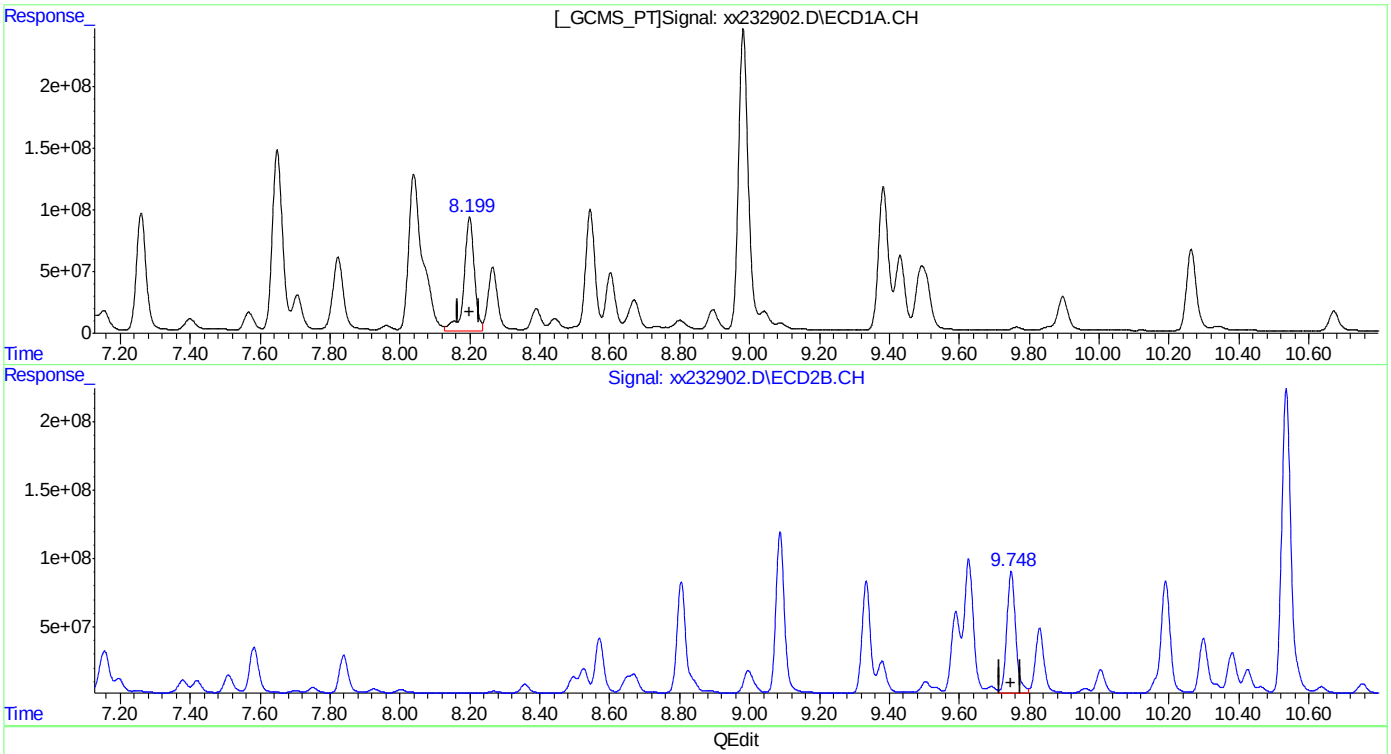
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 10:31:32 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:46 am
Operator : carolb
Sample : ic6423-3000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 30 08:30:10 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 10:30:05 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.199min 3105.540PPB
response 1888710325

(47) AR1260-B #2
9.749min 3067.924PPB
response 1577816667

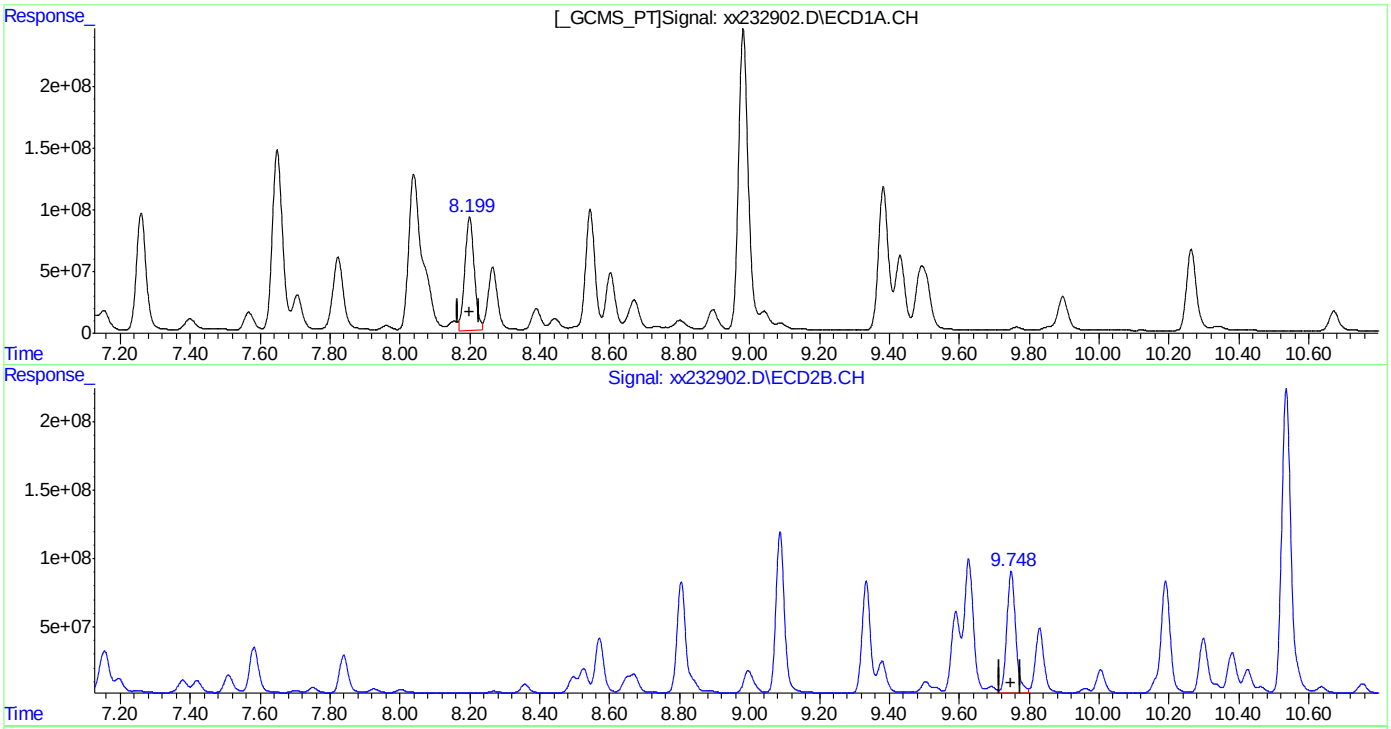
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:35:01 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232902.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 2:46 am
Operator : carolb
Sample : ic6423-3000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 30 08:30:10 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 10:30:05 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(47) AR1260-B
8.199min 2857.980PPB m
response 1738150967

(47) AR1260-B #2
9.749min 3067.924PPB
response 1577816667

(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:35:06 2018

XX232903.D

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
08/01/18 10:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:04 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:51:47 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:28:34 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.415	4.144	569.7E6	436.9E6	44.747m	42.423m
	Spiked Amount 40.000			Recovery	=	111.87%	106.06%
51) S	Decachlor...	10.943	12.792	685.4E6	492.5E6	43.307	43.835
	Spiked Amount 40.000			Recovery	=	108.27%	109.59%
	Target Compounds						
2)	AR1221-A	2.828	3.519f	75451820	62724885	2816.223	2875.972m
3)	AR1221-B	3.606	4.551	131.8E6	107.4E6	2858.563	3064.343
4)	AR1221-C	3.834	4.845	402.9E6	263.6E6	3659.253	3115.134
5)	AR1221-D	4.278	5.422	49215282	48187053	3468.064m	2979.322
6)	AR1221-E	4.529	5.510	44659042	31677157	4449.616	3238.261 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

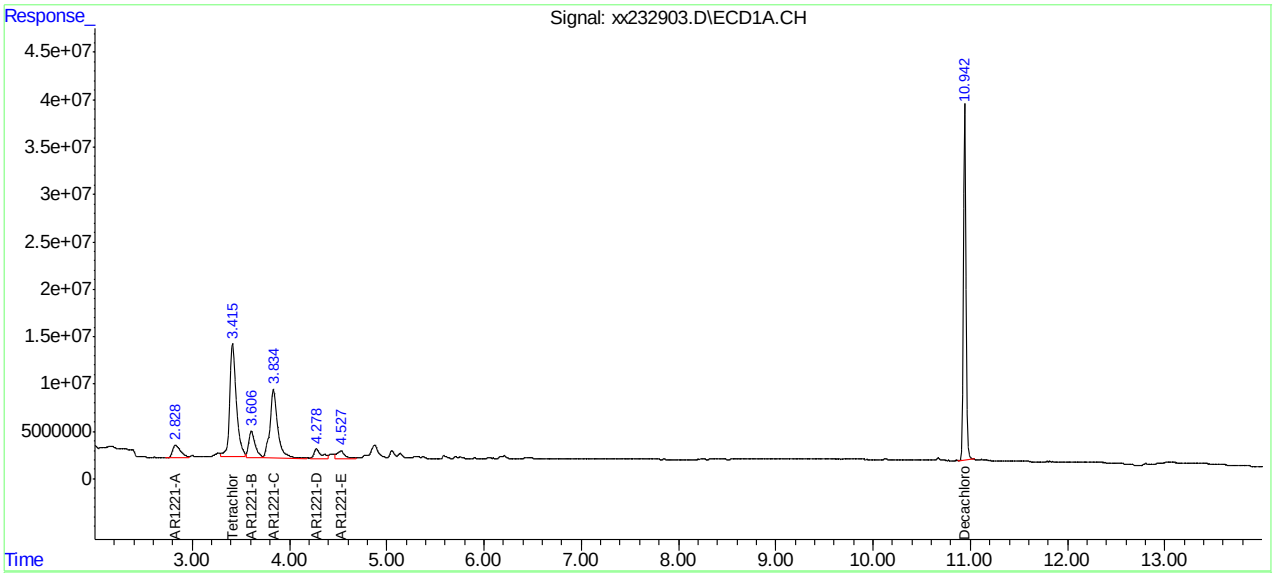
11.4.7 11

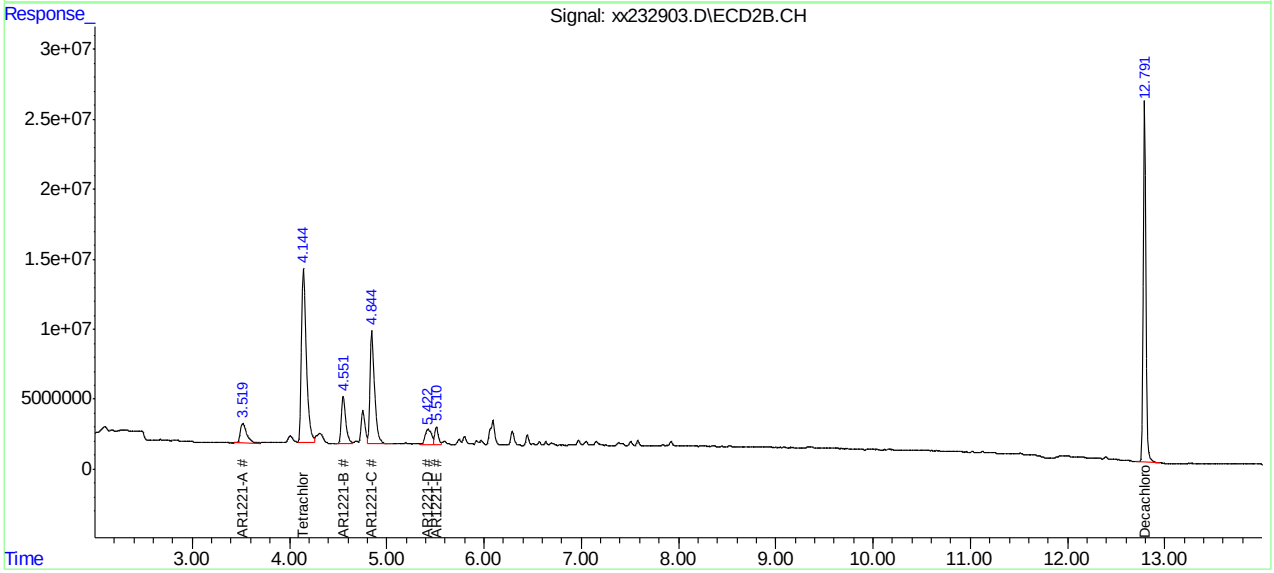
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:04 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:51:47 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:28:34 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GXX6423-IC6423
Lab FileID: XX232903.D
Injection Time: 07/28/18 03:04
Method: SW846 8082A
Analyst approved: 08/01/18 08:29 Tianwei Ruan
Supervisor approved: 08/01/18 10:03 Gwendolyn Burns

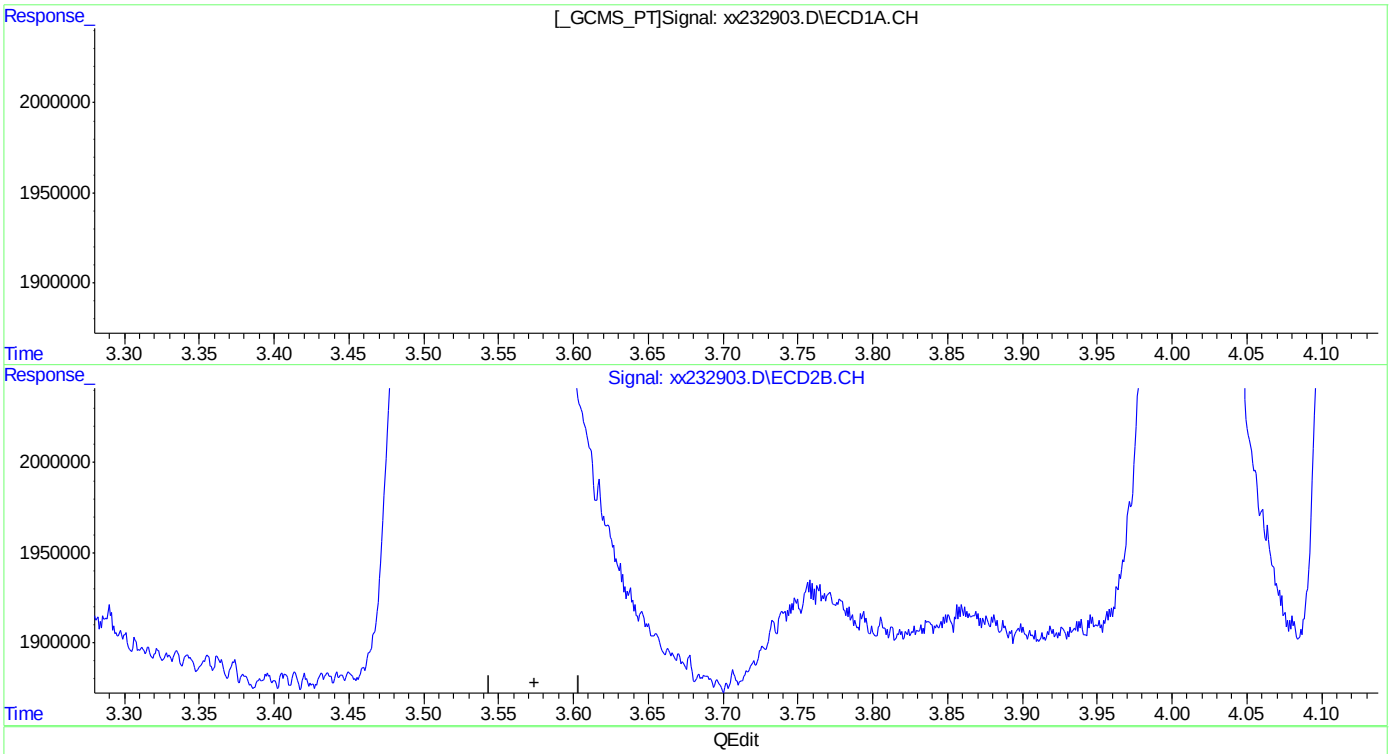
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	3.41	Poorly defined baseline
AR1221-A		2	3.52	Split peak
Tetrachloro-m-xylene	877-09-8	2	4.14	Poorly defined baseline
AR1221-D		1	4.28	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:04 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:28:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:28:34 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(2) AR1221-A
2.828min 2816.223
response 75451820

(2) AR1221-A #2
0.000min 0.000
response 0

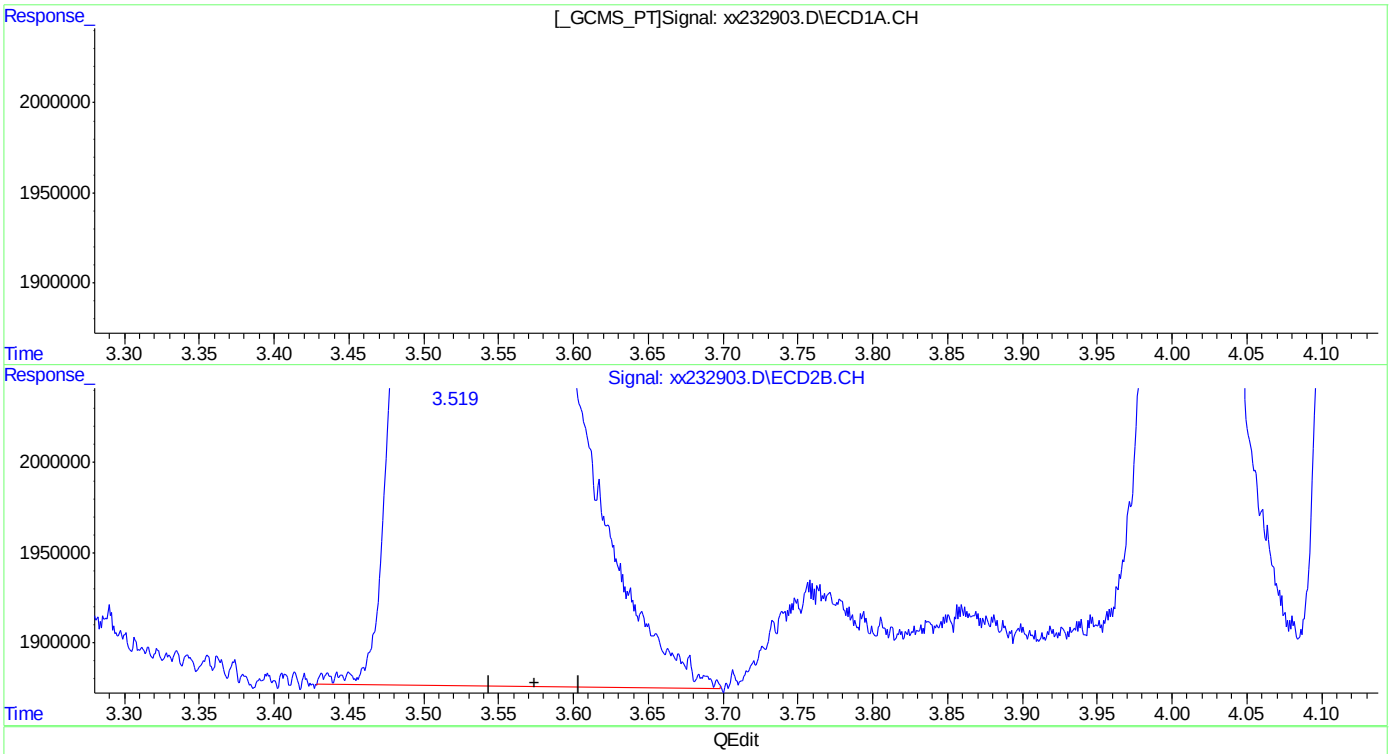
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:04 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:28:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:28:34 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(2) AR1221-A
2.828min 2816.223
response 75451820

(2) AR1221-A #2
3.519min 2875.972 m
response 62724885

(+) = Expected Retention Time

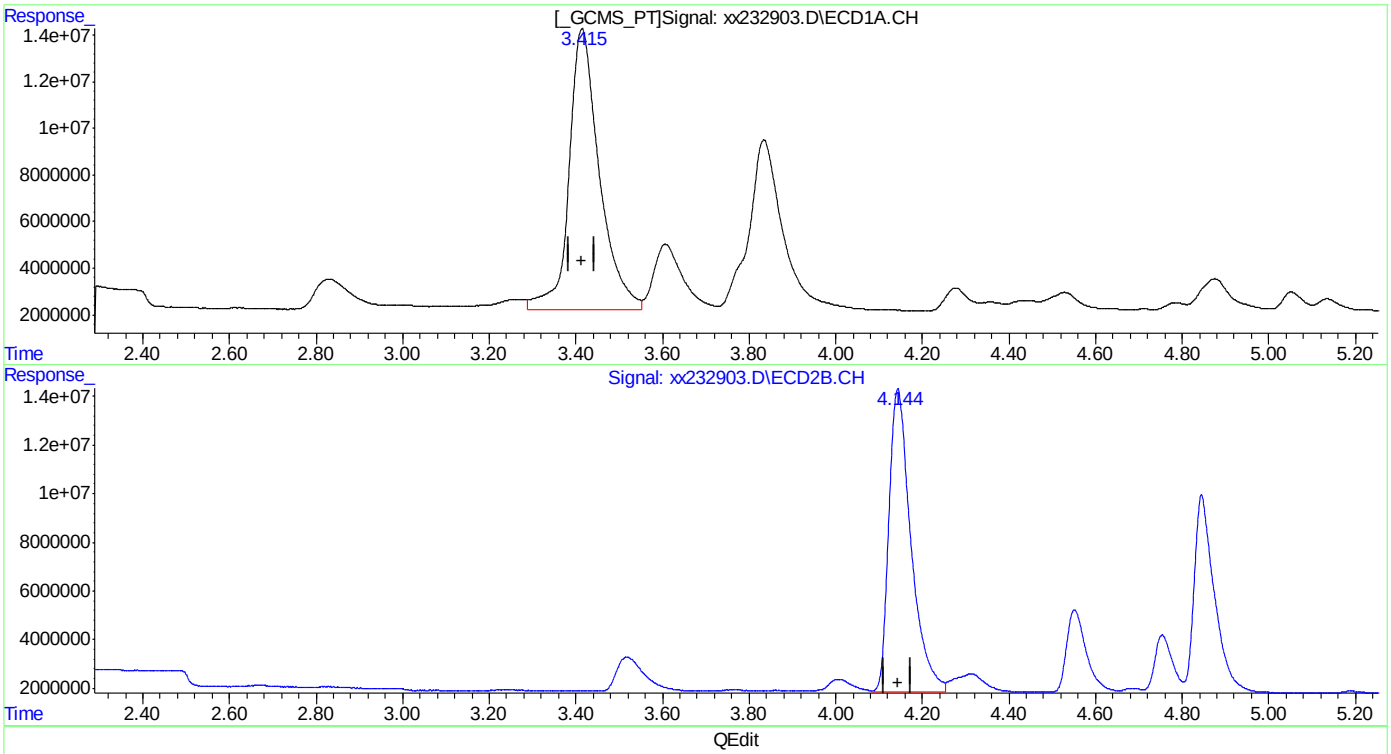
11.4.7.3 11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:04 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 18:00:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:28:34 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.415min 46.184ppb
response 587998306

(1) Tetrachloro-m-xylene #2 (S)
4.144min 42.970ppb
response 442589429

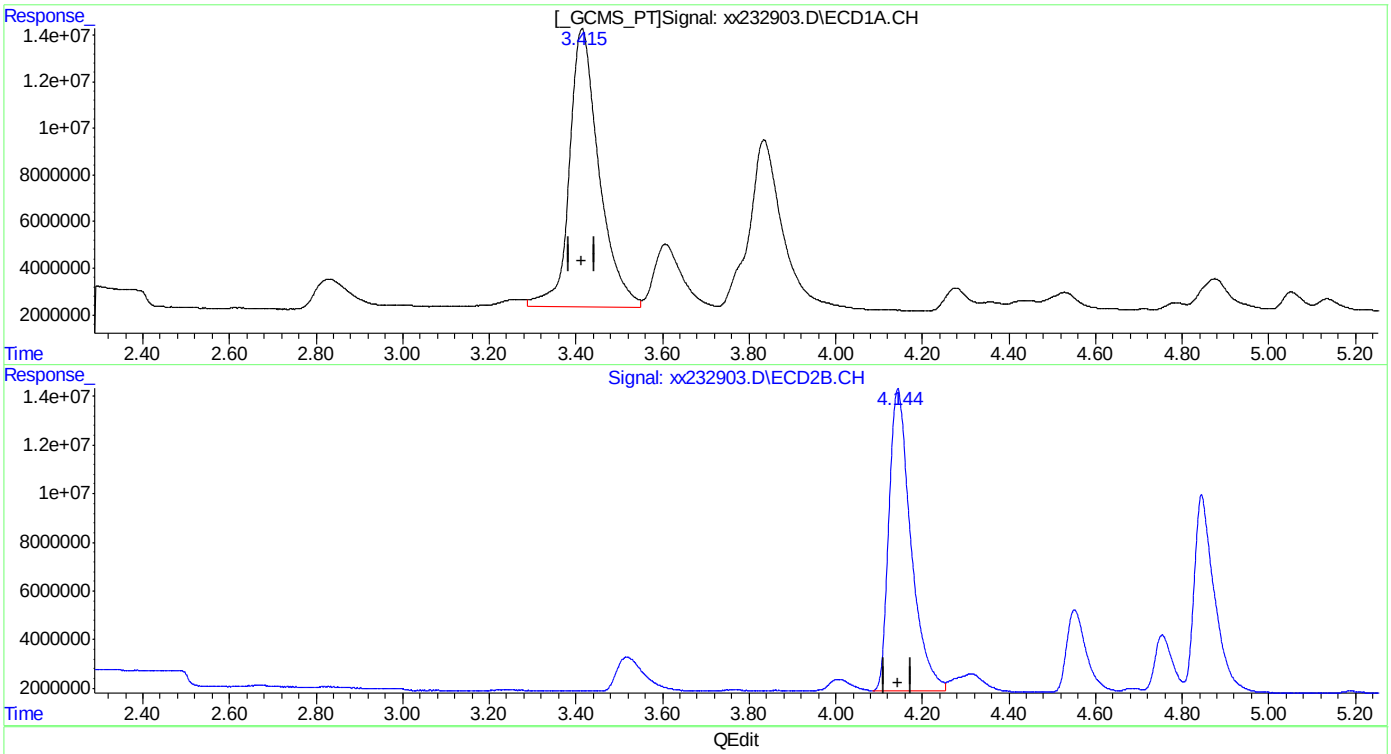
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:36:05 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:04 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 18:00:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:28:34 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.415min 44.747ppb m
response 569700278

(1) Tetrachloro-m-xylene #2 (S)
4.144min 42.423ppb m
response 436946466

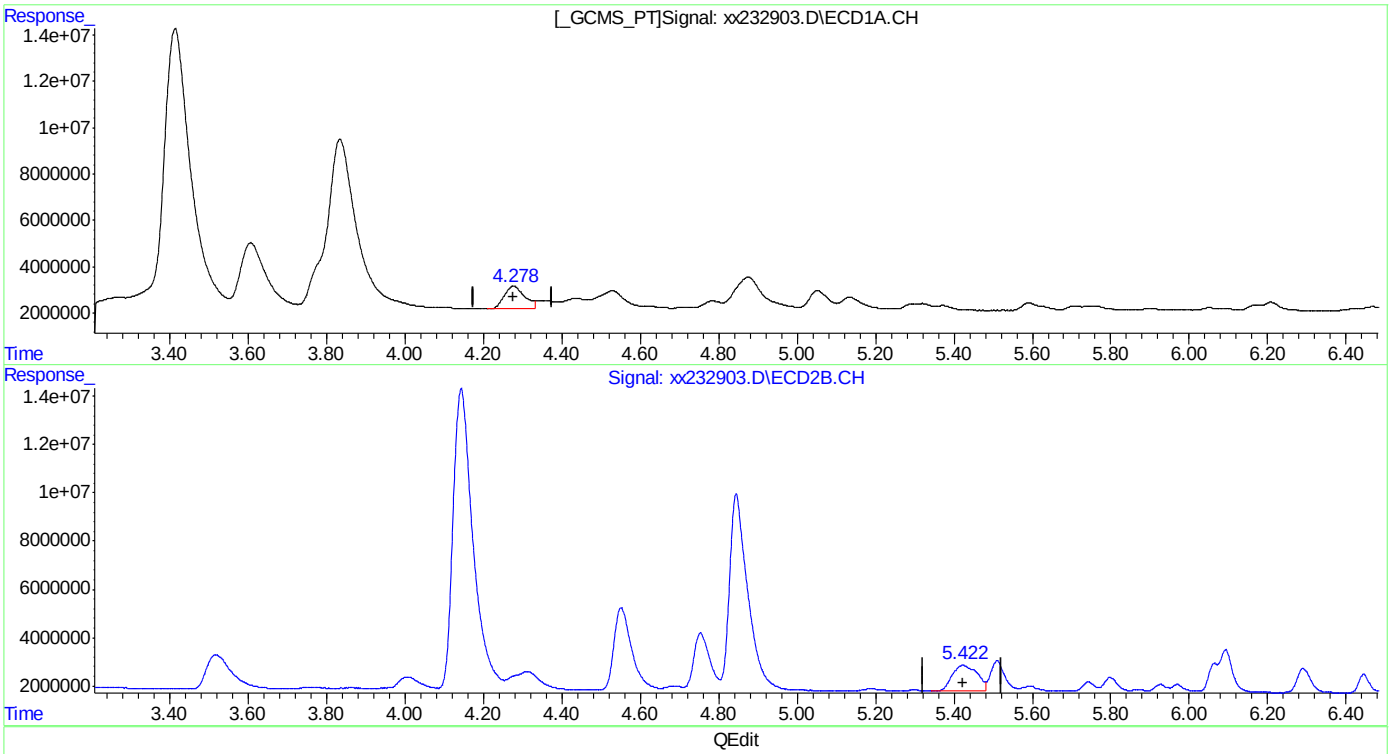
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:36:29 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:04 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:36:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:28:34 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(5) AR1221-D
4.277min 2544.578PPB
response 36110091

(5) AR1221-D #2
5.422min 2979.322PPB
response 48187053

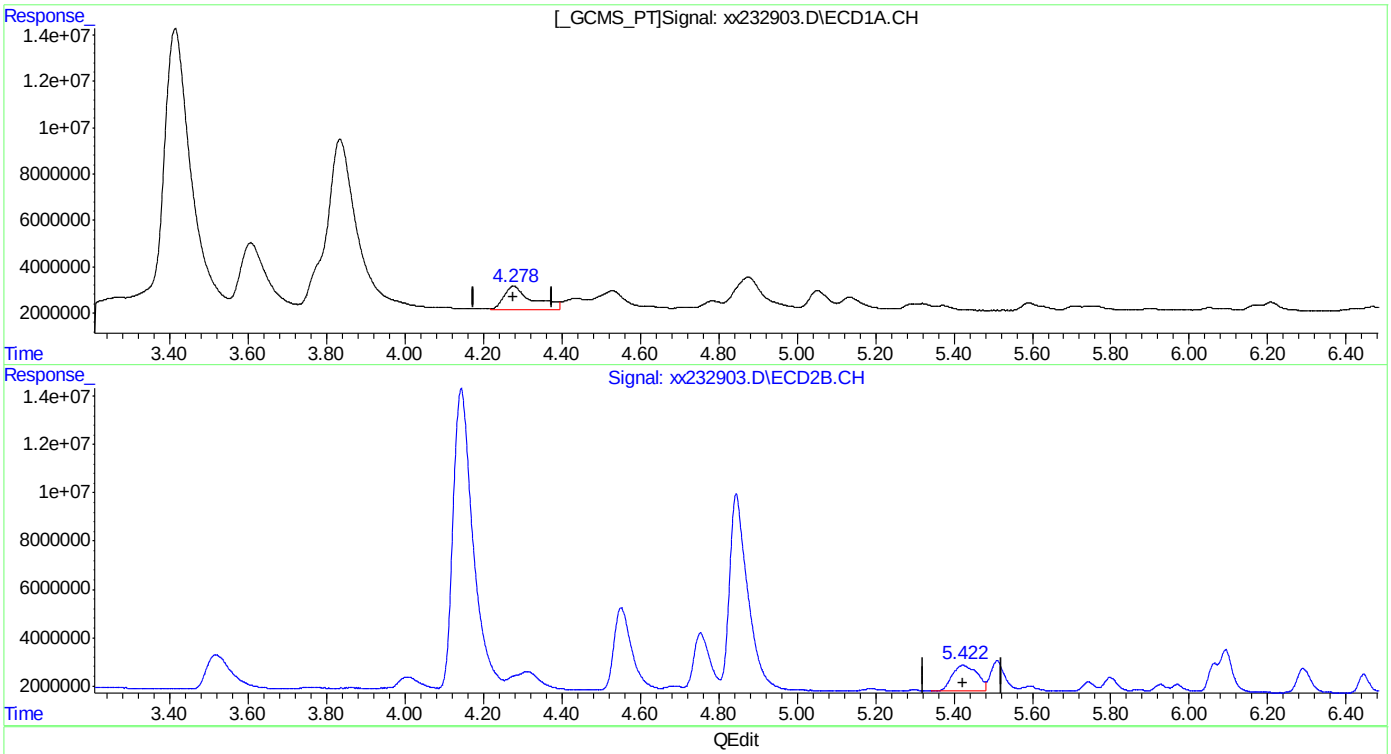
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:51:44 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:04 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:36:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:28:34 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(5) AR1221-D
4.278min 3468.064PPB m
response 49215282

(5) AR1221-D #2
5.422min 2979.322PPB
response 48187053

(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:51:49 2018 Page: 1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 08/01/18 10:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232904.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:23 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:37:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:32:13 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.414	4.143	564.6E6	444.9E6	43.317m	42.650m
	Spiked Amount 40.000			Recovery	=	108.29%	106.62%
51) S	Decachlor...	10.942	12.793	691.4E6	496.5E6	43.034	43.462
	Spiked Amount 40.000			Recovery	=	107.58%	108.66%
	Target Compounds						
7)	AR1232-A	3.835	4.846	297.8E6	206.5E6	1000.000	1000.000
8)	AR1232-B	4.275	5.430	195.1E6	155.7E6	1000.000	993.072
9)	AR1232-C	4.875	6.093	427.5E6	337.2E6	1000.000	1000.000
10)	AR1232-D	5.053	6.290	160.9E6	134.1E6	1053.706	1000.000
11)	AR1232-E	5.590	6.971	154.5E6	90210343	948.668	1003.091m

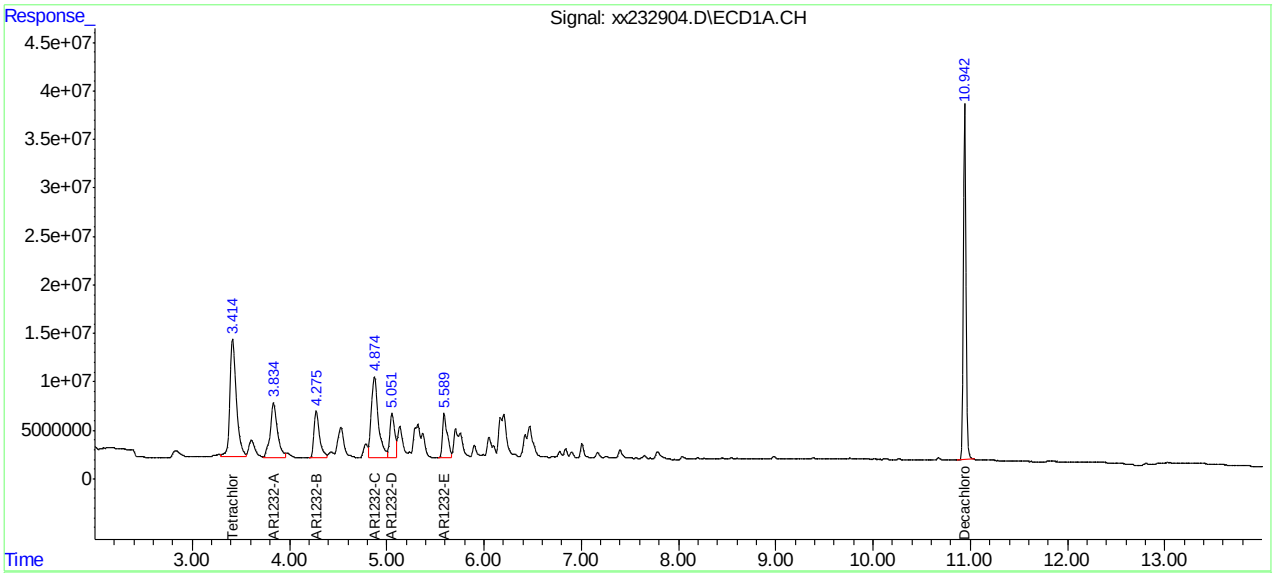
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

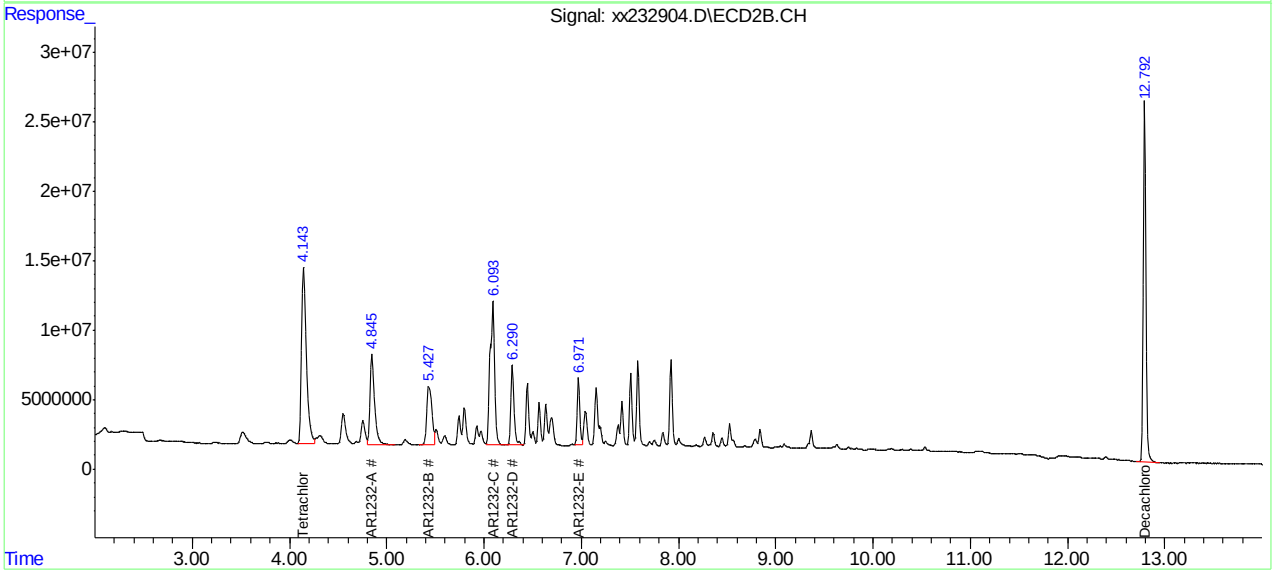
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232904.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:23 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:37:53 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:32:13 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GXX6423-IC6423
Lab FileID: XX232904.D
Injection Time: 07/28/18 03:23
Method: SW846 8082A
Analyst approved: 08/01/18 08:29 Tianwei Ruan
Supervisor approved: 08/01/18 10:03 Gwendolyn Burns

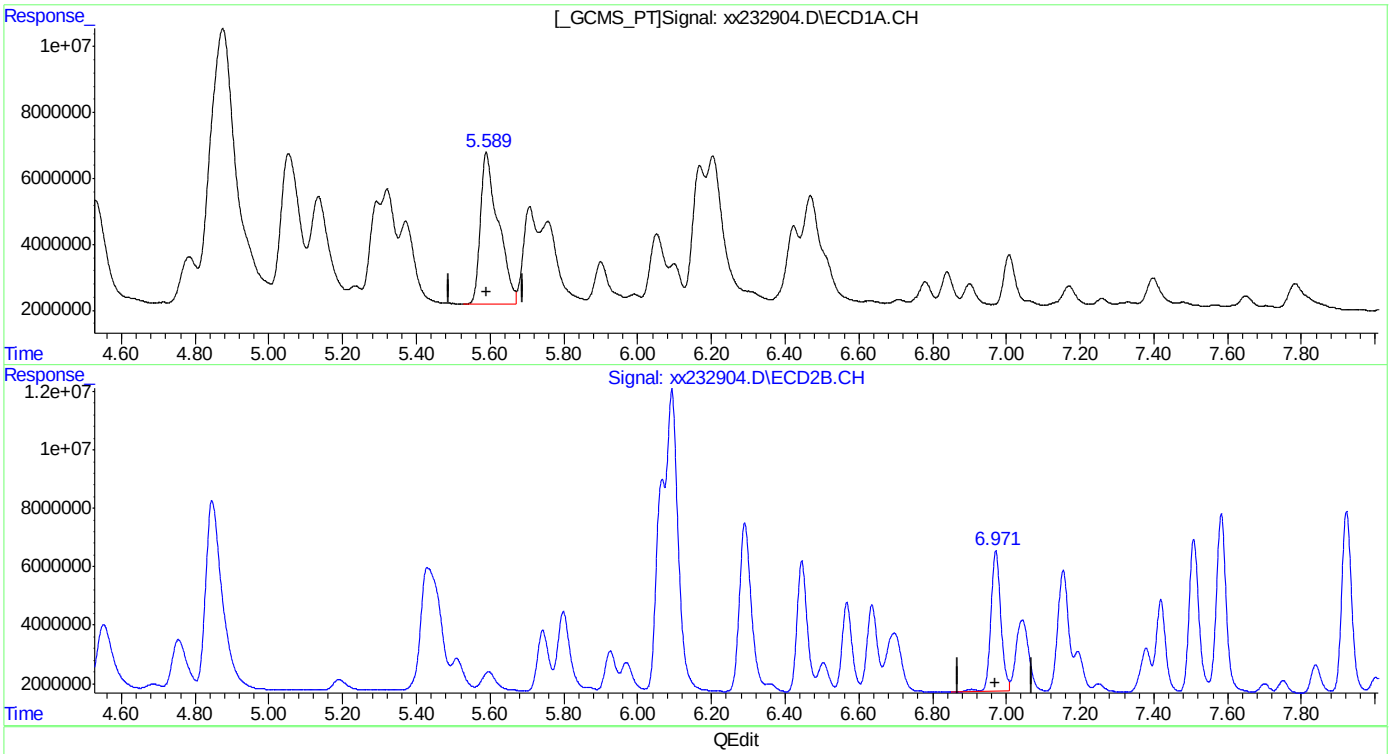
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	3.41	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	4.14	Poorly defined baseline
AR1232-E		2	6.97	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232904.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:23 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:32:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:32:13 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(11) AR1232-E
5.590min 948.668PPB
response 154500984

(11) AR1232-E #2
6.971min 1015.586PPB
response 91334056

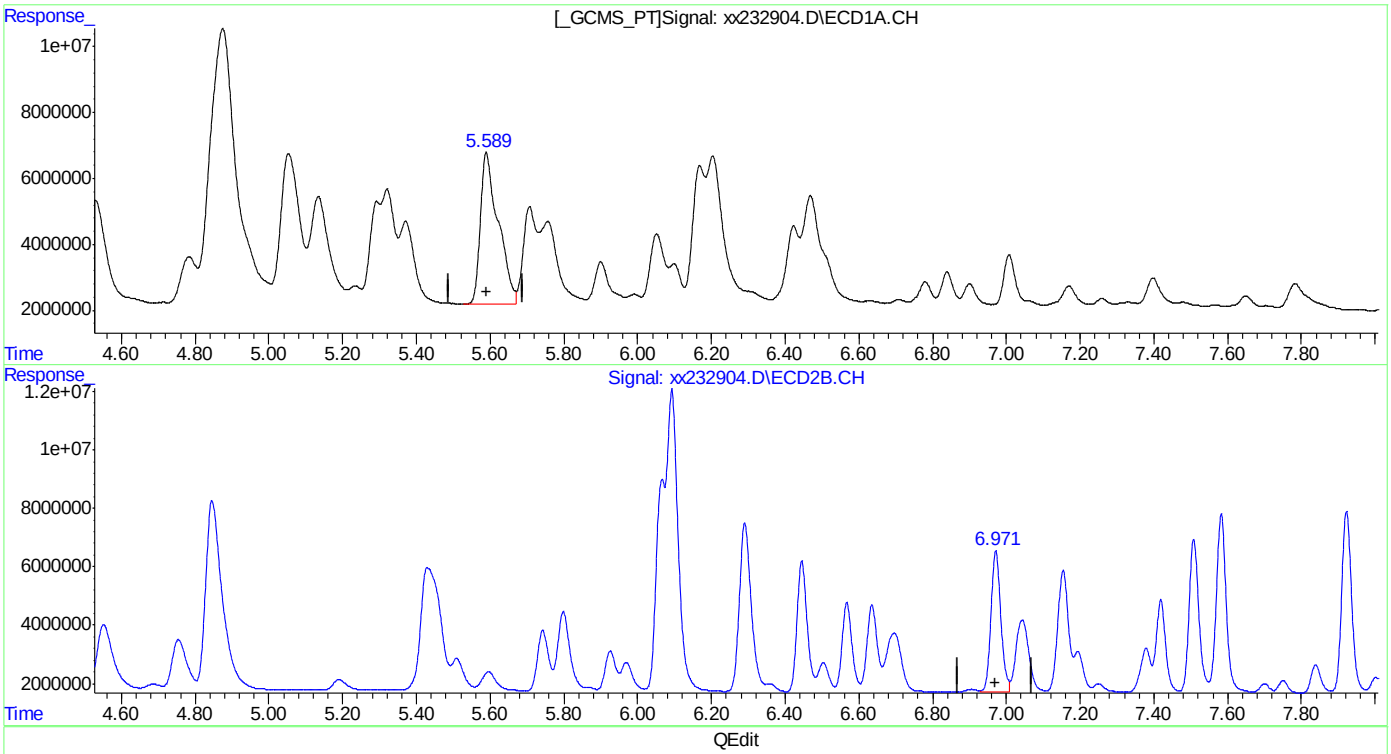
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:37:32 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232904.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:23 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:32:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:32:13 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(11) AR1232-E
5.590min 948.668PPB
response 154500984

(11) AR1232-E #2
6.971min 1003.091PPB m
response 90210343

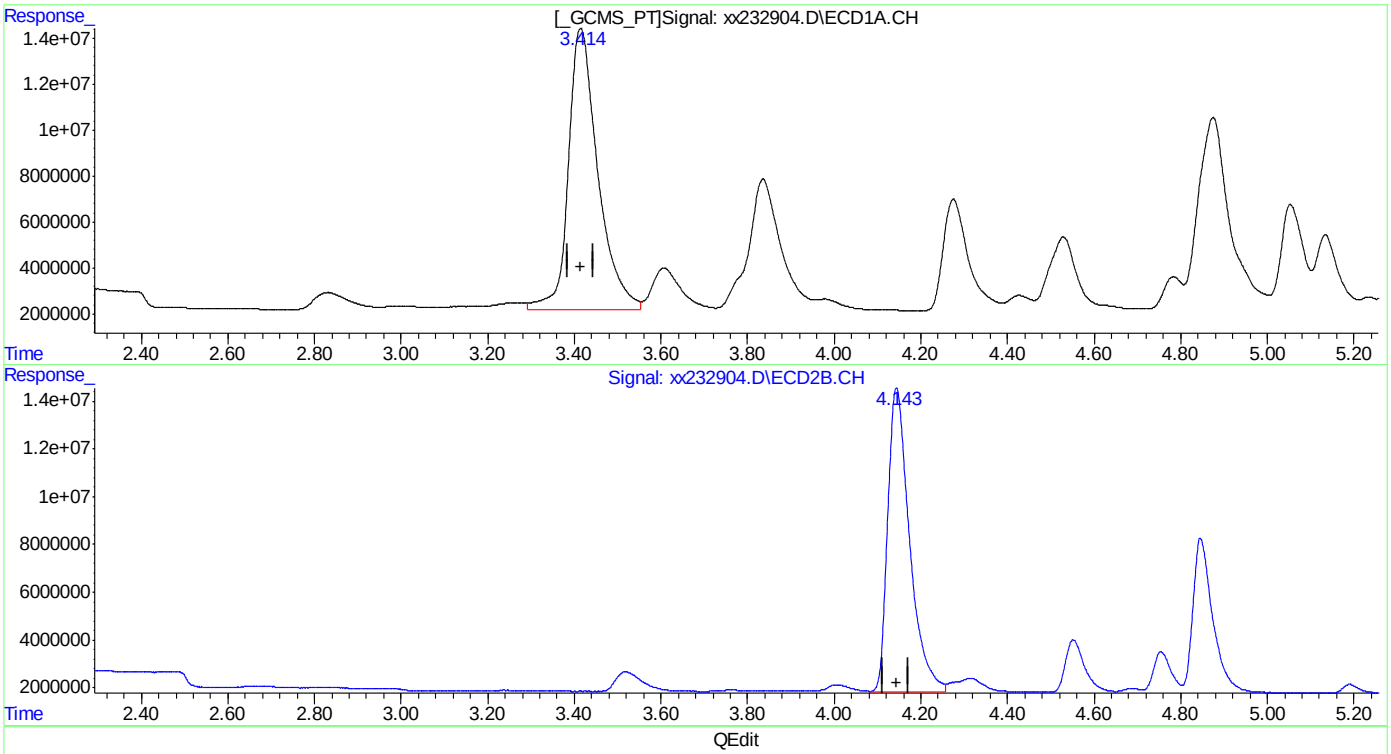
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:37:38 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232904.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:23 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:32:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:32:13 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.415min 44.740ppb
response 583111381

(1) Tetrachloro-m-xylene #2 (S)
4.144min 42.959ppb
response 448137321

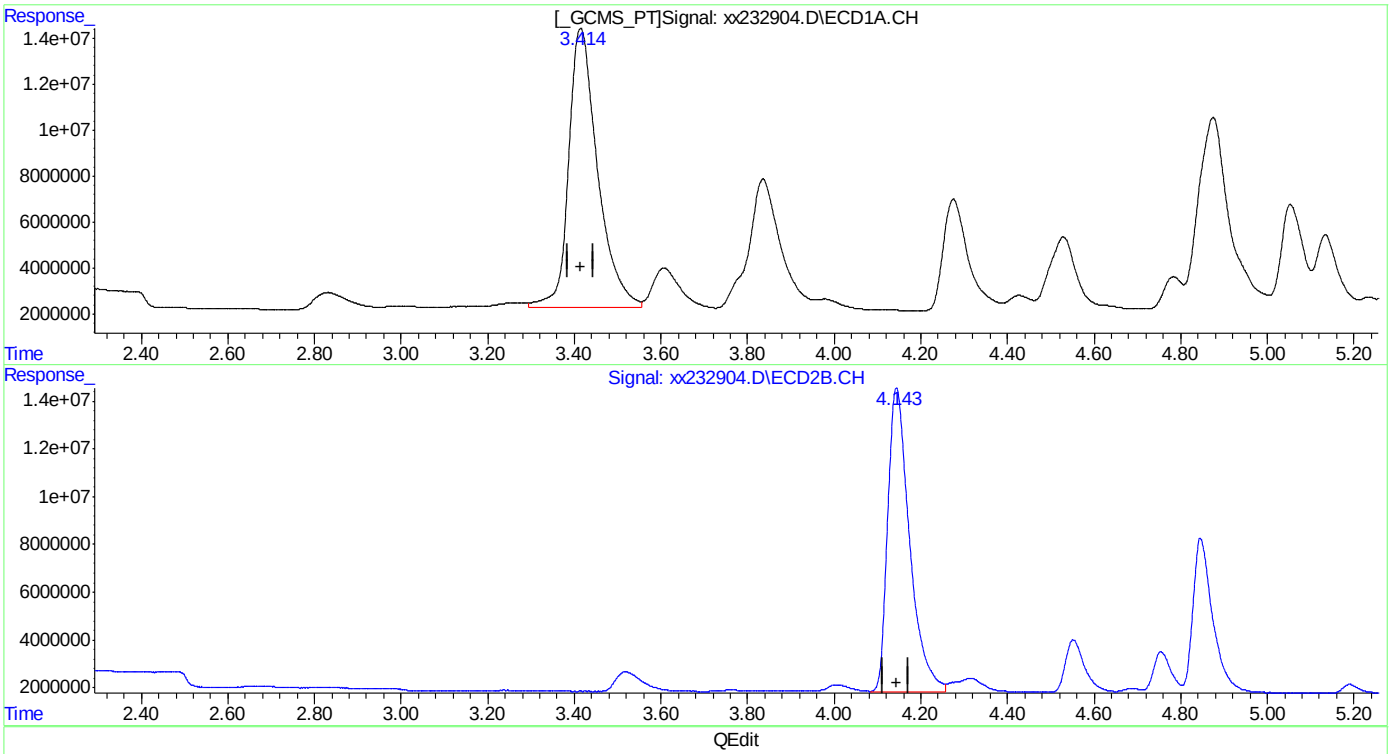
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232904.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:23 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:32:35 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:32:13 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.414min 43.317ppb m
response 564565042

(1) Tetrachloro-m-xylene #2 (S)
4.143min 42.650ppb m
response 444907834

(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:37:55 2018 Page: 1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 08/01/18 10:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232905.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:41 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:39:27 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:56:20 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.413	4.144	523.3E6	432.5E6	40.610m	41.722
	Spiked Amount 40.000			Recovery	=	101.53%	104.31%
51)	S Decachlor...	10.940	12.791	667.3E6	476.6E6	41.792	42.029
	Spiked Amount 40.000			Recovery	=	104.48%	105.07%
	Target Compounds						
12)	AR1242-A	4.275	5.430	352.3E6	289.4E6	1000.000	1000.000
13)	AR1242-B	4.874	6.092	806.5E6	629.2E6	1000.000	1000.000
14)	AR1242-C	5.053	6.289	303.2E6	248.5E6	943.573	1044.960m
15)	AR1242-D	5.588f	6.971	322.1E6	185.1E6	1979.396m	1002.521 #
16)	AR1242-E	6.202	7.582	301.7E6	239.0E6	1142.993	998.126

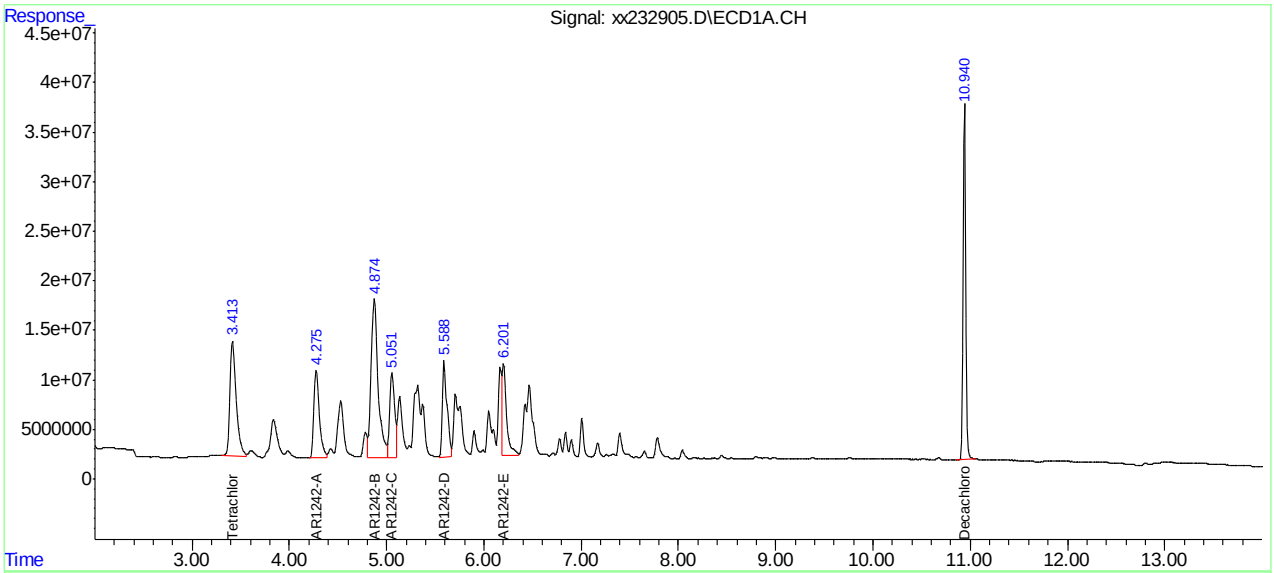
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

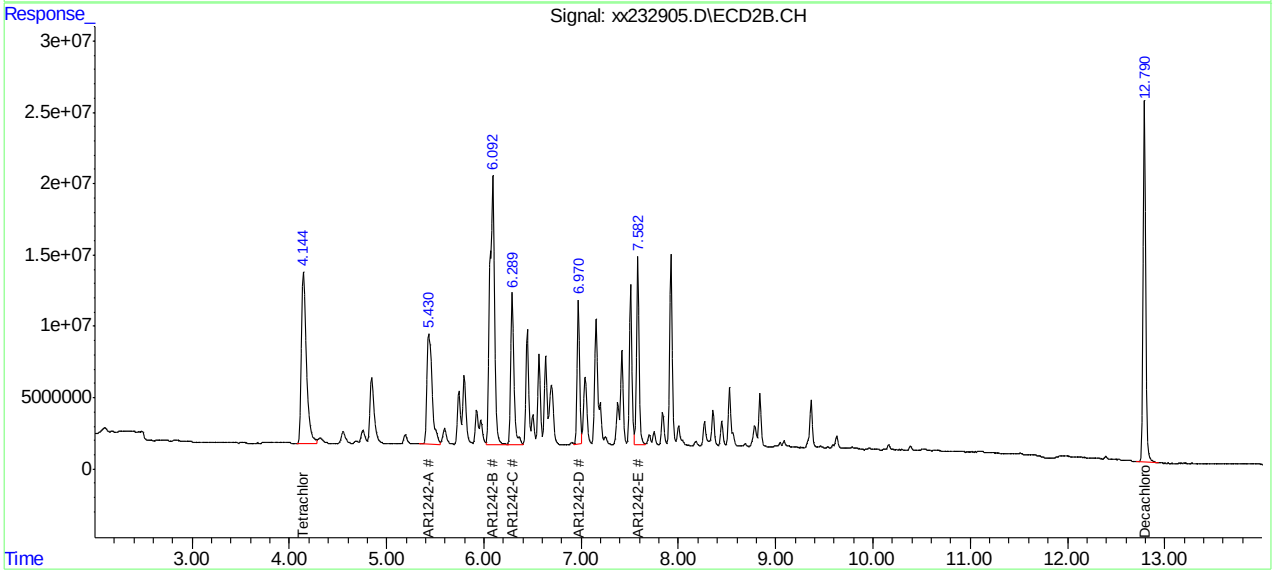
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232905.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:41 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:39:27 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:56:20 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GXX6423-IC6423
Lab FileID: XX232905.D
Injection Time: 07/28/18 03:41
Method: SW846 8082A
Analyst approved: 08/01/18 08:29 Tianwei Ruan
Supervisor approved: 08/01/18 10:03 Gwendolyn Burns

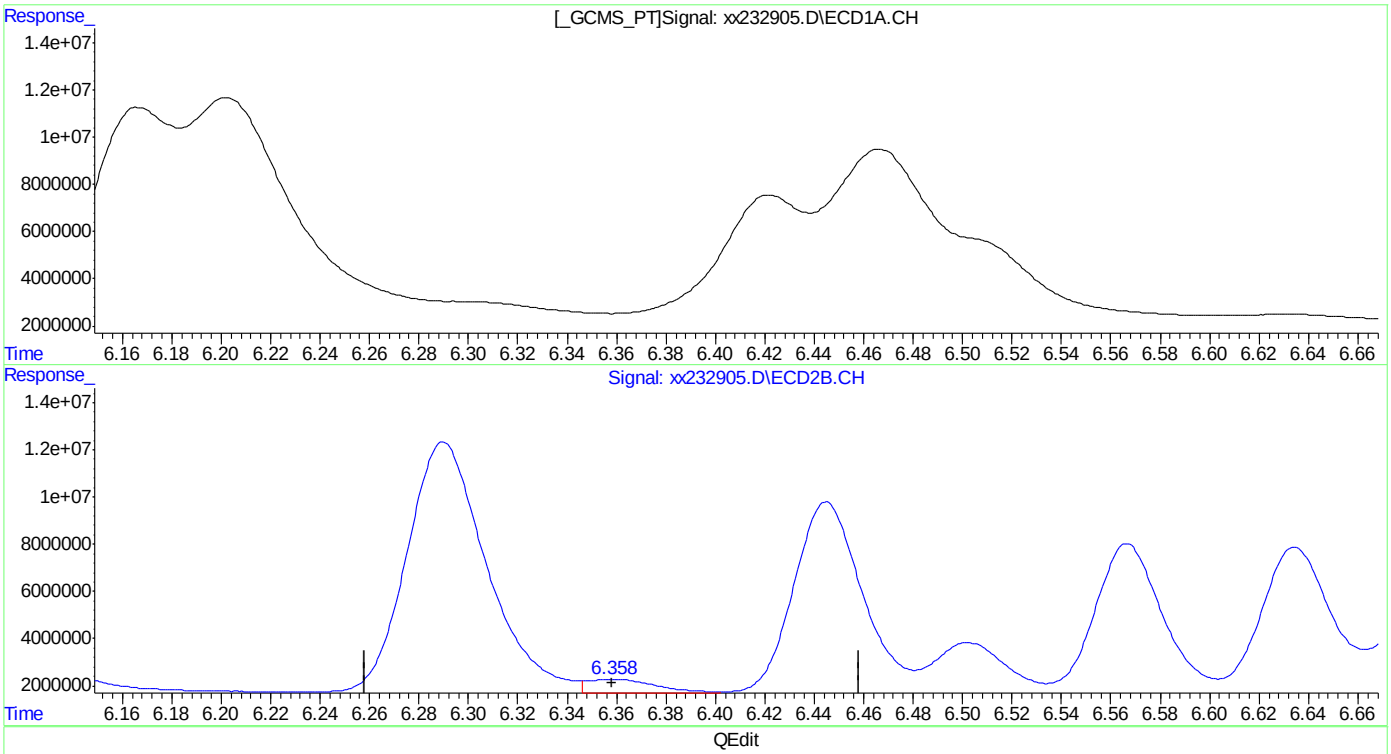
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	3.41	Poorly defined baseline
AR1242-D		1	5.59	Split peak
AR1242-C		2	6.29	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232905.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:41 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:53:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:50:35 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(14) AR1242-C
5.133min 694.962PPB
response 216270934

(14) AR1242-C #2
6.359min 45.524PPB
response 10850955

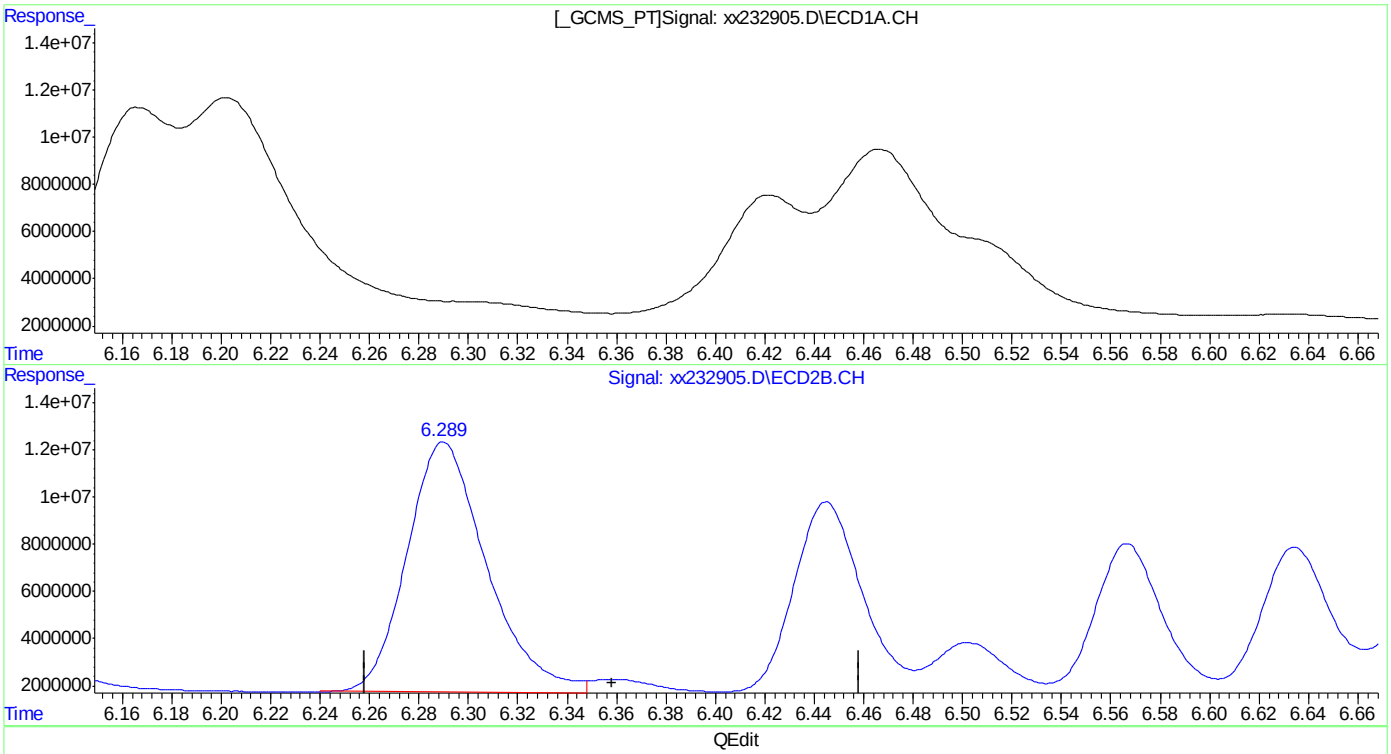
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232905.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:41 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:53:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:50:35 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(14) AR1242-C
5.133min 694.962PPB
response 216270934

(14) AR1242-C #2
6.289min 997.649PPB m
response 237798289

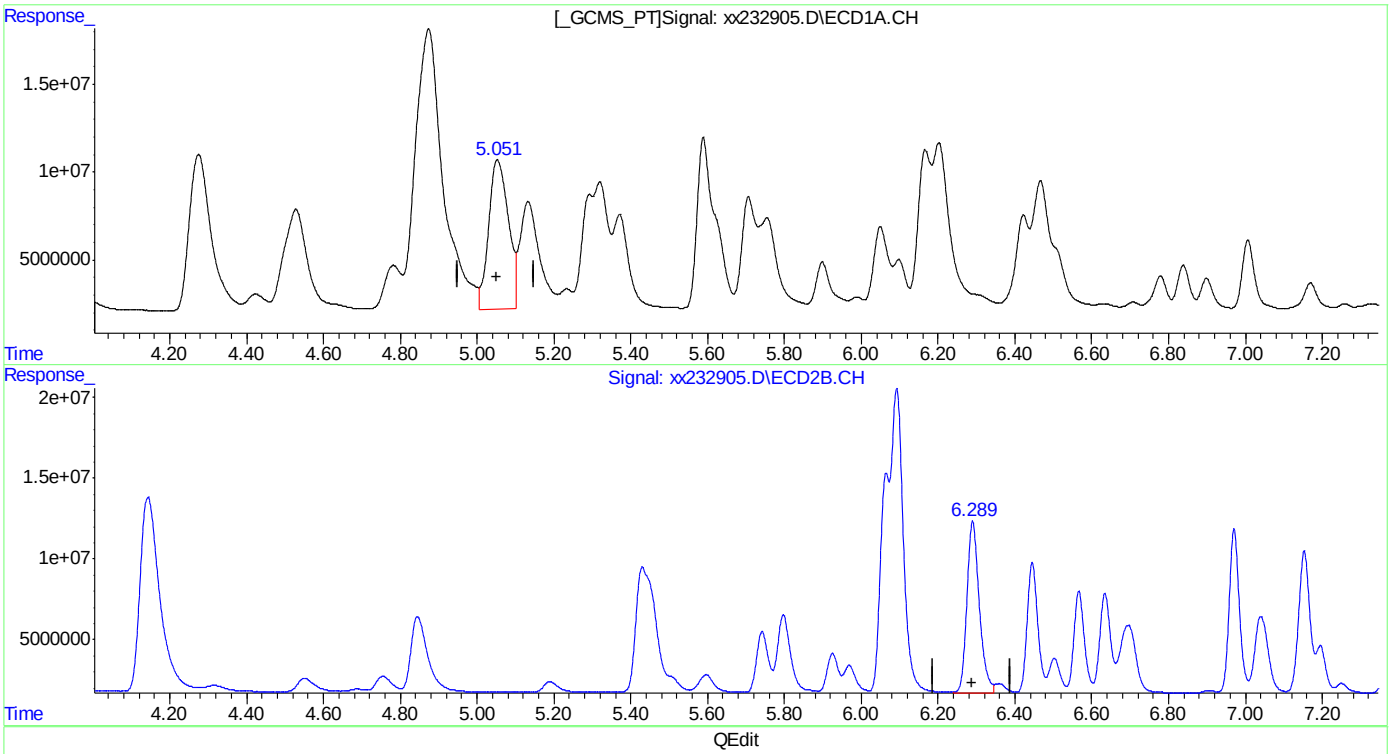
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232905.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:41 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:56:46 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:56:20 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(14) AR1242-C
5.053min 943.573PPB
response 303155322

(14) AR1242-C #2
6.290min 1002.908PPB
response 238489797

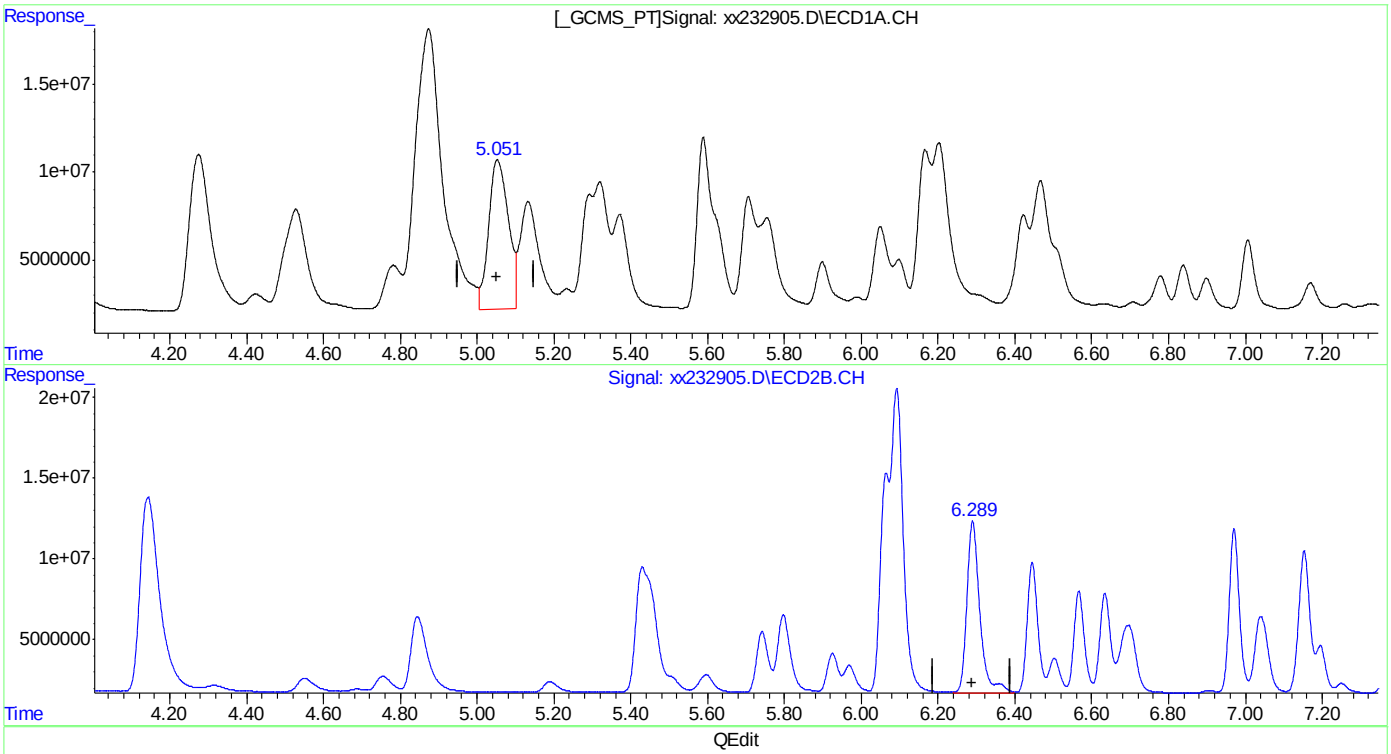
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:38:14 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232905.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:41 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:56:46 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:56:20 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(14) AR1242-C
5.053min 943.573PPB
response 303155322

(14) AR1242-C #2
6.289min 1044.960PPB m
response 248489735

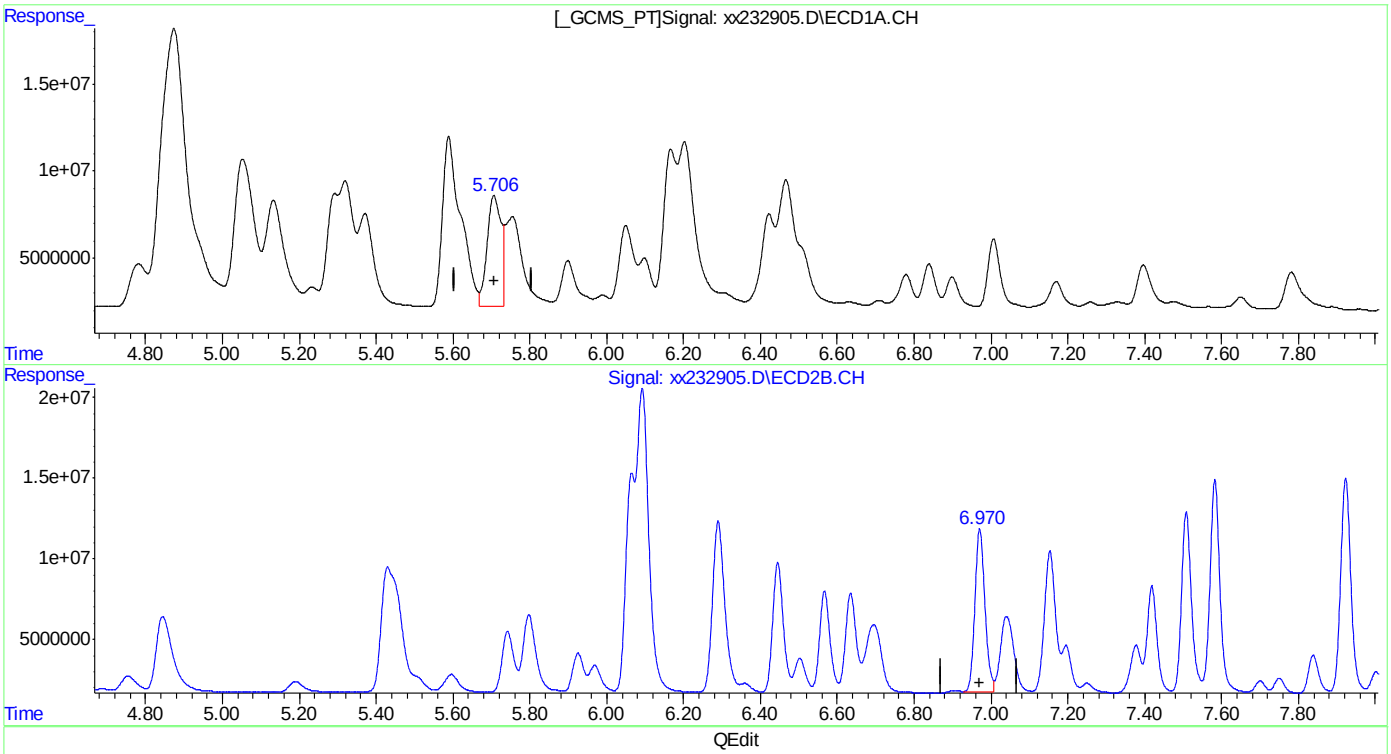
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:38:19 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232905.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:41 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:56:46 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:56:20 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(15) AR1242-D
5.706min 1000.000PPB
response 162745032

(15) AR1242-D #2
6.971min 1002.521PPB
response 185087381

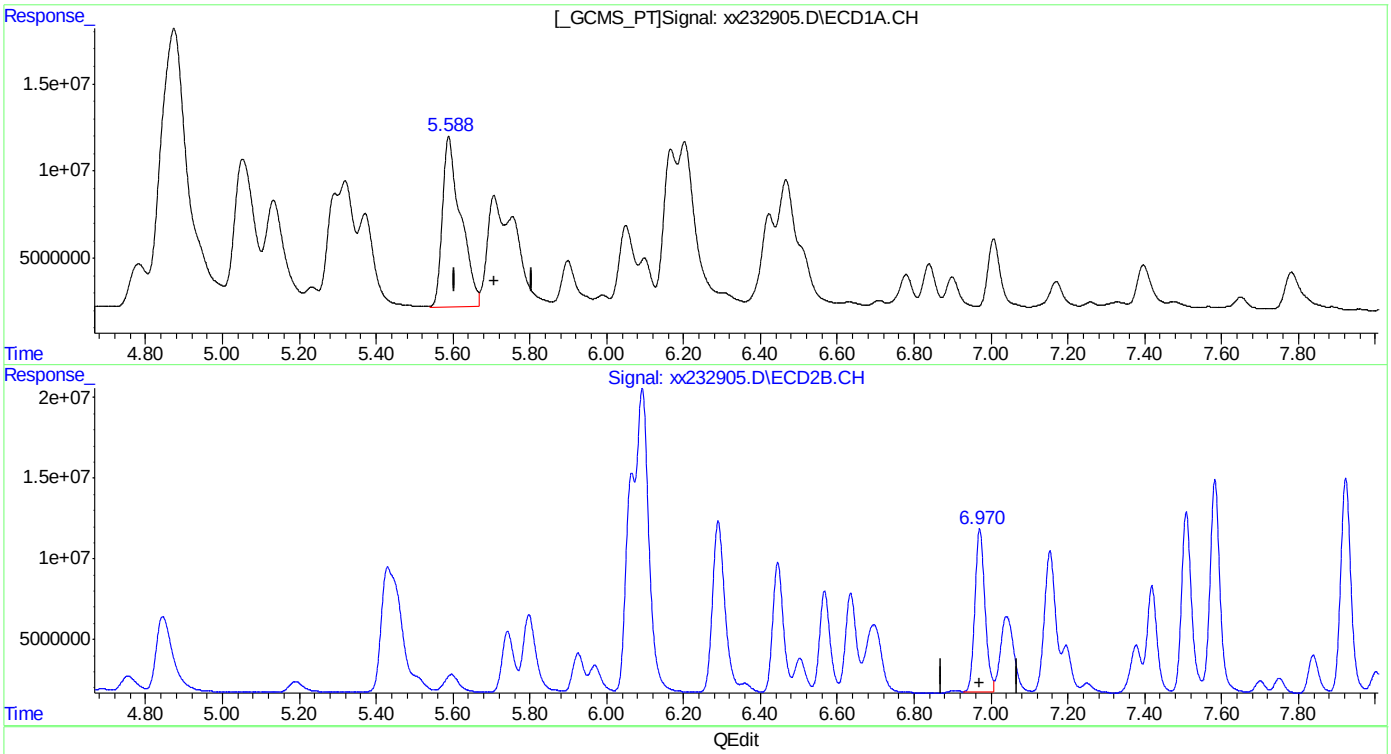
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232905.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:41 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:56:46 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:56:20 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(15) AR1242-D
5.588min 1979.396PPB m
response 322136810

(15) AR1242-D #2
6.971min 1002.521PPB
response 185087381

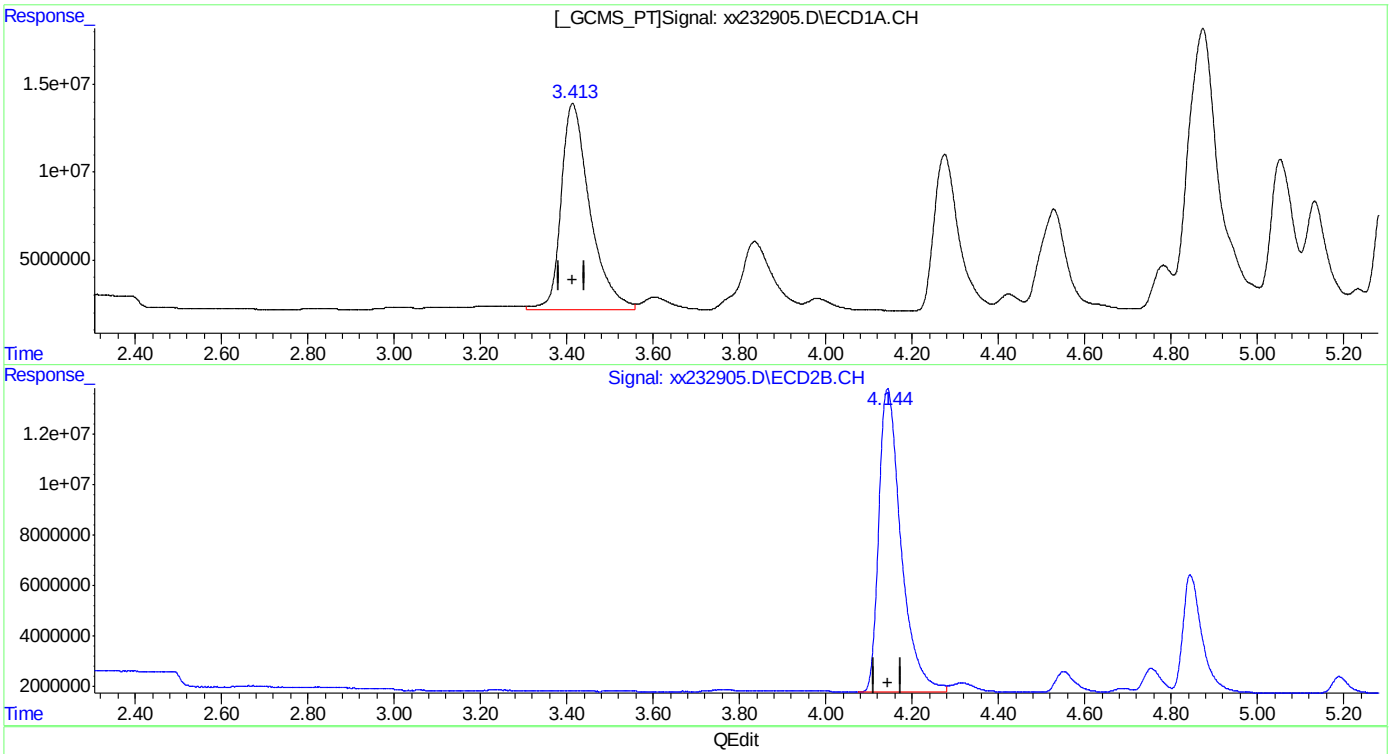
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:39:07 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232905.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:41 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:56:46 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:56:20 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.414min 42.518ppb
response 547912924

(1) Tetrachloro-m-xylene #2 (S)
4.144min 41.722ppb
response 432508978

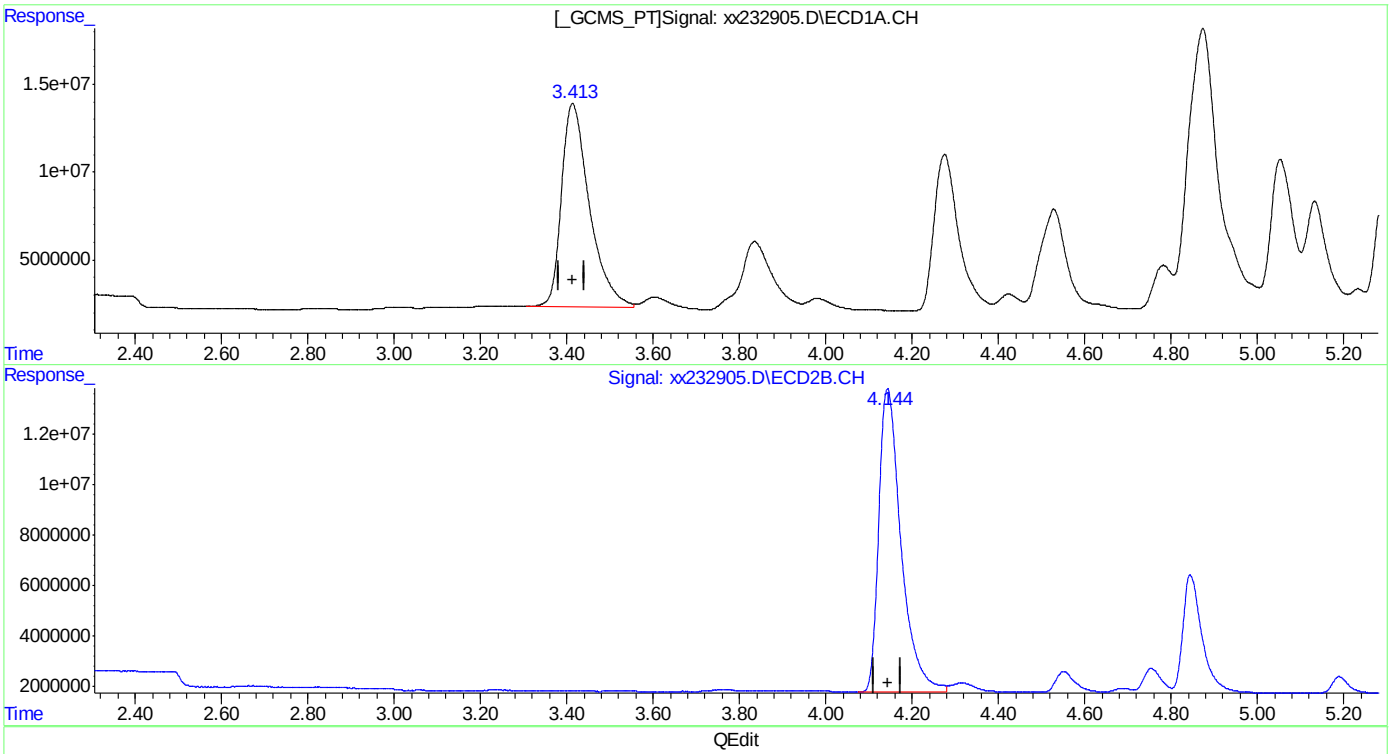
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232905.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 3:41 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:56:46 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:56:20 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.413min 40.610ppb m
response 523329255

(1) Tetrachloro-m-xylene #2 (S)
4.144min 41.722ppb
response 432508978

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 08/01/18 10:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:00 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:39:48 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:40:07 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.416	4.145	559.3E6	462.6E6	43.006m	44.093
	Spiked Amount 40.000			Recovery	= 107.52%	110.23%	
51) S	Decachlor...	10.943	12.792	700.1E6	505.0E6	43.478	44.071
	Spiked Amount 40.000			Recovery	= 108.70%	110.18%	
	Target Compounds						
17)	AR1248-A	4.274	5.431	184.1E6	149.0E6	1000.000	1000.000
18)	AR1248-B	4.873	6.093	548.9E6	409.5E6	1000.000	1016.082m
19)	AR1248-C	5.291	6.567	500.0E6	222.5E6	983.129m	1000.823
20)	AR1248-D	5.590	6.971	514.7E6	304.8E6	1008.813	997.376
21)	AR1248-E	5.706	7.154	472.0E6	345.9E6	985.665m	989.183
22)	AR1248-F	6.202	7.583	497.6E6	424.1E6	1000.000	1000.000
23)	AR1248-G	6.465	7.925	387.0E6	413.7E6	930.844m	998.442

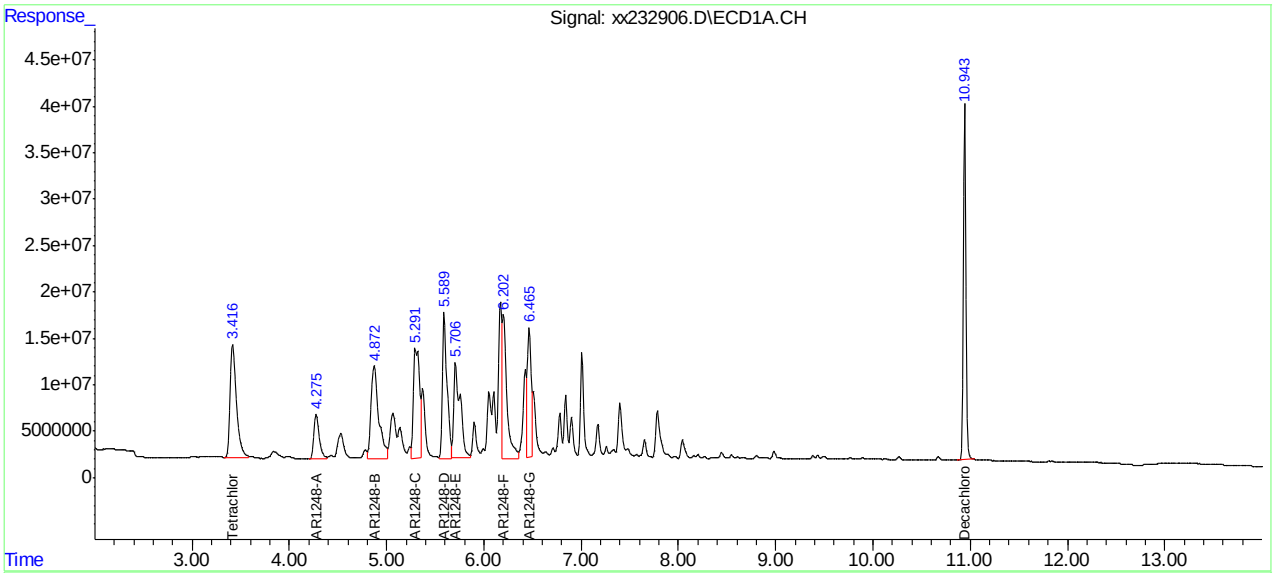
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

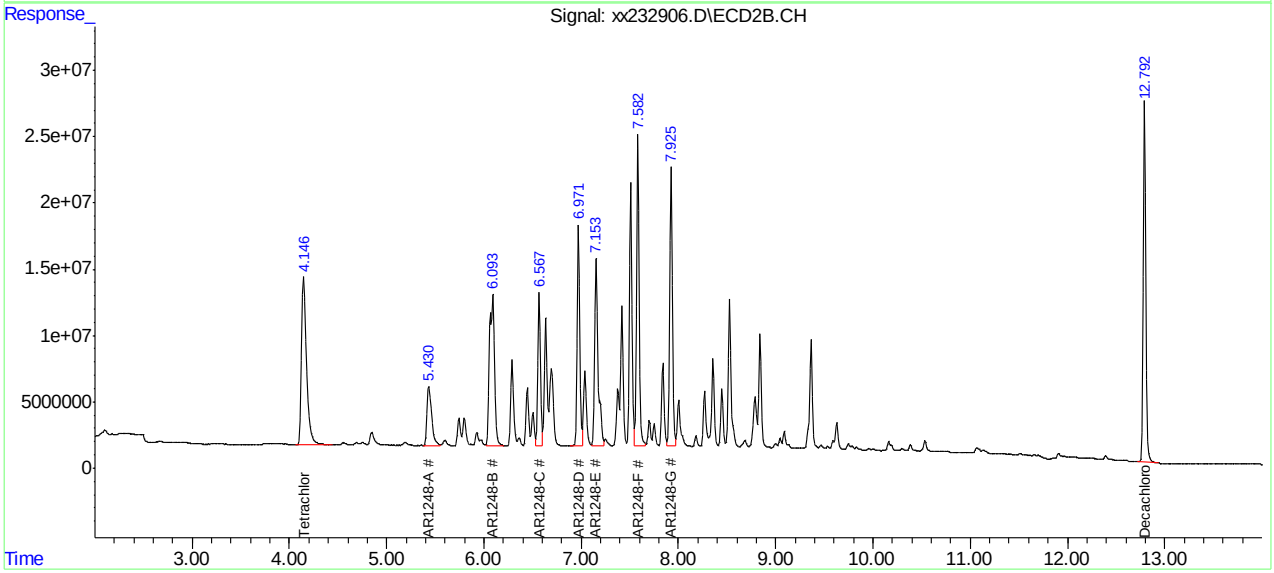
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:00 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:39:48 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:40:07 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GXX6423-IC6423 **Method:** SW846 8082A
Lab FileID: XX232906.D **Analyst approved:** 08/01/18 08:29 Tianwei Ruan
Injection Time: 07/28/18 04:00 **Supervisor approved:** 08/01/18 10:03 Gwendolyn Burns

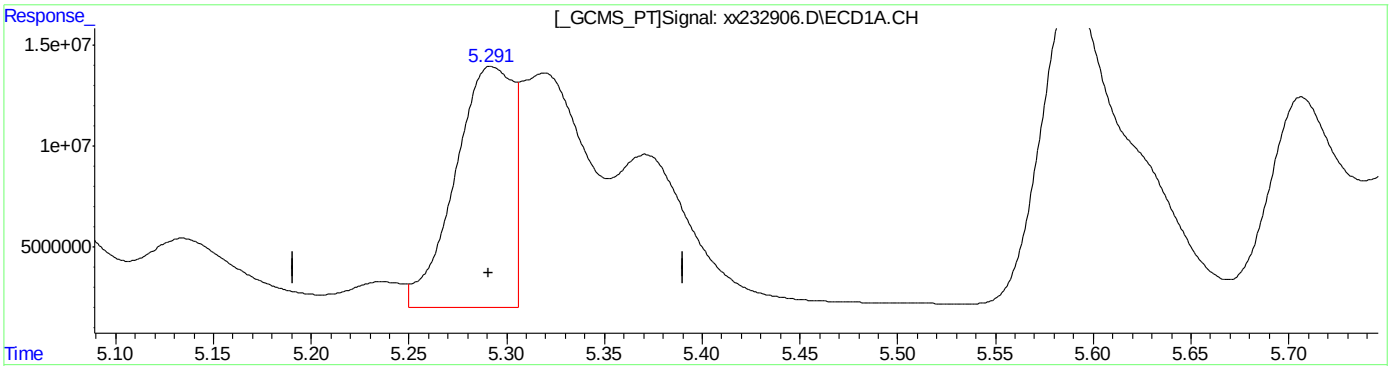
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	3.42	Poorly defined baseline
AR1248-C		1	5.29	Split peak
AR1248-E		1	5.71	Split peak
AR1248-B		2	6.09	Split peak
Ar1248-G		1	6.46	Split peak

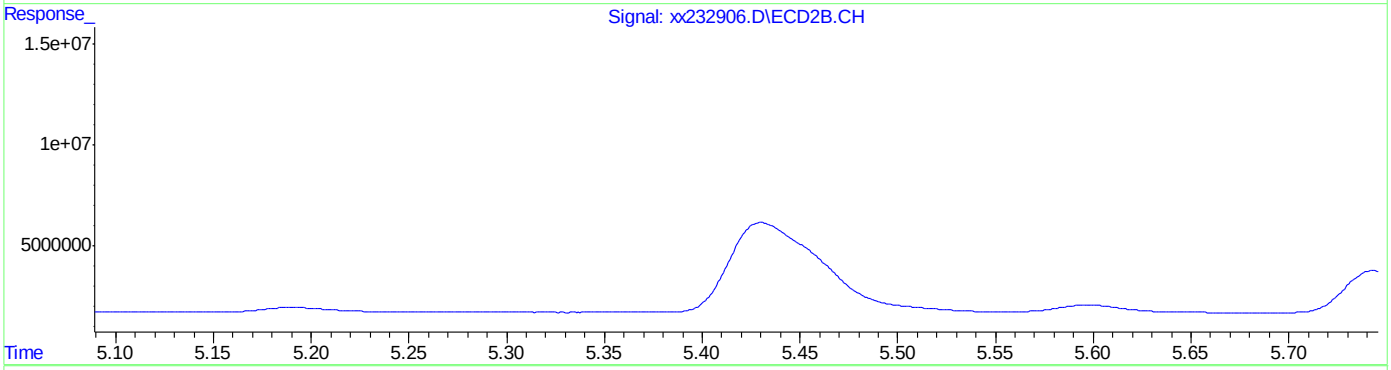
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:00 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:40:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:40:07 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(19) AR1248-C
5.293min 485.462PPB
response 246899190

(19) AR1248-C #2
6.567min 1000.823PPB
response 222511930

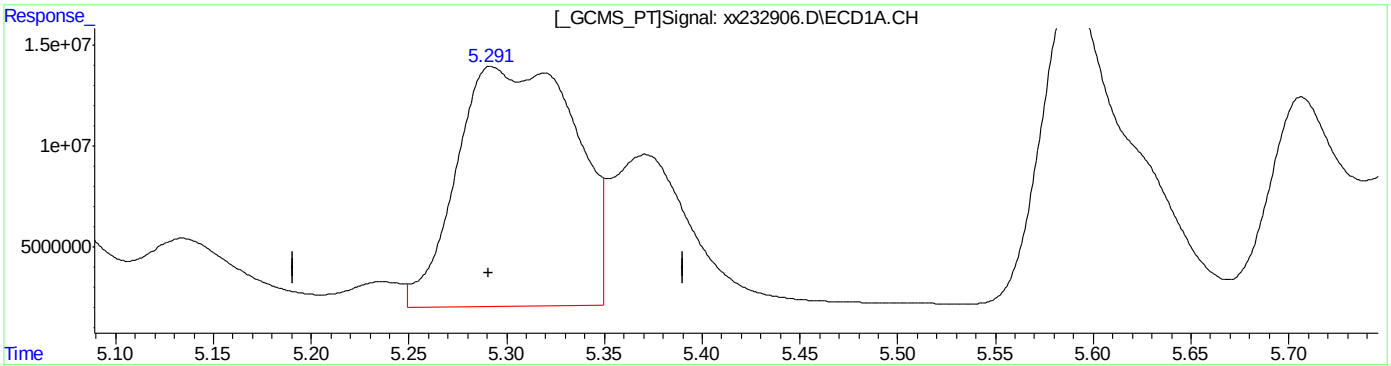
(+) = Expected Retention Time

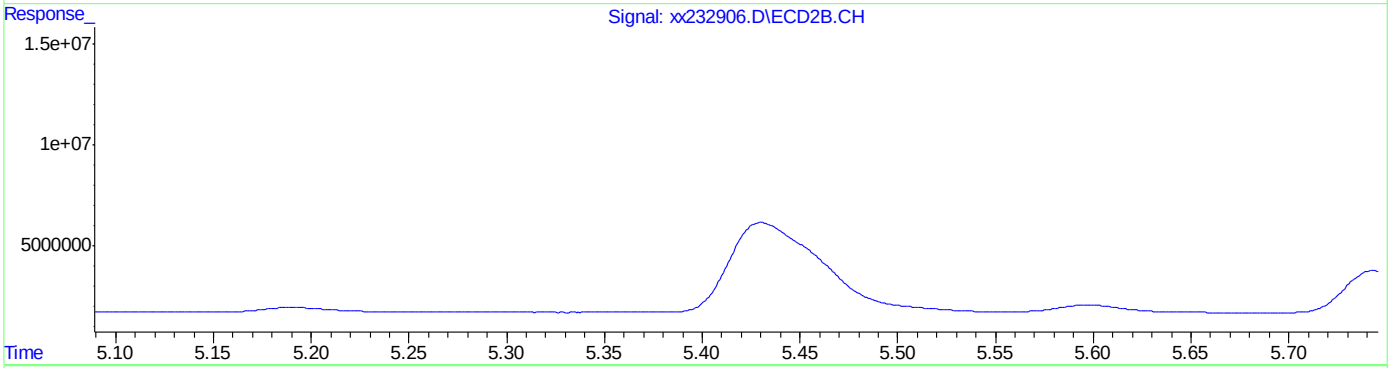
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:00 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:40:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:40:07 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(19) AR1248-C
5.291min 983.129PPB m
response 500005720

(19) AR1248-C #2
6.567min 1000.823PPB
response 222511930

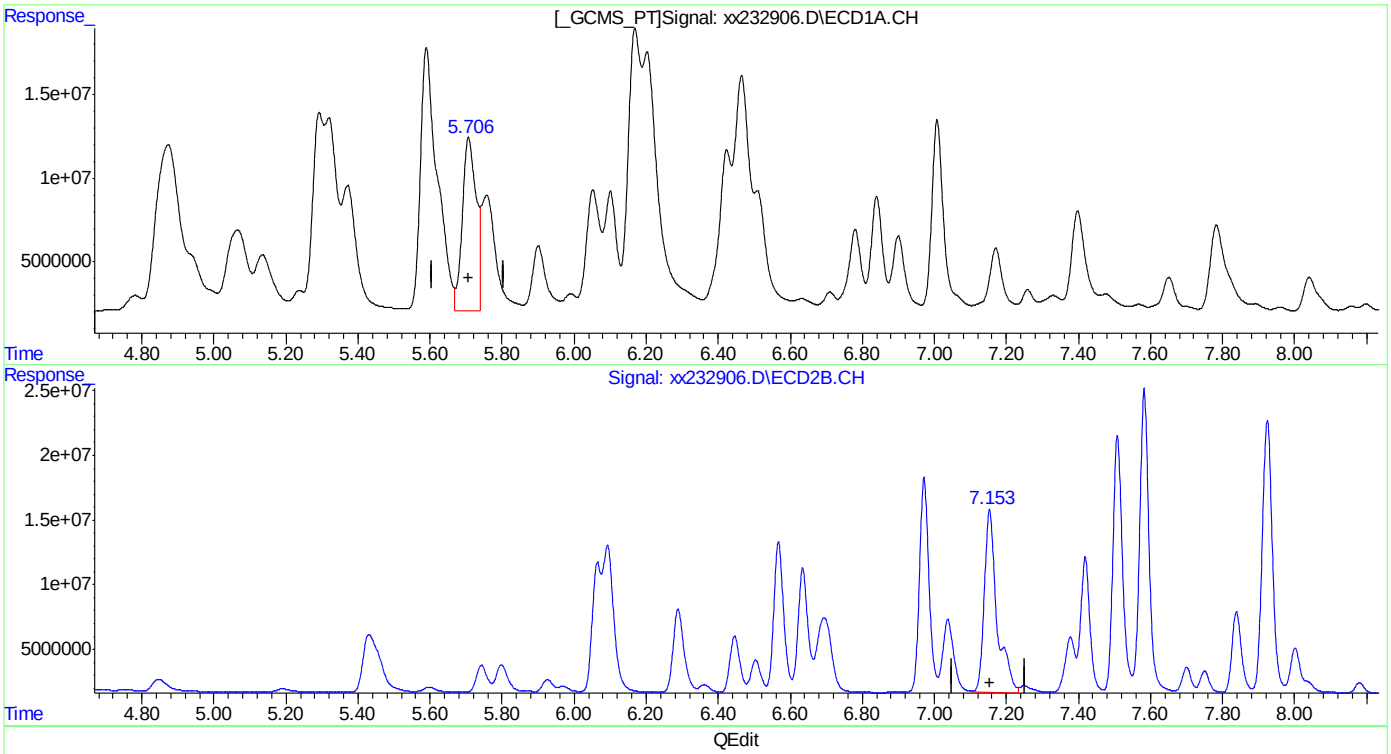
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 17:41:13 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:00 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:40:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:40:07 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(21) AR1248-E
5.707min 577.992PPB
response 276797104

(21) AR1248-E #2
7.154min 989.183PPB
response 345935014

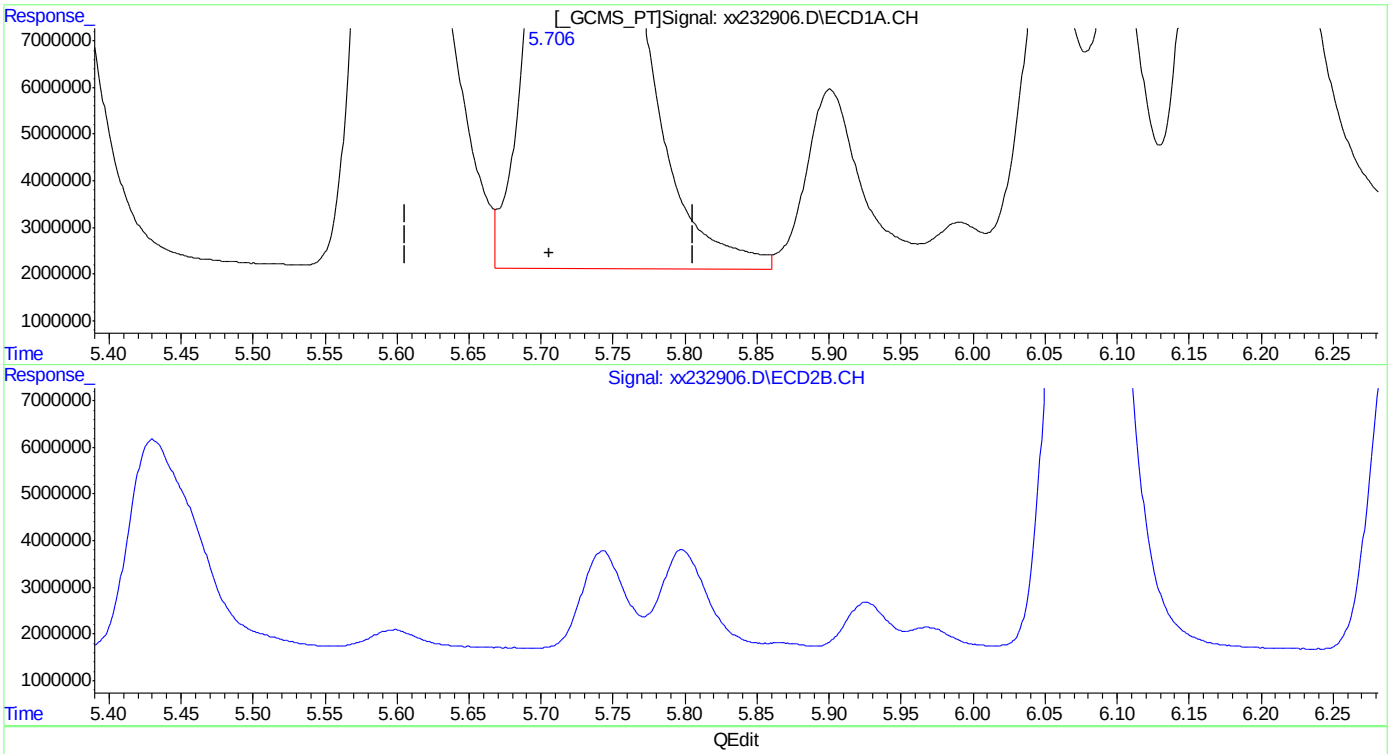
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:00 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:40:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:40:07 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(21) AR1248-E
5.706min 985.665PPB m
response 472029254

(21) AR1248-E #2
7.154min 989.183PPB
response 345935014

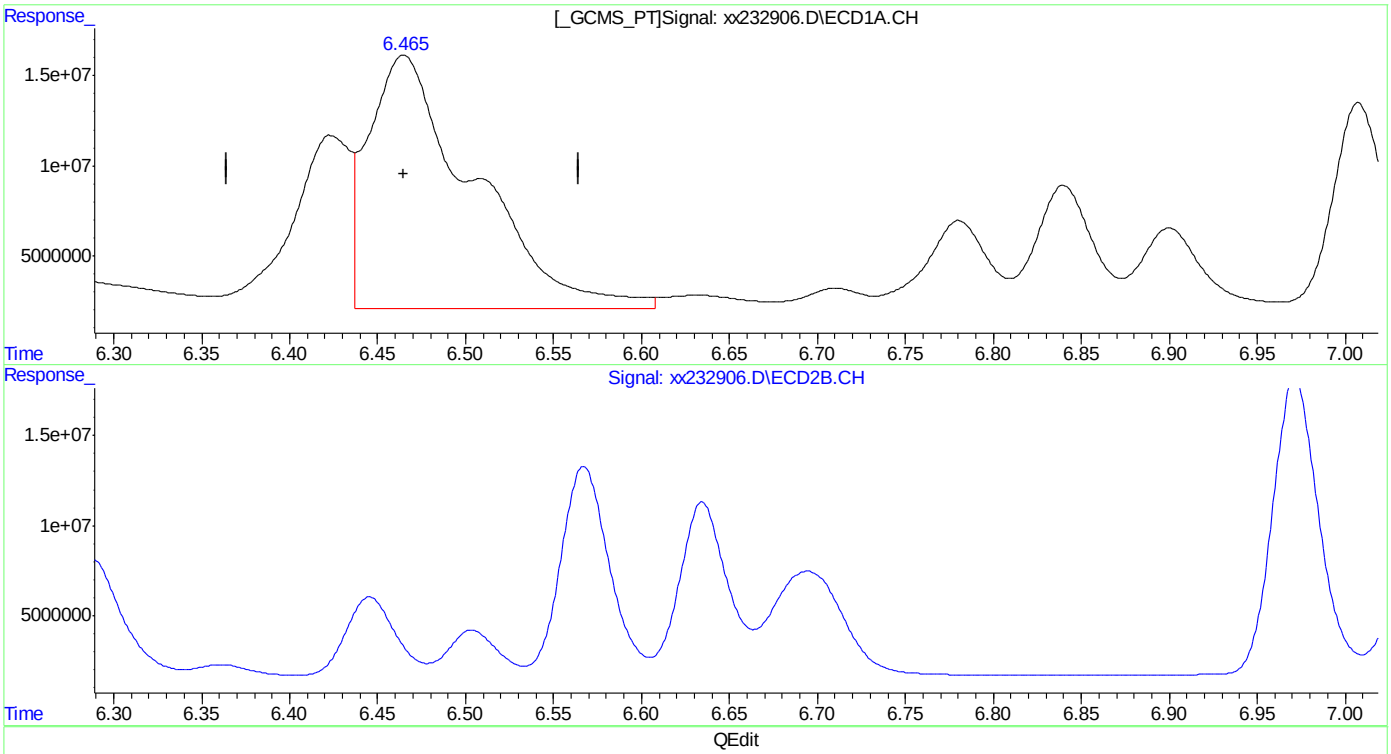
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:00 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:40:12 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:40:07 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(23) AR1248-G
6.465min 1400.525PPB
response 582208677

(23) AR1248-G #2
7.925min 998.442PPB
response 413670870

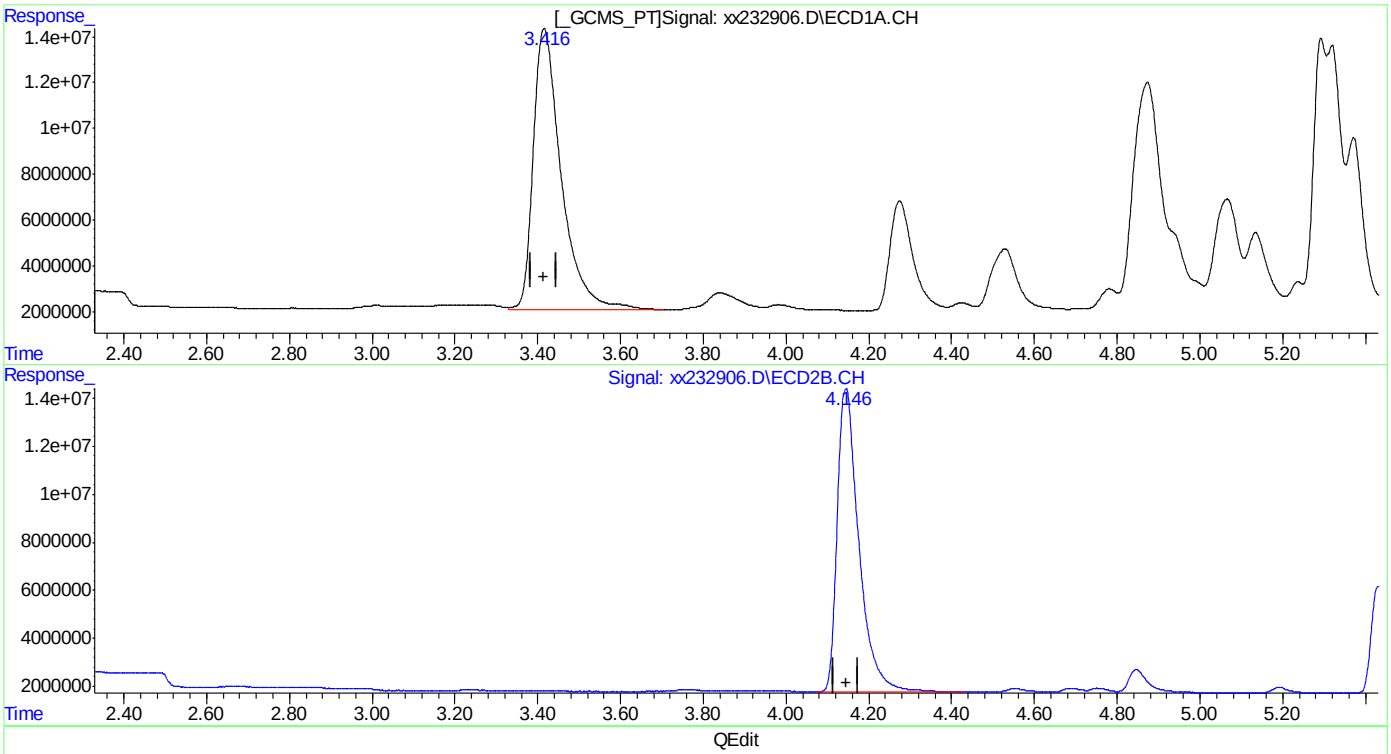
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:00 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1 (Sig #1); op13739,GXX6423,1000,,,5,1 (Sig #2)
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:43:11 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:40:07 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.415min 44.317ppb
response 576341355

(1) Tetrachloro-m-xylene #2 (S)
4.145min 44.093ppb
response 462621131

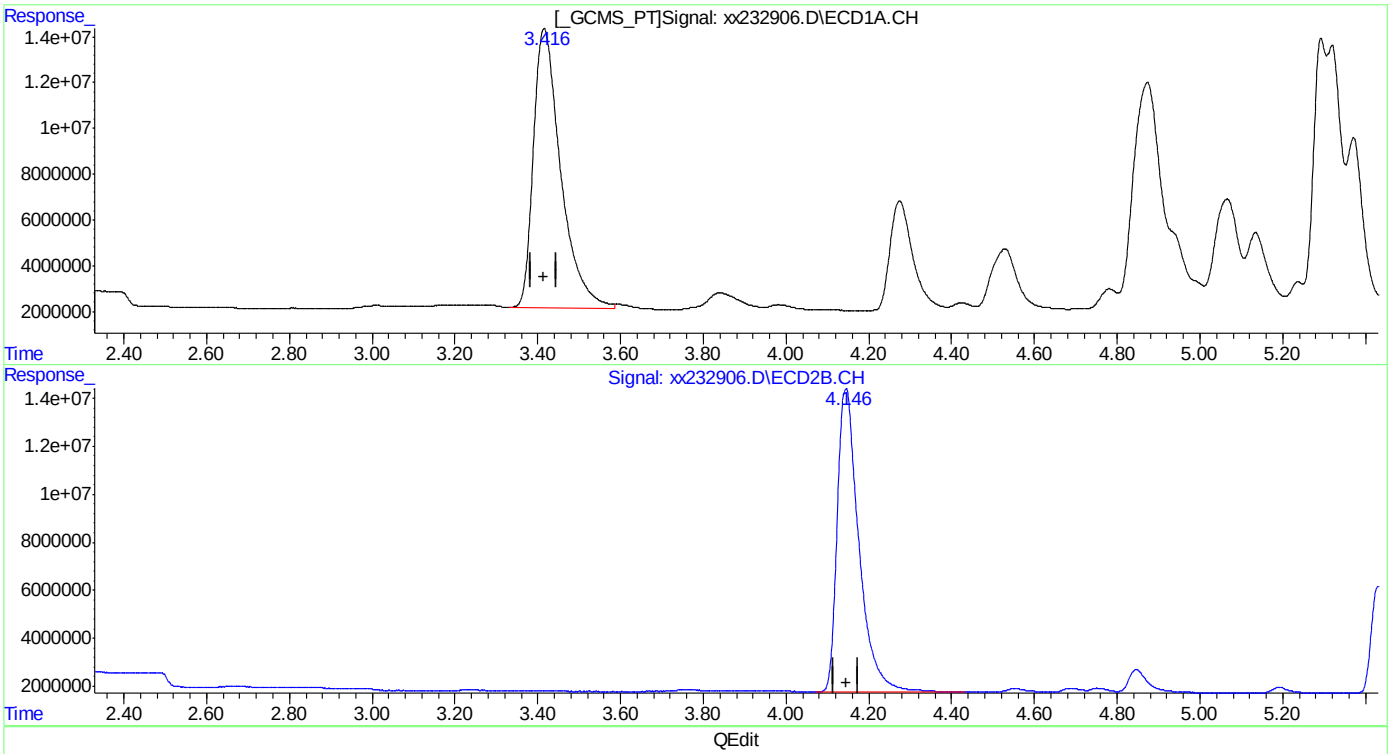
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:00 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1 (Sig #1); op13739,GXX6423,1000,,,5,1 (Sig #2)
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:43:11 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:40:07 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)
3.416min 43.006ppb m
response 559293628

(1) Tetrachloro-m-xylene #2 (S)
4.145min 44.093ppb
response 462621131

(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:39:54 2018 Page: 1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 08/01/18 10:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:41:54 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.413	4.143	552.4E6	445.3E6	43.386	43.229
	Spiked Amount 40.000			Recovery	= 108.47%	108.07%	
51) S	Decachlor...	10.942	12.791	678.3E6	489.6E6	42.854	43.576
	Spiked Amount 40.000			Recovery	= 107.14%	108.94%	
	Target Compounds						
24)	AR1254-A	6.101f	7.582	402.6E6	368.2E6	894.535m	997.457
25)	AR1254-B	6.458	7.838f	599.1E6	415.9E6	1017.905m	1005.384m
26)	AR1254-C	6.839	8.356	457.5E6	352.3E6	983.904	993.746
27)	AR1254-D	7.007f	8.525	892.6E6	752.1E6	1080.840m	995.369
28)	AR1254-E	7.396f	8.838	604.2E6	550.5E6	906.975m	992.484
29)	AR1254-F	7.651f	9.363	558.4E6	581.5E6	957.095	984.986m
30)	AR1254-G	8.040	9.628f	849.4E6	691.6E6	968.156m	1025.398m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

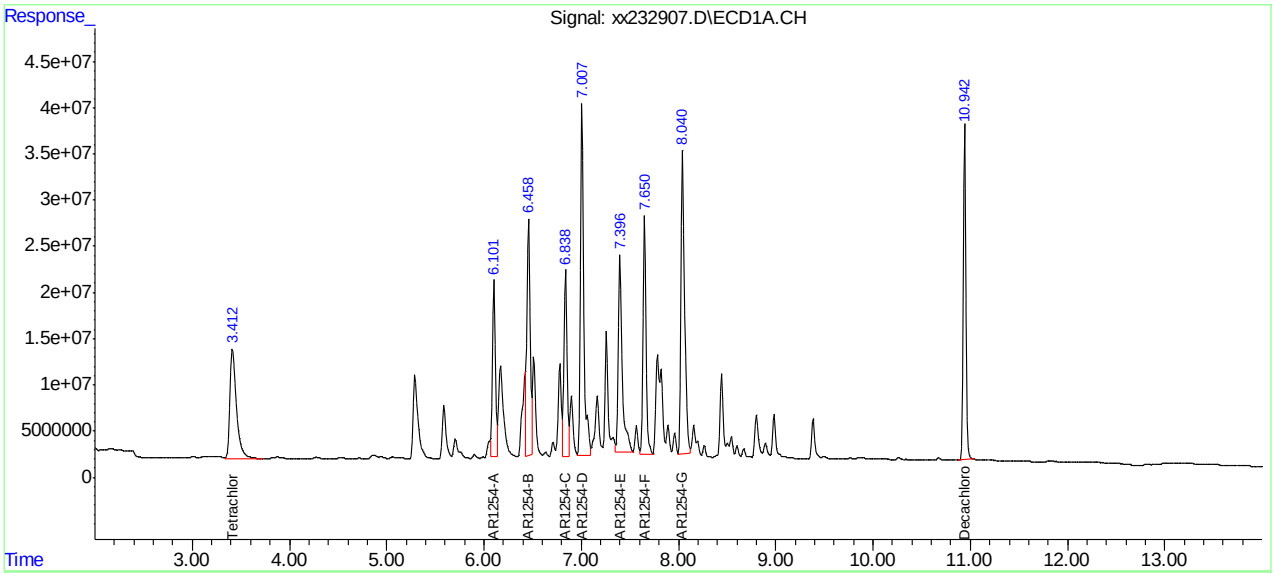
11.4.11

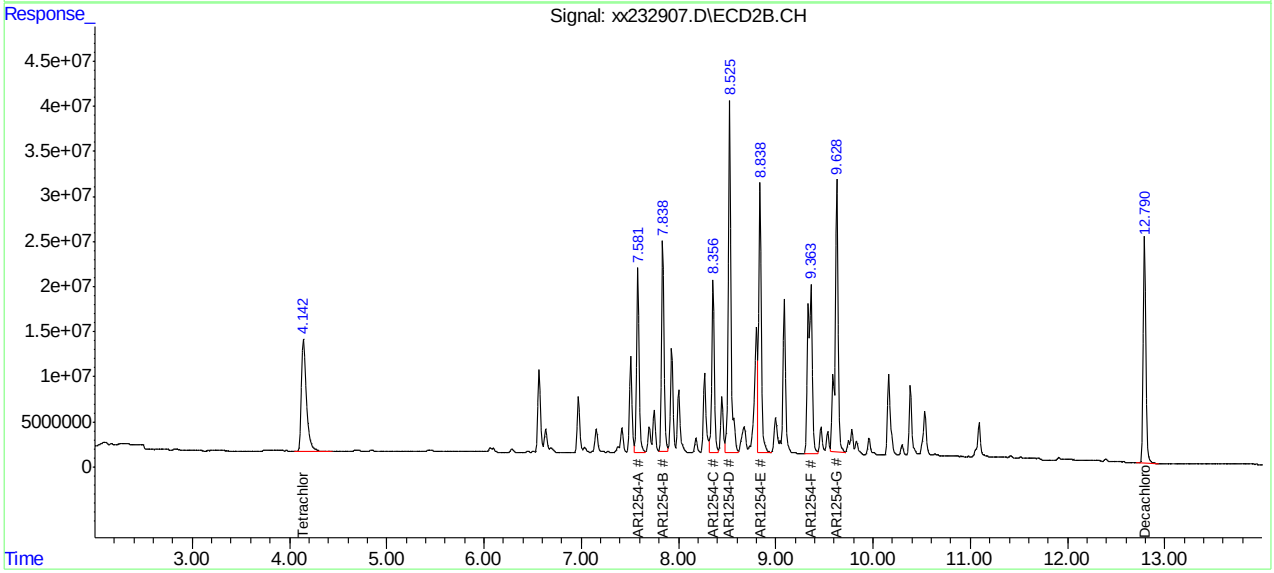
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 11:41:54 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GXX6423-IC6423 **Method:** SW846 8082A
Lab FileID: XX232907.D **Analyst approved:** 08/01/18 08:29 Tianwei Ruan
Injection Time: 07/28/18 04:18 **Supervisor approved:** 08/01/18 10:03 Gwendolyn Burns

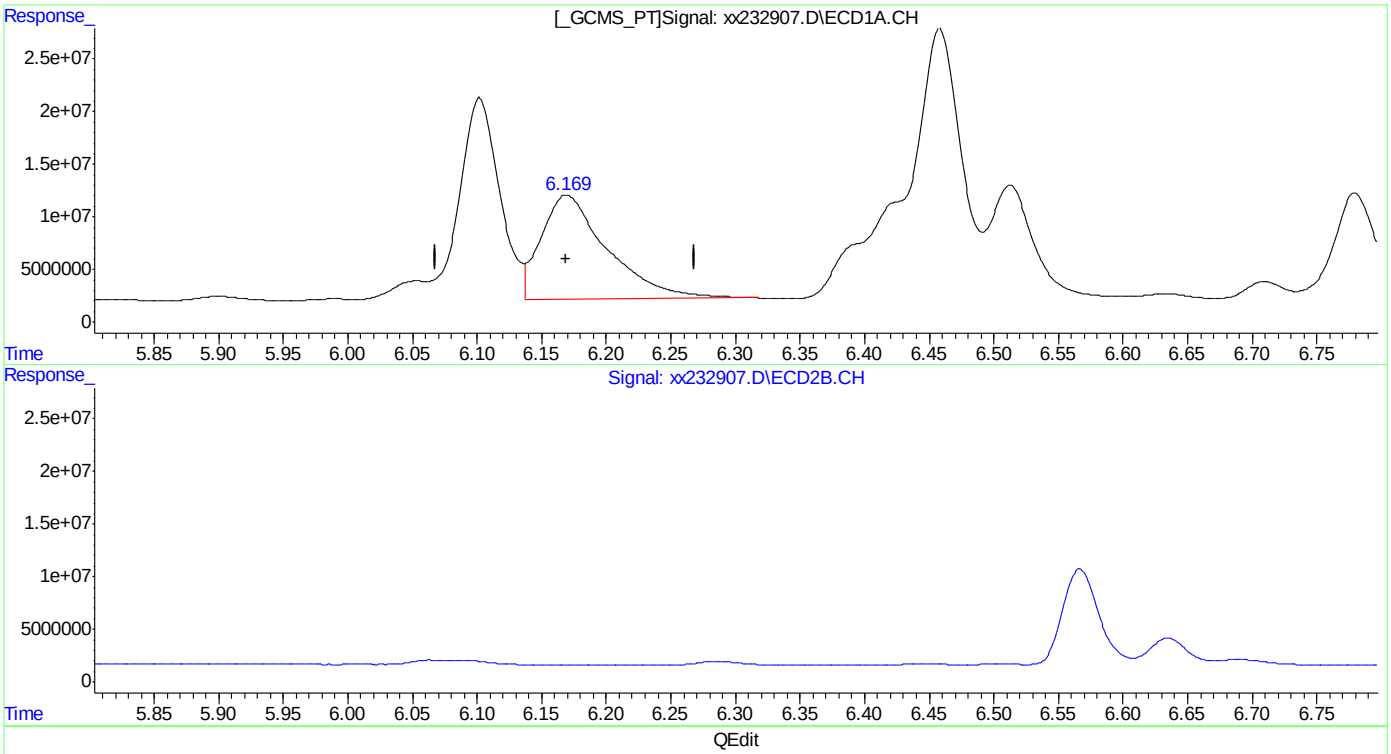
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1254-A		1	6.10	Split peak
AR1254-B		1	6.46	Split peak
AR1254-D		1	7.01	Split peak
AR1254-E		1	7.40	Split peak
AR1254-B		2	7.84	Split peak
AR1254-G		1	8.04	Split peak
AR1254-F		2	9.36	Split peak
AR1254-G		2	9.63	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:39:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(24) AR1254-A
6.169min 783.085PPB
response 352472563

(24) AR1254-A #2
7.582min 997.457PPB
response 368249354

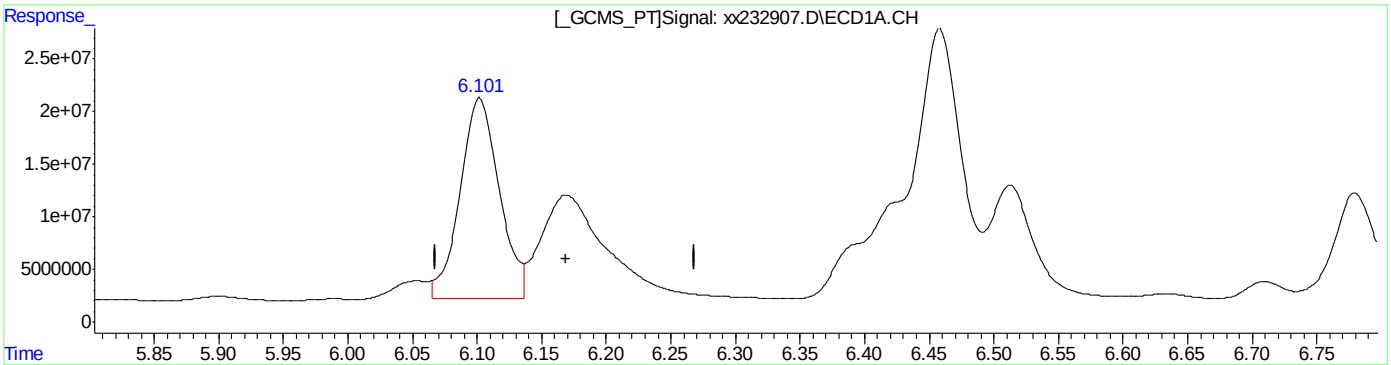
(+) = Expected Retention Time

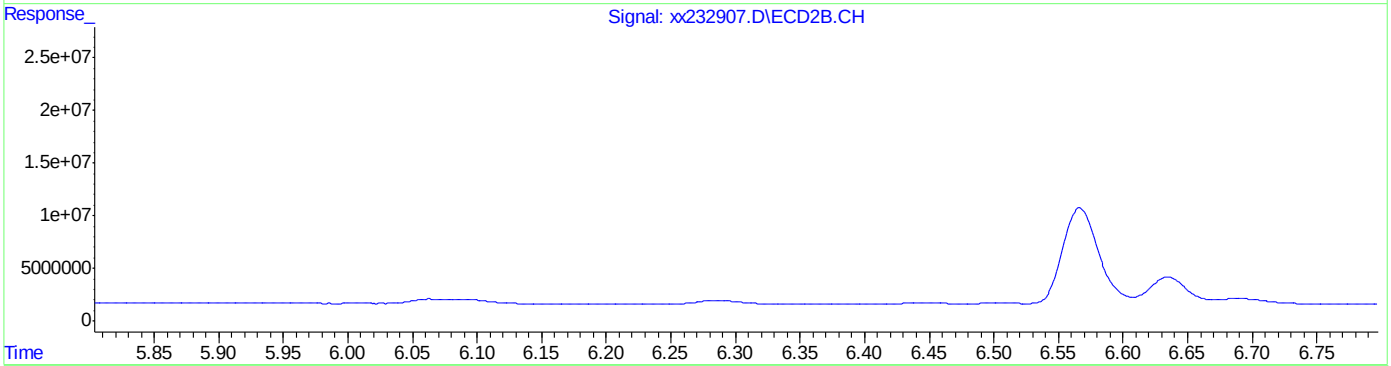
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:39:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(24) AR1254-A
6.101min 894.535PPB m
response 402637172

(24) AR1254-A #2
7.582min 997.457PPB
response 368249354

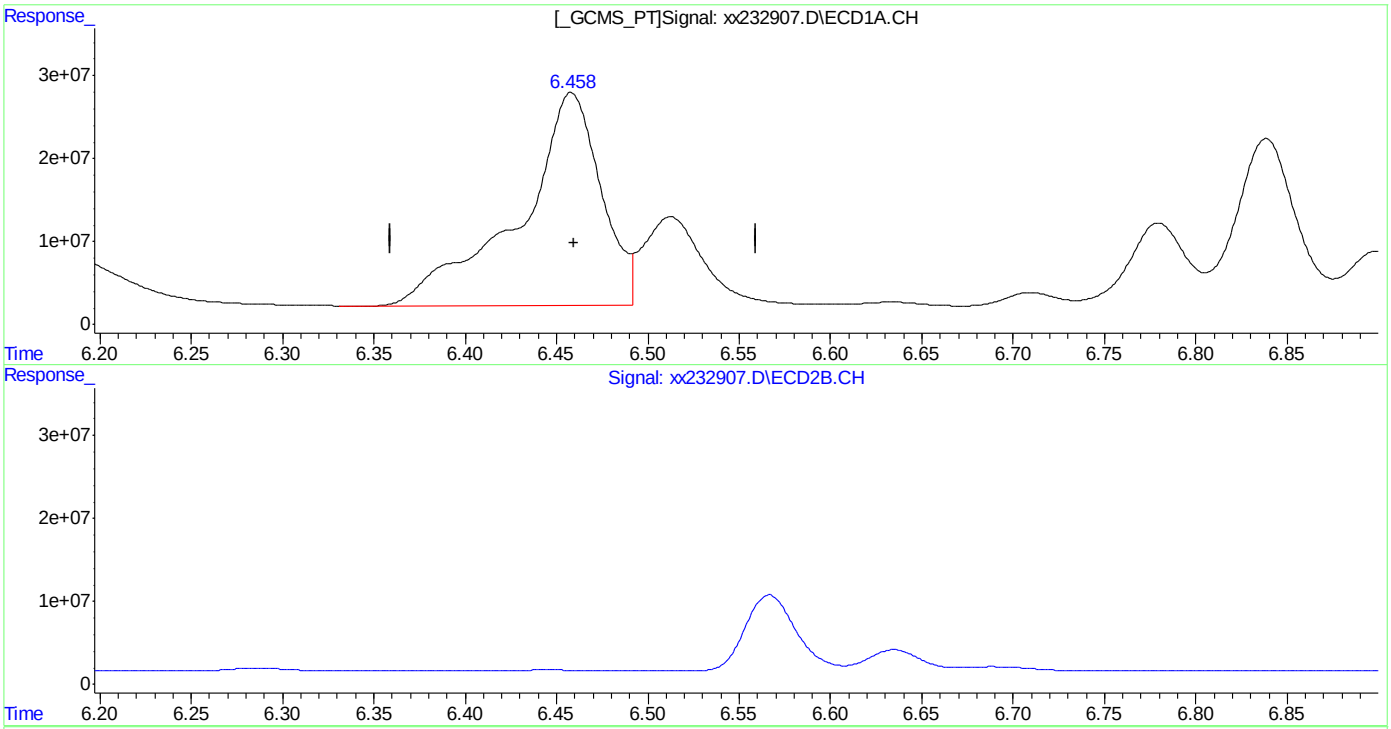
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:39:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(25) AR1254-B
6.458min 1356.968PPB
response 798597479

(25) AR1254-B #2
7.932min 515.626PPB
response 213290280

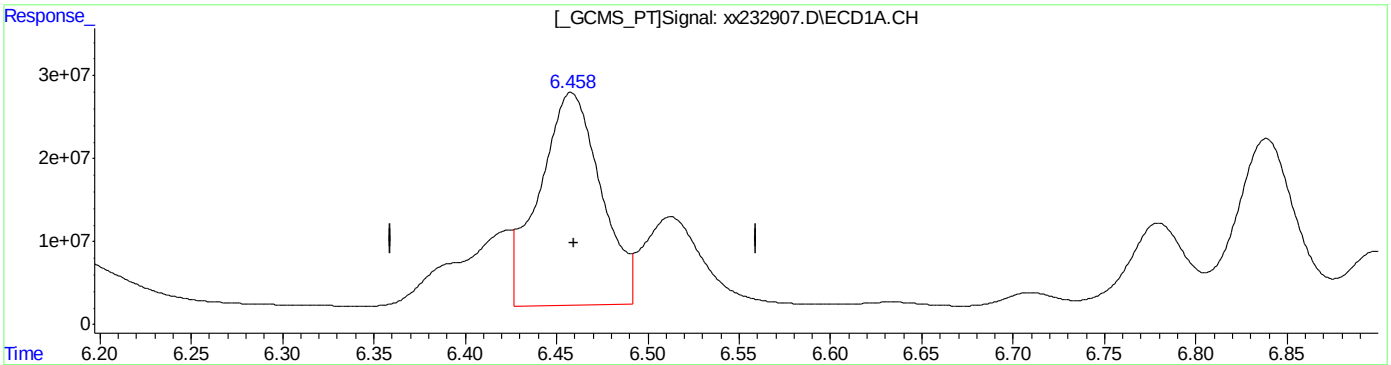
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 10:41:18 2018

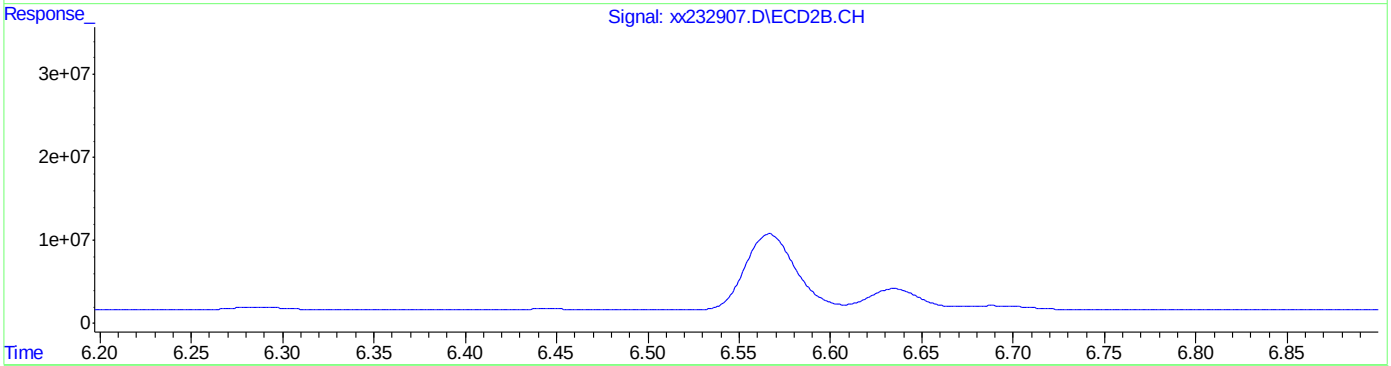
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:39:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(25) AR1254-B
6.458min 1017.905PPB m
response 599053736

(25) AR1254-B #2
7.932min 515.626PPB
response 213290280

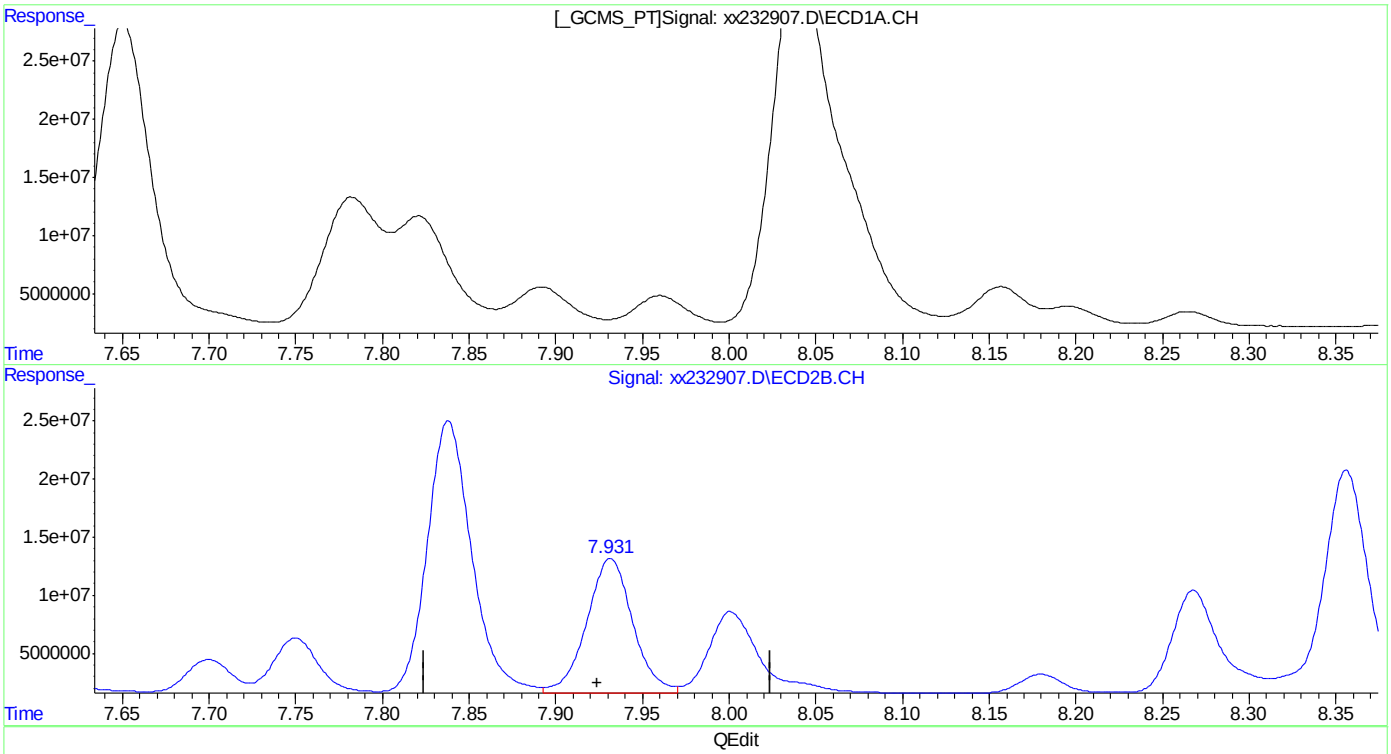
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 10:41:50 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:39:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(25) AR1254-B
6.458min 1017.905PPB m
response 599053736

(25) AR1254-B #2
7.932min 515.626PPB
response 213290280

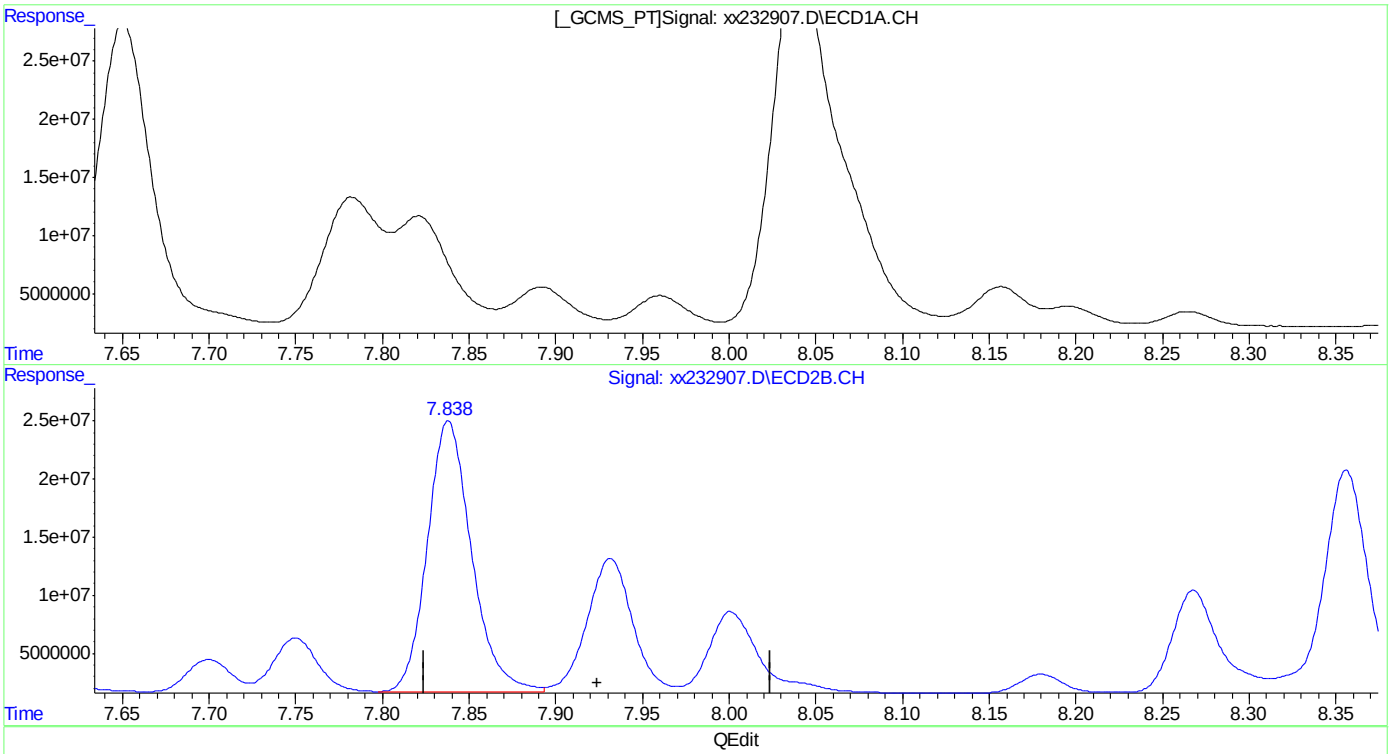
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 10:42:05 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:39:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(25) AR1254-B
6.458min 1017.905PPB m
response 599053736

(25) AR1254-B #2
7.838min 1005.384PPB m
response 415879900

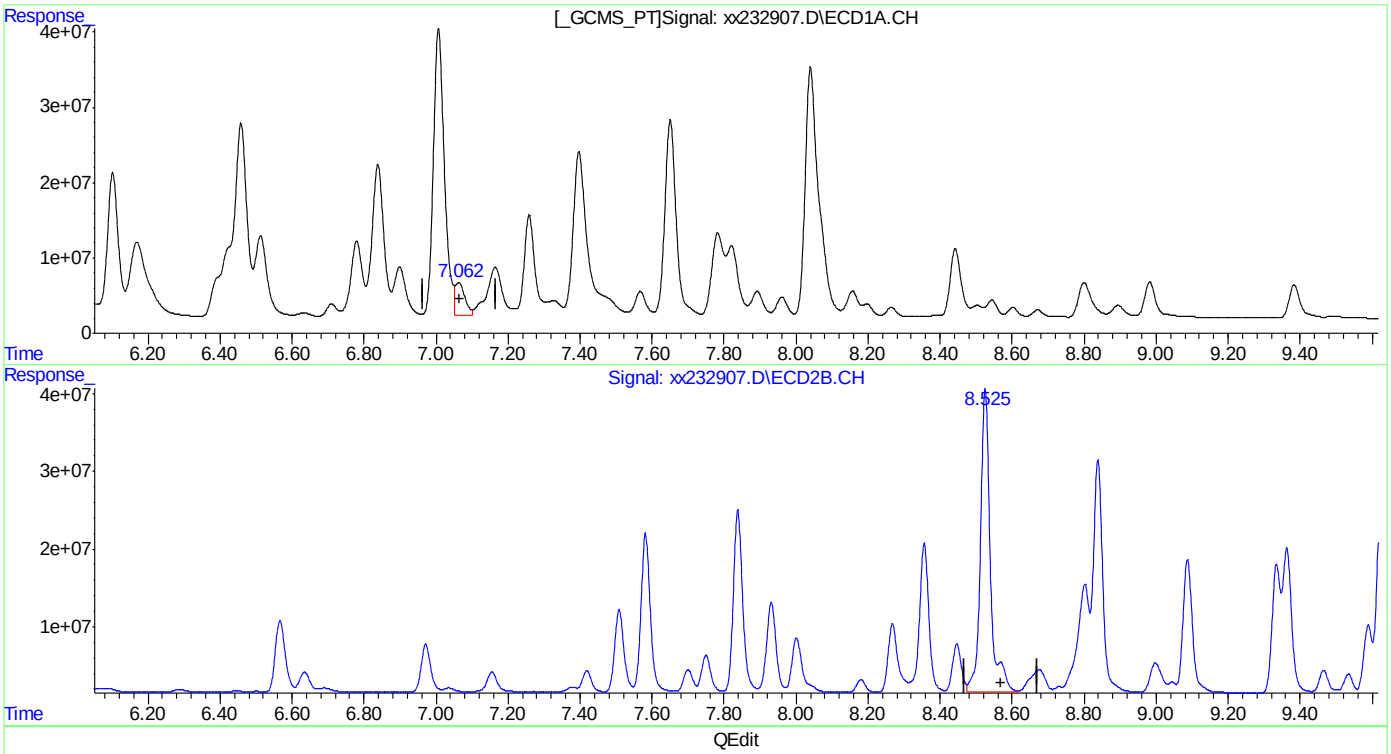
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 10:42:10 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:39:56 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(27) AR1254-D
7.063min 99.826PPB
response 82440219

(27) AR1254-D #2
8.525min 995.369PPB
response 752143046

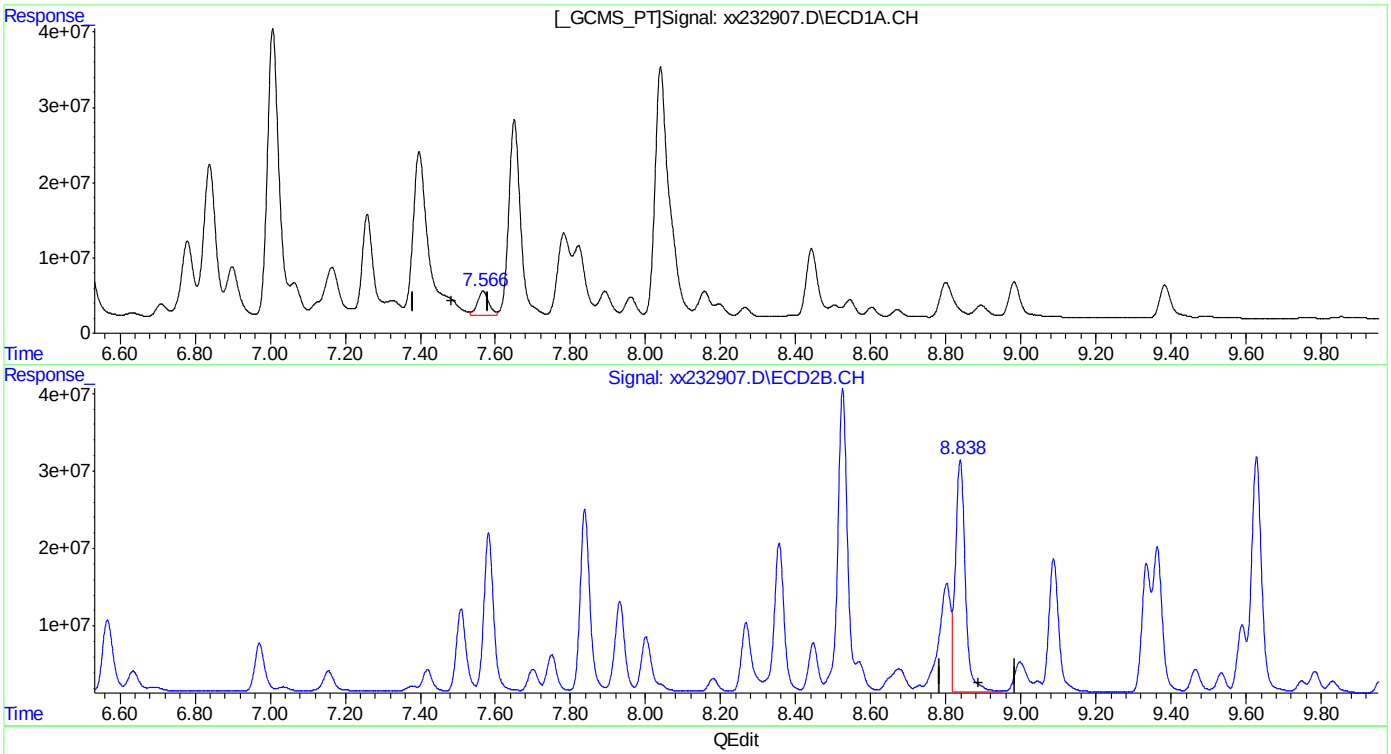
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 10:42:23 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:42:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(28) AR1254-E
7.567min 96.503PPB
response 64284979

(28) AR1254-E #2
8.838min 992.484PPB
response 550539514

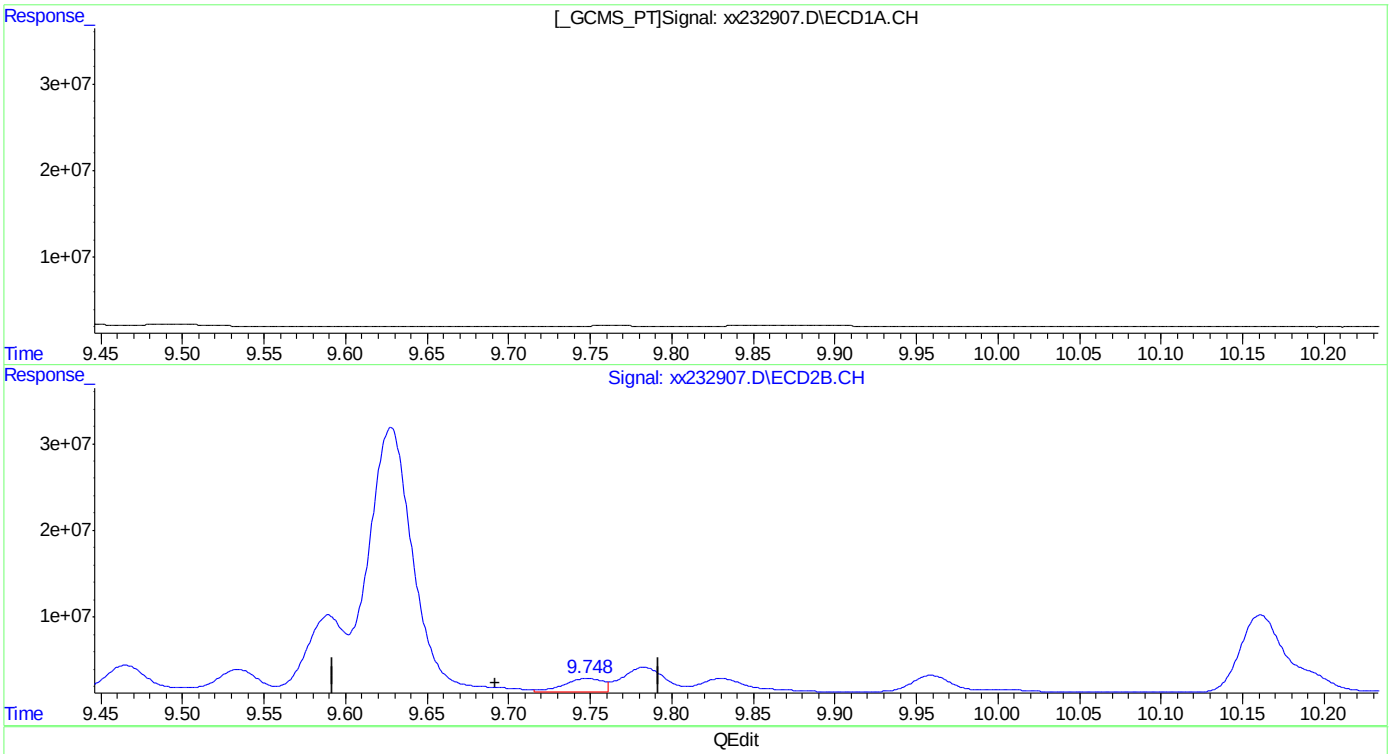
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 10:45:16 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:42:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(30) AR1254-G
8.040min 946.143PPB
response 830057320

(30) AR1254-G #2
9.748min 36.972PPB
response 24938052

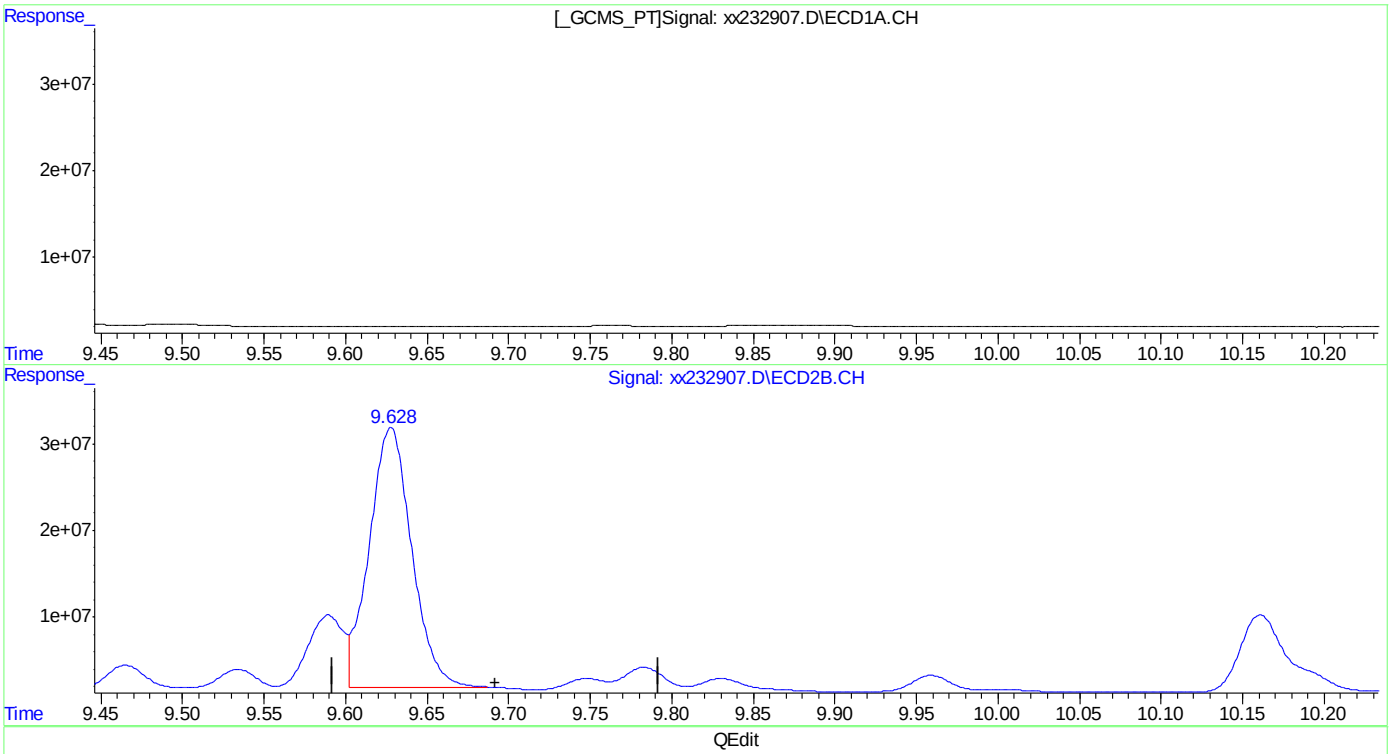
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 10:45:48 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:42:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(30) AR1254-G
8.040min 946.143PPB
response 830057320

(30) AR1254-G #2
9.628min 805.255PPB m
response 543151364

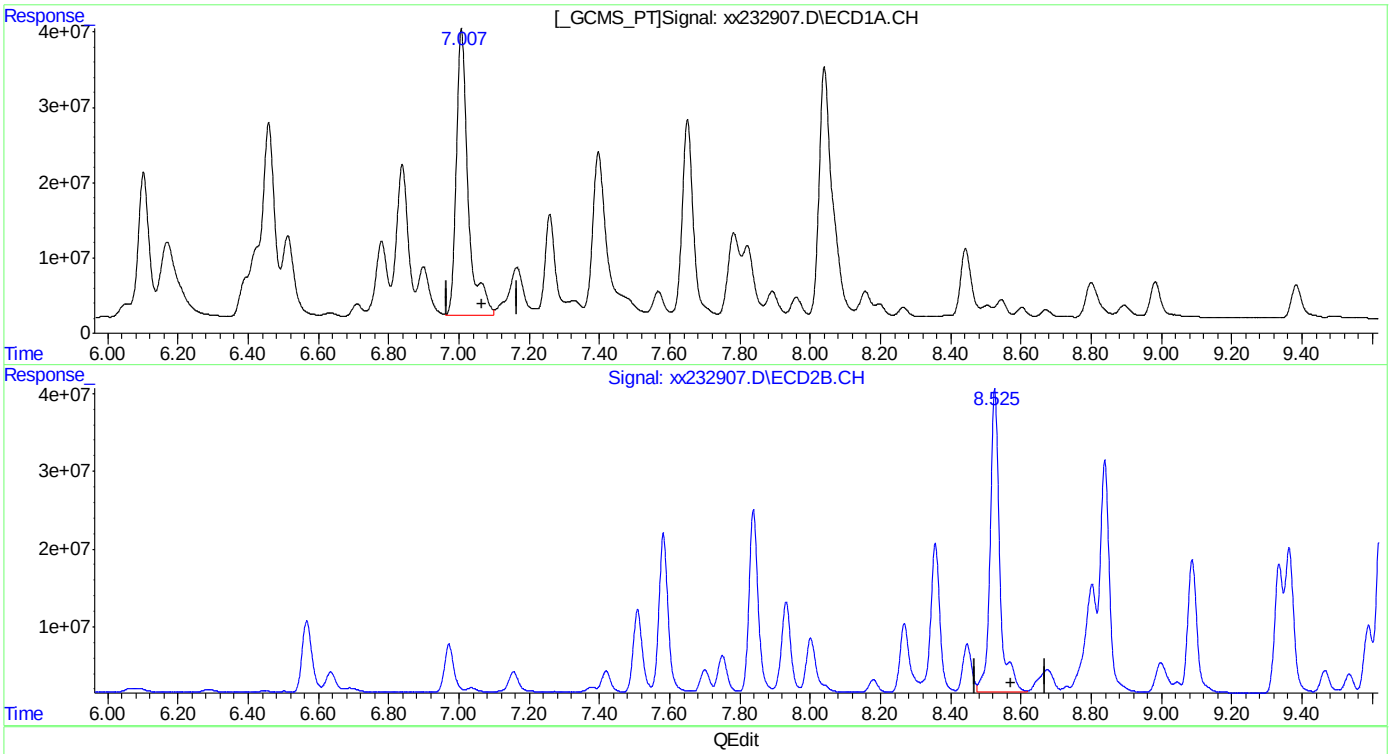
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:46:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(27) AR1254-D
7.007min 1080.840PPB m
response 892598751

(27) AR1254-D #2
8.525min 995.369PPB
response 752143046

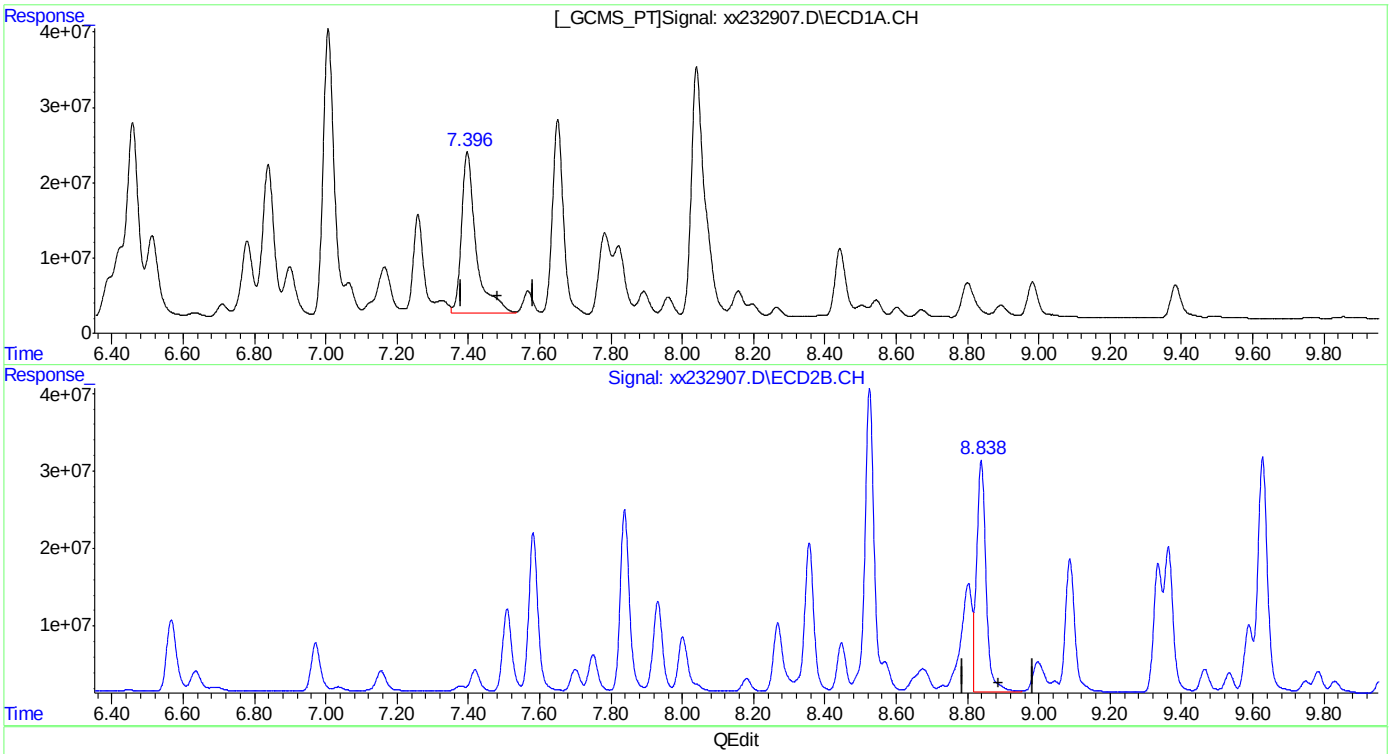
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:41:05 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:46:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(28) AR1254-E
7.396min 906.975PPB m
response 604175749

(28) AR1254-E #2
8.838min 992.484PPB
response 550539514

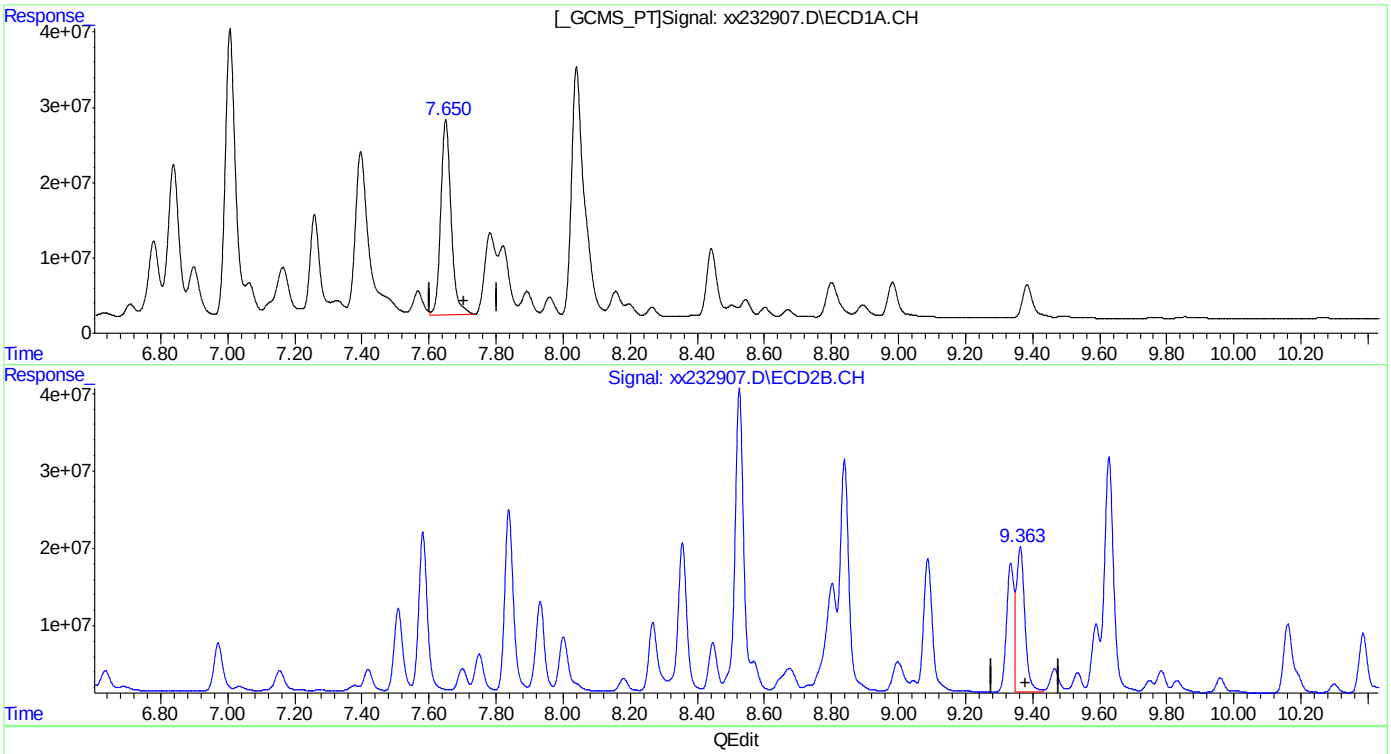
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:41:31 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:46:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(29) AR1254-F
7.651min 957.095PPB
response 558413998

(29) AR1254-F #2
9.363min 557.096PPB
response 328915743

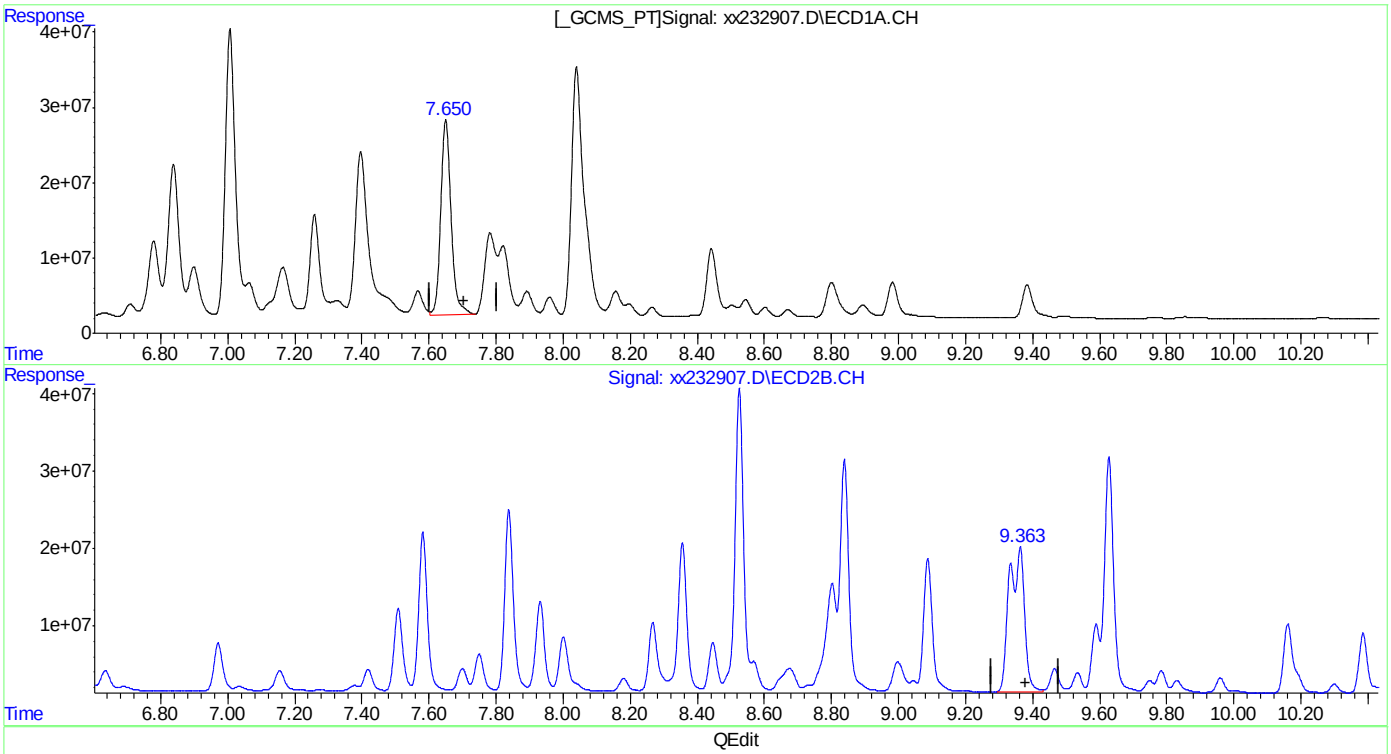
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:41:39 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:46:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(29) AR1254-F
7.651min 957.095PPB
response 558413998

(29) AR1254-F #2
9.363min 984.986PPB m
response 581546082

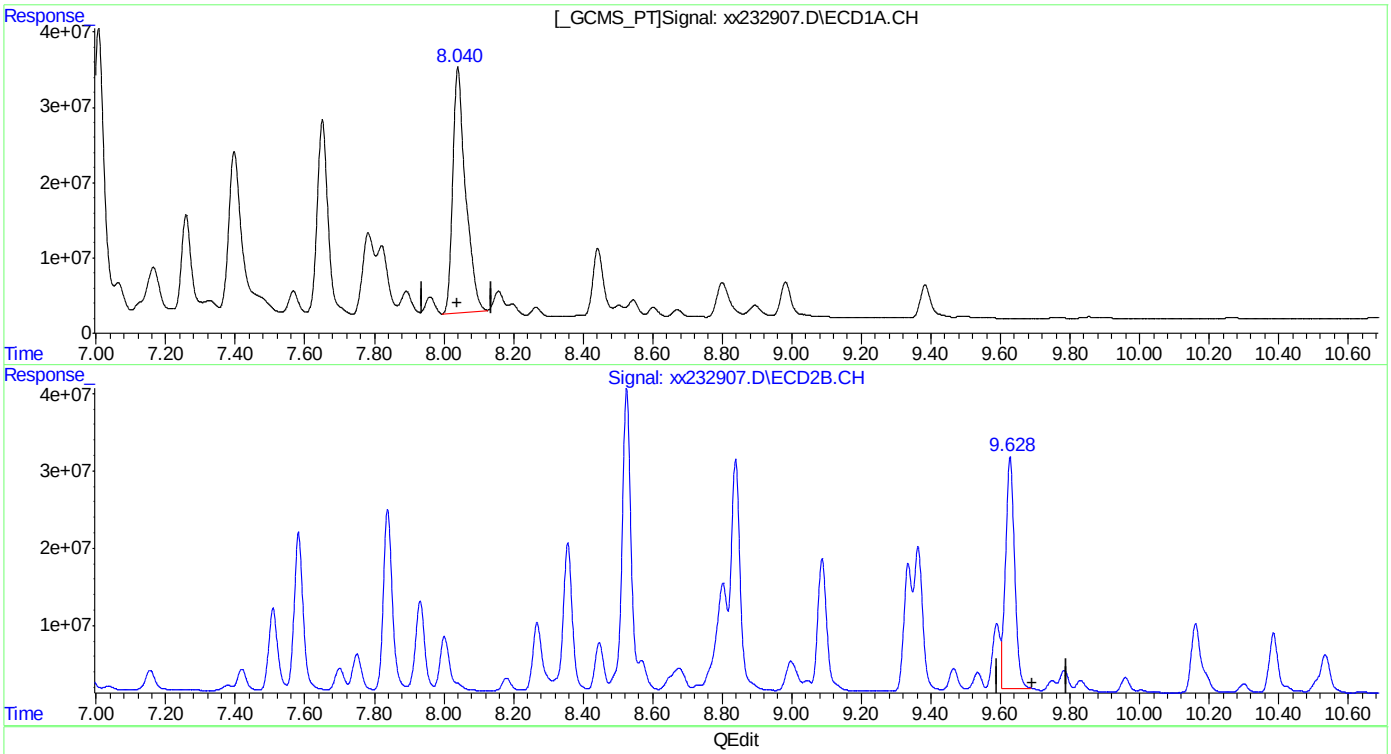
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:41:43 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:46:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(30) AR1254-G
8.040min 946.143PPB
response 830057320

(30) AR1254-G #2
9.628min 805.255PPB m
response 543151364

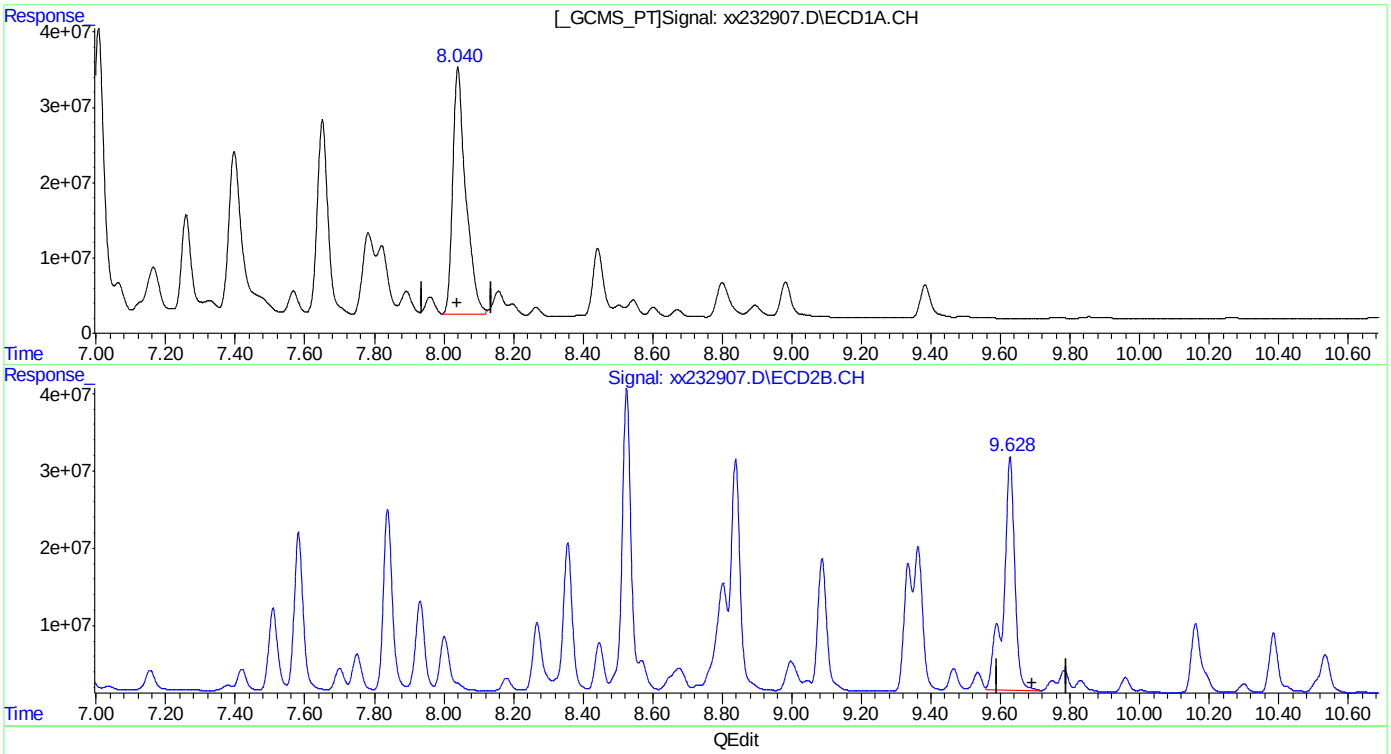
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:41:45 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:18 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 10:46:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 10:39:00 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(30) AR1254-G
8.040min 968.156PPB m
response 849369155

(30) AR1254-G #2
9.628min 1025.398PPB m
response 691639786

(+) = Expected Retention Time
PCB6423.M Tue Jul 31 11:41:55 2018 Page: 1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 08/01/18 10:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:37 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:54:49 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:53:40 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.414	4.143	542.8E6	437.6E6	42.192	42.126
	Spiked Amount 40.000			Recovery	= 105.48%	105.32%	
51) S	Decachlor...	10.942	12.792	675.3E6	484.8E6	42.207	42.622
	Spiked Amount 40.000			Recovery	= 105.52%	106.56%	
	Target Compounds						
31)	AR1262-A	7.646	9.087	669.9E6	515.1E6	1009.846	1000.000
32)	AR1262-B	8.197	9.747	955.7E6	830.6E6	1049.703	1032.424
33)	AR1262-C	8.542	10.191	826.6E6	676.8E6	1007.264	1000.000
34)	AR1262-D	8.980	10.533	1954.4E6	1700.5E6	1006.521	1000.000
35)	AR1262-E	9.429	11.064	2336.3E6	1862.2E6	1002.941m	993.523m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

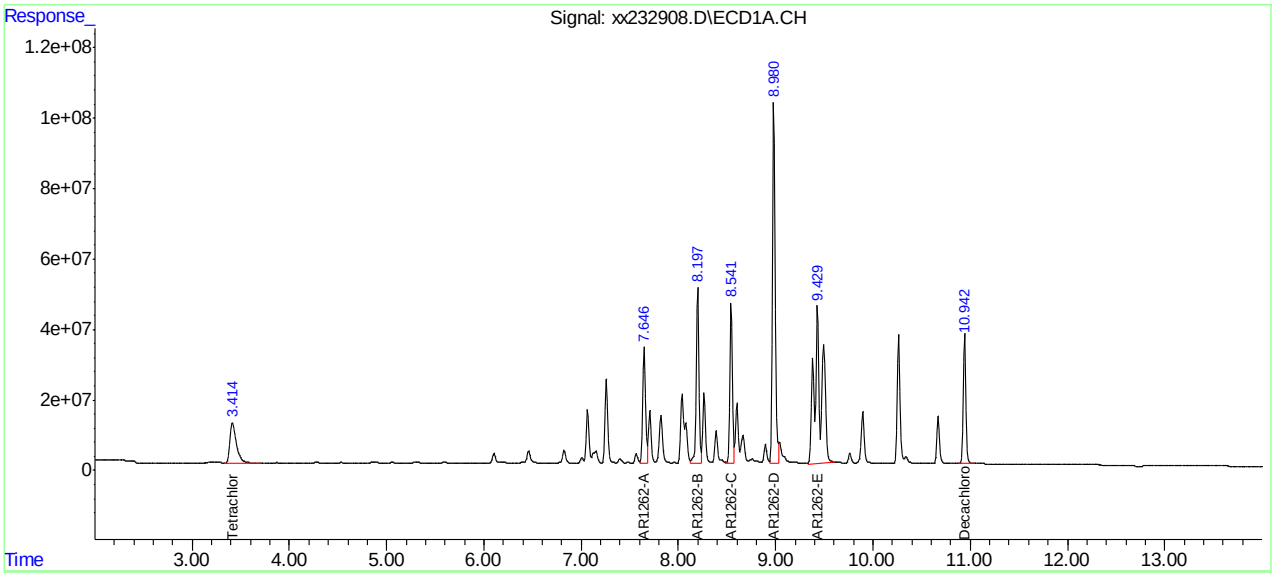
11.4.12
11

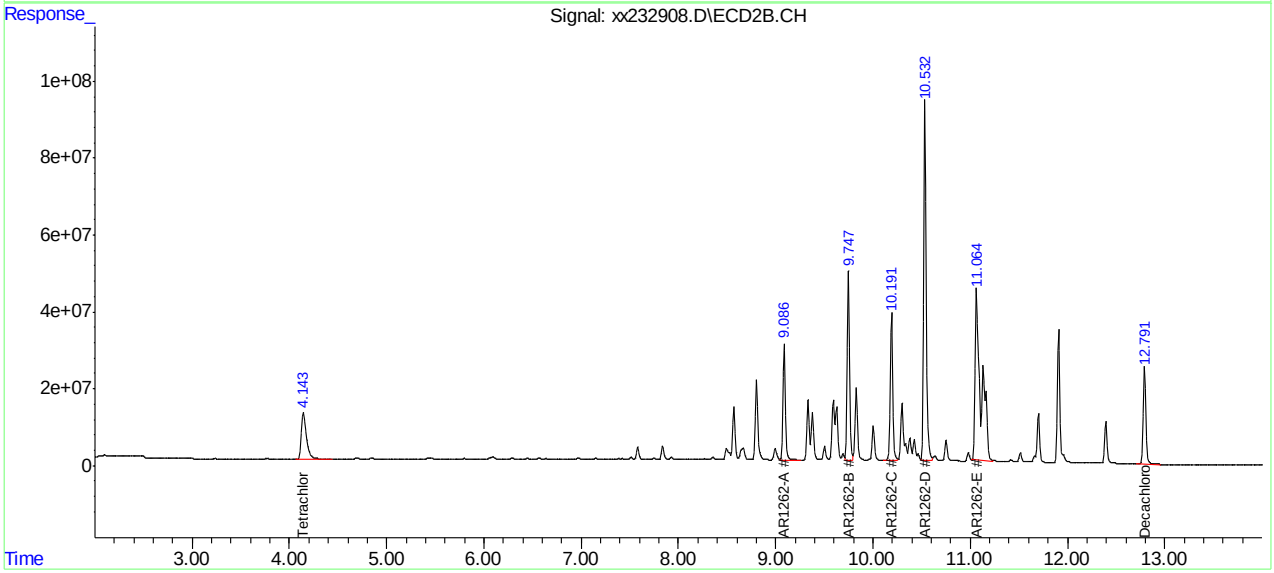
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:37 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:54:49 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:53:40 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6423-IC6423	**Method:**	SW846 8082A
Lab FileID:	XX232908.D	**Analyst approved:**	08/01/18 08:29 Tianwei Ruan
Injection Time:	07/28/18 04:37	**Supervisor approved:**	08/01/18 10:03 Gwendolyn Burns

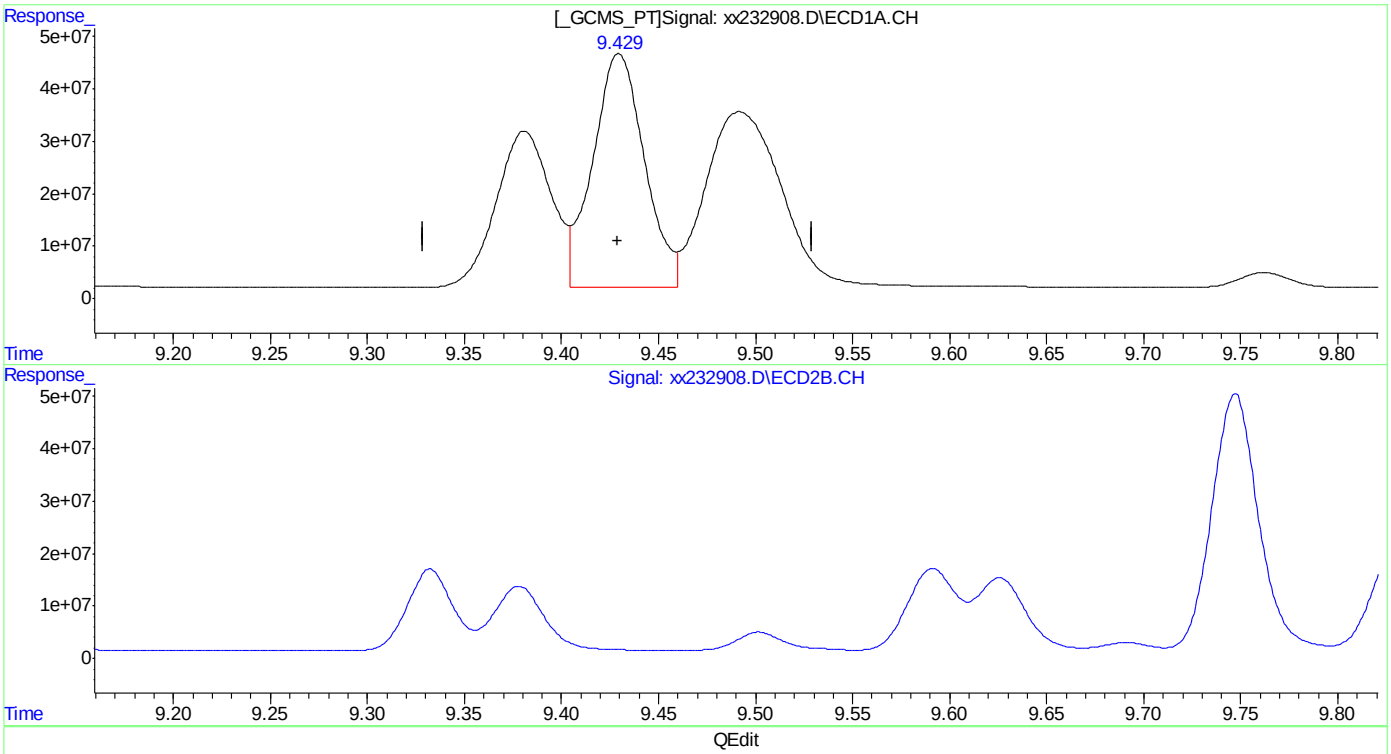
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ar1262-E		1	9.43	Split peak
Ar1262-E		2	11.06	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:37 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:53:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:53:40 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(35) AR1262-E
9.430min 355.792PPB
response 828794522

(35) AR1262-E #2
11.064min 607.975PPB
response 1139543103

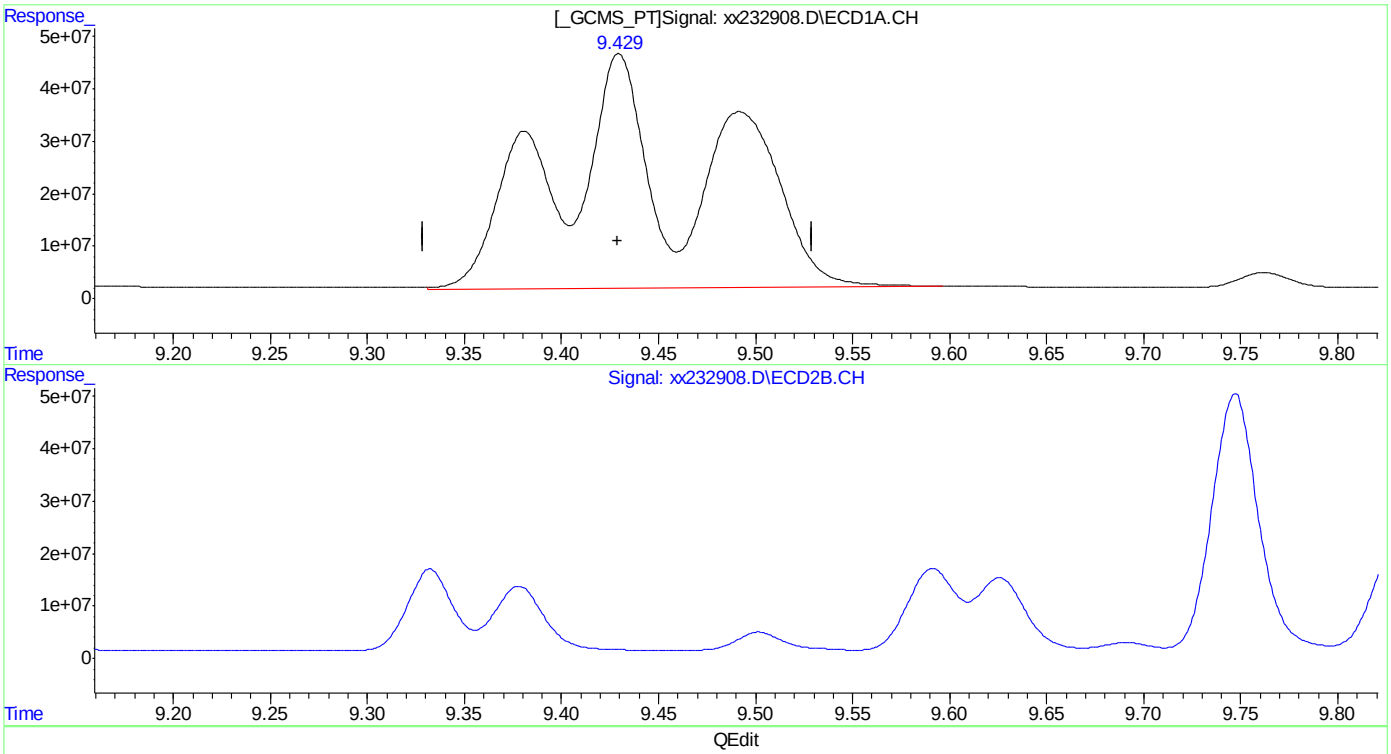
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:37 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:53:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:53:40 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(35) AR1262-E
9.429min 1002.941PPB m
response 2336290324

(35) AR1262-E #2
11.064min 607.975PPB
response 1139543103

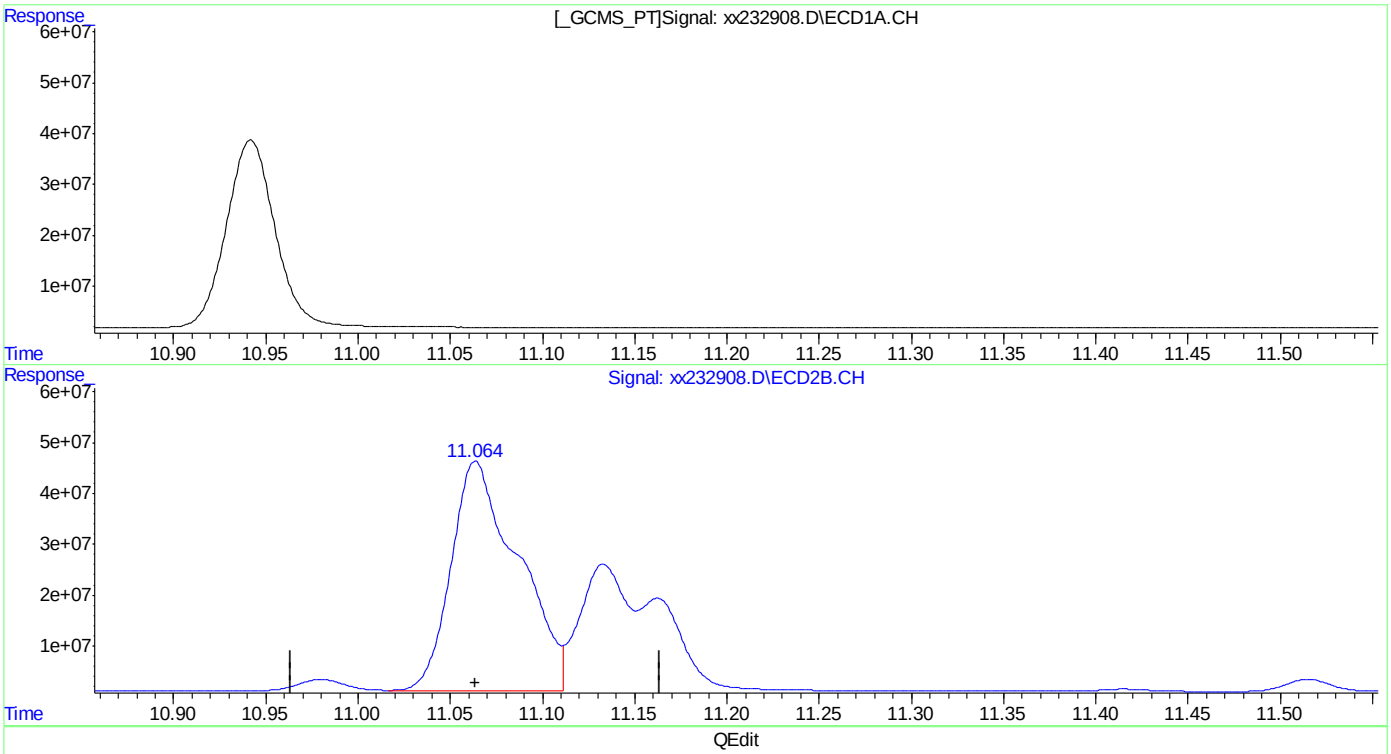
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:37 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:53:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:53:40 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(35) AR1262-E
9.429min 1002.941PPB m
response 2336290324

(35) AR1262-E #2
11.064min 607.975PPB
response 1139543103

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 08/01/18 10:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232909.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:55 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:56:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:55:05 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.413	4.143	561.7E6	454.1E6	43.661	43.712
	Spiked Amount 40.000			Recovery	=	109.15%	109.28%
51) S	Decachlor...	10.941	12.791	1983.4E6	1416.9E6	123.961	124.566
	Spiked Amount 40.000			Recovery	=	309.90%	311.42%
	Target Compounds						
36)	AR1268-A	9.430f	11.063	2319.2E6	2058.9E6	3667.976m	4014.536m
37)	AR1268-B	9.486f	11.132	2457.5E6	1902.2E6	3787.238	3831.586
38)	AR1268-C	9.762f	11.514	2003.5E6	1662.2E6	3626.035m	3879.618
39)	AR1268-D	10.263f	11.907	827.5E6	648.4E6	3762.510	3554.853m
40)	AR1268-E	10.669f	12.393	6913.3E6	4940.7E6	3848.187	4021.449

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

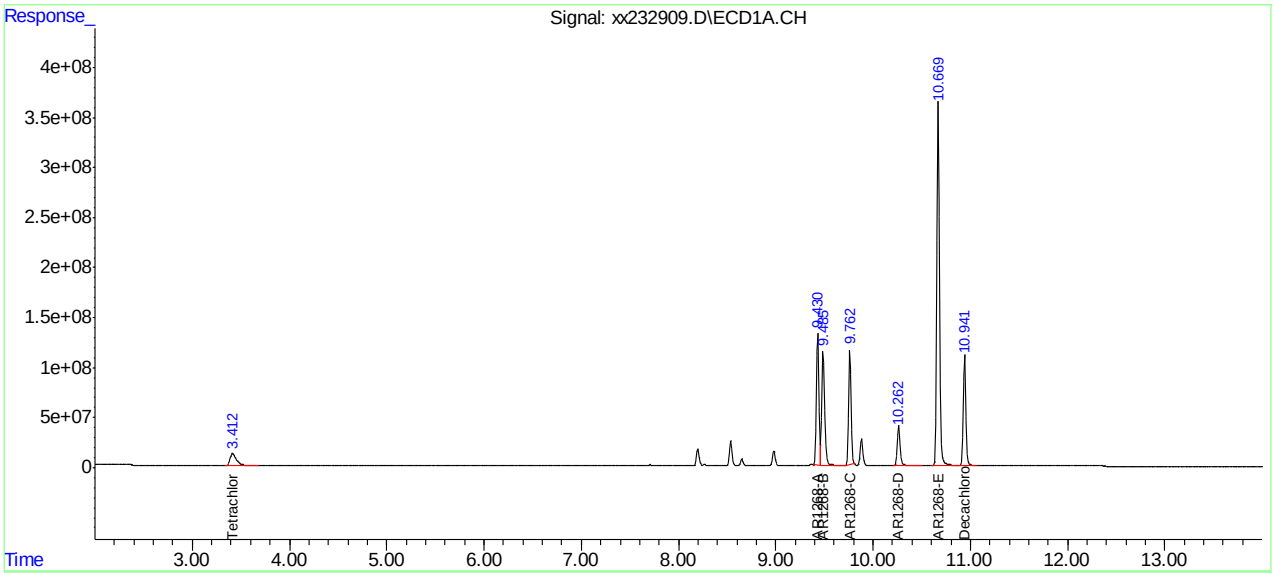
11.4.13 11

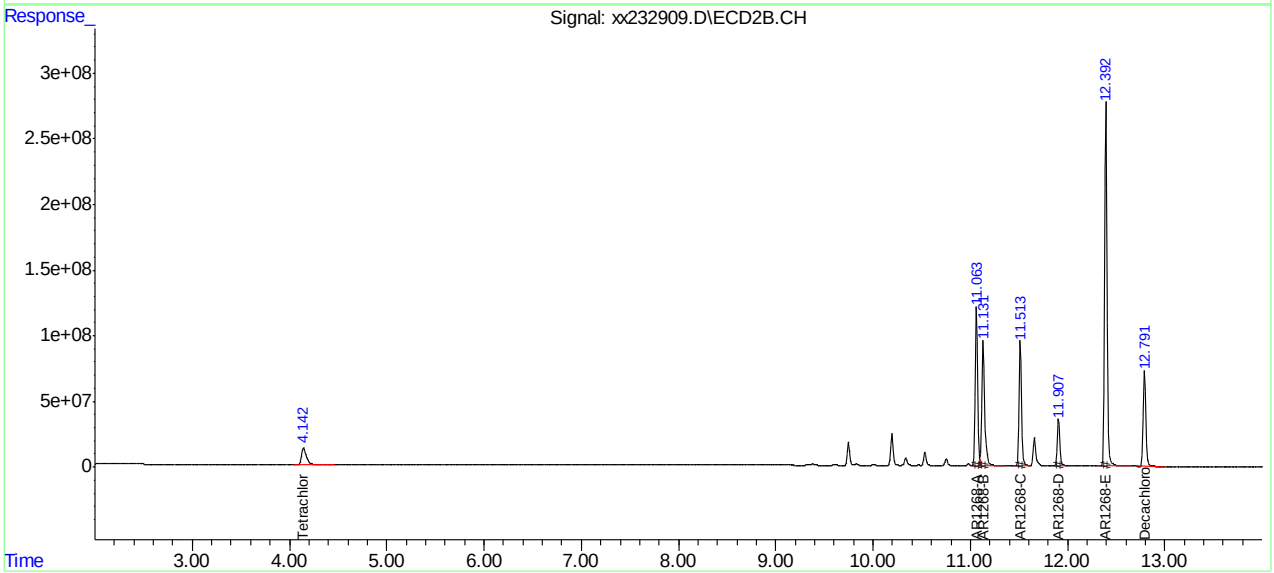
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232909.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:55 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:56:45 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:55:05 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6423-IC6423	**Method:**	SW846 8082A
Lab FileID:	XX232909.D	**Analyst approved:**	08/01/18 08:29 Tianwei Ruan
Injection Time:	07/28/18 04:55	**Supervisor approved:**	08/01/18 10:03 Gwendolyn Burns

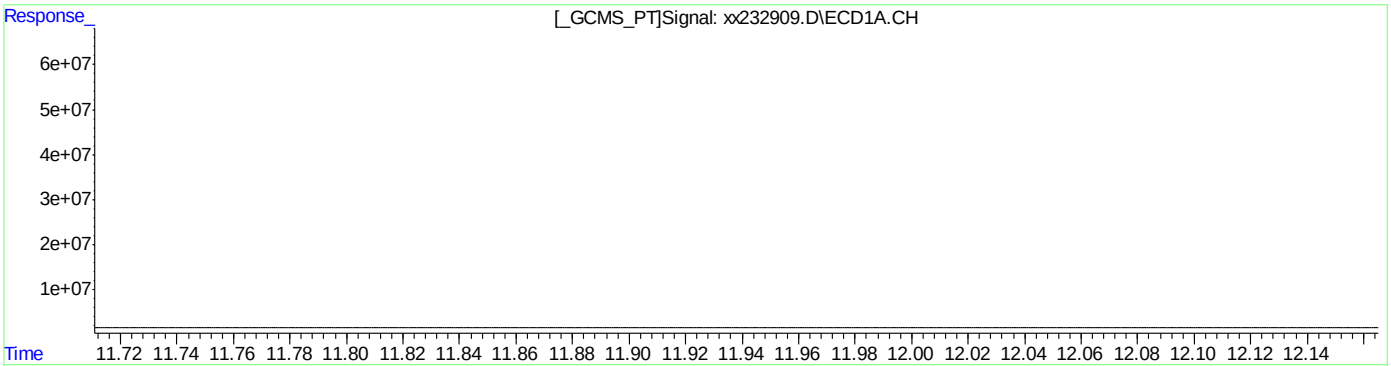
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1268-A		1	9.43	Split peak
Ar1268-C		1	9.76	Split peak
AR1268-A		2	11.06	Split peak
Ar1268-D		2	11.91	Split peak

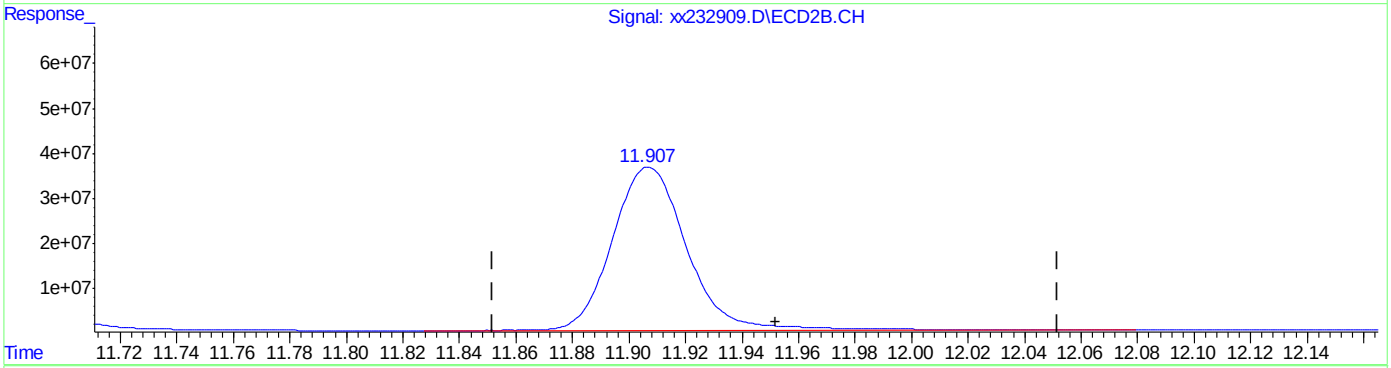
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232909.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:55 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:55:18 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:55:05 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(39) AR1268-D
10.263min 3762.510PPB
response 827451436

(39) AR1268-D #2
11.907min 3653.826PPB
response 666501638

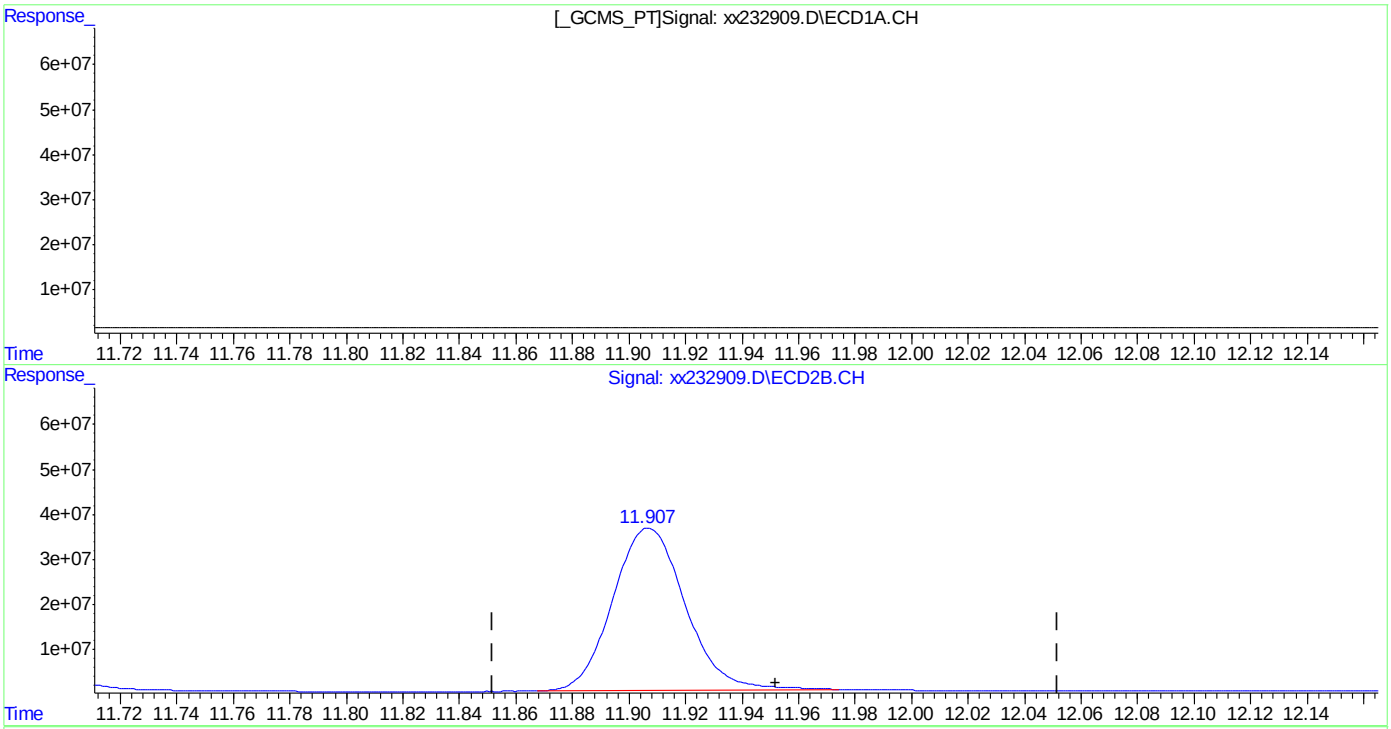
(+) = Expected Retention Time
PCB6423.M Sat Jul 28 17:56:42 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232909.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 4:55 am
Operator : carolb
Sample : ic6423-1000
Misc : op13739,GXX6422,1000,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 28 17:55:18 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Sat Jul 28 17:55:05 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(39) AR1268-D
10.263min 3762.510PPB
response 827451436

(39) AR1268-D #2
11.907min 3554.853PPB m
response 648447754

(+) = Expected Retention Time

Manual Integrations APPROVED
(compounds with "m" flag)
Carol Boykin
07/31/18 17:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 5:32 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:50:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.413	4.144	602.1E6	459.3E6	47.292	44.590
	Spiked Amount 40.000			Recovery	=	118.23%	111.48%
51) S	Decachlor...	10.943	12.795	689.9E6	497.6E6	43.589	44.295
	Spiked Amount 40.000			Recovery	=	108.97%	110.74%
	Target Compounds						
2)	AR1221-A	2.830	3.521	69181404	66656520	916.895	1062.681
3)	AR1221-B	3.608	4.552	117.8E6	103.7E6	893.482	965.480
4)	AR1221-C	3.834	4.845	366.8E6	253.4E6	910.273	961.345
5)	AR1221-D	4.275	5.418	43907594	41643806	892.154m	864.211
6)	AR1221-E	4.530	5.510	37909549	33053241	848.866m	1043.441

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

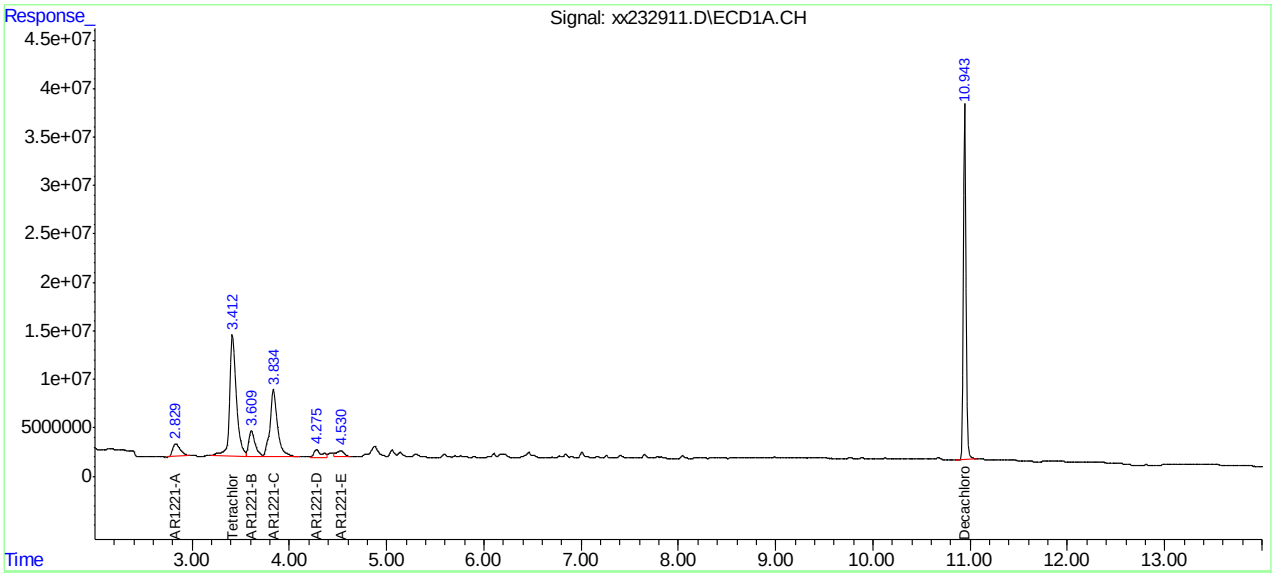
11.4.14
11

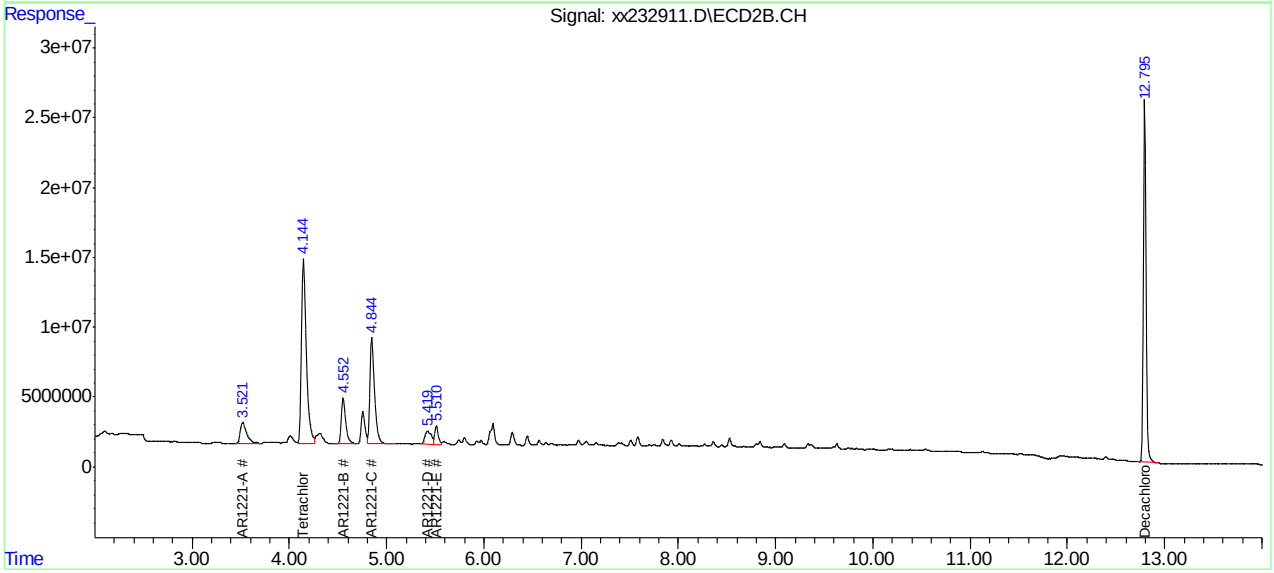
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 5:32 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:50:50 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6423-ICV6423	**Method:**	SW846 8082A	
Lab FileID:	XX232911.D	**Analyst approved:**	07/31/18 17:06	Summer Kotb
Injection Time:	07/28/18 05:32	**Supervisor approved:**	07/31/18 17:30	Carol Boykin

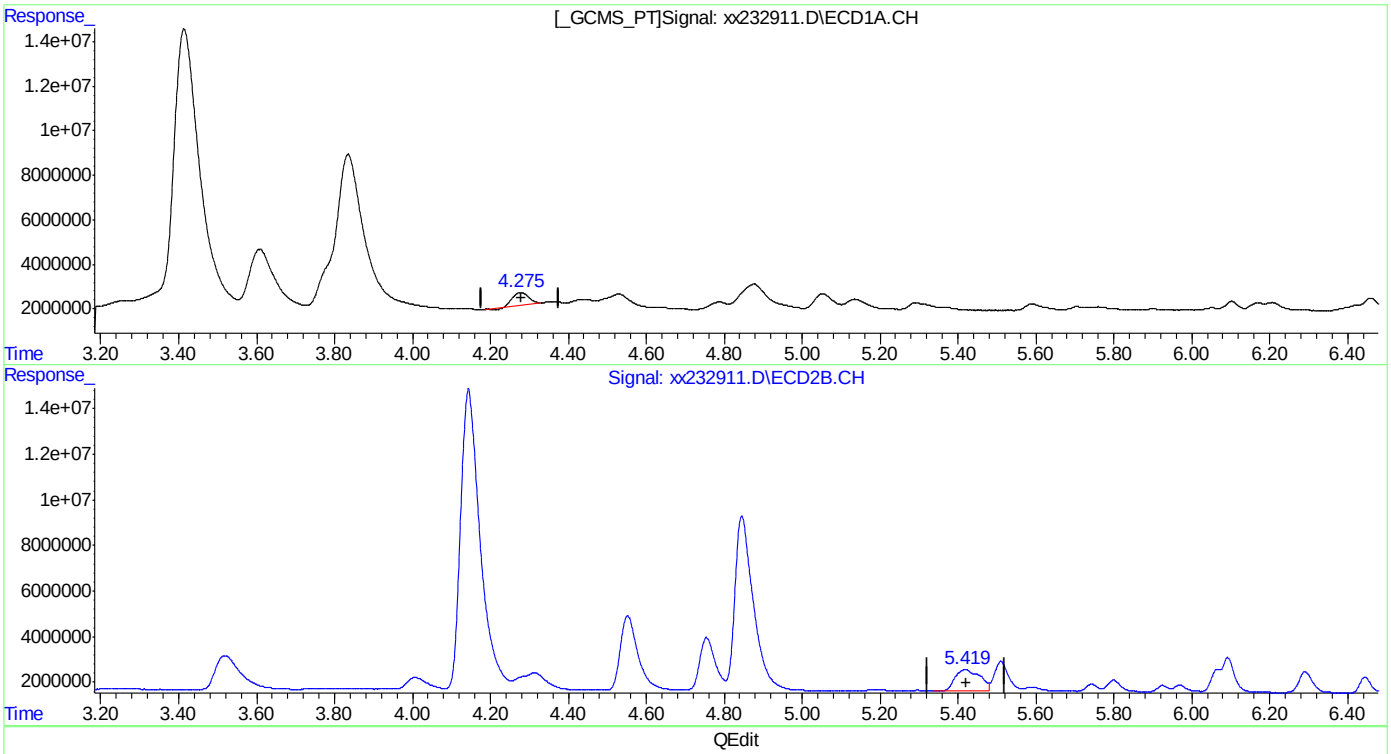
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1221-D		1	4.27	Split peak
AR1221-E		1	4.53	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 5:32 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:50:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(5) AR1221-D
4.277min 292.396PPB
response 14390348

(5) AR1221-D #2
5.418min 864.211PPB
response 41643806

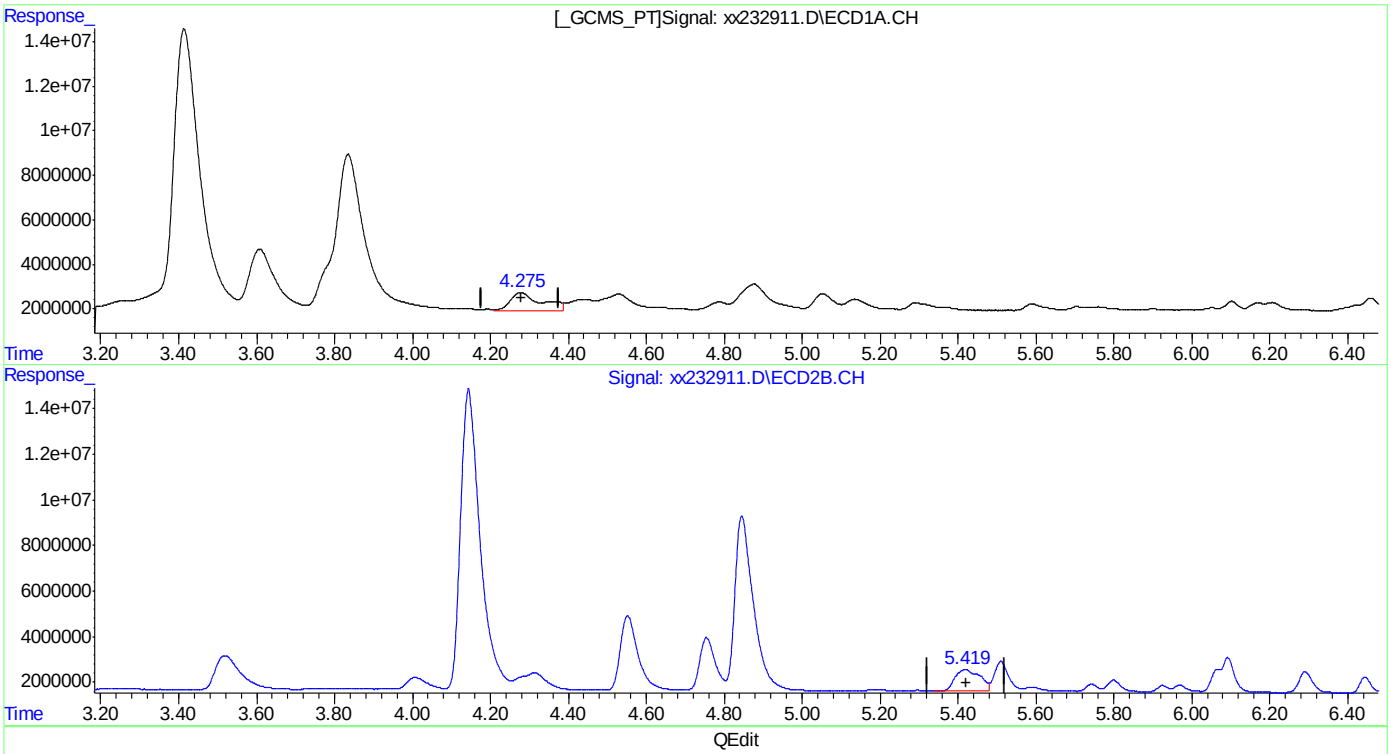
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 5:32 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:50:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(5) AR1221-D
4.275min 892.154PPB m
response 43907594

(5) AR1221-D #2
5.418min 864.211PPB
response 41643806

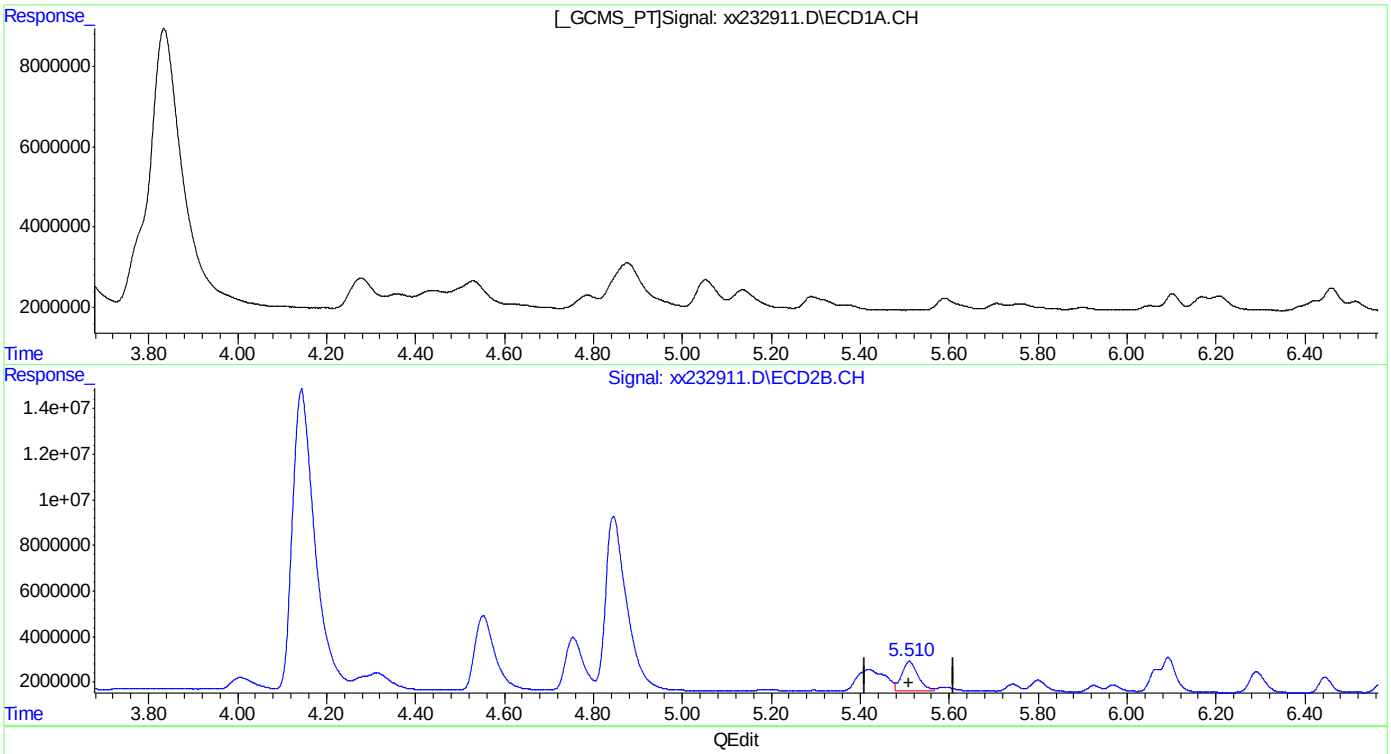
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 5:32 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:50:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(6) AR1221-E
0.000min 0.000PPB
response 0

(6) AR1221-E #2
5.510min 1043.441PPB
response 33053241

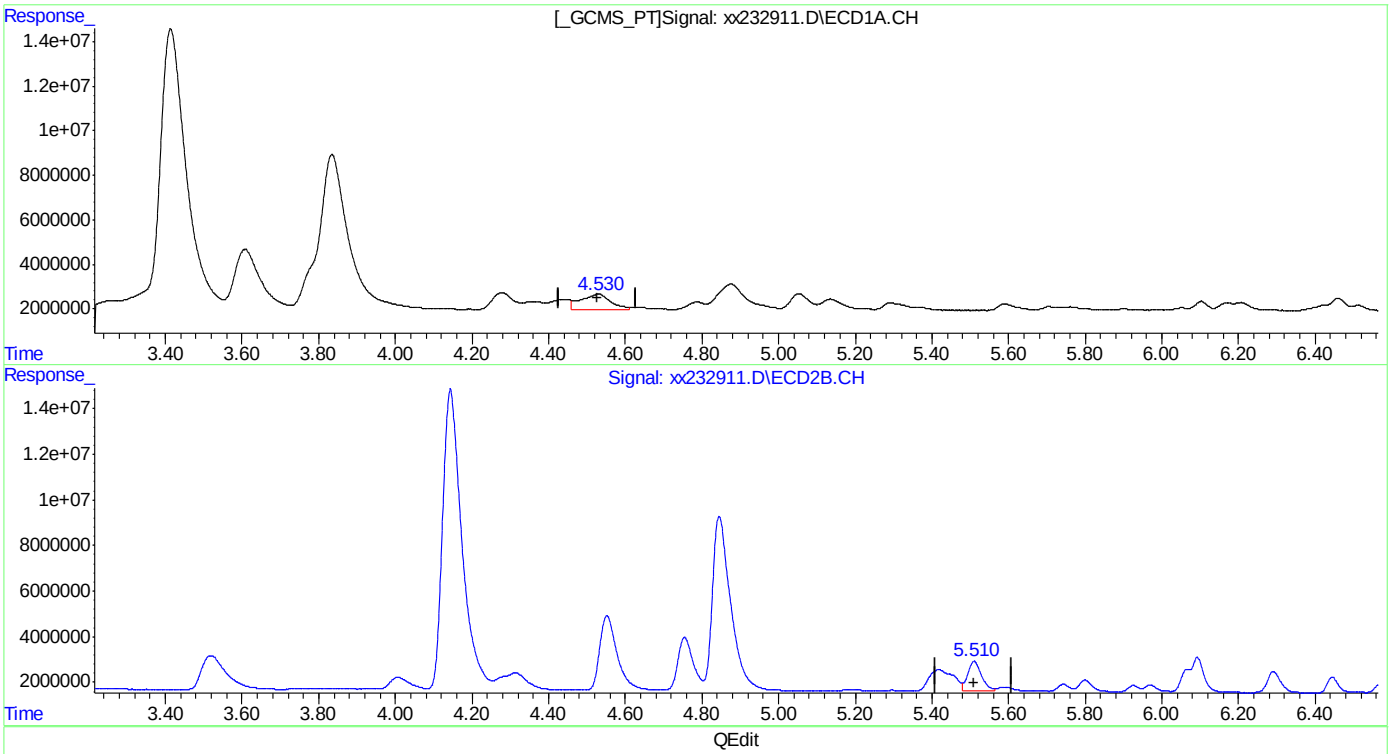
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 5:32 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:50:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(6) AR1221-E
4.530min 848.866PPB m
response 37909549

(6) AR1221-E #2
5.510min 1043.441PPB
response 33053241

(+) = Expected Retention Time
PCB6423.M Tue Jul 31 16:50:52 2018

Manual Integrations APPROVED (compounds with "m" flag)
Carol Boykin 07/31/18 17:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232912.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 5:51 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:51:16 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.415	4.144	578.0E6	456.7E6	45.395	44.337
	Spiked Amount 40.000			Recovery	=	113.49%	110.84%
51) S	Decachlor...	10.943	12.793	712.4E6	513.4E6	45.009	45.698
	Spiked Amount 40.000			Recovery	=	112.52%	114.24%
	Target Compounds						
7)	AR1232-A	3.835	4.845	294.8E6	211.2E6	989.812m	1022.702
8)	AR1232-B	4.275	5.432	197.4E6	158.1E6	1011.597	1015.131
9)	AR1232-C	4.875	6.093	428.8E6	344.4E6	1002.951	1021.297
10)	AR1232-D	5.054	6.290	162.3E6	133.3E6	1008.584	993.973
11)	AR1232-E	5.590	6.972	155.4E6	92231147	1006.077	1022.401

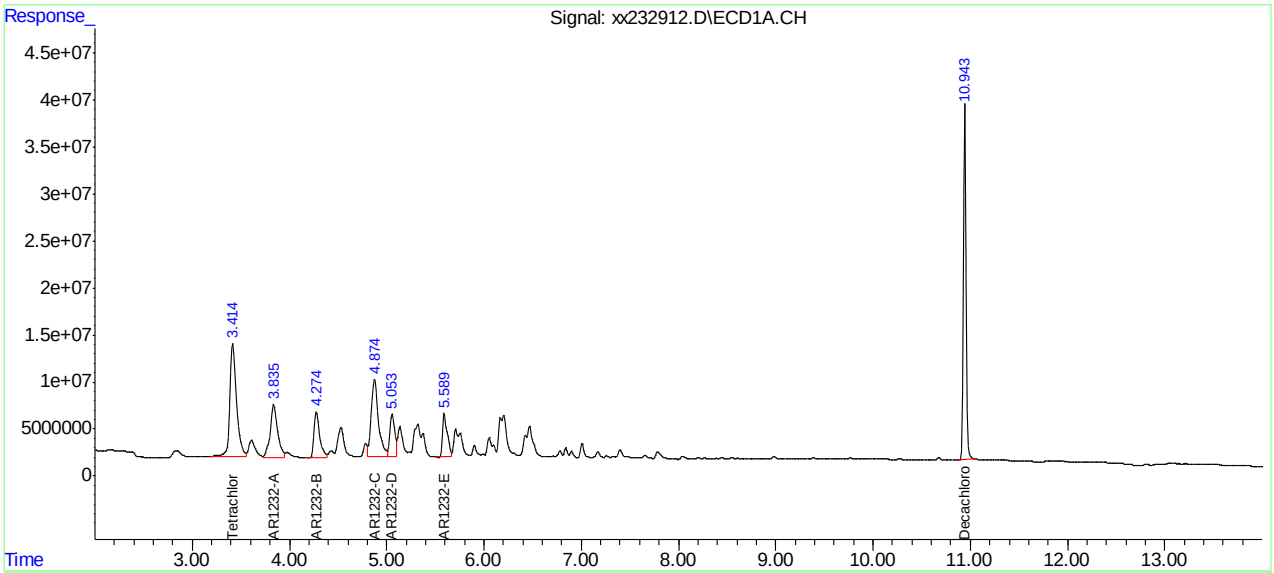
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

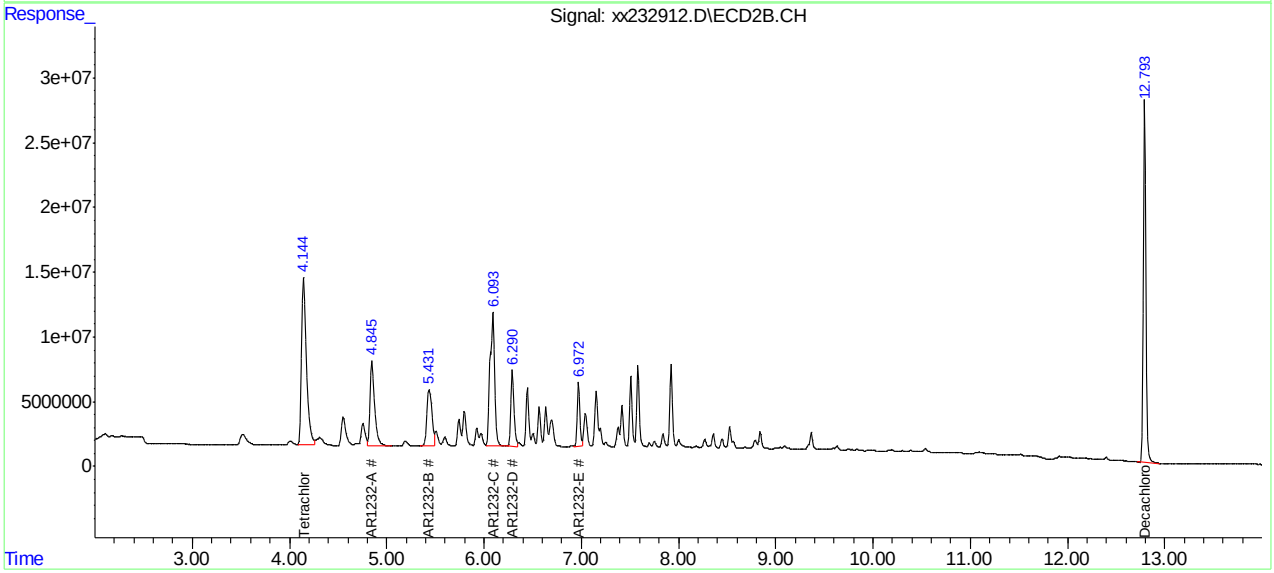
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232912.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 5:51 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:51:16 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6423-ICV6423	**Method:**	SW846 8082A	
Lab FileID:	XX232912.D	**Analyst approved:**	07/31/18 17:06	Summer Kotb
Injection Time:	07/28/18 05:51	**Supervisor approved:**	07/31/18 17:30	Carol Boykin

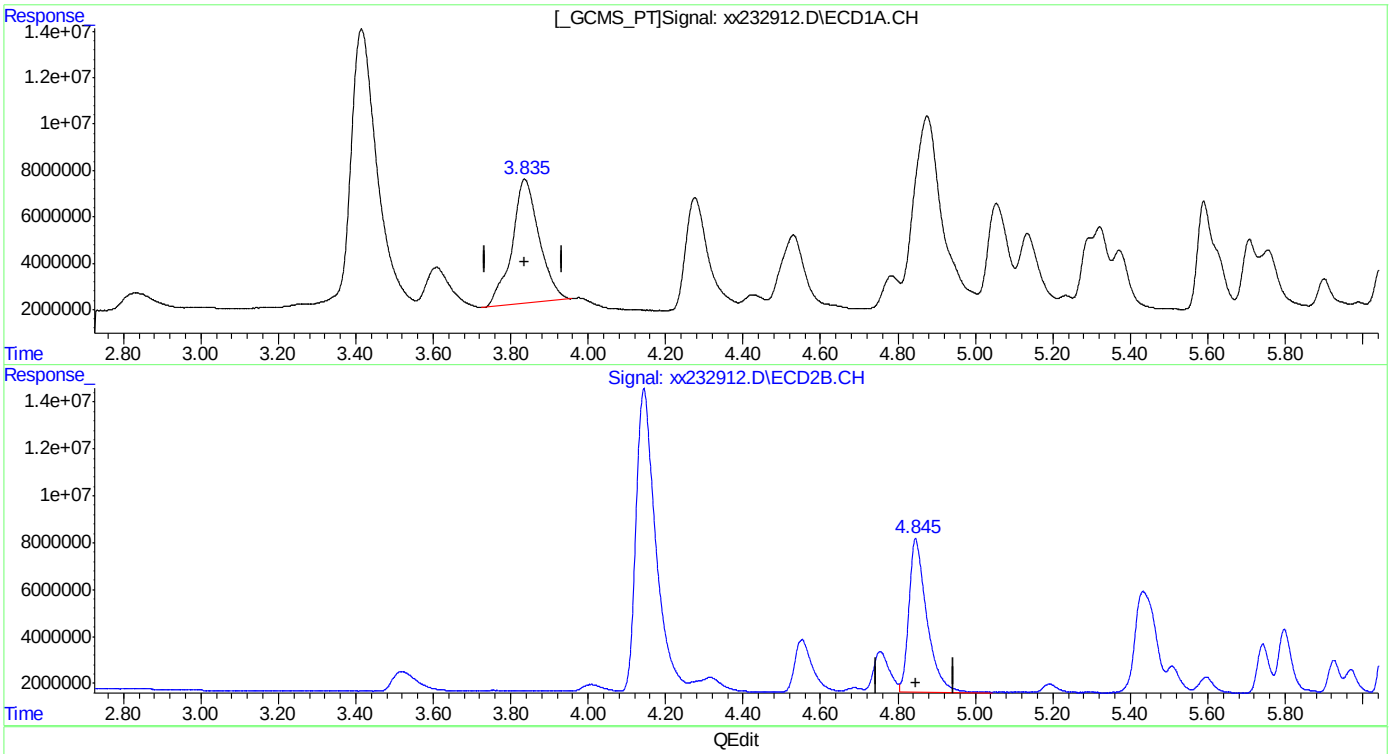
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1232-A		1	3.84	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232912.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 5:51 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:51:00 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(7) AR1232-A
3.836min 878.054PPB
response 261478092

(7) AR1232-A #2
4.845min 1022.702PPB
response 211172417

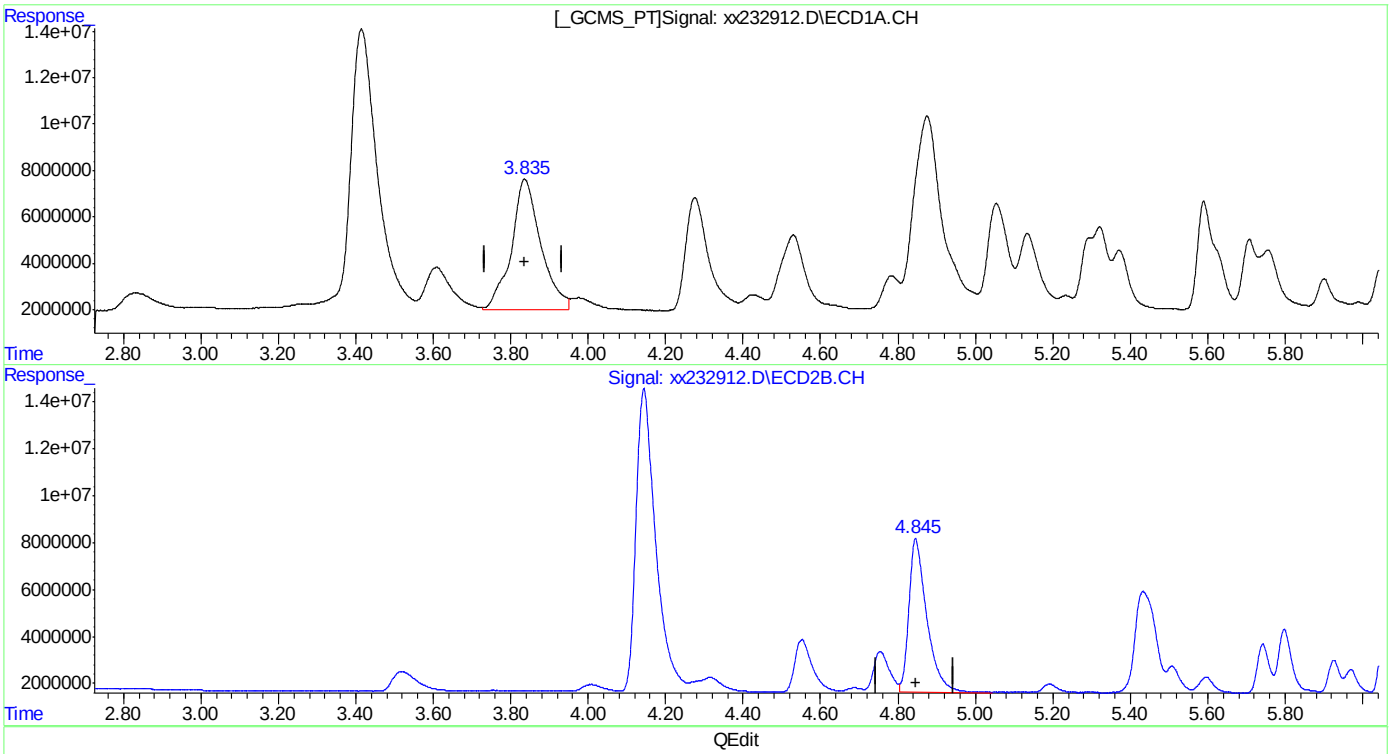
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232912.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 5:51 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:51:00 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(7) AR1232-A
3.835min 989.812PPB m
response 294758798

(7) AR1232-A #2
4.845min 1022.702PPB
response 211172417

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232913.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:09 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:57:58 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.415	4.144	537.8E6	441.6E6	42.243	42.878
	Spiked Amount 40.000			Recovery	=	105.61%	107.19%
51) S	Decachlor...	10.943	12.793	679.7E6	490.2E6	42.943	43.634
	Spiked Amount 40.000			Recovery	=	107.36%	109.09%
	Target Compounds						
12)	AR1242-A	4.276	5.431	355.1E6	295.2E6	1007.873	1019.922
13)	AR1242-B	4.875	6.093	804.5E6	639.0E6	997.480	1015.522
14)	AR1242-C	5.055	6.291	303.5E6	242.8E6	1001.195	977.081
15)	AR1242-D	5.590	6.971	323.0E6	188.0E6	1002.617	1015.914
16)	AR1242-E	6.203	7.583	301.2E6	243.7E6	998.316	1019.591

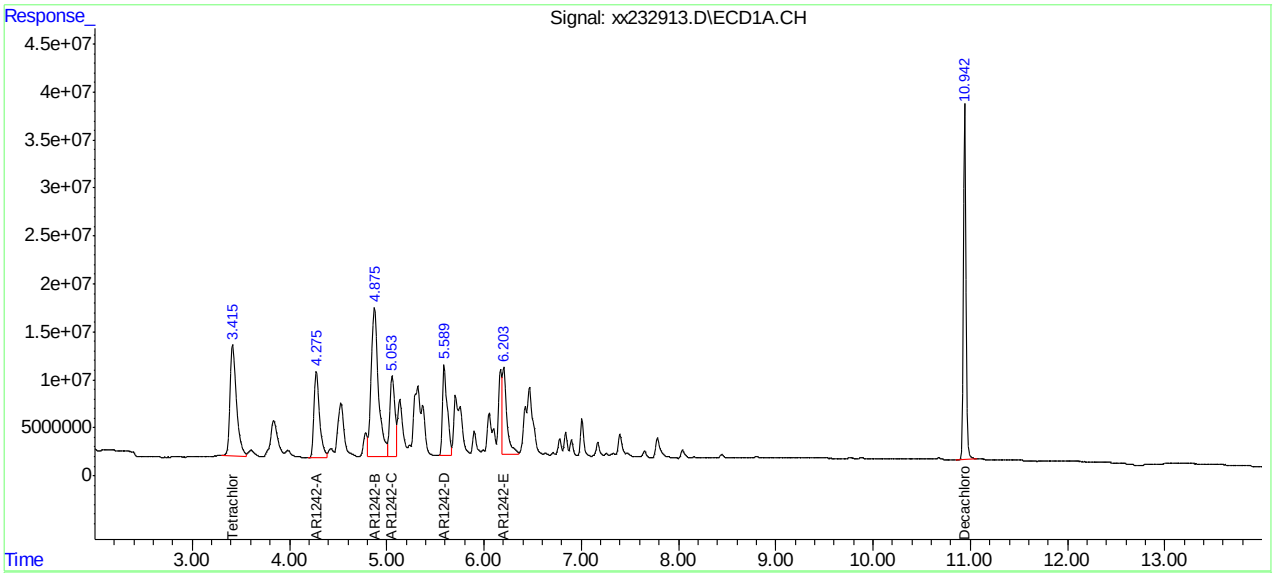
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

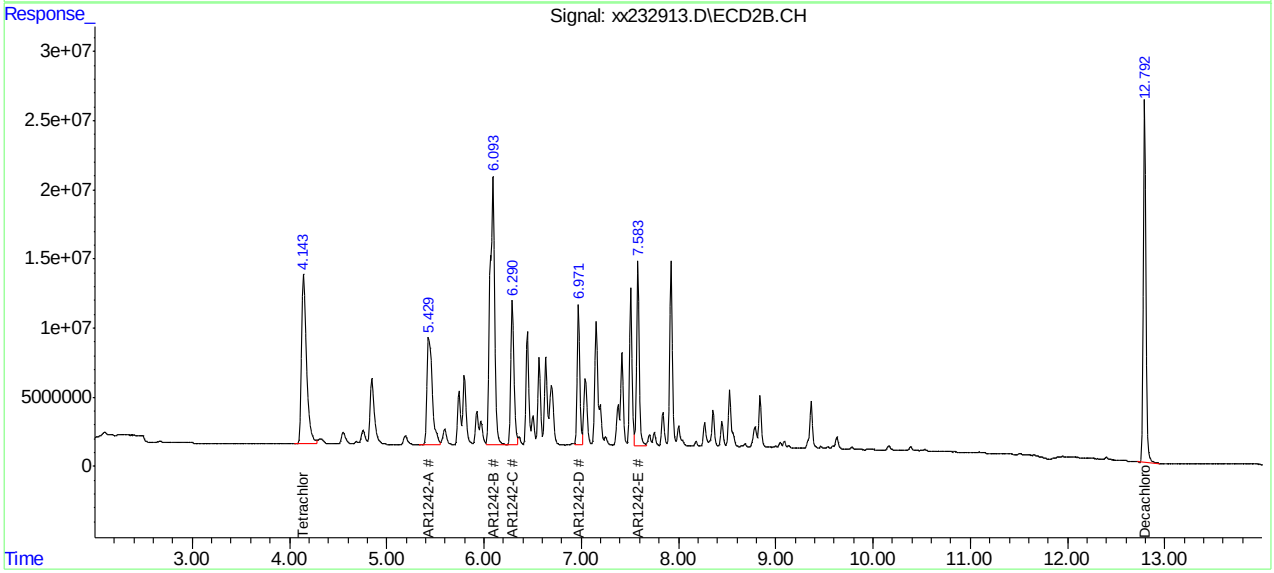
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232913.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:09 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:57:58 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Carol Boykin 07/31/18 17:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:28 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:58:59 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.416	4.145	591.9E6	482.5E6	46.489	46.846
	Spiked Amount 40.000			Recovery	= 116.22%	117.11%	
51) S	Decachlor...	10.943	12.793	715.0E6	517.2E6	45.176	46.035
	Spiked Amount 40.000			Recovery	= 112.94%	115.09%	
	Target Compounds						
17)	AR1248-A	4.274	5.429	162.4E6	132.4E6	882.122	888.411
18)	AR1248-B	4.873	6.092	510.9E6	388.5E6	930.781	948.786m
19)	AR1248-C	5.319	6.568	500.5E6	222.8E6	1001.073m	1001.447
20)	AR1248-D	5.590	6.972	510.2E6	304.5E6	991.296	999.236
21)	AR1248-E	5.706	7.154	476.2E6	348.5E6	1008.848m	1007.515m
22)	AR1248-F	6.202	7.583	505.1E6	434.3E6	1014.948	1023.944
23)	AR1248-G	6.465	7.925	382.6E6	428.2E6	988.716m	1035.152

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

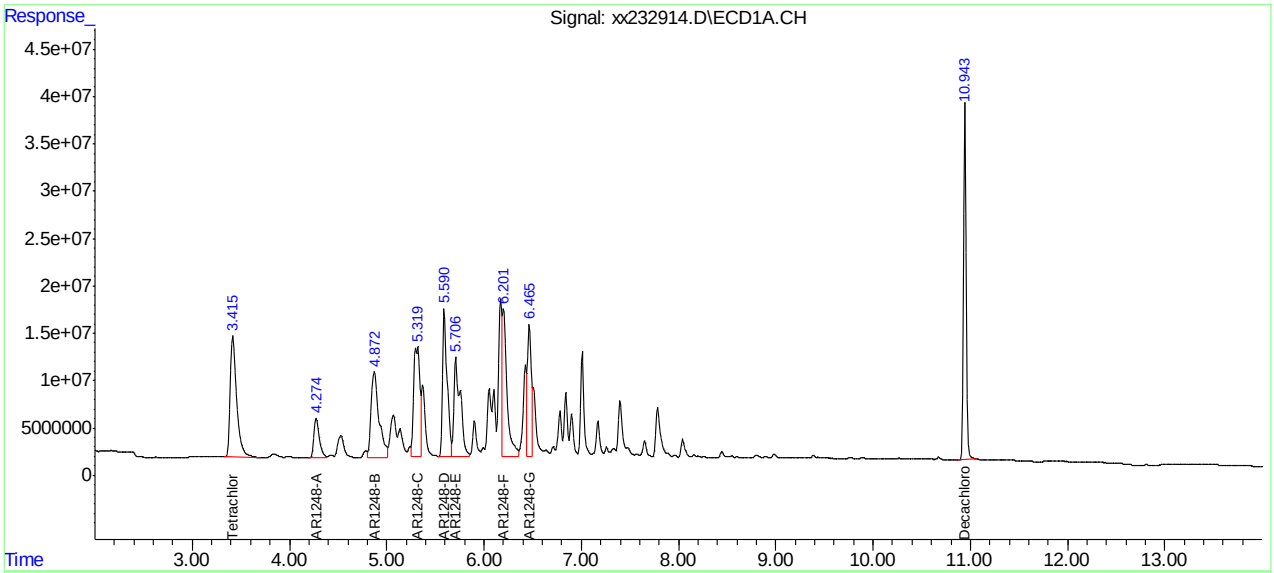
11.4.17 11

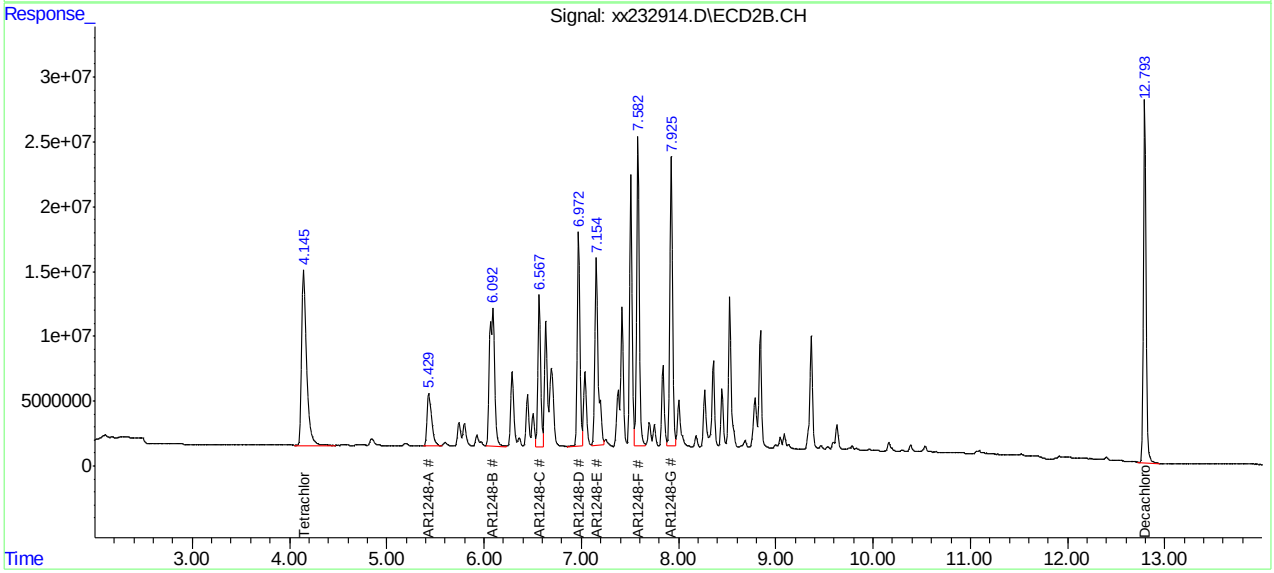
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:28 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:58:59 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6423-ICV6423	**Method:**	SW846 8082A	
Lab FileID:	XX232914.D	**Analyst approved:**	07/31/18 17:06	Summer Kotb
Injection Time:	07/28/18 06:28	**Supervisor approved:**	07/31/18 17:30	Carol Boykin

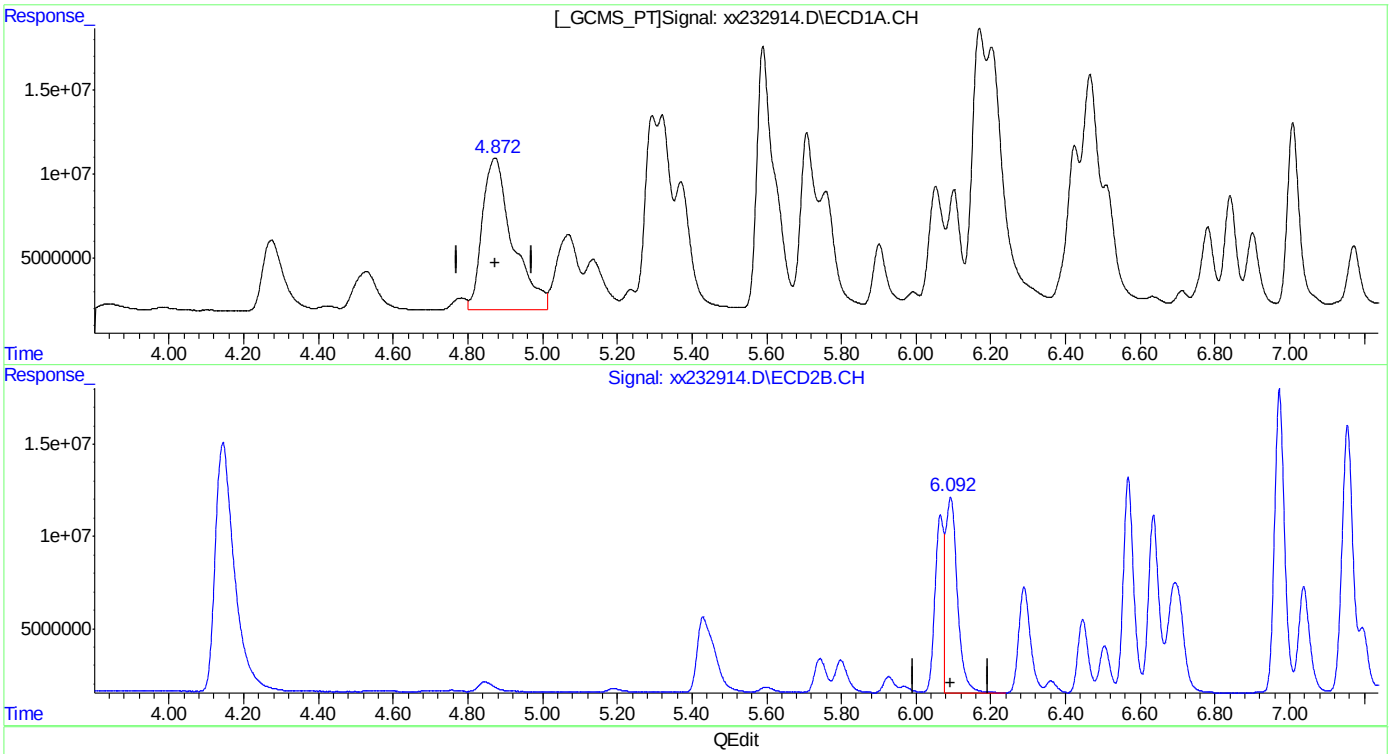
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1248-C		1	5.32	Split peak
AR1248-E		1	5.71	Split peak
AR1248-B		2	6.09	Split peak
Ar1248-G		1	6.47	Split peak
AR1248-E		2	7.15	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:28 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:58:11 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(18) AR1248-B
4.873min 930.781PPB
response 510933261

(18) AR1248-B #2
6.092min 562.008PPB
response 230152265

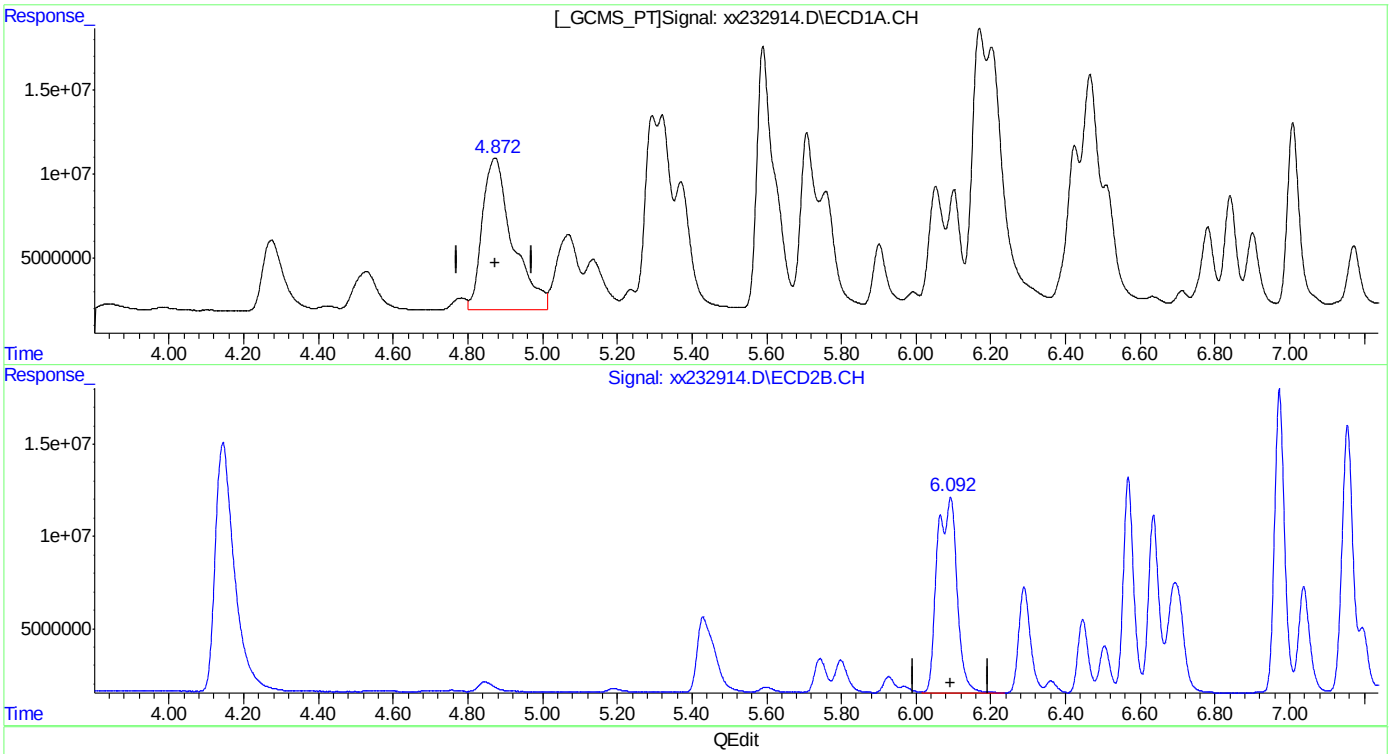
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:28 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:58:11 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(18) AR1248-B
4.873min 930.781PPB
response 510933261

(18) AR1248-B #2
6.092min 948.786PPB m
response 388544620

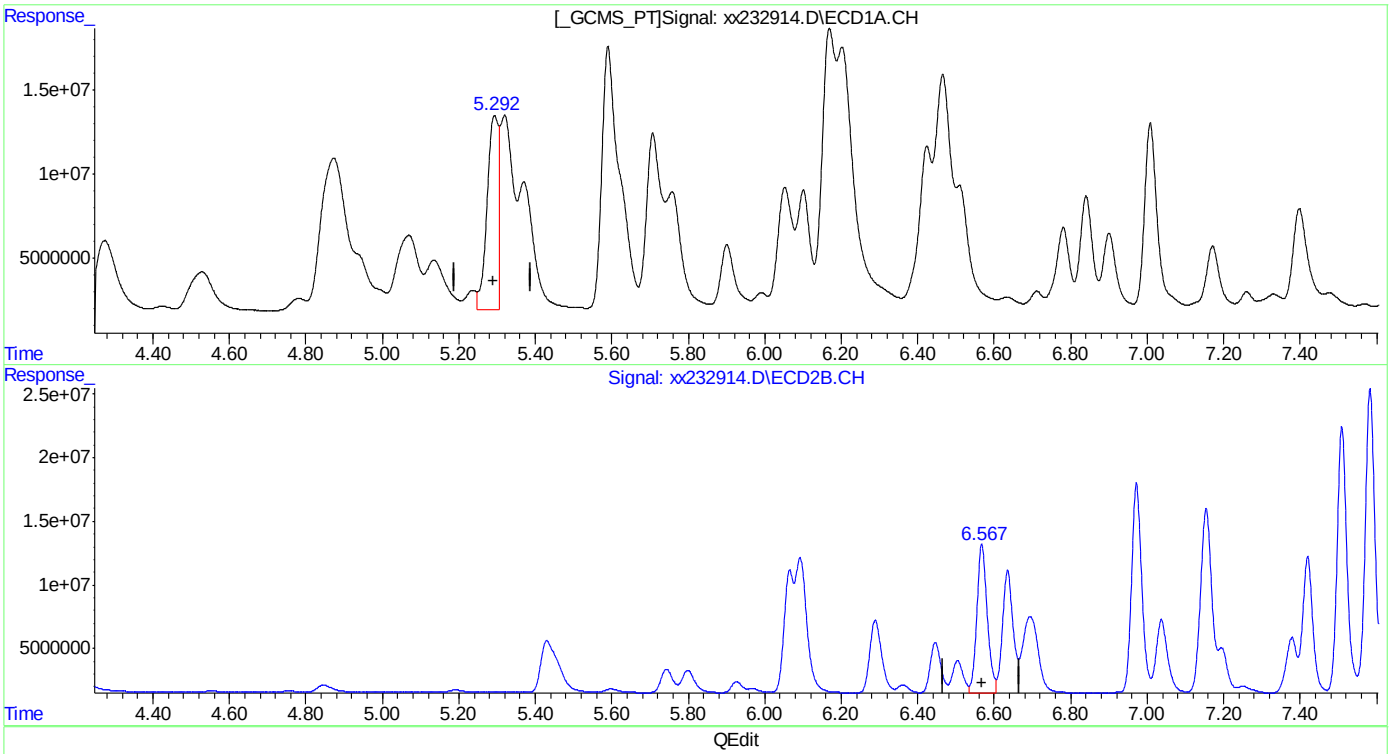
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:28 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:58:11 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(19) AR1248-C
5.294min 485.523PPB
response 242764130

(19) AR1248-C #2
6.568min 1001.447PPB
response 222833813

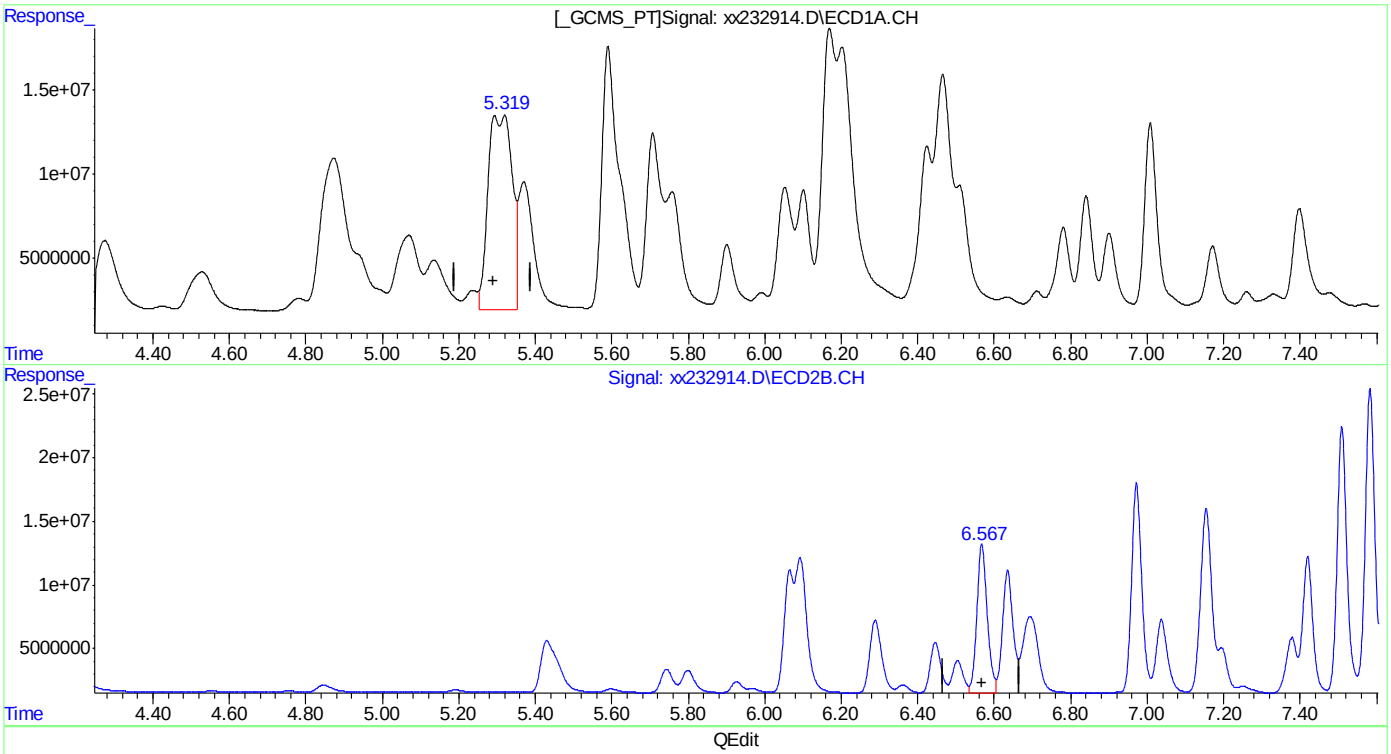
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 16:58:30 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:28 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:58:11 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(19) AR1248-C
5.319min 1001.073PPB m
response 500542178

(19) AR1248-C #2
6.568min 1001.447PPB
response 222833813

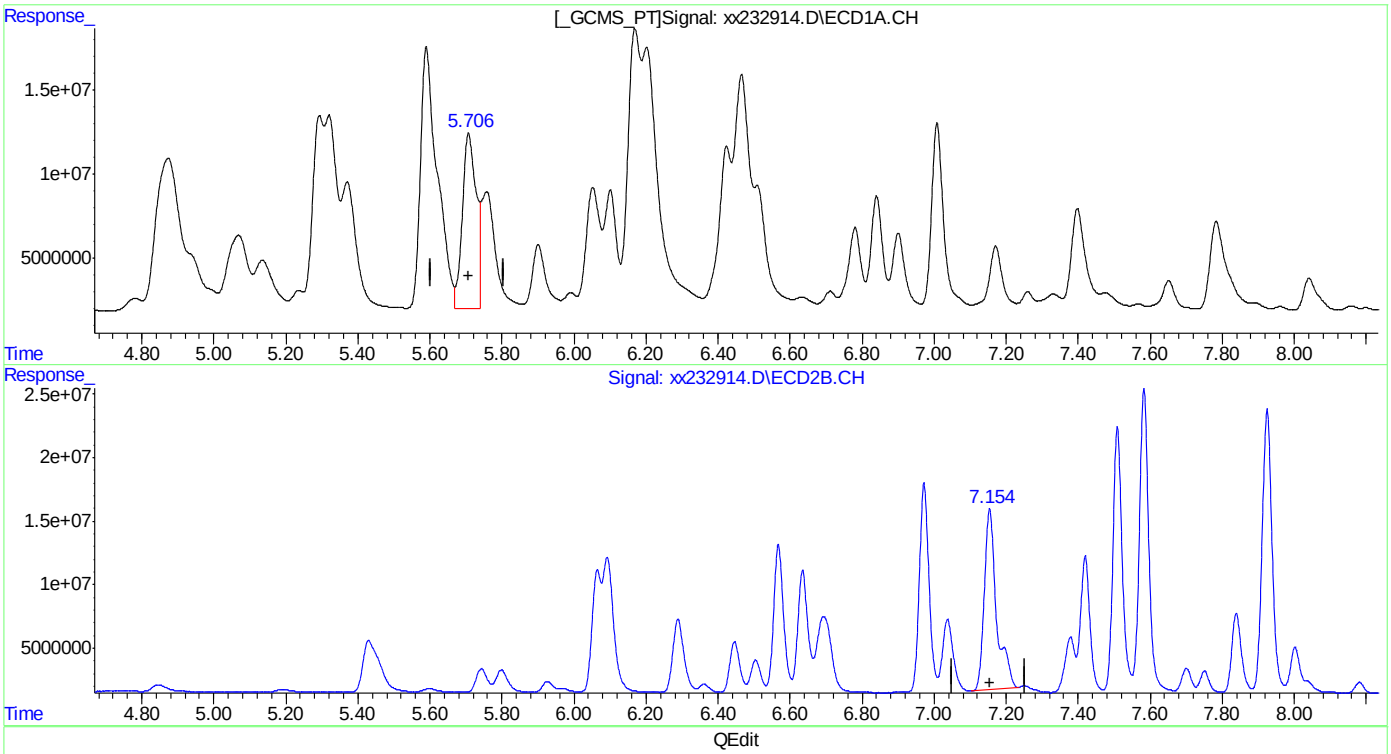
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 16:58:39 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:28 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:58:11 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(21) AR1248-E
5.707min 593.817PPB
response 280298935

(21) AR1248-E #2
7.154min 975.422PPB
response 337432524

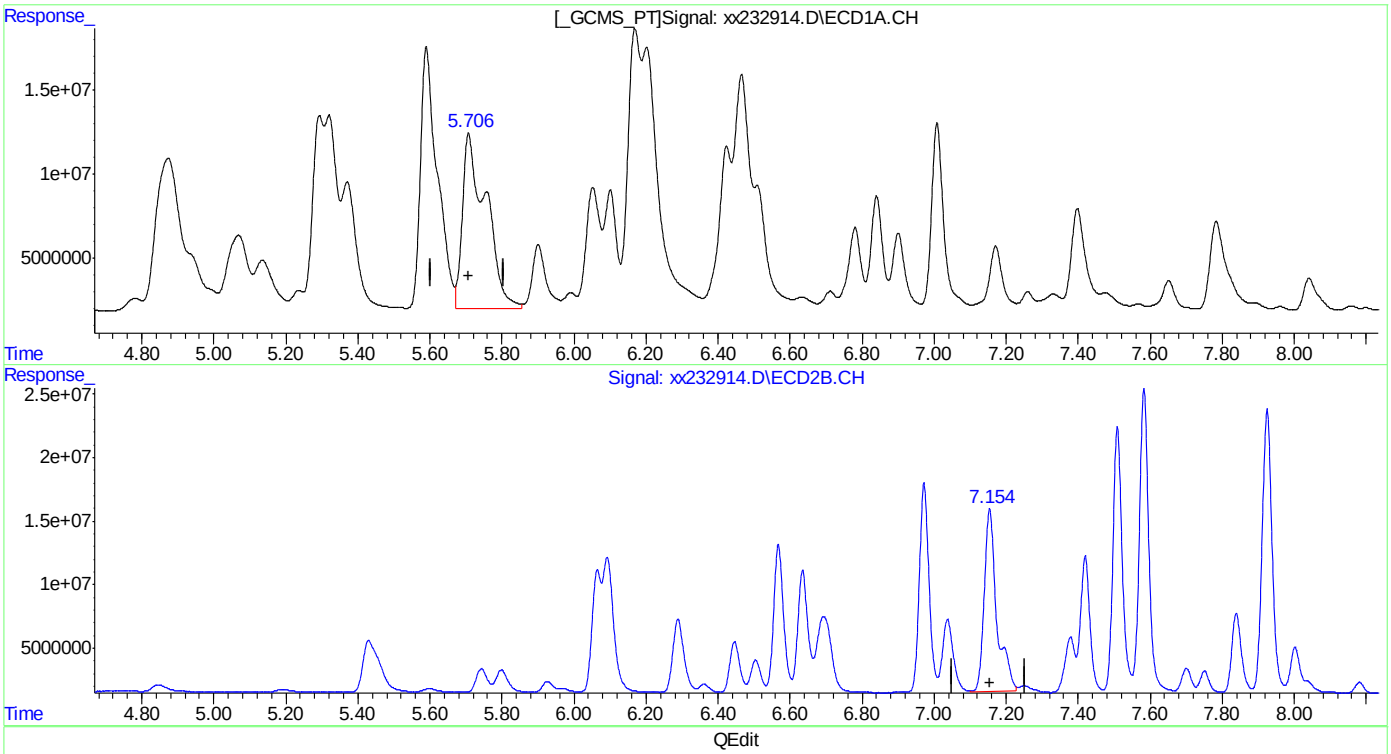
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:28 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:58:11 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(21) AR1248-E
5.706min 1008.848PPB m
response 476205702

(21) AR1248-E #2
7.154min 1007.515PPB m
response 348534684

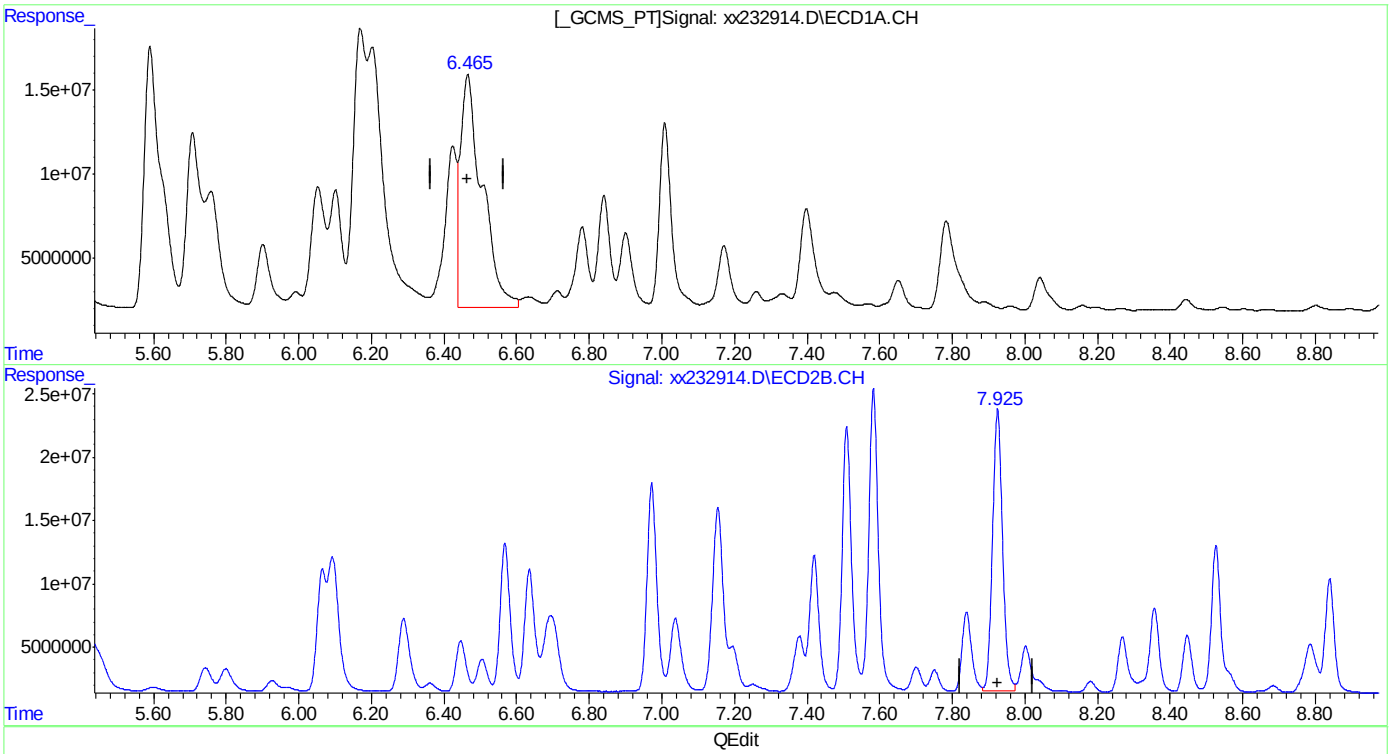
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 16:58:53 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:28 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:58:11 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(23) AR1248-G
6.465min 1488.568PPB
response 576014417

(23) AR1248-G #2
7.925min 1035.152PPB
response 428212241

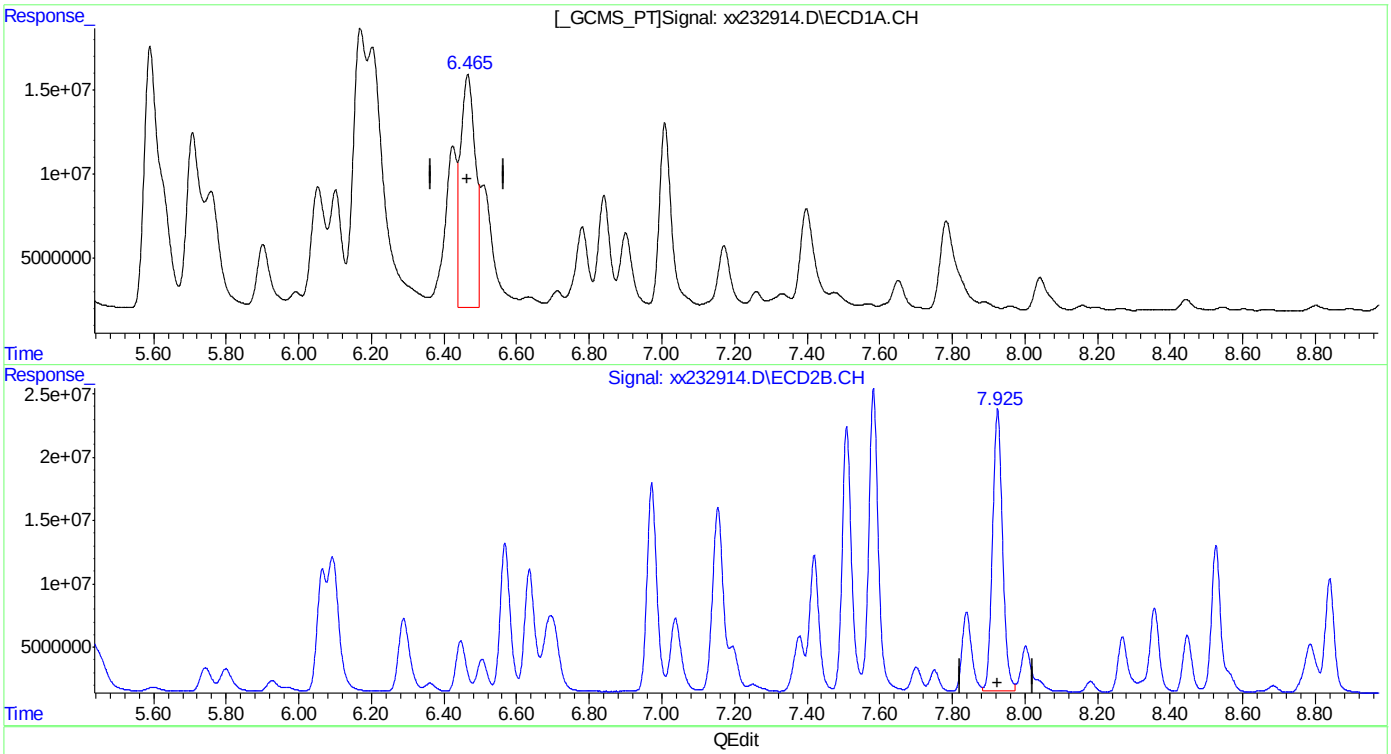
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:28 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:58:11 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(23) AR1248-G
6.465min 988.716PPB m
response 382592375

(23) AR1248-G #2
7.925min 1035.152PPB
response 428212241

(+) = Expected Retention Time
PCB6423.M Tue Jul 31 16:59:00 2018

Manual Integrations APPROVED (compounds with "m" flag)
Carol Boykin 07/31/18 17:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:46 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 17:00:03 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.414	4.144	608.6E6	492.0E6	47.800	47.768
	Spiked Amount 40.000			Recovery	= 119.50%	119.42%	
51)	S Decachlor...	10.942	12.792	736.5E6	533.4E6	46.534	47.479
	Spiked Amount 40.000			Recovery	= 116.33%	118.70%	
	Target Compounds						
24)	AR1254-A	6.102	7.581	406.7E6	370.3E6	1010.092m	1005.445
25)	AR1254-B	6.458	7.838	650.6E6	416.2E6	1086.059m	1000.704
26)	AR1254-C	6.839	8.356	453.3E6	348.9E6	990.822	990.235
27)	AR1254-D	7.007	8.525	894.8E6	741.0E6	1002.440m	985.157m
28)	AR1254-E	7.397	8.838	640.5E6	538.0E6	1060.154	977.176
29)	AR1254-F	7.650	9.364	584.1E6	582.4E6	1045.956	1001.531m
30)	AR1254-G	8.040	9.627	878.0E6	713.4E6	1033.757	1031.446m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

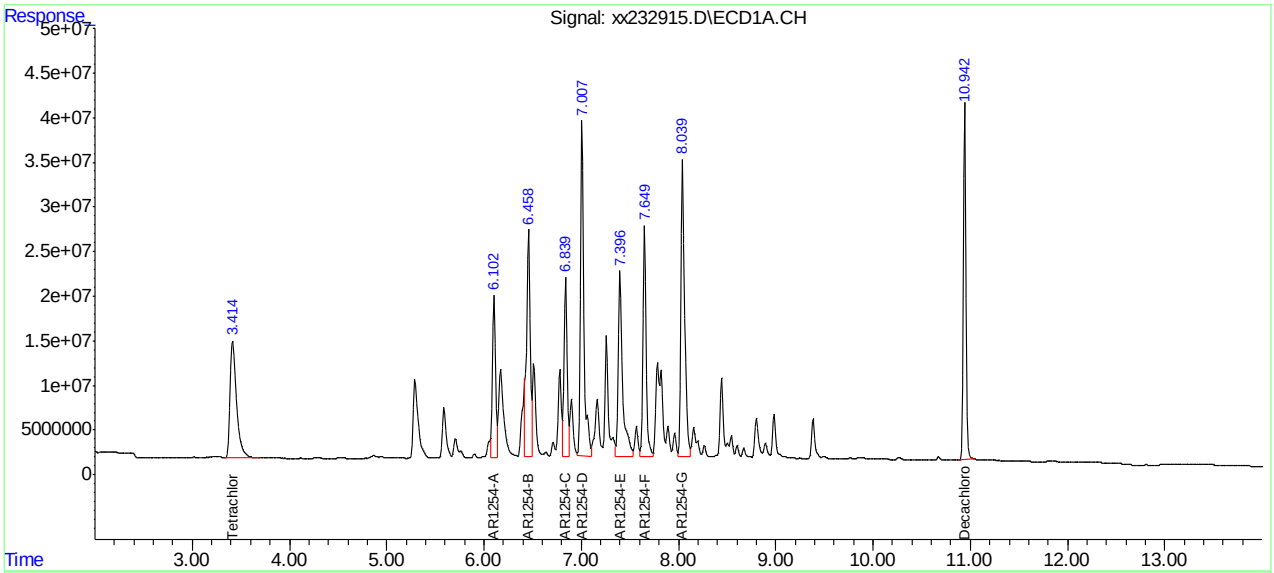
11.4.18 11

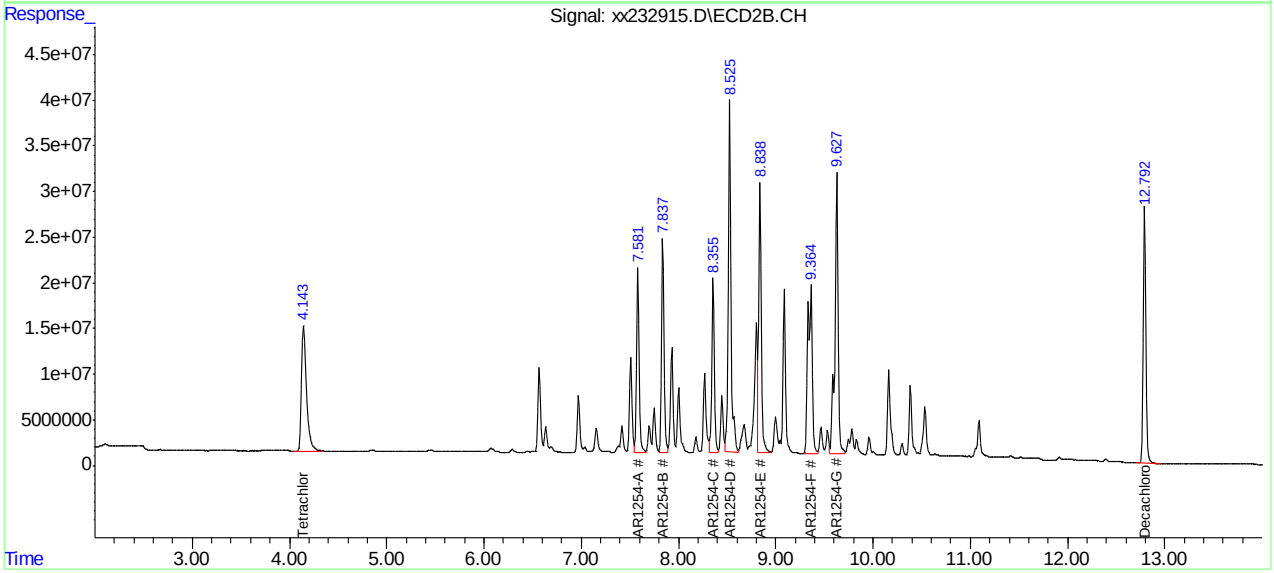
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:46 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 17:00:03 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6423-ICV6423	**Method:**	SW846 8082A	
Lab FileID:	XX232915.D	**Analyst approved:**	07/31/18 17:06	Summer Kotb
Injection Time:	07/28/18 06:46	**Supervisor approved:**	07/31/18 17:30	Carol Boykin

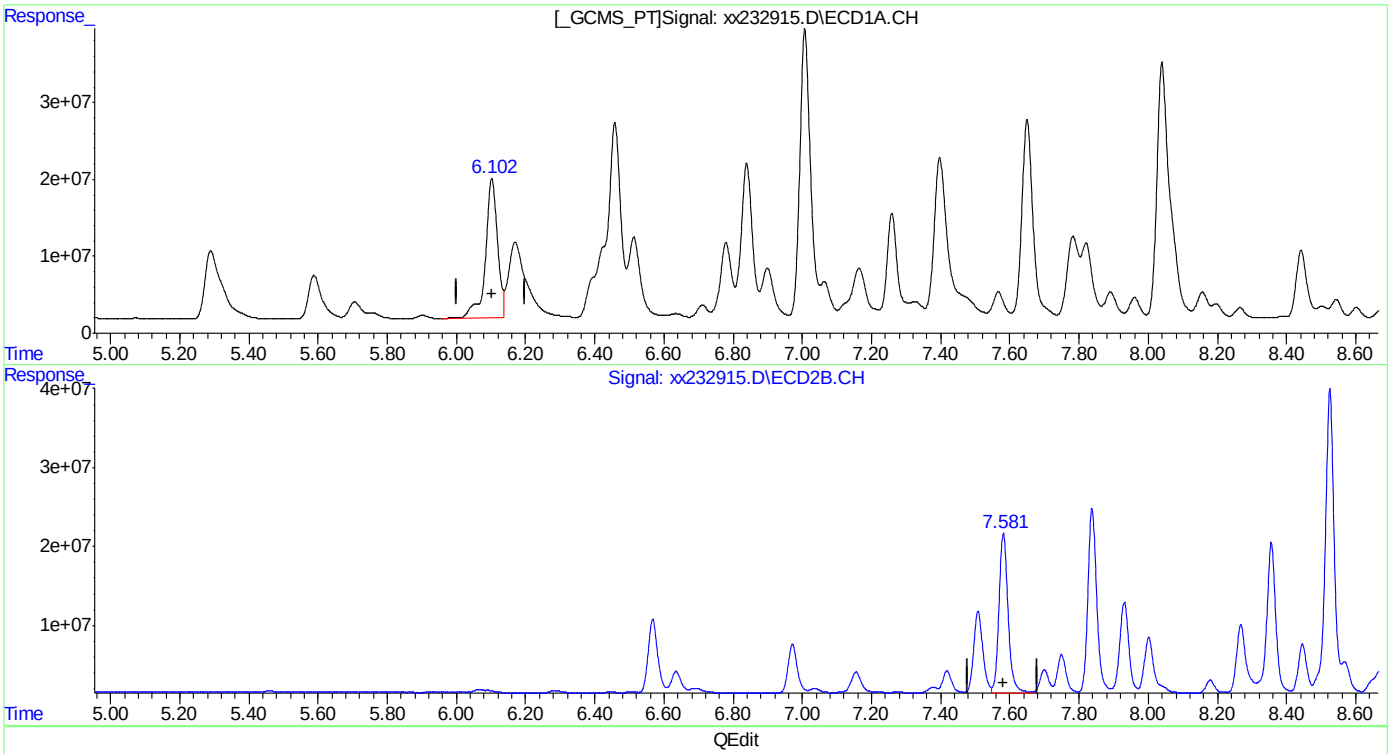
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1254-A		1	6.10	Split peak
AR1254-B		1	6.46	Split peak
AR1254-D		1	7.01	Split peak
AR1254-D		2	8.52	Split peak
AR1254-F		2	9.36	Split peak
AR1254-G		2	9.63	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:46 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:59:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(24) AR1254-A
6.102min 1109.789PPB
response 446842140

(24) AR1254-A #2
7.581min 1005.445PPB
response 370254490

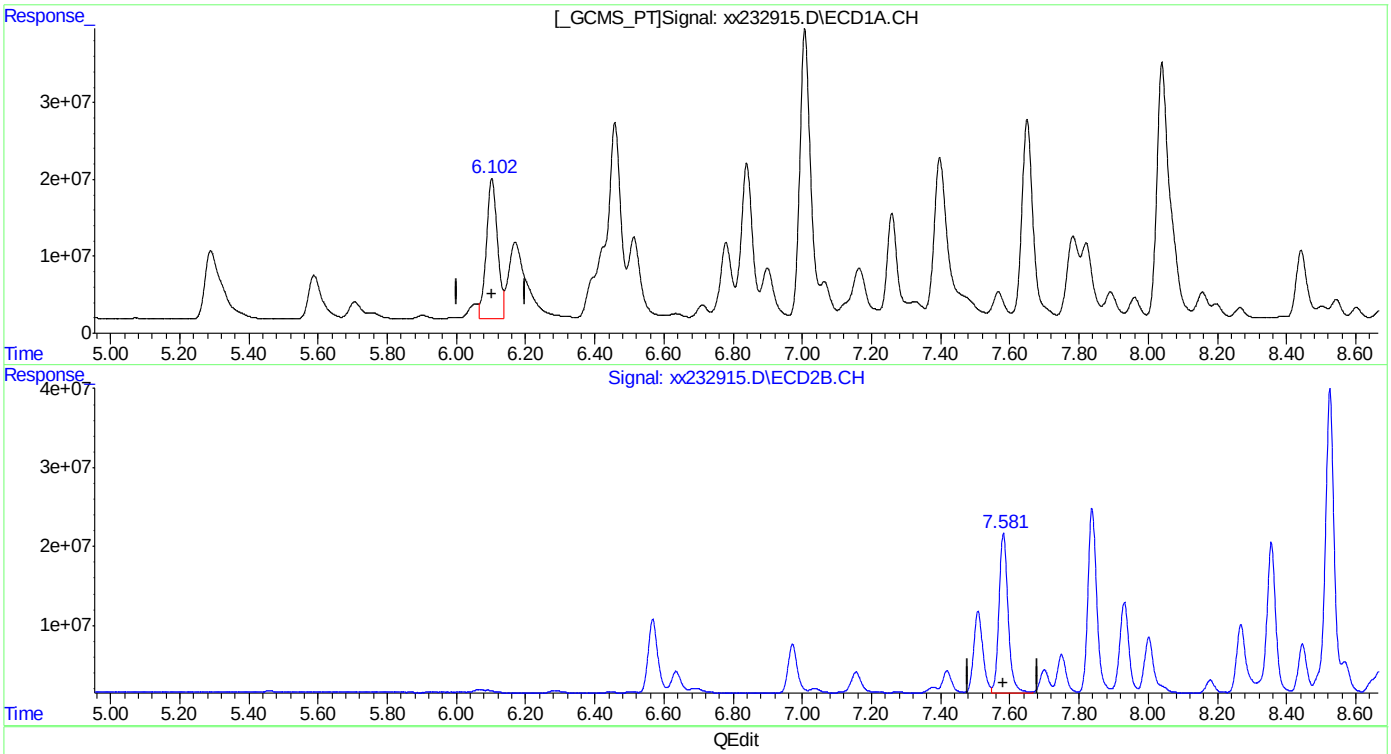
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 16:59:19 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:46 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:59:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(24) AR1254-A
6.102min 1010.092PPB m
response 406700479

(24) AR1254-A #2
7.581min 1005.445PPB
response 370254490

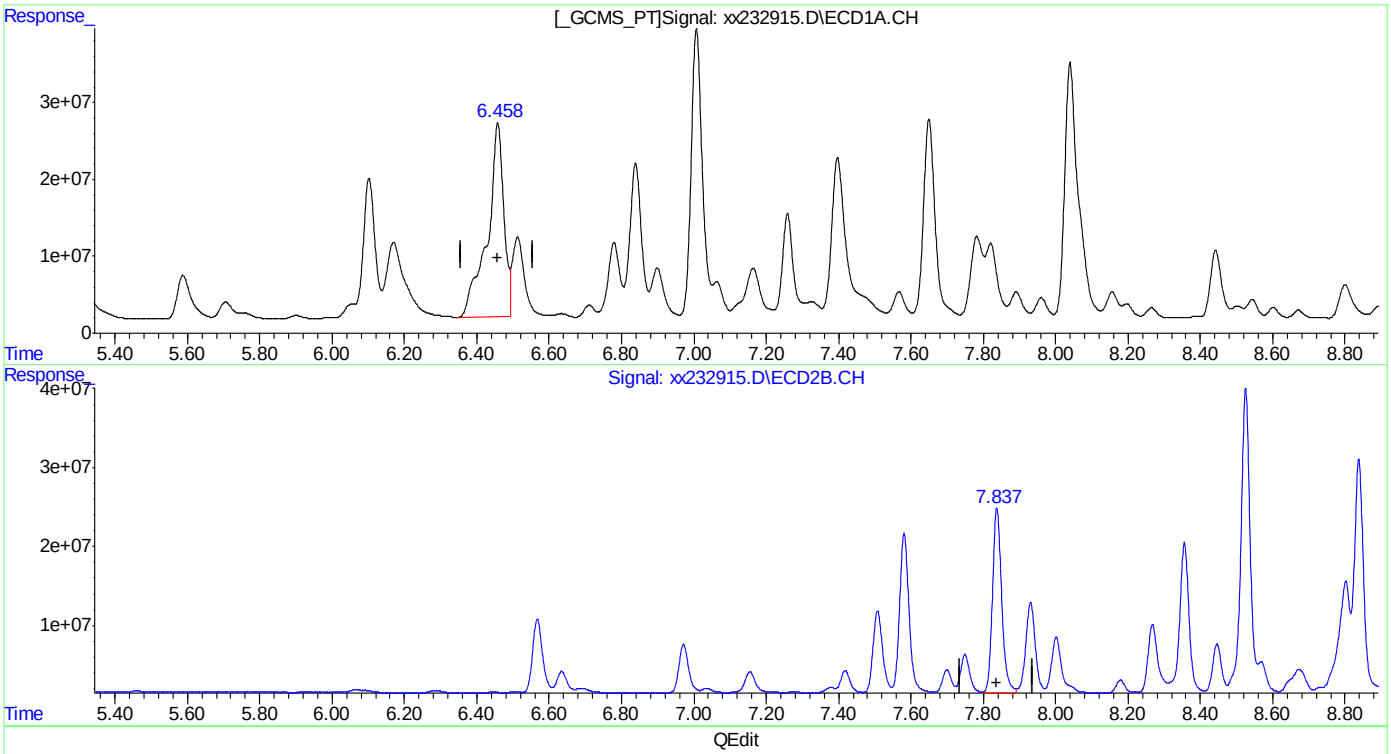
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:46 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:59:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(25) AR1254-B
6.458min 1320.824PPB
response 791244323

(25) AR1254-B #2
7.838min 1000.704PPB
response 416172787

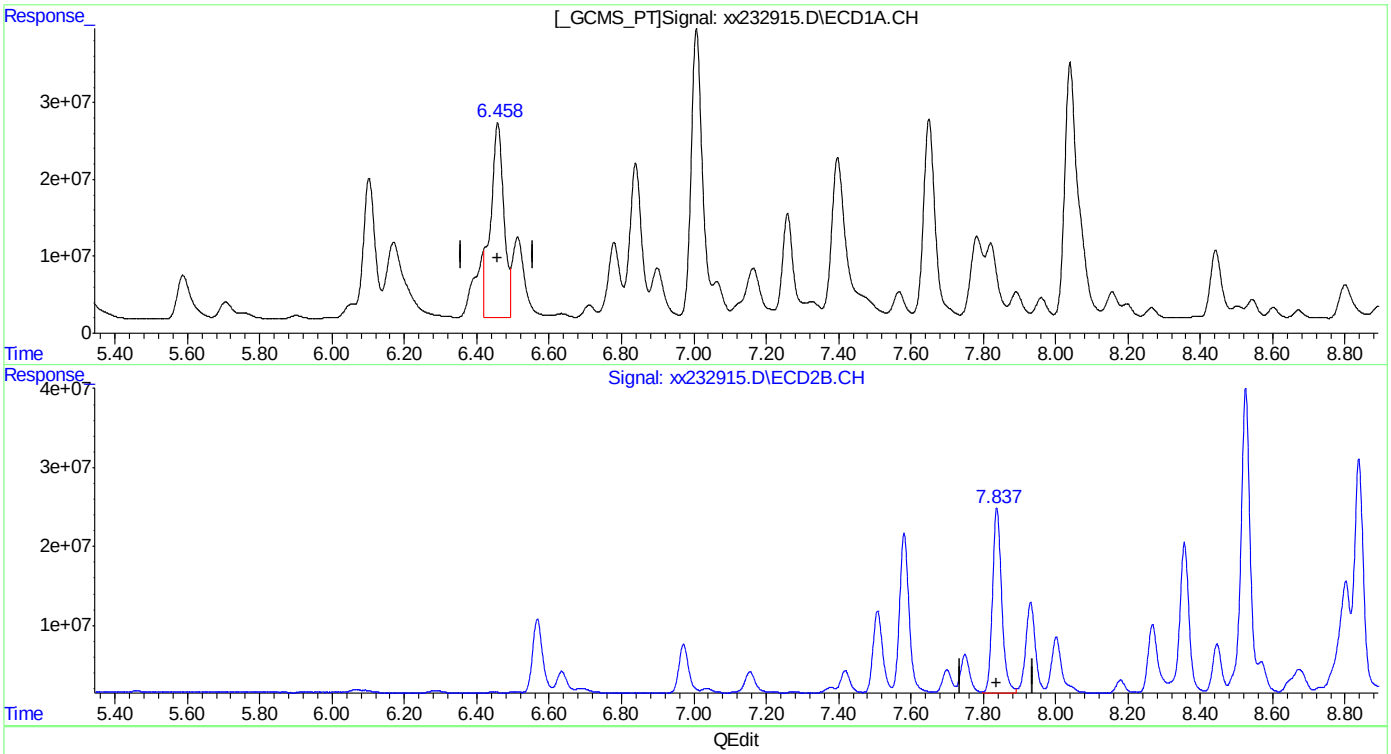
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:46 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:59:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(25) AR1254-B
6.458min 1086.059PPB m
response 650607493

(25) AR1254-B #2
7.838min 1000.704PPB
response 416172787

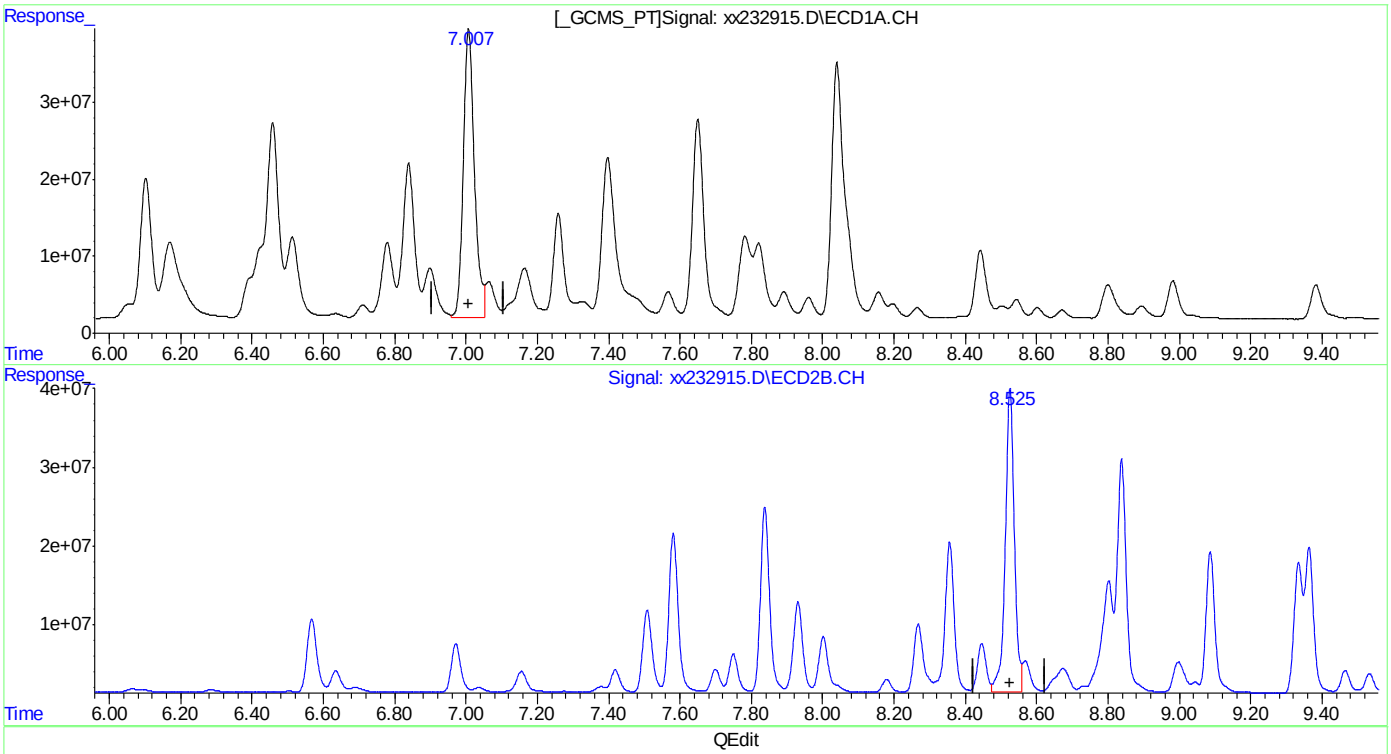
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 16:59:32 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:46 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:59:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(27) AR1254-D
7.007min 903.728PPB
response 806666281

(27) AR1254-D #2
8.525min 906.796PPB
response 682040613

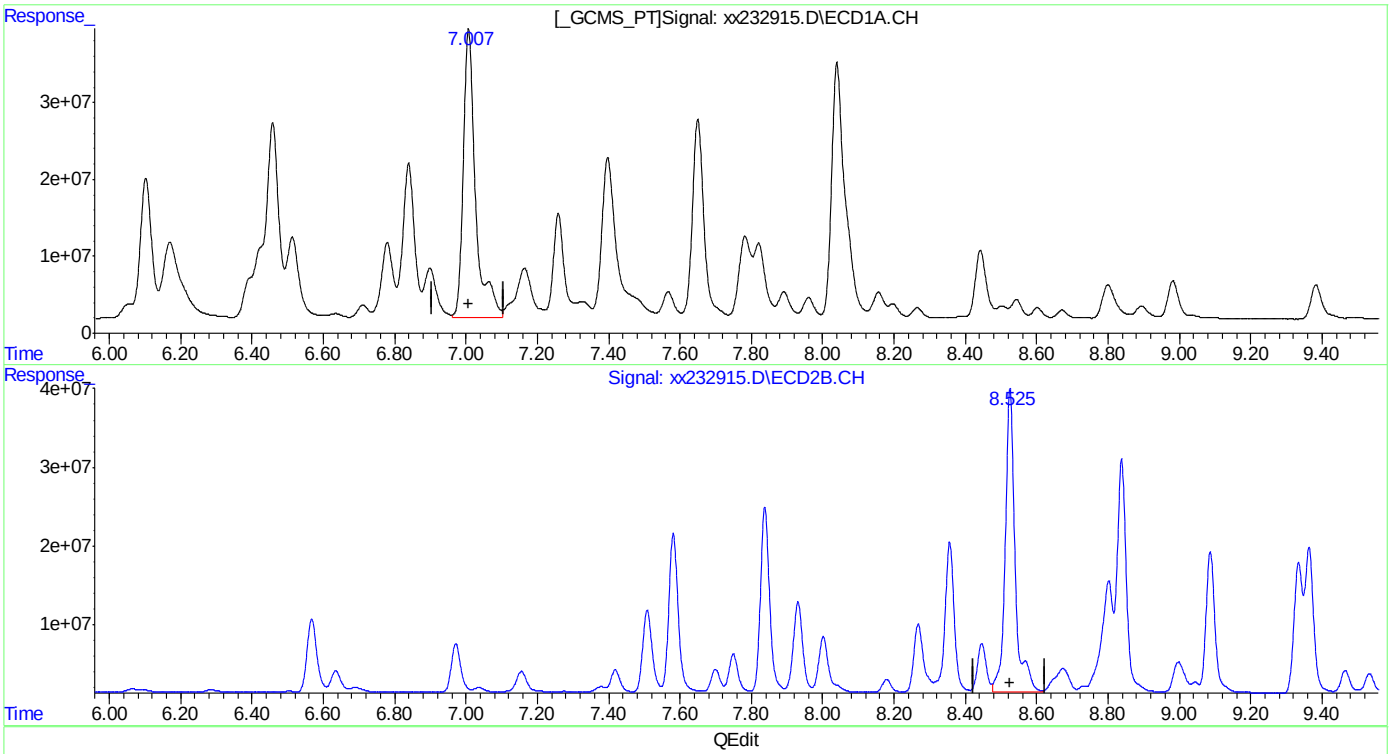
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 16:59:44 2018 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:46 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:59:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(27) AR1254-D
7.007min 1002.440PPB m
response 894776478

(27) AR1254-D #2
8.525min 985.157PPB m
response 740979028

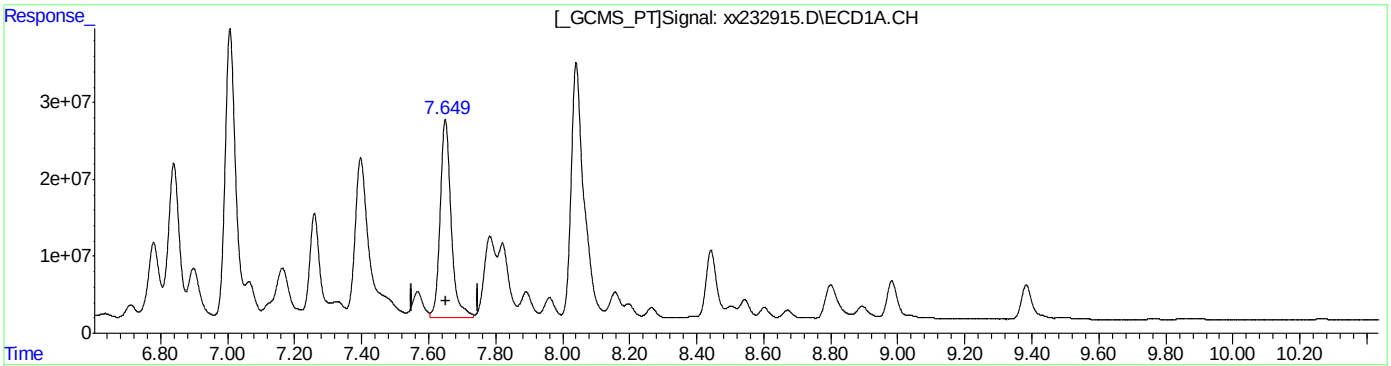
(+) = Expected Retention Time

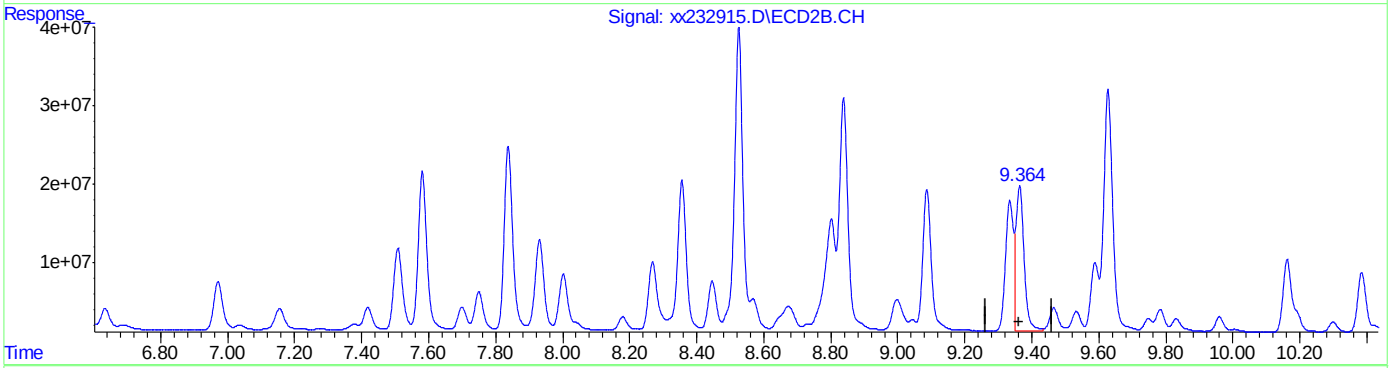
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:46 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:59:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(29) AR1254-F
7.650min 1045.956PPB
response 584076700

(29) AR1254-F #2
9.364min 548.371PPB
response 318903215

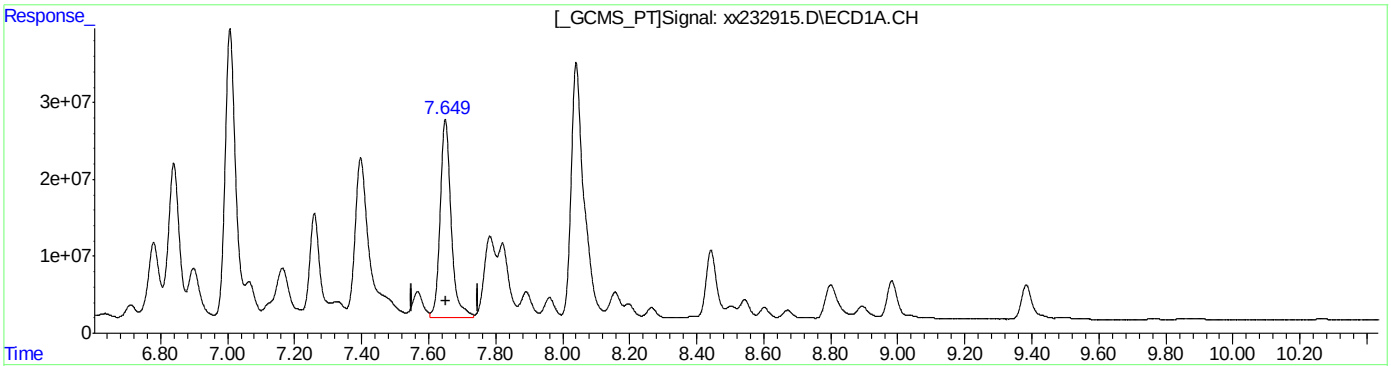
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 16:59:54 2018

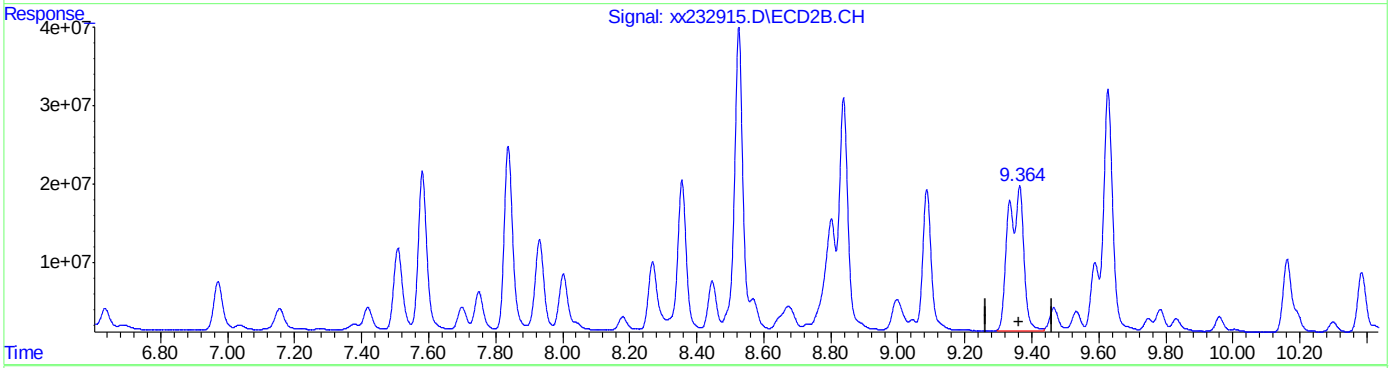
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:46 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:59:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(29) AR1254-F
7.650min 1045.956PPB
response 584076700

(29) AR1254-F #2
9.364min 1001.531PPB m
response 582436505

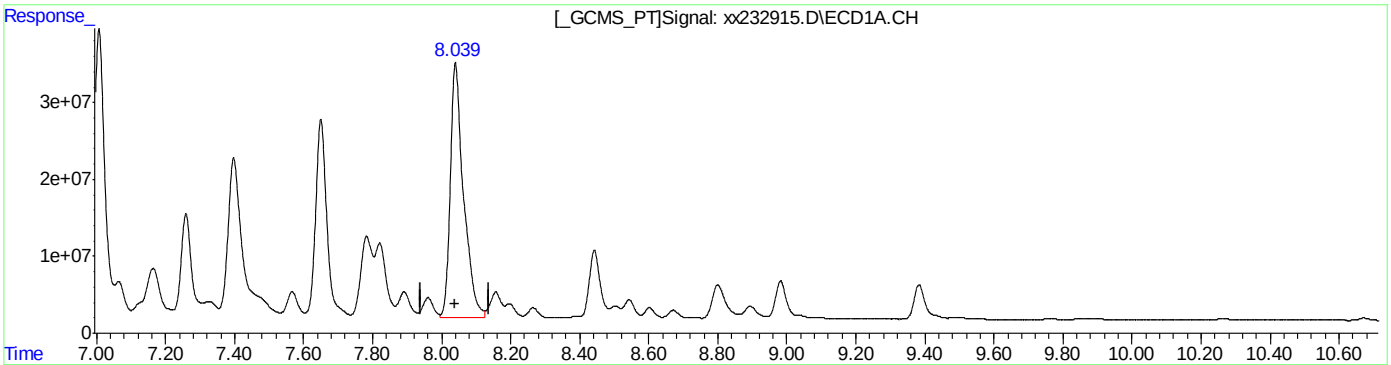
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 16:59:58 2018

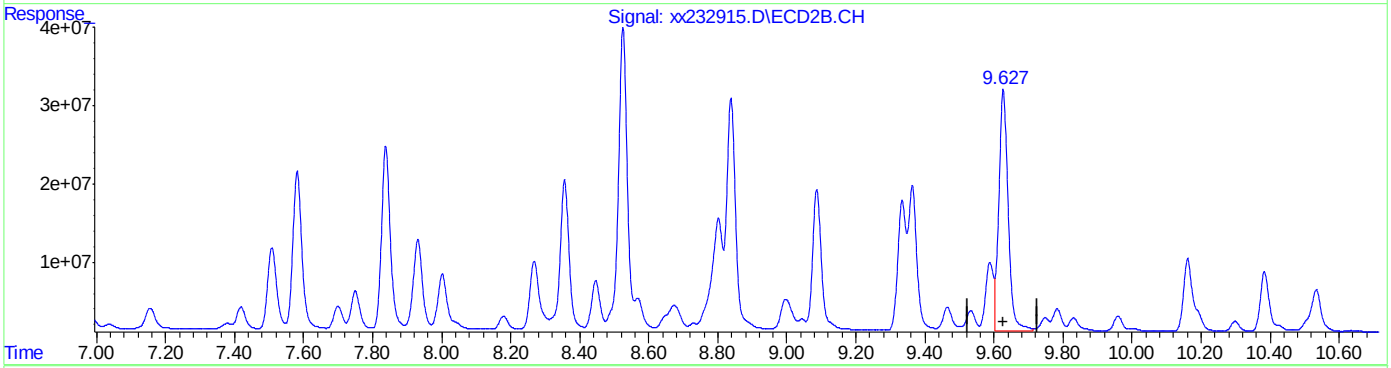
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:46 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:59:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(30) AR1254-G
8.040min 1033.757PPB
response 878041403

(30) AR1254-G #2
9.627min 838.614PPB
response 580018874

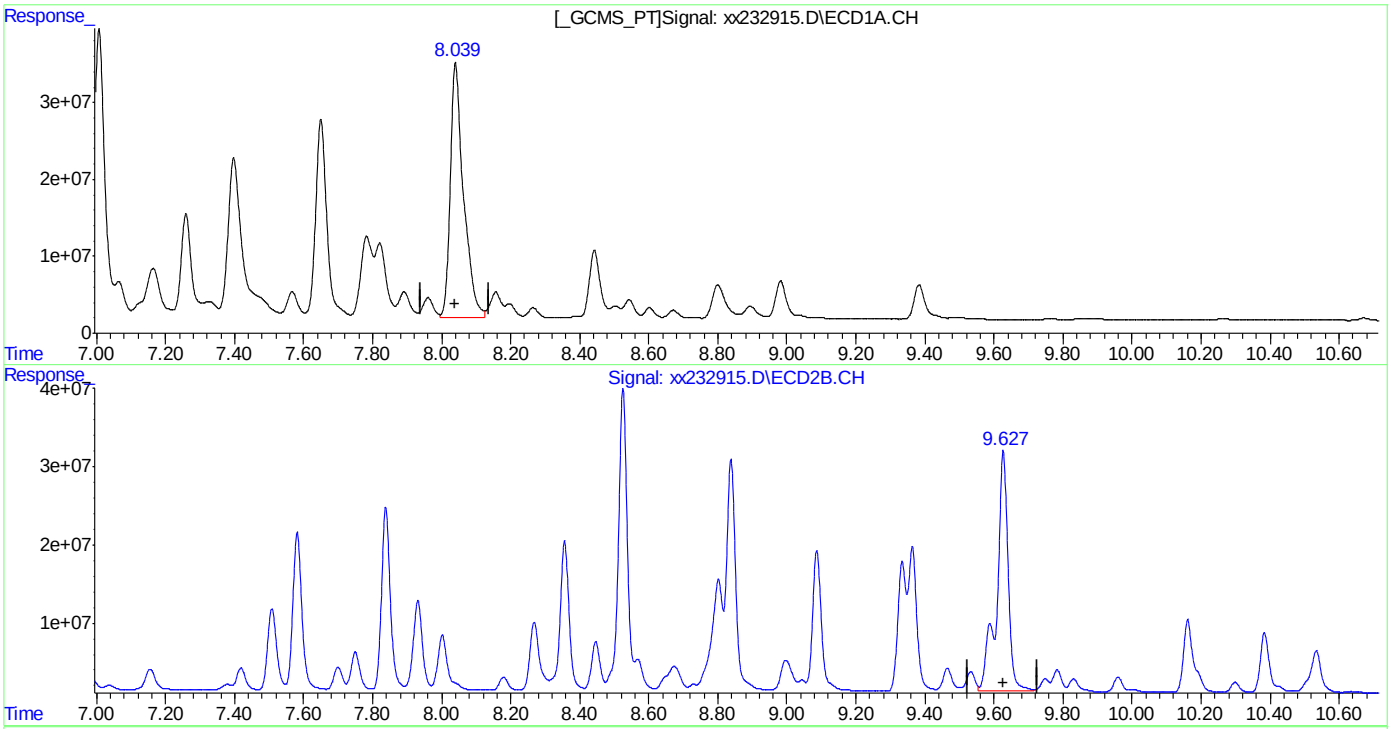
(+) = Expected Retention Time
PCB6423.M Tue Jul 31 17:00:00 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 6:46 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 16:59:08 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(30) AR1254-G
8.040min 1033.757PPB
response 878041403

(30) AR1254-G #2
9.627min 1031.446PPB m
response 713388794

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Carol Boykin 07/31/18 17:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232916.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 7:05 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 17:00:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.414	4.144	611.6E6	496.1E6	48.037	48.166
	Spiked Amount 40.000			Recovery	= 120.09%	120.41%	
51) S	Decachlor...	10.942	12.792	750.3E6	539.0E6	47.404	47.978
	Spiked Amount 40.000			Recovery	= 118.51%	119.95%	
	Target Compounds						
31)	AR1262-A	7.648	9.088	662.3E6	516.9E6	988.670	1003.589
32)	AR1262-B	8.199	9.749	955.8E6	832.9E6	1000.161	1002.733
33)	AR1262-C	8.544	10.191	826.9E6	685.4E6	1000.395	1012.713
34)	AR1262-D	8.982	10.535	1968.3E6	1716.6E6	1007.106	1009.440
35)	AR1262-E	9.430	11.064	2334.8E6	1909.0E6	999.343m	1025.149m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

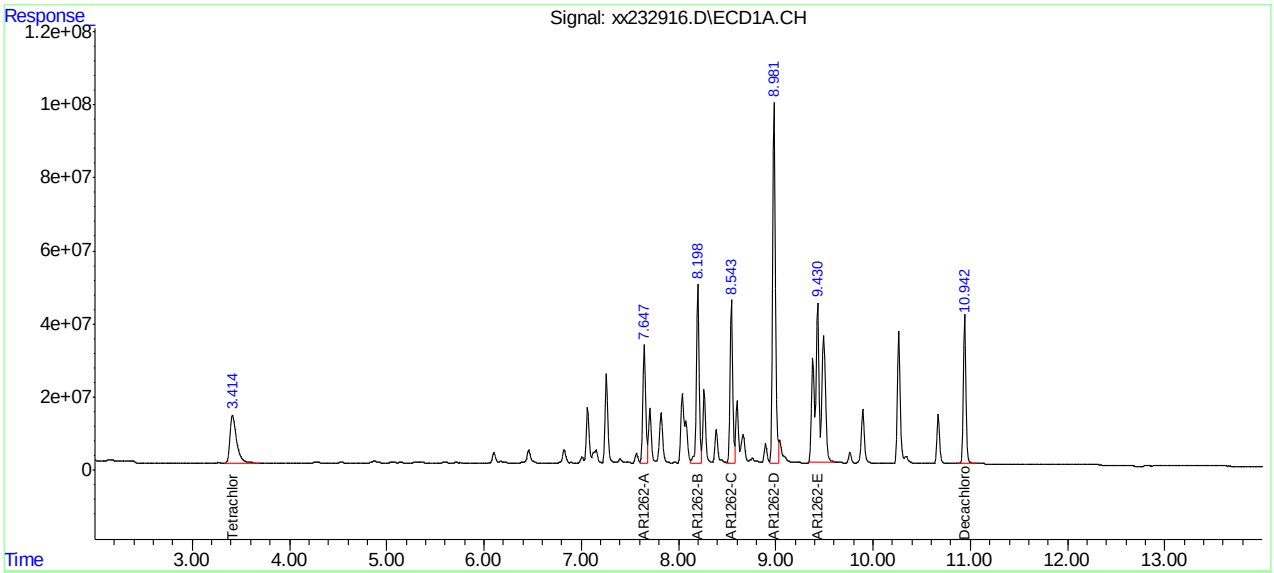
11.4.19 11

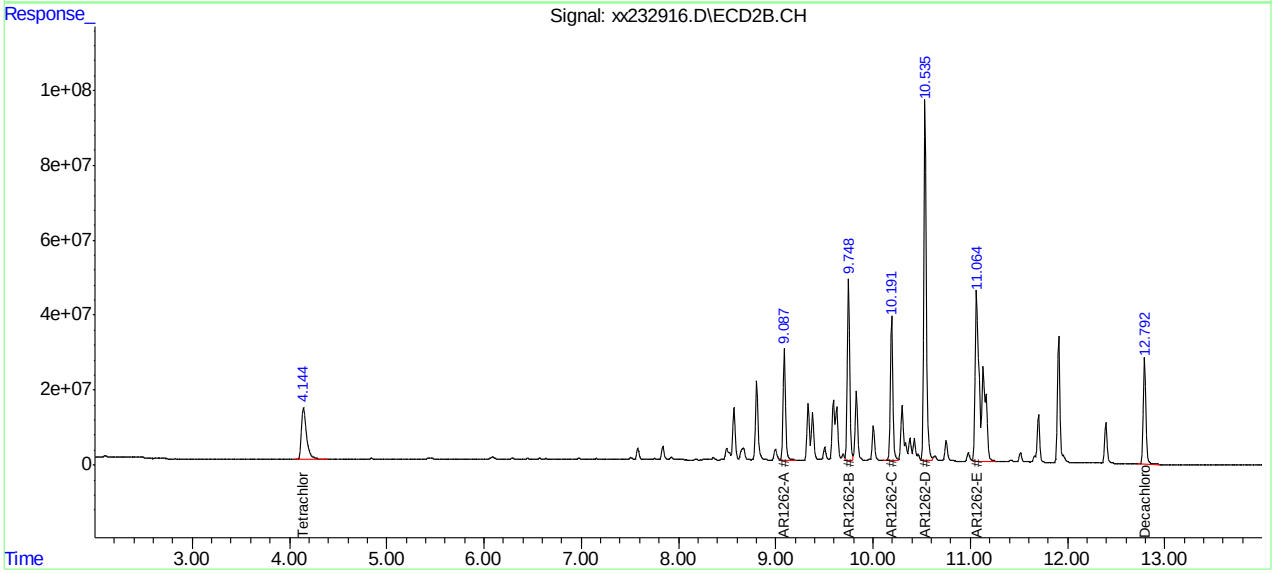
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232916.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 7:05 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 17:00:42 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6423-ICV6423	**Method:**	SW846 8082A	
Lab FileID:	XX232916.D	**Analyst approved:**	07/31/18 17:06	Summer Kotb
Injection Time:	07/28/18 07:05	**Supervisor approved:**	07/31/18 17:30	Carol Boykin

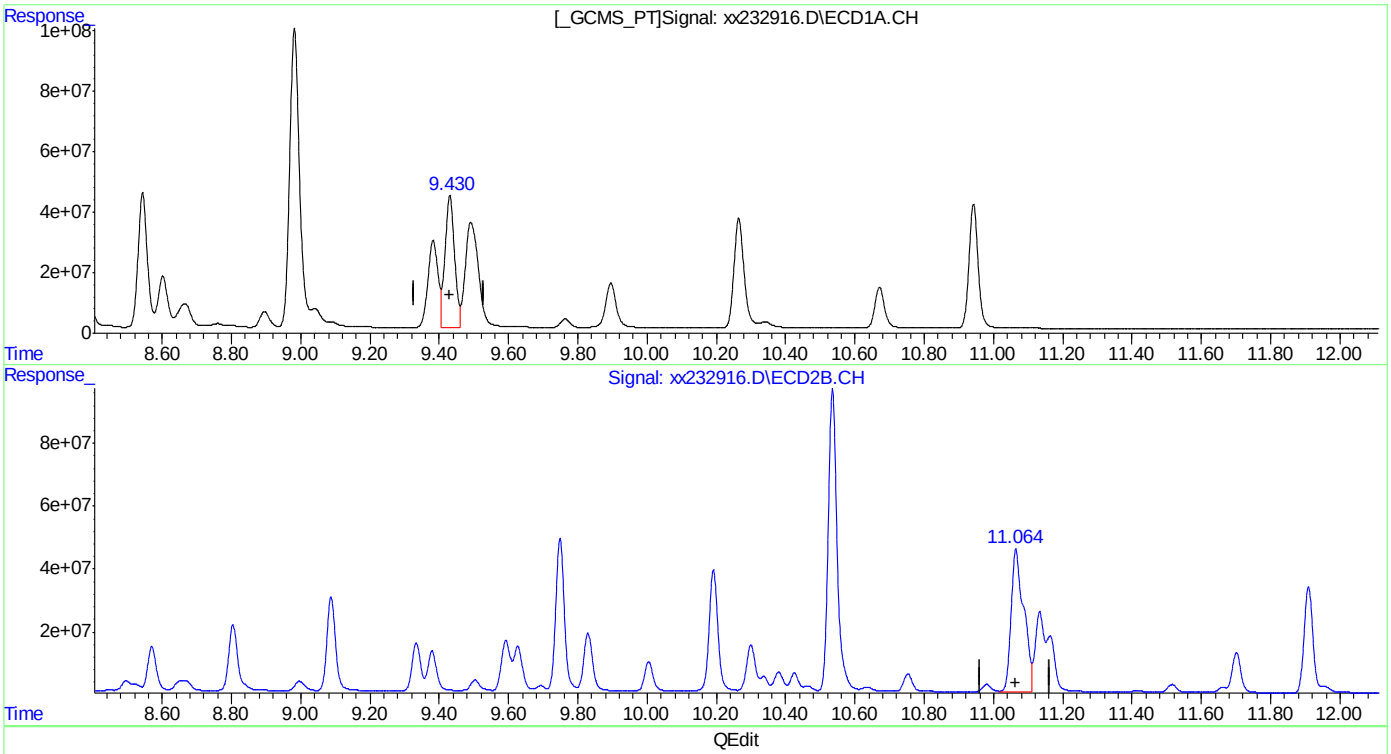
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ar1262-E		1	9.43	Split peak
Ar1262-E		2	11.06	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232916.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 7:05 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 17:00:19 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(35) AR1262-E
9.431min 362.394PPB
response 846657413

(35) AR1262-E #2
11.064min 619.808PPB
response 1154197252

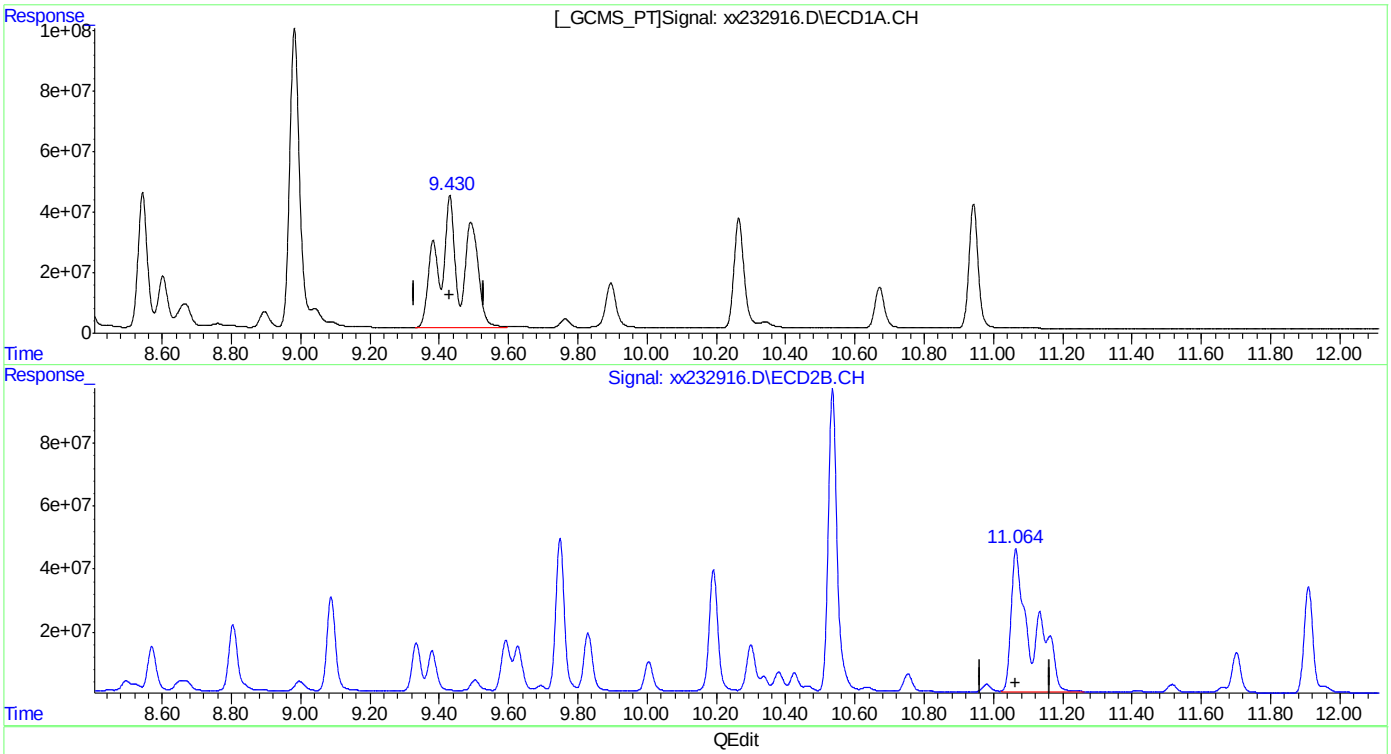
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232916.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 7:05 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 17:00:19 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(35) AR1262-E
9.430min 999.343PPB m
response 2334754606

(35) AR1262-E #2
11.064min 1025.149PPB m
response 1909017088

(+) = Expected Retention Time
PCB6423.M Tue Jul 31 17:00:44 2018

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232917.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 7:23 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 17:01:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.414	4.142	594.2E6	480.7E6	46.674	46.669
	Spiked Amount 40.000			Recovery	=	116.68%	116.67%
51) S	Decachlor...	10.942	12.791	1957.9E6	1405.9E6	123.705	125.145
	Spiked Amount 40.000			Recovery	=	309.26%	312.86%
	Target Compounds						
36)	AR1268-A	9.431	11.065	2324.3E6	2002.9E6	1002.203	972.805
37)	AR1268-B	9.487	11.133	2427.2E6	1881.9E6	987.670	989.351
38)	AR1268-C	9.764	11.515	2052.8E6	1625.4E6	1024.608	977.824
39)	AR1268-D	10.264	11.909	826.0E6	661.4E6	998.186	1020.011
40)	AR1268-E	10.670	12.395	6751.3E6	4835.2E6	976.576	978.650

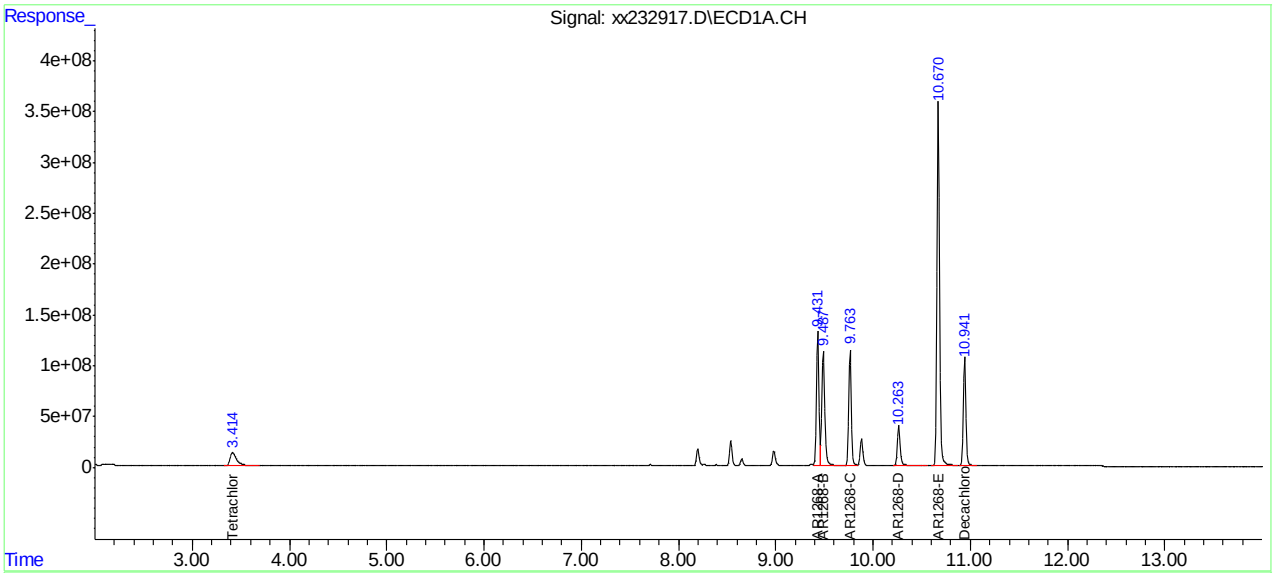
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

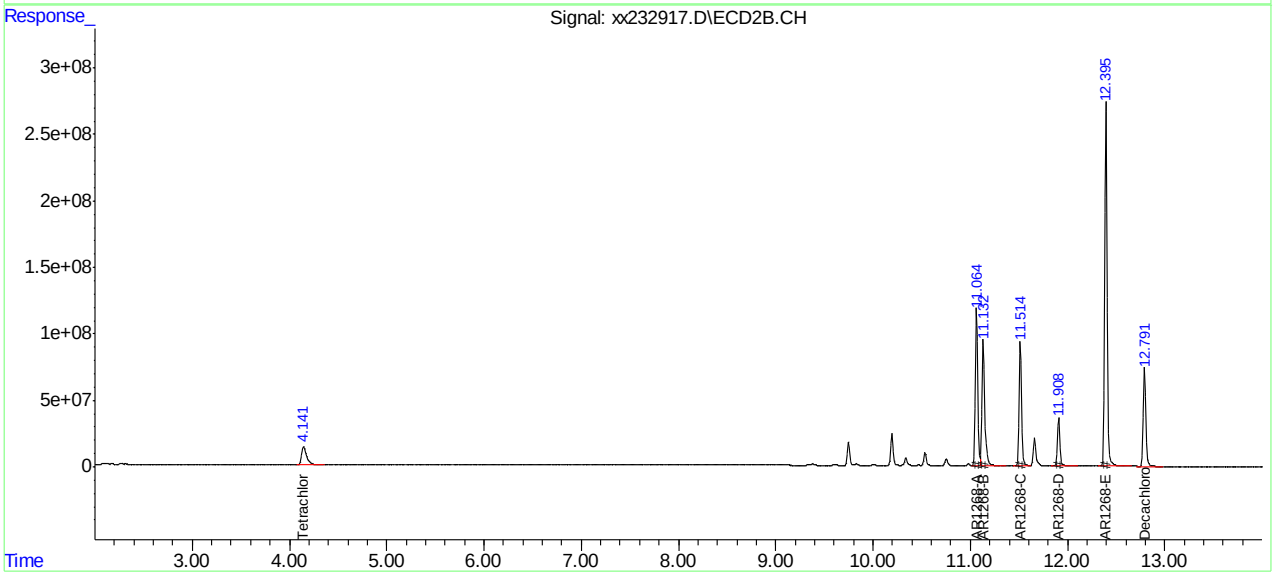
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232917.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 7:23 am
Operator : carolb
Sample : icv-6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 17:01:02 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Carol Boykin 07/31/18 17:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 10:50 am
Operator : carolb
Sample : icv6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 17:01:37 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.423	4.139	564.5E6	460.4E6	44.341	44.699
	Spiked Amount 40.000			Recovery	= 110.85%	111.75%	
51)	S Decachlor...	10.958f	12.797	691.7E6	500.9E6	43.706	44.583
	Spiked Amount 40.000			Recovery	= 109.27%	111.46%	
	Target Compounds						
41)	AR1016-A	3.846	4.842	215.4E6	168.0E6	940.468	942.430
42)	AR1016-B	4.287	5.430	427.5E6	356.3E6	1000.743	993.378
43)	AR1016-C	4.887	6.092	978.0E6	788.3E6	977.291	999.931
44)	AR1016-D	5.067	6.288	370.2E6	297.8E6	984.104	1013.922
45)	AR1016-E	5.602	6.972	374.5E6	223.4E6	946.338	975.630
46)	AR1260-A	8.054f	8.807	1123.2E6	477.9E6	982.395	945.783
47)	AR1260-B	8.213f	9.752	507.0E6	475.6E6	879.683	924.736
48)	AR1260-C	8.559f	10.195	535.3E6	493.6E6	897.476	938.528
49)	AR1260-D	8.997f	10.540	1406.5E6	1317.5E6	920.083	963.181
50)	AR1260-E	9.398f	11.094	1424.8E6	1090.7E6	915.697m	842.633m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

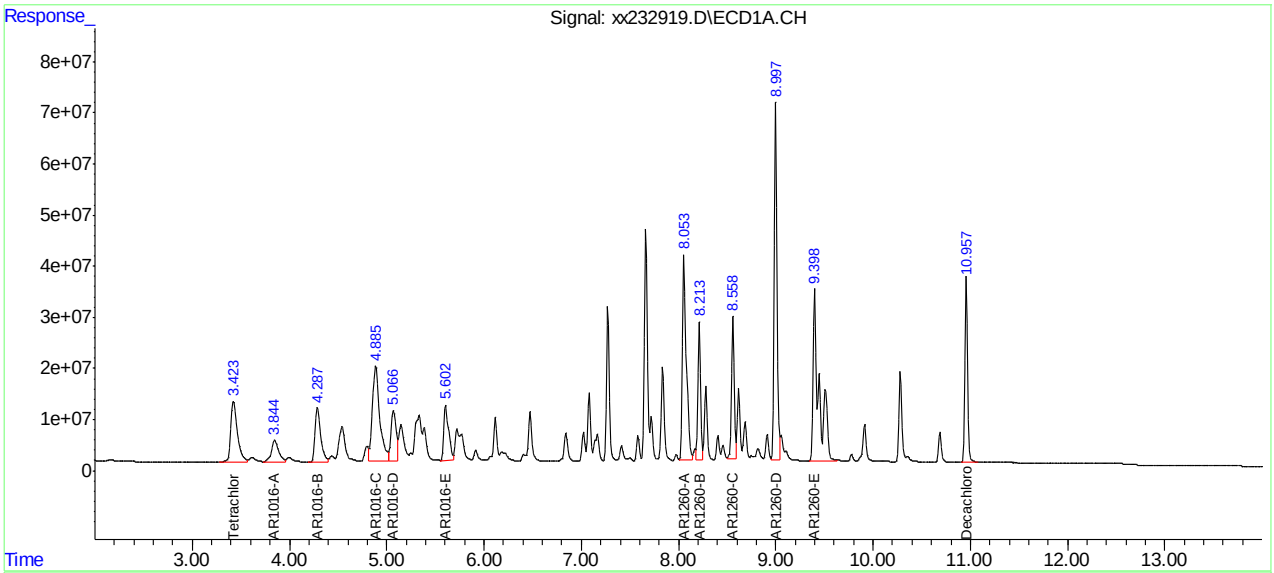
11.4.21
11

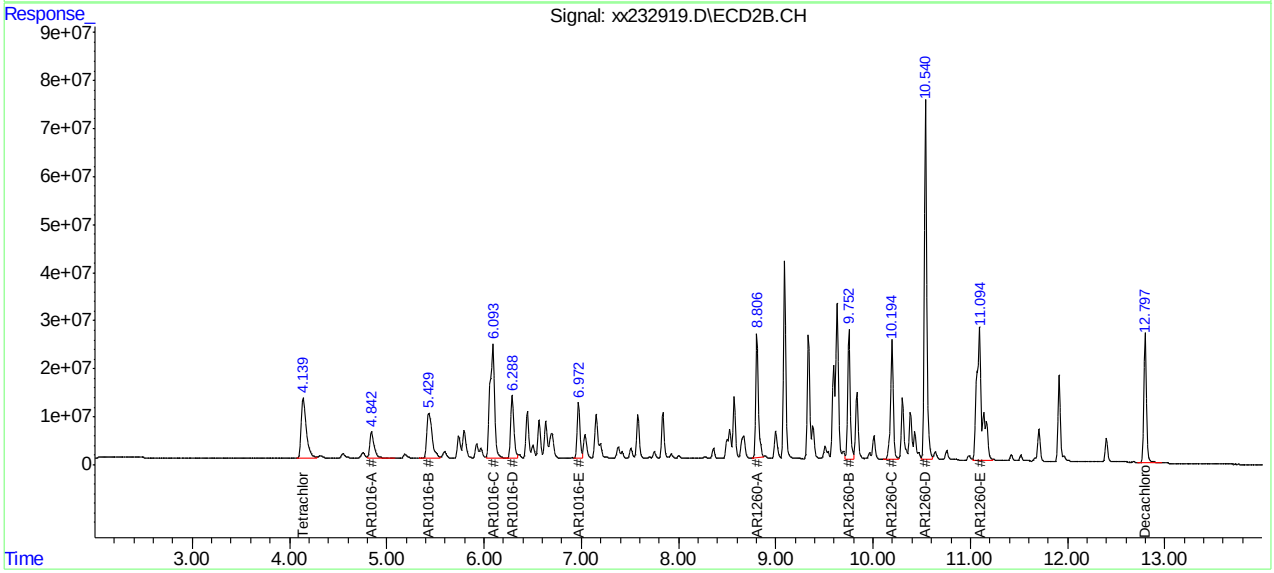
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 10:50 am
Operator : carolb
Sample : icv6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 17:01:37 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6423-ICV6423	**Method:**	SW846 8082A	
Lab FileID:	XX232919.D	**Analyst approved:**	07/31/18 17:06	Summer Kotb
Injection Time:	07/28/18 10:50	**Supervisor approved:**	07/31/18 17:30	Carol Boykin

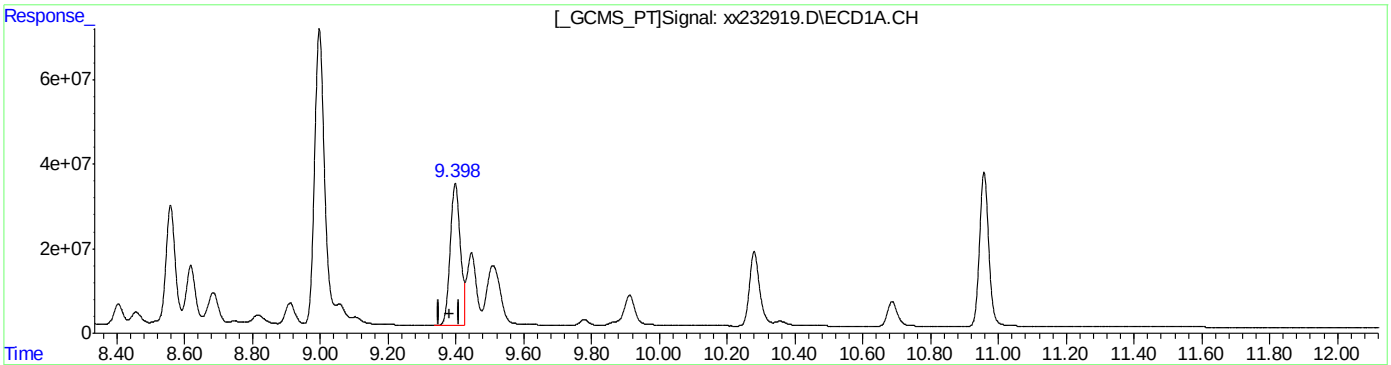
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-E		1	9.40	Split peak
AR1260-E		2	11.09	Split peak

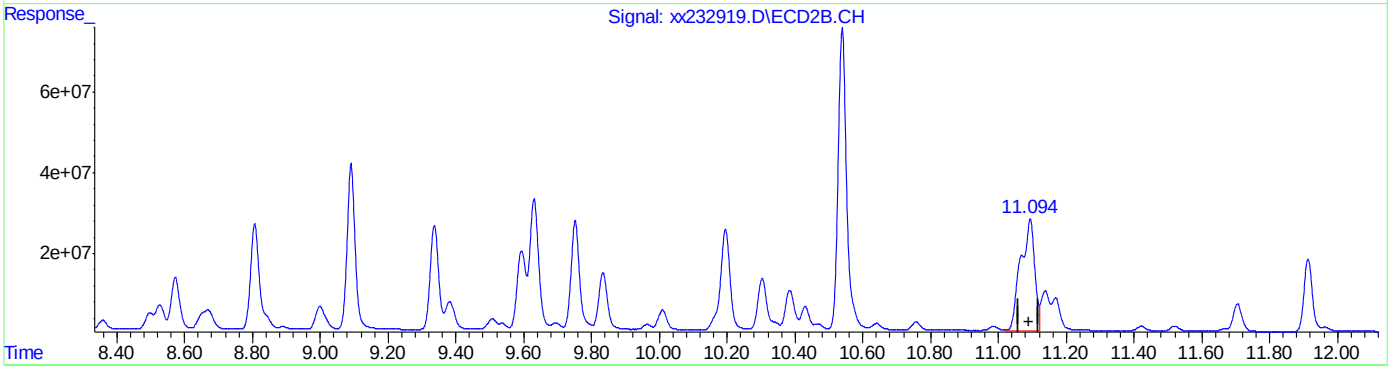
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 10:50 am
Operator : carolb
Sample : icv6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 17:01:16 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E
9.398min 444.692PPB
response 691942581

(50) AR1260-E #2
11.094min 604.482PPB
response 782472753

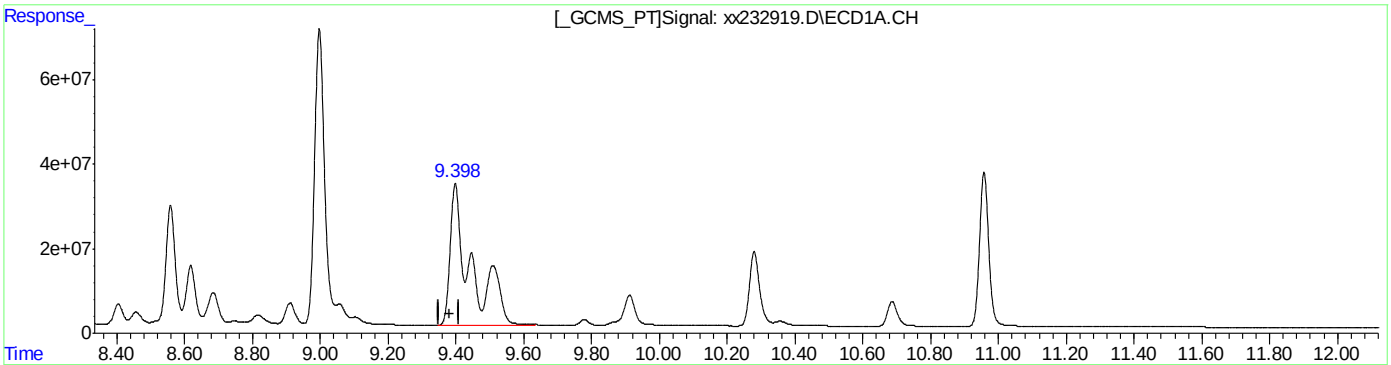
(+) = Expected Retention Time

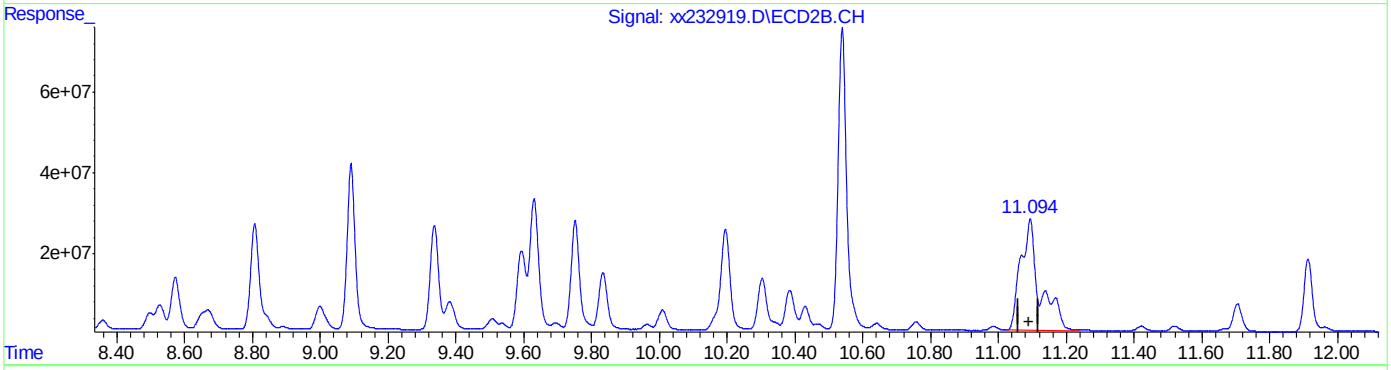
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6423\
Data File : xx232919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jul 2018 10:50 am
Operator : carolb
Sample : icv6423-1000
Misc : op13739,GXX6423,1000,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 31 17:01:16 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E
9.398min 915.697PPB m
response 1424829301

(50) AR1260-E #2
11.094min 842.633PPB m
response 1090748849

(+) = Expected Retention Time
PCB6423.M Tue Jul 31 17:01:39 2018

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 08/15/18 11:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233808.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 3:54 am
Operator : summerk
Sample : cc6423-500
Misc : op14212,GXX6439,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 04:21:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.420	4.149	280.9E6	201.9E6	22.060	19.602
	Spiked Amount 40.000			Recovery	=	55.15%	49.00%
51)	S Decachlor...	10.938	12.785	281.8E6	187.2E6	17.803	16.665
	Spiked Amount 40.000			Recovery	=	44.51%	41.66%
	Target Compounds						
41)	AR1016-A	3.838	4.847	135.7E6	90294718	592.517	506.568
42)	AR1016-B	4.276	5.432	232.1E6	181.2E6	543.317	505.283
43)	AR1016-C	4.875	6.092	537.8E6	387.9E6	537.376	492.009
44)	AR1016-D	5.051	6.288	204.8E6	148.0E6	544.365	504.039
45)	AR1016-E	5.588	6.969	212.3E6	111.7E6	536.459	487.946
46)	AR1260-A	8.035	8.800	561.3E6	224.5E6	490.914	444.277
47)	AR1260-B	8.195	9.743	279.5E6	236.9E6	485.055	460.541
48)	AR1260-C	8.540	10.185	295.7E6	237.3E6	495.811	451.191
49)	AR1260-D	8.978	10.530	735.5E6	620.7E6	481.165	453.773
50)	AR1260-E	9.378	11.083	742.2E6	563.1E6	477.003m	435.020m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

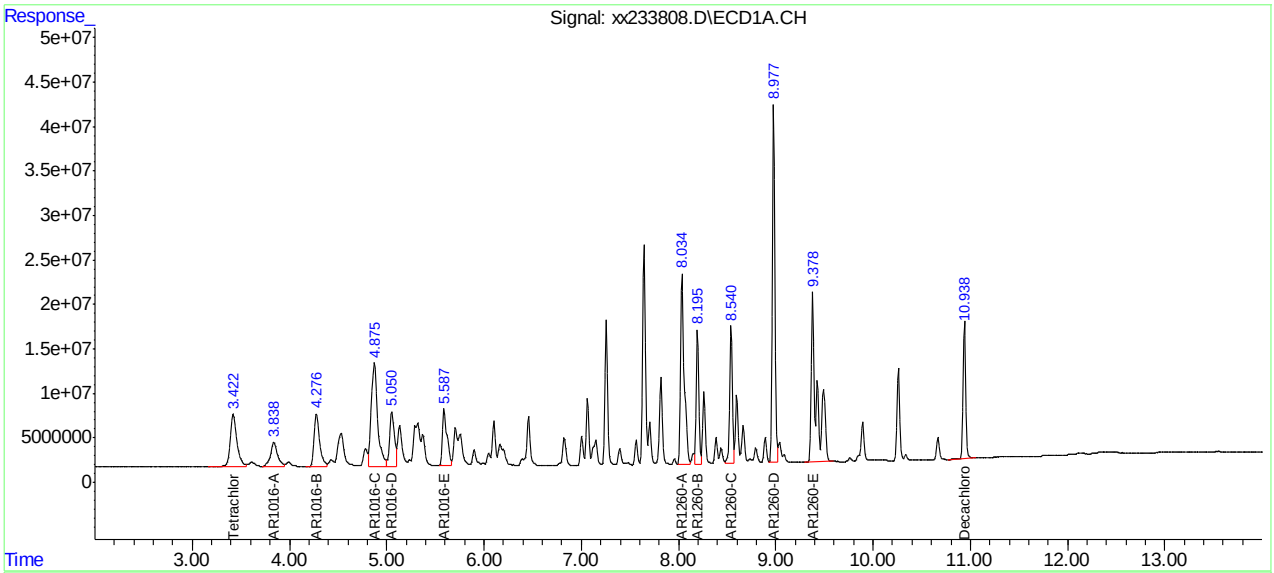
11.4.22
11

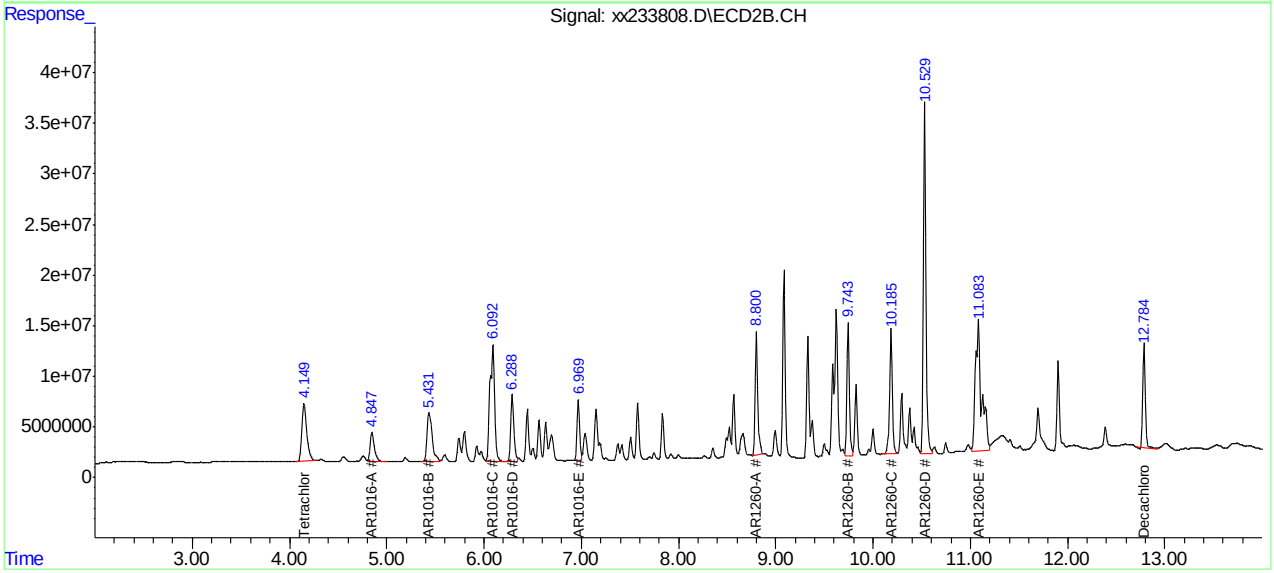
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233808.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 3:54 am
Operator : summerk
Sample : cc6423-500
Misc : op14212,GXX6439,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 04:21:24 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6439-CC6423	**Method:**	SW846 8082A
Lab FileID:	XX233808.D	**Analyst approved:**	08/15/18 08:44 Summer Kotb
Injection Time:	08/15/18 03:54	**Supervisor approved:**	08/15/18 11:07 Gwendolyn Burns

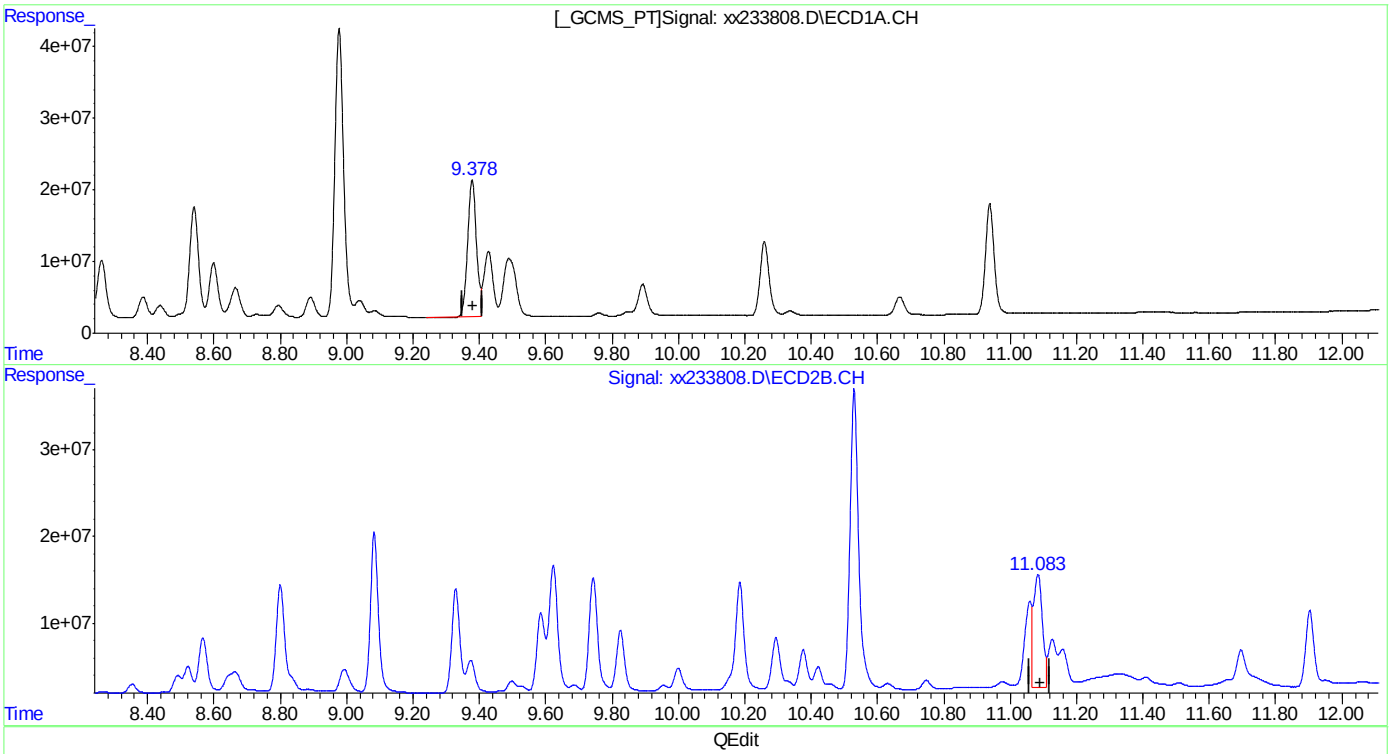
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-E		1	9.38	Split peak
AR1260-E		2	11.08	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233808.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 3:54 am
Operator : summerk
Sample : cc6423-500
Misc : op14212,GXX6439,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 04:20:17 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.378min 227.697PPB
response 354298249

(50) AR1260-E #2
11.084min 184.686PPB
response 239067121

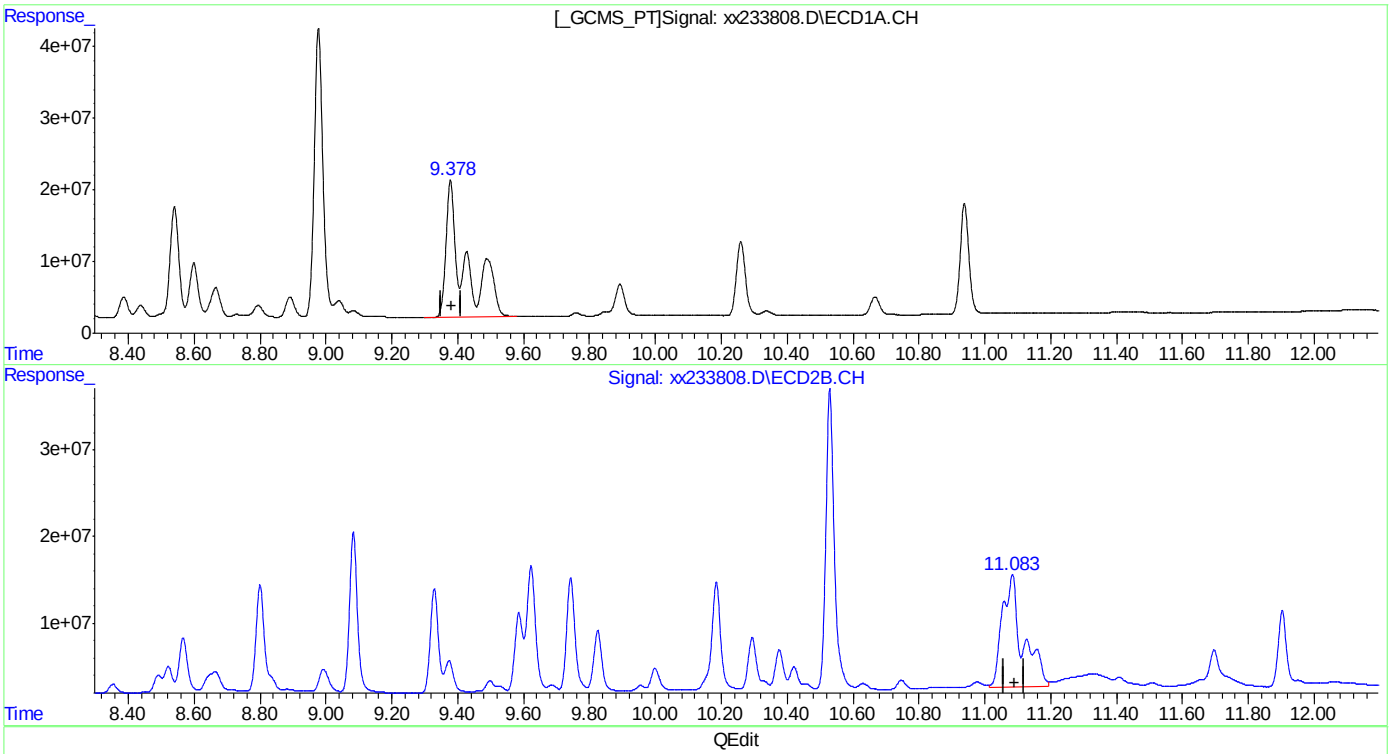
(+) = Expected Retention Time
PCB6423.M Wed Aug 15 04:20:52 2018

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233808.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 3:54 am
Operator : summerk
Sample : cc6423-500
Misc : op14212,GXX6439,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 04:20:17 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.378min 477.003PPB m
response 742219395

(50) AR1260-E #2
11.083min 435.020PPB m
response 563113080

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 08/15/18 11:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233818.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 6:59 am
Operator : summerk
Sample : cc6423-1000
Misc : op14250,GXX6439,900,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 08:17:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.420	4.148	557.5E6	423.3E6	43.788	41.098
	Spiked Amount 40.000			Recovery	=	109.47%	102.75%
51)	S Decachlor...	10.939	12.786	613.6E6	443.8E6	38.771	39.505
	Spiked Amount 40.000			Recovery	=	96.93%	98.76%
	Target Compounds						
41)	AR1016-A	3.837	4.847	259.8E6	176.3E6	1134.019	989.150
42)	AR1016-B	4.276	5.430	448.0E6	356.5E6	1048.855	993.913
43)	AR1016-C	4.874	6.093	1061.6E6	784.6E6	1060.818	995.280
44)	AR1016-D	5.050	6.290	400.0E6	298.9E6	1063.049	1017.849
45)	AR1016-E	5.589	6.970	419.5E6	230.5E6	1059.898	1006.723
46)	AR1260-A	8.035	8.801	1171.5E6	509.5E6	1024.614	1008.213
47)	AR1260-B	8.195	9.744	578.9E6	526.0E6	1004.564	1022.663
48)	AR1260-C	8.541	10.187	625.0E6	524.0E6	1047.894	996.213
49)	AR1260-D	8.979	10.531	1575.4E6	1396.5E6	1030.591	1020.884
50)	AR1260-E	9.378	11.084	1581.3E6	1214.5E6	1016.282m	938.227m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

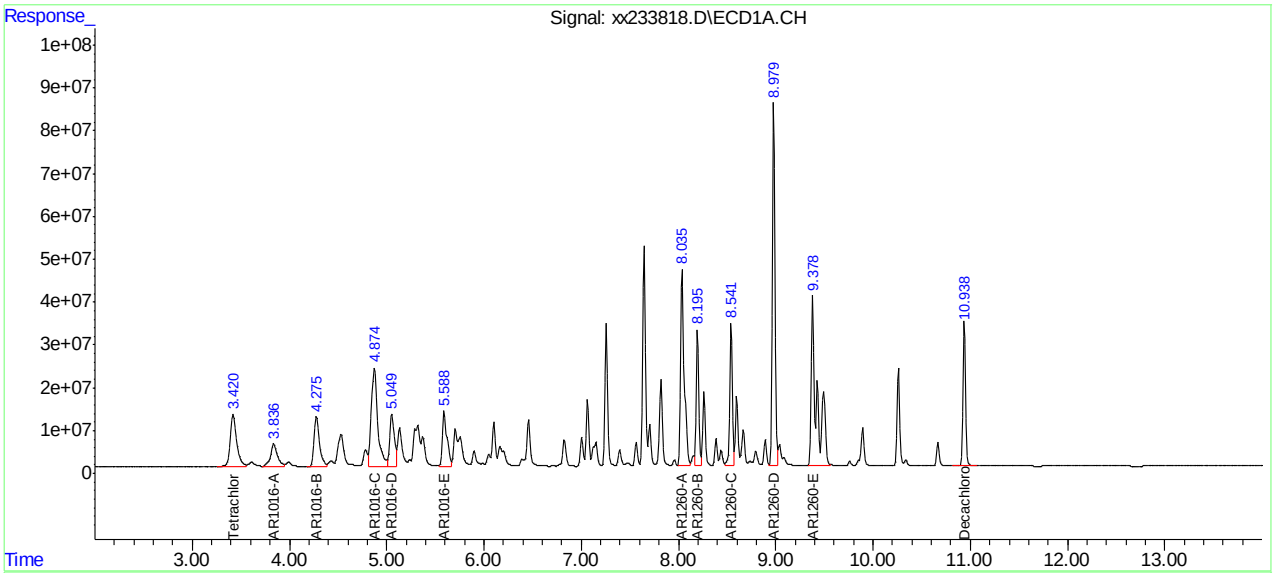
11.4.23 11

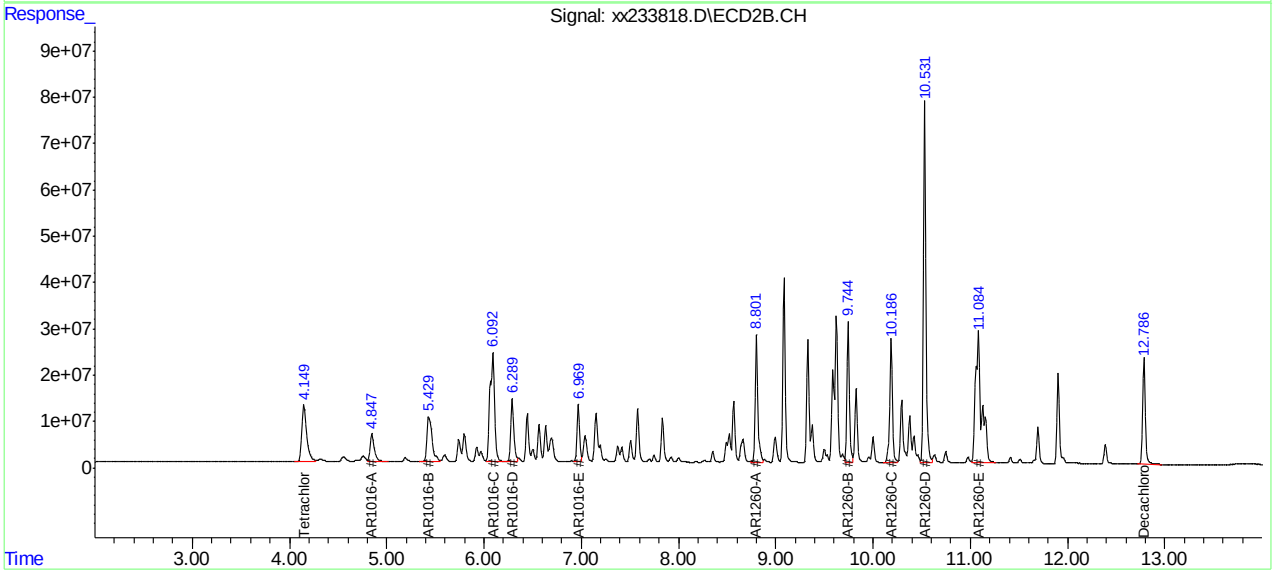
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233818.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 6:59 am
Operator : summerk
Sample : cc6423-1000
Misc : op14250,GXX6439,900,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 08:17:26 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GXX6439-CC6423	**Method:**	SW846 8082A
Lab FileID:	XX233818.D	**Analyst approved:**	08/15/18 08:44 Summer Kotb
Injection Time:	08/15/18 06:59	**Supervisor approved:**	08/15/18 11:07 Gwendolyn Burns

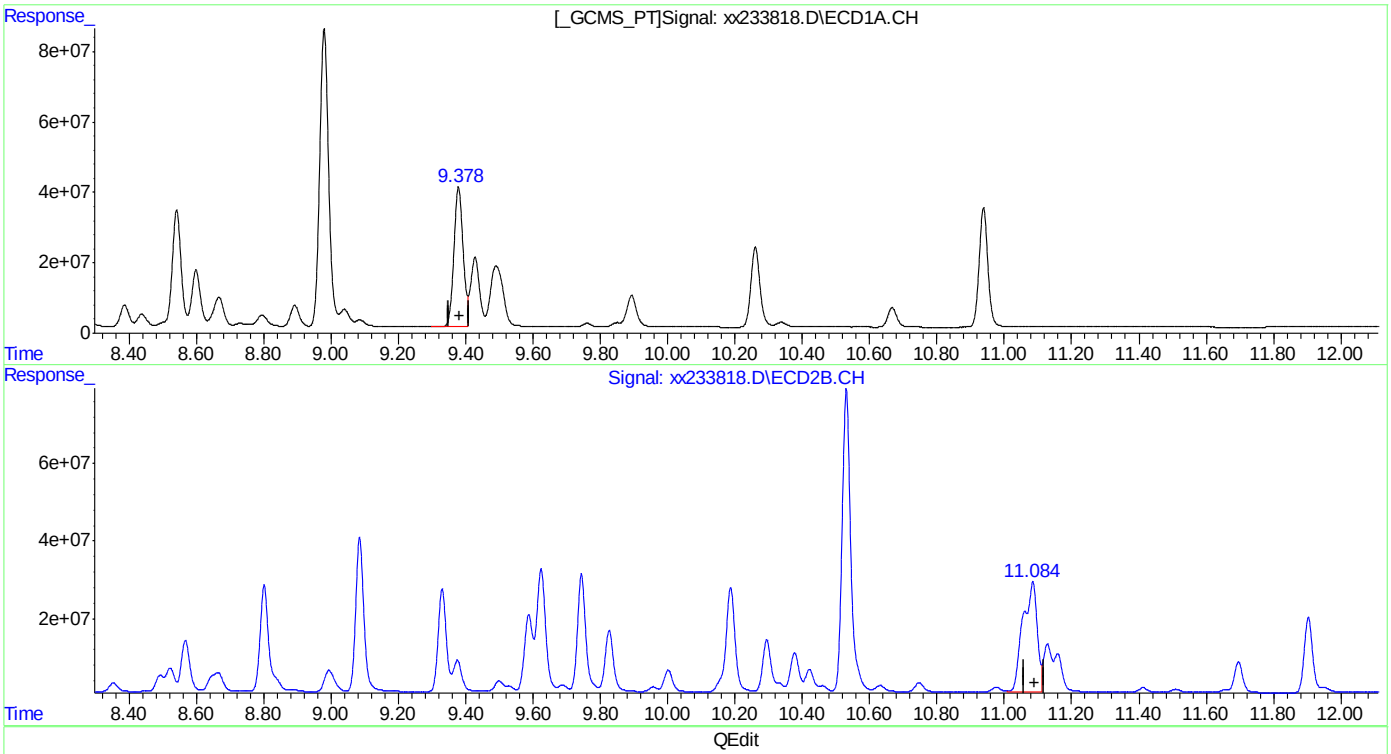
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-E		1	9.38	Split peak
AR1260-E		2	11.08	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233818.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 6:59 am
Operator : summerk
Sample : cc6423-1000
Misc : op14250,GXX6439,900,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 08:16:49 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.378min 486.964PPB
response 757717865

(50) AR1260-E #2
11.085min 645.928PPB
response 836123482

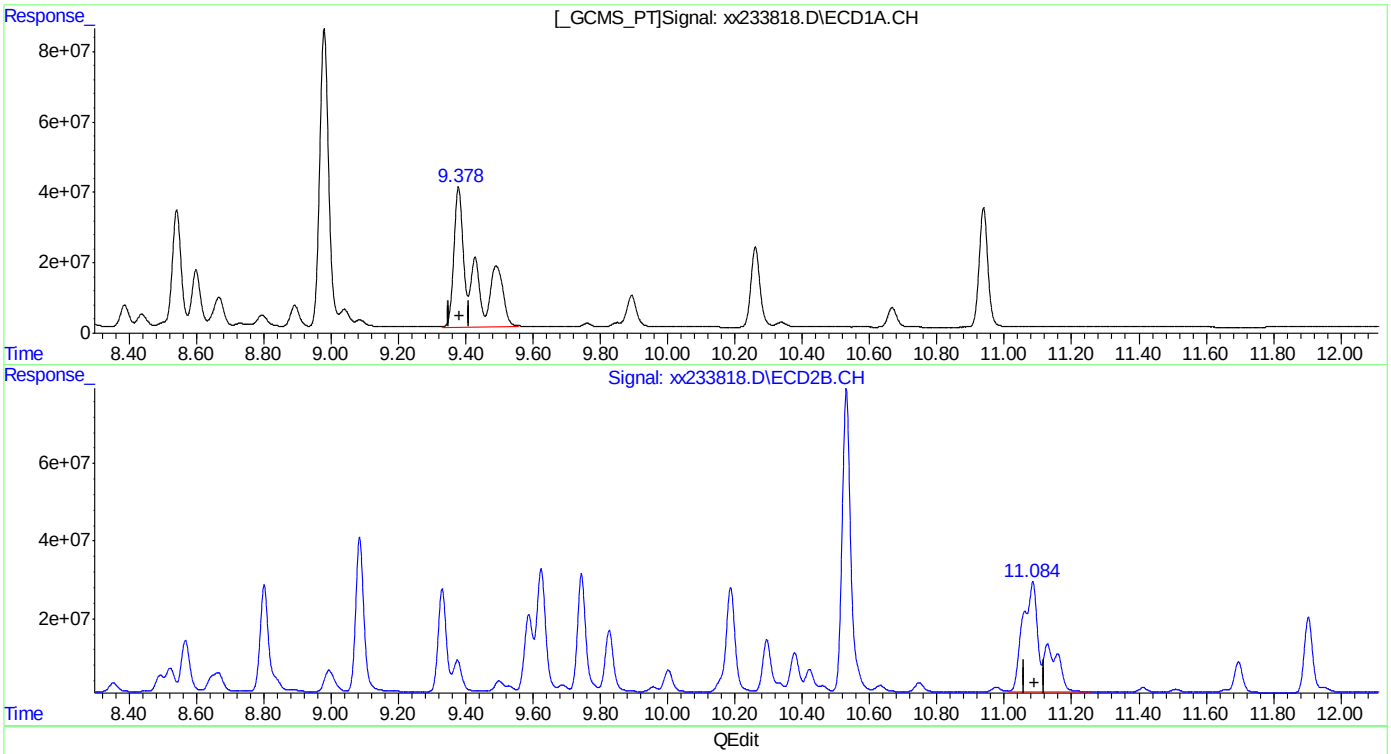
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\gxx6439\
Data File : xx233818.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 15 Aug 2018 6:59 am
Operator : summerk
Sample : cc6423-1000
Misc : op14250,GXX6439,900,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 15 08:16:49 2018
Quant Method : C:\MSDCHEM\1\METHODS\PCB6423.M
Quant Title :
QLast Update : Tue Jul 31 16:48:22 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E
9.378min 1016.282PPB m
response 1581339620

(50) AR1260-E #2
11.084min 938.227PPB m
response 1214490199

(+) = Expected Retention Time
PCB6423.M Wed Aug 15 08:17:27 2018

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GXX6423

Print Analyst Name: Carol B. Boyle

Analyst Signature: CB

Date: 7/27/18

Columns: 2BCLPI / 2BCLPII

Method 8082

Initial Cal. Method PCB6423

Injection Volume: 1.0ul.

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SW8-243	1016/1260	500 ppb
↓ 243B	1016/1260	1000 ppb
↓ 102	1B	20 ppb

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: CB Date: 7/30/18

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	X23893	Hex				100				✓	
	894	↓				100				✓	
	895	↓				100				✓	
	896	1B				2			✓	OK	
	897	ICV6423-50				3			✓	OK	✓
	898	250				4			✓	OK	✓
	899	500				5			✓	OK	✓
	900	ICV6423-1000				6			✓	OK	✓
	901	2000				7			✓	OK	✓
	902	3000				8			✓	OK	✓
	903	IC6423-1000	1221			9			✓	OK	✓
	904	1000	1232			10			✓	OK	✓
	905	1000	1242			11			✓	OK	✓
	906	1000	1248			12			✓	OK	✓
	907	1000	1254			13			✓	OK	✓
	908	1000	1262			14			✓	OK	✓
	909	↓ 1000	1268			15			✓	OK	✓
	910	ICV6423-1000	1216/1260			16				NG	RR DCB high
	911	1000	1221			17			✓	OK	✓

MTX = Matrix. Designate W for water, S for soil, O for oil. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated, and reason applied if not transcription error

37

Form: OR016-09

Rev. Date: 5/25/17

11.5.1 11

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GXX6423

Print Analyst Name: Carol B. Boyle

Date: 7/27/18

Analyst Signature: CB

Columns: 2B CLP I / 2B CLP

Method 8082

Initial Cal. Method PCB6423

Injection Volume: 1.0uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SUB2422	1234 10/60-1260	500ppb
	B ↓	1000 ppb
10K	1B	20ppb
180405	1KY	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: CB Date: 7/30/18

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	XX233912	ICV 6423-1000	1232			18			/	OK	✓
	913		1242			19			/	OK	✓
	914		1254			20			/	OK	✓
	915		1254			21			/	OK	✓
	916		1262			22			/	OK	✓
	917	↓	1268			23			/	OK	✓
	918	Posting				24			/		✓
	919	ICV 6423-1000 CC 6423-500	1016/1260			25			/	OK OK	✓
	~~920~~	1B				2					

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09
Rev. Date: 5/25/17

39

11.5.1 11

JJJ

SEMIVOLATILE by GC ANALYSIS LOG

3/8/4

Batch ID: GXX64389

Print Analyst Name: Summer Kotb

Date: 8/14/18

Analyst Signature: SK

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
18-2484-59	AR 1016/1260	500 ppb
58	AR 1016/1260	1000 ppb
102	IB	20 ppb
180465	Hexane (Fisher)	—

Columns: ZB-CLPI/ZB-CLPII

Method 8082, 608

Initial Cal. Method PCB6423

Injection Volume: 1.0 ul

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 8-15-18

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	XX233756	CC6423-500				89			/	ok	
	757	IB				2			/	ok	
	758	JC71560-3	14165	8082	S	58	100		/	ok	
	759	-4				59	5		/	ok	
	760	-5				60	10		/	ok	
	761	-23				68	100 5x		/	ok	
	762	-25				62	10		/	ok	
	763	-31				69	10 5x		/	ok	
R	764	-32				64			/	ok	
	765	JC71518-4				65	100		/	ok	
	766	Hexane				100				ok	
	767	CC6423-500				66 10 5x			/	ok	
	768	IB				2			/	ok	
R	769	JC71518-5	14166	8082	S	70			/	ok	Had TBA /RR1:5
R	770	-6				71	10		/	ok	
R	771	-7				72			/	ok	5x RR 1:5
R	772	-12				73			/	ok	Had TBA
	773	JC71525-10				74			/	ok	
	774	-11				76			/	ok	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09
Rev. Date: 5/25/17

133

11.5.2 11

JJJ

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GXX6439

Print Analyst Name: Summer Kotb

Date: 8/14/18

Analyst Signature: SK

Columns: ZBCLPI / ZBCLPII

Method 8082, 608

Initial Cal. Method PCB1423

Injection Volume: 1.0ul

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 18-2484-5a	SV 18: AR 1016/1260	500 ppb
-5B	AR 1016/1260	1000 ppb
-102	1B	20 ppb
180405	Hexane (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 8-15-18

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	XX233775	JC71525-12				77			/	ok	
	776	-13				78			/	ok	
	777	Hexane				100				ok	
	778	Hexane				100				ok	
	779	cc6423-1000				91			/	ok	
	780	1B				2			/	ok	
	781	JC71525-14	14166	8082	S	96	79 8/14		/	ok	
	782	-15				93	80		/	ok	
	783	-16				94	81		/	ok	
	784	-17				95	82		/	ok	
	785	Hexane				100				ok	
	786	Hexane				100				ok	
	787	cc6423-500				92			/	ok	
	788	1B				2			/	ok	
	789	op14212-MB	14212	8082	S	3			/	ok	
	790	-BS				4			/	ok	
	791	-BSD				5			/	ok	
	792	JC69949-18f				6			/	ok	
	793	-MS				7			/	ok	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09
Rev. Date: 5/25/17

135

11.5.2 11

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GXX6439

Print Analyst Name: Summer Kolb

Date: 8/14/18

Analyst Signature: SK

Columns: ZBCLPI / ZBCLPII

Method 8082, 608

Initial Cal. Method PCB6423

Injection Volume: 1.0 ul

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SOM18-2484-5A	AR 1016/1260	500 ppb
-5B	AR 1016/1260	1000 ppb
-102	IB	20 ppb
180405	Hexane (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: W. Dayne Date: 8-15-18

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	X1233794	OP14212-MSD				8			/	ok	
	795	JC69949-7ot				9			/	ok	
	796	Hexane				100				ok	
	797	Hexane				100				ok	
	798	CC6423-1000				10			/	ok	
	799	IB				2			/	ok	
	800	JC71523-5	14212	8082	S	11			/	ok	
	801	-6				12			/	ok	
	802	-7				13			/	ok	
	803	JC71660-1				14			/	ok	
	804	JC71679-1				15			/	ok	
	805	JC71688-2				16			/	ok	
	805A	JC71518-5	14166	8082	S	18	5		/	ok	
	806	Hexane				100				ok	
	807	Hexane				100				ok	
	808	CC6423-500				17			/	ok	
	809	IB				2			/	ok	
	810	OP14250-MB	14250	8082	W	19	CMP8115/16		/	ok	
	811	-BS				20			/	ok	
	812	-BSD				21			/	ok	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09
Rev. Date: 5/25/17

137

Pest/PCB Extraction Log - Aqueous (GC)

Date Started:	8/14/2018	Time Started:	08:45
Date Finished:	8/14/18	Time Finished:	1530

Batch # OP14250 **Rack #** PCB 7

	JS
Extracted By:	JS
Concentrated By:	AA
Final Vol. Top-up:	~~SA~~ 55
Vialed By:	SA
Supervisor Review:	AM 8-14-18

Set-up by:

Separatory Funnel: SW846 3510C/CLP/other

Continuous Liquid Liquid: SW846 3520C/CLP/other

Special Client Spike Instructions

QC ID # for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt Spiked

Sample #	Analysis Type	Samp Bot #	pH	Sample Description	Sample Vol (mL)	Final Extract Color	Final Extract Vol (mL)					Comments
OP14250-MB				DI H2O	1000	CLEAR	5.0	-				
OP14250-BS				DI H2O	1000	CLEAR	5.0	-				
OP14250-BSD				DI H2O	1000	CLEAR	5.0	-				

Pest/PCB Extraction Log - Aqueous (GC)

Sample #	Analysis Type	Samp Bot #	pH	Sample Description	Sample Vol (mL)	Final Extract Color	Final Extract Vol (mL)					Comments
JC71597-9		4		CLEAR	900	CLEAR	5.0	-				
JC71604-1		3		LT YELLOW	1000	YELLOW	5.0	-				
JC71728-6		4		CLEAR	900	CLEAR	5.0	-				

Pest/PCB Extraction Log - Aqueous (GC)

Equipment/Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/Flowrate
Buchi (65-71°C)	3	65	-	-	OK
Buchi Chiller	B3	11	-	-	OK
Waterbath (70-80°C)	5	73	-	-	-
Waterbath Chiller (GPM)	F3	5	-	-	2.0
NEVAP (32-38°C, LPM)	4	35	-	-	10

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	18223159	400	1.0
PPCB LL			
WITNESS SIGN:	VP	SPIKE SIGN:	JS
MATRIX SPIKE	LOT #	CONC (ppb)	AMT (mL)
Pest			
PestLL			
PCB	182158121	2	1.0
PCB LL			
WITNESS SIGN:	VP	SPIKE SIGN:	JS
REAGENT	LOT #	Bake Batch #	Brand
Sodium Sulfate	178434	7-10-18	FISHER
Glass Wool	04T04		LAB
Filter Paper			
Copper	18223126		ALDRICH
Florisil			
1:1 Sulfuric Acid			
Chlorine Strips			
Solvent	LOT #	Brand	AMT (mL)
Meth Chlor	185095	FISHER	60x3
Hexane	180405	FISHER	50

Special processing instructions

RX Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Batch Comments:

Pest/PCB Extraction Log - Aqueous (GC)

Approved By: _____ Approval Date: _____

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
Analyst: EAL Run ID: MA45052
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:07	MA45052-STD1	1		B=2.0658e-004, C=-1.3383e-002, Rho=0.9999506
15:08	MA45052-STD2	1		STDB
15:09	MA45052-STD3	1		STDC
15:11	MA45052-STD4	1		STDD
15:12	MA45052-STD5	1		STDE
15:14	MA45052-STD6	1		STDF
15:16	MA45052-ICV1	1		
15:17	MA45052-ICB1	1		
15:19	MA45052-CCV1	1		
15:21	MA45052-CCB1	1		
15:22	MA45052-CRI1	1		
15:24	MP8547-MB2	1		
15:25	ZZZZZZ	1		
15:26	ZZZZZZ	1		
15:28	ZZZZZZ	1		
15:29	MP8562-MB1	1		
15:30	MP8562-MB2	1		
15:32	MP8562-B1	1		
15:33	MP8562-B2	1		
15:35	MA45052-CCV2	1		
15:36	MA45052-CCB2	1		
15:38	MP8562-S1	1		
15:39	MP8562-S2	1		
15:41	JC68615-8UA	1		(sample used for QC only; not part of login JC71604)
15:42	ZZZZZZ	1		
15:44	ZZZZZZ	1		
15:45	ZZZZZZ	1		
15:46	ZZZZZZ	1		
15:48	ZZZZZZ	1		
15:49	ZZZZZZ	1		
15:50	MA45052-CCV3	1		
15:51	MA45052-CCB3	1		
15:53	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
Analyst: EAL Run ID: MA45052
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:54	ZZZZZZ	1		
15:56	ZZZZZZ	1		
15:57	ZZZZZZ	1		
15:58	ZZZZZZ	1		
16:00	ZZZZZZ	1		
16:05	ZZZZZZ	1		
16:06	ZZZZZZ	1		
16:08	ZZZZZZ	1		
16:09	ZZZZZZ	1		
16:11	ZZZZZZ	1		
16:12	MA45052-CCV4	1		
16:13	MA45052-CCB4	1		
16:15	ZZZZZZ	1		
16:16	ZZZZZZ	1		
16:20	ZZZZZZ	1		
16:21	ZZZZZZ	1		
16:22	ZZZZZZ	1		
16:24	ZZZZZZ	1		
16:25	ZZZZZZ	1		
16:26	ZZZZZZ	1		
16:27	ZZZZZZ	1		
16:29	MA45052-CCV5	1		
16:30	MA45052-CCB5	1		
16:32	ZZZZZZ	1		
16:33	ZZZZZZ	1		
16:35	MP8547-B2	1		
16:37	ZZZZZZ	1		
16:39	ZZZZZZ	1		
16:40	ZZZZZZ	1		
16:44	ZZZZZZ	1		
16:45	MA45052-CCV6	1		
16:47	MA45052-CCB6	1		
16:49	MP8567-MB1	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
Analyst: EAL Run ID: MA45052
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:50	MP8567-B1	1		
16:52	MP8567-S1	1		
16:53	MP8567-S2	1		
16:55	JC71534-1	1		(sample used for QC only; not part of login JC71604)
16:56	ZZZZZZ	1		
16:58	ZZZZZZ	1		
16:59	MA45052-CCV7	1		
17:00	MA45052-CCB7	1		
17:03	ZZZZZZ	1		
17:04	ZZZZZZ	1		
17:06	JC71604-1	1		
---------->	Last reportable sample/prep for job JC71604			
17:07	MP8573-MB1	1		Batch to be redigested, analytical problem.
17:08	MP8573-B1	1		Batch to be redigested, analytical problem.
17:09	MP8573-S1	1		Batch to be redigested, analytical problem.
17:11	ZZZZZZ	20		Honeywell for confirmation.
17:13	ZZZZZZ	1		Honeywell for confirmation.
17:14	ZZZZZZ	1		Honeywell for confirmation.
17:16	MA45052-CCV8	1		
17:17	MA45052-CCB8	1		
---------->	Last reportable CCB for job JC71604			
17:19	MP8573-S2	20		Batch to be redigested, analytical problem.
17:20	JC71477-1A	2		(sample used for QC only; not part of login JC71604)
17:22	MP8576-MB1	2		
17:23	MP8576-B1	1		
17:24	MP8576-S1	1		
17:26	MP8576-S2	1		
17:28	JC71587-2A	1		(sample used for QC only; not part of login JC71604)
17:29	ZZZZZZ	1		
17:30	ZZZZZZ	1		
17:32	MA45052-CCV9	1		
17:33	MA45052-CCB9	1		
17:35	ZZZZZZ	1		
17:36	ZZZZZZ	1		
17:37	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
Analyst: EAL Run ID: MA45052
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:39	ZZZZZZ	1		
17:40	ZZZZZZ	1		
17:41	ZZZZZZ	1		
17:43	MP8577-MB1	1		
17:44	MP8577-B1	1		
17:45	MP8577-S1	1		
17:47	MA45052-CCV10	1		
17:49	MA45052-CCB10	1		
17:50	MP8577-S2	1		
17:52	JC71187-1R	1		(sample used for QC only; not part of login JC71604)
17:53	ZZZZZZ	1		
17:55	ZZZZZZ	1		
17:56	ZZZZZZ	1		
17:57	ZZZZZZ	1		
17:59	MA45052-CCV11	1		
18:00	MA45052-CCB11	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
Analyst: EAL Run ID: MA45052
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
15:16	MA45052-ICV1	1	X	
15:17	MA45052-ICB1	1	X	
15:19	MA45052-CCV1	1	X	
15:21	MA45052-CCB1	1	X	
15:22	MA45052-CRI1	1	X	
15:24	MP8547-MB2	1	X	
15:25	ZZZZZZ	1		
15:26	ZZZZZZ	1		
15:28	ZZZZZZ	1		
15:29	MP8562-MB1	1	X	
15:30	MP8562-MB2	1	X	
15:32	MP8562-B1	1	X	
15:33	MP8562-B2	1	X	
15:35	MA45052-CCV2	1	X	
15:36	MA45052-CCB2	1	X	
15:38	MP8562-S1	1	X	
15:39	MP8562-S2	1	X	
15:41	JC68615-8UA	1	X	(a)
15:42	ZZZZZZ	1		
15:44	ZZZZZZ	1		
15:45	ZZZZZZ	1		
15:46	ZZZZZZ	1		
15:48	ZZZZZZ	1		
15:49	ZZZZZZ	1		
15:50	MA45052-CCV3	1	X	
15:51	MA45052-CCB3	1	X	
15:53	ZZZZZZ	1		
15:54	ZZZZZZ	1		
15:56	ZZZZZZ	1		
15:57	ZZZZZZ	1		
15:58	ZZZZZZ	1		
16:00	ZZZZZZ	1		
16:05	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
Analyst: EAL Run ID: MA45052
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
16:06	ZZZZZZ	1		
16:08	ZZZZZZ	1		
16:09	ZZZZZZ	1		
16:11	ZZZZZZ	1		
16:12	MA45052-CCV4	1	X	
16:13	MA45052-CCB4	1	X	
16:15	ZZZZZZ	1		
16:16	ZZZZZZ	1		
16:20	ZZZZZZ	1		
16:21	ZZZZZZ	1		
16:22	ZZZZZZ	1		
16:24	ZZZZZZ	1		
16:25	ZZZZZZ	1		
16:26	ZZZZZZ	1		
16:27	ZZZZZZ	1		
16:29	MA45052-CCV5	1	X	
16:30	MA45052-CCB5	1	X	
16:32	ZZZZZZ	1		
16:33	ZZZZZZ	1		
16:35	MP8547-B2	1	X	
16:37	ZZZZZZ	1		
16:39	ZZZZZZ	1		
16:40	ZZZZZZ	1		
16:44	ZZZZZZ	1		
16:45	MA45052-CCV6	1	X	
16:47	MA45052-CCB6	1	X	
16:49	MP8567-MB1	1	X	
16:50	MP8567-B1	1	X	
16:52	MP8567-S1	1	X	
16:53	MP8567-S2	1	X	
16:55	JC71534-1	1	X	(a)
16:56	ZZZZZZ	1		
16:58	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
Analyst: EAL Run ID: MA45052
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
16:59	MA45052-CCV7	1	X	
17:00	MA45052-CCB7	1	X	
17:03	ZZZZZZ	1		
17:04	ZZZZZZ	1		
17:06	JC71604-1	1	X	
17:07	MP8573-MB1	1		
17:08	MP8573-B1	1		
17:09	MP8573-S1	1		
17:11	ZZZZZZ	20		
17:13	ZZZZZZ	1		
17:14	ZZZZZZ	1		
17:16	MA45052-CCV8	1	X	
17:17	MA45052-CCB8	1	X	
17:19	MP8573-S2	20		
17:20	JC71477-1A	2		(a)
17:22	MP8576-MB1	2	X	
17:23	MP8576-B1	1	X	
17:24	MP8576-S1	1	X	
17:26	MP8576-S2	1	X	
17:28	JC71587-2A	1	X	(a)
17:29	ZZZZZZ	1		
17:30	ZZZZZZ	1		
17:32	MA45052-CCV9	1	X	
17:33	MA45052-CCB9	1	X	
17:35	ZZZZZZ	1		
17:36	ZZZZZZ	1		
17:37	ZZZZZZ	1		
17:39	ZZZZZZ	1		
17:40	ZZZZZZ	1		
17:41	ZZZZZZ	1		
17:43	MP8577-MB1	1	X	
17:44	MP8577-B1	1	X	
17:45	MP8577-S1	1	X	
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
Analyst: EAL Run ID: MA45052
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg
17:47	MA45052-CCV10	1	X
17:49	MA45052-CCB10	1	X
17:50	MP8577-S2	1	X
17:52	JC71187-1R	1	X (a)
17:53	ZZZZZZ	1	
17:55	ZZZZZZ	1	
17:56	ZZZZZZ	1	
17:57	ZZZZZZ	1	
17:59	MA45052-CCV11	1	X
18:00	MA45052-CCB11	1	X

(a) Sample used for QC only; not part of login JC71604.

Element: Hg

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA45052 Units: ug/l

Time:			15:17		15:21		15:36		15:51	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.017	-0.0999	<0.20	-0.0630	<0.20	-0.0514	<0.20	-0.0502	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA45052 Units: ug/l

Time:			16:13		16:30		16:47		17:00	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.017	-0.0477	<0.20	-0.0530	<0.20	-0.0458	<0.20	-0.0421	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA45052 Units: ug/l

Time:			17:17	
Sample ID:			CCB8	
Metal	RL	IDL	raw	final
Mercury	0.20	.017	-0.0551	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA45052 Units: ug/l

Time:		15:16			15:19			15:35	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.27	109.0	2.5	2.56	102.4	2.5	2.54	101.6

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA45052 Units: ug/l

Time:		15:50			16:12			16:29	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.51	100.4	2.5	2.52	100.8	2.5	2.54	101.6

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA45052 Units: ug/l

Time:		16:45			16:59			17:16	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.53	101.2	2.5	2.54	101.6	2.5	2.50	100.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8081018W1.CSV Date Analyzed: 08/10/18 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA45052 Units: ug/l

Time:			15:22	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Mercury	0.20		0.200	100.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:44	MA45064-STD1	1		STDA
12:49	MA45064-STD2	1		STDA
12:54	MA45064-STD3	1		STDA
12:59	MA45064-STD4	1		STDB
13:04	MA45064-STD5	1		STDC
13:09	MA45064-STD6	1		STDD
13:14	MA45064-STD7	1		STDE
13:19	MA45064-STD8	1		STDF
13:24	MA45064-STD9	1		STDG
13:29	MA45064-STD10	1		STDH
13:34	MA45064-STD11	1		STDI
13:39	MA45064-STD12	1		STDJ
13:44	ZZZZZZ	1		
13:49	MA45064-ICVA1	1		
13:54	MA45064-ICV1	1		
13:59	MA45064-ICB1	1		
14:04	MA45064-CCVA1	1		
14:09	MA45064-CCB1	1		
14:15	MA45064-CRI1	1		
14:20	MA45064-ICSA1	1		
14:24	MA45064-ICSAB1	1		
14:29	ZZZZZZ	1		
14:35	MA45064-CCVA2	1		
14:40	MA45064-CCB2	1		
14:45	MP8579-MB1	1		
14:50	MP8579-B1	3		
14:55	MP8579-B1	1		
15:00	MP8579-S1	3		
15:05	MP8579-S2	3		
15:10	MP8579-S1	1		
15:15	MP8579-S2	1		
15:20	JC71444-1	1		(sample used for QC only; not part of login JC71604)
15:25	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:30	MA45064-CCVA3	1		
15:35	MA45064-CCB3	1		
15:40	ZZZZZZ	1		
15:45	ZZZZZZ	1		
15:50	ZZZZZZ	1		
15:55	ZZZZZZ	1		
16:00	ZZZZZZ	1		
16:05	ZZZZZZ	2		
16:10	ZZZZZZ	2		
16:15	MP8590-MB1	2		Batch to reanalysis for Se
16:20	MP8590-B1	2		
16:25	MA45064-CCVA4	1		
16:30	MA45064-CCB4	1		
16:35	ZZZZZZ	2		
16:40	MP8590-S1	2		Overrange
16:45	MP8590-S2	2		Overrange
16:50	JC71601-5	2		(sample used for QC only; not part of login JC71604)
16:55	MP8590-SD1	10		Overrange
17:00	MP8578-MB1	2		Batch to reanalysis for Se and Al
17:05	MP8578-B2	2		
17:10	MP8578-S5	2		
17:15	MP8578-S6	2		
17:20	MA45064-CCVA5	1		
17:27	MA45064-CCB5	1		
17:32	JC71649-3	2		(sample used for QC only; not part of login JC71604)
17:37	MP8578-SD1	10		
17:42	MP8578-S7	2		
17:47	MP8578-S8	2		
17:52	ZZZZZZ	1		
17:57	ZZZZZZ	2		
18:02	JC71649-3F	2		(sample used for QC only; not part of login JC71604)
18:07	MP8578-SD2	10		
18:12	JC71604-1	2		
---------->	Last reportable sample/prep for job JC71604			

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	18:17	MA45064-CCVA6	1		
	18:23	MA45064-CCB6	1		
---------->	Last reportable CCB for job JC71604				
	18:28	ZZZZZZ	1		
	18:33	ZZZZZZ	1		
	18:38	ZZZZZZ	1		
	18:43	ZZZZZZ	1		
	18:48	ZZZZZZ	2		
	18:53	ZZZZZZ	1		
	18:58	ZZZZZZ	2		
	19:03	ZZZZZZ	2		
	19:08	ZZZZZZ	2		
	19:13	ZZZZZZ	2		
	19:18	MA45064-CCVA7	1		
	19:23	MA45064-CCB7	1		
	19:28	ZZZZZZ	2		
	19:33	ZZZZZZ	2		
	19:38	ZZZZZZ	2		
	19:43	ZZZZZZ	1		
	19:48	ZZZZZZ	2		
	19:53	ZZZZZZ	2		
	19:58	ZZZZZZ	2		
	20:03	ZZZZZZ	2		
	20:08	ZZZZZZ	2		
	20:13	MA45064-CCVA8	1		
	20:18	MA45064-CCB8	1		
	20:23	ZZZZZZ	2		
	20:28	ZZZZZZ	2		
	20:33	ZZZZZZ	2		
	20:38	ZZZZZZ	2		
	20:43	ZZZZZZ	2		
	20:48	ZZZZZZ	2		
	20:53	ZZZZZZ	2		
	20:58	MA45064-CCVA9	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
21:03	MA45064-CCB9	1		
21:08	ZZZZZZ	2		
21:13	ZZZZZZ	1		
21:18	ZZZZZZ	2		
21:23	ZZZZZZ	1		
21:28	ZZZZZZ	10		
21:33	ZZZZZZ	1		
21:38	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	
13:44	ZZZZZZ	1										
13:49	MA45064-ICVA1	1	X	X	X	X	X	X	X	X	X	
13:54	MA45064-ICV1	1	X									
13:59	MA45064-ICB1	1	X	X	X	X	X	X	X	X	X	
14:04	MA45064-CCVA1	1	X	X	X	X	X	X	X	X	X	
14:09	MA45064-CCB1	1	X	X	X	X	X	X	X	X	X	
14:15	MA45064-CRI1	1	X	X	X	X	X	X	X	X	X	
14:20	MA45064-ICSA1	1	X	X	X	X	X	X	X	X	X	
14:24	MA45064-ICSAB1	1	X	X	X	X	X	X	X	X	X	
14:29	ZZZZZZ	1										
14:35	MA45064-CCVA2	1	X	X	X	X	X	X	X	X	X	
14:40	MA45064-CCB2	1	X	X	X	X	X	X	X	X	X	
14:45	MP8579-MB1	1					X					
14:50	MP8579-B1	3					X					
14:55	MP8579-B1	1										
15:00	MP8579-S1	3					X					
15:05	MP8579-S2	3					X					
15:10	MP8579-S1	1										
15:15	MP8579-S2	1										
15:20	JC71444-1	1										(a)
15:25	ZZZZZZ	1										
15:30	MA45064-CCVA3	1	X	X	X	X	X	X	X	X	X	
15:35	MA45064-CCB3	1	X	X	X	X	X	X	X	X	X	
15:40	ZZZZZZ	1										
15:45	ZZZZZZ	1										
15:50	ZZZZZZ	1										
15:55	ZZZZZZ	1										
16:00	ZZZZZZ	1										
16:05	ZZZZZZ	2										
16:10	ZZZZZZ	2										
16:15	MP8590-MB1	2	X	X	X	X	X	X	X	X	X	
16:20	MP8590-B1	2	X	X	X	X	X	X	X	X	X	
16:25	MA45064-CCVA4	1	X	X	X	X	X	X	X	X	X	
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	
16:30	MA45064-CCB4	1	X	X	X	X	X	X	X	X	X	
16:35	ZZZZZZ	2										
16:40	MP8590-S1	2	X		X	X	X	X	X	X	X	
16:45	MP8590-S2	2	X		X	X	X	X	X	X	X	
16:50	JC71601-5	2								X		(a)
16:55	MP8590-SD1	10	X	X	X	X	X	X	X	X	X	
17:00	MP8578-MB1	2		X	X	X	X	X	X	X	X	
17:05	MP8578-B2	2		X	X	X	X	X	X	X	X	
17:10	MP8578-S5	2		X	X	X	X	X	X	X	X	
17:15	MP8578-S6	2		X	X	X	X	X	X	X	X	
17:20	MA45064-CCVA5	1	X	X	X	X	X	X	X	X	X	
17:27	MA45064-CCB5	1	X	X	X	X	X	X	X	X	X	
17:32	JC71649-3	2		X								(a)
17:37	MP8578-SD1	10		X	X	X	X	X	X	X	X	
17:42	MP8578-S7	2	X	X	X	X	X	X	X	X	X	
17:47	MP8578-S8	2	X	X	X	X	X	X	X	X	X	
17:52	ZZZZZZ	1										
17:57	ZZZZZZ	2										
18:02	JC71649-3F	2		X								(a)
18:07	MP8578-SD2	10	X	X	X	X	X	X	X	X	X	
18:12	JC71604-1	2		X	X	X	X	X	X	X	X	
18:17	MA45064-CCVA6	1	X	X	X	X	X	X	X	X	X	
18:23	MA45064-CCB6	1	X	X	X	X	X	X	X	X	X	
18:28	ZZZZZZ	1										
18:33	ZZZZZZ	1										
18:38	ZZZZZZ	1										
18:43	ZZZZZZ	1										
18:48	ZZZZZZ	2										
18:53	ZZZZZZ	1										
18:58	ZZZZZZ	2										
19:03	ZZZZZZ	2										
19:08	ZZZZZZ	2										
19:13	ZZZZZZ	2										
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag
19:18	MA45064-CCVA7	1	X	X	X	X	X	X	X	X	X
19:23	MA45064-CCB7	1	X	X	X	X	X	X	X	X	X
19:28	ZZZZZZ	2									
19:33	ZZZZZZ	2									
19:38	ZZZZZZ	2									
19:43	ZZZZZZ	1									
19:48	ZZZZZZ	2									
19:53	ZZZZZZ	2									
19:58	ZZZZZZ	2									
20:03	ZZZZZZ	2									
20:08	ZZZZZZ	2									
20:13	MA45064-CCVA8	1	X	X	X	X	X	X	X	X	X
20:18	MA45064-CCB8	1	X	X	X	X	X	X	X	X	X
20:23	ZZZZZZ	2									
20:28	ZZZZZZ	2									
20:33	ZZZZZZ	2									
20:38	ZZZZZZ	2									
20:43	ZZZZZZ	2									
20:48	ZZZZZZ	2									
20:53	ZZZZZZ	2									
20:58	MA45064-CCVA9	1	X	X	X	X	X	X	X	X	X
21:03	MA45064-CCB9	1	X	X	X	X	X	X	X	X	X
21:08	ZZZZZZ	2									
21:13	ZZZZZZ	1									
21:18	ZZZZZZ	2									
21:23	ZZZZZZ	1									
21:28	ZZZZZZ	10									
21:33	ZZZZZZ	1									
21:38	ZZZZZZ	1									

(a) Sample used for QC only; not part of login JC71604.

Element: Al As Ba Cd Cr Cu Fe Pb Ag

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
12:44	MA45064-STD1	100	100	100	100	100	100	100	100
12:49	MA45064-STD2	100	100	100	100	100	100	100	100
12:54	MA45064-STD3	100	100	100	100	100	100	100	100
12:59	MA45064-STD4	99.155	98.624	97.905	100.994	97.142	97.753	100.633	97.619
13:04	MA45064-STD5	98.74	97.197	97.34	99.734	97.82	97.161	100.277	97.656
13:09	MA45064-STD6	97.571	97.508	98.896	98.52	96.388	98.244	98.873	96.382
13:14	MA45064-STD7	97.515	96.498	96.521	98.978	102.378	96.114	99.414	101.93
13:19	MA45064-STD8	98.053	97.115	97.13	98.641	100.551	97.055	100.658	100.492
13:24	MA45064-STD9	97.976	96.471	94.873	95.981	95.394	95.703	97.153	96.092
13:29	MA45064-STD10	97.949	96.034	97.46	96.194	95.682	96.075	95.472	95.205
13:34	MA45064-STD11	97.738	97.194	96.578	95.67	97.956	96.542	96.561	97.043
13:39	MA45064-STD12	95.986	95.799	95.882	95.405	101.454	99.057	95.191	100.908
13:44	ZZZZZZ	97.771	96.792	97.306	97.26	97.379	97.874	99.348	97.277
13:49	MA45064-ICVA1	98.42	98.474	97.555	97.323	96.859	96.17	96.375	97.014
13:54	MA45064-ICV1	100.174	98.764	98.768	97.593	98.536	97.659	98.504	98.566
13:59	MA45064-ICB1	101.409	100.255	99.692	99.167	99.402	98.51	98.388	99.901
14:04	MA45064-CCVA1	100.965	99.894	99.634	97.439	99.174	98.104	97.182	99.309
14:09	MA45064-CCB1	101.295	99.529	98.985	97.913	99.756	98.883	98.674	99.48
14:15	MA45064-CRI1	102.768	100.943	100.694	98.408	100.535	100.384	99.972	101.305
14:20	MA45064-ICSA1	91.426	93.538	95.186	92.049	92.746	92.323	91.706	87.929
14:24	MA45064-ICSAB1	92.114	94.44	93.365	87.421	94.332	92.929	88.674	90.303
14:29	ZZZZZZ	88.703	89.323	88.799	94.127	92.331	92.456	95.821	92.552
14:35	MA45064-CCVA2	95.347	96.165	94.076	98.674	97.382	97.412	98.907	97.319
14:40	MA45064-CCB2	100.507	99.482	96.042	100.357	100.965	98.67	102.916	101.804
14:45	MP8579-MB1	104.054	103.626	99.41	104.006	104.949	101.843	106.91	105.236
14:50	MP8579-B1	105.785	105.007	100.127	104.592	105.72	102.264	105.363	106.022
14:55	MP8579-B1	107.238	105.826	100.581	103.789	105.156	101.502	104.746	106.895
15:00	MP8579-S1	103.004	102.113	98.172	101.495	101.924	98.987	102.28	102.343
15:05	MP8579-S2	103.805	102.73	98.63	102.738	103.111	99.671	102.749	103.982
15:10	MP8579-S1	102.128	104.579	100.55	103.629	101.424	99.154	103.011	102.778
15:15	MP8579-S2	102.46	105.425	100.968	102.799	101.876	98.53	102.183	102.511
15:20	JC71444-1	103.905	105.805	101.308	104.089	102.458	100.208	102.822	102.284
15:25	ZZZZZZ	105.907	107.677	103.245	103.122	103.486	102.633	102.459	102.636

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:30	MA45064-CCVA3	106.304	104.242	99.963	101.292	104.913	101.673	102.586	105.006
15:35	MA45064-CCB3	107.019	103.73	100.629	103.069	104.325	102.196	103.612	105.91
15:40	ZZZZZZ	104.736	106.688	102.353	104.061	103.155	103.163	103.499	103.613
15:45	ZZZZZZ	106.103	109.936	104.713	105.328	104.65	103.582	102.469	104.444
15:50	ZZZZZZ	106.736	109.927	103.835	106.328	106.068	103.093	105.697	105.518
15:55	ZZZZZZ	106.056	110.36	105.355	104.832	105.307	103.18	103.502	105.194
16:00	ZZZZZZ	112.454	109.875	105.395	106.022	111.197	107.222	106.122	110.831
16:05	ZZZZZZ	111.628	106.514	100.978	103.081	118.795	112.538	116.943	116.167
16:10	ZZZZZZ	112.712	106.915	101.669	104.27	120.129	114.007	123.988	117.343
16:15	MP8590-MB1	115.199	110.09	103.28	105.132	123.005	115.473	123.143	121.117
16:20	MP8590-B1	111.197	106.21	100.225	103.01	119.983	113.441	117.661	117.866
16:25	MA45064-CCVA4	108.47	106.488	103.115	104.691	107.692	104.027	104.992	108.451
16:30	MA45064-CCB4	109.472	107.269	103.54	105.464	108.197	105.683	105.171	108.441
16:35	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:40	MP8590-S1	104.947	104.18	96.385	99.633	117.254	112.296	115.897	116.851
16:45	MP8590-S2	101.55	102.051	95.301	100.3	113.994	108.387	113.839	112.898
16:50	JC71601-5	101.246	100.749	94.137	98.755	114.386	109.053	113.411	114.957
16:55	MP8590-SD1	105.097	104.471	99.504	103.685	106.436	103.146	105.521	106.669
17:00	MP8578-MB1	105.721	100.979	96.145	101.091	115.783	108.726	115.399	115.622
17:05	MP8578-B2	106.247	101.453	96.105	101.446	116.137	111.358	112.655	115.495
17:10	MP8578-S5	101.453	100.412	94.609	98.394	114.451	105.212	111.789	113.837
17:15	MP8578-S6	101.46	100.729	94.793	99.329	114.089	107.207	114.64	113.87
17:20	MA45064-CCVA5	103.443	103.699	99.837	102.805	105.816	102.697	101.231	105.699
17:27	MA45064-CCB5	106.176	105.089	101.647	103.239	106.019	104.126	104.749	106.67
17:32	JC71649-3	102.235	101.189	95.977	98.664	108.213	104.285	111.172	107.889
17:37	MP8578-SD1	104.425	105.435	101.492	102.847	106.463	104.924	104.418	106.638
17:42	MP8578-S7	100.246	99.072	93.457	97.536	108.428	103.695	107.351	109.091
17:47	MP8578-S8	99.301	99.652	93.938	97.99	112.659	106.007	111.071	111.699
17:52	ZZZZZZ	104.88	104.375	100.893	102.47	107.489	103.838	102.488	106.743
17:57	ZZZZZZ	105.572	101.349	97.348	100.86	114.922	108.554	111.839	113.307
18:02	JC71649-3F	100.954	100.309	95.384	98.221	109.898	106.15	108.576	109.764
18:07	MP8578-SD2	105.295	104.743	101.353	103.18	107.276	103.207	104.116	107.546
18:12	JC71604-1	101.133	100.861	95.483	98.73	105.052	101.514	108.072	105.34

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:17	MA45064-CCVA6	100.805	102.151	99.326	102.401	104.862	102.452	102.201	105.224
18:23	MA45064-CCB6	102.801	102.887	99.897	102.259	103.535	102.246	103.414	104.129
18:28	ZZZZZZ	99.138	104.112	101.057	101.714	101.194	101.547	101.143	101.047
18:33	ZZZZZZ	99.077	102.778	97.569	100.495	100.527	99.144	99.376	99.789
18:38	ZZZZZZ	95.399	100.685	97.74	98.796	97.476	97.463	99.549	98.721
18:43	ZZZZZZ	95.668	107.735	107.48	105.275	99.277	101.212	99.153	100.207
18:48	ZZZZZZ	91.077	97.243	91.389	95.772	96.981	95.792	104.182	95.721
18:53	ZZZZZZ	95.778	99.732	99.013	101.16	102.089	103.03	101.918	102.48
18:58	ZZZZZZ	94.659	101.609	96.282	101.775	107.008	110.154	123.975	105.664
19:03	ZZZZZZ	97.485	102.72	96.76	101.414	108.487	105.841	122.431	107.88
19:08	ZZZZZZ	96.276	103.795	96.147	100.601	104.975	101.577	120.56	103.725
19:13	ZZZZZZ	97.023	101.141	95.485	100.58	105.548	103.062	124.611	104.645
19:18	MA45064-CCVA7	100.045	104.729	102.286	104.414	105.712	104.198	104.639	106.528
19:23	MA45064-CCB7	101.005	104.843	101.498	104.391	105.569	103.966	103.779	105.945
19:28	ZZZZZZ	101.068	102.577	97.062	100.497	105.661	102.097	125.512	104.573
19:33	ZZZZZZ	99.244	101.298	95.442	101.114	104.964	100.776	122.207	104.477
19:38	ZZZZZZ	101.116	101.413	95.972	101.769	105.833	101.896	122.425	104.581
19:43	ZZZZZZ	103.544	105.92	101.42	108.164	107.282	104.561	108.985	107.855
19:48	ZZZZZZ	101.653	100.161	94.497	101.669	103.222	97.495	117.781	101.382
19:53	ZZZZZZ	102.543	101.866	96.157	103.225	103.584	97.03	118.893	102.269
19:58	ZZZZZZ	101.452	102.561	97.277	106.215	109.445	104.905	150.756	!a107.558
20:03	ZZZZZZ	102.022	103.639	99.155	104.833	110.493	105.657	156.498	!a108.22
20:08	ZZZZZZ	95.752	103.241	96.269	108.384	107.778	100.929	145.453	!a106.562
20:13	MA45064-CCVA8	98.669	103.957	101.202	107.255	105.977	101.436	108.979	106.17
20:18	MA45064-CCB8	100.465	102.167	98.453	104.868	103.261	101.581	105.07	104.455
20:23	ZZZZZZ	91.551	98.801	93.7	103.302	97.392	94.767	127.217	97.008
20:28	ZZZZZZ	84.206	90.653	93.23	103.057	89.087	94.255	139.613	!a88.902
20:33	ZZZZZZ	94.344	99.34	95.188	104.975	100.703	98.549	152.811	!a100.359
20:38	ZZZZZZ	96.465	100.663	93.274	100.757	99.827	94.796	116.98	99.778
20:43	ZZZZZZ	95.29	99.02	92.004	102.055	98.63	95.062	124.28	98.822
20:48	ZZZZZZ	96.194	99.611	93.883	105.075	101.246	97.164	153.454	!a101.097
20:53	ZZZZZZ	100.479	100.933	95.681	105.996	104.484	99.937	135.682	! 104.56
20:58	MA45064-CCVA9	98.812	101.066	96.878	105.346	101.825	99.647	106.803	102.104

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
21:03	MA45064-CCB9	98.254	100.632	97.422	106.73	101.735	99.693	107.112	102.308
21:08	ZZZZZZ	97.334	101.707	102.701	111.063	102.081	104.131	110.791	101.794
21:13	ZZZZZZ	97.461	99.844	96.97	107.858	100.296	99.161	107.301	100.565
21:18	ZZZZZZ	99.306	104.082	102.564	113.071	103.515	104.13	113.304	104.083
21:23	ZZZZZZ	97.943	101.217	98.105	110.268	101.426	99.272	110.356	101.943
21:28	ZZZZZZ	98.798	101.017	97.448	104.967	101.598	98.179	108.229	101.776
21:33	ZZZZZZ	98.721	99.505	97.504	105.154	100.256	100.162	105.402	100.643
21:38	ZZZZZZ	99.392	103.45	101.405	108.497	104.99	102.943	110.734	104.781

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (72-3)	60-125 %	60-125 %
Istd#8	Germanium (74-1)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
12:44	MA45064-STD1	100	100	100	100	100	100	100	100
12:49	MA45064-STD2	100	100	100	100	100	100	100	100
12:54	MA45064-STD3	100	100	100	100	100	100	100	100
12:59	MA45064-STD4	97.335	98.382	97.67	98.345	100.078	98.152	98.025	98.498
13:04	MA45064-STD5	96.616	98.097	97.067	97.154	100.195	97.039	96.757	97.496
13:09	MA45064-STD6	98.022	96.061	96.683	98.618	98.171	96.052	97.816	96.42
13:14	MA45064-STD7	96.761	97.287	96.781	96.28	98.628	96.386	95.652	96.941
13:19	MA45064-STD8	96.934	97.87	96.223	96.915	98.785	96.758	95.746	97.89
13:24	MA45064-STD9	95.336	95.508	96.319	96.246	96.93	96.732	96.039	97.616
13:29	MA45064-STD10	95.872	95.774	95.022	96.182	95.562	96.218	97.02	96.861
13:34	MA45064-STD11	96.719	94.405	94.747	94.589	94.996	95.283	94.69	97.729
13:39	MA45064-STD12	99.62	93.517	92.17	92.296	93.083	92.895	93.482	96.776
13:44	ZZZZZZ	96.989	96.015	97.066	97.455	97.666	97.322	98.293	98.267
13:49	MA45064-ICVA1	96.603	96.774	94.6	95.338	94.582	96.269	95.982	98.25
13:54	MA45064-ICV1	97.649	97.636	99.039	99.176	98.248	98.777	99.443	99.44
13:59	MA45064-ICB1	99.948	98.097	99.964	99.914	98.154	99.931	99.172	100.714
14:04	MA45064-CCVA1	98.009	93.968	96.571	96.146	94.954	97.764	97.578	100.015
14:09	MA45064-CCB1	98.259	96.04	99.073	99.717	98.166	98.957	98.629	99.878
14:15	MA45064-CRI1	100.572	98.188	100.151	100.454	98.574	100.581	99.821	100.038
14:20	MA45064-ICSA1	88.857	87.613	83.748	84.467	81.495	86.53	87.401	92.094
14:24	MA45064-ICSAB1	90.398	85.513	85.389	85.45	80.061	88.954	87.586	94.687
14:29	ZZZZZZ	91.884	94.748	95.25	95.399	97.204	96.652	95.575	99.025
14:35	MA45064-CCVA2	97.135	96.281	97.484	97.207	97.136	100.031	96.099	103.724
14:40	MA45064-CCB2	99.471	100.544	103.261	102.105	101.119	104.907	98.817	105.902
14:45	MP8579-MB1	102.974	104.208	106.597	104.352	103.77	107.543	101.751	113.654
14:50	MP8579-B1	103.168	104.75	106.172	103.715	103.024	107.13	100.993	114.125
14:55	MP8579-B1	103.268	103.037	105.411	103.178	101.591	107.739	100.2	114.19
15:00	MP8579-S1	99.574	101.946	99.4	97.474	97.728	103.253	96.699	106.772
15:05	MP8579-S2	100.436	102.354	99.037	97.869	98.013	103.5	97.346	111.891
15:10	MP8579-S1	99.733	99.794	96.494	95.196	95.08	101.009	95.423	105.388
15:15	MP8579-S2	99.636	99.678	96.354	94.716	93.924	100.877	95.072	107.71
15:20	JC71444-1	99.836	101.037	98.033	96.487	96.526	102.733	96.78	108.12
15:25	ZZZZZZ	101.988	101.447	97.151	95.355	94.403	101.83	97.586	113.358

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:30	MA45064-CCVA3	100.553	100.101	103.358	100.593	99.241	105.195	99.28	114.342
15:35	MA45064-CCB3	103.178	102.414	106.227	104.722	102.325	106.802	101.915	114.593
15:40	ZZZZZZ	102.105	101.639	98.339	97.255	95.999	103.212	99.357	111.001
15:45	ZZZZZZ	102.826	101.74	97.84	96.349	95.103	103.101	98.999	111.69
15:50	ZZZZZZ	104.301	103.402	100.014	98.354	97.136	104.83	99.524	115.259
15:55	ZZZZZZ	103.057	102.478	98.922	96.936	94.26	103.166	99.42	114.967
16:00	ZZZZZZ	107.671	104.808	110.702	107.632	103.587	110.188	105.544	116.821
16:05	ZZZZZZ	113.945	113.733	107.807	104.822	100.479	108.159	100.534	118.278
16:10	ZZZZZZ	114.703	119.824	107.696	105.207	101.24	109.428	100.974	118.721
16:15	MP8590-MB1	117.505	121.136	109.391	106.795	102.691	111.111	101.707	120.823
16:20	MP8590-B1	111.804	115.245	105.114	102.554	99.087	107.117	98.35	118.005
16:25	MA45064-CCVA4	104.505	103.973	104.371	102.28	100.474	106.565	100.592	118.033
16:30	MA45064-CCB4	105.761	104.42	108.188	106.286	103.066	108.767	103.748	116.82
16:35	ZZZZZZ	No results reported for the elements associated with this internal standard.							
16:40	MP8590-S1	112.806	114.368	97.521	95.513	94.158	101.696	94.588	114.52
16:45	MP8590-S2	108.126	111.782	96.279	93.818	93.998	100.87	93.051	113.316
16:50	JC71601-5	109.286	112.718	96.229	93.69	93.238	100.817	93.007	111.283
16:55	MP8590-SD1	104.216	103.715	103.767	101.24	101.66	106.812	100.548	115.591
17:00	MP8578-MB1	109.002	113.764	103.39	101.199	99.436	104.413	96.532	115.568
17:05	MP8578-B2	111.972	109.491	102.396	99.46	97.936	104.255	95.409	115.674
17:10	MP8578-S5	107.169	109.382	95.242	93.156	92.401	99.16	91.972	113.775
17:15	MP8578-S6	106.497	112.058	95.203	93.076	92.212	99.553	91.501	113.759
17:20	MA45064-CCVA5	102.181	100.34	102.394	99.635	98.004	104.135	98.67	115.787
17:27	MA45064-CCB5	105.229	100.565	106.269	103.316	101.02	107.262	101.77	116.753
17:32	JC71649-3	104.907	110.264	95.521	93.042	92.249	100.772	93.449	110.659
17:37	MP8578-SD1	104.798	103.406	103.384	100.446	101.002	106.948	101.579	117
17:42	MP8578-S7	105.318	105.723	93.604	91.764	91.623	98.413	91.714	109.946
17:47	MP8578-S8	108.031	109.874	94.886	92.936	92.183	99.166	91.468	114.103
17:52	ZZZZZZ	104.722	101.746	105.661	103.124	100.428	107.466	100.79	116.681
17:57	ZZZZZZ	108.85	108.255	103.035	100.004	98.563	104.61	96.218	116.566
18:02	JC71649-3F	106.281	106.711	94.41	93.502	91.97	99.174	92.253	110.159
18:07	MP8578-SD2	104.188	103.412	103.177	100.788	100.104	106.325	101.269	116.139
18:12	JC71604-1	101.845	107.794	96.998	95.619	94.289	102.013	94.784	114.601

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:17	MA45064-CCVA6	101.872	99.784	101.362	99.57	97.198	103.538	97.717	116.713
18:23	MA45064-CCB6	102.436	100.617	104.275	101.987	100.236	105.81	100.624	115.478
18:28	ZZZZZZ	100.312	100.282	95.661	94.397	93.219	99.807	96.927	113.205
18:33	ZZZZZZ	99.717	97.747	95.521	93.458	92.414	99.722	95.63	108.621
18:38	ZZZZZZ	97.687	96.805	94	92.352	91.083	97.645	94.33	108.396
18:43	ZZZZZZ	102.298	96.943	91.305	89.618	85.645	94.559	94.876	97.027
18:48	ZZZZZZ	95.096	101.645	95.402	93.911	92.909	98.164	92.217	108.801
18:53	ZZZZZZ	103.415	99.705	103.814	102.765	99.883	104.48	102.111	114.642
18:58	ZZZZZZ	108.9	121.064	98.678	95.813	92.775	101.527	94.718	114.421
19:03	ZZZZZZ	105.018	120.269	99.624	96.629	94.583	101.733	94.084	115.428
19:08	ZZZZZZ	100.965	117.142	97.37	94.483	92.577	100.598	93.065	116.547
19:13	ZZZZZZ	102.921	120.913	95.839	93.089	91.801	100.656	94.018	114.871
19:18	MA45064-CCVA7	104.074	103.373	103.792	100.117	97.266	105.088	99.663	117.67
19:23	MA45064-CCB7	104.577	103.872	106.086	103.261	100.994	106.809	102.9	117.349
19:28	ZZZZZZ	103.061	122.535	98.148	95.223	93.589	101.902	94.18	116.968
19:33	ZZZZZZ	101.845	119.96	95.951	93.643	92.576	100.383	92.517	116.164
19:38	ZZZZZZ	101.488	121.889	97.716	94.949	95.157	102.012	92.84	117.099
19:43	ZZZZZZ	105.631	107.437	106.239	102.205	102.556	106.568	100.832	118.027
19:48	ZZZZZZ	98.48	117.671	95.802	94.188	95.809	99.859	92.611	116.083
19:53	ZZZZZZ	99.255	115.695	98.02	95.495	96.244	101.784	94.575	117.646
19:58	ZZZZZZ	105.297	148.466 !a	96.968	93.383	93.138	100.282	92.085	115.503
20:03	ZZZZZZ	105.507	153.89 !a	93.42	89.878	88.463	96.896	89.353	108.639
20:08	ZZZZZZ	101.529	141.883 !a	95.528	90.744	96.088	99.891	90.943	114.701
20:13	MA45064-CCVA8	103.144	105.55	101.377	97.826	100.298	103.338	97.798	114.995
20:18	MA45064-CCB8	101.803	104.348	104.116	101.251	102.523	105.063	99.968	116.559
20:23	ZZZZZZ	94.41	124.772	91.069	87.868	88.561	95.528	88.856	103.529
20:28	ZZZZZZ	93.688	136.788 !a	81.726	87.416	88.303	86.414	88.268	90.586
20:33	ZZZZZZ	96.93	148.797 !a	93.34	89.386	90.732	97.295	89.538	112.315
20:38	ZZZZZZ	94.447	114.112	94.258	91.362	92.955	98.246	91.08	115.6
20:43	ZZZZZZ	95.602	123.34	95.802	92.678	93.568	99.882	92.246	115.537
20:48	ZZZZZZ	97.454	150.012 !a	96.996	91.902	93.577	101.365	91.657	115.381
20:53	ZZZZZZ	99.274	134.041 !	103.572	98.827	101.556	104.34	95.068	118.461
20:58	MA45064-CCVA9	99.112	105.536	99.996	96.464	99.352	101.946	95.256	116.012

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
21:03	MA45064-CCB9	99.353	105.311	100.967	97.814	101.964	102.362	96.963	115.02
21:08	ZZZZZZ	104.418	109.072	100.768	99.947	104.564	102.241	101.146	104.086
21:13	ZZZZZZ	99.554	106.804	100.579	97.305	101.405	101.481	96.997	112.947
21:18	ZZZZZZ	104.313	111.683	102.499	99.634	103.38	103.005	101.482	108.498
21:23	ZZZZZZ	99.252	108.998	100.375	96.468	100.18	101.168	95.505	103.388
21:28	ZZZZZZ	97.367	106.872	100.509	96.674	101.481	101.314	95.156	108.896
21:33	ZZZZZZ	98.946	103.202	101.255	98.719	101.287	102.569	97.805	113.509
21:38	ZZZZZZ	103.085	108.72	103.039	99.375	99.7	103.525	98.349	113.874

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	60-125 %	60-125 %
Istd#10	Germanium (74-3)	60-125 %	60-125 %
Istd#11	Rhodium (103-1)	60-125 %	60-125 %
Istd#12	Rhodium (103-2)	60-125 %	60-125 %
Istd#13	Rhodium (103-3)	60-125 %	60-125 %
Istd#14	Indium (115-1)	60-125 %	60-125 %
Istd#15	Indium (115-2)	60-125 %	60-125 %
Istd#16	Terbium (159-1)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
12:44	MA45064-STD1	100	100	100	100	100	100
12:49	MA45064-STD2	100	100	100	100	100	100
12:54	MA45064-STD3	100	100	100	100	100	100
12:59	MA45064-STD4	98.136	101.002	97.638	98.126	98.429	98.255
13:04	MA45064-STD5	96.988	100.293	97.131	96.754	97.231	96.684
13:09	MA45064-STD6	98.227	98.532	96.109	98.166	96.94	98.597
13:14	MA45064-STD7	96.926	98.785	96.059	97.396	97.581	97.045
13:19	MA45064-STD8	97.351	99.312	96.966	96.904	98.957	97.51
13:24	MA45064-STD9	96.77	97.844	96.581	96.109	96.632	96.253
13:29	MA45064-STD10	97.612	97.284	95.895	97.32	96.604	96.836
13:34	MA45064-STD11	96.925	97.595	97.651	96.846	95.122	95.22
13:39	MA45064-STD12	97.168	96.187	96	96.928	92.386	92.619
13:44	ZZZZZZ	98.098	97.357	97.655	98.445	99.031	98.722
13:49	MA45064-ICVA1	98.832	97.32	97.444	98.765	96.316	95.861
13:54	MA45064-ICV1	99.143	98.31	99.434	99.33	99.262	98.784
13:59	MA45064-ICB1	99.445	98.316	100.034	99.524	99.678	99.434
14:04	MA45064-CCVA1	99.149	96.436	99.652	99.226	97.327	96.253
14:09	MA45064-CCB1	99.161	97.684	99.093	99.588	99.128	98.932
14:15	MA45064-CRI1	99.872	98.534	99.253	100.23	100.158	99.166
14:20	MA45064-ICSA1	92.907	87.713	91.333	93.55	83.385	84.156
14:24	MA45064-ICSAB1	93.944	86.146	94.391	93.89	86.505	84.924
14:29	ZZZZZZ	97.315	98.454	97.976	98.185	98.922	97.828
14:35	MA45064-CCVA2	99.607	100.182	104.04	100.414	101.368	97.974
14:40	MA45064-CCB2	100.782	101.062	106.296	101.414	105.499	101.394
14:45	MP8579-MB1	102.963	102.951	107.59	103.494	108.716	104.918
14:50	MP8579-B1	103.411	102.539	108.208	103.942	107.718	102.748
14:55	MP8579-B1	103.099	102.339	108.646	104.24	107.324	102.274
15:00	MP8579-S1	100.108	101.05	105.736	100.921	102.161	97.208
15:05	MP8579-S2	100.437	101.287	105.743	101.333	101.73	97.209
15:10	MP8579-S1	99.746	99.385	105.348	101.35	97.435	93.337
15:15	MP8579-S2	99.315	98.812	105.573	101.066	97.184	92.782
15:20	JC71444-1	100.519	100.194	105.733	101.74	98.223	94.227
15:25	ZZZZZZ	100.549	98.962	111.334	107.21	97.046	93.087

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
15:30	MA45064-CCVA3	102.091	100.278	107.429	102.606	103.954	98.925
15:35	MA45064-CCB3	101.718	100.844	105.584	102.753	105.833	101.792
15:40	ZZZZZZ	101.393	99.248	106.041	102.613	98.198	94.98
15:45	ZZZZZZ	101.308	99.647	112.577	107.796	97.11	93.505
15:50	ZZZZZZ	102.307	100.712	106.607	103.218	98.961	95.471
15:55	ZZZZZZ	102.254	98.835	112.745	109.3	97.351	93.909
16:00	ZZZZZZ	104.532	101.166	108.393	104.667	109.015	104.059
16:05	ZZZZZZ	103.736	99.752	109.741	103.832	110.973	104.377
16:10	ZZZZZZ	103.826	99.922	110.005	104.418	109.646	103.503
16:15	MP8590-MB1	104.601	100.916	111.073	104.937	110.408	103.833
16:20	MP8590-B1	101.693	99.554	109.912	103.116	106.394	100.195
16:25	MA45064-CCVA4	101.662	101.75	108.199	103.15	104.079	100.124
16:30	MA45064-CCB4	103.118	100.909	108.612	104.024	106.665	102.766
16:35	ZZZZZZ	No results reported for the elements associated with this internal standard.					
16:40	MP8590-S1	99.383	97.569	107.195	100.428	98.98	93.703
16:45	MP8590-S2	98.386	97.973	105.678	99.551	98.103	92.557
16:50	JC71601-5	97.88	97.551	105.579	98.902	99.07	92.507
16:55	MP8590-SD1	100.552	101.66	106.413	102.387	105.343	100.377
17:00	MP8578-MB1	99.843	99.072	106.034	100.42	105.055	99.949
17:05	MP8578-B2	99.299	98.923	107.333	99.953	104.557	97.869
17:10	MP8578-S5	96.883	96.776	104.234	98.2	97.153	91.91
17:15	MP8578-S6	97.957	96.904	104.746	98.643	97.298	91.966
17:20	MA45064-CCVA5	100.016	99.781	106.518	100.433	102.71	97.516
17:27	MA45064-CCB5	101.713	99.383	105.942	103.054	105.062	101.947
17:32	JC71649-3	97.591	96.053	104.551	98.255	98.132	92.02
17:37	MP8578-SD1	100.94	101.327	106.459	101.567	104.166	99.013
17:42	MP8578-S7	97.341	96.092	103.933	98.161	96.063	90.391
17:47	MP8578-S8	96.422	96.862	103.916	97.622	96.546	91.192
17:52	ZZZZZZ	101.056	99.113	105.435	101.677	105.449	100.777
17:57	ZZZZZZ	98.934	97.393	105.635	99.315	105.351	98.42
18:02	JC71649-3F	97.016	95.376	103.438	98.228	95.911	91.553
18:07	MP8578-SD2	100.829	100.267	105.271	100.973	103.531	98.715
18:12	JC71604-1	98.541	97.043	105.17	99.614	100.392	95.227

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
18:17	MA45064-CCVA6	100.307	97.957	104.886	101.38	101.203	97.359
18:23	MA45064-CCB6	99.959	97.998	104.231	101.003	103.43	99.192
18:28	ZZZZZZ	98.759	97.277	102.425	99.63	94.957	91.645
18:33	ZZZZZZ	97.746	96.67	102.235	98.638	95.32	91.14
18:38	ZZZZZZ	97.088	95.354	100.327	98.599	93.59	90.616
18:43	ZZZZZZ	95.631	87.061	96.108	96.25	84.263	84.093
18:48	ZZZZZZ	96.81	95.568	103.194	99.721	100.6	96.537
18:53	ZZZZZZ	100.928	98.336	103.074	101.232	102.106	100.453
18:58	ZZZZZZ	97.962	90.898	104.736	99.546	102.463	96.902
19:03	ZZZZZZ	97.882	92.944	105.106	99.231	102.684	97.131
19:08	ZZZZZZ	98.013	94.47	106.998	100.48	100.176	94.435
19:13	ZZZZZZ	98.346	94.341	103.812	99.582	97.363	92.9
19:18	MA45064-CCVA7	100.353	96.795	105.975	101.89	102.413	98.898
19:23	MA45064-CCB7	101.312	98.187	105.151	101.899	104.202	100.968
19:28	ZZZZZZ	98.624	94.342	105.598	99.295	100.856	95.305
19:33	ZZZZZZ	97.64	94.926	104.316	99.387	97.578	92.381
19:38	ZZZZZZ	97.844	96.575	105.28	98.652	100.396	94.764
19:43	ZZZZZZ	100.209	97.607	105.378	100.958	104.715	100.555
19:48	ZZZZZZ	97.215	99.067	105.49	98.381	98.697	92.239
19:53	ZZZZZZ	98.293	98.346	105.454	99.122	99.284	93.197
19:58	ZZZZZZ	95.724	92.274	103.598	96.85	97.048	91.491
20:03	ZZZZZZ	93.892	87.964	101.209	94.584	90.525	85.45
20:08	ZZZZZZ	95.3	96.216	103.149	96.299	95.524	89.145
20:13	MA45064-CCVA8	98.046	100.48	102.579	99.697	100.026	95.8
20:18	MA45064-CCB8	98.58	99.629	103.42	99.148	102.023	98.388
20:23	ZZZZZZ	93.129	89.709	99.924	94.04	90.954	85.906
20:28	ZZZZZZ	92.645	89.07	90.673	94.976	83.034	86.509
20:33	ZZZZZZ	93.287	89.353	100.155	94.451	93.047	86.917
20:38	ZZZZZZ	96.218	98.03	102.96	98.35	95.732	90.464
20:43	ZZZZZZ	95.867	95.073	104.603	97.39	99.134	92.379
20:48	ZZZZZZ	94.439	90.83	103.085	94.878	99.054	91.148
20:53	ZZZZZZ	97.668	99.41	105.835	98.257	104.133	97.722
20:58	MA45064-CCVA9	96.758	99.236	102.742	98.509	99.734	94.468

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA45064
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
21:03	MA45064-CCB9	95.712	98.154	102.571	96.542	99.672	95.623
21:08	ZZZZZZ	97.831	100.104	98.879	98.296	98.13	98.23
21:13	ZZZZZZ	95.457	97.21	98.923	95.716	98.213	95.128
21:18	ZZZZZZ	96.981	96.965	98.777	96.999	99.9	98.006
21:23	ZZZZZZ	93.512	93.69	97.421	93.727	98.159	93.645
21:28	ZZZZZZ	94.989	99.283	99.274	95.693	99.835	96.088
21:33	ZZZZZZ	95.727	99.049	100.955	97.041	99.133	95.869
21:38	ZZZZZZ	96.346	93.24	101.104	96.602	100.357	96.155

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	60-125 %	60-125 %
Istd#18	Terbium (159-3)	60-125 %	60-125 %
Istd#19	Holmium (165-1)	60-125 %	60-125 %
Istd#20	Holmium (165-2)	60-125 %	60-125 %
Istd#21	Bismuth (209-1)	60-125 %	60-125 %
Istd#22	Bismuth (209-2)	60-125 %	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA45064 Units: ug/l

Time:			13:59		14:09		14:40		15:35	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	1.1	-0.542	<25	-0.210	<25	-0.0641	<25	-0.275	<50
Antimony	2.0	.27	anr							
Arsenic	0.50	.017	-0.00351	<0.50	0.00312	<0.50	0.00471	<0.50	0.00185	<1.0
Barium	1.0	.011	-0.00405	<1.0	0.00471	<1.0	0.00286	<1.0	0.00210	<1.0
Beryllium	0.50	.002	anr							
Boron	25	1.5	anr							
Cadmium	0.50	.004	0.00595	<0.50	0.00311	<0.50	-0.000815	<0.50	0.00286	<0.50
Calcium	250	21	anr							
Chromium	1.0	.009	-0.00199	<1.0	-0.00192	<1.0	-0.00420	<1.0	-0.00144	<4.0
Cobalt	0.50	.002	anr							
Copper	2.0	.012	-0.00367	<2.0	-0.00977	<2.0	0.00326	<2.0	0.00492	<4.0
Iron	25	.87	-0.0655	<25	0.241	<25	0.506	<25	0.275	<50
Lead	0.50	.004	-0.000630	<0.50	0.00658	<0.50	0.00732	<0.50	0.0134	<0.50
Magnesium	250	1.9	anr							
Manganese	1.0	.02	anr							
Molybdenum	1.0	.018								
Nickel	1.0	.02	anr							
Potassium	250	3.3	anr							
Selenium	0.50	.025	anr							
Silver	0.50	.005	-0.00153	<0.50	0.00581	<0.50	0.00717	<0.50	0.0120	<2.0
Sodium	250	3.6	anr							
Strontium	5.0	.039								
Thallium	0.50	.003	anr							
Tin	5.0	.038								
Titanium	1.0	.042								
Vanadium	1.0	.006	anr							
Zinc	5.0	2.2	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA45064 Units: ug/l

Time:			16:30		17:27		18:23	
Sample ID:			CCB4		CCB5		CCB6	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	25	1.1	-0.365	<25	-0.452	<25	-0.334	<25
Antimony	2.0	.27	anr					
Arsenic	0.50	.017	0.000386	<0.50	-0.00297	<0.50	0.00199	<0.50
Barium	1.0	.011	-0.00233	<1.0	0.00140	<1.0	-0.000654	<1.0
Beryllium	0.50	.002	anr					
Boron	25	1.5	anr					
Cadmium	0.50	.004	0.00276	<0.50	0.00570	<0.50	0.00105	<0.50
Calcium	250	21	anr					
Chromium	1.0	.009	0.00307	<1.0	-0.00224	<1.0	-0.000385	<1.0
Cobalt	0.50	.002	anr					
Copper	2.0	.012	-0.00508	<2.0	-0.00598	<2.0	-0.00412	<2.0
Iron	25	.87	0.201	<25	0.0354	<25	0.244	<25
Lead	0.50	.004	0.00995	<0.50	0.00614	<0.50	0.00753	<0.50
Magnesium	250	1.9	anr					
Manganese	1.0	.02	anr					
Molybdenum	1.0	.018						
Nickel	1.0	.02	anr					
Potassium	250	3.3	anr					
Selenium	0.50	.025	anr					
Silver	0.50	.005	0.00713	<0.50	0.00396	<0.50	0.0103	<0.50
Sodium	250	3.6	anr					
Strontium	5.0	.039						
Thallium	0.50	.003	anr					
Tin	5.0	.038						
Titanium	1.0	.042						
Vanadium	1.0	.006	anr					
Zinc	5.0	2.2	anr					

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA45064 Units: ug/l

Time:		13:49			13:54			14:04	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	5640	102.5	60	62.2	103.7	5000	5070	101.4
Antimony	anr								
Arsenic	60	60.9	101.5				50	49.7	99.4
Barium	60	59.1	98.5				50	50.2	100.4
Beryllium	anr								
Boron	anr								
Cadmium	60	59.3	98.8				50	49.9	99.8
Calcium	anr								
Chromium	60	59.9	99.8				50	50.0	100.0
Cobalt	anr								
Copper	60	58.6	97.7				50	49.2	98.4
Iron	5500	5550	100.9				5000	5070	101.4
Lead	60	60.2	100.3				50	50.8	101.6
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	60	58.0	96.7				50	49.4	98.8
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA45064 Units: ug/l

Time:		14:35			15:30			16:25	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4810	96.2	5000	4830	96.6	5000	4720	94.4
Antimony	anr								
Arsenic	50	52.2	104.4	50	51.7	103.4	50	51.6	103.2
Barium	50	49.9	99.8	50	47.7	95.4	50	47.1	94.2
Beryllium	anr								
Boron	anr								
Cadmium	50	50.1	100.2	50	49.5	99.0	50	50.0	100.0
Calcium	anr								
Chromium	50	51.0	102.0	50	51.0	102.0	50	50.3	100.6
Cobalt	anr								
Copper	50	50.8	101.6	50	50.4	100.8	50	49.8	99.6
Iron	5000	5180	103.6	5000	5150	103.0	5000	5180	103.6
Lead	50	50.7	101.4	50	50.8	101.6	50	51.0	102.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	50	48.5	97.0	50	48.7	97.4	50	48.4	96.8
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA45064 Units: ug/l

Time:		17:20			18:17	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4780	95.6	5000	4800	96.0
Antimony	anr					
Arsenic	50	50.9	101.8	50	51.6	103.2
Barium	50	46.8	93.6	50	46.3	92.6
Beryllium	anr					
Boron	anr					
Cadmium	50	49.5	99.0	50	49.9	99.8
Calcium	anr					
Chromium	50	50.4	100.8	50	50.3	100.6
Cobalt	anr					
Copper	50	49.7	99.4	50	49.4	98.8
Iron	5000	5200	104.0	5000	5220	104.4
Lead	50	51.1	102.2	50	50.7	101.4
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	50	48.5	97.0	50	48.3	96.6
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA45064 Units: ug/l

Time:			14:15	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	24.3	97.2
Antimony	2.0	0.25	anr	
Arsenic	0.50	0.50	0.502	100.4
Barium	1.0	0.50	0.983	98.3
Beryllium	0.50	0.25	anr	
Boron	25	2.5	anr	
Cadmium	0.50	0.25	0.516	103.2
Calcium	250	125	anr	
Chromium	1.0	2.0	1.01	101.0
Cobalt	0.50	0.25	anr	
Copper	2.0	2.0	2.01	100.5
Iron	25	25	24.5	98.0
Lead	0.50	0.25	0.497	99.4
Magnesium	250	125	anr	
Manganese	1.0	0.25	anr	
Molybdenum	1.0	0.50		
Nickel	1.0	2.0	anr	
Potassium	250	125	anr	
Selenium	0.50	0.50	anr	
Silver	0.50	1.0	0.486	97.2
Sodium	250	125	anr	
Strontium	5.0	0.50		
Thallium	0.50	0.25	anr	
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0	anr	
Zinc	5.0	2.0	anr	

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081218M1.CSV Date Analyzed: 08/12/18 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA45064 Units: ug/l

Time:			14:20		14:24	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	96300	96.3	96800	96.8
Antimony			0.102		0.0881	
Arsenic		20	0.0862		19.5	97.5
Barium			0.124		0.128	
Beryllium			0.00201		0.000406	
Boron		50	8.58		54.2	108.4
Cadmium		20	0.373		19.5	97.5
Calcium	100000	100000	95400	95.4	97000	97.0
Chromium		20	0.210		20.2	101.0
Cobalt		20	0.0822		19.4	97.0
Copper		20	0.238		18.3	91.5
Iron	100000	100000	89600	89.6	91600	91.6
Lead			0.101		0.0945	
Magnesium	100000	100000	92900	92.9	93700	93.7
Manganese		20	0.313		19.8	99.0
Molybdenum	2000	2000	2160	108.0	2190	109.5
Nickel		20	0.550		19.2	96.0
Potassium	100000	100000	96900	96.9	99200	99.2
Selenium		20	0.0493		17.7	88.5
Silver		20	0.0307		18.5	92.5
Sodium	100000	100000	91300	91.3	92900	92.9
Strontium	2000	2000	2020	101.0	2080	104.0
Thallium			0.0195		0.0172	
Tin	2000	2000	1960	98.0	2020	101.0
Titanium	2000	2000	1840	92.0	1880	94.0
Vanadium		20	0.0106		20.4	102.0
Zinc		20	-0.395		16.3	81.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:45	MA45074-STD1	1		STDA
12:50	MA45074-STD2	1		STDA
12:55	MA45074-STD3	1		STDB
13:00	MA45074-STD4	1		STDC
13:05	MA45074-STD5	1		STDD
13:10	MA45074-STD6	1		STDE
13:15	MA45074-STD7	1		STDF
13:20	MA45074-STD8	1		STDG
13:25	MA45074-STD9	1		STDH
13:30	MA45074-STD10	1		STDI
13:35	MA45074-STD11	1		STDJ
13:40	ZZZZZZ	1		
13:45	MA45074-ICVA1	1		
13:52	MA45074-ICV1	1		60ppb Al.
13:57	MA45074-ICB1	1		
14:02	MA45074-CCVA1	1		
14:07	MA45074-CCB1	1		
14:12	MA45074-CRI1	1		
14:17	MA45074-ICSA1	1		
14:22	MA45074-ICSAB1	1		
14:27	ZZZZZZ	1		
14:32	MA45074-CCVA2	1		
14:37	MA45074-CCB2	1		
14:42	ZZZZZZ	50		
14:47	MP8578-MB1	2		
14:52	MP8578-B2	2		
14:57	MP8578-S5	2		
15:02	MP8578-S6	2		
15:07	ZZZZZZ	1		
15:12	JC71649-3	2		(sample used for QC only; not part of login JC71604)
15:17	MP8578-SD1	10		
15:22	MP8578-MB1	5		
15:27	MA45074-CCVA3	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:32	MA45074-CCB3	1		
15:37	MP8578-B2	5		
15:42	MP8578-S5	5		
15:47	MP8578-S6	5		
15:52	JC71649-3	5		(sample used for QC only; not part of login JC71604)
15:57	MP8578-SD1	25		
16:02	MP8578-S7	5		
16:07	MP8578-S8	5		
16:12	JC71649-3F	5		(sample used for QC only; not part of login JC71604)
16:17	MP8578-SD2	25		
16:22	MA45074-CCVA4	1		
16:27	MA45074-CCB4	1		
16:32	JC71604-1	5		
16:37	JC71604-1	2		
---------->	Last reportable sample/prep for job JC71604			
16:42	MP8535-S3	10		
16:47	MP8535-S4	10		
16:52	ZZZZZZ	2		
16:57	JC71363-1	10		(sample used for QC only; not part of login JC71604)
17:02	MP8535-SD1	50		
17:07	ZZZZZZ	25		
17:12	ZZZZZZ	50		
17:17	MA45074-CCVA5	1		
17:22	MA45074-CCB5	1		
---------->	Last reportable CCB for job JC71604			
17:27	ZZZZZZ	50		
17:32	ZZZZZZ	25		
17:37	ZZZZZZ	50		
17:42	ZZZZZZ	50		
17:47	ZZZZZZ	2		
17:52	MP8590-MB1	5		
17:57	MP8590-B1	5		
18:02	MP8590-S1	5		
18:07	MP8590-S2	5		
18:12	MA45074-CCVA6	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:17	MA45074-CCB6	1		
18:22	JC71601-5	5		(sample used for QC only; not part of login JC71604)
18:27	MP8590-SD1	25		
18:32	ZZZZZZ	5		
18:37	ZZZZZZ	5		
18:42	MP8590-S1	10		
18:47	MP8590-S2	10		
18:52	ZZZZZZ	1		
18:57	JC71601-5	10		(sample used for QC only; not part of login JC71604)
19:02	MP8590-SD1	50		
19:07	ZZZZZZ	2		
19:12	MA45074-CCVA7	1		
19:17	MA45074-CCB7	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Element: Dilution	Al	Se	
13:40	ZZZZZZ	1			
13:45	MA45074-ICVA1	1	X	X	
13:52	MA45074-ICV1	1	X		
13:57	MA45074-ICB1	1	X	X	
14:02	MA45074-CCVA1	1	X	X	
14:07	MA45074-CCB1	1	X	X	
14:12	MA45074-CRI1	1	X	X	
14:17	MA45074-ICSA1	1	X	X	
14:22	MA45074-ICSAB1	1	X	X	
14:27	ZZZZZZ	1			
14:32	MA45074-CCVA2	1	X	X	
14:37	MA45074-CCB2	1	X	X	
14:42	ZZZZZZ	50			
14:47	MP8578-MB1	2	X		
14:52	MP8578-B2	2	X		
14:57	MP8578-S5	2	X		
15:02	MP8578-S6	2	X		
15:07	ZZZZZZ	1			
15:12	JC71649-3	2			(a)
15:17	MP8578-SD1	10	X		
15:22	MP8578-MB1	5		X	
15:27	MA45074-CCVA3	1	X	X	
15:32	MA45074-CCB3	1	X	X	
15:37	MP8578-B2	5		X	
15:42	MP8578-S5	5		X	
15:47	MP8578-S6	5		X	
15:52	JC71649-3	5			(a)
15:57	MP8578-SD1	25		X	
16:02	MP8578-S7	5		X	
16:07	MP8578-S8	5		X	
16:12	JC71649-3F	5			(a)
16:17	MP8578-SD2	25		X	
16:22	MA45074-CCVA4	1	X	X	
		Element:	Al	Se	

REPORTED ELEMENTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Element: Dilution	Al	Se	
16:27	MA45074-CCB4	1	X	X	
16:32	JC71604-1	5		X	
16:37	JC71604-1	2	X		
16:42	MP8535-S3	10			
16:47	MP8535-S4	10			
16:52	ZZZZZZ	2			
16:57	JC71363-1	10			(a)
17:02	MP8535-SD1	50			
17:07	ZZZZZZ	25			
17:12	ZZZZZZ	50			
17:17	MA45074-CCVA5	1	X	X	
17:22	MA45074-CCB5	1	X	X	
17:27	ZZZZZZ	50			
17:32	ZZZZZZ	25			
17:37	ZZZZZZ	50			
17:42	ZZZZZZ	50			
17:47	ZZZZZZ	2			
17:52	MP8590-MB1	5		X	
17:57	MP8590-B1	5		X	
18:02	MP8590-S1	5		X	
18:07	MP8590-S2	5		X	
18:12	MA45074-CCVA6	1	X	X	
18:17	MA45074-CCB6	1	X	X	
18:22	JC71601-5	5			(a)
18:27	MP8590-SD1	25		X	
18:32	ZZZZZZ	5			
18:37	ZZZZZZ	5			
18:42	MP8590-S1	10			
18:47	MP8590-S2	10			
18:52	ZZZZZZ	1			
18:57	JC71601-5	10			(a)
19:02	MP8590-SD1	50			
19:07	ZZZZZZ	2			
		Element:	Al	Se	

REPORTED ELEMENTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Element: Dilution	Al	Se
19:12	MA45074-CCVA7	1	X	X
19:17	MA45074-CCB7	1	X	X

(a) Sample used for QC only; not part of login JC71604.

	Element:	Al	Se

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
12:45	MA45074-STD1	100	100	100	100	100	100	100	100
12:50	MA45074-STD2	100	100	100	100	100	100	100	100
12:55	MA45074-STD3	99.909	100.448	100.126	100.662	101.306	101.351	100.118	101.766
13:00	MA45074-STD4	100.061	99.762	98.814	99.655	99.983	101.16	100.538	100.498
13:05	MA45074-STD5	97.185	96.93	98.118	99.704	98.233	101.623	99.156	99.041
13:10	MA45074-STD6	97.822	97.573	97.826	100.781	99.434	98.431	99.122	100.275
13:15	MA45074-STD7	96.373	94.901	95.1	97.447	96.974	96.123	97.971	98.747
13:20	MA45074-STD8	95.725	94.701	94.972	97.541	96.253	96.357	97.309	97.187
13:25	MA45074-STD9	95.279	93.883	96.314	98.014	95.151	97.049	97.51	95.894
13:30	MA45074-STD10	94.796	94.635	94.902	98.253	96.126	96.113	98.135	96.631
13:35	MA45074-STD11	94.287	94.455	95.659	97.834	95.984	95.228	97.662	95.505
13:40	ZZZZZZ	94.808	93.953	94.186	97.416	96.835	97.198	96.978	97.744
13:45	MA45074-ICVA1	94.287	94.529	95.493	97.763	95.827	97.052	97.68	96.825
13:52	MA45074-ICV1	95.322	95.163	95.613	98.75	97.061	98.526	97.767	97.784
13:57	MA45074-ICB1	96.292	95.239	95.596	98.733	96.651	98.708	98.051	98.308
14:02	MA45074-CCVA1	95.905	96.072	95.508	98.278	98.316	97.728	97.049	98.621
14:07	MA45074-CCB1	96.194	95.742	95.011	96.949	97.493	97.129	97.195	98.379
14:12	MA45074-CRI1	96.936	96.664	96.741	98.83	98.142	98.071	98.187	98.948
14:17	MA45074-ICSA1	87.727	88.98	87.004	90.763	87.993	86.52	91.213	85.618
14:22	MA45074-ICSAB1	84.371	86.468	85.105	89.767	86.444	84.345	88.922	83.43
14:27	ZZZZZZ	84.163	85.166	85.656	93.883	88.455	88.677	96.001	89.642
14:32	MA45074-CCVA2	86.835	89.301	87.963	97.785	91.969	90.468	96.755	92.4
14:37	MA45074-CCB2	87.887	89.592	88.076	99.457	92.36	93.381	99.839	93.792
14:42	ZZZZZZ	92.574	94.051	91.347	102.605	96.219	96.049	101.714	96.217
14:47	MP8578-MB1	91.978	90.765	87.685	98.766	101.47	98.174	106.094	102.131
14:52	MP8578-B2	90.889	90.202	87.162	98.494	101.573	99.793	106.438	101.71
14:57	MP8578-S5	88.61	89.657	86.621	98.639	104.776	99.802	107.499	104.729
15:02	MP8578-S6	87.325	89.365	84.7	97.314	98.571	93.901	104.931	98.455
15:07	ZZZZZZ	94.136	94.136	91.555	101.654	97.589	94.478	101.253	98.26
15:12	JC71649-3	87.685	88.67	85.097	97.638	96.648	93.264	107.01	95.89
15:17	MP8578-SD1	93.573	94.548	92.216	102.425	98.034	95.875	103.093	99.108
15:22	MP8578-MB1	95.043	93.462	90.539	101.632	97.438	96.972	101.921	98.027
15:27	MA45074-CCVA3	90.255	91.736	90.72	101.025	94.762	91.869	99.845	94.747

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:32	MA45074-CCB3	92.402	94.48	91.346	101.733	95.316	92.557	100.034	97.081
15:37	MP8578-B2	91.82	90.013	90.251	99.561	94.087	94.945	98.945	94.695
15:42	MP8578-S5	89.347	87.717	89.24	98.647	92.523	93.037	98.367	93.419
15:47	MP8578-S6	89.144	88.475	89.54	98.11	92.996	93.157	97.591	93.397
15:52	JC71649-3	91.188	91.628	87.844	97.892	95.019	92.539	98.88	95.684
15:57	MP8578-SD1	93.704	94.334	93.088	102.241	95.314	96.524	100.591	96.146
16:02	MP8578-S7	90.683	90.89	87.185	98.078	92.877	91.289	97.018	93.648
16:07	MP8578-S8	89.869	90.318	87.025	97.491	93.47	91.714	97.761	94.051
16:12	JC71649-3F	91.129	90.409	88.231	96.888	92.923	91.148	97.377	93.34
16:17	MP8578-SD2	91.108	91.423	93.641	100.252	91.903	95.379	100.294	93.229
16:22	MA45074-CCVA4	91.111	92.1	90.25	97.289	93.026	91.343	95.54	93.49
16:27	MA45074-CCB4	92.061	91.317	91.468	96.888	92.099	92.022	95.797	93.817
16:32	JC71604-1	90.511	90.732	86.845	96.196	93.158	89.939	97.071	93.592
16:37	JC71604-1	87.999	88.356	85.29	94.415	94.827	93.043	103.644	95.025
16:42	MP8535-S3	89.725	89.207	90.215	97.126	94.329	94.26	98.475	94.606
16:47	MP8535-S4	89.205	87.721	89.081	96.938	91.717	93.24	96.848	92.316
16:52	ZZZZZZ	90.246	88.039	86.815	95.714	102.404	100.041	117.663	102.973
16:57	JC71363-1	92.081	91.326	88.222	97.644	95.571	93.283	99.434	96.701
17:02	MP8535-SD1	93.654	93.425	90.338	97.868	95.033	93.045	99.555	96.101
17:07	ZZZZZZ	91.037	90.296	89.901	95.379	91.635	91.537	95.921	92.49
17:12	ZZZZZZ	89.928	88.75	91.425	96.48	91.202	93.968	97.071	91.66
17:17	MA45074-CCVA5	89.816	89.019	88.966	95.212	90.072	92.158	94.061	91.084
17:22	MA45074-CCB5	88.282	86.734	89.621	95.177	88.627	91.454	94.411	88.982
17:27	ZZZZZZ	90.455	89.771	88.951	95.569	91.053	90.852	94.89	92.131
17:32	ZZZZZZ	91.994	90.872	88.996	93.843	92.543	91.377	95.116	93.727
17:37	ZZZZZZ	89.991	89.928	89.042	93.992	91.634	92.143	93.492	92.266
17:42	ZZZZZZ	90.169	88.451	89.574	96.275	89.985	91.438	94.94	90.621
17:47	ZZZZZZ	88.41	85.681	85.112	92.977	100.668	98.982	106.137	101.289
17:52	MP8590-MB1	91.383	90.371	89.314	94.284	93.629	92.726	95.469	93.867
17:57	MP8590-B1	92.415	90.212	89.427	96.789	92.54	92.004	95.289	93.676
18:02	MP8590-S1	88.625	87.787	85.974	94.191	89.825	88.884	93.703	90.523
18:07	MP8590-S2	87.878	88.293	86.44	94.583	90.365	88.763	93.511	90.476
18:12	MA45074-CCVA6	90.154	89.735	88.903	95.248	90.446	90.152	92.97	91.655

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:17	MA45074-CCB6	90.528	89.24	88.757	94.982	89.945	90.15	93.678	91.061
18:22	JC71601-5	86.417	87.135	85.917	93.698	89.81	89.32	93.56	90.226
18:27	MP8590-SD1	87.114	87.54	91.655	96.587	88.235	91.797	95.803	88.698
18:32	ZZZZZZ	89.708	87.634	87.836	92.933	91.383	91.009	93.799	91.66
18:37	ZZZZZZ	89.426	87.892	86.809	92.935	91.673	91.89	94.371	91.974
18:42	MP8590-S1	87.286	87.176	84.339	92.342	88.763	88.721	91.21	89.821
18:47	MP8590-S2	85.934	86.403	86.57	92.421	89.294	88.287	93.131	90.013
18:52	ZZZZZZ	89.092	89.165	88.84	94.395	89.33	88.769	91.528	90.695
18:57	JC71601-5	87.031	86.463	85.701	93.197	88.421	89.156	92.41	89.23
19:02	MP8590-SD1	89.227	88.535	88.569	93.613	90.653	90.65	93.894	91.77
19:07	ZZZZZZ	81.323	82.764	83.173	88.775	90.031	90.906	97.785	90.304
19:12	MA45074-CCVA7	89.825	90.302	86.89	94.313	91.359	87.882	93.338	92.001
19:17	MA45074-CCB7	90.391	89.783	90.459	92.526	90.762	92.041	92.589	91.093

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	70-130 %	70-130 %
Istd#2	Scandium (45-1)	70-130 %	70-130 %
Istd#3	Scandium (45-2)	70-130 %	70-130 %
Istd#4	Scandium (45-3)	70-130 %	70-130 %
Istd#5	Germanium (72-1)	70-130 %	70-130 %
Istd#6	Germanium (72-2)	70-130 %	70-130 %
Istd#7	Germanium (72-3)	70-130 %	70-130 %
Istd#8	Germanium (74-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
12:45	MA45074-STD1	100	100	100	100	100	100	100	100
12:50	MA45074-STD2	100	100	100	100	100	100	100	100
12:55	MA45074-STD3	101.935	99.663	99.59	100.385	99.934	100.589	100.247	101.211
13:00	MA45074-STD4	99.752	99.858	99.905	99.311	100.134	100.066	99.142	100.329
13:05	MA45074-STD5	100.744	98.842	96.769	98.837	99.097	96.956	98.109	97.332
13:10	MA45074-STD6	99.291	99.799	97.581	97.129	99.503	97.713	97.008	98.367
13:15	MA45074-STD7	96.127	96.162	95.249	94.433	97.343	95.196	94.029	97.937
13:20	MA45074-STD8	97.153	97.707	94.213	94.619	98.039	95.438	94.469	97.346
13:25	MA45074-STD9	97.654	97.089	92.258	95.366	97.651	93.743	95.858	96.082
13:30	MA45074-STD10	96.52	97.462	91.916	93.198	96.992	93.218	93.687	96.488
13:35	MA45074-STD11	95.634	95.339	90.857	91.145	94.83	92.662	92.898	96.721
13:40	ZZZZZZ	97.741	96.276	94.874	94.822	97.639	95.479	95.23	97.87
13:45	MA45074-ICVA1	96.681	95.765	92.219	92.328	95.108	93.457	93.434	95.599
13:52	MA45074-ICV1	98.286	98.028	95.262	95.532	98.826	95.21	96.119	97.829
13:57	MA45074-ICB1	99.278	97.793	95.95	95.831	98.372	96.152	96.14	98.689
14:02	MA45074-CCVA1	97.147	96.32	92.875	92.71	95.905	94.225	94.13	97.208
14:07	MA45074-CCB1	97.673	96.451	95.81	95.302	97.43	95.754	95.857	98.905
14:12	MA45074-CRI1	98.569	97.4	95.796	96.546	98.285	96.517	96.877	99.175
14:17	MA45074-ICSA1	83.027	87.377	80.094	78.9	81.71	84.058	81.25	88.928
14:22	MA45074-ICSAB1	82.066	86.279	79.302	77.863	81.66	83.082	79.277	90.093
14:27	ZZZZZZ	89.253	94.643	90.93	91.583	96.774	93.329	90.022	99.671
14:32	MA45074-CCVA2	90.344	96.114	90.776	89.55	96.46	93.56	89.074	100.654
14:37	MA45074-CCB2	93.125	99.344	93.653	93.287	100.467	95.789	91.237	101.48
14:42	ZZZZZZ	94.691	99.803	94.05	93.045	98.285	96.947	92.119	102.27
14:47	MP8578-MB1	97.509	105.159	93.723	92.745	98.227	95.59	88.425	101.771
14:52	MP8578-B2	99.198	106.01	92.153	91.264	97.565	94.48	86.74	103.206
14:57	MP8578-S5	99.591	107.468	86.683	86.252	93.802	91.16	83.863	101.699
15:02	MP8578-S6	94.08	105.316	85.998	84.918	92.58	89.783	82.081	101.203
15:07	ZZZZZZ	95.458	102.014	96.869	95.161	100.884	98.599	91.813	104.709
15:12	JC71649-3	93.921	105.743	85.373	84.557	92.648	90.014	83.232	100.543
15:17	MP8578-SD1	97.329	101.561	94.29	92.84	99.868	97.162	91.531	104.417
15:22	MP8578-MB1	95.624	100.495	95.993	93.677	100.455	97.509	90.545	104.288
15:27	MA45074-CCVA3	92.833	98.782	90.544	89.216	94.748	92.298	87.148	100.548

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:32	MA45074-CCB3	92.497	98.796	95.269	92.019	99.441	95.883	89.044	102.571
15:37	MP8578-B2	94.233	99.733	91.913	93.648	99.291	94.283	90.787	99.766
15:42	MP8578-S5	92.987	97.169	87.19	88.758	95.351	90.764	87.362	97.972
15:47	MP8578-S6	94.086	97.155	87.666	89.231	95.059	90.592	87.801	99.547
15:52	JC71649-3	92.482	98.363	89.843	88.038	95.2	93.873	87.892	102.516
15:57	MP8578-SD1	96.024	99.882	94.851	94.249	100.174	96.855	93.623	103.304
16:02	MP8578-S7	90.495	96.684	89.313	87.612	94.279	93.067	86.841	102.114
16:07	MP8578-S8	90.715	96.367	88.399	86.896	94.188	92.321	86.15	101.28
16:12	JC71649-3F	91.504	96.78	89.327	87.935	94.135	92.811	86.418	101.848
16:17	MP8578-SD2	96.409	99.498	91.227	93.57	99.642	93.163	93.895	100.636
16:22	MA45074-CCVA4	91.266	94.713	91.447	90.367	94.431	93.457	89.181	102.735
16:27	MA45074-CCB4	92.604	94.798	93.411	92.971	96.31	95.05	90.855	102.261
16:32	JC71604-1	89.495	96.306	90.344	87.969	94.583	93.537	87.286	101.951
16:37	JC71604-1	92.997	102.736	86.257	85.615	91.256	90.536	84.425	101.605
16:42	MP8535-S3	95.043	98.038	89.737	91.676	95.784	92.463	90.356	100.541
16:47	MP8535-S4	92.78	96.403	88.475	90.373	94.966	91.736	89.453	98.1
16:52	ZZZZZZ	100.493	116.917	90.544	89.575	94.929	92.086	86.233	101.996
16:57	JC71363-1	92.988	98.953	91.264	89.572	96.016	94.83	88.022	103.833
17:02	MP8535-SD1	93.344	98.299	94.53	92.075	96.914	96.758	90.912	103.043
17:07	ZZZZZZ	92.141	96.268	90.412	91.172	94.362	92.967	90.042	101.521
17:12	ZZZZZZ	92.643	96.07	89.173	91.8	95.373	90.926	91.175	99.047
17:17	MA45074-CCVA5	90.811	93.202	88.67	88.846	91.704	90.6	88.183	98.628
17:22	MA45074-CCB5	90.683	95.032	89.098	91.347	95.6	89.946	89.53	98.343
17:27	ZZZZZZ	90.783	94.968	90.337	88.489	94.667	92.67	89.171	99.402
17:32	ZZZZZZ	91.274	94.611	92.16	89.948	94.274	94.621	90.113	102.156
17:37	ZZZZZZ	92.174	93.423	90.356	90.191	93.279	92.078	90.266	100.543
17:42	ZZZZZZ	90.351	95.315	88.998	89.002	94.645	90.757	88.701	96.772
17:47	ZZZZZZ	97.489	107.219	87.554	86.715	91.388	89.755	83.66	100.96
17:52	MP8590-MB1	91.69	95.147	91.324	92.014	93.759	93.155	89.233	102.572
17:57	MP8590-B1	91.975	93.959	91.693	90.572	94.679	93.104	89.016	100.844
18:02	MP8590-S1	89.442	92.5	86.394	85.596	90.412	90.415	85.796	99.578
18:07	MP8590-S2	88.607	92.388	86.271	85.766	90.594	89.763	85.88	99.445
18:12	MA45074-CCVA6	90.024	92.611	88.714	88.264	91.05	91.136	87.299	100.743

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:17	MA45074-CCB6	91.009	92.923	91.378	89.964	94.37	91.537	88.631	100.242
18:22	JC71601-5	89.06	93.22	85.639	85.495	90.783	88.706	86.443	98.956
18:27	MP8590-SD1	91.612	95.401	87.855	90.032	94.992	90.218	91.574	97.269
18:32	ZZZZZZ	91.177	93.804	89.984	89.717	93.494	90.389	88.623	99.472
18:37	ZZZZZZ	90.784	93.417	89.676	89.18	92.978	90.97	88.264	99.903
18:42	MP8590-S1	87.393	92.059	86.3	83.565	88.99	89.371	83.836	99.026
18:47	MP8590-S2	88.507	92.119	85.536	85.165	88.681	88.579	85.593	97.776
18:52	ZZZZZZ	89.065	90.877	90.157	88.648	91.879	90.988	88.258	99.319
18:57	JC71601-5	87.278	92.47	86.143	84.668	89.854	89.264	85.351	98.94
19:02	MP8590-SD1	89.631	92.671	89.283	88.783	92.809	91.649	88.212	99.299
19:07	ZZZZZZ	89.79	96.493	77.324	79.4	83.072	81.466	79.793	88.17
19:12	MA45074-CCVA7	88.628	93.347	89.568	85.362	90.877	91.477	86.056	101.55
19:17	MA45074-CCB7	91.51	90.768	90.977	91.123	91.93	92.271	90.639	100.319

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	70-130 %	70-130 %
Istd#10	Germanium (74-3)	70-130 %	70-130 %
Istd#11	Rhodium (103-1)	70-130 %	70-130 %
Istd#12	Rhodium (103-2)	70-130 %	70-130 %
Istd#13	Rhodium (103-3)	70-130 %	70-130 %
Istd#14	Indium (115-1)	70-130 %	70-130 %
Istd#15	Indium (115-2)	70-130 %	70-130 %
Istd#16	Terbium (159-1)	70-130 %	70-130 %

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
12:45	MA45074-STD1	100	100	100	100	100	100
12:50	MA45074-STD2	100	100	100	100	100	100
12:55	MA45074-STD3	100.246	99.887	100.5	99.965	100.085	100.352
13:00	MA45074-STD4	99.067	99.778	99.795	99.72	99.353	99.04
13:05	MA45074-STD5	98.889	99.785	96.578	98.968	96.678	99.133
13:10	MA45074-STD6	96.996	100.638	96.92	97.663	97.535	97.493
13:15	MA45074-STD7	95.058	98.731	97.289	95.233	97.374	95.58
13:20	MA45074-STD8	95.507	98.872	95.795	95.981	95.974	94.414
13:25	MA45074-STD9	96.504	99.592	94.742	96.623	93.949	95.692
13:30	MA45074-STD10	94.168	100.116	94.545	95.744	92.585	93.303
13:35	MA45074-STD11	94.721	98.123	95.264	95.051	90.771	90.974
13:40	ZZZZZZ	94.749	98.129	95.824	95.278	95.426	94.433
13:45	MA45074-ICVA1	96.224	97.671	95.86	96.122	91.997	92.378
13:52	MA45074-ICV1	95.579	99.358	95.806	96.349	95.398	95.813
13:57	MA45074-ICB1	96.412	98.867	95.267	96.538	95.653	96.146
14:02	MA45074-CCVA1	95.579	97.963	95.568	95.293	92.485	92.019
14:07	MA45074-CCB1	94.996	97.778	95.496	95.038	94.86	94.585
14:12	MA45074-CRI1	96.28	98.605	96.127	96.537	96.051	95.933
14:17	MA45074-ICSA1	86.446	89.037	88.943	87.149	80.577	78.442
14:22	MA45074-ICSAB1	85.687	88.69	89.956	86.804	81.542	78.725
14:27	ZZZZZZ	92.364	98.758	95.683	92.892	96.591	93.584
14:32	MA45074-CCVA2	91.709	100.072	98.107	92.924	95.314	90.864
14:37	MA45074-CCB2	93.056	101.05	97.571	93.718	97.341	94.216
14:42	ZZZZZZ	94.387	100.959	99.918	95.729	99.658	95.731
14:47	MP8578-MB1	92.621	100.022	99.197	93.343	99.748	93.935
14:52	MP8578-B2	92.208	99.823	99.752	92.983	98.021	91.9
14:57	MP8578-S5	91.259	99.032	98.281	92.197	91.7	86.808
15:02	MP8578-S6	90.175	98.486	97.532	91.676	90.456	86.082
15:07	ZZZZZZ	93.551	101.25	100.594	95.269	100.212	94.728
15:12	JC71649-3	89.697	97.72	96.724	91.216	90.555	85.041
15:17	MP8578-SD1	93.737	102.167	99.672	95.203	97.464	92.929
15:22	MP8578-MB1	91.693	100.874	99.725	92.964	98.632	93.46
15:27	MA45074-CCVA3	89.663	91.156	96.563	90.699	93.007	88.943

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
15:32	MA45074-CCB3	90.252	97.171	97.734	91.405	96.947	91.725
15:37	MP8578-B2	93.041	100.548	96.841	93.873	96.426	93.969
15:42	MP8578-S5	91.534	98.947	93.829	92.777	90.748	89.693
15:47	MP8578-S6	91.609	98.421	94.894	92.701	91.539	90.053
15:52	JC71649-3	90.681	99.185	97.46	91.315	93.759	88.1
15:57	MP8578-SD1	93.921	101.256	97.663	94.162	97.057	94.091
16:02	MP8578-S7	90.732	97.971	97.273	91.439	92.331	88.175
16:07	MP8578-S8	90.466	97.854	96.434	91.004	92.5	87.667
16:12	JC71649-3F	90.355	97.704	96.379	91.998	93.046	88.607
16:17	MP8578-SD2	93.83	100.286	94.377	94.654	93.838	94.592
16:22	MA45074-CCVA4	92.229	97.406	97.45	92.988	94.146	90.239
16:27	MA45074-CCB4	92.281	96.774	96.275	93.37	95.96	92.807
16:32	JC71604-1	89.724	97.526	96.947	91.189	95.651	89.967
16:37	JC71604-1	89.88	96.505	95.728	90.744	92.929	87.818
16:42	MP8535-S3	92.604	98.138	94.803	93.66	93.69	91.911
16:47	MP8535-S4	91.937	97.177	93.831	92.184	92.247	90.887
16:52	ZZZZZZ	90.156	96.516	96.921	91.156	95.232	90.463
16:57	JC71363-1	90.827	97.658	96.948	90.771	95.064	89.556
17:02	MP8535-SD1	91.532	97.443	97.63	92.681	97.085	92.324
17:07	ZZZZZZ	91.422	95.973	95.191	92.681	93.084	91.18
17:12	ZZZZZZ	91.907	96.591	92.149	92.37	92.946	92.328
17:17	MA45074-CCVA5	91.67	94.839	93.69	92.824	90.916	89.091
17:22	MA45074-CCB5	91.032	96.147	91.277	91.966	91.439	91.028
17:27	ZZZZZZ	89.576	96.032	93.901	90.017	94.131	89.985
17:32	ZZZZZZ	90.496	95.599	96.303	91.319	95.028	90.304
17:37	ZZZZZZ	90.781	94.952	95.014	91.388	93.636	91.005
17:42	ZZZZZZ	90.714	96.696	92.875	91.056	92.885	89.95
17:47	ZZZZZZ	88.072	94.428	94.834	89.15	92.856	87.313
17:52	MP8590-MB1	91.379	94.857	95.251	92.331	94.888	91.81
17:57	MP8590-B1	90.634	96.704	94.247	90.25	94.194	90.24
18:02	MP8590-S1	89.346	94.466	93.412	89.239	90.893	86.442
18:07	MP8590-S2	88.215	94.616	93.738	89.182	90.482	87.357
18:12	MA45074-CCVA6	89.266	94.325	94.084	90.356	90.921	87.715

INTERNAL STANDARD SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
Analyst: MS Run ID: MA45074
Parameters: Al,Se

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
18:17	MA45074-CCB6	89.335	94.771	93.367	90.499	93.149	89.262
18:22	JC71601-5	88.502	94.209	91.378	89.026	89.037	86.389
18:27	MP8590-SD1	90.962	96.56	91.18	91.477	89.871	91.467
18:32	ZZZZZZ	89.449	93.972	92.7	90.214	92.59	90.342
18:37	ZZZZZZ	88.969	93.509	92.782	89.316	92.743	89.322
18:42	MP8590-S1	86.83	90.618	92.086	86.968	89.372	84.923
18:47	MP8590-S2	87.191	89.523	91.853	88.295	88.823	86.561
18:52	ZZZZZZ	88.291	91.791	92.912	89.144	91.518	88.474
18:57	JC71601-5	87.397	92.618	91.892	87.827	90.204	86.055
19:02	MP8590-SD1	89.533	93.941	92.447	89.928	92.54	89.39
19:07	ZZZZZZ	86.524	89.645	89.116	87.335	81.659	79.853
19:12	MA45074-CCVA7	87.886	94.133	93.952	87.941	90.976	85.278
19:17	MA45074-CCB7	90.762	92.359	92.971	91.362	91.795	90.309

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	70-130 %	70-130 %
Istd#18	Terbium (159-3)	70-130 %	70-130 %
Istd#19	Holmium (165-1)	70-130 %	70-130 %
Istd#20	Holmium (165-2)	70-130 %	70-130 %
Istd#21	Bismuth (209-1)	70-130 %	70-130 %
Istd#22	Bismuth (209-2)	70-130 %	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA45074 Units: ug/l

Time: / Sample ID:			13:57 ICB1		14:07 CCB1		14:37 CCB2		15:32 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	1.1	0.110	<25	0.133	<25	0.957	<25	0.00541	<25
Antimony	2.0	.27								
Arsenic	0.50	.017	anr							
Barium	1.0	.011								
Beryllium	0.50	.002								
Boron	25	1.5								
Cadmium	0.50	.004								
Calcium	250	21	anr							
Chromium	1.0	.009								
Cobalt	0.50	.002								
Copper	2.0	.012								
Iron	25	.87								
Lead	0.50	.004	anr							
Magnesium	250	1.9								
Manganese	1.0	.02	anr							
Molybdenum	1.0	.018								
Nickel	1.0	.02								
Potassium	250	3.3								
Selenium	0.50	.025	0.0133	<0.50	-0.00761	<0.50	0.0382	<0.50	0.0312	<0.50
Silver	0.50	.005								
Sodium	250	3.6	anr							
Strontium	5.0	.039								
Thallium	0.50	.003								
Tin	5.0	.038								
Titanium	1.0	.042								
Vanadium	1.0	.006								
Zinc	5.0	2.2								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
QC Limits: result < RL Run ID: MA45074 Units: ug/l

Time:			16:27		17:22	
Sample ID:			CCB4		CCB5	
Metal	RL	IDL	raw	final	raw	final
Aluminum	25	1.1	0.288	<25	-0.00630	<25
Antimony	2.0	.27				
Arsenic	0.50	.017	anr			
Barium	1.0	.011				
Beryllium	0.50	.002				
Boron	25	1.5				
Cadmium	0.50	.004				
Calcium	250	21	anr			
Chromium	1.0	.009				
Cobalt	0.50	.002				
Copper	2.0	.012				
Iron	25	.87				
Lead	0.50	.004	anr			
Magnesium	250	1.9				
Manganese	1.0	.02	anr			
Molybdenum	1.0	.018				
Nickel	1.0	.02				
Potassium	250	3.3				
Selenium	0.50	.025	0.0379	<0.50	0.0274	<0.50
Silver	0.50	.005				
Sodium	250	3.6	anr			
Strontium	5.0	.039				
Thallium	0.50	.003				
Tin	5.0	.038				
Titanium	1.0	.042				
Vanadium	1.0	.006				
Zinc	5.0	2.2				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA45074 Units: ug/l

Time:		13:45			13:52			14:02	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	5600	101.8	60	65.4	109.0	5000	5110	102.2
Antimony									
Arsenic	anr								
Barium									
Beryllium									
Boron									
Cadmium									
Calcium	anr								
Chromium									
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel									
Potassium									
Selenium	60	58.6	97.7				50	49.3	98.6
Silver									
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA45074 Units: ug/l

Time:		14:32			15:27			16:22	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4840	96.8	5000	4820	96.4	5000	4850	97.0
Antimony									
Arsenic	anr								
Barium									
Beryllium									
Boron									
Cadmium									
Calcium	anr								
Chromium									
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel									
Potassium									
Selenium	50	48.5	97.0	50	48.5	97.0	50	49.5	99.0
Silver									
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA45074 Units: ug/l

Time:		17:17	
Sample ID:	CCVA	CCVA5	
Metal	True	Results	% Rec
Aluminum	5000	4860	97.2
Antimony			
Arsenic	anr		
Barium			
Beryllium			
Boron			
Cadmium			
Calcium	anr		
Chromium			
Cobalt			
Copper			
Iron			
Lead	anr		
Magnesium			
Manganese	anr		
Molybdenum			
Nickel			
Potassium			
Selenium	50	48.8	97.6
Silver			
Sodium	anr		
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA45074 Units: ug/l

Time:			14:12	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	25.8	103.2
Antimony	2.0	0.25		
Arsenic	0.50	0.50	anr	
Barium	1.0	0.50		
Beryllium	0.50	0.25		
Boron	25	2.5		
Cadmium	0.50	0.25		
Calcium	250	125	anr	
Chromium	1.0	2.0		
Cobalt	0.50	0.25		
Copper	2.0	2.0		
Iron	25	25		
Lead	0.50	0.25	anr	
Magnesium	250	125		
Manganese	1.0	0.25	anr	
Molybdenum	1.0	0.50		
Nickel	1.0	2.0		
Potassium	250	125		
Selenium	0.50	0.50	0.522	104.4
Silver	0.50	1.0		
Sodium	250	125	anr	
Strontium	5.0	0.50		
Thallium	0.50	0.25		
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0		
Zinc	5.0	2.0		

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA081318M1.CSV Date Analyzed: 08/13/18 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA45074 Units: ug/l

Time:			14:17		14:22	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	95700	95.7	94100	94.1
Antimony			0.0169		0.0112	
Arsenic		20	0.0941		19.6	98.0
Barium			0.115		0.113	
Beryllium			0.00289		0.00599	
Boron		50	7.10		52.2	104.4
Cadmium		20	0.372		19.4	97.0
Calcium	100000	100000	94000	94.0	95300	95.3
Chromium		20	0.205		20.0	100.0
Cobalt		20	0.0763		19.4	97.0
Copper		20	0.220		18.2	91.0
Iron	100000	100000	91700	91.7	92200	92.2
Lead			0.100		0.0968	
Magnesium	100000	100000	94700	94.7	94000	94.0
Manganese		20	0.340		19.9	99.5
Molybdenum	2000	2000	2150	107.5	2150	107.5
Nickel		20	0.592		19.2	96.0
Potassium	100000	100000	98600	98.6	98400	98.4
Selenium		20	0.0345		17.4	87.0
Silver		20	0.0283		18.2	91.0
Sodium	100000	100000	94000	94.0	94200	94.2
Strontium	2000	2000	2000	100.0	2000	100.0
Thallium			0.0235		0.0232	
Tin	2000	2000	1980	99.0	2020	101.0
Titanium	2000	2000	1820	91.0	1810	90.5
Vanadium		20	-0.00608		20.4	102.0
Zinc		20	0.615		17.6	88.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP8567 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 08/10/18

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.017	.095	0.025	<0.20

Associated samples MP8567: JC71604-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP8567
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 08/10/18

Metal	JC71534-1 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.029	2.4	2	118.6	75-125

Associated samples MP8567: JC71604-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP8567 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 08/10/18

Metal	JC71534-1 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.029	2.3	2	113.6	4.3	20

Associated samples MP8567: JC71604-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP8567
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 08/10/18

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	2.3	2	115.0	80-120

Associated samples MP8567: JC71604-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP8578
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 08/11/18

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	2.3	32	2.9	<50
Antimony	4.0	.55	1.7		
Arsenic	1.0	.034	.94	0.36	<1.0
Barium	2.0	.022	.73	0.030	<2.0
Beryllium	1.0	.004	.15		
Boron	50	3	14		
Cadmium	1.0	.008	.17	-0.0035	<1.0
Calcium	500	42	64		
Chromium	2.0	.018	.62	0.29	<2.0
Cobalt	1.0	.004	.17		
Copper	4.0	.024	1.9	0.10	<4.0
Iron	50	1.7	19	2.4	<50
Lead	1.0	.008	.52	0.019	<1.0
Magnesium	500	3.8	46		
Manganese	2.0	.04	.63		
Molybdenum	2.0	.036	.45		
Nickel	2.0	.04	.95		
Potassium	500	6.5	68		
Selenium	2.5	.13	1.4	0.096	<2.5
Silver	1.0	.01	.16	0.0053	<1.0
Sodium	500	7.1	140		
Strontium	10	.078	2.4		
Thallium	1.0	.006	.17		
Tin	10	.076	2.6		
Titanium	2.0	.084	1.6		
Vanadium	2.0	.012	1.8		
Zinc	10	4.4	5.4		

Associated samples MP8578: JC71604-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP8578
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 08/11/18

Metal	JC71649-3 Original	MS	Spikelot MP6020AQ1%	Rec	QC Limits
Aluminum	7.8	1480	1600	92.0	75-125
Antimony					
Arsenic	0.13	78.5	80	98.0	75-125
Barium	115	186	80	88.8	75-125
Beryllium					
Boron					
Cadmium	0.032	78.2	80	97.7	75-125
Calcium					
Chromium	1.7	83.5	80	102.3	75-125
Cobalt					
Copper	0.36	78.3	80	97.4	75-125
Iron	4.0	1520	1600	94.8	75-125
Lead	0.046	83.5	80	104.3	75-125
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium	0.79	75.3	80	93.1	75-125
Silver	0.031	74.7	80	93.3	75-125
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP8578: JC71604-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP8578
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 08/11/18

Metal	JC71649-3 Original	MSD	Spikelot MP6020AQ1%	Rec	MSD RPD	QC Limit
Aluminum	7.8	1510	1600	93.9	2.0	20
Antimony						
Arsenic	0.13	78.2	80	97.6	0.4	20
Barium	115	188	80	91.3	1.1	20
Beryllium						
Boron						
Cadmium	0.032	78.4	80	98.0	0.3	20
Calcium						
Chromium	1.7	83.1	80	101.8	0.5	20
Cobalt						
Copper	0.36	77.6	80	96.6	0.9	20
Iron	4.0	1530	1600	95.4	0.7	20
Lead	0.046	83.7	80	104.6	0.2	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	0.79	76.9	80	95.1	2.1	20
Silver	0.031	73.5	80	91.8	1.6	20
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP8578: JC71604-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP8578
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 08/11/18

Metal	BSP Result	Spikelot MP6020AQ1% Rec	QC Limits
Aluminum	1510	1600 94.4	80-120
Antimony			
Arsenic	79.1	80 98.9	80-120
Barium	75.9	80 94.9	80-120
Beryllium			
Boron			
Cadmium	78.8	80 98.5	80-120
Calcium			
Chromium	84.2	80 105.3	80-120
Cobalt			
Copper	83.2	80 104.0	80-120
Iron	1570	1600 98.1	80-120
Lead	82.4	80 103.0	80-120
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium	78.5	80 98.1	80-120
Silver	76.3	80 95.4	80-120
Sodium			
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium			
Zinc			

Associated samples MP8578: JC71604-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP8578
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date:			08/11/18				08/11/18	
Metal	JC71649-3 Original	SDL 2:10	%DIF	QC Limits	JC71649-3F Original	SDL 2:10	%DIF	QC Limits
Aluminum	7.80	29.5	278.1(a)	0-10	6.10	18.0	195.1(a)	0-10
Antimony								
Arsenic	0.132	0.00	100.0(a)	0-10	0.0966	0.253	161.9(a)	0-10
Barium	115	112	2.0	0-10	116	116	0.0	0-10
Beryllium								
Boron								
Cadmium	0.0316	0.00	100.0(a)	0-10	0.0445	0.00	100.0(a)	0-10
Calcium								
Chromium	1.66	1.26	24.5*(b)	0-10	1.21	0.844	30.3*(b)	0-10
Cobalt								
Copper	0.359	0.297	17.2 (a)	0-10	0.670	0.564	15.8 (a)	0-10
Iron	3.97	0.00	100.0(a)	0-10	2.09	0.00	100.0(a)	0-10
Lead	0.0461	0.0819	77.5 (a)	0-10	0.0449	0.119	164.1(a)	0-10
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium	0.790	1.16	46.5 (a)	0-10	0.983	10.8	998.1(a)	0-10
Silver	0.0310	0.00	100.0(a)	0-10	0.0127	0.00	100.0(a)	0-10
Sodium								
Strontium								
Thallium	anr							
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP8578: JC71604-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

Instrument Detection Limits

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: AGICPMS1 **Effective Date:** 05/30/18

Analyte	IDL ug/l
Aluminum	.162
Aluminum	1.132
Antimony	.274
Arsenic	.511
Arsenic	.017
Barium	.011
Beryllium	.002
Boron	1.488
Cadmium	.009
Cadmium	.004
Calcium	21.1
Chromium	.028
Chromium	.009
Cobalt	.007
Cobalt	.002
Copper	.018
Copper	.012
Iron	1.37
Iron	.87
Lead	.004
Magnesium	.16
Magnesium	1.894
Manganese	.011
Manganese	.02
Molybdenum	.018
Nickel	.015
Nickel	.02
Potassium	1.74
Potassium	3.269
Selenium	.789
Selenium	.025
Silver	.005
Sodium	.571
Sodium	3.563
Strontium	.039
Thallium	.003
Tin	.023
Tin	.038
Titanium	.025
Titanium	.042
Vanadium	.11
Vanadium	.006
Zinc	.117
Zinc	2.2

Instrument Detection Limits

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: AGICPMS1 **Effective Date:** 05/30/18

Analyte	IDL ug/l

The above applies to the following instrument runs:
MA45064,MA45074

Instrument Detection Limits

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: LEEMANHG8 **Effective Date:** 05/04/18

Analyte	IDL ug/l
Mercury	.0165

The above applies to the following instrument runs:
MA45052

Instrument Linear Ranges

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: AGICPMS1 **Effective Date:** 06/02/18

Analyte	Linear Range ug/l
Aluminum	10000
Aluminum	10000
Antimony	100
Arsenic	100
Arsenic	100
Barium	100
Beryllium	100
Boron	200
Cadmium	100
Cadmium	100
Calcium	10000
Chromium	100
Chromium	100
Cobalt	100
Cobalt	100
Copper	100
Copper	100
Iron	10000
Iron	10000
Lithium	100
Lead	100
Magnesium	10000
Magnesium	10000
Manganese	100
Manganese	100
Molybdenum	100
Nickel	100
Nickel	100
Potassium	10000
Potassium	10000
Selenium	100
Selenium	100
Silver	100
Sodium	10000
Sodium	10000
Strontium	100
Thallium	100
Tin	100
Tin	100
Titanium	100
Titanium	100
Tungsten	100
Uranium	100
Vanadium	100
Vanadium	100
Zinc	100

Instrument Linear Ranges

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: AGICPMS1 **Effective Date:** 06/02/18

Analyte	Linear Range ug/l
Zinc	100

The above applies to the following instrument runs:
MA45064,MA45074

Instrument Linear Ranges

Job Number: JC71604
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: LEEMANHG8 **Effective Date:** 03/10/17

Analyte	Linear Range ug/l
Mercury	5

The above applies to the following instrument runs:
MA45052

Metals Analysis

Raw Data

MA45052

Method: ACCUTEST Operator: Admin Date of Analysis: 10 Aug 2018 15:06:57

Sample ID	Date	Type	Units	Conc.	µ Abs.	Wt.	Vol.
STDA - 1	10 Aug 2018 15:07:11	Std	ug/l	-	176	1.000	1.000
STDB - 1	10 Aug 2018 15:08:29	Std	ug/l	-	973	1.000	1.000
STDC - 1	10 Aug 2018 15:09:48	Std	ug/l	-	2361	1.000	1.000
STDD - 1	10 Aug 2018 15:11:09	Std	ug/l	-	4919	1.000	1.000
STDE - 1	10 Aug 2018 15:12:37	Std	ug/l	-	12265	1.000	1.000
STDF - 1	10 Aug 2018 15:14:09	Std	ug/l	-	24230	1.000	1.000
ICV - 1	10 Aug 2018 15:16:37	CK STND	ug/l	109.0% 3.2708	15898	1.000	1.000
ICB - 1	10 Aug 2018 15:17:55	CK STND	ug/l	-0.0999	-419	1.000	1.000
CCV - 1	10 Aug 2018 15:19:45	CK STND	ug/l	102.6% 2.5641	12477	1.000	1.000
CCB - 1	10 Aug 2018 15:21:03	CK STND	ug/l	-0.0630	-240	1.000	1.000
CRI - 1	10 Aug 2018 15:22:44	CK STND	ug/l	99.8% 0.1996	1031	1.000	1.000
MP8547-MB2 - 1	10 Aug 2018 15:24:01	SMPL	ug/l	-0.0190	-27	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 15:25:20	SMPL	ug/l	2.4707	12025	1.000	1.000
JC71223-1 - 1	10 Aug 2018 15:26:39	SMPL	ug/l	0.0746	426	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 15:28:16	SMPL	ug/l	-0.2255	-1027	1.000	1.000
MP8562-MB1 - 1	10 Aug 2018 15:29:33	SMPL	ug/l	0.0263	192	1.000	1.000
MP8562-MB2 - 1	10 Aug 2018 15:30:50	SMPL	ug/l	0.0180	152	1.000	1.000
MP8562-B1 - 1	10 Aug 2018 15:32:08	SMPL	ug/l	2.3397	11391	1.000	1.000
MP8562-B2 - 1	10 Aug 2018 15:33:26	SMPL	ug/l	2.2059	10743	1.000	1.000
CCV - 1	10 Aug 2018 15:35:01	CK STND	ug/l	101.7% 2.5422	12371	1.000	1.000
CCB - 1	10 Aug 2018 15:36:38	CK STND	ug/l	-0.0514	-184	1.000	1.000
MP8562-S1 - 1	10 Aug 2018 15:38:19	SMPL	ug/l	2.3590	11484	1.000	1.000
MP8562-S2 - 1	10 Aug 2018 15:39:38	SMPL	ug/l	2.3187	11289	1.000	1.000
JC68615-8UA - 1	10 Aug 2018 15:41:13	SMPL	ug/l	-0.0840	-342	1.000	1.000
JC68615-9UA - 1	10 Aug 2018 15:42:54	SMPL	ug/l	0.0048	88	1.000	1.000
JC68615-10UA - 1	10 Aug 2018 15:44:11	SMPL	ug/l	0.2180	1120	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 15:45:27	SMPL	ug/l	-0.2383	-1089	1.000	1.000
JC71344-1 - 1	10 Aug 2018 15:46:47	SMPL	ug/l	0.0275	198	1.000	1.000
JC71456-6A - 1	10 Aug 2018 15:48:04	SMPL	ug/l	0.0358	238	1.000	1.000
JC71477-1B - 1	10 Aug 2018 15:49:21	SMPL	ug/l	0.0362	240	1.000	1.000
CCV - 1	10 Aug 2018 15:50:39	CK STND	ug/l	100.6% 2.5143	12236	1.000	1.000
CCB - 1	10 Aug 2018 15:51:57	CK STND	ug/l	-0.0502	-178	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 15:53:39	SMPL	ug/l	0.1494	788	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 15:54:57	SMPL	ug/l	-0.0167	-16	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 15:56:16	SMPL	ug/l	0.0176	150	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 15:57:35	SMPL	ug/l	2.3422	11403	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 15:58:53	SMPL	ug/l	-0.0417	-137	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 16:00:28	SMPL	ug/l	0.0230	176	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 16:05:21	SMPL	ug/l	2.3253	11321	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 16:06:37	SMPL	ug/l	2.2982	11190	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 16:08:13	SMPL	ug/l	0.0329	224	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 16:09:51	SMPL	ug/l	-0.0070	31	1.000	1.000
SAMPLECONF - 1	10 Aug 2018 16:11:11	SMPL	ug/l	0.0856	479	1.000	1.000
CCV - 1	10 Aug 2018 16:12:28	CK STND	ug/l	100.8% 2.5203	12265	1.000	1.000
CCB - 1	10 Aug 2018 16:13:48	CK STND	ug/l	-0.0477	-166	1.000	1.000
JC71534-4 - 1	10 Aug 2018 16:15:29	SMPL	ug/l	0.0089	108	1.000	1.000
JC71534-5 - 1	10 Aug 2018 16:16:46	SMPL	ug/l	0.0418	267	1.000	1.000
JC71553-1 - 1	10 Aug 2018 16:20:13	SMPL	ug/l	0.0633	371	1.000	1.000
JC71575-6 - 1	10 Aug 2018 16:21:31	SMPL	ug/l	-0.0867	-355	1.000	1.000
JC71575-7 - 1	10 Aug 2018 16:22:48	SMPL	ug/l	0.0230	176	1.000	1.000
JC71575-8 - 1	10 Aug 2018 16:24:06	SMPL	ug/l	0.0250	186	1.000	1.000
JC71575-9 - 1	10 Aug 2018 16:25:24	SMPL	ug/l	0.0259	190	1.000	1.000
JC71567-6 - 1	10 Aug 2018 16:26:42	SMPL	ug/l	0.0350	234	1.000	1.000
JC71580-1 - 1	10 Aug 2018 16:27:59	SMPL	ug/l	0.0540	326	1.000	1.000
CCV - 1	10 Aug 2018 16:29:16	CK STND	ug/l	101.4% 2.5354	12338	1.000	1.000
CCB - 1	10 Aug 2018 16:30:34	CK STND	ug/l	-0.0530	-192	1.000	1.000
JC71580-2 - 1	10 Aug 2018 16:32:15	SMPL	ug/l	2.0656	10064	1.000	1.000
JC71580-3 - 1	10 Aug 2018 16:33:32	SMPL	ug/l	-0.0417	-137	1.000	1.000
MP8547-B2 - 1	10 Aug 2018 16:35:44	SMPL	ug/l	2.2883	11142	1.000	1.000
JC71336-1 - 1	10 Aug 2018 16:37:34	SMPL	ug/l	0.0457	286	1.000	1.000
JC71130-1 - 1	10 Aug 2018 16:39:23	SMPL	ug/l	0.1102	598	1.000	1.000
JC71496-2 - 1	10 Aug 2018 16:40:40	SMPL	ug/l	-0.0076	28	1.000	1.000
JC71454-2A - 1	10 Aug 2018 16:44:13	SMPL	ug/l	0.0368	243	1.000	1.000
CCV - 1	10 Aug 2018 16:45:45	CK STND	ug/l	101.4% 2.5341	12332	1.000	1.000
CCB - 1	10 Aug 2018 16:47:02	CK STND	ug/l	-0.0458	-157	1.000	1.000
MP8567-MB1 - 1	10 Aug 2018 16:49:23	SMPL	ug/l	0.0246	184	1.000	1.000
MP8567-B1 - 1	10 Aug 2018 16:50:41	SMPL	ug/l	2.3011	11204	1.000	1.000
MP8567-S1 - 1	10 Aug 2018 16:52:01	SMPL	ug/l	2.3924	11646	1.000	1.000
MP8567-S2 - 1	10 Aug 2018 16:53:38	SMPL	ug/l	2.3402	11393	1.000	1.000

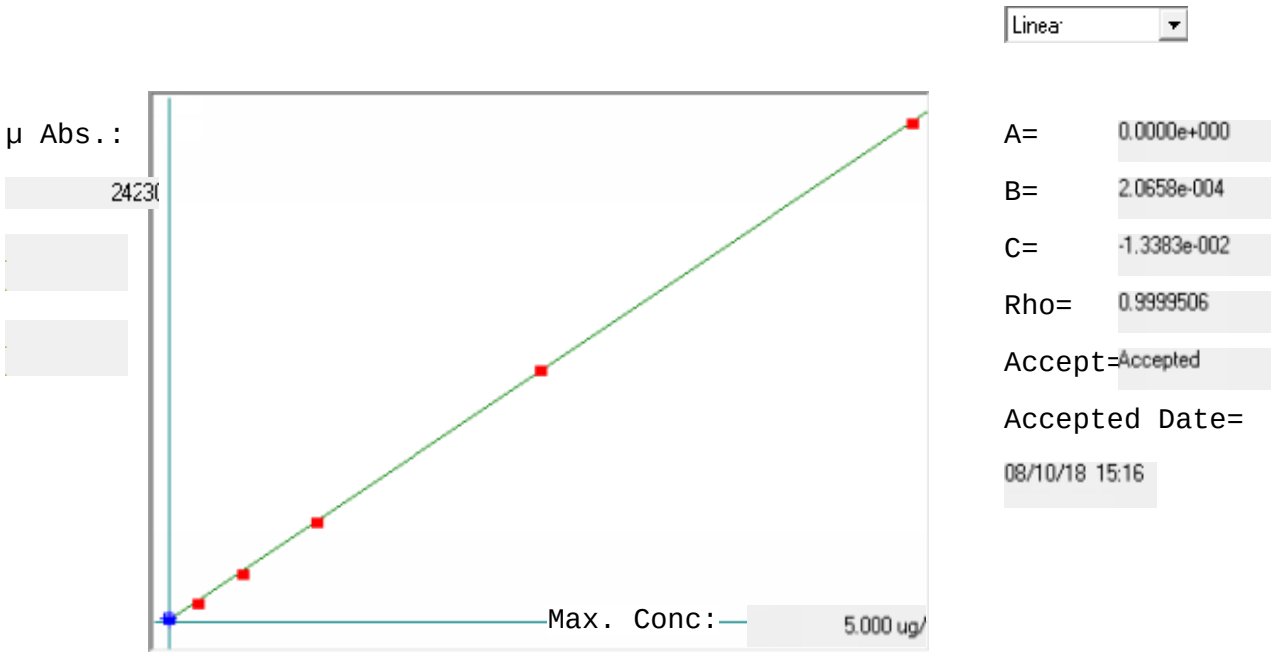
Page : 1

MA45052

Method: ACCUTEST Operator: Admin Date of Analysis: 10 Aug 2018 15:06:57

Sample ID	Date	Type	Units	Conc.	µ Abs.	Wt.	Vol.
JC71534-1 - 1	10 Aug 2018 16:55:14	SMPL	ug/l	0.0292	206	1.000	1.000
JC71534-2 - 1	10 Aug 2018 16:56:51	SMPL	ug/l	0.0091	109	1.000	1.000
JC71534-3 - 1	10 Aug 2018 16:58:10	SMPL	ug/l	0.1124	609	1.000	1.000
CCV - 1	10 Aug 2018 16:59:28	CK STND	ug/l	101.8% 2.5438	12379	1.000	1.000
CCB - 1	10 Aug 2018 17:00:47	CK STND	ug/l	-0.0421	-139	1.000	1.000
JC71580-4 - 1	10 Aug 2018 17:03:26	SMPL	ug/l	0.0690	399	1.000	1.000
JC71337-16 - 1	10 Aug 2018 17:04:43	SMPL	ug/l	0.0257	189	1.000	1.000
JC71604-1 - 1	10 Aug 2018 17:06:02	SMPL	ug/l	0.0323	221	1.000	1.000
MP8573-MB1 - 1	10 Aug 2018 17:07:20	SMPL	ug/l	0.0932	516	1.000	1.000
MP8573-B1 - 1	10 Aug 2018 17:08:38	SMPL	ug/l	0.0701	404	1.000	1.000
MP8573-S1 - 1	10 Aug 2018 17:09:56	SMPL	ug/l	0.1674	875	1.000	1.000
JC71532-1CONF - 1	10 Aug 2018 17:11:50	SMPL	ug/l	76.6206	18610	1.000	20.000
JC71532-3CONF - 1	10 Aug 2018 17:13:08	SMPL	ug/l	0.4593	2288	1.000	1.000
JC71532-4CONF - 1	10 Aug 2018 17:14:48	SMPL	ug/l	0.9234	4535	1.000	1.000
CCV - 1	10 Aug 2018 17:16:12	CK STND	ug/l	99.9% 2.4963	12149	1.000	1.000
CCB - 1	10 Aug 2018 17:17:41	CK STND	ug/l	-0.0551	-202	1.000	1.000
MP8573-S2 - 1	10 Aug 2018 17:19:35	SMPL	ug/l	4.1614	1072	1.000	20.000
JC71477-1A - 1	10 Aug 2018 17:20:53	SMPL	ug/l	0.0241	123	1.000	2.000
MP8576-MB1 - 1	10 Aug 2018 17:22:12	SMPL	ug/l	0.0220	118	1.000	2.000
MP8576-B1 - 1	10 Aug 2018 17:23:30	SMPL	ug/l	2.0811	10139	1.000	1.000
MP8576-S1 - 1	10 Aug 2018 17:24:48	SMPL	ug/l	2.2015	10722	1.000	1.000
MP8576-S2 - 1	10 Aug 2018 17:26:24	SMPL	ug/l	2.1328	10389	1.000	1.000
JC71587-2A - 1	10 Aug 2018 17:28:01	SMPL	ug/l	0.0100	113	1.000	1.000
JC71491-1 - 1	10 Aug 2018 17:29:37	SMPL	ug/l	0.1469	776	1.000	1.000
JC71523-1 - 1	10 Aug 2018 17:30:56	SMPL	ug/l	0.0515	314	1.000	1.000
CCV - 1	10 Aug 2018 17:32:15	CK STND	ug/l	101.8% 2.5459	12389	1.000	1.000
CCB - 1	10 Aug 2018 17:33:34	CK STND	ug/l	-0.0479	-167	1.000	1.000
JC71523-2 - 1	10 Aug 2018 17:35:16	SMPL	ug/l	0.0982	540	1.000	1.000
JC71523-3 - 1	10 Aug 2018 17:36:33	SMPL	ug/l	0.1225	658	1.000	1.000
JC71523-4 - 1	10 Aug 2018 17:37:53	SMPL	ug/l	0.0907	504	1.000	1.000
JC71523-5 - 1	10 Aug 2018 17:39:12	SMPL	ug/l	0.4803	2390	1.000	1.000
JC71523-6 - 1	10 Aug 2018 17:40:32	SMPL	ug/l	0.0381	249	1.000	1.000
JC71523-7 - 1	10 Aug 2018 17:41:55	SMPL	ug/l	0.0940	520	1.000	1.000
MP8577-MB1 - 1	10 Aug 2018 17:43:14	SMPL	ug/l	0.0849	476	1.000	1.000
MP8577-B1 - 1	10 Aug 2018 17:44:32	SMPL	ug/l	2.2703	11055	1.000	1.000
MP8577-S1 - 1	10 Aug 2018 17:45:51	SMPL	ug/l	2.2683	11045	1.000	1.000
CCV - 1	10 Aug 2018 17:47:27	CK STND	ug/l	101.5% 2.5381	12351	1.000	1.000
CCB - 1	10 Aug 2018 17:49:06	CK STND	ug/l	-0.0502	-178	1.000	1.000
MP8577-S2 - 1	10 Aug 2018 17:50:47	SMPL	ug/l	2.3046	11221	1.000	1.000
JC71187-1R - 1	10 Aug 2018 17:52:05	SMPL	ug/l	0.1050	573	1.000	1.000
JC71187-2R - 1	10 Aug 2018 17:53:44	SMPL	ug/l	0.0593	352	1.000	1.000
JC71187-3R - 1	10 Aug 2018 17:55:04	SMPL	ug/l	0.0837	470	1.000	1.000
JC71187-4R - 1	10 Aug 2018 17:56:23	SMPL	ug/l	0.3062	1547	1.000	1.000
JC71187-5R - 1	10 Aug 2018 17:57:43	SMPL	ug/l	0.0866	484	1.000	1.000
CCV - 1	10 Aug 2018 17:59:03	CK STND	ug/l	102.1% 2.5521	12419	1.000	1.000
CCB - 1	10 Aug 2018 18:00:22	CK STND	ug/l	-0.0361	-110	1.000	1.000

ACCUTEST



A= 0.0000e+000

B= 2.0658e-004

C= -1.3383e-002

Rho= 0.9999506

Accept= Accepted

Accepted Date=

08/10/18 15:16

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
STDA	0.000	0.023	0.023	176	0.000	176				
STDB	0.200	0.188	-0.012	973	0.0 %	973				
STDC	0.500	0.474	-0.026	2361	0.0 %	2361				
STDD	1.000	1.003	0.003	4919	0.0 %	4919				
STDE	2.500	2.520	0.020	12265	0.0 %	12265				
STDF	5.000	4.992	-0.008	24230	0.0 %	24230				

Quantitation Report

File Name	001CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 12:44
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-232.24	18.67	8.124E-06	Pulse	0.25	3
B			1	0.185	ug/l	42.58	16,243.68	7.069E-03	Pulse	0.15	3
Ca			1	-0.378	ug/l	-405.70	23,690.93	9.492E-03	Pulse	0.10	3
Sr			1	-0.003	ug/l	-41.94	490.02	1.477E-04	Pulse	0.10	3
Mo			1	-0.001	ug/l	-335.73	40.00	1.205E-05	Pulse	0.10	3
Ag			1	-0.002	ug/l	-86.71	26.67	7.494E-06	Pulse	0.10	3
Sn			1	0.185	ug/l	0.99	1,183.43	3.327E-04	Pulse	0.10	3
Sb			1	0.000	ug/l	338.69	233.34	4.655E-05	Pulse	0.10	3
Ba			1	0.003	ug/l	41.60	53.33	1.064E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	-258.22	96.67	3.081E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	3986.29	120.00	3.829E-05	Pulse	0.10	3
Pb			1	-0.004	ug/l	-95.66	83.33	2.661E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	299.54	476.68	1.521E-04	Pulse	0.10	3
Na			2	-0.107	ug/l	-153.69	5,590.98	7.481E-02	Pulse	0.30	3
Mg			2	0.054	ug/l	125.51	120.00	1.607E-03	Pulse	0.30	3
Al			2	-0.062	ug/l	-195.44	86.67	1.160E-03	Pulse	0.30	3
K			2	-2.828	ug/l	-54.62	5,809.97	7.776E-02	Pulse	0.30	3
Ca			2	-2.429	ug/l	-95.96	50.00	6.676E-04	Pulse	0.30	3
Ti			2	0.039	ug/l	99.59	3.33	4.440E-05	Pulse	0.30	3
V			2	0.007	ug/l	77.24	127.78	1.711E-03	Pulse	0.30	3
Cr			2	0.007	ug/l	54.47	263.34	3.523E-03	Pulse	0.30	3
Mn			2	-0.001	ug/l	-348.89	40.00	5.355E-04	Pulse	0.30	3
Fe			2	0.055	ug/l	16.19	1,618.99	2.166E-02	Pulse	0.30	3
Co			2	0.000	ug/l	65.46	43.33	5.798E-04	Pulse	0.30	3
Ni			2	0.011	ug/l	48.55	58.89	7.886E-04	Pulse	0.30	3
Cu			2	0.036	ug/l	17.61	366.68	4.904E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.111	ug/l	42.60	826.70	1.106E-02	Pulse	0.30	3
As			2	-0.006	ug/l	-57.70	4.67	6.249E-05	Pulse	1.00	3
Cd			2	-0.001	ug/l	-556.15	3.33	6.954E-06	Pulse	0.30	3
Sn			2	0.007	ug/l	123.14	202.23	4.222E-04	Pulse	0.30	3
Se			3	0.008	ug/l	113.46	2.67	5.123E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,297,833.54	0.24	100.0	Pulse	0.10	3
1	Sc		2,496,249.76	0.31	100.0	Pulse	0.10	3
1	Ge		483,991.45	1.26	100.0	Pulse	0.10	3
1	Ge		669,362.12	0.60	100.0	Pulse	0.10	3
1	Rh		3,317,544.53	0.19	100.0	Pulse	0.10	3
1	In		3,556,917.94	0.18	100.0	Pulse	0.10	3
1	Tb		5,013,160.13	0.51	100.0	Pulse	0.10	3
1	Ho		485,956.80	0.46	100.0	Pulse	0.10	3
1	Bi		3,135,044.33	0.30	100.0	Pulse	0.10	3
2	Sc		74,732.91	0.80	100.0	Pulse	0.30	3
2	Ge		46,442.52	0.66	100.0	Pulse	0.30	3
2	Ge		70,097.42	0.84	100.0	Pulse	0.30	3
2	Rh		1,528,000.29	0.23	100.0	Pulse	0.30	3
2	In		478,964.21	0.09	100.0	Pulse	0.30	3
2	Tb		2,058,049.99	0.10	100.0	Pulse	0.30	3
2	Ho		200,523.87	0.23	100.0	Pulse	0.30	3
2	Bi		1,442,549.94	0.18	100.0	Pulse	0.30	3
3	Sc		53,444.25	2.02	100.0	Pulse	0.30	3
3	Ge		34,634.53	2.06	100.0	Pulse	0.30	3
3	Ge		52,117.37	1.17	100.0	Pulse	0.30	3
3	Rh		598,593.42	1.81	100.0	Pulse	0.30	3
3	Tb		1,012,849.20	2.17	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 12:49
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.001	ug/l	-140.11	14.67	6.504E-06	Pulse	0.25	3
B			1	0.077	ug/l	66.15	15,338.35	6.796E-03	Pulse	0.15	3
Ca			1	-0.219	ug/l	-213.90	23,574.24	9.541E-03	Pulse	0.10	3
Sr			1	-0.001	ug/l	-164.28	540.03	1.653E-04	Pulse	0.10	3
Mo			1	0.002	ug/l	187.74	63.33	1.932E-05	Pulse	0.10	3
Ag			1	-0.002	ug/l	-25.52	20.00	5.697E-06	Pulse	0.10	3
Sn			1	0.179	ug/l	6.11	1,103.42	3.141E-04	Pulse	0.10	3
Sb			1	-0.001	ug/l	-202.15	213.35	4.317E-05	Pulse	0.10	3
Ba			1	0.000	ug/l	-1765.05	36.67	7.406E-06	Pulse	0.10	3
Tl			1	0.000	ug/l	-992.46	106.67	3.426E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-284.04	100.00	3.204E-05	Pulse	0.10	3
Pb			1	-0.002	ug/l	-291.68	106.67	3.418E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	388.62	483.35	1.551E-04	Pulse	0.10	3
Na			2	-0.046	ug/l	-418.35	5,570.98	7.545E-02	Pulse	0.30	3
Mg			2	0.098	ug/l	78.36	134.44	1.822E-03	Pulse	0.30	3
Al			2	0.089	ug/l	18.30	101.11	1.369E-03	Pulse	0.30	3
K			2	-2.140	ug/l	-17.63	5,872.21	7.954E-02	Pulse	0.30	3
Ca			2	0.592	ug/l	268.71	81.11	1.098E-03	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	0.009	ug/l	146.09	132.22	1.790E-03	Pulse	0.30	3
Cr			2	-0.003	ug/l	-275.65	216.67	2.933E-03	Pulse	0.30	3
Mn			2	-0.005	ug/l	-66.77	31.11	4.210E-04	Pulse	0.30	3
Fe			2	0.083	ug/l	7.61	1,694.55	2.295E-02	Pulse	0.30	3
Co			2	-0.002	ug/l	-38.22	28.89	3.913E-04	Pulse	0.30	3
Ni			2	0.010	ug/l	109.08	56.67	7.664E-04	Pulse	0.30	3
Cu			2	0.010	ug/l	83.03	221.12	2.996E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.158	ug/l	54.61	850.03	1.151E-02	Pulse	0.30	3
As			2	-0.010	ug/l	-47.38	3.00	4.059E-05	Pulse	1.00	3
Cd			2	0.001	ug/l	771.10	5.56	1.176E-05	Pulse	0.30	3
Sn			2	0.012	ug/l	76.32	208.89	4.417E-04	Pulse	0.30	3
Se			3	0.002	ug/l	966.81	2.40	4.509E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,256,923.54	0.45	100.0	Pulse	0.10	3
1	Sc		2,470,940.69	0.51	100.0	Pulse	0.10	3
1	Ge		484,061.10	0.40	100.0	Pulse	0.10	3
1	Ge		667,760.51	0.34	100.0	Pulse	0.10	3
1	Rh		3,268,982.76	0.91	100.0	Pulse	0.10	3
1	In		3,511,790.59	0.39	100.0	Pulse	0.10	3
1	Tb		4,940,829.10	0.35	100.0	Pulse	0.10	3
1	Ho		479,214.91	0.43	100.0	Pulse	0.10	3
1	Bi		3,114,941.83	0.59	100.0	Pulse	0.10	3
2	Sc		73,829.96	0.63	100.0	Pulse	0.30	3
2	Ge		46,507.03	0.80	100.0	Pulse	0.30	3
2	Ge		69,603.07	0.91	100.0	Pulse	0.30	3
2	Rh		1,513,402.68	0.32	100.0	Pulse	0.30	3
2	In		472,897.25	0.14	100.0	Pulse	0.30	3
2	Tb		2,024,349.99	0.63	100.0	Pulse	0.30	3
2	Ho		197,525.41	0.83	100.0	Pulse	0.30	3
2	Bi		1,427,818.62	0.56	100.0	Pulse	0.30	3
3	Sc		55,012.57	0.76	100.0	Pulse	0.30	3
3	Ge		35,771.41	1.81	100.0	Pulse	0.30	3
3	Ge		53,438.40	1.38	100.0	Pulse	0.30	3
3	Rh		620,789.68	0.18	100.0	Pulse	0.30	3
3	Tb		1,045,255.44	0.36	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 12:54
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	1734.86	22.67	1.017E-05	Pulse	0.25	3
B			1	0.000	ug/l	---	14,737.84	6.603E-03	Pulse	0.15	3
Ca			1	-0.144	ug/l	-328.54	23,223.60	9.564E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	-3369.43	570.03	1.762E-04	Pulse	0.10	3
Mo			1	0.000	ug/l	---	46.67	1.442E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	2908.74	60.00	1.719E-05	Pulse	0.10	3
Sn			1	0.171	ug/l	2.50	1,000.07	2.861E-04	Pulse	0.10	3
Sb			1	0.000	ug/l	---	223.34	4.563E-05	Pulse	0.10	3
Ba			1	0.000	ug/l	-1016.42	36.67	7.498E-06	Pulse	0.10	3
Tl			1	0.000	ug/l	1006.96	113.34	3.687E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-26207.04	116.67	3.792E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-15734.64	123.34	4.012E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	7702.58	460.02	1.496E-04	Pulse	0.10	3
Na			2	0.000	ug/l	84558.80	5,603.21	7.595E-02	Pulse	0.30	3
Mg			2	-0.012	ug/l	-383.47	95.56	1.293E-03	Pulse	0.30	3
Al			2	0.049	ug/l	616.10	96.67	1.313E-03	Pulse	0.30	3
K			2	-0.745	ug/l	-80.59	6,135.64	8.314E-02	Pulse	0.30	3
Ca			2	-0.337	ug/l	-511.16	71.11	9.656E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00		Pulse	0.30	3
V			2	-0.001	ug/l	-511.33	103.34	1.401E-03	Pulse	0.30	3
Cr			2	0.000	ug/l	---	230.01	3.116E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	1831.16	42.22	5.704E-04	Pulse	0.30	3
Fe			2	0.041	ug/l	26.94	1,548.98	2.099E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-7926.29	42.22	5.705E-04	Pulse	0.30	3
Ni			2	0.000	ug/l	---	36.67	4.983E-04	Pulse	0.30	3
Cu			2	0.000	ug/l	---	166.67	2.259E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.000	ug/l	---	736.69	9.984E-03	Pulse	0.30	3
As			2	0.000	ug/l	3090.88	6.67	9.046E-05	Pulse	1.00	3
Cd			2	0.000	ug/l	3105.98	4.45	9.382E-06	Pulse	0.30	3
Sn			2	0.001	ug/l	1636.17	186.68	3.950E-04	Pulse	0.30	3
Se			3	0.000	ug/l	846.65	2.33	4.315E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,232,172.35	0.21	100.0	Pulse	0.10	3
1	Sc		2,428,189.34	0.49	100.0	Pulse	0.10	3
1	Ge		472,688.18	1.09	100.0	Pulse	0.10	3
1	Ge		653,150.51	0.40	100.0	Pulse	0.10	3
1	Rh		3,235,712.45	0.42	100.0	Pulse	0.10	3
1	In		3,496,812.86	0.66	100.0	Pulse	0.10	3
1	Tb		4,892,686.28	0.49	100.0	Pulse	0.10	3
1	Ho		476,364.94	0.96	100.0	Pulse	0.10	3
1	Bi		3,075,706.73	0.50	100.0	Pulse	0.10	3
2	Sc		73,808.97	1.32	100.0	Pulse	0.30	3
2	Ge		46,074.82	1.72	100.0	Pulse	0.30	3
2	Ge		69,376.71	0.10	100.0	Pulse	0.30	3
2	Rh		1,501,957.10	0.79	100.0	Pulse	0.30	3
2	In		472,799.58	0.47	100.0	Pulse	0.30	3
2	Tb		2,017,097.70	0.71	100.0	Pulse	0.30	3
2	Ho		197,530.12	0.51	100.0	Pulse	0.30	3
2	Bi		1,423,046.61	0.22	100.0	Pulse	0.30	3
3	Sc		54,965.70	1.78	100.0	Pulse	0.30	3
3	Ge		35,358.26	1.89	100.0	Pulse	0.30	3
3	Ge		54,074.77	0.51	100.0	Pulse	0.30	3
3	Rh		615,994.80	0.18	100.0	Pulse	0.30	3
3	Tb		1,039,981.56	0.23	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 12:59
Sample Name	STDB
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.496	ug/l	3.28	3,655.11	1.652E-03	Pulse	0.25	3
B			1	25.513	ug/l	0.42	157,315.55	7.108E-02	Pulse	0.15	3
Ca			1	256.120	ug/l	0.64	213,409.50	8.912E-02	Pulse	0.10	3
Sr			1	5.083	ug/l	1.05	183,397.06	5.803E-02	Pulse	0.10	3
Mo			1	0.996	ug/l	3.54	7,131.84	2.257E-03	Pulse	0.10	3
Ag			1	0.492	ug/l	6.19	9,146.30	2.665E-03	Pulse	0.10	3
Sn			1	5.102	ug/l	1.48	57,562.45	1.677E-02	Pulse	0.10	3
Sb			1	1.992	ug/l	0.47	26,379.40	5.474E-03	Pulse	0.10	3
Ba			1	1.018	ug/l	4.01	5,394.45	1.119E-03	Pulse	0.10	3
Tl			1	0.490	ug/l	1.34	17,851.36	5.897E-03	Pulse	0.10	3
Pb			1	0.492	ug/l	7.79	6,124.83	2.024E-03	Pulse	0.10	3
Pb			1	0.490	ug/l	2.80	5,461.20	1.804E-03	Pulse	0.10	3
Pb			1	0.492	ug/l	4.68	24,792.39	8.190E-03	Pulse	0.10	3
Na			2	251.712	ug/l	1.41	197,943.99	2.739E+00	Pulse	0.30	3
Mg			2	257.686	ug/l	0.34	89,544.31	1.239E+00	Pulse	0.30	3
Al			2	25.522	ug/l	3.04	2,634.68	3.646E-02	Pulse	0.30	3
K			2	255.056	ug/l	1.14	53,702.41	7.432E-01	Pulse	0.30	3
Ca			2	280.738	ug/l	3.35	2,963.63	4.101E-02	Pulse	0.30	3
Ti			2	1.189	ug/l	27.87	98.89	1.369E-03	Pulse	0.30	3
V			2	1.039	ug/l	2.73	3,159.23	4.372E-02	Pulse	0.30	3
Cr			2	1.037	ug/l	0.55	4,342.85	6.010E-02	Pulse	0.30	3
Mn			2	1.008	ug/l	5.83	1,905.69	2.637E-02	Pulse	0.30	3
Fe			2	24.524	ug/l	0.50	83,203.28	1.151E+00	Pulse	0.30	3
Co			2	0.505	ug/l	1.70	3,475.95	4.810E-02	Pulse	0.30	3
Ni			2	1.018	ug/l	2.78	1,966.81	2.722E-02	Pulse	0.30	3
Cu			2	2.012	ug/l	2.14	10,724.69	1.484E-01	Pulse	0.30	3
Zn			2	5.022	ug/l	6.12	4,240.59	5.868E-02	Pulse	0.30	3
As			2	0.495	ug/l	3.98	181.67	2.514E-03	Pulse	1.00	3
Cd			2	0.505	ug/l	15.54	576.68	1.245E-03	Pulse	0.30	3
Sn			2	4.921	ug/l	0.88	10,451.33	2.255E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.494	ug/l	2.07	28.27	5.313E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,213,320.19	1.09	99.2	Pulse	0.10	3
1	Sc		2,394,773.61	0.22	98.6	Pulse	0.10	3
1	Ge		459,180.18	0.97	97.1	Pulse	0.10	3
1	Ge		637,601.45	0.94	97.6	Pulse	0.10	3
1	Rh		3,160,336.00	0.77	97.7	Pulse	0.10	3
1	In		3,432,188.93	0.43	98.2	Pulse	0.10	3
1	Tb		4,819,210.97	0.39	98.5	Pulse	0.10	3
1	Ho		465,111.53	1.22	97.6	Pulse	0.10	3
1	Bi		3,027,381.73	0.46	98.4	Pulse	0.10	3
2	Sc		72,262.32	0.48	97.9	Pulse	0.30	3
2	Ge		45,039.73	0.46	97.8	Pulse	0.30	3
2	Ge		67,527.88	1.02	97.3	Pulse	0.30	3
2	Rh		1,477,101.71	0.28	98.3	Pulse	0.30	3
2	In		463,463.84	0.34	98.0	Pulse	0.30	3
2	Tb		1,979,506.87	0.49	98.1	Pulse	0.30	3
2	Ho		193,828.59	0.61	98.1	Pulse	0.30	3
2	Bi		1,398,211.96	0.46	98.3	Pulse	0.30	3
3	Sc		55,512.00	0.38	101.0	Pulse	0.30	3
3	Ge		35,582.12	0.42	100.6	Pulse	0.30	3
3	Ge		53,199.73	1.83	98.4	Pulse	0.30	3
3	Rh		616,472.89	1.14	100.1	Pulse	0.30	3
3	Tb		1,050,402.36	0.68	101.0	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 13:04
Sample Name	STDC
Sample Type	CalStd
Comment	5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	4.995	ug/l	0.90	36,488.27	1.656E-02	Pulse	0.25	3
B			1	4.896	ug/l	2.16	41,824.94	1.898E-02	Pulse	0.15	3
Ca			1	8.293	ug/l	10.89	28,755.67	1.218E-02	Pulse	0.10	3
Sr			1	5.072	ug/l	1.07	181,885.84	5.791E-02	Pulse	0.10	3
Mo			1	5.063	ug/l	0.73	35,860.93	1.142E-02	Pulse	0.10	3
Ag			1	4.991	ug/l	1.36	91,215.77	2.688E-02	Pulse	0.10	3
Sn			1	5.306	ug/l	0.37	59,225.44	1.745E-02	Pulse	0.10	3
Sb			1	5.028	ug/l	1.85	65,580.88	1.375E-02	Pulse	0.10	3
Ba			1	5.118	ug/l	1.53	26,696.96	5.596E-03	Pulse	0.10	3
Tl			1	4.975	ug/l	1.26	178,018.30	5.952E-02	Pulse	0.10	3
Pb			1	4.998	ug/l	1.28	60,447.61	2.021E-02	Pulse	0.10	3
Pb			1	5.010	ug/l	0.25	54,106.39	1.809E-02	Pulse	0.10	3
Pb			1	4.989	ug/l	0.40	244,087.37	8.162E-02	Pulse	0.10	3
Na			2	5.563	ug/l	1.38	9,685.09	1.348E-01	Pulse	0.30	3
Mg			2	5.008	ug/l	8.35	1,825.67	2.541E-02	Pulse	0.30	3
Al			2	5.147	ug/l	7.61	600.02	8.348E-03	Pulse	0.30	3
K			2	4.505	ug/l	13.17	6,947.06	9.668E-02	Pulse	0.30	3
Ca			2	35.627	ug/l	12.55	437.79	6.089E-03	Pulse	0.30	3
Ti			2	5.398	ug/l	1.73	446.68	6.217E-03	Pulse	0.30	3
V			2	4.997	ug/l	0.75	14,711.09	2.048E-01	Pulse	0.30	3
Cr			2	4.987	ug/l	1.41	19,907.61	2.771E-01	Pulse	0.30	3
Mn			2	4.847	ug/l	2.08	8,961.39	1.247E-01	Pulse	0.30	3
Fe			2	4.994	ug/l	2.02	17,937.64	2.497E-01	Pulse	0.30	3
Co			2	4.949	ug/l	2.06	33,472.85	4.660E-01	Pulse	0.30	3
Ni			2	4.962	ug/l	2.06	9,393.88	1.308E-01	Pulse	0.30	3
Cu			2	5.045	ug/l	1.76	26,494.74	3.688E-01	Pulse	0.30	3
Zn			2	4.918	ug/l	5.53	4,143.91	5.767E-02	Pulse	0.30	3
As			2	4.955	ug/l	2.52	1,751.77	2.438E-02	Pulse	1.00	3
Cd			2	4.792	ug/l	1.29	5,363.18	1.172E-02	Pulse	0.30	3
Sn			2	5.128	ug/l	1.24	10,743.78	2.349E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	5.062	ug/l	3.73	267.73	5.046E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,204,054.26	0.46	98.7	Pulse	0.10	3
1	Sc		2,360,132.15	0.38	97.2	Pulse	0.10	3
1	Ge		462,383.18	0.94	97.8	Pulse	0.10	3
1	Ge		637,837.80	0.58	97.7	Pulse	0.10	3
1	Rh		3,140,821.62	0.50	97.1	Pulse	0.10	3
1	In		3,393,284.78	0.76	97.0	Pulse	0.10	3
1	Tb		4,770,164.93	0.70	97.5	Pulse	0.10	3
1	Ho		462,700.03	1.64	97.1	Pulse	0.10	3
1	Bi		2,990,554.33	0.58	97.2	Pulse	0.10	3
2	Sc		71,846.00	1.11	97.3	Pulse	0.30	3
2	Ge		44,766.77	0.22	97.2	Pulse	0.30	3
2	Ge		67,028.93	1.14	96.6	Pulse	0.30	3
2	Rh		1,459,217.37	0.11	97.2	Pulse	0.30	3
2	In		457,465.82	0.80	96.8	Pulse	0.30	3
2	Tb		1,956,345.13	0.18	97.0	Pulse	0.30	3
2	Ho		191,117.69	0.31	96.8	Pulse	0.30	3
2	Bi		1,375,858.77	0.66	96.7	Pulse	0.30	3
3	Sc		54,819.65	1.45	99.7	Pulse	0.30	3
3	Ge		35,456.24	1.28	100.3	Pulse	0.30	3
3	Ge		53,045.87	1.14	98.1	Pulse	0.30	3
3	Rh		617,198.81	0.84	100.2	Pulse	0.30	3
3	Tb		1,043,027.04	0.32	100.3	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 13:09
Sample Name	STDD
Sample Type	CalStd
Comment	25
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	24.942	ug/l	0.36	179,961.24	8.263E-02	Pulse	0.25	3
B			1	24.631	ug/l	1.02	149,953.92	6.885E-02	Pulse	0.15	3
Ca			1	35.080	ug/l	3.74	48,531.78	2.050E-02	Pulse	0.10	3
Sr			1	25.113	ug/l	0.29	894,859.46	2.860E-01	Pulse	0.10	3
Mo			1	24.907	ug/l	0.90	175,545.63	5.611E-02	Pulse	0.10	3
Ag			1	24.977	ug/l	0.86	451,677.17	1.345E-01	Pulse	0.10	3
Sn			1	25.015	ug/l	0.56	279,937.54	8.334E-02	Pulse	0.10	3
Sb			1	25.194	ug/l	0.66	324,171.72	6.872E-02	Pulse	0.10	3
Ba			1	25.136	ug/l	1.57	129,519.55	2.745E-02	Pulse	0.10	3
Tl			1	25.201	ug/l	0.71	898,487.62	3.014E-01	Pulse	0.10	3
Pb			1	25.278	ug/l	0.57	304,356.11	1.021E-01	Pulse	0.10	3
Pb			1	25.028	ug/l	0.67	269,004.04	9.022E-02	Pulse	0.10	3
Pb			1	25.151	ug/l	0.34	1,225,114.54	4.109E-01	Pulse	0.10	3
Na			2	24.924	ug/l	2.55	24,794.89	3.397E-01	Pulse	0.30	3
Mg			2	25.376	ug/l	2.43	8,995.81	1.232E-01	Pulse	0.30	3
Al			2	24.591	ug/l	2.36	2,568.00	3.518E-02	Pulse	0.30	3
K			2	24.838	ug/l	7.18	10,885.87	1.491E-01	Pulse	0.30	3
Ca			2	161.324	ug/l	5.38	1,751.22	2.400E-02	Pulse	0.30	3
Ti			2	26.151	ug/l	7.06	2,199.06	3.012E-02	Pulse	0.30	3
V			2	24.813	ug/l	1.31	73,805.30	1.011E+00	Pulse	0.30	3
Cr			2	25.093	ug/l	0.82	100,858.27	1.382E+00	Pulse	0.30	3
Mn			2	24.971	ug/l	1.38	46,729.28	6.402E-01	Pulse	0.30	3
Fe			2	24.390	ug/l	0.41	83,593.00	1.145E+00	Pulse	0.30	3
Co			2	24.985	ug/l	0.92	171,549.44	2.350E+00	Pulse	0.30	3
Ni			2	24.869	ug/l	0.22	47,691.04	6.533E-01	Pulse	0.30	3
Cu			2	24.913	ug/l	0.37	132,279.24	1.812E+00	Pulse	0.30	3
Zn			2	24.914	ug/l	1.10	18,360.38	2.515E-01	Pulse	0.30	3
As			2	25.305	ug/l	2.47	9,062.20	1.242E-01	Pulse	1.00	3
Cd			2	25.083	ug/l	1.37	28,364.30	6.134E-02	Pulse	0.30	3
Sn			2	25.032	ug/l	1.41	52,319.83	1.131E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	25.572	ug/l	2.39	1,314.58	2.532E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,177,961.20	0.44	97.6	Pulse	0.10	3
1	Sc		2,367,681.27	0.51	97.5	Pulse	0.10	3
1	Ge		455,612.58	0.18	96.4	Pulse	0.10	3
1	Ge		629,518.40	0.64	96.4	Pulse	0.10	3
1	Rh		3,128,375.58	0.55	96.7	Pulse	0.10	3
1	In		3,358,767.74	0.41	96.1	Pulse	0.10	3
1	Tb		4,717,546.28	0.33	96.4	Pulse	0.10	3
1	Ho		457,831.78	0.41	96.1	Pulse	0.10	3
1	Bi		2,981,575.58	0.46	96.9	Pulse	0.10	3
2	Sc		72,994.25	0.71	98.9	Pulse	0.30	3
2	Ge		45,265.90	1.49	98.2	Pulse	0.30	3
2	Ge		68,004.21	2.31	98.0	Pulse	0.30	3
2	Rh		1,481,203.76	0.47	98.6	Pulse	0.30	3
2	In		462,473.45	1.12	97.8	Pulse	0.30	3
2	Tb		1,981,338.88	1.09	98.2	Pulse	0.30	3
2	Ho		193,907.38	0.60	98.2	Pulse	0.30	3
2	Bi		1,403,075.43	1.12	98.6	Pulse	0.30	3
3	Sc		54,152.05	2.33	98.5	Pulse	0.30	3
3	Ge		34,959.66	2.07	98.9	Pulse	0.30	3
3	Ge		51,944.78	2.36	96.1	Pulse	0.30	3
3	Rh		604,729.16	2.23	98.2	Pulse	0.30	3
3	Tb		1,024,710.13	2.68	98.5	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 13:14
Sample Name	STDE
Sample Type	CalStd
Comment	50
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.152	ug/l	0.61	361,627.52	1.661E-01	Pulse	0.25	3
B			1	49.605	ug/l	0.42	287,245.54	1.320E-01	Pulse	0.15	3
Ca			1	65.583	ug/l	0.50	70,218.44	2.997E-02	Pulse	0.10	3
Sr			1	49.677	ug/l	0.22	1,771,406.64	5.657E-01	Pulse	0.10	3
Mo			1	49.684	ug/l	1.01	350,490.28	1.119E-01	Pulse	0.10	3
Ag			1	49.885	ug/l	0.88	905,177.96	2.686E-01	Pulse	0.10	3
Sn			1	49.442	ug/l	0.19	556,161.78	1.650E-01	Pulse	0.10	3
Sb			1	49.631	ug/l	1.12	641,796.22	1.353E-01	Pulse	0.10	3
Ba			1	49.797	ug/l	1.00	257,921.82	5.438E-02	Pulse	0.10	3
Tl			1	50.009	ug/l	0.43	1,794,647.78	5.980E-01	Pulse	0.10	3
Pb			1	49.935	ug/l	0.38	605,111.62	2.016E-01	Pulse	0.10	3
Pb			1	49.881	ug/l	0.30	539,552.67	1.798E-01	Pulse	0.10	3
Pb			1	50.062	ug/l	0.35	2,454,228.90	8.177E-01	Pulse	0.10	3
Na			2	50.504	ug/l	1.10	43,477.80	6.103E-01	Pulse	0.30	3
Mg			2	51.211	ug/l	2.51	17,621.49	2.473E-01	Pulse	0.30	3
Al			2	49.382	ug/l	1.25	4,942.99	6.938E-02	Pulse	0.30	3
K			2	48.146	ug/l	6.94	14,905.63	2.093E-01	Pulse	0.30	3
Ca			2	316.735	ug/l	6.98	3,285.92	4.614E-02	Pulse	0.30	3
Ti			2	50.842	ug/l	4.50	4,170.57	5.856E-02	Pulse	0.30	3
V			2	50.131	ug/l	0.74	145,426.41	2.041E+00	Pulse	0.30	3
Cr			2	50.522	ug/l	0.79	197,959.41	2.779E+00	Pulse	0.30	3
Mn			2	50.209	ug/l	1.10	91,659.52	1.287E+00	Pulse	0.30	3
Fe			2	48.995	ug/l	0.79	162,510.54	2.281E+00	Pulse	0.30	3
Co			2	50.393	ug/l	1.14	337,643.80	4.740E+00	Pulse	0.30	3
Ni			2	50.410	ug/l	0.86	94,308.27	1.324E+00	Pulse	0.30	3
Cu			2	50.173	ug/l	1.34	259,818.40	3.647E+00	Pulse	0.30	3
Zn			2	50.883	ug/l	2.55	35,851.36	5.033E-01	Pulse	0.30	3
As			2	50.233	ug/l	2.22	17,548.08	2.464E-01	Pulse	1.00	3
Cd			2	50.041	ug/l	0.52	55,333.76	1.224E-01	Pulse	0.30	3
Sn			2	49.845	ug/l	0.45	101,697.99	2.249E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	50.394	ug/l	0.98	2,622.28	4.985E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,176,704.43	0.58	97.5	Pulse	0.10	3
1	Sc		2,343,149.29	0.08	96.5	Pulse	0.10	3
1	Ge		483,926.38	1.01	102.4	Pulse	0.10	3
1	Ge		665,754.78	1.37	101.9	Pulse	0.10	3
1	Rh		3,131,556.10	0.09	96.8	Pulse	0.10	3
1	In		3,370,436.16	0.28	96.4	Pulse	0.10	3
1	Tb		4,743,019.83	0.65	96.9	Pulse	0.10	3
1	Ho		457,589.46	0.42	96.1	Pulse	0.10	3
1	Bi		3,001,319.64	0.33	97.6	Pulse	0.10	3
2	Sc		71,241.30	1.19	96.5	Pulse	0.30	3
2	Ge		44,284.29	2.88	96.1	Pulse	0.30	3
2	Ge		67,129.36	1.43	96.8	Pulse	0.30	3
2	Rh		1,446,084.87	0.48	96.3	Pulse	0.30	3
2	In		452,243.28	0.53	95.7	Pulse	0.30	3
2	Tb		1,955,091.38	0.61	96.9	Pulse	0.30	3
2	Ho		192,386.63	0.57	97.4	Pulse	0.30	3
2	Bi		1,380,994.04	0.25	97.0	Pulse	0.30	3
3	Sc		54,403.99	1.51	99.0	Pulse	0.30	3
3	Ge		35,151.12	1.29	99.4	Pulse	0.30	3
3	Ge		52,607.94	1.32	97.3	Pulse	0.30	3
3	Rh		607,544.28	1.05	98.6	Pulse	0.30	3
3	Tb		1,027,343.26	0.70	98.8	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 13:19
Sample Name	STDF
Sample Type	CalStd
Comment	100
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	100.168	ug/l	0.37	726,237.69	3.318E-01	Pulse	0.25	3
B			1	100.623	ug/l	0.44	571,032.62	2.609E-01	Pulse	0.15	3
Ca			1	130.395	ug/l	0.38	118,110.91	5.009E-02	Pulse	0.10	3
Sr			1	100.903	ug/l	0.36	3,576,748.18	1.149E+00	Pulse	0.10	3
Mo			1	100.178	ug/l	0.40	702,579.52	2.257E-01	Pulse	0.10	3
Ag			1	100.156	ug/l	0.52	1,824,308.88	5.392E-01	Pulse	0.10	3
Sn			1	100.270	ug/l	0.56	1,133,228.19	3.349E-01	Pulse	0.10	3
Sb			1	100.135	ug/l	0.97	1,307,353.86	2.730E-01	Pulse	0.10	3
Ba			1	99.936	ug/l	0.58	522,671.96	1.091E-01	Pulse	0.10	3
Tl			1	99.848	ug/l	0.89	3,633,611.93	1.194E+00	Pulse	0.10	3
Pb			1	99.652	ug/l	0.38	1,224,469.59	4.023E-01	Pulse	0.10	3
Pb			1	99.159	ug/l	1.31	1,087,569.05	3.573E-01	Pulse	0.10	3
Pb			1	99.727	ug/l	0.24	4,957,518.92	1.629E+00	Pulse	0.10	3
Na			2	98.702	ug/l	1.97	80,308.63	1.120E+00	Pulse	0.30	3
Mg			2	100.426	ug/l	1.27	34,678.87	4.838E-01	Pulse	0.30	3
Al			2	100.283	ug/l	1.50	10,008.61	1.396E-01	Pulse	0.30	3
K			2	98.209	ug/l	1.26	24,265.50	3.385E-01	Pulse	0.30	3
Ca			2	635.373	ug/l	4.26	6,560.25	9.153E-02	Pulse	0.30	3
Ti			2	99.269	ug/l	3.98	8,195.45	1.143E-01	Pulse	0.30	3
V			2	99.125	ug/l	1.50	289,254.20	4.035E+00	Pulse	0.30	3
Cr			2	99.716	ug/l	1.59	392,952.33	5.482E+00	Pulse	0.30	3
Mn			2	99.970	ug/l	1.02	183,622.07	2.561E+00	Pulse	0.30	3
Fe			2	97.625	ug/l	1.11	324,497.82	4.527E+00	Pulse	0.30	3
Co			2	99.672	ug/l	0.91	672,020.15	9.374E+00	Pulse	0.30	3
Ni			2	99.830	ug/l	0.50	187,913.17	2.621E+00	Pulse	0.30	3
Cu			2	99.933	ug/l	0.95	520,626.35	7.263E+00	Pulse	0.30	3
Zn			2	99.579	ug/l	1.22	69,927.99	9.755E-01	Pulse	0.30	3
As			2	99.519	ug/l	1.38	34,981.89	4.880E-01	Pulse	1.00	3
Cd			2	100.088	ug/l	0.40	110,780.75	2.447E-01	Pulse	0.30	3
Sn			2	100.203	ug/l	0.96	204,460.14	4.517E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	98.294	ug/l	1.33	5,143.47	9.719E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,188,702.91	0.29	98.1	Pulse	0.10	3
1	Sc		2,358,138.87	0.65	97.1	Pulse	0.10	3
1	Ge		475,293.86	1.11	100.6	Pulse	0.10	3
1	Ge		656,362.59	0.02	100.5	Pulse	0.10	3
1	Rh		3,113,513.50	0.34	96.2	Pulse	0.10	3
1	In		3,383,452.24	0.70	96.8	Pulse	0.10	3
1	Tb		4,789,467.32	0.67	97.9	Pulse	0.10	3
1	Ho		461,910.59	0.04	97.0	Pulse	0.10	3
1	Bi		3,043,641.10	0.23	99.0	Pulse	0.10	3
2	Sc		71,690.81	0.87	97.1	Pulse	0.30	3
2	Ge		44,717.72	0.65	97.1	Pulse	0.30	3
2	Ge		67,249.86	1.04	96.9	Pulse	0.30	3
2	Rh		1,455,626.96	0.33	96.9	Pulse	0.30	3
2	In		452,688.84	0.52	95.7	Pulse	0.30	3
2	Tb		1,963,655.62	0.73	97.4	Pulse	0.30	3
2	Ho		191,415.37	0.48	96.9	Pulse	0.30	3
2	Bi		1,387,606.58	0.48	97.5	Pulse	0.30	3
3	Sc		54,218.85	0.98	98.6	Pulse	0.30	3
3	Ge		35,590.94	0.58	100.7	Pulse	0.30	3
3	Ge		52,923.22	0.31	97.9	Pulse	0.30	3
3	Rh		608,510.06	0.33	98.8	Pulse	0.30	3
3	Tb		1,032,825.86	0.16	99.3	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 13:24
Sample Name	STDG
Sample Type	CalStd
Comment	500MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.008	ug/l	11.92	80.00	3.658E-05	Pulse	0.25	3
B			1	199.772	ug/l	0.75	1,118,578.46	5.115E-01	Pulse	0.15	3
Ca			1	493.667	ug/l	0.57	381,491.49	1.629E-01	Pulse	0.10	3
Sr			1	0.010	ug/l	28.39	896.73	2.877E-04	Pulse	0.10	3
Mo			1	0.055	ug/l	20.70	433.36	1.391E-04	Pulse	0.10	3
Ag			1	0.009	ug/l	12.92	213.34	6.306E-05	Pulse	0.10	3
Sn			1	0.336	ug/l	12.50	2,837.01	8.382E-04	Pulse	0.10	3
Sb			1	0.500	ug/l	4.64	6,725.01	1.408E-03	Pulse	0.10	3
Ba			1	0.009	ug/l	62.77	83.34	1.745E-05	Pulse	0.10	3
Tl			1	0.021	ug/l	15.42	850.05	2.859E-04	Pulse	0.10	3
Pb			1	0.012	ug/l	52.12	256.68	8.645E-05	Pulse	0.10	3
Pb			1	0.013	ug/l	11.94	253.34	8.525E-05	Pulse	0.10	3
Pb			1	0.015	ug/l	17.83	1,183.40	3.982E-04	Pulse	0.10	3
Na			2	497.915	ug/l	1.00	374,243.66	5.344E+00	Pulse	0.30	3
Mg			2	505.645	ug/l	0.37	170,177.66	2.430E+00	Pulse	0.30	3
Al			2	502.496	ug/l	1.01	48,638.72	6.946E-01	Pulse	0.30	3
K			2	507.959	ug/l	0.66	97,736.15	1.396E+00	Pulse	0.30	3
Ca			2	484.599	ug/l	1.66	4,905.23	7.005E-02	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00		Pulse	0.30	3
V			2	0.001	ug/l	1010.39	102.22	1.460E-03	Pulse	0.30	3
Cr			2	0.007	ug/l	49.25	245.56	3.507E-03	Pulse	0.30	3
Mn			2	0.007	ug/l	82.04	52.22	7.459E-04	Pulse	0.30	3
Fe			2	494.655	ug/l	0.27	1,600,641.05	2.286E+01	Pulse	0.30	3
Co			2	0.029	ug/l	25.35	233.34	3.332E-03	Pulse	0.30	3
Ni			2	0.021	ug/l	30.86	73.33	1.047E-03	Pulse	0.30	3
Cu			2	0.014	ug/l	37.54	228.89	3.268E-03	Pulse	0.30	3
Zn			2	-0.355	ug/l	-17.01	457.79	6.538E-03	Pulse	0.30	3
As			2	0.011	ug/l	97.63	10.00	1.429E-04	Pulse	1.00	3
Cd			2	0.007	ug/l	23.62	12.22	2.691E-05	Pulse	0.30	3
Sn			2	0.173	ug/l	4.86	531.13	1.170E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.026	ug/l	81.61	3.53	6.834E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,186,982.65	0.18	98.0	Pulse	0.10	3
1	Sc		2,342,506.22	0.05	96.5	Pulse	0.10	3
1	Ge		450,915.94	0.39	95.4	Pulse	0.10	3
1	Ge		627,625.65	0.87	96.1	Pulse	0.10	3
1	Rh		3,116,606.83	0.20	96.3	Pulse	0.10	3
1	In		3,382,530.49	0.61	96.7	Pulse	0.10	3
1	Tb		4,776,025.45	0.08	97.6	Pulse	0.10	3
1	Ho		460,079.54	0.68	96.6	Pulse	0.10	3
1	Bi		2,972,120.58	0.68	96.6	Pulse	0.10	3
2	Sc		70,024.94	0.24	94.9	Pulse	0.30	3
2	Ge		44,094.95	0.61	95.7	Pulse	0.30	3
2	Ge		66,141.08	1.65	95.3	Pulse	0.30	3
2	Rh		1,445,567.34	0.32	96.2	Pulse	0.30	3
2	In		454,071.30	0.72	96.0	Pulse	0.30	3
2	Tb		1,951,948.26	0.67	96.8	Pulse	0.30	3
2	Ho		189,843.54	0.59	96.1	Pulse	0.30	3
2	Bi		1,369,728.31	0.62	96.3	Pulse	0.30	3
3	Sc		52,756.51	2.99	96.0	Pulse	0.30	3
3	Ge		34,351.72	4.21	97.2	Pulse	0.30	3
3	Ge		51,645.96	1.71	95.5	Pulse	0.30	3
3	Rh		597,083.47	2.21	96.9	Pulse	0.30	3
3	Tb		1,017,554.61	2.81	97.8	Pulse	0.30	3

Quantitation Report

File Name	010CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 13:29
Sample Name	STDH
Sample Type	CalStd
Comment	1000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.001	ug/l	-69.23	14.67	6.700E-06	Pulse	0.25	3
B			1	2.523	ug/l	2.67	28,379.55	1.298E-02	Pulse	0.15	3
Ca			1	998.307	ug/l	0.62	745,053.48	3.195E-01	Pulse	0.10	3
Sr			1	0.008	ug/l	85.09	816.72	2.658E-04	Pulse	0.10	3
Mo			1	0.019	ug/l	70.23	173.34	5.636E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	-453712.62	56.67	1.684E-05	Pulse	0.10	3
Sn			1	0.213	ug/l	4.00	1,430.12	4.251E-04	Pulse	0.10	3
Sb			1	0.170	ug/l	8.88	2,413.60	5.092E-04	Pulse	0.10	3
Ba			1	-0.003	ug/l	-42.95	23.33	4.926E-06	Pulse	0.10	3
Tl			1	0.004	ug/l	12.42	263.34	8.860E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	183.86	126.67	4.265E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	151.57	120.00	4.039E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	15.59	596.69	2.008E-04	Pulse	0.10	3
Na			2	985.898	ug/l	1.73	755,729.19	1.051E+01	Pulse	0.30	3
Mg			2	1005.562	ug/l	1.51	347,499.91	4.832E+00	Pulse	0.30	3
Al			2	995.736	ug/l	1.58	98,903.34	1.375E+00	Pulse	0.30	3
K			2	1002.663	ug/l	1.88	192,183.65	2.672E+00	Pulse	0.30	3
Ca			2	996.914	ug/l	2.09	10,286.60	1.430E-01	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00		Pulse	0.30	3
V			2	-0.011	ug/l	-85.43	72.22	1.007E-03	Pulse	0.30	3
Cr			2	0.005	ug/l	59.82	245.56	3.412E-03	Pulse	0.30	3
Mn			2	0.007	ug/l	50.00	52.22	7.250E-04	Pulse	0.30	3
Fe			2	974.916	ug/l	2.02	3,238,627.09	4.503E+01	Pulse	0.30	3
Co			2	0.046	ug/l	1.18	353.34	4.913E-03	Pulse	0.30	3
Ni			2	0.028	ug/l	22.53	87.78	1.222E-03	Pulse	0.30	3
Cu			2	0.001	ug/l	226.57	167.78	2.333E-03	Pulse	0.30	3
Zn			2	-0.565	ug/l	-6.10	324.45	4.508E-03	Pulse	0.30	3
As			2	0.002	ug/l	371.56	7.00	9.762E-05	Pulse	1.00	3
Cd			2	0.001	ug/l	370.10	5.56	1.212E-05	Pulse	0.30	3
Sn			2	0.040	ug/l	54.65	261.12	5.693E-04	Pulse	0.30	3
Se			3	0.018	ug/l	40.38	3.13	6.060E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,186,394.54	0.61	97.9	Pulse	0.10	3
1	Sc		2,331,890.96	0.34	96.0	Pulse	0.10	3
1	Ge		452,277.86	0.42	95.7	Pulse	0.10	3

Quantitation Report

1	Ge		621,830.21	0.43	95.2	Pulse	0.10	3
1	Rh		3,074,650.06	0.34	95.0	Pulse	0.10	3
1	In		3,364,562.60	0.30	96.2	Pulse	0.10	3
1	Tb		4,739,095.34	0.64	96.9	Pulse	0.10	3
1	Ho		456,808.99	0.41	95.9	Pulse	0.10	3
1	Bi		2,971,251.52	0.90	96.6	Pulse	0.10	3
2	Sc		71,934.24	1.78	97.5	Pulse	0.30	3
2	Ge		44,266.49	1.32	96.1	Pulse	0.30	3
2	Ge		66,512.53	0.95	95.9	Pulse	0.30	3
2	Rh		1,444,618.03	0.12	96.2	Pulse	0.30	3
2	In		458,710.87	0.30	97.0	Pulse	0.30	3
2	Tb		1,968,932.70	0.28	97.6	Pulse	0.30	3
2	Ho		192,236.50	0.26	97.3	Pulse	0.30	3
2	Bi		1,378,021.65	0.50	96.8	Pulse	0.30	3
3	Sc		52,873.50	2.31	96.2	Pulse	0.30	3
3	Ge		33,757.16	2.19	95.5	Pulse	0.30	3
3	Ge		51,789.63	2.21	95.8	Pulse	0.30	3
3	Rh		588,655.62	1.82	95.6	Pulse	0.30	3
3	Tb		1,011,740.17	2.29	97.3	Pulse	0.30	3

Quantitation Report

File Name	011CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 13:34
Sample Name	STDI
Sample Type	CalStd
Comment	5000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.002	ug/l	-51.01	9.33	4.266E-06	Pulse	0.25	3
B			1	1.404	ug/l	11.79	22,139.19	1.015E-02	Pulse	0.15	3
Ca			1	4968.391	ug/l	0.43	3,662,556.72	1.552E+00	Pulse	0.10	3
Sr			1	0.058	ug/l	9.79	2,553.62	8.330E-04	Pulse	0.10	3
Mo			1	0.005	ug/l	83.97	80.00	2.610E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	-552.18	53.33	1.601E-05	Pulse	0.10	3
Sn			1	0.193	ug/l	2.60	1,196.76	3.592E-04	Pulse	0.10	3
Sb			1	0.102	ug/l	18.05	1,553.47	3.249E-04	Pulse	0.10	3
Ba			1	0.009	ug/l	30.90	86.67	1.812E-05	Pulse	0.10	3
Tl			1	0.002	ug/l	81.70	160.00	5.470E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	91.69	150.01	5.125E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	255.52	133.34	4.560E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	68.88	640.03	2.188E-04	Pulse	0.10	3
Na			2	4951.778	ug/l	0.89	3,740,193.46	5.247E+01	Pulse	0.30	3
Mg			2	4992.432	ug/l	1.16	1,709,469.03	2.398E+01	Pulse	0.30	3
Al			2	5009.561	ug/l	0.72	492,793.44	6.913E+00	Pulse	0.30	3
K			2	5032.605	ug/l	1.28	931,652.29	1.307E+01	Pulse	0.30	3
Ca			2	5038.658	ug/l	1.24	51,236.20	7.188E-01	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00		Pulse	0.30	3
V			2	-0.006	ug/l	-79.15	85.55	1.200E-03	Pulse	0.30	3
Cr			2	0.021	ug/l	36.15	305.56	4.289E-03	Pulse	0.30	3
Mn			2	0.049	ug/l	9.62	128.89	1.808E-03	Pulse	0.30	3
Fe			2	5071.421	ug/l	1.02	16,692,632.11	2.342E+02	Analog	0.30	3
Co			2	0.226	ug/l	3.97	1,553.42	2.179E-02	Pulse	0.30	3
Ni			2	0.168	ug/l	8.57	350.01	4.909E-03	Pulse	0.30	3
Cu			2	0.102	ug/l	5.80	690.02	9.677E-03	Pulse	0.30	3
Zn			2	-0.535	ug/l	-8.59	342.23	4.801E-03	Pulse	0.30	3
As			2	0.011	ug/l	38.14	10.33	1.449E-04	Pulse	1.00	3
Cd			2	-0.002	ug/l	-203.25	2.22	4.924E-06	Pulse	0.30	3
Sn			2	0.021	ug/l	39.65	215.56	4.817E-04	Pulse	0.30	3
Se			3	0.000	ug/l	12947.36	2.20	4.307E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,181,670.67	0.67	97.7	Pulse	0.10	3
1	Sc		2,360,043.51	0.73	97.2	Pulse	0.10	3
1	Ge		463,027.23	0.62	98.0	Pulse	0.10	3

Quantitation Report

1	Ge		633,836.38	0.39	97.0	Pulse	0.10	3
1	Rh		3,065,738.18	0.23	94.7	Pulse	0.10	3
1	In		3,331,859.93	0.26	95.3	Pulse	0.10	3
1	Tb		4,781,556.80	0.31	97.7	Pulse	0.10	3
1	Ho		465,173.14	0.97	97.7	Pulse	0.10	3
1	Bi		2,925,686.10	0.33	95.1	Pulse	0.10	3
2	Sc		71,283.55	1.02	96.6	Pulse	0.30	3
2	Ge		44,481.36	1.31	96.5	Pulse	0.30	3
2	Ge		67,100.43	1.18	96.7	Pulse	0.30	3
2	Rh		1,420,692.06	0.87	94.6	Pulse	0.30	3
2	In		447,693.75	0.74	94.7	Pulse	0.30	3
2	Tb		1,955,081.87	0.82	96.9	Pulse	0.30	3
2	Ho		191,300.32	0.38	96.8	Pulse	0.30	3
2	Bi		1,355,022.93	0.62	95.2	Pulse	0.30	3
3	Sc		52,585.94	1.12	95.7	Pulse	0.30	3
3	Ge		34,142.33	0.74	96.6	Pulse	0.30	3
3	Ge		51,049.48	0.17	94.4	Pulse	0.30	3
3	Rh		585,168.00	0.15	95.0	Pulse	0.30	3
3	Tb		1,014,965.83	0.24	97.6	Pulse	0.30	3

Quantitation Report

File Name	012CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 13:39
Sample Name	STDJ
Sample Type	CalStd
Comment	10000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	80.23	33.33	1.556E-05	Pulse	0.25	3
B			1	1.069	ug/l	5.75	19,936.46	9.305E-03	Pulse	0.15	3
Ca			1	10034.186	ug/l	0.90	7,267,934.89	3.124E+00	Analog	0.10	3
Sr			1	0.109	ug/l	0.47	4,214.05	1.413E-03	Pulse	0.10	3
Mo			1	0.015	ug/l	52.83	146.67	4.914E-05	Pulse	0.10	3
Ag			1	-0.002	ug/l	-103.39	23.33	7.216E-06	Pulse	0.10	3
Sn			1	0.270	ug/l	4.37	2,000.21	6.157E-04	Pulse	0.10	3
Sb			1	0.099	ug/l	11.77	1,490.12	3.146E-04	Pulse	0.10	3
Ba			1	0.008	ug/l	121.75	80.00	1.694E-05	Pulse	0.10	3
Tl			1	0.002	ug/l	27.07	186.68	6.568E-05	Pulse	0.10	3
Pb			1	0.015	ug/l	37.56	276.68	9.737E-05	Pulse	0.10	3
Pb			1	0.013	ug/l	37.73	246.68	8.679E-05	Pulse	0.10	3
Pb			1	0.014	ug/l	21.01	1,083.39	3.812E-04	Pulse	0.10	3
Na			2	10154.988	ug/l	0.91	7,609,410.53	1.075E+02	Analog	0.30	3
Mg			2	9989.034	ug/l	1.13	3,395,608.27	4.798E+01	Pulse	0.30	3
Al			2	9971.226	ug/l	1.16	973,697.63	1.376E+01	Pulse	0.30	3
K			2	9954.920	ug/l	1.27	1,823,717.08	2.577E+01	Pulse	0.30	3
Ca			2	9940.479	ug/l	2.34	100,278.36	1.417E+00	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00		Pulse	0.30	3
V			2	-0.006	ug/l	-163.75	84.45	1.194E-03	Pulse	0.30	3
Cr			2	0.092	ug/l	15.14	580.02	8.192E-03	Pulse	0.30	3
Mn			2	0.113	ug/l	16.79	244.45	3.457E-03	Pulse	0.30	3
Fe			2	9964.748	ug/l	0.61	32,560,423.15	4.601E+02	Analog	0.30	3
Co			2	0.467	ug/l	3.64	3,147.01	4.447E-02	Pulse	0.30	3
Ni			2	0.374	ug/l	10.34	730.02	1.032E-02	Pulse	0.30	3
Cu			2	0.025	ug/l	33.96	290.01	4.099E-03	Pulse	0.30	3
Zn			2	-0.400	ug/l	-15.11	432.24	6.106E-03	Pulse	0.30	3
As			2	0.071	ug/l	19.63	31.00	4.384E-04	Pulse	1.00	3
Cd			2	-0.003	ug/l	-65.35	1.11	2.498E-06	Pulse	0.30	3
Sn			2	0.093	ug/l	15.73	356.67	8.073E-04	Pulse	0.30	3
Se			3	0.013	ug/l	128.13	2.80	5.539E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,142,572.79	0.46	96.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,326,174.65	0.55	95.8	Pulse	0.10	3
1	Ge		479,562.67	0.24	101.5	Pulse	0.10	3
1	Ge		659,079.89	0.74	100.9	Pulse	0.10	3
1	Rh		2,982,355.89	0.40	92.2	Pulse	0.10	3
1	In		3,248,368.90	0.49	92.9	Pulse	0.10	3
1	Tb		4,734,927.53	0.64	96.8	Pulse	0.10	3
1	Ho		457,312.57	0.47	96.0	Pulse	0.10	3
1	Bi		2,841,529.33	0.34	92.4	Pulse	0.10	3
2	Sc		70,769.25	0.81	95.9	Pulse	0.30	3
2	Ge		45,640.24	0.54	99.1	Pulse	0.30	3
2	Ge		69,113.15	0.61	99.6	Pulse	0.30	3
2	Rh		1,386,249.25	0.56	92.3	Pulse	0.30	3
2	In		441,981.24	0.71	93.5	Pulse	0.30	3
2	Tb		1,959,976.93	0.75	97.2	Pulse	0.30	3
2	Ho		191,461.17	1.03	96.9	Pulse	0.30	3
2	Bi		1,318,016.13	0.50	92.6	Pulse	0.30	3
3	Sc		52,440.00	1.51	95.4	Pulse	0.30	3
3	Ge		33,657.96	0.35	95.2	Pulse	0.30	3
3	Ge		50,569.32	1.32	93.5	Pulse	0.30	3
3	Rh		573,388.16	0.17	93.1	Pulse	0.30	3
3	Tb		1,000,330.93	0.50	96.2	Pulse	0.30	3

Quantitation Report

File Name	013SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 13:44
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.002	ug/l	-40.63	4.00	1.841E-06	Pulse	0.25	3
B			1	0.903	ug/l	4.88	19,393.64	8.886E-03	Pulse	0.15	3
Ca			1	-4.701	ug/l	-18.07	19,154.93	8.150E-03	Pulse	0.10	3
Sr			1	-0.005	ug/l	-40.06	380.02	1.210E-04	Pulse	0.10	3
Mo			1	-0.004	ug/l	-53.33	16.67	5.304E-06	Pulse	0.10	3
Ag			1	-0.001	ug/l	-0.26	30.00	8.815E-06	Pulse	0.10	3
Sn			1	0.166	ug/l	14.18	913.39	2.684E-04	Pulse	0.10	3
Sb			1	0.036	ug/l	23.97	696.71	1.449E-04	Pulse	0.10	3
Ba			1	-0.006	ug/l	-18.67	6.67	1.384E-06	Pulse	0.10	3
Tl			1	0.000	ug/l	-323.60	100.00	3.283E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-263.54	103.34	3.393E-05	Pulse	0.10	3
Pb			1	-0.004	ug/l	-23.52	80.00	2.626E-05	Pulse	0.10	3
Pb			1	-0.002	ug/l	-115.68	373.34	1.226E-04	Pulse	0.10	3
Na			2	-0.324	ug/l	-65.06	5,206.41	7.251E-02	Pulse	0.30	3
Mg			2	0.264	ug/l	52.97	187.78	2.620E-03	Pulse	0.30	3
Al			2	0.052	ug/l	436.71	94.45	1.318E-03	Pulse	0.30	3
K			2	-4.087	ug/l	-27.48	5,349.80	7.451E-02	Pulse	0.30	3
Ca			2	-4.508	ug/l	-12.79	26.66	3.715E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	-0.006	ug/l	-33.22	86.67	1.206E-03	Pulse	0.30	3
Cr			2	-0.005	ug/l	-82.65	203.34	2.830E-03	Pulse	0.30	3
Mn			2	-0.004	ug/l	-126.91	33.33	4.635E-04	Pulse	0.30	3
Fe			2	0.426	ug/l	23.91	2,783.60	3.880E-02	Pulse	0.30	3
Co			2	0.001	ug/l	317.79	46.67	6.480E-04	Pulse	0.30	3
Ni			2	-0.002	ug/l	-239.50	31.11	4.340E-04	Pulse	0.30	3
Cu			2	-0.008	ug/l	-129.46	122.22	1.706E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.741	ug/l	-3.41	201.11	2.800E-03	Pulse	0.30	3
As			2	-0.006	ug/l	-24.25	4.33	6.027E-05	Pulse	1.00	3
Cd			2	-0.002	ug/l	-94.98	2.22	4.770E-06	Pulse	0.30	3
Sn			2	0.002	ug/l	700.34	184.45	3.971E-04	Pulse	0.30	3
Se			3	0.037	ug/l	56.17	4.13	7.950E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,182,421.95	1.04	97.8	Pulse	0.10	3
1	Sc		2,350,293.25	0.30	96.8	Pulse	0.10	3
1	Ge		460,301.05	0.64	97.4	Pulse	0.10	3
1	Ge		635,366.57	0.36	97.3	Pulse	0.10	3
1	Rh		3,140,761.00	0.09	97.1	Pulse	0.10	3
1	In		3,403,185.51	0.23	97.3	Pulse	0.10	3
1	Tb		4,807,900.97	0.38	98.3	Pulse	0.10	3
1	Ho		465,192.47	0.75	97.7	Pulse	0.10	3
1	Bi		3,045,914.95	0.07	99.0	Pulse	0.10	3
2	Sc		71,820.23	1.42	97.3	Pulse	0.30	3
2	Ge		45,095.28	2.00	97.9	Pulse	0.30	3
2	Ge		67,287.93	0.31	97.0	Pulse	0.30	3
2	Rh		1,463,733.45	0.44	97.5	Pulse	0.30	3
2	In		464,730.57	0.75	98.3	Pulse	0.30	3
2	Tb		1,978,738.67	0.68	98.1	Pulse	0.30	3
2	Ho		194,457.58	0.21	98.4	Pulse	0.30	3
2	Bi		1,404,855.26	0.59	98.7	Pulse	0.30	3
3	Sc		53,459.68	0.47	97.3	Pulse	0.30	3
3	Ge		35,127.85	1.93	99.3	Pulse	0.30	3
3	Ge		51,920.11	0.84	96.0	Pulse	0.30	3
3	Rh		601,617.25	0.94	97.7	Pulse	0.30	3
3	Tb		1,012,490.34	0.87	97.4	Pulse	0.30	3

Quantitation Report

File Name	014_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 13:49
Sample Name	ICVA
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	60.308	ug/l	0.71	438,882.39	1.998E-01	Pulse	0.25	3
B			1	121.014	ug/l	1.19	686,352.60	3.124E-01	Pulse	0.15	3
Ca			1	5479.563	ug/l	0.71	4,090,249.62	1.711E+00	Pulse	0.10	3
Sr			1	61.688	ug/l	0.31	2,149,987.05	7.024E-01	Pulse	0.10	3
Mo			1	60.199	ug/l	0.54	415,091.27	1.356E-01	Pulse	0.10	3
Ag			1	57.969	ug/l	0.42	1,050,580.76	3.121E-01	Pulse	0.10	3
Sn			1	58.676	ug/l	0.18	659,412.36	1.959E-01	Pulse	0.10	3
Sb			1	61.365	ug/l	0.42	804,224.13	1.673E-01	Pulse	0.10	3
Ba			1	59.115	ug/l	0.27	310,321.78	6.456E-02	Pulse	0.10	3
Tl			1	62.202	ug/l	0.79	2,203,201.11	7.437E-01	Pulse	0.10	3
Pb			1	62.029	ug/l	0.83	741,863.69	2.504E-01	Pulse	0.10	3
Pb			1	58.300	ug/l	0.27	622,425.93	2.101E-01	Pulse	0.10	3
Pb			1	60.243	ug/l	0.50	2,914,944.43	9.840E-01	Pulse	0.10	3
Na			2	5457.277	ug/l	0.46	4,163,258.31	5.782E+01	Pulse	0.30	3
Mg			2	5559.297	ug/l	0.15	1,922,929.86	2.671E+01	Pulse	0.30	3
Al			2	5639.252	ug/l	0.80	560,354.40	7.782E+00	Pulse	0.30	3
K			2	5555.122	ug/l	1.09	1,038,180.16	1.442E+01	Pulse	0.30	3
Ca			2	5877.837	ug/l	1.48	60,363.10	8.384E-01	Pulse	0.30	3
Ti			2	59.813	ug/l	6.42	4,961.91	6.889E-02	Pulse	0.30	3
V			2	60.205	ug/l	0.51	176,507.40	2.451E+00	Pulse	0.30	3
Cr			2	59.893	ug/l	0.20	237,164.50	3.294E+00	Pulse	0.30	3
Mn			2	59.723	ug/l	1.08	110,194.36	1.530E+00	Pulse	0.30	3
Fe			2	5545.920	ug/l	1.29	18,438,300.94	2.561E+02	Analog	0.30	3
Co			2	59.057	ug/l	1.19	399,946.09	5.555E+00	Pulse	0.30	3
Ni			2	59.593	ug/l	0.90	112,677.76	1.565E+00	Pulse	0.30	3
Cu			2	58.634	ug/l	1.14	306,881.83	4.262E+00	Pulse	0.30	3
Zn			2	57.877	ug/l	0.83	41,123.66	5.711E-01	Pulse	0.30	3
As			2	60.882	ug/l	0.43	21,497.77	2.986E-01	Pulse	1.00	3
Cd			2	59.265	ug/l	0.37	65,758.83	1.449E-01	Pulse	0.30	3
Sn			2	59.092	ug/l	0.74	120,948.64	2.665E-01	Pulse	0.30	3
Se			3	57.707	ug/l	1.94	2,986.08	5.708E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,196,907.81	0.68	98.4	Pulse	0.10	3
1	Sc		2,391,129.81	0.33	98.5	Pulse	0.10	3
1	Ge		457,841.54	0.73	96.9	Pulse	0.10	3

Quantitation Report

1	Ge		633,646.90	0.38	97.0	Pulse	0.10	3
1	Rh		3,060,968.08	0.24	94.6	Pulse	0.10	3
1	In		3,366,341.16	0.36	96.3	Pulse	0.10	3
1	Tb		4,807,046.60	0.42	98.2	Pulse	0.10	3
1	Ho		464,188.08	0.67	97.4	Pulse	0.10	3
1	Bi		2,962,387.87	0.46	96.3	Pulse	0.10	3
2	Sc		72,004.44	0.64	97.6	Pulse	0.30	3
2	Ge		44,309.98	0.52	96.2	Pulse	0.30	3
2	Ge		67,020.14	0.72	96.6	Pulse	0.30	3
2	Rh		1,431,931.12	1.11	95.3	Pulse	0.30	3
2	In		453,802.24	0.37	96.0	Pulse	0.30	3
2	Tb		1,993,533.53	0.84	98.8	Pulse	0.30	3
2	Ho		195,090.89	1.48	98.8	Pulse	0.30	3
2	Bi		1,364,147.52	1.46	95.9	Pulse	0.30	3
3	Sc		53,494.51	1.72	97.3	Pulse	0.30	3
3	Ge		34,076.66	1.33	96.4	Pulse	0.30	3
3	Ge		52,330.31	2.14	96.8	Pulse	0.30	3
3	Rh		582,618.59	0.35	94.6	Pulse	0.30	3
3	Tb		1,012,110.13	0.63	97.3	Pulse	0.30	3

Quantitation Report

File Name	015_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 13:54
Sample Name	ICV
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	135.05	30.67	1.371E-05	Pulse	0.25	3
B			1	2.209	ug/l	3.10	27,248.80	1.219E-02	Pulse	0.15	3
Ca			1	-3.735	ug/l	-9.95	20,262.92	8.449E-03	Pulse	0.10	3
Sr			1	0.001	ug/l	372.12	606.70	1.893E-04	Pulse	0.10	3
Mo			1	0.022	ug/l	41.01	206.68	6.444E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	33.69	110.00	3.185E-05	Pulse	0.10	3
Sn			1	0.220	ug/l	4.02	1,550.14	4.487E-04	Pulse	0.10	3
Sb			1	0.022	ug/l	15.01	516.69	1.062E-04	Pulse	0.10	3
Ba			1	-0.001	ug/l	-328.97	33.33	6.852E-06	Pulse	0.10	3
Tl			1	0.012	ug/l	20.84	563.37	1.845E-04	Pulse	0.10	3
Pb			1	0.014	ug/l	24.51	293.35	9.603E-05	Pulse	0.10	3
Pb			1	0.020	ug/l	6.07	343.35	1.124E-04	Pulse	0.10	3
Pb			1	0.019	ug/l	7.32	1,416.75	4.641E-04	Pulse	0.10	3
Na			2	0.808	ug/l	5.75	6,158.96	8.449E-02	Pulse	0.30	3
Mg			2	0.201	ug/l	25.75	168.89	2.317E-03	Pulse	0.30	3
Al			2	62.222	ug/l	4.94	6,349.03	8.710E-02	Pulse	0.30	3
K			2	-3.637	ug/l	-32.13	5,516.53	7.567E-02	Pulse	0.30	3
Ca			2	0.260	ug/l	950.94	76.67	1.051E-03	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	-0.004	ug/l	-135.63	92.22	1.265E-03	Pulse	0.30	3
Cr			2	0.024	ug/l	24.63	324.45	4.451E-03	Pulse	0.30	3
Mn			2	-0.004	ug/l	-203.73	33.33	4.566E-04	Pulse	0.30	3
Fe			2	0.816	ug/l	2.37	4,138.35	5.677E-02	Pulse	0.30	3
Co			2	0.001	ug/l	146.61	50.00	6.861E-04	Pulse	0.30	3
Ni			2	0.021	ug/l	40.49	75.56	1.037E-03	Pulse	0.30	3
Cu			2	3.136	ug/l	4.18	16,770.92	2.301E-01	Pulse	0.30	3
Zn			2	-0.396	ug/l	-11.24	447.79	6.144E-03	Pulse	0.30	3
As			2	-0.002	ug/l	-466.86	5.67	7.758E-05	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.004	ug/l	209.28	8.89	1.890E-05	Pulse	0.30	3
Sn			2	0.026	ug/l	23.06	237.78	5.057E-04	Pulse	0.30	3
Se			3	0.000	ug/l	38934.27	2.27	4.293E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,236,053.50	0.39	100.2	Pulse	0.10	3
1	Sc		2,398,172.26	0.10	98.8	Pulse	0.10	3
1	Ge		465,769.26	1.48	98.5	Pulse	0.10	3
1	Ge		643,787.01	0.75	98.6	Pulse	0.10	3
1	Rh		3,204,621.20	0.46	99.0	Pulse	0.10	3
1	In		3,454,052.27	0.27	98.8	Pulse	0.10	3
1	Tb		4,865,269.82	0.28	99.4	Pulse	0.10	3
1	Ho		473,670.81	0.25	99.4	Pulse	0.10	3
1	Bi		3,053,021.10	0.54	99.3	Pulse	0.10	3
2	Sc		72,899.48	0.45	98.8	Pulse	0.30	3
2	Ge		44,996.25	0.49	97.7	Pulse	0.30	3
2	Ge		67,745.37	1.64	97.6	Pulse	0.30	3
2	Rh		1,489,582.79	0.10	99.2	Pulse	0.30	3
2	In		470,167.34	0.59	99.4	Pulse	0.30	3
2	Tb		1,999,801.17	0.90	99.1	Pulse	0.30	3
2	Ho		196,205.94	0.51	99.3	Pulse	0.30	3
2	Bi		1,405,747.27	0.64	98.8	Pulse	0.30	3
3	Sc		53,642.61	1.20	97.6	Pulse	0.30	3
3	Ge		34,829.36	0.56	98.5	Pulse	0.30	3
3	Ge		52,796.20	1.30	97.6	Pulse	0.30	3
3	Rh		605,201.77	0.33	98.2	Pulse	0.30	3
3	Tb		1,022,404.64	0.32	98.3	Pulse	0.30	3

Quantitation Report

File Name	016_ICB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 13:59
Sample Name	ICB
Sample Type	ICB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.001	ug/l	-106.80	12.00	5.307E-06	Pulse	0.25	3
B			1	1.533	ug/l	2.72	23,714.71	1.048E-02	Pulse	0.15	3
Ca			1	-6.423	ug/l	-5.15	18,537.52	7.615E-03	Pulse	0.10	3
Sr			1	-0.006	ug/l	-39.35	343.35	1.061E-04	Pulse	0.10	3
Mo			1	0.003	ug/l	114.09	70.00	2.166E-05	Pulse	0.10	3
Ag			1	-0.002	ug/l	-69.34	30.00	8.592E-06	Pulse	0.10	3
Sn			1	0.180	ug/l	7.09	1,106.89	3.167E-04	Pulse	0.10	3
Sb			1	0.016	ug/l	18.09	433.35	8.794E-05	Pulse	0.10	3
Ba			1	-0.004	ug/l	-70.31	16.67	3.389E-06	Pulse	0.10	3
Tl			1	0.002	ug/l	120.29	170.01	5.550E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	22480.20	116.67	3.803E-05	Pulse	0.10	3
Pb			1	-0.003	ug/l	-52.57	90.00	2.936E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-348.03	426.68	1.392E-04	Pulse	0.10	3
Na			2	-0.618	ug/l	-17.12	5,106.38	6.940E-02	Pulse	0.30	3
Mg			2	-0.070	ug/l	-128.12	74.44	1.013E-03	Pulse	0.30	3
Al			2	-0.542	ug/l	-10.82	36.66	4.985E-04	Pulse	0.30	3
K			2	-3.570	ug/l	-23.49	5,581.00	7.585E-02	Pulse	0.30	3
Ca			2	-4.253	ug/l	-7.59	30.00	4.078E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	-0.001	ug/l	-140.80	103.33	1.404E-03	Pulse	0.30	3
Cr			2	-0.002	ug/l	-208.28	221.12	3.006E-03	Pulse	0.30	3
Mn			2	-0.005	ug/l	-222.24	32.22	4.369E-04	Pulse	0.30	3
Fe			2	-0.066	ug/l	-17.54	1,183.39	1.608E-02	Pulse	0.30	3
Co			2	-0.002	ug/l	-35.96	26.66	3.620E-04	Pulse	0.30	3
Ni			2	-0.005	ug/l	-34.69	26.67	3.626E-04	Pulse	0.30	3
Cu			2	-0.004	ug/l	-46.24	146.67	1.993E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.837	ug/l	-6.37	137.78	1.871E-03	Pulse	0.30	3
As			2	-0.004	ug/l	-122.18	5.33	7.254E-05	Pulse	1.00	3
Cd			2	0.006	ug/l	122.78	11.11	2.367E-05	Pulse	0.30	3
Sn			2	0.008	ug/l	133.15	200.00	4.264E-04	Pulse	0.30	3
Se			3	-0.001	ug/l	-935.07	2.20	4.148E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,263,621.63	0.21	101.4	Pulse	0.10	3
1	Sc		2,434,383.77	0.32	100.3	Pulse	0.10	3
1	Ge		469,860.20	0.79	99.4	Pulse	0.10	3
1	Ge		652,505.16	0.64	99.9	Pulse	0.10	3
1	Rh		3,234,563.29	0.74	100.0	Pulse	0.10	3
1	In		3,494,391.79	0.52	99.9	Pulse	0.10	3
1	Tb		4,927,639.30	0.30	100.7	Pulse	0.10	3
1	Ho		476,525.93	0.50	100.0	Pulse	0.10	3
1	Bi		3,065,809.64	0.36	99.7	Pulse	0.10	3
2	Sc		73,581.31	0.67	99.7	Pulse	0.30	3
2	Ge		45,388.43	0.61	98.5	Pulse	0.30	3
2	Ge		69,340.83	1.02	99.9	Pulse	0.30	3
2	Rh		1,500,663.10	0.63	99.9	Pulse	0.30	3
2	In		468,882.70	0.37	99.2	Pulse	0.30	3
2	Tb		2,005,893.05	0.26	99.4	Pulse	0.30	3
2	Ho		196,590.87	0.26	99.5	Pulse	0.30	3
2	Bi		1,414,989.63	0.16	99.4	Pulse	0.30	3
3	Sc		54,507.59	0.75	99.2	Pulse	0.30	3
3	Ge		34,788.13	0.66	98.4	Pulse	0.30	3
3	Ge		53,045.89	0.25	98.1	Pulse	0.30	3
3	Rh		604,626.18	0.17	98.2	Pulse	0.30	3
3	Tb		1,022,469.72	0.75	98.3	Pulse	0.30	3

Quantitation Report

File Name	017_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 14:04
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.863	ug/l	0.40	379,720.55	1.685E-01	Pulse	0.25	3
B			1	103.411	ug/l	0.52	603,884.23	2.679E-01	Pulse	0.15	3
Ca			1	5046.612	ug/l	0.25	3,823,302.24	1.576E+00	Pulse	0.10	3
Sr			1	52.016	ug/l	0.08	1,850,758.10	5.923E-01	Pulse	0.10	3
Mo			1	52.072	ug/l	0.74	366,532.57	1.173E-01	Pulse	0.10	3
Ag			1	49.400	ug/l	0.45	909,215.53	2.660E-01	Pulse	0.10	3
Sn			1	49.877	ug/l	0.37	569,083.13	1.665E-01	Pulse	0.10	3
Sb			1	51.783	ug/l	0.74	690,893.32	1.412E-01	Pulse	0.10	3
Ba			1	50.156	ug/l	0.25	268,032.05	5.477E-02	Pulse	0.10	3
Tl			1	51.143	ug/l	0.16	1,830,590.44	6.115E-01	Pulse	0.10	3
Pb			1	50.560	ug/l	0.17	611,087.77	2.041E-01	Pulse	0.10	3
Pb			1	50.424	ug/l	0.66	544,003.51	1.817E-01	Pulse	0.10	3
Pb			1	50.780	ug/l	0.10	2,482,965.53	8.294E-01	Pulse	0.10	3
Na			2	5025.031	ug/l	0.90	3,915,571.23	5.325E+01	Pulse	0.30	3
Mg			2	5084.872	ug/l	1.20	1,796,226.18	2.443E+01	Pulse	0.30	3
Al			2	5067.832	ug/l	1.35	514,289.58	6.994E+00	Pulse	0.30	3
K			2	5037.645	ug/l	1.54	962,086.87	1.308E+01	Pulse	0.30	3
Ca			2	5319.098	ug/l	1.06	55,799.50	7.588E-01	Pulse	0.30	3
Ti			2	51.120	ug/l	2.47	4,329.50	5.888E-02	Pulse	0.30	3
V			2	50.160	ug/l	1.78	150,196.18	2.043E+00	Pulse	0.30	3
Cr			2	49.993	ug/l	1.83	202,200.57	2.750E+00	Pulse	0.30	3
Mn			2	50.146	ug/l	0.92	94,500.65	1.285E+00	Pulse	0.30	3
Fe			2	5074.049	ug/l	0.24	17,229,710.98	2.343E+02	Analog	0.30	3
Co			2	49.520	ug/l	0.23	342,515.95	4.658E+00	Pulse	0.30	3
Ni			2	49.270	ug/l	0.33	95,153.18	1.294E+00	Pulse	0.30	3
Cu			2	49.244	ug/l	0.35	263,255.82	3.580E+00	Pulse	0.30	3
Zn			2	47.788	ug/l	0.72	34,806.89	4.733E-01	Pulse	0.30	3
As			2	49.750	ug/l	1.94	17,941.17	2.440E-01	Pulse	1.00	3
Cd			2	49.938	ug/l	1.01	56,330.58	1.221E-01	Pulse	0.30	3
Sn			2	49.734	ug/l	1.97	103,514.91	2.244E-01	Pulse	0.30	3
Se			3	50.453	ug/l	1.76	2,535.53	4.991E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,253,719.80	0.84	101.0	Pulse	0.10	3
1	Sc		2,425,606.63	0.53	99.9	Pulse	0.10	3
1	Ge		468,785.53	0.84	99.2	Pulse	0.10	3

Quantitation Report

1	Ge		648,634.69	0.29	99.3	Pulse	0.10	3
1	Rh		3,124,766.10	0.40	96.6	Pulse	0.10	3
1	In		3,418,614.99	0.24	97.8	Pulse	0.10	3
1	Tb		4,893,440.45	0.14	100.0	Pulse	0.10	3
1	Ho		474,706.19	0.61	99.7	Pulse	0.10	3
1	Bi		2,993,503.81	0.52	97.3	Pulse	0.10	3
2	Sc		73,538.73	0.70	99.6	Pulse	0.30	3
2	Ge		45,201.25	1.33	98.1	Pulse	0.30	3
2	Ge		67,995.32	0.42	98.0	Pulse	0.30	3
2	Rh		1,444,066.51	0.73	96.1	Pulse	0.30	3
2	In		461,348.58	0.47	97.6	Pulse	0.30	3
2	Tb		1,999,931.10	0.54	99.1	Pulse	0.30	3
2	Ho		196,001.23	0.46	99.2	Pulse	0.30	3
2	Bi		1,369,720.23	0.68	96.3	Pulse	0.30	3
3	Sc		53,557.84	0.51	97.4	Pulse	0.30	3
3	Ge		34,361.75	1.28	97.2	Pulse	0.30	3
3	Ge		50,813.24	1.55	94.0	Pulse	0.30	3
3	Rh		584,912.13	0.16	95.0	Pulse	0.30	3
3	Tb		1,002,918.74	0.21	96.4	Pulse	0.30	3

Quantitation Report

File Name	018_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 14:09
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	104.88	37.33	1.651E-05	Pulse	0.25	3
B			1	2.568	ug/l	2.02	29,606.08	1.309E-02	Pulse	0.15	3
Ca			1	-7.157	ug/l	-11.45	17,853.52	7.387E-03	Pulse	0.10	3
Sr			1	-0.002	ug/l	-124.01	490.03	1.528E-04	Pulse	0.10	3
Mo			1	0.043	ug/l	25.96	356.69	1.111E-04	Pulse	0.10	3
Ag			1	0.006	ug/l	31.25	166.67	4.811E-05	Pulse	0.10	3
Sn			1	0.218	ug/l	8.65	1,530.13	4.427E-04	Pulse	0.10	3
Sb			1	0.046	ug/l	13.23	836.73	1.712E-04	Pulse	0.10	3
Ba			1	0.005	ug/l	165.34	63.33	1.295E-05	Pulse	0.10	3
Tl			1	0.018	ug/l	9.15	766.71	2.515E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	100.98	210.01	6.890E-05	Pulse	0.10	3
Pb			1	0.006	ug/l	116.74	190.01	6.227E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	36.01	783.37	2.568E-04	Pulse	0.10	3
Na			2	-0.278	ug/l	-37.46	5,333.13	7.300E-02	Pulse	0.30	3
Mg			2	0.016	ug/l	577.60	104.45	1.427E-03	Pulse	0.30	3
Al			2	-0.210	ug/l	-92.19	70.00	9.569E-04	Pulse	0.30	3
K			2	-4.450	ug/l	-17.70	5,375.37	7.358E-02	Pulse	0.30	3
Ca			2	-4.338	ug/l	-15.59	28.89	3.957E-04	Pulse	0.30	3
Ti			2	0.013	ug/l	173.21	1.11	1.528E-05	Pulse	0.30	3
V			2	0.005	ug/l	209.49	118.89	1.629E-03	Pulse	0.30	3
Cr			2	-0.002	ug/l	-250.85	220.01	3.010E-03	Pulse	0.30	3
Mn			2	-0.005	ug/l	-164.89	32.22	4.419E-04	Pulse	0.30	3
Fe			2	0.241	ug/l	27.14	2,211.29	3.026E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-1710.60	41.11	5.622E-04	Pulse	0.30	3
Ni			2	0.002	ug/l	188.07	40.00	5.476E-04	Pulse	0.30	3
Cu			2	-0.010	ug/l	-38.42	113.34	1.550E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.815	ug/l	-6.20	152.22	2.082E-03	Pulse	0.30	3
As			2	0.003	ug/l	190.82	7.67	1.051E-04	Pulse	1.00	3
Cd			2	0.003	ug/l	144.83	7.78	1.672E-05	Pulse	0.30	3
Sn			2	0.059	ug/l	19.92	305.56	6.550E-04	Pulse	0.30	3
Se			3	0.023	ug/l	78.27	3.40	6.547E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,261,078.56	0.18	101.3	Pulse	0.10	3
1	Sc		2,416,756.48	0.43	99.5	Pulse	0.10	3
1	Ge		471,533.81	1.20	99.8	Pulse	0.10	3
1	Ge		649,756.81	0.27	99.5	Pulse	0.10	3
1	Rh		3,205,730.68	0.71	99.1	Pulse	0.10	3
1	In		3,460,329.13	1.15	99.0	Pulse	0.10	3
1	Tb		4,886,713.99	0.45	99.9	Pulse	0.10	3
1	Ho		472,042.17	0.56	99.1	Pulse	0.10	3
1	Bi		3,048,901.31	0.46	99.1	Pulse	0.10	3
2	Sc		73,059.89	0.74	99.0	Pulse	0.30	3
2	Ge		45,560.01	0.43	98.9	Pulse	0.30	3
2	Ge		68,169.12	0.30	98.3	Pulse	0.30	3
2	Rh		1,497,699.18	0.28	99.7	Pulse	0.30	3
2	In		466,317.11	0.72	98.6	Pulse	0.30	3
2	Tb		2,000,168.39	0.12	99.2	Pulse	0.30	3
2	Ho		196,717.13	0.63	99.6	Pulse	0.30	3
2	Bi		1,407,846.30	0.39	98.9	Pulse	0.30	3
3	Sc		53,818.74	1.32	97.9	Pulse	0.30	3
3	Ge		34,889.53	0.70	98.7	Pulse	0.30	3
3	Ge		51,933.35	0.37	96.0	Pulse	0.30	3
3	Rh		604,697.93	0.56	98.2	Pulse	0.30	3
3	Tb		1,015,894.30	0.41	97.7	Pulse	0.30	3

Quantitation Report

File Name	019LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 14:15
Sample Name	CRI
Sample Type	LLCCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.512	ug/l	1.30	3,911.18	1.705E-03	Pulse	0.25	3
B			1	27.146	ug/l	1.57	172,522.88	7.521E-02	Pulse	0.15	3
Ca			1	246.143	ug/l	0.91	210,834.87	8.602E-02	Pulse	0.10	3
Sr			1	4.985	ug/l	0.57	184,456.17	5.692E-02	Pulse	0.10	3
Mo			1	0.969	ug/l	0.58	7,121.83	2.198E-03	Pulse	0.10	3
Ag			1	0.486	ug/l	1.19	9,263.02	2.634E-03	Pulse	0.10	3
Sn			1	5.032	ug/l	1.17	58,164.58	1.654E-02	Pulse	0.10	3
Sb			1	1.987	ug/l	1.50	26,726.68	5.460E-03	Pulse	0.10	3
Ba			1	0.983	ug/l	2.20	5,294.40	1.082E-03	Pulse	0.10	3
Tl			1	0.497	ug/l	2.30	18,425.29	5.981E-03	Pulse	0.10	3
Pb			1	0.485	ug/l	8.77	6,154.86	1.997E-03	Pulse	0.10	3
Pb			1	0.503	ug/l	5.96	5,704.61	1.851E-03	Pulse	0.10	3
Pb			1	0.497	ug/l	3.49	25,452.86	8.262E-03	Pulse	0.10	3
Na			2	247.093	ug/l	0.41	199,960.43	2.690E+00	Pulse	0.30	3
Mg			2	253.985	ug/l	1.04	90,775.48	1.221E+00	Pulse	0.30	3
Al			2	24.301	ug/l	4.54	2,584.67	3.478E-02	Pulse	0.30	3
K			2	249.039	ug/l	1.56	54,080.30	7.277E-01	Pulse	0.30	3
Ca			2	278.671	ug/l	4.30	3,025.87	4.071E-02	Pulse	0.30	3
Ti			2	1.052	ug/l	39.14	90.00	1.211E-03	Pulse	0.30	3
V			2	1.008	ug/l	3.67	3,153.67	4.243E-02	Pulse	0.30	3
Cr			2	1.010	ug/l	2.64	4,357.29	5.863E-02	Pulse	0.30	3
Mn			2	0.966	ug/l	2.82	1,880.13	2.530E-02	Pulse	0.30	3
Fe			2	24.519	ug/l	1.81	85,555.98	1.151E+00	Pulse	0.30	3
Co			2	0.507	ug/l	6.10	3,582.65	4.821E-02	Pulse	0.30	3
Ni			2	0.952	ug/l	2.82	1,894.58	2.549E-02	Pulse	0.30	3
Cu			2	2.013	ug/l	4.39	11,036.01	1.485E-01	Pulse	0.30	3
Zn			2	4.241	ug/l	8.50	3,798.26	5.111E-02	Pulse	0.30	3
As			2	0.502	ug/l	6.35	189.67	2.552E-03	Pulse	1.00	3
Cd			2	0.516	ug/l	7.15	600.02	1.271E-03	Pulse	0.30	3
Sn			2	4.880	ug/l	2.57	10,555.84	2.237E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.515	ug/l	5.08	29.33	5.523E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,293,963.94	0.27	102.8	Pulse	0.10	3
1	Sc		2,451,087.46	0.29	100.9	Pulse	0.10	3
1	Ge		475,217.23	0.40	100.5	Pulse	0.10	3
1	Ge		661,674.96	0.81	101.3	Pulse	0.10	3
1	Rh		3,240,598.70	0.76	100.2	Pulse	0.10	3
1	In		3,517,141.32	0.69	100.6	Pulse	0.10	3
1	Tb		4,894,567.43	0.54	100.0	Pulse	0.10	3
1	Ho		472,808.07	0.31	99.3	Pulse	0.10	3
1	Bi		3,080,555.16	0.54	100.2	Pulse	0.10	3
2	Sc		74,321.06	0.13	100.7	Pulse	0.30	3
2	Ge		46,251.97	0.54	100.4	Pulse	0.30	3
2	Ge		69,773.74	0.66	100.6	Pulse	0.30	3
2	Rh		1,508,771.33	0.32	100.5	Pulse	0.30	3
2	In		471,952.21	0.98	99.8	Pulse	0.30	3
2	Tb		2,014,513.12	0.46	99.9	Pulse	0.30	3
2	Ho		197,984.90	0.34	100.2	Pulse	0.30	3
2	Bi		1,411,185.01	0.17	99.2	Pulse	0.30	3
3	Sc		54,090.62	1.08	98.4	Pulse	0.30	3
3	Ge		35,348.27	0.40	100.0	Pulse	0.30	3
3	Ge		53,094.95	1.14	98.2	Pulse	0.30	3
3	Rh		607,208.32	0.64	98.6	Pulse	0.30	3
3	Tb		1,024,737.08	0.48	98.5	Pulse	0.30	3

Quantitation Report

File Name	020ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 14:20
Sample Name	ICSA
Sample Type	ICSA
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	95.17	33.33	1.634E-05	Pulse	0.25	3
B			1	8.580	ug/l	2.50	57,726.35	2.829E-02	Pulse	0.15	3
Ca			1	95404.011	ug/l	0.18	67,287,649.00	2.963E+01	Analog	0.10	3
Sr			1	2024.189	ug/l	0.47	62,440,432.40	2.304E+01	Analog	0.10	3
Mo			1	2155.346	ug/l	1.01	13,155,398.97	4.855E+00	Analog	0.10	3
Ag			1	0.031	ug/l	21.20	550.03	1.819E-04	Pulse	0.10	3
Sn			1	2000.398	ug/l	0.56	20,234,543.87	6.688E+00	Analog	0.10	3
Sb			1	0.102	ug/l	6.83	1,463.45	3.247E-04	Pulse	0.10	3
Ba			1	0.124	ug/l	3.05	643.37	1.428E-04	Pulse	0.10	3
Tl			1	0.019	ug/l	10.33	690.04	2.691E-04	Pulse	0.10	3
Pb			1	0.105	ug/l	5.50	1,183.42	4.615E-04	Pulse	0.10	3
Pb			1	0.095	ug/l	10.33	976.73	3.809E-04	Pulse	0.10	3
Pb			1	0.101	ug/l	4.86	4,610.45	1.798E-03	Pulse	0.10	3
Na			2	91307.726	ug/l	0.50	67,880,846.19	9.662E+02	Analog	0.30	3
Mg			2	92872.998	ug/l	0.38	31,342,079.87	4.461E+02	Analog	0.30	3
Al			2	96269.121	ug/l	0.36	9,332,247.68	1.328E+02	Analog	0.30	3
K			2	96900.841	ug/l	0.85	17,571,457.64	2.501E+02	Analog	0.30	3
Ca			2	101043.437	ug/l	1.23	1,011,320.69	1.440E+01	Pulse	0.30	3
Ti			2	1838.189	ug/l	1.20	148,736.72	2.117E+00	Pulse	0.30	3
V			2	0.011	ug/l	99.81	131.12	1.869E-03	Pulse	0.30	3
Cr			2	0.210	ug/l	1.58	1,031.16	1.468E-02	Pulse	0.30	3
Mn			2	0.313	ug/l	8.28	602.24	8.572E-03	Pulse	0.30	3
Fe			2	89642.017	ug/l	0.52	290,782,477.33	4.139E+03	Analog	0.30	3
Co			2	0.082	ug/l	7.88	583.35	8.306E-03	Pulse	0.30	3
Ni			2	0.550	ug/l	2.00	1,048.94	1.493E-02	Pulse	0.30	3
Cu			2	0.238	ug/l	6.84	1,373.41	1.955E-02	Pulse	0.30	3
Zn			2	-0.395	ug/l	-17.32	432.24	6.150E-03	Pulse	0.30	3
As			2	0.086	ug/l	11.72	36.00	5.123E-04	Pulse	1.00	3
Cd			2	0.373	ug/l	2.80	381.12	9.222E-04	Pulse	0.30	3
Sn			2	1964.855	ug/l	0.72	3,656,805.96	8.850E+00	Pulse	0.30	3
Se			3	0.049	ug/l	58.82	4.33	9.162E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,040,787.30	0.19	91.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,271,272.72	0.11	93.5	Pulse	0.10	3
1	Ge		438,400.96	0.53	92.7	Pulse	0.10	3
1	Ge		574,308.65	0.44	87.9	Pulse	0.10	3
1	Rh		2,709,840.48	0.12	83.7	Pulse	0.10	3
1	In		3,025,805.66	0.85	86.5	Pulse	0.10	3
1	Tb		4,505,873.89	0.60	92.1	Pulse	0.10	3
1	Ho		435,078.22	1.03	91.3	Pulse	0.10	3
1	Bi		2,564,692.67	0.25	83.4	Pulse	0.10	3
2	Sc		70,255.80	0.85	95.2	Pulse	0.30	3
2	Ge		42,537.51	1.18	92.3	Pulse	0.30	3
2	Ge		61,645.90	0.77	88.9	Pulse	0.30	3
2	Rh		1,268,653.07	0.05	84.5	Pulse	0.30	3
2	In		413,230.38	0.47	87.4	Pulse	0.30	3
2	Tb		1,874,020.48	0.43	92.9	Pulse	0.30	3
2	Ho		184,788.56	0.83	93.5	Pulse	0.30	3
2	Bi		1,197,584.67	0.83	84.2	Pulse	0.30	3
3	Sc		50,595.35	1.34	92.0	Pulse	0.30	3
3	Ge		32,425.55	0.79	91.7	Pulse	0.30	3
3	Ge		47,376.30	1.19	87.6	Pulse	0.30	3
3	Rh		502,004.84	0.51	81.5	Pulse	0.30	3
3	Tb		912,203.82	0.46	87.7	Pulse	0.30	3

Quantitation Report

File Name	021ICSB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 14:24
Sample Name	ICSAB
Sample Type	ICSB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	224.33	22.67	1.103E-05	Pulse	0.25	3
B			1	54.171	ug/l	1.41	295,055.16	1.435E-01	Pulse	0.15	3
Ca			1	96950.352	ug/l	0.52	69,038,243.97	3.011E+01	Analog	0.10	3
Sr			1	2077.978	ug/l	0.55	65,353,767.36	2.365E+01	Analog	0.10	3
Mo			1	2193.439	ug/l	1.02	13,650,258.13	4.941E+00	Analog	0.10	3
Ag			1	18.488	ug/l	0.87	309,641.28	9.955E-02	Pulse	0.10	3
Sn			1	2046.029	ug/l	0.53	21,276,337.18	6.840E+00	Analog	0.10	3
Sb			1	0.088	ug/l	3.27	1,323.44	2.856E-04	Pulse	0.10	3
Ba			1	0.128	ug/l	9.42	683.37	1.475E-04	Pulse	0.10	3
Tl			1	0.017	ug/l	14.24	643.37	2.419E-04	Pulse	0.10	3
Pb			1	0.102	ug/l	12.92	1,200.09	4.511E-04	Pulse	0.10	3
Pb			1	0.096	ug/l	5.52	1,023.41	3.847E-04	Pulse	0.10	3
Pb			1	0.095	ug/l	5.12	4,503.76	1.693E-03	Pulse	0.10	3
Na			2	92889.091	ug/l	1.16	67,736,330.64	9.830E+02	Analog	0.30	3
Mg			2	93656.378	ug/l	0.47	31,002,437.66	4.499E+02	Analog	0.30	3
Al			2	96807.610	ug/l	0.84	9,204,991.58	1.336E+02	Analog	0.30	3
K			2	99245.753	ug/l	0.39	17,652,830.96	2.562E+02	Analog	0.30	3
Ca			2	103209.968	ug/l	0.28	1,013,299.61	1.470E+01	Pulse	0.30	3
Ti			2	1879.173	ug/l	0.76	149,152.53	2.164E+00	Pulse	0.30	3
V			2	20.370	ug/l	1.35	57,221.43	8.304E-01	Pulse	0.30	3
Cr			2	20.159	ug/l	0.69	76,537.56	1.111E+00	Pulse	0.30	3
Mn			2	19.787	ug/l	0.24	34,968.03	5.074E-01	Pulse	0.30	3
Fe			2	91583.945	ug/l	0.29	291,398,690.64	4.229E+03	Analog	0.30	3
Co			2	19.422	ug/l	0.31	125,910.52	1.827E+00	Pulse	0.30	3
Ni			2	19.189	ug/l	1.16	34,747.80	5.042E-01	Pulse	0.30	3
Cu			2	18.266	ug/l	1.14	91,601.72	1.329E+00	Pulse	0.30	3
Zn			2	16.322	ug/l	1.34	11,593.06	1.682E-01	Pulse	0.30	3
As			2	19.534	ug/l	1.87	6,605.68	9.586E-02	Pulse	1.00	3
Cd			2	19.484	ug/l	0.79	19,730.15	4.764E-02	Pulse	0.30	3
Sn			2	2015.950	ug/l	0.54	3,759,905.27	9.080E+00	Pulse	0.30	3
Se			3	17.705	ug/l	2.29	811.02	1.754E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,056,145.28	0.49	92.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,293,188.09	0.24	94.4	Pulse	0.10	3
1	Ge		445,895.66	0.87	94.3	Pulse	0.10	3
1	Ge		589,814.64	0.77	90.3	Pulse	0.10	3
1	Rh		2,762,929.02	0.78	85.4	Pulse	0.10	3
1	In		3,110,559.09	0.12	89.0	Pulse	0.10	3
1	Tb		4,632,745.14	0.84	94.7	Pulse	0.10	3
1	Ho		449,647.02	0.75	94.4	Pulse	0.10	3
1	Bi		2,660,624.96	0.46	86.5	Pulse	0.10	3
2	Sc		68,911.44	0.20	93.4	Pulse	0.30	3
2	Ge		42,817.09	0.47	92.9	Pulse	0.30	3
2	Ge		62,715.35	1.50	90.4	Pulse	0.30	3
2	Rh		1,283,415.64	0.31	85.4	Pulse	0.30	3
2	In		414,108.17	0.41	87.6	Pulse	0.30	3
2	Tb		1,894,941.80	0.62	93.9	Pulse	0.30	3
2	Ho		185,461.11	0.96	93.9	Pulse	0.30	3
2	Bi		1,208,501.52	0.71	84.9	Pulse	0.30	3
3	Sc		48,051.32	2.26	87.4	Pulse	0.30	3
3	Ge		31,353.46	2.63	88.7	Pulse	0.30	3
3	Ge		46,240.88	1.93	85.5	Pulse	0.30	3
3	Rh		493,171.89	1.05	80.1	Pulse	0.30	3
3	Tb		895,902.05	0.97	86.1	Pulse	0.30	3

Quantitation Report

File Name	022SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 14:29
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.002	ug/l	-0.18	4.00	2.020E-06	Pulse	0.25	3
B			1	1.514	ug/l	10.17	20,646.23	1.043E-02	Pulse	0.15	3
Ca			1	0.966	ug/l	121.04	21,491.18	9.909E-03	Pulse	0.10	3
Sr			1	0.204	ug/l	7.48	7,712.13	2.503E-03	Pulse	0.10	3
Mo			1	0.542	ug/l	1.05	3,803.92	1.234E-03	Pulse	0.10	3
Ag			1	0.004	ug/l	77.85	123.34	3.652E-05	Pulse	0.10	3
Sn			1	0.465	ug/l	1.96	4,287.40	1.269E-03	Pulse	0.10	3
Sb			1	0.013	ug/l	46.00	386.68	7.985E-05	Pulse	0.10	3
Ba			1	-0.001	ug/l	-256.48	30.00	6.197E-06	Pulse	0.10	3
Tl			1	-0.001	ug/l	-87.81	70.00	2.298E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	32.51	133.34	4.383E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-479.98	120.01	3.945E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	26.71	526.69	1.731E-04	Pulse	0.10	3
Na			2	7.878	ug/l	17.74	10,440.01	1.593E-01	Pulse	0.30	3
Mg			2	6.828	ug/l	15.18	2,237.95	3.415E-02	Pulse	0.30	3
Al			2	8.386	ug/l	16.22	840.03	1.282E-02	Pulse	0.30	3
K			2	-1.290	ug/l	-130.60	5,356.47	8.173E-02	Pulse	0.30	3
Ca			2	1.809	ug/l	19.07	83.33	1.271E-03	Pulse	0.30	3
Ti			2	0.295	ug/l	34.80	22.22	3.392E-04	Pulse	0.30	3
V			2	-0.009	ug/l	-8.90	71.11	1.085E-03	Pulse	0.30	3
Cr			2	0.004	ug/l	153.88	218.89	3.340E-03	Pulse	0.30	3
Mn			2	0.001	ug/l	335.41	38.89	5.933E-04	Pulse	0.30	3
Fe			2	8.139	ug/l	11.27	25,881.59	3.949E-01	Pulse	0.30	3
Co			2	0.000	ug/l	3368.64	37.78	5.766E-04	Pulse	0.30	3
Ni			2	-0.005	ug/l	-62.45	23.33	3.561E-04	Pulse	0.30	3
Cu			2	0.015	ug/l	64.22	217.78	3.324E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.913	ug/l	-1.33	74.44	1.136E-03	Pulse	0.30	3
As			2	0.000	ug/l	2283.50	6.00	9.153E-05	Pulse	1.00	3
Cd			2	0.000	ug/l	598.84	4.44	9.833E-06	Pulse	0.30	3
Sn			2	0.259	ug/l	16.07	702.25	1.554E-03	Pulse	0.30	3
Se			3	0.001	ug/l	833.77	2.27	4.424E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,980,007.48	0.69	88.7	Pulse	0.10	3
1	Sc		2,168,926.74	0.56	89.3	Pulse	0.10	3
1	Ge		436,438.61	0.77	92.3	Pulse	0.10	3
1	Ge		604,506.81	0.26	92.6	Pulse	0.10	3
1	Rh		3,082,017.14	0.84	95.3	Pulse	0.10	3
1	In		3,379,735.13	0.39	96.7	Pulse	0.10	3
1	Tb		4,844,969.51	0.43	99.0	Pulse	0.10	3
1	Ho		466,725.32	0.48	98.0	Pulse	0.10	3
1	Bi		3,042,549.74	0.41	98.9	Pulse	0.10	3
2	Sc		65,541.38	0.22	88.8	Pulse	0.30	3
2	Ge		42,598.76	0.49	92.5	Pulse	0.30	3
2	Ge		63,746.01	0.33	91.9	Pulse	0.30	3
2	Rh		1,432,857.55	0.67	95.4	Pulse	0.30	3
2	In		451,878.20	0.11	95.6	Pulse	0.30	3
2	Tb		1,962,947.15	0.60	97.3	Pulse	0.30	3
2	Ho		193,945.76	0.56	98.2	Pulse	0.30	3
2	Bi		1,392,131.47	0.15	97.8	Pulse	0.30	3
3	Sc		51,737.67	1.48	94.1	Pulse	0.30	3
3	Ge		33,880.71	0.86	95.8	Pulse	0.30	3
3	Ge		51,234.63	0.05	94.7	Pulse	0.30	3
3	Rh		598,773.50	0.75	97.2	Pulse	0.30	3
3	Tb		1,023,900.44	0.40	98.5	Pulse	0.30	3

Quantitation Report

File Name	023_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 14:35
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	47.879	ug/l	0.34	337,561.10	1.586E-01	Pulse	0.25	3
B			1	99.579	ug/l	0.85	549,638.50	2.583E-01	Pulse	0.15	3
Ca			1	5013.274	ug/l	0.41	3,656,353.49	1.566E+00	Pulse	0.10	3
Sr			1	52.022	ug/l	0.22	1,868,467.73	5.924E-01	Pulse	0.10	3
Mo			1	51.569	ug/l	0.10	366,432.77	1.162E-01	Pulse	0.10	3
Ag			1	48.466	ug/l	0.65	912,685.38	2.609E-01	Pulse	0.10	3
Sn			1	50.437	ug/l	0.72	588,836.18	1.683E-01	Pulse	0.10	3
Sb			1	51.967	ug/l	0.77	719,006.50	1.417E-01	Pulse	0.10	3
Ba			1	49.944	ug/l	0.88	276,778.01	5.454E-02	Pulse	0.10	3
Tl			1	51.148	ug/l	0.78	1,906,736.33	6.116E-01	Pulse	0.10	3
Pb			1	51.016	ug/l	1.51	642,181.58	2.060E-01	Pulse	0.10	3
Pb			1	50.397	ug/l	1.45	566,278.78	1.816E-01	Pulse	0.10	3
Pb			1	50.678	ug/l	1.10	2,580,813.72	8.278E-01	Pulse	0.10	3
Na			2	4882.052	ug/l	0.45	3,592,231.24	5.173E+01	Pulse	0.30	3
Mg			2	4908.853	ug/l	0.37	1,637,409.24	2.358E+01	Pulse	0.30	3
Al			2	4805.709	ug/l	0.55	460,520.62	6.632E+00	Pulse	0.30	3
K			2	4978.878	ug/l	0.46	897,959.58	1.293E+01	Pulse	0.30	3
Ca			2	5229.878	ug/l	0.76	51,804.53	7.461E-01	Pulse	0.30	3
Ti			2	49.812	ug/l	3.64	3,983.85	5.737E-02	Pulse	0.30	3
V			2	51.503	ug/l	0.37	145,623.00	2.097E+00	Pulse	0.30	3
Cr			2	51.000	ug/l	0.26	194,780.88	2.805E+00	Pulse	0.30	3
Mn			2	50.226	ug/l	1.51	89,377.29	1.287E+00	Pulse	0.30	3
Fe			2	5179.571	ug/l	0.27	16,607,093.78	2.392E+02	Analog	0.30	3
Co			2	51.353	ug/l	0.45	335,386.06	4.830E+00	Pulse	0.30	3
Ni			2	51.035	ug/l	0.77	93,062.60	1.340E+00	Pulse	0.30	3
Cu			2	50.820	ug/l	0.18	256,528.03	3.694E+00	Pulse	0.30	3
Zn			2	50.250	ug/l	0.58	34,524.10	4.972E-01	Pulse	0.30	3
As			2	52.167	ug/l	0.13	17,764.98	2.558E-01	Pulse	1.00	3
Cd			2	50.086	ug/l	1.83	55,640.38	1.225E-01	Pulse	0.30	3
Sn			2	50.819	ug/l	0.67	104,162.63	2.293E-01	Pulse	0.30	3
Se			3	50.597	ug/l	0.60	2,605.74	5.005E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,128,300.69	0.75	95.3	Pulse	0.10	3
1	Sc		2,335,062.68	0.59	96.2	Pulse	0.10	3
1	Ge		460,311.33	0.54	97.4	Pulse	0.10	3

Quantitation Report

1	Ge		635,637.13	0.83	97.3	Pulse	0.10	3
1	Rh		3,154,306.83	0.35	97.5	Pulse	0.10	3
1	In		3,497,885.46	0.57	100.0	Pulse	0.10	3
1	Tb		5,074,900.03	1.24	103.7	Pulse	0.10	3
1	Ho		495,610.36	1.57	104.0	Pulse	0.10	3
1	Bi		3,117,796.41	0.34	101.4	Pulse	0.10	3
2	Sc		69,436.79	0.12	94.1	Pulse	0.30	3
2	Ge		44,882.58	0.51	97.4	Pulse	0.30	3
2	Ge		67,389.40	0.53	97.1	Pulse	0.30	3
2	Rh		1,460,011.09	0.16	97.2	Pulse	0.30	3
2	In		454,355.53	0.98	96.1	Pulse	0.30	3
2	Tb		2,009,164.37	1.05	99.6	Pulse	0.30	3
2	Ho		198,347.07	0.25	100.4	Pulse	0.30	3
2	Bi		1,394,211.72	0.50	98.0	Pulse	0.30	3
3	Sc		54,236.68	1.45	98.7	Pulse	0.30	3
3	Ge		34,971.87	0.91	98.9	Pulse	0.30	3
3	Ge		52,063.91	1.02	96.3	Pulse	0.30	3
3	Rh		598,354.60	0.70	97.1	Pulse	0.30	3
3	Tb		1,041,872.70	0.41	100.2	Pulse	0.30	3

Quantitation Report

File Name	024_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 14:40
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.001	ug/l	-187.34	17.33	7.716E-06	Pulse	0.25	3
B			1	2.502	ug/l	8.68	28,991.70	1.292E-02	Pulse	0.15	3
Ca			1	-7.464	ug/l	-2.98	17,613.27	7.292E-03	Pulse	0.10	3
Sr			1	0.004	ug/l	30.60	746.71	2.235E-04	Pulse	0.10	3
Mo			1	0.080	ug/l	5.46	646.70	1.935E-04	Pulse	0.10	3
Ag			1	0.007	ug/l	39.10	203.34	5.544E-05	Pulse	0.10	3
Sn			1	0.251	ug/l	4.77	2,030.21	5.533E-04	Pulse	0.10	3
Sb			1	0.050	ug/l	17.24	936.73	1.808E-04	Pulse	0.10	3
Ba			1	0.003	ug/l	216.54	56.67	1.093E-05	Pulse	0.10	3
Tl			1	0.016	ug/l	22.43	740.05	2.280E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	55.78	196.68	6.064E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	110.71	206.67	6.362E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	37.67	873.38	2.691E-04	Pulse	0.10	3
Na			2	1.631	ug/l	10.95	6,605.80	9.320E-02	Pulse	0.30	3
Mg			2	0.202	ug/l	30.26	164.45	2.320E-03	Pulse	0.30	3
Al			2	-0.064	ug/l	-495.82	82.22	1.158E-03	Pulse	0.30	3
K			2	-3.969	ug/l	-26.91	5,303.14	7.482E-02	Pulse	0.30	3
Ca			2	-3.269	ug/l	-40.04	38.89	5.480E-04	Pulse	0.30	3
Ti			2	0.014	ug/l	173.21	1.11	1.577E-05	Pulse	0.30	3
V			2	-0.004	ug/l	-219.44	91.11	1.285E-03	Pulse	0.30	3
Cr			2	-0.004	ug/l	-68.92	204.45	2.885E-03	Pulse	0.30	3
Mn			2	-0.007	ug/l	-76.96	26.67	3.759E-04	Pulse	0.30	3
Fe			2	0.506	ug/l	6.45	3,011.42	4.247E-02	Pulse	0.30	3
Co			2	0.000	ug/l	1052.76	42.22	5.949E-04	Pulse	0.30	3
Ni			2	-0.008	ug/l	-37.64	20.00	2.821E-04	Pulse	0.30	3
Cu			2	0.003	ug/l	319.77	176.67	2.496E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.905	ug/l	-0.71	85.55	1.207E-03	Pulse	0.30	3
As			2	0.005	ug/l	211.60	8.00	1.128E-04	Pulse	1.00	3
Cd			2	-0.001	ug/l	-1.89	3.33	7.128E-06	Pulse	0.30	3
Sn			2	0.075	ug/l	33.39	340.01	7.281E-04	Pulse	0.30	3
Se			3	0.011	ug/l	86.08	2.93	5.399E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,243,493.30	0.73	100.5	Pulse	0.10	3
1	Sc		2,415,603.40	0.71	99.5	Pulse	0.10	3
1	Ge		477,249.58	0.79	101.0	Pulse	0.10	3
1	Ge		664,934.00	0.50	101.8	Pulse	0.10	3
1	Rh		3,341,244.22	0.63	103.3	Pulse	0.10	3
1	In		3,668,394.28	0.47	104.9	Pulse	0.10	3
1	Tb		5,181,432.00	0.11	105.9	Pulse	0.10	3
1	Ho		506,357.69	0.56	106.3	Pulse	0.10	3
1	Bi		3,244,838.39	0.46	105.5	Pulse	0.10	3
2	Sc		70,887.51	0.76	96.0	Pulse	0.30	3
2	Ge		45,461.88	0.63	98.7	Pulse	0.30	3
2	Ge		69,009.38	0.47	99.5	Pulse	0.30	3
2	Rh		1,533,571.50	0.30	102.1	Pulse	0.30	3
2	In		467,205.60	0.53	98.8	Pulse	0.30	3
2	Tb		2,032,868.53	0.58	100.8	Pulse	0.30	3
2	Ho		200,322.85	0.94	101.4	Pulse	0.30	3
2	Bi		1,442,877.96	0.25	101.4	Pulse	0.30	3
3	Sc		55,161.91	0.61	100.4	Pulse	0.30	3
3	Ge		36,389.38	0.91	102.9	Pulse	0.30	3
3	Ge		54,369.14	0.69	100.5	Pulse	0.30	3
3	Rh		622,886.70	0.48	101.1	Pulse	0.30	3
3	Tb		1,051,023.08	0.72	101.1	Pulse	0.30	3

Quantitation Report

File Name	025SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 14:45
Sample Name	mp8579-mb1 1
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	33.48	41.33	1.780E-05	Pulse	0.25	3
B			1	2.291	ug/l	4.38	28,782.52	1.239E-02	Pulse	0.15	3
Ca			1	6.737	ug/l	3.24	29,440.19	1.170E-02	Pulse	0.10	3
Sr			1	0.018	ug/l	19.36	1,330.10	3.855E-04	Pulse	0.10	3
Mo			1	0.037	ug/l	21.99	336.68	9.757E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	138.20	116.67	3.102E-05	Pulse	0.10	3
Sn			1	0.179	ug/l	9.83	1,170.08	3.111E-04	Pulse	0.10	3
Sb			1	0.016	ug/l	53.91	503.36	9.048E-05	Pulse	0.10	3
Ba			1	0.035	ug/l	23.30	256.68	4.614E-05	Pulse	0.10	3
Tl			1	0.007	ug/l	14.56	416.69	1.246E-04	Pulse	0.10	3
Pb			1	0.010	ug/l	21.59	260.01	7.773E-05	Pulse	0.10	3
Pb			1	0.013	ug/l	28.39	296.68	8.870E-05	Pulse	0.10	3
Pb			1	0.015	ug/l	7.42	1,296.74	3.877E-04	Pulse	0.10	3
Na			2	4.501	ug/l	4.71	9,066.94	1.236E-01	Pulse	0.30	3
Mg			2	1.321	ug/l	6.58	564.46	7.695E-03	Pulse	0.30	3
Al			2	1.313	ug/l	24.53	224.45	3.058E-03	Pulse	0.30	3
K			2	-2.583	ug/l	-10.21	5,752.16	7.840E-02	Pulse	0.30	3
Ca			2	7.550	ug/l	22.68	153.34	2.089E-03	Pulse	0.30	3
Ti			2	0.079	ug/l	100.23	6.67	9.128E-05	Pulse	0.30	3
V			2	0.000	ug/l	5909.97	105.56	1.439E-03	Pulse	0.30	3
Cr			2	0.030	ug/l	19.44	350.01	4.770E-03	Pulse	0.30	3
Mn			2	0.073	ug/l	20.81	177.78	2.424E-03	Pulse	0.30	3
Fe			2	2.057	ug/l	1.79	8,372.20	1.141E-01	Pulse	0.30	3
Co			2	0.006	ug/l	13.31	82.22	1.121E-03	Pulse	0.30	3
Ni			2	0.029	ug/l	61.97	92.22	1.255E-03	Pulse	0.30	3
Cu			2	0.062	ug/l	20.46	494.46	6.736E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	2.155	ug/l	3.30	2,265.74	3.088E-02	Pulse	0.30	3
As			2	0.003	ug/l	192.82	7.67	1.045E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	3386.66	4.44	9.239E-06	Pulse	0.30	3
Sn			2	0.017	ug/l	129.37	224.45	4.666E-04	Pulse	0.30	3
Se			3	0.025	ug/l	82.49	3.80	6.754E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,322,675.53	0.48	104.1	Pulse	0.10	3
1	Sc		2,516,237.05	0.52	103.6	Pulse	0.10	3
1	Ge		496,080.20	0.53	104.9	Pulse	0.10	3
1	Ge		687,350.25	0.10	105.2	Pulse	0.10	3
1	Rh		3,449,166.82	0.44	106.6	Pulse	0.10	3
1	In		3,760,593.13	0.07	107.5	Pulse	0.10	3
1	Tb		5,560,741.79	1.09	113.7	Analog	0.10	3
1	Ho		512,522.60	0.67	107.6	Pulse	0.10	3
1	Bi		3,343,794.22	0.71	108.7	Pulse	0.10	3
2	Sc		73,373.79	0.69	99.4	Pulse	0.30	3
2	Ge		46,923.87	1.15	101.8	Pulse	0.30	3
2	Ge		71,439.99	1.05	103.0	Pulse	0.30	3
2	Rh		1,567,326.22	0.57	104.4	Pulse	0.30	3
2	In		481,079.85	0.23	101.8	Pulse	0.30	3
2	Tb		2,076,855.89	0.50	103.0	Pulse	0.30	3
2	Ho		204,432.63	0.07	103.5	Pulse	0.30	3
2	Bi		1,493,035.53	0.66	104.9	Pulse	0.30	3
3	Sc		57,167.57	0.75	104.0	Pulse	0.30	3
3	Ge		37,801.55	2.40	106.9	Pulse	0.30	3
3	Ge		56,350.11	1.10	104.2	Pulse	0.30	3
3	Rh		639,219.45	0.66	103.8	Pulse	0.30	3
3	Tb		1,070,670.10	0.38	103.0	Pulse	0.30	3

Quantitation Report

File Name	026SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 14:50
Sample Name	mp8579-b1
Sample Type	Sample
Comment	
Prep Dilution	3.000
Auto Dilution	N/A
Total Dilution	3.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	95.923	ug/l	0.34	250,115.25	1.059E-01	Pulse	0.25	3
B			1	103.011	ug/l	0.47	220,500.67	9.338E-02	Pulse	0.15	3
Ca			1	2031.495	ug/l	0.64	560,471.70	2.198E-01	Pulse	0.10	3
Sr			1	103.233	ug/l	0.57	1,346,266.80	3.919E-01	Pulse	0.10	3
Mo			1	101.767	ug/l	0.71	262,528.66	7.642E-02	Pulse	0.10	3
Ag			1	75.891	ug/l	0.55	510,228.28	1.362E-01	Pulse	0.10	3
Sn			1	101.450	ug/l	0.12	422,454.30	1.128E-01	Pulse	0.10	3
Sb			1	102.407	ug/l	0.51	519,776.15	9.309E-02	Pulse	0.10	3
Ba			1	97.688	ug/l	0.87	198,574.73	3.556E-02	Pulse	0.10	3
Tl			1	101.919	ug/l	0.61	1,345,855.86	4.062E-01	Pulse	0.10	3
Pb			1	103.050	ug/l	0.73	459,514.21	1.387E-01	Pulse	0.10	3
Pb			1	100.474	ug/l	1.30	399,927.81	1.207E-01	Pulse	0.10	3
Pb			1	102.011	ug/l	0.79	1,840,277.71	5.555E-01	Pulse	0.10	3
Na			2	1988.253	ug/l	0.49	523,863.71	7.089E+00	Pulse	0.30	3
Mg			2	1984.261	ug/l	0.49	234,898.47	3.179E+00	Pulse	0.30	3
Al			2	1908.725	ug/l	1.23	64,968.47	8.791E-01	Pulse	0.30	3
K			2	1987.489	ug/l	1.02	132,614.41	1.794E+00	Pulse	0.30	3
Ca			2	2542.840	ug/l	3.42	8,998.06	1.218E-01	Pulse	0.30	3
Ti			2	101.197	ug/l	5.56	2,871.39	3.885E-02	Pulse	0.30	3
V			2	104.335	ug/l	0.59	104,693.47	1.417E+00	Pulse	0.30	3
Cr			2	105.117	ug/l	1.18	142,496.05	1.928E+00	Pulse	0.30	3
Mn			2	102.625	ug/l	0.55	64,800.44	8.768E-01	Pulse	0.30	3
Fe			2	1973.187	ug/l	0.44	2,245,722.27	3.039E+01	Pulse	0.30	3
Co			2	106.275	ug/l	0.19	246,254.15	3.332E+00	Pulse	0.30	3
Ni			2	105.576	ug/l	0.64	68,311.60	9.244E-01	Pulse	0.30	3
Cu			2	105.849	ug/l	0.28	189,605.97	2.566E+00	Pulse	0.30	3
Zn			2	103.302	ug/l	1.81	25,412.08	3.438E-01	Pulse	0.30	3
As			2	106.351	ug/l	0.88	12,850.39	1.739E-01	Pulse	1.00	3
Cd			2	101.502	ug/l	1.13	39,503.71	8.273E-02	Pulse	0.30	3
Sn			2	102.329	ug/l	0.37	73,536.65	1.540E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	197.202	ug/l	2.36	3,681.61	6.501E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,361,303.29	0.71	105.8	Pulse	0.10	3
1	Sc		2,549,763.04	0.64	105.0	Pulse	0.10	3
1	Ge		499,725.72	0.77	105.7	Pulse	0.10	3
1	Ge		692,480.80	0.19	106.0	Pulse	0.10	3
1	Rh		3,435,408.91	0.82	106.2	Pulse	0.10	3
1	In		3,746,132.87	0.40	107.1	Pulse	0.10	3
1	Tb		5,583,792.00	0.36	114.1	Analog	0.10	3
1	Ho		515,465.45	0.78	108.2	Pulse	0.10	3
1	Bi		3,313,095.26	0.60	107.7	Pulse	0.10	3
2	Sc		73,902.61	0.40	100.1	Pulse	0.30	3
2	Ge		47,117.77	0.70	102.3	Pulse	0.30	3
2	Ge		71,574.91	0.11	103.2	Pulse	0.30	3
2	Rh		1,557,749.59	0.44	103.7	Pulse	0.30	3
2	In		477,492.31	0.83	101.0	Pulse	0.30	3
2	Tb		2,085,893.60	0.52	103.4	Pulse	0.30	3
2	Ho		205,316.01	0.57	103.9	Pulse	0.30	3
2	Bi		1,462,155.40	0.59	102.7	Pulse	0.30	3
3	Sc		57,489.87	2.31	104.6	Pulse	0.30	3
3	Ge		37,254.66	1.51	105.4	Pulse	0.30	3
3	Ge		56,643.57	1.68	104.8	Pulse	0.30	3
3	Rh		634,621.09	0.66	103.0	Pulse	0.30	3
3	Tb		1,066,386.28	0.57	102.5	Pulse	0.30	3

Quantitation Report

File Name	027SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 14:55
Sample Name	mp8579-b1
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	95.159	ug/l	0.91	754,537.71	3.152E-01	Pulse	0.25	3
B			1	99.181	ug/l	0.46	615,806.75	2.573E-01	Pulse	0.15	3
Ca			1	2011.069	ug/l	0.29	1,628,891.48	6.339E-01	Pulse	0.10	3
Sr			1	104.339	ug/l	0.26	4,051,702.75	1.188E+00	Pulse	0.10	3
Mo			1	102.945	ug/l	0.44	790,929.05	2.319E-01	Pulse	0.10	3
Ag			1	74.872	ug/l	0.36	1,518,565.71	4.031E-01	Pulse	0.10	3
Sn			1	101.107	ug/l	0.48	1,272,381.65	3.377E-01	Pulse	0.10	3
Sb			1	102.572	ug/l	0.41	1,562,199.87	2.796E-01	Pulse	0.10	3
Ba			1	97.620	ug/l	0.16	595,572.87	1.066E-01	Pulse	0.10	3
Tl			1	102.861	ug/l	0.59	4,059,709.73	1.230E+00	Pulse	0.10	3
Pb			1	102.669	ug/l	0.38	1,368,194.77	4.145E-01	Pulse	0.10	3
Pb			1	101.846	ug/l	0.56	1,211,531.80	3.670E-01	Pulse	0.10	3
Pb			1	102.422	ug/l	0.47	5,521,975.49	1.673E+00	Pulse	0.10	3
Na			2	1956.718	ug/l	1.04	1,542,591.01	2.078E+01	Pulse	0.30	3
Mg			2	1960.229	ug/l	0.76	699,093.39	9.417E+00	Pulse	0.30	3
Al			2	1872.662	ug/l	0.86	191,906.88	2.585E+00	Pulse	0.30	3
K			2	1976.539	ug/l	1.09	384,906.46	5.185E+00	Pulse	0.30	3
Ca			2	2491.278	ug/l	2.42	26,419.89	3.559E-01	Pulse	0.30	3
Ti			2	100.890	ug/l	1.91	8,625.66	1.162E-01	Pulse	0.30	3
V			2	103.961	ug/l	1.46	314,132.27	4.232E+00	Pulse	0.30	3
Cr			2	104.162	ug/l	1.70	425,032.91	5.726E+00	Pulse	0.30	3
Mn			2	100.805	ug/l	1.31	191,726.02	2.583E+00	Pulse	0.30	3
Fe			2	2055.076	ug/l	1.24	7,044,986.67	9.491E+01	Analog	0.30	3
Co			2	104.301	ug/l	1.39	728,189.12	9.810E+00	Pulse	0.30	3
Ni			2	102.872	ug/l	0.78	200,517.95	2.701E+00	Pulse	0.30	3
Cu			2	102.229	ug/l	0.52	551,516.58	7.429E+00	Pulse	0.30	3
Zn			2	102.842	ug/l	1.00	74,761.28	1.007E+00	Pulse	0.30	3
As			2	103.904	ug/l	1.23	37,820.52	5.095E-01	Pulse	1.00	3
Cd			2	100.911	ug/l	0.75	116,882.62	2.467E-01	Pulse	0.30	3
Sn			2	102.502	ug/l	0.48	218,880.45	4.620E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	195.862	ug/l	1.59	10,787.01	1.936E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,393,741.15	0.40	107.2	Pulse	0.10	3
1	Sc		2,569,650.64	0.54	105.8	Pulse	0.10	3
1	Ge		497,059.10	0.36	105.2	Pulse	0.10	3
1	Ge		698,185.95	0.31	106.9	Pulse	0.10	3
1	Rh		3,410,804.01	0.44	105.4	Pulse	0.10	3
1	In		3,767,414.16	0.68	107.7	Pulse	0.10	3
1	Tb		5,586,961.17	0.86	114.2	Analog	0.10	3
1	Ho		517,549.82	0.32	108.6	Pulse	0.10	3
1	Bi		3,300,966.31	0.59	107.3	Pulse	0.10	3
2	Sc		74,237.49	0.97	100.6	Pulse	0.30	3
2	Ge		46,766.65	0.63	101.5	Pulse	0.30	3
2	Ge		71,644.18	0.34	103.3	Pulse	0.30	3
2	Rh		1,549,692.44	1.26	103.2	Pulse	0.30	3
2	In		473,745.03	0.44	100.2	Pulse	0.30	3
2	Tb		2,079,604.85	0.38	103.1	Pulse	0.30	3
2	Ho		205,905.06	0.55	104.2	Pulse	0.30	3
2	Bi		1,455,402.20	1.05	102.3	Pulse	0.30	3
3	Sc		57,048.24	0.69	103.8	Pulse	0.30	3
3	Ge		37,036.48	1.12	104.7	Pulse	0.30	3
3	Ge		55,716.84	0.79	103.0	Pulse	0.30	3
3	Rh		625,795.36	0.68	101.6	Pulse	0.30	3
3	Tb		1,064,304.64	0.42	102.3	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 15:00
Sample Name	mp8579-s1
Sample Type	Sample
Comment	
Prep Dilution	3.000
Auto Dilution	N/A
Total Dilution	3.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	94.724	ug/l	1.31	240,479.87	1.046E-01	Pulse	0.25	3
B			1	132.764	ug/l	1.09	272,311.48	1.184E-01	Pulse	0.15	3
Ca			1	43997.552	ug/l	0.78	11,311,936.08	4.562E+00	Analog	0.10	3
Sr			1	323.849	ug/l	0.38	3,952,767.34	1.229E+00	Pulse	0.10	3
Mo			1	107.144	ug/l	0.48	258,774.08	8.046E-02	Pulse	0.10	3
Ag			1	73.899	ug/l	0.32	478,856.31	1.326E-01	Pulse	0.10	3
Sn			1	103.762	ug/l	0.59	416,473.67	1.153E-01	Pulse	0.10	3
Sb			1	107.184	ug/l	0.41	508,950.92	9.743E-02	Pulse	0.10	3
Ba			1	159.983	ug/l	0.85	304,221.58	5.824E-02	Pulse	0.10	3
Tl			1	100.932	ug/l	0.33	1,264,053.58	4.023E-01	Pulse	0.10	3
Pb			1	100.239	ug/l	0.70	423,924.81	1.349E-01	Pulse	0.10	3
Pb			1	99.345	ug/l	0.47	375,050.28	1.194E-01	Pulse	0.10	3
Pb			1	100.443	ug/l	0.52	1,718,546.69	5.469E-01	Pulse	0.10	3
Na			2	55212.670	ug/l	0.23	14,116,169.99	1.948E+02	Analog	0.30	3
Mg			2	19957.217	ug/l	0.67	2,315,556.85	3.196E+01	Pulse	0.30	3
Al			2	1959.288	ug/l	0.26	65,386.82	9.024E-01	Pulse	0.30	3
K			2	6034.160	ug/l	1.27	382,228.61	5.275E+00	Pulse	0.30	3
Ca			2	43350.683	ug/l	1.14	149,235.99	2.060E+00	Pulse	0.30	3
Ti			2	107.746	ug/l	5.74	2,996.97	4.137E-02	Pulse	0.30	3
V			2	103.227	ug/l	0.88	101,558.50	1.402E+00	Pulse	0.30	3
Cr			2	101.682	ug/l	0.88	135,160.98	1.865E+00	Pulse	0.30	3
Mn			2	117.059	ug/l	0.88	72,466.44	1.000E+00	Pulse	0.30	3
Fe			2	2085.981	ug/l	0.81	2,327,642.62	3.212E+01	Pulse	0.30	3
Co			2	100.799	ug/l	1.55	228,998.81	3.160E+00	Pulse	0.30	3
Ni			2	99.608	ug/l	1.35	63,192.57	8.721E-01	Pulse	0.30	3
Cu			2	100.806	ug/l	0.18	177,053.12	2.443E+00	Pulse	0.30	3
Zn			2	99.706	ug/l	1.79	24,073.31	3.322E-01	Pulse	0.30	3
As			2	106.392	ug/l	0.45	12,604.54	1.740E-01	Pulse	1.00	3
Cd			2	99.023	ug/l	1.62	36,901.76	8.071E-02	Pulse	0.30	3
Sn			2	105.627	ug/l	1.34	72,671.65	1.590E-01	Pulse	0.30	3
Se			3	190.140	ug/l	0.50	3,455.50	6.268E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,299,219.25	0.88	103.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,479,502.88	0.55	102.1	Pulse	0.10	3
1	Ge		481,784.95	0.41	101.9	Pulse	0.10	3
1	Ge		668,453.25	0.74	102.3	Pulse	0.10	3
1	Rh		3,216,288.60	0.60	99.4	Pulse	0.10	3
1	In		3,610,576.57	0.26	103.3	Pulse	0.10	3
1	Tb		5,223,997.94	0.56	106.8	Pulse	0.10	3
1	Ho		503,691.25	0.42	105.7	Pulse	0.10	3
1	Bi		3,142,169.33	0.58	102.2	Pulse	0.10	3
2	Sc		72,459.81	0.44	98.2	Pulse	0.30	3
2	Ge		45,607.95	0.73	99.0	Pulse	0.30	3
2	Ge		69,080.87	0.99	99.6	Pulse	0.30	3
2	Rh		1,464,014.59	0.73	97.5	Pulse	0.30	3
2	In		457,192.77	0.53	96.7	Pulse	0.30	3
2	Tb		2,019,274.02	0.76	100.1	Pulse	0.30	3
2	Ho		199,349.32	0.21	100.9	Pulse	0.30	3
2	Bi		1,383,319.36	0.58	97.2	Pulse	0.30	3
3	Sc		55,787.33	0.03	101.5	Pulse	0.30	3
3	Ge		36,164.42	1.19	102.3	Pulse	0.30	3
3	Ge		55,127.15	0.67	101.9	Pulse	0.30	3
3	Rh		602,000.96	0.42	97.7	Pulse	0.30	3
3	Tb		1,050,900.83	0.79	101.0	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 15:05
Sample Name	mp8579-s2
Sample Type	Sample
Comment	
Prep Dilution	3.000
Auto Dilution	N/A
Total Dilution	3.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	97.541	ug/l	0.58	249,571.48	1.077E-01	Pulse	0.25	3
B			1	134.207	ug/l	1.54	277,258.38	1.197E-01	Pulse	0.15	3
Ca			1	44686.533	ug/l	1.39	11,558,434.41	4.634E+00	Analog	0.10	3
Sr			1	333.450	ug/l	0.43	4,055,157.44	1.265E+00	Pulse	0.10	3
Mo			1	107.402	ug/l	0.23	258,450.22	8.065E-02	Pulse	0.10	3
Ag			1	74.266	ug/l	0.18	482,386.42	1.333E-01	Pulse	0.10	3
Sn			1	104.055	ug/l	0.91	418,658.18	1.157E-01	Pulse	0.10	3
Sb			1	102.403	ug/l	0.58	509,571.68	9.308E-02	Pulse	0.10	3
Ba			1	156.196	ug/l	0.81	311,257.83	5.686E-02	Pulse	0.10	3
Tl			1	104.045	ug/l	0.48	1,297,552.17	4.147E-01	Pulse	0.10	3
Pb			1	104.400	ug/l	0.48	439,665.07	1.405E-01	Pulse	0.10	3
Pb			1	102.895	ug/l	0.35	386,814.70	1.236E-01	Pulse	0.10	3
Pb			1	103.831	ug/l	0.32	1,769,020.64	5.654E-01	Pulse	0.10	3
Na			2	56569.058	ug/l	1.79	14,528,982.76	1.996E+02	Analog	0.30	3
Mg			2	20292.587	ug/l	0.96	2,365,366.36	3.249E+01	Pulse	0.30	3
Al			2	1976.992	ug/l	0.76	66,283.78	9.105E-01	Pulse	0.30	3
K			2	6100.070	ug/l	0.77	388,136.24	5.332E+00	Pulse	0.30	3
Ca			2	44018.254	ug/l	0.76	152,236.42	2.091E+00	Pulse	0.30	3
Ti			2	106.639	ug/l	2.79	2,980.30	4.094E-02	Pulse	0.30	3
V			2	106.334	ug/l	0.17	105,101.62	1.444E+00	Pulse	0.30	3
Cr			2	104.034	ug/l	0.30	138,926.16	1.908E+00	Pulse	0.30	3
Mn			2	119.244	ug/l	0.94	74,159.27	1.019E+00	Pulse	0.30	3
Fe			2	2101.422	ug/l	0.69	2,355,776.36	3.236E+01	Pulse	0.30	3
Co			2	103.263	ug/l	1.40	235,683.01	3.238E+00	Pulse	0.30	3
Ni			2	102.992	ug/l	1.57	65,639.82	9.017E-01	Pulse	0.30	3
Cu			2	102.306	ug/l	1.36	180,520.36	2.480E+00	Pulse	0.30	3
Zn			2	103.024	ug/l	0.88	24,966.83	3.430E-01	Pulse	0.30	3
As			2	104.859	ug/l	1.26	12,480.45	1.714E-01	Pulse	1.00	3
Cd			2	100.938	ug/l	1.29	37,862.90	8.227E-02	Pulse	0.30	3
Sn			2	103.645	ug/l	1.19	71,788.94	1.560E-01	Pulse	0.30	3
Se			3	194.786	ug/l	0.23	3,554.05	6.421E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,317,103.13	0.39	103.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,494,478.97	0.81	102.7	Pulse	0.10	3
1	Ge		487,391.38	0.71	103.1	Pulse	0.10	3
1	Ge		679,157.99	1.64	104.0	Pulse	0.10	3
1	Rh		3,204,547.35	0.35	99.0	Pulse	0.10	3
1	In		3,619,208.92	0.39	103.5	Pulse	0.10	3
1	Tb		5,474,488.67	0.80	111.9	Analog	0.10	3
1	Ho		503,721.33	1.00	105.7	Pulse	0.10	3
1	Bi		3,128,915.89	0.41	101.7	Pulse	0.10	3
2	Sc		72,797.76	0.84	98.6	Pulse	0.30	3
2	Ge		45,923.24	0.55	99.7	Pulse	0.30	3
2	Ge		69,679.09	0.71	100.4	Pulse	0.30	3
2	Rh		1,469,956.64	0.53	97.9	Pulse	0.30	3
2	In		460,253.40	0.67	97.3	Pulse	0.30	3
2	Tb		2,025,916.17	1.39	100.4	Pulse	0.30	3
2	Ho		200,164.04	0.52	101.3	Pulse	0.30	3
2	Bi		1,383,322.83	0.59	97.2	Pulse	0.30	3
3	Sc		56,470.71	1.36	102.7	Pulse	0.30	3
3	Ge		36,330.34	1.23	102.7	Pulse	0.30	3
3	Ge		55,347.85	0.94	102.4	Pulse	0.30	3
3	Rh		603,753.92	0.33	98.0	Pulse	0.30	3
3	Tb		1,053,369.13	0.67	101.3	Pulse	0.30	3

Quantitation Report

File Name 030SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File
Method Path
Acq Time 8/12/2018 15:10
Sample Name mp8579-s1
Sample Type Sample
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/12/2018 16:24
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	94.395	ug/l	0.57	712,824.85	3.127E-01	Pulse	0.25	3
B			1	126.605	ug/l	0.58	744,455.34	3.266E-01	Pulse	0.15	3
Ca			1	43194.445	ug/l	1.09	34,074,623.66	1.342E+01	Analog	0.10	3
Sr			1	349.681	ug/l	0.12	12,428,818.98	3.981E+00	Analog	0.10	3
Mo			1	109.660	ug/l	0.69	771,229.28	2.470E-01	Pulse	0.10	3
Ag			1	72.411	ug/l	0.48	1,376,928.89	3.898E-01	Pulse	0.10	3
Sn			1	103.163	ug/l	0.40	1,217,201.21	3.446E-01	Pulse	0.10	3
Sb			1	105.560	ug/l	0.25	1,483,777.58	2.878E-01	Pulse	0.10	3
Ba			1	158.873	ug/l	0.10	894,520.19	1.735E-01	Pulse	0.10	3
Tl			1	102.862	ug/l	0.68	3,685,562.65	1.230E+00	Pulse	0.10	3
Pb			1	102.181	ug/l	0.65	1,236,186.00	4.125E-01	Pulse	0.10	3
Pb			1	101.018	ug/l	1.03	1,090,916.21	3.640E-01	Pulse	0.10	3
Pb			1	102.053	ug/l	0.84	4,994,973.73	1.667E+00	Pulse	0.10	3
Na			2	53679.061	ug/l	1.10	42,157,369.44	5.681E+02	Analog	0.30	3
Mg			2	20486.643	ug/l	1.71	7,303,027.49	9.841E+01	Analog	0.30	3
Al			2	1925.266	ug/l	0.72	197,238.06	2.658E+00	Pulse	0.30	3
K			2	5920.961	ug/l	0.64	1,140,129.19	1.536E+01	Pulse	0.30	3
Ca			2	42720.996	ug/l	0.19	451,753.02	6.087E+00	Pulse	0.30	3
Ti			2	103.607	ug/l	2.21	8,855.81	1.193E-01	Pulse	0.30	3
V			2	101.579	ug/l	0.31	306,876.45	4.135E+00	Pulse	0.30	3
Cr			2	98.397	ug/l	0.53	401,437.21	5.409E+00	Pulse	0.30	3
Mn			2	112.346	ug/l	0.99	213,613.94	2.878E+00	Pulse	0.30	3
Fe			2	2155.033	ug/l	0.56	7,385,838.60	9.952E+01	Analog	0.30	3
Co			2	95.879	ug/l	0.53	669,222.84	9.018E+00	Pulse	0.30	3
Ni			2	94.422	ug/l	0.71	184,001.87	2.479E+00	Pulse	0.30	3
Cu			2	94.669	ug/l	0.29	510,599.51	6.880E+00	Pulse	0.30	3
Zn			2	91.968	ug/l	1.13	66,915.54	9.017E-01	Pulse	0.30	3
As			2	101.451	ug/l	0.38	36,919.11	4.975E-01	Pulse	1.00	3
Cd			2	95.765	ug/l	1.38	105,627.11	2.341E-01	Pulse	0.30	3
Sn			2	105.524	ug/l	0.42	214,590.33	4.756E-01	Pulse	0.30	3
Se			3	182.645	ug/l	0.76	9,743.36	1.806E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,279,662.18	0.16	102.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,539,382.57	0.32	104.6	Pulse	0.10	3
1	Ge		479,420.72	1.01	101.4	Pulse	0.10	3
1	Ge		671,293.84	0.78	102.8	Pulse	0.10	3
1	Rh		3,122,275.37	0.42	96.5	Pulse	0.10	3
1	In		3,532,080.52	0.07	101.0	Pulse	0.10	3
1	Tb		5,156,283.26	0.34	105.4	Pulse	0.10	3
1	Ho		501,839.08	0.15	105.3	Pulse	0.10	3
1	Bi		2,996,806.41	1.02	97.4	Pulse	0.10	3
2	Sc		74,215.16	0.72	100.6	Pulse	0.30	3
2	Ge		45,684.84	0.95	99.2	Pulse	0.30	3
2	Ge		69,191.18	0.77	99.7	Pulse	0.30	3
2	Rh		1,429,805.01	0.22	95.2	Pulse	0.30	3
2	In		451,160.71	0.91	95.4	Pulse	0.30	3
2	Tb		2,011,968.88	0.66	99.7	Pulse	0.30	3
2	Ho		200,196.44	0.49	101.3	Pulse	0.30	3
2	Bi		1,328,225.85	0.34	93.3	Pulse	0.30	3
3	Sc		56,960.26	1.51	103.6	Pulse	0.30	3
3	Ge		36,422.84	1.20	103.0	Pulse	0.30	3
3	Ge		53,963.24	0.83	99.8	Pulse	0.30	3
3	Rh		585,685.36	0.19	95.1	Pulse	0.30	3
3	Tb		1,033,585.27	0.37	99.4	Pulse	0.30	3

Quantitation Report

File Name 031SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File
Method Path
Acq Time 8/12/2018 15:15
Sample Name mp8579-s2
Sample Type Sample
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/12/2018 16:24
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	97.280	ug/l	0.32	736,995.29	3.222E-01	Pulse	0.25	3
B			1	131.389	ug/l	0.55	774,535.51	3.387E-01	Pulse	0.15	3
Ca			1	43522.944	ug/l	0.85	34,611,378.65	1.352E+01	Analog	0.10	3
Sr			1	356.717	ug/l	0.86	12,660,050.64	4.061E+00	Analog	0.10	3
Mo			1	109.860	ug/l	0.09	771,528.61	2.475E-01	Pulse	0.10	3
Ag			1	73.370	ug/l	0.57	1,393,330.61	3.950E-01	Pulse	0.10	3
Sn			1	103.808	ug/l	0.27	1,223,218.39	3.468E-01	Pulse	0.10	3
Sb			1	103.686	ug/l	3.34	1,488,406.12	2.827E-01	Pulse	0.10	3
Ba			1	160.462	ug/l	3.22	922,676.39	1.752E-01	Pulse	0.10	3
Tl			1	105.652	ug/l	0.44	3,775,929.53	1.263E+00	Pulse	0.10	3
Pb			1	105.700	ug/l	0.29	1,275,518.23	4.267E-01	Pulse	0.10	3
Pb			1	104.684	ug/l	0.67	1,127,613.68	3.772E-01	Pulse	0.10	3
Pb			1	105.705	ug/l	0.28	5,160,517.39	1.726E+00	Pulse	0.10	3
Na			2	54462.540	ug/l	0.21	42,951,762.74	5.764E+02	Analog	0.30	3
Mg			2	20740.424	ug/l	0.24	7,424,601.37	9.963E+01	Analog	0.30	3
Al			2	1937.627	ug/l	0.72	199,326.09	2.675E+00	Pulse	0.30	3
K			2	5990.513	ug/l	0.75	1,158,218.98	1.554E+01	Pulse	0.30	3
Ca			2	43240.455	ug/l	0.99	459,119.04	6.161E+00	Pulse	0.30	3
Ti			2	103.227	ug/l	1.78	8,861.33	1.189E-01	Pulse	0.30	3
V			2	104.016	ug/l	0.55	315,528.37	4.234E+00	Pulse	0.30	3
Cr			2	100.569	ug/l	1.32	411,979.53	5.529E+00	Pulse	0.30	3
Mn			2	115.189	ug/l	0.91	219,926.16	2.951E+00	Pulse	0.30	3
Fe			2	2167.201	ug/l	0.61	7,458,231.09	1.001E+02	Analog	0.30	3
Co			2	98.832	ug/l	1.02	692,671.00	9.295E+00	Pulse	0.30	3
Ni			2	96.994	ug/l	0.95	189,783.95	2.547E+00	Pulse	0.30	3
Cu			2	95.789	ug/l	0.65	518,771.54	6.961E+00	Pulse	0.30	3
Zn			2	94.745	ug/l	0.38	69,201.43	9.286E-01	Pulse	0.30	3
As			2	99.937	ug/l	0.78	36,517.55	4.900E-01	Pulse	1.00	3
Cd			2	99.128	ug/l	0.46	108,943.42	2.424E-01	Pulse	0.30	3
Sn			2	105.562	ug/l	0.62	213,878.79	4.758E-01	Pulse	0.30	3
Se			3	184.692	ug/l	1.49	9,840.08	1.826E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,287,091.50	0.57	102.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,559,914.34	0.43	105.4	Pulse	0.10	3
1	Ge		481,555.40	0.33	101.9	Pulse	0.10	3
1	Ge		669,549.65	1.00	102.5	Pulse	0.10	3
1	Rh		3,117,743.19	0.67	96.4	Pulse	0.10	3
1	In		3,527,479.10	0.46	100.9	Pulse	0.10	3
1	Tb		5,269,911.80	3.54	107.7	Mix	0.10	3
1	Ho		502,914.30	0.88	105.6	Pulse	0.10	3
1	Bi		2,989,097.56	0.25	97.2	Pulse	0.10	3
2	Sc		74,523.09	0.88	101.0	Pulse	0.30	3
2	Ge		45,397.43	1.14	98.5	Pulse	0.30	3
2	Ge		69,124.35	0.09	99.6	Pulse	0.30	3
2	Rh		1,422,594.18	0.36	94.7	Pulse	0.30	3
2	In		449,501.22	0.34	95.1	Pulse	0.30	3
2	Tb		2,003,284.51	0.44	99.3	Pulse	0.30	3
2	Ho		199,634.95	0.32	101.1	Pulse	0.30	3
2	Bi		1,320,336.79	0.42	92.8	Pulse	0.30	3
3	Sc		56,504.12	1.51	102.8	Pulse	0.30	3
3	Ge		36,129.97	1.43	102.2	Pulse	0.30	3
3	Ge		53,900.90	1.44	99.7	Pulse	0.30	3
3	Rh		578,564.73	0.53	93.9	Pulse	0.30	3
3	Tb		1,027,622.08	0.54	98.8	Pulse	0.30	3

Quantitation Report

File Name	032SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 15:20
Sample Name	jc71444-1
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.027	ug/l	3.08	226.67	9.773E-05	Pulse	0.25	3
B			1	30.356	ug/l	0.33	193,244.95	8.332E-02	Pulse	0.15	3
Ca			1	41261.667	ug/l	0.04	32,932,102.01	1.282E+01	Analog	0.10	3
Sr			1	236.611	ug/l	1.08	8,544,085.50	2.694E+00	Analog	0.10	3
Mo			1	0.193	ug/l	14.92	1,426.79	4.497E-04	Pulse	0.10	3
Ag			1	0.038	ug/l	10.84	803.39	2.236E-04	Pulse	0.10	3
Sn			1	0.367	ug/l	1.01	3,380.50	9.410E-04	Pulse	0.10	3
Sb			1	0.158	ug/l	12.94	2,506.95	4.749E-04	Pulse	0.10	3
Ba			1	60.134	ug/l	3.29	347,131.37	6.567E-02	Pulse	0.10	3
Tl			1	0.036	ug/l	19.46	1,420.12	4.704E-04	Pulse	0.10	3
Pb			1	0.401	ug/l	2.44	5,011.01	1.659E-03	Pulse	0.10	3
Pb			1	0.372	ug/l	5.73	4,167.41	1.379E-03	Pulse	0.10	3
Pb			1	0.394	ug/l	1.10	19,889.33	6.583E-03	Pulse	0.10	3
Na			2	53050.454	ug/l	0.54	41,979,352.77	5.614E+02	Analog	0.30	3
Mg			2	19015.370	ug/l	1.25	6,829,783.62	9.134E+01	Analog	0.30	3
Al			2	48.291	ug/l	4.49	5,075.26	6.788E-02	Pulse	0.30	3
K			2	4012.827	ug/l	0.86	780,576.34	1.044E+01	Pulse	0.30	3
Ca			2	40746.464	ug/l	0.32	434,125.86	5.806E+00	Pulse	0.30	3
Ti			2	1.767	ug/l	4.45	152.22	2.036E-03	Pulse	0.30	3
V			2	0.424	ug/l	5.46	1,396.74	1.868E-02	Pulse	0.30	3
Cr			2	0.357	ug/l	7.42	1,701.22	2.275E-02	Pulse	0.30	3
Mn			2	18.782	ug/l	1.40	36,018.08	4.817E-01	Pulse	0.30	3
Fe			2	168.082	ug/l	0.93	581,709.79	7.780E+00	Pulse	0.30	3
Co			2	0.272	ug/l	2.65	1,956.81	2.617E-02	Pulse	0.30	3
Ni			2	1.381	ug/l	4.48	2,748.04	3.676E-02	Pulse	0.30	3
Cu			2	1.572	ug/l	1.97	8,709.05	1.165E-01	Pulse	0.30	3
Zn			2	16.961	ug/l	1.30	13,043.06	1.744E-01	Pulse	0.30	3
As			2	0.231	ug/l	11.78	91.33	1.221E-03	Pulse	1.00	3
Cd			2	0.035	ug/l	56.02	43.33	9.480E-05	Pulse	0.30	3
Sn			2	0.213	ug/l	12.52	616.68	1.348E-03	Pulse	0.30	3
Se			3	0.337	ug/l	8.46	20.53	3.761E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,319,339.40	0.13	103.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,569,137.31	0.66	105.8	Pulse	0.10	3
1	Ge		484,305.19	1.15	102.5	Pulse	0.10	3
1	Ge		668,067.96	0.31	102.3	Pulse	0.10	3
1	Rh		3,172,067.97	0.40	98.0	Pulse	0.10	3
1	In		3,592,374.06	0.83	102.7	Pulse	0.10	3
1	Tb		5,289,956.69	3.31	108.1	Mix	0.10	3
1	Ho		503,673.63	0.79	105.7	Pulse	0.10	3
1	Bi		3,021,058.60	0.57	98.2	Pulse	0.10	3
2	Sc		74,774.36	0.59	101.3	Pulse	0.30	3
2	Ge		46,170.62	0.61	100.2	Pulse	0.30	3
2	Ge		69,262.67	1.15	99.8	Pulse	0.30	3
2	Rh		1,449,197.10	0.59	96.5	Pulse	0.30	3
2	In		457,576.07	0.50	96.8	Pulse	0.30	3
2	Tb		2,027,561.73	0.59	100.5	Pulse	0.30	3
2	Ho		200,968.04	0.74	101.7	Pulse	0.30	3
2	Bi		1,340,893.31	0.46	94.2	Pulse	0.30	3
3	Sc		57,213.18	0.42	104.1	Pulse	0.30	3
3	Ge		36,356.00	0.63	102.8	Pulse	0.30	3
3	Ge		54,635.56	1.61	101.0	Pulse	0.30	3
3	Rh		594,597.18	0.37	96.5	Pulse	0.30	3
3	Tb		1,041,994.92	0.32	100.2	Pulse	0.30	3

Quantitation Report

File Name 033SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File
Method Path
Acq Time 8/12/2018 15:25
Sample Name jc71444-2
Sample Type Sample
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/12/2018 16:24
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.159	ug/l	2.77	1,270.74	5.376E-04	Pulse	0.25	3
B			1	36.983	ug/l	1.24	236,547.10	1.001E-01	Pulse	0.15	3
Ca			1	53632.084	ug/l	0.53	43,554,796.02	1.666E+01	Analog	0.10	3
Sr			1	336.808	ug/l	0.79	12,052,683.57	3.834E+00	Analog	0.10	3
Mo			1	0.127	ug/l	8.29	943.40	3.001E-04	Pulse	0.10	3
Ag			1	0.024	ug/l	29.08	523.36	1.472E-04	Pulse	0.10	3
Sn			1	0.223	ug/l	5.17	1,640.15	4.604E-04	Pulse	0.10	3
Sb			1	0.057	ug/l	12.66	1,110.08	2.003E-04	Pulse	0.10	3
Ba			1	117.639	ug/l	0.53	712,432.75	1.285E-01	Pulse	0.10	3
Tl			1	0.012	ug/l	17.01	546.70	1.832E-04	Pulse	0.10	3
Pb			1	0.064	ug/l	21.62	880.06	2.949E-04	Pulse	0.10	3
Pb			1	0.055	ug/l	12.06	706.71	2.368E-04	Pulse	0.10	3
Pb			1	0.060	ug/l	5.40	3,376.94	1.131E-03	Pulse	0.10	3
Na			2	97735.396	ug/l	0.88	78,809,859.09	1.034E+03	Analog	0.30	3
Mg			2	17556.776	ug/l	1.57	6,426,300.99	8.434E+01	Analog	0.30	3
Al			2	11.349	ug/l	9.92	1,287.84	1.691E-02	Pulse	0.30	3
K			2	5849.428	ug/l	0.96	1,156,608.67	1.518E+01	Pulse	0.30	3
Ca			2	53023.509	ug/l	0.86	575,697.10	7.555E+00	Pulse	0.30	3
Ti			2	0.317	ug/l	62.09	27.78	3.650E-04	Pulse	0.30	3
V			2	0.199	ug/l	9.36	725.58	9.518E-03	Pulse	0.30	3
Cr			2	0.225	ug/l	6.18	1,180.06	1.548E-02	Pulse	0.30	3
Mn			2	136.841	ug/l	0.27	267,159.52	3.506E+00	Pulse	0.30	3
Fe			2	56.561	ug/l	0.72	200,454.71	2.631E+00	Pulse	0.30	3
Co			2	0.149	ug/l	1.81	1,108.94	1.455E-02	Pulse	0.30	3
Ni			2	0.911	ug/l	2.91	1,861.24	2.443E-02	Pulse	0.30	3
Cu			2	1.066	ug/l	5.45	6,072.30	7.969E-02	Pulse	0.30	3
Zn			2	3.565	ug/l	2.44	3,394.83	4.455E-02	Pulse	0.30	3
As			2	0.211	ug/l	16.25	85.67	1.124E-03	Pulse	1.00	3
Cd			2	0.088	ug/l	18.81	103.33	2.243E-04	Pulse	0.30	3
Sn			2	0.081	ug/l	19.92	347.79	7.534E-04	Pulse	0.30	3
Se			3	0.990	ug/l	4.80	56.07	1.022E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,364,035.41	0.76	105.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,614,604.91	0.29	107.7	Pulse	0.10	3
1	Ge		489,166.27	0.02	103.5	Pulse	0.10	3
1	Ge		670,370.30	0.34	102.6	Pulse	0.10	3
1	Rh		3,143,516.21	0.14	97.2	Pulse	0.10	3
1	In		3,560,811.45	0.82	101.8	Pulse	0.10	3
1	Tb		5,546,274.08	1.21	113.4	Analog	0.10	3
1	Ho		530,358.13	1.36	111.3	Pulse	0.10	3
1	Bi		2,984,836.31	0.23	97.0	Pulse	0.10	3
2	Sc		76,203.99	0.77	103.2	Pulse	0.30	3
2	Ge		47,288.15	0.46	102.6	Pulse	0.30	3
2	Ge		70,755.86	1.25	102.0	Pulse	0.30	3
2	Rh		1,432,194.88	0.17	95.4	Pulse	0.30	3
2	In		461,387.53	1.09	97.6	Pulse	0.30	3
2	Tb		2,028,180.75	0.23	100.5	Pulse	0.30	3
2	Ho		211,771.58	0.74	107.2	Pulse	0.30	3
2	Bi		1,324,667.69	0.47	93.1	Pulse	0.30	3
3	Sc		56,681.46	0.63	103.1	Pulse	0.30	3
3	Ge		36,227.88	1.98	102.5	Pulse	0.30	3
3	Ge		54,857.29	1.14	101.4	Pulse	0.30	3
3	Rh		581,517.18	0.74	94.4	Pulse	0.30	3
3	Tb		1,029,183.85	0.09	99.0	Pulse	0.30	3

Quantitation Report

File Name	034_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 15:30
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	47.340	ug/l	0.43	372,111.96	1.568E-01	Pulse	0.25	3
B			1	101.520	ug/l	1.01	624,453.59	2.632E-01	Pulse	0.15	3
Ca			1	5058.455	ug/l	0.27	3,998,987.86	1.580E+00	Pulse	0.10	3
Sr			1	52.019	ug/l	0.13	1,980,945.96	5.923E-01	Pulse	0.10	3
Mo			1	51.524	ug/l	0.18	388,167.34	1.161E-01	Pulse	0.10	3
Ag			1	48.666	ug/l	0.46	963,779.57	2.620E-01	Pulse	0.10	3
Sn			1	50.783	ug/l	0.96	623,458.39	1.695E-01	Pulse	0.10	3
Sb			1	49.678	ug/l	0.47	757,744.73	1.354E-01	Pulse	0.10	3
Ba			1	47.703	ug/l	0.47	291,430.64	5.209E-02	Pulse	0.10	3
Tl			1	51.069	ug/l	0.57	1,952,380.18	6.106E-01	Pulse	0.10	3
Pb			1	51.579	ug/l	0.27	665,836.76	2.082E-01	Pulse	0.10	3
Pb			1	50.222	ug/l	0.69	578,691.38	1.810E-01	Pulse	0.10	3
Pb			1	50.827	ug/l	0.34	2,654,421.62	8.302E-01	Pulse	0.10	3
Na			2	4930.518	ug/l	0.88	3,854,676.37	5.225E+01	Pulse	0.30	3
Mg			2	4950.256	ug/l	1.24	1,754,430.45	2.378E+01	Pulse	0.30	3
Al			2	4830.662	ug/l	1.47	491,835.62	6.667E+00	Pulse	0.30	3
K			2	5007.425	ug/l	1.47	959,503.47	1.301E+01	Pulse	0.30	3
Ca			2	5200.195	ug/l	1.95	54,728.25	7.418E-01	Pulse	0.30	3
Ti			2	51.669	ug/l	1.32	4,390.64	5.951E-02	Pulse	0.30	3
V			2	51.630	ug/l	0.72	155,112.11	2.102E+00	Pulse	0.30	3
Cr			2	50.966	ug/l	0.63	206,823.32	2.803E+00	Pulse	0.30	3
Mn			2	49.524	ug/l	1.90	93,633.60	1.269E+00	Pulse	0.30	3
Fe			2	5153.071	ug/l	1.54	17,555,465.41	2.379E+02	Analog	0.30	3
Co			2	50.754	ug/l	0.70	352,199.44	4.774E+00	Pulse	0.30	3
Ni			2	50.518	ug/l	1.04	97,882.53	1.327E+00	Pulse	0.30	3
Cu			2	50.430	ug/l	0.73	270,476.42	3.666E+00	Pulse	0.30	3
Zn			2	49.789	ug/l	0.36	36,354.74	4.927E-01	Pulse	0.30	3
As			2	51.700	ug/l	1.59	18,706.02	2.536E-01	Pulse	1.00	3
Cd			2	49.487	ug/l	2.29	56,794.50	1.210E-01	Pulse	0.30	3
Sn			2	50.906	ug/l	0.92	107,792.30	2.297E-01	Pulse	0.30	3
Se			3	50.255	ug/l	0.52	2,690.75	4.971E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,372,882.28	0.97	106.3	Pulse	0.10	3
1	Sc		2,531,191.84	0.22	104.2	Pulse	0.10	3
1	Ge		495,912.24	0.35	104.9	Pulse	0.10	3

Quantitation Report

1	Ge		685,849.00	0.82	105.0	Pulse	0.10	3
1	Rh		3,344,359.01	0.16	103.4	Pulse	0.10	3
1	In		3,678,475.31	0.41	105.2	Pulse	0.10	3
1	Tb		5,594,393.88	0.95	114.3	Analog	0.10	3
1	Ho		511,755.55	1.19	107.4	Pulse	0.10	3
1	Bi		3,197,305.27	0.91	104.0	Pulse	0.10	3
2	Sc		73,781.91	0.86	100.0	Pulse	0.30	3
2	Ge		46,845.85	0.92	101.7	Pulse	0.30	3
2	Ge		69,760.41	0.28	100.6	Pulse	0.30	3
2	Rh		1,510,870.18	0.13	100.6	Pulse	0.30	3
2	In		469,397.19	0.99	99.3	Pulse	0.30	3
2	Tb		2,059,267.00	0.89	102.1	Pulse	0.30	3
2	Ho		202,677.41	0.14	102.6	Pulse	0.30	3
2	Bi		1,407,746.68	0.28	98.9	Pulse	0.30	3
3	Sc		55,675.98	0.37	101.3	Pulse	0.30	3
3	Ge		36,272.47	0.28	102.6	Pulse	0.30	3
3	Ge		54,129.38	1.13	100.1	Pulse	0.30	3
3	Rh		611,322.37	0.24	99.2	Pulse	0.30	3
3	Tb		1,042,873.60	0.43	100.3	Pulse	0.30	3

Quantitation Report

File Name	035_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 15:35
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.004	ug/l	47.74	57.33	2.402E-05	Pulse	0.25	3
B			1	3.805	ug/l	4.72	38,742.01	1.622E-02	Pulse	0.15	3
Ca			1	-8.003	ug/l	-9.38	17,946.97	7.125E-03	Pulse	0.10	3
Sr			1	0.003	ug/l	122.82	726.71	2.115E-04	Pulse	0.10	3
Mo			1	0.044	ug/l	24.75	386.68	1.125E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	12.76	303.35	8.123E-05	Pulse	0.10	3
Sn			1	0.260	ug/l	6.90	2,180.60	5.840E-04	Pulse	0.10	3
Sb			1	0.059	ug/l	11.76	1,150.09	2.052E-04	Pulse	0.10	3
Ba			1	0.002	ug/l	248.93	56.67	1.010E-05	Pulse	0.10	3
Tl			1	0.016	ug/l	21.45	743.38	2.282E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	33.02	266.68	8.201E-05	Pulse	0.10	3
Pb			1	0.011	ug/l	31.09	256.68	7.882E-05	Pulse	0.10	3
Pb			1	0.013	ug/l	0.77	1,196.73	3.677E-04	Pulse	0.10	3
Na			2	2.993	ug/l	15.78	7,993.09	1.076E-01	Pulse	0.30	3
Mg			2	0.239	ug/l	24.03	185.56	2.500E-03	Pulse	0.30	3
Al			2	-0.275	ug/l	-51.91	64.44	8.668E-04	Pulse	0.30	3
K			2	-4.416	ug/l	-15.24	5,472.07	7.367E-02	Pulse	0.30	3
Ca			2	-4.380	ug/l	-21.38	28.89	3.897E-04	Pulse	0.30	3
Ti			2	0.013	ug/l	173.21	1.11	1.488E-05	Pulse	0.30	3
V			2	-0.003	ug/l	-124.87	96.67	1.302E-03	Pulse	0.30	3
Cr			2	-0.001	ug/l	-683.24	225.56	3.036E-03	Pulse	0.30	3
Mn			2	-0.004	ug/l	-111.13	33.33	4.493E-04	Pulse	0.30	3
Fe			2	0.275	ug/l	31.04	2,361.31	3.180E-02	Pulse	0.30	3
Co			2	0.002	ug/l	59.22	54.45	7.332E-04	Pulse	0.30	3
Ni			2	-0.006	ug/l	-31.42	24.45	3.293E-04	Pulse	0.30	3
Cu			2	0.005	ug/l	65.84	194.45	2.617E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.908	ug/l	-3.74	87.78	1.183E-03	Pulse	0.30	3
As			2	0.002	ug/l	235.74	7.33	9.885E-05	Pulse	1.00	3
Cd			2	0.003	ug/l	53.82	7.78	1.612E-05	Pulse	0.30	3
Sn			2	0.074	ug/l	19.60	347.79	7.214E-04	Pulse	0.30	3
Se			3	0.052	ug/l	47.92	5.20	9.381E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,388,853.95	0.35	107.0	Pulse	0.10	3
1	Sc		2,518,756.52	0.59	103.7	Pulse	0.10	3
1	Ge		493,129.60	0.19	104.3	Pulse	0.10	3
1	Ge		691,754.68	0.80	105.9	Pulse	0.10	3
1	Rh		3,437,187.03	0.38	106.2	Pulse	0.10	3
1	In		3,734,667.14	0.35	106.8	Pulse	0.10	3
1	Tb		5,606,655.13	0.99	114.6	Analog	0.10	3
1	Ho		502,966.74	0.82	105.6	Pulse	0.10	3
1	Bi		3,255,104.22	0.86	105.8	Pulse	0.10	3
2	Sc		74,273.19	0.82	100.6	Pulse	0.30	3
2	Ge		47,086.42	1.00	102.2	Pulse	0.30	3
2	Ge		71,581.57	0.74	103.2	Pulse	0.30	3
2	Rh		1,572,880.18	0.36	104.7	Pulse	0.30	3
2	In		481,853.24	1.24	101.9	Pulse	0.30	3
2	Tb		2,051,747.69	0.25	101.7	Pulse	0.30	3
2	Ho		202,967.60	0.84	102.8	Pulse	0.30	3
2	Bi		1,448,546.68	0.54	101.8	Pulse	0.30	3
3	Sc		56,652.44	0.79	103.1	Pulse	0.30	3
3	Ge		36,635.50	1.35	103.6	Pulse	0.30	3
3	Ge		55,380.20	1.01	102.4	Pulse	0.30	3
3	Rh		630,319.11	0.62	102.3	Pulse	0.30	3
3	Tb		1,048,759.58	0.33	100.8	Pulse	0.30	3

Quantitation Report

File Name	036SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 15:40
Sample Name	jc71444-3
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.017	ug/l	19.81	156.00	6.674E-05	Pulse	0.25	3
B			1	28.832	ug/l	1.25	185,781.40	7.947E-02	Pulse	0.15	3
Ca			1	41471.214	ug/l	0.59	33,376,037.84	1.288E+01	Analog	0.10	3
Sr			1	239.648	ug/l	1.24	8,680,892.16	2.728E+00	Analog	0.10	3
Mo			1	0.129	ug/l	3.17	973.40	3.059E-04	Pulse	0.10	3
Ag			1	0.019	ug/l	9.50	433.36	1.200E-04	Pulse	0.10	3
Sn			1	0.213	ug/l	1.33	1,540.13	4.267E-04	Pulse	0.10	3
Sb			1	0.105	ug/l	8.07	1,806.84	3.331E-04	Pulse	0.10	3
Ba			1	58.683	ug/l	3.36	347,750.17	6.408E-02	Pulse	0.10	3
Tl			1	0.015	ug/l	8.74	650.04	2.152E-04	Pulse	0.10	3
Pb			1	0.139	ug/l	10.04	1,803.51	5.973E-04	Pulse	0.10	3
Pb			1	0.123	ug/l	4.67	1,460.12	4.835E-04	Pulse	0.10	3
Pb			1	0.131	ug/l	2.80	6,900.89	2.285E-03	Pulse	0.10	3
Na			2	52168.211	ug/l	1.09	41,703,820.56	5.521E+02	Analog	0.30	3
Mg			2	18837.466	ug/l	2.07	6,834,963.20	9.049E+01	Analog	0.30	3
Al			2	32.486	ug/l	2.33	3,480.41	4.607E-02	Pulse	0.30	3
K			2	3831.580	ug/l	1.59	753,227.69	9.972E+00	Pulse	0.30	3
Ca			2	40892.476	ug/l	1.84	440,116.34	5.827E+00	Pulse	0.30	3
Ti			2	1.351	ug/l	49.43	117.79	1.556E-03	Pulse	0.30	3
V			2	0.358	ug/l	6.25	1,208.95	1.601E-02	Pulse	0.30	3
Cr			2	0.318	ug/l	1.29	1,556.76	2.061E-02	Pulse	0.30	3
Mn			2	15.017	ug/l	2.19	29,097.91	3.852E-01	Pulse	0.30	3
Fe			2	123.928	ug/l	1.12	433,676.04	5.741E+00	Pulse	0.30	3
Co			2	0.221	ug/l	0.76	1,610.10	2.131E-02	Pulse	0.30	3
Ni			2	1.012	ug/l	3.85	2,043.48	2.706E-02	Pulse	0.30	3
Cu			2	1.390	ug/l	2.12	7,800.81	1.033E-01	Pulse	0.30	3
Zn			2	3.579	ug/l	5.37	3,375.95	4.468E-02	Pulse	0.30	3
As			2	0.236	ug/l	7.15	94.33	1.248E-03	Pulse	1.00	3
Cd			2	0.021	ug/l	43.27	28.89	6.146E-05	Pulse	0.30	3
Sn			2	0.038	ug/l	49.12	262.23	5.585E-04	Pulse	0.30	3
Se			3	0.308	ug/l	14.51	19.07	3.469E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,337,888.26	0.32	104.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,590,584.96	0.42	106.7	Pulse	0.10	3
1	Ge		487,603.31	1.16	103.2	Pulse	0.10	3
1	Ge		676,751.84	0.50	103.6	Pulse	0.10	3
1	Rh		3,181,958.81	0.25	98.3	Pulse	0.10	3
1	In		3,609,123.76	0.62	103.2	Pulse	0.10	3
1	Tb		5,430,932.21	3.71	111.0	Mix	0.10	3
1	Ho		505,143.39	0.72	106.0	Pulse	0.10	3
1	Bi		3,020,274.85	0.48	98.2	Pulse	0.10	3
2	Sc		75,545.40	1.08	102.4	Pulse	0.30	3
2	Ge		47,532.24	1.10	103.2	Pulse	0.30	3
2	Ge		70,837.15	0.64	102.1	Pulse	0.30	3
2	Rh		1,460,734.46	0.65	97.3	Pulse	0.30	3
2	In		469,758.31	0.58	99.4	Pulse	0.30	3
2	Tb		2,045,204.50	0.61	101.4	Pulse	0.30	3
2	Ho		202,691.77	0.38	102.6	Pulse	0.30	3
2	Bi		1,351,607.10	0.55	95.0	Pulse	0.30	3
3	Sc		57,197.62	0.40	104.1	Pulse	0.30	3
3	Ge		36,595.40	0.57	103.5	Pulse	0.30	3
3	Ge		54,961.08	0.48	101.6	Pulse	0.30	3
3	Rh		591,346.14	0.22	96.0	Pulse	0.30	3
3	Tb		1,032,165.20	0.39	99.2	Pulse	0.30	3

Quantitation Report

File Name 037SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File
Method Path
Acq Time 8/12/2018 15:45
Sample Name jc71444-4
Sample Type Sample
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/12/2018 16:24
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.159	ug/l	10.63	1,268.06	5.354E-04	Pulse	0.25	3
B			1	37.034	ug/l	1.06	237,277.76	1.002E-01	Pulse	0.15	3
Ca			1	54094.729	ug/l	0.63	44,851,971.00	1.680E+01	Analog	0.10	3
Sr			1	346.976	ug/l	1.01	12,504,327.31	3.950E+00	Analog	0.10	3
Mo			1	0.111	ug/l	14.20	840.05	2.653E-04	Pulse	0.10	3
Ag			1	0.031	ug/l	17.92	653.37	1.813E-04	Pulse	0.10	3
Sn			1	0.199	ug/l	5.71	1,373.44	3.811E-04	Pulse	0.10	3
Sb			1	0.045	ug/l	14.01	920.06	1.688E-04	Pulse	0.10	3
Ba			1	122.942	ug/l	4.28	732,772.39	1.342E-01	Pulse	0.10	3
Tl			1	0.008	ug/l	6.84	396.69	1.328E-04	Pulse	0.10	3
Pb			1	0.066	ug/l	12.35	910.06	3.048E-04	Pulse	0.10	3
Pb			1	0.054	ug/l	18.79	696.72	2.332E-04	Pulse	0.10	3
Pb			1	0.058	ug/l	3.55	3,290.26	1.102E-03	Pulse	0.10	3
Na			2	100123.790	ug/l	1.35	81,883,372.30	1.060E+03	Analog	0.30	3
Mg			2	17835.002	ug/l	1.51	6,621,001.13	8.567E+01	Analog	0.30	3
Al			2	17.488	ug/l	0.97	1,961.25	2.538E-02	Pulse	0.30	3
K			2	6361.746	ug/l	0.24	1,275,250.82	1.650E+01	Pulse	0.30	3
Ca			2	53527.638	ug/l	0.22	589,437.11	7.627E+00	Pulse	0.30	3
Ti			2	0.537	ug/l	34.55	47.78	6.183E-04	Pulse	0.30	3
V			2	0.191	ug/l	11.75	711.14	9.196E-03	Pulse	0.30	3
Cr			2	0.203	ug/l	2.47	1,104.49	1.429E-02	Pulse	0.30	3
Mn			2	138.905	ug/l	0.42	275,048.38	3.559E+00	Pulse	0.30	3
Fe			2	64.259	ug/l	0.88	230,772.28	2.986E+00	Pulse	0.30	3
Co			2	0.151	ug/l	3.92	1,145.61	1.482E-02	Pulse	0.30	3
Ni			2	1.070	ug/l	7.10	2,207.96	2.858E-02	Pulse	0.30	3
Cu			2	0.581	ug/l	4.42	3,433.73	4.444E-02	Pulse	0.30	3
Zn			2	3.227	ug/l	2.69	3,189.23	4.127E-02	Pulse	0.30	3
As			2	0.233	ug/l	13.66	95.00	1.230E-03	Pulse	1.00	3
Cd			2	0.094	ug/l	15.13	112.22	2.397E-04	Pulse	0.30	3
Sn			2	0.034	ug/l	16.45	254.45	5.435E-04	Pulse	0.30	3
Se			3	1.034	ug/l	7.14	58.53	1.065E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,368,392.89	1.45	106.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,669,455.79	0.24	109.9	Pulse	0.10	3
1	Ge		494,665.98	0.66	104.6	Pulse	0.10	3
1	Ge		682,175.25	0.15	104.4	Pulse	0.10	3
1	Rh		3,165,814.74	0.47	97.8	Pulse	0.10	3
1	In		3,605,249.79	0.58	103.1	Pulse	0.10	3
1	Tb		5,464,665.13	4.21	111.7	Mix	0.10	3
1	Ho		536,276.27	0.35	112.6	Pulse	0.10	3
1	Bi		2,986,815.48	0.36	97.1	Pulse	0.10	3
2	Sc		77,287.79	0.94	104.7	Pulse	0.30	3
2	Ge		47,725.03	1.93	103.6	Pulse	0.30	3
2	Ge		71,337.16	0.86	102.8	Pulse	0.30	3
2	Rh		1,447,116.33	0.77	96.3	Pulse	0.30	3
2	In		468,064.52	0.76	99.0	Pulse	0.30	3
2	Tb		2,043,477.97	0.15	101.3	Pulse	0.30	3
2	Ho		212,928.94	0.37	107.8	Pulse	0.30	3
2	Bi		1,330,618.83	0.33	93.5	Pulse	0.30	3
3	Sc		57,894.40	0.53	105.3	Pulse	0.30	3
3	Ge		36,231.27	1.32	102.5	Pulse	0.30	3
3	Ge		55,015.72	1.34	101.7	Pulse	0.30	3
3	Rh		585,831.58	0.52	95.1	Pulse	0.30	3
3	Tb		1,036,308.29	0.51	99.6	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 15:50
Sample Name	jc71444-5
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.024	ug/l	23.61	216.00	9.063E-05	Pulse	0.25	3
B			1	29.023	ug/l	1.35	190,484.25	7.995E-02	Pulse	0.15	3
Ca			1	41155.782	ug/l	0.94	34,126,771.16	1.279E+01	Analog	0.10	3
Sr			1	240.414	ug/l	1.41	8,856,941.75	2.737E+00	Analog	0.10	3
Mo			1	0.137	ug/l	9.14	1,046.74	3.235E-04	Pulse	0.10	3
Ag			1	0.016	ug/l	20.27	386.68	1.055E-04	Pulse	0.10	3
Sn			1	0.185	ug/l	0.84	1,223.43	3.337E-04	Pulse	0.10	3
Sb			1	0.098	ug/l	20.51	1,763.50	3.129E-04	Pulse	0.10	3
Ba			1	58.290	ug/l	0.16	358,965.63	6.365E-02	Pulse	0.10	3
Tl			1	0.011	ug/l	17.67	513.36	1.687E-04	Pulse	0.10	3
Pb			1	0.285	ug/l	2.68	3,613.92	1.187E-03	Pulse	0.10	3
Pb			1	0.261	ug/l	8.41	2,983.73	9.803E-04	Pulse	0.10	3
Pb			1	0.274	ug/l	1.51	14,096.45	4.631E-03	Pulse	0.10	3
Na			2	53645.157	ug/l	1.95	43,498,543.83	5.677E+02	Analog	0.30	3
Mg			2	19032.401	ug/l	2.11	7,004,964.30	9.142E+01	Analog	0.30	3
Al			2	75.485	ug/l	3.51	8,075.34	1.054E-01	Pulse	0.30	3
K			2	3353.977	ug/l	1.53	669,658.11	8.739E+00	Pulse	0.30	3
Ca			2	41346.705	ug/l	1.62	451,423.73	5.891E+00	Pulse	0.30	3
Ti			2	2.987	ug/l	11.73	263.34	3.440E-03	Pulse	0.30	3
V			2	0.504	ug/l	8.20	1,681.22	2.195E-02	Pulse	0.30	3
Cr			2	0.425	ug/l	7.15	2,031.26	2.649E-02	Pulse	0.30	3
Mn			2	22.953	ug/l	1.80	45,097.94	5.885E-01	Pulse	0.30	3
Fe			2	232.796	ug/l	1.68	825,069.67	1.077E+01	Pulse	0.30	3
Co			2	0.341	ug/l	4.03	2,500.22	3.262E-02	Pulse	0.30	3
Ni			2	1.089	ug/l	3.23	2,227.95	2.908E-02	Pulse	0.30	3
Cu			2	2.192	ug/l	3.29	12,372.52	1.615E-01	Pulse	0.30	3
Zn			2	4.332	ug/l	4.15	3,983.86	5.198E-02	Pulse	0.30	3
As			2	0.236	ug/l	9.03	95.33	1.245E-03	Pulse	1.00	3
Cd			2	0.019	ug/l	25.32	26.67	5.663E-05	Pulse	0.30	3
Sn			2	0.015	ug/l	187.98	214.45	4.561E-04	Pulse	0.30	3
Se			3	0.326	ug/l	16.11	20.40	3.652E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,382,529.57	0.35	106.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,669,236.11	0.31	109.9	Pulse	0.10	3
1	Ge		501,372.43	0.64	106.1	Pulse	0.10	3
1	Ge		689,193.63	0.26	105.5	Pulse	0.10	3
1	Rh		3,236,167.66	0.16	100.0	Pulse	0.10	3
1	In		3,665,709.32	0.52	104.8	Pulse	0.10	3
1	Tb		5,639,275.13	0.60	115.3	Analog	0.10	3
1	Ho		507,840.68	0.88	106.6	Pulse	0.10	3
1	Bi		3,043,737.35	0.53	99.0	Pulse	0.10	3
2	Sc		76,639.32	1.80	103.8	Pulse	0.30	3
2	Ge		47,499.92	1.22	103.1	Pulse	0.30	3
2	Ge		72,360.41	1.04	104.3	Pulse	0.30	3
2	Rh		1,477,238.73	0.15	98.4	Pulse	0.30	3
2	In		470,550.26	0.52	99.5	Pulse	0.30	3
2	Tb		2,063,627.56	0.27	102.3	Pulse	0.30	3
2	Ho		203,887.24	0.15	103.2	Pulse	0.30	3
2	Bi		1,358,595.33	0.29	95.5	Pulse	0.30	3
3	Sc		58,444.20	0.76	106.3	Pulse	0.30	3
3	Ge		37,372.73	1.10	105.7	Pulse	0.30	3
3	Ge		55,914.33	1.15	103.4	Pulse	0.30	3
3	Rh		598,352.32	0.43	97.1	Pulse	0.30	3
3	Tb		1,047,386.11	0.20	100.7	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 15:55
Sample Name	jc71444-6
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.174	ug/l	7.74	1,388.08	5.864E-04	Pulse	0.25	3
B			1	36.526	ug/l	0.33	234,159.57	9.891E-02	Pulse	0.15	3
Ca			1	54175.816	ug/l	1.26	45,091,389.33	1.683E+01	Analog	0.10	3
Sr			1	346.298	ug/l	0.21	12,618,192.31	3.942E+00	Analog	0.10	3
Mo			1	0.098	ug/l	20.66	753.38	2.354E-04	Pulse	0.10	3
Ag			1	0.028	ug/l	13.12	610.03	1.692E-04	Pulse	0.10	3
Sn			1	0.172	ug/l	5.21	1,046.75	2.902E-04	Pulse	0.10	3
Sb			1	0.052	ug/l	2.42	1,050.07	1.867E-04	Pulse	0.10	3
Ba			1	120.001	ug/l	0.35	737,082.15	1.310E-01	Pulse	0.10	3
Tl			1	0.008	ug/l	31.42	393.35	1.314E-04	Pulse	0.10	3
Pb			1	0.049	ug/l	23.21	710.04	2.371E-04	Pulse	0.10	3
Pb			1	0.048	ug/l	16.67	640.04	2.137E-04	Pulse	0.10	3
Pb			1	0.050	ug/l	10.32	2,910.21	9.719E-04	Pulse	0.10	3
Na			2	99659.675	ug/l	0.66	82,005,196.74	1.055E+03	Analog	0.30	3
Mg			2	17869.420	ug/l	0.75	6,674,723.90	8.584E+01	Analog	0.30	3
Al			2	11.955	ug/l	9.79	1,380.08	1.774E-02	Pulse	0.30	3
K			2	6234.930	ug/l	1.44	1,257,572.24	1.617E+01	Pulse	0.30	3
Ca			2	53917.196	ug/l	1.03	597,350.34	7.682E+00	Pulse	0.30	3
Ti			2	0.273	ug/l	20.30	24.44	3.141E-04	Pulse	0.30	3
V			2	0.175	ug/l	8.02	666.69	8.575E-03	Pulse	0.30	3
Cr			2	0.197	ug/l	7.71	1,084.49	1.395E-02	Pulse	0.30	3
Mn			2	140.896	ug/l	1.58	280,685.14	3.610E+00	Pulse	0.30	3
Fe			2	57.222	ug/l	1.34	206,925.40	2.661E+00	Pulse	0.30	3
Co			2	0.161	ug/l	1.12	1,220.06	1.569E-02	Pulse	0.30	3
Ni			2	0.908	ug/l	2.87	1,892.35	2.434E-02	Pulse	0.30	3
Cu			2	0.701	ug/l	5.36	4,136.12	5.320E-02	Pulse	0.30	3
Zn			2	3.258	ug/l	4.32	3,232.58	4.157E-02	Pulse	0.30	3
As			2	0.225	ug/l	9.17	92.67	1.192E-03	Pulse	1.00	3
Cd			2	0.095	ug/l	3.63	113.34	2.411E-04	Pulse	0.30	3
Sn			2	-0.018	ug/l	-41.32	145.56	3.099E-04	Pulse	0.30	3
Se			3	1.053	ug/l	2.15	60.07	1.084E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,367,343.78	0.28	106.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,679,738.50	0.33	110.4	Pulse	0.10	3
1	Ge		497,771.79	0.77	105.3	Pulse	0.10	3
1	Ge		687,073.17	0.51	105.2	Pulse	0.10	3
1	Rh		3,200,819.12	0.70	98.9	Pulse	0.10	3
1	In		3,607,535.49	0.56	103.2	Pulse	0.10	3
1	Tb		5,624,988.46	0.13	115.0	Analog	0.10	3
1	Ho		537,077.00	0.44	112.7	Pulse	0.10	3
1	Bi		2,994,240.89	0.28	97.4	Pulse	0.10	3
2	Sc		77,761.24	0.51	105.4	Pulse	0.30	3
2	Ge		47,540.08	0.30	103.2	Pulse	0.30	3
2	Ge		71,497.75	0.68	103.1	Pulse	0.30	3
2	Rh		1,455,939.63	0.32	96.9	Pulse	0.30	3
2	In		470,056.98	1.05	99.4	Pulse	0.30	3
2	Tb		2,062,568.46	0.10	102.3	Pulse	0.30	3
2	Ho		215,900.73	0.97	109.3	Pulse	0.30	3
2	Bi		1,336,362.69	0.27	93.9	Pulse	0.30	3
3	Sc		57,621.37	1.58	104.8	Pulse	0.30	3
3	Ge		36,596.54	2.26	103.5	Pulse	0.30	3
3	Ge		55,414.83	1.01	102.5	Pulse	0.30	3
3	Rh		580,637.23	0.30	94.3	Pulse	0.30	3
3	Tb		1,027,863.81	0.42	98.8	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 16:00
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.002	ug/l	-30.80	9.33	3.718E-06	Pulse	0.25	3
B			1	2.775	ug/l	1.06	34,176.88	1.362E-02	Pulse	0.15	3
Ca			1	-4.309	ug/l	-10.91	22,068.51	8.271E-03	Pulse	0.10	3
Sr			1	0.021	ug/l	9.67	1,506.80	4.207E-04	Pulse	0.10	3
Mo			1	0.004	ug/l	44.22	86.67	2.420E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	60.30	106.67	2.769E-05	Pulse	0.10	3
Sn			1	0.162	ug/l	2.29	986.73	2.561E-04	Pulse	0.10	3
Sb			1	0.023	ug/l	33.24	613.37	1.073E-04	Pulse	0.10	3
Ba			1	0.008	ug/l	56.26	96.67	1.693E-05	Pulse	0.10	3
Tl			1	-0.001	ug/l	-26.02	63.33	1.889E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	219.07	150.01	4.475E-05	Pulse	0.10	3
Pb			1	-0.002	ug/l	-133.81	106.67	3.179E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	42.69	583.36	1.739E-04	Pulse	0.10	3
Na			2	8.254	ug/l	8.20	12,701.53	1.633E-01	Pulse	0.30	3
Mg			2	0.680	ug/l	19.35	358.90	4.614E-03	Pulse	0.30	3
Al			2	-0.510	ug/l	-19.65	42.22	5.429E-04	Pulse	0.30	3
K			2	-3.066	ug/l	-28.95	6,001.14	7.715E-02	Pulse	0.30	3
Ca			2	-0.902	ug/l	-301.17	68.89	8.851E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	0.048	ug/l	5.98	262.23	3.371E-03	Pulse	0.30	3
Cr			2	-0.001	ug/l	-1434.93	238.89	3.072E-03	Pulse	0.30	3
Mn			2	-0.005	ug/l	-118.58	34.45	4.427E-04	Pulse	0.30	3
Fe			2	-0.014	ug/l	-202.39	1,437.86	1.848E-02	Pulse	0.30	3
Co			2	-0.003	ug/l	-40.69	25.56	3.286E-04	Pulse	0.30	3
Ni			2	-0.009	ug/l	-61.17	21.11	2.716E-04	Pulse	0.30	3
Cu			2	-0.003	ug/l	-135.28	160.01	2.057E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.944	ug/l	-0.26	64.44	8.284E-04	Pulse	0.30	3
As			2	-0.002	ug/l	-323.88	6.33	8.145E-05	Pulse	1.00	3
Cd			2	-0.002	ug/l	-82.25	2.22	4.443E-06	Pulse	0.30	3
Sn			2	0.003	ug/l	537.68	200.00	4.009E-04	Pulse	0.30	3
Se			3	-0.003	ug/l	-581.11	2.27	3.990E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,510,163.10	0.07	112.5	Pulse	0.10	3
1	Sc		2,667,970.27	0.38	109.9	Pulse	0.10	3
1	Ge		525,614.00	0.71	111.2	Pulse	0.10	3
1	Ge		723,896.47	0.43	110.8	Pulse	0.10	3
1	Rh		3,581,989.63	0.50	110.7	Pulse	0.10	3
1	In		3,853,071.80	0.32	110.2	Pulse	0.10	3
1	Tb		5,715,692.00	1.39	116.8	Analog	0.10	3
1	Ho		516,345.08	1.53	108.4	Pulse	0.10	3
1	Bi		3,352,974.64	0.50	109.0	Pulse	0.10	3
2	Sc		77,791.17	0.27	105.4	Pulse	0.30	3
2	Ge		49,402.21	0.61	107.2	Pulse	0.30	3
2	Ge		74,698.50	0.54	107.7	Pulse	0.30	3
2	Rh		1,616,579.13	0.45	107.6	Pulse	0.30	3
2	In		499,009.24	0.38	105.5	Pulse	0.30	3
2	Tb		2,108,506.23	0.34	104.5	Pulse	0.30	3
2	Ho		206,749.47	0.21	104.7	Pulse	0.30	3
2	Bi		1,480,801.16	0.38	104.1	Pulse	0.30	3
3	Sc		58,275.85	0.30	106.0	Pulse	0.30	3
3	Ge		37,523.04	1.05	106.1	Pulse	0.30	3
3	Ge		56,674.82	1.25	104.8	Pulse	0.30	3
3	Rh		638,092.00	0.68	103.6	Pulse	0.30	3
3	Tb		1,052,109.54	0.70	101.2	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 16:05
Sample Name	jc71728-6 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.005	ug/l	-32.05	5.33	2.126E-06	Pulse	0.25	3
B			1	7.332	ug/l	2.56	39,535.18	1.587E-02	Pulse	0.15	3
Ca			1	37.493	ug/l	2.79	39,902.06	1.543E-02	Pulse	0.10	3
Sr			1	0.156	ug/l	1.95	3,703.90	1.062E-03	Pulse	0.10	3
Mo			1	0.165	ug/l	6.15	696.70	1.997E-04	Pulse	0.10	3
Ag			1	0.019	ug/l	5.15	260.01	6.875E-05	Pulse	0.10	3
Sn			1	1.772	ug/l	1.62	10,123.62	2.677E-03	Pulse	0.10	3
Sb			1	0.189	ug/l	3.81	1,753.50	3.030E-04	Pulse	0.10	3
Ba			1	0.425	ug/l	17.43	1,386.79	2.396E-04	Pulse	0.10	3
Tl			1	0.025	ug/l	15.25	630.04	1.846E-04	Pulse	0.10	3
Pb			1	0.044	ug/l	32.03	430.02	1.260E-04	Pulse	0.10	3
Pb			1	0.031	ug/l	34.88	326.68	9.569E-05	Pulse	0.10	3
Pb			1	0.039	ug/l	4.37	1,586.76	4.649E-04	Pulse	0.10	3
Na			2	191.742	ug/l	0.74	81,262.97	1.090E+00	Pulse	0.30	3
Mg			2	9.375	ug/l	2.07	1,779.01	2.387E-02	Pulse	0.30	3
Al			2	4.199	ug/l	11.26	308.90	4.143E-03	Pulse	0.30	3
K			2	-6.733	ug/l	-19.89	5,693.25	7.637E-02	Pulse	0.30	3
Ca			2	51.369	ug/l	20.39	347.79	4.673E-03	Pulse	0.30	3
Ti			2	0.130	ug/l	35.44	5.56	7.474E-05	Pulse	0.30	3
V			2	0.417	ug/l	6.44	738.91	9.914E-03	Pulse	0.30	3
Cr			2	1.017	ug/l	5.81	2,314.64	3.105E-02	Pulse	0.30	3
Mn			2	0.415	ug/l	5.39	437.79	5.874E-03	Pulse	0.30	3
Fe			2	13.142	ug/l	1.45	24,034.26	3.225E-01	Pulse	0.30	3
Co			2	0.007	ug/l	27.55	66.66	8.952E-04	Pulse	0.30	3
Ni			2	0.344	ug/l	20.33	373.34	5.017E-03	Pulse	0.30	3
Cu			2	1.607	ug/l	5.77	4,517.34	6.064E-02	Pulse	0.30	3
Zn			2	-0.159	ug/l	-34.69	686.69	9.211E-03	Pulse	0.30	3
As			2	0.078	ug/l	84.75	21.00	2.817E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.004	ug/l	143.35	6.67	1.403E-05	Pulse	0.30	3
Sn			2	1.432	ug/l	5.17	1,717.89	3.614E-03	Pulse	0.30	3
Se			3	0.056	ug/l	32.36	4.33	7.053E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,491,719.62	0.93	111.6	Pulse	0.10	3
1	Sc		2,586,354.23	0.34	106.5	Pulse	0.10	3
1	Ge		561,529.34	1.90	118.8	Pulse	0.10	3
1	Ge		758,742.65	1.80	116.2	Pulse	0.10	3
1	Rh		3,488,317.14	0.27	107.8	Pulse	0.10	3
1	In		3,782,114.10	0.55	108.2	Pulse	0.10	3
1	Tb		5,786,957.62	0.43	118.3	Analog	0.10	3
1	Ho		522,767.03	0.54	109.7	Pulse	0.10	3
1	Bi		3,413,192.87	0.31	111.0	Pulse	0.10	3
2	Sc		74,530.84	1.29	101.0	Pulse	0.30	3
2	Ge		51,851.81	0.48	112.5	Pulse	0.30	3
2	Ge		79,051.19	1.25	113.9	Pulse	0.30	3
2	Rh		1,574,385.49	0.45	104.8	Pulse	0.30	3
2	In		475,323.83	0.19	100.5	Pulse	0.30	3
2	Tb		2,092,463.94	0.46	103.7	Pulse	0.30	3
2	Ho		205,099.40	0.62	103.8	Pulse	0.30	3
2	Bi		1,485,333.10	0.07	104.4	Pulse	0.30	3
3	Sc		56,659.19	0.63	103.1	Pulse	0.30	3
3	Ge		41,348.91	1.33	116.9	Pulse	0.30	3
3	Ge		61,500.74	1.39	113.7	Pulse	0.30	3
3	Rh		618,948.15	0.88	100.5	Pulse	0.30	3
3	Tb		1,037,405.51	0.45	99.8	Pulse	0.30	3

Quantitation Report

File Name	042SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 16:10
Sample Name	jc71729-13
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.055	ug/l	11.13	254.68	1.012E-04	Pulse	0.25	3
B			1	6.456	ug/l	2.77	37,136.40	1.476E-02	Pulse	0.15	3
Ca			1	56.088	ug/l	4.40	47,538.63	1.831E-02	Pulse	0.10	3
Sr			1	7.264	ug/l	1.34	144,694.55	4.152E-02	Pulse	0.10	3
Mo			1	0.016	ug/l	77.95	113.34	3.251E-05	Pulse	0.10	3
Ag			1	0.010	ug/l	59.53	170.01	4.445E-05	Pulse	0.10	3
Sn			1	0.778	ug/l	7.76	3,883.95	1.015E-03	Pulse	0.10	3
Sb			1	0.115	ug/l	14.58	1,173.43	2.020E-04	Pulse	0.10	3
Ba			1	3.462	ug/l	2.65	11,024.31	1.898E-03	Pulse	0.10	3
Tl			1	0.003	ug/l	114.82	180.01	5.342E-05	Pulse	0.10	3
Pb			1	0.018	ug/l	74.58	253.35	7.505E-05	Pulse	0.10	3
Pb			1	0.025	ug/l	75.07	290.01	8.607E-05	Pulse	0.10	3
Pb			1	0.027	ug/l	14.25	1,243.40	3.687E-04	Pulse	0.10	3
Na			2	176.560	ug/l	1.40	75,787.92	1.010E+00	Pulse	0.30	3
Mg			2	15.791	ug/l	1.93	2,946.96	3.928E-02	Pulse	0.30	3
Al			2	11.939	ug/l	10.34	711.14	9.483E-03	Pulse	0.30	3
K			2	-4.751	ug/l	-60.26	5,922.25	7.893E-02	Pulse	0.30	3
Ca			2	92.377	ug/l	8.99	570.02	7.594E-03	Pulse	0.30	3
Ti			2	8.857	ug/l	169.44	382.36	5.100E-03	Pulse	0.30	3
V			2	0.358	ug/l	5.88	654.47	8.721E-03	Pulse	0.30	3
Cr			2	0.389	ug/l	15.11	1,035.60	1.381E-02	Pulse	0.30	3
Mn			2	0.593	ug/l	3.44	612.24	8.158E-03	Pulse	0.30	3
Fe			2	2.671	ug/l	62.31	6,079.90	8.076E-02	Pulse	0.30	3
Co			2	0.140	ug/l	3.59	537.79	7.166E-03	Pulse	0.30	3
Ni			2	1.114	ug/l	7.59	1,134.50	1.513E-02	Pulse	0.30	3
Cu			2	0.169	ug/l	6.17	631.13	8.413E-03	Pulse	0.30	3
Zn			2	-0.206	ug/l	-51.79	674.47	8.984E-03	Pulse	0.30	3
As			2	0.039	ug/l	22.18	14.00	1.864E-04	Pulse	1.00	3
Cd			2	-0.004	ug/l	-178.47	2.22	4.628E-06	Pulse	0.30	3
Sn			2	0.401	ug/l	4.32	616.69	1.292E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.073	ug/l	17.29	5.13	7.918E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,515,932.29	0.36	112.7	Pulse	0.10	3
1	Sc		2,596,110.43	1.15	106.9	Pulse	0.10	3
1	Ge		567,835.13	0.80	120.1	Pulse	0.10	3
1	Ge		766,424.96	0.66	117.3	Pulse	0.10	3
1	Rh		3,484,747.66	0.35	107.7	Pulse	0.10	3
1	In		3,826,501.14	0.27	109.4	Pulse	0.10	3
1	Tb		5,808,630.95	0.38	118.7	Analog	0.10	3
1	Ho		524,024.92	1.19	110.0	Pulse	0.10	3
1	Bi		3,372,377.97	0.40	109.6	Pulse	0.10	3
2	Sc		75,040.89	1.18	101.7	Pulse	0.30	3
2	Ge		52,528.48	1.33	114.0	Pulse	0.30	3
2	Ge		79,577.04	0.69	114.7	Pulse	0.30	3
2	Rh		1,580,167.89	0.74	105.2	Pulse	0.30	3
2	In		477,405.55	1.07	101.0	Pulse	0.30	3
2	Tb		2,094,273.87	0.90	103.8	Pulse	0.30	3
2	Ho		206,257.96	0.23	104.4	Pulse	0.30	3
2	Bi		1,472,902.69	0.59	103.5	Pulse	0.30	3
3	Sc		57,312.48	1.26	104.3	Pulse	0.30	3
3	Ge		43,839.85	0.29	124.0	Pulse	0.30	3
3	Ge		64,794.51	1.60	119.8	Pulse	0.30	3
3	Rh		623,634.59	0.86	101.2	Pulse	0.30	3
3	Tb		1,039,167.04	0.33	99.9	Pulse	0.30	3

Quantitation Report

File Name	043SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 16:15
Sample Name	mp8590-mb1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.001	ug/l	-37.88	18.67	7.261E-06	Pulse	0.25	3
B			1	4.652	ug/l	4.58	32,092.95	1.248E-02	Pulse	0.15	3
Ca			1	-5.332	ug/l	-1.07	23,474.01	8.781E-03	Pulse	0.10	3
Sr			1	0.015	ug/l	39.64	926.74	2.619E-04	Pulse	0.10	3
Mo			1	0.043	ug/l	32.66	223.34	6.307E-05	Pulse	0.10	3
Ag			1	0.008	ug/l	24.18	150.01	3.862E-05	Pulse	0.10	3
Sn			1	0.666	ug/l	6.46	3,213.76	8.274E-04	Pulse	0.10	3
Sb			1	0.097	ug/l	22.13	1,050.08	1.777E-04	Pulse	0.10	3
Ba			1	0.011	ug/l	79.17	80.00	1.354E-05	Pulse	0.10	3
Tl			1	0.002	ug/l	128.98	173.34	5.097E-05	Pulse	0.10	3
Pb			1	0.015	ug/l	77.39	230.01	6.774E-05	Pulse	0.10	3
Pb			1	0.010	ug/l	42.29	196.68	5.793E-05	Pulse	0.10	3
Pb			1	0.012	ug/l	11.52	853.38	2.513E-04	Pulse	0.10	3
Na			2	6.737	ug/l	5.87	8,505.55	1.116E-01	Pulse	0.30	3
Mg			2	0.682	ug/l	31.97	227.78	2.989E-03	Pulse	0.30	3
Al			2	6.527	ug/l	25.20	437.80	5.749E-03	Pulse	0.30	3
K			2	-9.666	ug/l	-5.40	5,533.19	7.259E-02	Pulse	0.30	3
Ca			2	2.340	ug/l	88.58	90.00	1.180E-03	Pulse	0.30	3
Ti			2	0.152	ug/l	99.55	6.67	8.751E-05	Pulse	0.30	3
V			2	0.360	ug/l	9.32	667.80	8.762E-03	Pulse	0.30	3
Cr			2	0.239	ug/l	14.13	737.80	9.675E-03	Pulse	0.30	3
Mn			2	-0.008	ug/l	-93.17	34.44	4.516E-04	Pulse	0.30	3
Fe			2	0.779	ug/l	3.36	2,828.07	3.710E-02	Pulse	0.30	3
Co			2	0.001	ug/l	40.21	48.89	6.414E-04	Pulse	0.30	3
Ni			2	0.033	ug/l	72.93	71.11	9.344E-04	Pulse	0.30	3
Cu			2	0.046	ug/l	4.90	298.90	3.921E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.454	ug/l	-21.71	593.35	7.782E-03	Pulse	0.30	3
As			2	0.035	ug/l	77.63	13.33	1.753E-04	Pulse	1.00	3
Cd			2	-0.006	ug/l	-57.88	1.11	2.284E-06	Pulse	0.30	3
Sn			2	0.387	ug/l	8.56	606.68	1.261E-03	Pulse	0.30	3
Se			3	0.142	ug/l	29.11	7.40	1.132E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,571,433.92	0.31	115.2	Pulse	0.10	3
1	Sc		2,673,185.27	0.07	110.1	Pulse	0.10	3
1	Ge		581,428.14	1.07	123.0	Pulse	0.10	3
1	Ge		791,076.78	1.18	121.1	Pulse	0.10	3
1	Rh		3,539,580.15	0.36	109.4	Pulse	0.10	3
1	In		3,885,360.08	0.58	111.1	Pulse	0.10	3
1	Tb		5,911,473.45	0.68	120.8	Analog	0.10	3
1	Ho		529,114.18	0.71	111.1	Pulse	0.10	3
1	Bi		3,395,821.41	0.57	110.4	Pulse	0.10	3
2	Sc		76,229.72	0.79	103.3	Pulse	0.30	3
2	Ge		53,204.13	1.96	115.5	Pulse	0.30	3
2	Ge		81,521.02	0.63	117.5	Pulse	0.30	3
2	Rh		1,604,013.37	0.01	106.8	Pulse	0.30	3
2	In		480,869.85	0.97	101.7	Pulse	0.30	3
2	Tb		2,109,897.76	0.33	104.6	Pulse	0.30	3
2	Ho		207,281.39	0.95	104.9	Pulse	0.30	3
2	Bi		1,477,597.41	0.61	103.8	Pulse	0.30	3
3	Sc		57,786.35	1.18	105.1	Pulse	0.30	3
3	Ge		43,541.20	2.20	123.1	Pulse	0.30	3
3	Ge		65,504.06	1.53	121.1	Pulse	0.30	3
3	Rh		632,574.26	1.38	102.7	Pulse	0.30	3
3	Tb		1,049,510.23	0.78	100.9	Pulse	0.30	3

Quantitation Report

File Name	044SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 16:20
Sample Name	mp8590-b1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	73.613	ug/l	1.10	302,635.15	1.219E-01	Pulse	0.25	3
B			1	86.721	ug/l	0.90	288,377.50	1.162E-01	Pulse	0.15	3
Ca			1	1630.431	ug/l	0.81	677,422.96	2.627E-01	Pulse	0.10	3
Sr			1	84.870	ug/l	0.25	1,643,550.13	4.832E-01	Pulse	0.10	3
Mo			1	84.392	ug/l	0.91	323,296.82	9.506E-02	Pulse	0.10	3
Ag			1	78.402	ug/l	0.59	790,545.79	2.111E-01	Pulse	0.10	3
Sn			1	83.985	ug/l	0.53	524,788.47	1.401E-01	Pulse	0.10	3
Sb			1	78.399	ug/l	0.68	617,113.52	1.069E-01	Pulse	0.10	3
Ba			1	76.368	ug/l	0.64	240,774.37	4.170E-02	Pulse	0.10	3
Tl			1	82.580	ug/l	0.25	1,615,598.57	4.937E-01	Pulse	0.10	3
Pb			1	83.551	ug/l	0.16	551,961.68	1.687E-01	Pulse	0.10	3
Pb			1	81.919	ug/l	1.10	483,084.61	1.476E-01	Pulse	0.10	3
Pb			1	82.844	ug/l	0.53	2,214,162.58	6.766E-01	Pulse	0.10	3
Na			2	1610.043	ug/l	0.39	635,741.62	8.594E+00	Pulse	0.30	3
Mg			2	1601.923	ug/l	0.16	284,717.98	3.849E+00	Pulse	0.30	3
Al			2	1522.288	ug/l	1.21	77,782.38	1.051E+00	Pulse	0.30	3
K			2	1596.837	ug/l	1.27	158,687.10	2.145E+00	Pulse	0.30	3
Ca			2	2065.704	ug/l	2.00	10,960.38	1.482E-01	Pulse	0.30	3
Ti			2	85.296	ug/l	0.75	3,633.77	4.912E-02	Pulse	0.30	3
V			2	84.202	ug/l	0.32	126,841.46	1.715E+00	Pulse	0.30	3
Cr			2	83.950	ug/l	0.54	170,827.17	2.309E+00	Pulse	0.30	3
Mn			2	80.940	ug/l	1.33	76,728.85	1.037E+00	Pulse	0.30	3
Fe			2	1573.372	ug/l	0.45	2,688,348.29	3.634E+01	Pulse	0.30	3
Co			2	84.757	ug/l	0.67	294,872.54	3.986E+00	Pulse	0.30	3
Ni			2	84.418	ug/l	0.91	82,005.63	1.109E+00	Pulse	0.30	3
Cu			2	83.351	ug/l	1.34	224,140.63	3.030E+00	Pulse	0.30	3
Zn			2	73.098	ug/l	1.44	26,952.21	3.644E-01	Pulse	0.30	3
As			2	79.263	ug/l	1.71	14,379.00	1.944E-01	Pulse	1.00	3
Cd			2	79.680	ug/l	0.66	45,295.53	9.741E-02	Pulse	0.30	3
Sn			2	84.168	ug/l	0.60	88,313.73	1.899E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	59.187	ug/l	3.42	1,824.17	2.929E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,482,102.76	0.33	111.2	Pulse	0.10	3
1	Sc		2,578,979.86	0.25	106.2	Pulse	0.10	3
1	Ge		567,146.15	0.38	120.0	Pulse	0.10	3
1	Ge		769,840.09	0.67	117.9	Pulse	0.10	3
1	Rh		3,401,189.74	0.51	105.1	Pulse	0.10	3
1	In		3,745,694.14	0.28	107.1	Pulse	0.10	3
1	Tb		5,773,612.41	0.97	118.0	Analog	0.10	3
1	Ho		523,580.21	0.70	109.9	Pulse	0.10	3
1	Bi		3,272,353.81	0.16	106.4	Pulse	0.10	3
2	Sc		73,975.16	0.42	100.2	Pulse	0.30	3
2	Ge		52,267.77	1.85	113.4	Pulse	0.30	3
2	Ge		77,566.26	1.13	111.8	Pulse	0.30	3
2	Rh		1,540,323.24	0.34	102.6	Pulse	0.30	3
2	In		464,998.01	0.81	98.3	Pulse	0.30	3
2	Tb		2,051,240.75	0.30	101.7	Pulse	0.30	3
2	Ho		203,685.46	0.05	103.1	Pulse	0.30	3
2	Bi		1,425,822.10	0.32	100.2	Pulse	0.30	3
3	Sc		56,620.08	0.39	103.0	Pulse	0.30	3
3	Ge		41,602.89	2.10	117.7	Pulse	0.30	3
3	Ge		62,318.24	2.90	115.2	Pulse	0.30	3
3	Rh		610,369.37	0.16	99.1	Pulse	0.30	3
3	Tb		1,035,342.29	0.22	99.6	Pulse	0.30	3

Quantitation Report

File Name	045_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 16:25
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	47.231	ug/l	1.05	378,808.51	1.565E-01	Pulse	0.25	3
B			1	100.729	ug/l	1.54	632,301.26	2.612E-01	Pulse	0.15	3
Ca			1	5049.892	ug/l	0.76	4,078,310.46	1.577E+00	Pulse	0.10	3
Sr			1	52.550	ug/l	0.55	2,020,782.99	5.984E-01	Pulse	0.10	3
Mo			1	51.743	ug/l	0.52	393,640.33	1.166E-01	Pulse	0.10	3
Ag			1	48.366	ug/l	0.29	970,305.87	2.604E-01	Pulse	0.10	3
Sn			1	50.399	ug/l	0.81	626,811.85	1.682E-01	Pulse	0.10	3
Sb			1	48.490	ug/l	0.62	763,496.84	1.322E-01	Pulse	0.10	3
Ba			1	47.050	ug/l	0.25	296,726.53	5.138E-02	Pulse	0.10	3
Tl			1	51.357	ug/l	0.19	1,965,763.93	6.141E-01	Pulse	0.10	3
Pb			1	51.559	ug/l	0.04	666,386.14	2.082E-01	Pulse	0.10	3
Pb			1	50.584	ug/l	0.77	583,593.50	1.823E-01	Pulse	0.10	3
Pb			1	51.011	ug/l	0.41	2,667,266.70	8.332E-01	Pulse	0.10	3
Na			2	4921.323	ug/l	0.74	3,968,988.32	5.215E+01	Pulse	0.30	3
Mg			2	4892.528	ug/l	0.87	1,788,769.86	2.350E+01	Pulse	0.30	3
Al			2	4721.444	ug/l	0.52	495,914.44	6.516E+00	Pulse	0.30	3
K			2	4975.876	ug/l	0.66	983,638.71	1.292E+01	Pulse	0.30	3
Ca			2	5252.069	ug/l	0.91	57,022.50	7.492E-01	Pulse	0.30	3
Ti			2	49.248	ug/l	4.85	4,317.28	5.672E-02	Pulse	0.30	3
V			2	50.492	ug/l	0.06	156,482.76	2.056E+00	Pulse	0.30	3
Cr			2	50.300	ug/l	0.60	210,566.54	2.767E+00	Pulse	0.30	3
Mn			2	49.312	ug/l	0.73	96,180.33	1.264E+00	Pulse	0.30	3
Fe			2	5181.570	ug/l	0.23	18,209,599.28	2.393E+02	Analog	0.30	3
Co			2	50.816	ug/l	0.36	363,766.21	4.780E+00	Pulse	0.30	3
Ni			2	50.125	ug/l	0.45	100,186.90	1.316E+00	Pulse	0.30	3
Cu			2	49.787	ug/l	0.79	275,465.26	3.619E+00	Pulse	0.30	3
Zn			2	47.956	ug/l	1.02	36,147.50	4.750E-01	Pulse	0.30	3
As			2	51.626	ug/l	0.50	19,269.66	2.532E-01	Pulse	1.00	3
Cd			2	50.020	ug/l	0.26	58,166.18	1.223E-01	Pulse	0.30	3
Sn			2	50.666	ug/l	1.22	108,710.70	2.286E-01	Pulse	0.30	3
Se			3	48.163	ug/l	0.17	2,678.69	4.764E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,421,235.82	0.69	108.5	Pulse	0.10	3
1	Sc		2,585,730.53	0.14	106.5	Pulse	0.10	3
1	Ge		509,046.99	1.08	107.7	Pulse	0.10	3

Quantitation Report

1	Ge		708,347.57	0.99	108.5	Pulse	0.10	3
1	Rh		3,377,142.87	0.26	104.4	Pulse	0.10	3
1	In		3,726,370.55	0.16	106.6	Pulse	0.10	3
1	Tb		5,774,964.91	0.62	118.0	Analog	0.10	3
1	Ho		515,421.80	0.59	108.2	Pulse	0.10	3
1	Bi		3,201,160.99	0.22	104.1	Pulse	0.10	3
2	Sc		76,107.99	0.12	103.1	Pulse	0.30	3
2	Ge		47,930.05	0.60	104.0	Pulse	0.30	3
2	Ge		72,502.20	0.87	104.5	Pulse	0.30	3
2	Rh		1,536,194.49	0.27	102.3	Pulse	0.30	3
2	In		475,597.08	0.93	100.6	Pulse	0.30	3
2	Tb		2,050,628.81	1.09	101.7	Pulse	0.30	3
2	Ho		203,752.67	1.53	103.2	Pulse	0.30	3
2	Bi		1,424,814.18	0.35	100.1	Pulse	0.30	3
3	Sc		57,544.27	0.51	104.7	Pulse	0.30	3
3	Ge		37,123.25	0.82	105.0	Pulse	0.30	3
3	Ge		56,223.11	0.48	104.0	Pulse	0.30	3
3	Rh		618,914.04	0.35	100.5	Pulse	0.30	3
3	Tb		1,058,183.46	0.57	101.8	Pulse	0.30	3

Quantitation Report

File Name	046_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 16:30
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	85.32	44.00	1.800E-05	Pulse	0.25	3
B			1	3.007	ug/l	5.47	34,700.12	1.420E-02	Pulse	0.15	3
Ca			1	-8.634	ug/l	-1.05	18,047.07	6.929E-03	Pulse	0.10	3
Sr			1	-0.002	ug/l	-129.59	536.70	1.534E-04	Pulse	0.10	3
Mo			1	0.033	ug/l	12.01	313.35	8.953E-05	Pulse	0.10	3
Ag			1	0.007	ug/l	8.13	210.01	5.524E-05	Pulse	0.10	3
Sn			1	0.207	ug/l	1.89	1,540.13	4.050E-04	Pulse	0.10	3
Sb			1	0.044	ug/l	10.73	950.06	1.663E-04	Pulse	0.10	3
Ba			1	-0.002	ug/l	-119.60	30.00	5.259E-06	Pulse	0.10	3
Tl			1	0.015	ug/l	4.54	693.37	2.113E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	46.07	233.34	7.108E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	109.29	183.34	5.583E-05	Pulse	0.10	3
Pb			1	0.010	ug/l	3.11	1,023.39	3.119E-04	Pulse	0.10	3
Na			2	1.265	ug/l	13.39	6,827.00	8.933E-02	Pulse	0.30	3
Mg			2	0.085	ug/l	52.35	134.45	1.759E-03	Pulse	0.30	3
Al			2	-0.365	ug/l	-83.56	56.66	7.419E-04	Pulse	0.30	3
K			2	-5.140	ug/l	-36.01	5,485.40	7.180E-02	Pulse	0.30	3
Ca			2	-4.869	ug/l	-19.33	24.44	3.200E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	0.007	ug/l	94.52	132.22	1.730E-03	Pulse	0.30	3
Cr			2	0.003	ug/l	461.23	251.12	3.285E-03	Pulse	0.30	3
Mn			2	-0.004	ug/l	-111.10	35.56	4.657E-04	Pulse	0.30	3
Fe			2	0.201	ug/l	24.14	2,170.17	2.840E-02	Pulse	0.30	3
Co			2	0.000	ug/l	767.26	45.56	5.969E-04	Pulse	0.30	3
Ni			2	-0.001	ug/l	-503.80	35.56	4.654E-04	Pulse	0.30	3
Cu			2	-0.005	ug/l	-78.75	144.45	1.890E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.919	ug/l	-2.77	82.22	1.077E-03	Pulse	0.30	3
As			2	0.000	ug/l	721.50	7.00	9.165E-05	Pulse	1.00	3
Cd			2	0.003	ug/l	154.75	7.78	1.588E-05	Pulse	0.30	3
Sn			2	0.047	ug/l	44.50	294.45	6.000E-04	Pulse	0.30	3
Se			3	0.003	ug/l	403.31	2.60	4.605E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,443,613.83	0.23	109.5	Pulse	0.10	3
1	Sc		2,604,701.63	0.19	107.3	Pulse	0.10	3
1	Ge		511,433.46	0.44	108.2	Pulse	0.10	3
1	Ge		708,280.38	0.91	108.4	Pulse	0.10	3
1	Rh		3,500,643.70	0.45	108.2	Pulse	0.10	3
1	In		3,803,395.01	0.90	108.8	Pulse	0.10	3
1	Tb		5,715,614.50	0.78	116.8	Analog	0.10	3
1	Ho		517,387.75	0.56	108.6	Pulse	0.10	3
1	Bi		3,280,714.95	0.67	106.7	Pulse	0.10	3
2	Sc		76,421.66	0.61	103.5	Pulse	0.30	3
2	Ge		48,693.39	1.20	105.7	Pulse	0.30	3
2	Ge		73,373.66	0.59	105.8	Pulse	0.30	3
2	Rh		1,596,366.19	0.43	106.3	Pulse	0.30	3
2	In		490,522.00	0.42	103.7	Pulse	0.30	3
2	Tb		2,079,993.88	0.40	103.1	Pulse	0.30	3
2	Ho		205,478.37	1.16	104.0	Pulse	0.30	3
2	Bi		1,462,409.18	1.09	102.8	Pulse	0.30	3
3	Sc		57,969.22	0.31	105.5	Pulse	0.30	3
3	Ge		37,186.75	0.78	105.2	Pulse	0.30	3
3	Ge		56,464.95	0.59	104.4	Pulse	0.30	3
3	Rh		634,878.74	0.24	103.1	Pulse	0.30	3
3	Tb		1,049,438.81	0.16	100.9	Pulse	0.30	3

Quantitation Report

File Name	047SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 16:35
Sample Name	jc71729-13
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.046	ug/l	23.92	213.34	8.660E-05	Pulse	0.25	3
B			1	7.667	ug/l	5.11	40,152.19	1.629E-02	Pulse	0.15	3
Ca			1	53.053	ug/l	2.21	45,479.36	1.784E-02	Pulse	0.10	3
Sr			1	7.286	ug/l	1.29	142,348.51	4.165E-02	Pulse	0.10	3
Mo			1	0.037	ug/l	28.23	193.34	5.653E-05	Pulse	0.10	3
Ag			1	0.013	ug/l	49.94	196.67	5.257E-05	Pulse	0.10	3
Sn			1	0.823	ug/l	3.31	4,080.68	1.090E-03	Pulse	0.10	3
Sb			1	0.112	ug/l	9.45	1,136.76	1.982E-04	Pulse	0.10	3
Ba			1	3.409	ug/l	1.85	10,724.01	1.869E-03	Pulse	0.10	3
Tl			1	0.013	ug/l	20.59	386.69	1.162E-04	Pulse	0.10	3
Pb			1	0.026	ug/l	35.13	300.02	9.016E-05	Pulse	0.10	3
Pb			1	0.024	ug/l	30.63	280.01	8.418E-05	Pulse	0.10	3
Pb			1	0.032	ug/l	8.50	1,366.75	4.110E-04	Pulse	0.10	3
Na			2	173.217	ug/l	1.42	72,722.55	9.924E-01	Pulse	0.30	3
Mg			2	15.153	ug/l	5.64	2,765.81	3.774E-02	Pulse	0.30	3
Al			2	8.190	ug/l	20.06	505.57	6.897E-03	Pulse	0.30	3
K			2	-8.230	ug/l	-5.89	5,455.40	7.444E-02	Pulse	0.30	3
Ca			2	93.471	ug/l	2.29	562.24	7.672E-03	Pulse	0.30	3
Ti			2	0.079	ug/l	100.07	3.33	4.535E-05	Pulse	0.30	3
V			2	0.187	ug/l	7.05	384.45	5.247E-03	Pulse	0.30	3
Cr			2	0.362	ug/l	8.69	956.71	1.306E-02	Pulse	0.30	3
Mn			2	0.694	ug/l	8.53	692.24	9.443E-03	Pulse	0.30	3
Fe			2	1.418	ug/l	5.82	3,799.37	5.184E-02	Pulse	0.30	3
Co			2	0.150	ug/l	9.50	557.79	7.612E-03	Pulse	0.30	3
Ni			2	1.150	ug/l	12.09	1,143.38	1.560E-02	Pulse	0.30	3
Cu			2	0.167	ug/l	4.49	608.91	8.308E-03	Pulse	0.30	3
Zn			2	0.080	ug/l	85.67	760.03	1.037E-02	Pulse	0.30	3
As			2	0.027	ug/l	44.66	11.33	1.547E-04	Pulse	1.00	3
Cd			2	-0.006	ug/l	-61.50	1.11	2.390E-06	Pulse	0.30	3
Sn			2	0.528	ug/l	3.82	737.80	1.577E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.011	ug/l	108.03	3.00	4.826E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,464,496.35	0.72	110.4	Pulse	0.10	3
1	Sc		2,548,779.02	0.48	105.0	Pulse	0.10	3
1	Ge		546,048.78	0.72	115.5	Pulse	0.10	3
1	Ge		745,940.82	0.52	114.2	Pulse	0.10	3
1	Rh		3,417,988.70	0.47	105.6	Pulse	0.10	3
1	In		3,742,238.41	0.17	107.0	Pulse	0.10	3
1	Tb		5,739,049.50	1.47	117.3	Analog	0.10	3
1	Ho		516,454.13	0.14	108.4	Pulse	0.10	3
1	Bi		3,325,291.31	0.60	108.1	Pulse	0.10	3
2	Sc		73,285.46	0.53	99.3	Pulse	0.30	3
2	Ge		51,185.48	0.80	111.1	Pulse	0.30	3
2	Ge		77,666.86	2.11	111.9	Pulse	0.30	3
2	Rh		1,560,596.50	0.44	103.9	Pulse	0.30	3
2	In		467,858.32	1.01	99.0	Pulse	0.30	3
2	Tb		2,046,627.14	0.36	101.5	Pulse	0.30	3
2	Ho		202,941.32	0.98	102.7	Pulse	0.30	3
2	Bi		1,458,087.10	0.25	102.5	Pulse	0.30	3
3	Sc		56,371.49	1.04	102.6	Pulse	0.30	3
3	Ge		41,117.20	1.15	116.3	Pulse	0.30	3
3	Ge		62,102.02	1.34	114.8	Pulse	0.30	3
3	Rh		622,454.70	0.48	101.0	Pulse	0.30	3
3	Tb		1,039,850.55	0.49	100.0	Pulse	0.30	3

Quantitation Report

File Name	048SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 16:40
Sample Name	mp8590-s1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	75.443	ug/l	0.66	292,720.83	1.250E-01	Pulse	0.25	3
B			1	274.850	ug/l	0.85	829,024.31	3.539E-01	Pulse	0.15	3
Ca			1	83947.276	ug/l	0.60	32,985,458.67	1.304E+01	Analog	0.10	3
Sr			1	659.731	ug/l	0.68	11,849,553.57	3.755E+00	Analog	0.10	3
Mo			1	91.339	ug/l	0.70	324,638.26	1.029E-01	Pulse	0.10	3
Ag			1	75.305	ug/l	0.53	720,875.93	2.027E-01	Pulse	0.10	3
Sn			1	85.790	ug/l	0.85	508,954.25	1.431E-01	Pulse	0.10	3
Sb			1	79.461	ug/l	1.15	606,977.80	1.083E-01	Pulse	0.10	3
Ba			1	186.806	ug/l	0.99	571,454.88	1.020E-01	Pulse	0.10	3
Tl			1	84.889	ug/l	0.67	1,545,010.03	5.075E-01	Pulse	0.10	3
Pb			1	86.438	ug/l	0.24	531,240.00	1.745E-01	Pulse	0.10	3
Pb			1	84.573	ug/l	0.64	463,976.25	1.524E-01	Pulse	0.10	3
Pb			1	85.441	ug/l	0.35	2,124,403.76	6.978E-01	Pulse	0.10	3
Na			2	69050.282	ug/l	0.47	25,994,691.19	3.654E+02	Analog	0.30	3
Mg			2	13673.821	ug/l	0.94	2,336,421.22	3.284E+01	Pulse	0.30	3
Al			2	1595.279	ug/l	1.30	78,381.38	1.102E+00	Pulse	0.30	3
K			2	9782.967	ug/l	0.80	903,927.12	1.271E+01	Pulse	0.30	3
Ca			2	82786.433	ug/l	0.91	419,579.69	5.898E+00	Pulse	0.30	3
Ti			2	86.904	ug/l	1.94	3,560.42	5.005E-02	Pulse	0.30	3
V			2	86.834	ug/l	0.94	125,785.88	1.768E+00	Pulse	0.30	3
Cr			2	91.896	ug/l	1.23	179,808.14	2.528E+00	Pulse	0.30	3
Mn			2	576.256	ug/l	0.68	525,095.83	7.381E+00	Pulse	0.30	3
Fe			2	6004.014	ug/l	1.39	9,861,952.11	1.386E+02	Analog	0.30	3
Co			2	83.557	ug/l	0.43	279,556.44	3.930E+00	Pulse	0.30	3
Ni			2	85.052	ug/l	0.57	79,455.96	1.117E+00	Pulse	0.30	3
Cu			2	81.513	ug/l	1.04	210,800.92	2.963E+00	Pulse	0.30	3
Zn			2	97.384	ug/l	0.48	34,295.86	4.821E-01	Pulse	0.30	3
As			2	243.040	ug/l	0.70	42,388.26	5.958E-01	Pulse	1.00	3
Cd			2	77.813	ug/l	0.90	42,544.68	9.513E-02	Pulse	0.30	3
Sn			2	86.120	ug/l	0.35	86,902.86	1.943E-01	Pulse	0.30	3
Se			3	57.043	ug/l	1.90	1,745.76	2.823E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,342,591.08	0.88	104.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,529,691.58	0.78	104.2	Pulse	0.10	3
1	Ge		554,247.42	0.62	117.3	Pulse	0.10	3
1	Ge		763,214.34	0.75	116.9	Pulse	0.10	3
1	Rh		3,155,507.24	0.34	97.5	Pulse	0.10	3
1	In		3,556,117.57	0.14	101.7	Pulse	0.10	3
1	Tb		5,603,090.33	0.93	114.5	Analog	0.10	3
1	Ho		510,637.11	0.41	107.2	Pulse	0.10	3
1	Bi		3,044,320.37	0.34	99.0	Pulse	0.10	3
2	Sc		71,140.94	0.64	96.4	Pulse	0.30	3
2	Ge		51,740.34	2.00	112.3	Pulse	0.30	3
2	Ge		78,260.77	1.82	112.8	Pulse	0.30	3
2	Rh		1,434,558.62	0.26	95.5	Pulse	0.30	3
2	In		447,213.11	0.41	94.6	Pulse	0.30	3
2	Tb		2,004,654.50	0.33	99.4	Pulse	0.30	3
2	Ho		198,376.11	0.62	100.4	Pulse	0.30	3
2	Bi		1,333,443.42	0.61	93.7	Pulse	0.30	3
3	Sc		54,764.05	1.28	99.6	Pulse	0.30	3
3	Ge		40,979.12	1.84	115.9	Pulse	0.30	3
3	Ge		61,844.38	1.04	114.4	Pulse	0.30	3
3	Rh		580,009.75	0.11	94.2	Pulse	0.30	3
3	Tb		1,014,704.23	0.45	97.6	Pulse	0.30	3

Quantitation Report

File Name 049SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File
Method Path
Acq Time 8/12/2018 16:45
Sample Name mp8590-s2
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/12/2018 16:24
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	76.086	ug/l	0.97	285,653.29	1.260E-01	Pulse	0.25	3
B			1	273.519	ug/l	1.11	798,365.02	3.522E-01	Pulse	0.15	3
Ca			1	83426.667	ug/l	0.59	32,110,738.69	1.296E+01	Analog	0.10	3
Sr			1	657.191	ug/l	0.62	11,653,224.41	3.741E+00	Analog	0.10	3
Mo			1	90.176	ug/l	0.29	316,417.23	1.016E-01	Pulse	0.10	3
Ag			1	74.576	ug/l	1.60	707,987.23	2.008E-01	Pulse	0.10	3
Sn			1	85.026	ug/l	0.87	500,275.14	1.418E-01	Pulse	0.10	3
Sb			1	78.528	ug/l	1.28	593,538.59	1.071E-01	Pulse	0.10	3
Ba			1	185.477	ug/l	0.97	561,426.14	1.013E-01	Pulse	0.10	3
Tl			1	85.145	ug/l	0.42	1,535,954.72	5.090E-01	Pulse	0.10	3
Pb			1	86.141	ug/l	0.22	524,725.04	1.739E-01	Pulse	0.10	3
Pb			1	84.628	ug/l	0.44	460,166.98	1.525E-01	Pulse	0.10	3
Pb			1	85.598	ug/l	0.13	2,109,492.29	6.991E-01	Pulse	0.10	3
Na			2	68574.494	ug/l	2.14	25,522,533.43	3.629E+02	Analog	0.30	3
Mg			2	13458.226	ug/l	1.26	2,273,617.20	3.233E+01	Pulse	0.30	3
Al			2	1585.094	ug/l	0.85	77,006.57	1.095E+00	Pulse	0.30	3
K			2	9626.243	ug/l	0.61	879,533.92	1.250E+01	Pulse	0.30	3
Ca			2	82286.565	ug/l	0.32	412,353.62	5.862E+00	Pulse	0.30	3
Ti			2	87.435	ug/l	3.17	3,541.53	5.035E-02	Pulse	0.30	3
V			2	85.969	ug/l	0.92	123,130.78	1.751E+00	Pulse	0.30	3
Cr			2	91.280	ug/l	0.60	176,594.51	2.511E+00	Pulse	0.30	3
Mn			2	563.073	ug/l	0.45	507,314.79	7.212E+00	Pulse	0.30	3
Fe			2	5888.857	ug/l	0.38	9,564,107.95	1.360E+02	Analog	0.30	3
Co			2	82.162	ug/l	0.68	271,793.58	3.864E+00	Pulse	0.30	3
Ni			2	83.354	ug/l	1.00	76,990.58	1.095E+00	Pulse	0.30	3
Cu			2	81.214	ug/l	0.27	207,675.48	2.952E+00	Pulse	0.30	3
Zn			2	95.469	ug/l	2.13	33,253.70	4.728E-01	Pulse	0.30	3
As			2	238.642	ug/l	0.88	41,152.14	5.851E-01	Pulse	1.00	3
Cd			2	77.683	ug/l	0.41	41,782.76	9.497E-02	Pulse	0.30	3
Sn			2	85.473	ug/l	0.14	84,848.37	1.929E-01	Pulse	0.30	3
Se			3	57.957	ug/l	1.32	1,733.42	2.868E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,266,771.53	0.83	101.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,477,980.59	0.70	102.1	Pulse	0.10	3
1	Ge		538,834.69	0.38	114.0	Pulse	0.10	3
1	Ge		737,392.41	0.72	112.9	Pulse	0.10	3
1	Rh		3,115,311.52	1.12	96.3	Pulse	0.10	3
1	In		3,527,239.18	1.69	100.9	Pulse	0.10	3
1	Tb		5,544,204.71	0.94	113.3	Analog	0.10	3
1	Ho		503,414.03	0.57	105.7	Pulse	0.10	3
1	Bi		3,017,354.23	0.38	98.1	Pulse	0.10	3
2	Sc		70,340.68	0.80	95.3	Pulse	0.30	3
2	Ge		49,939.33	0.72	108.4	Pulse	0.30	3
2	Ge		75,014.55	0.71	108.1	Pulse	0.30	3
2	Rh		1,409,111.54	0.03	93.8	Pulse	0.30	3
2	In		439,943.73	0.37	93.1	Pulse	0.30	3
2	Tb		1,984,545.27	0.75	98.4	Pulse	0.30	3
2	Ho		196,643.23	0.19	99.6	Pulse	0.30	3
2	Bi		1,317,127.14	0.21	92.6	Pulse	0.30	3
3	Sc		55,130.71	0.24	100.3	Pulse	0.30	3
3	Ge		40,251.67	1.54	113.8	Pulse	0.30	3
3	Ge		60,445.75	2.41	111.8	Pulse	0.30	3
3	Rh		579,021.19	0.52	94.0	Pulse	0.30	3
3	Tb		1,018,899.93	0.93	98.0	Pulse	0.30	3

Quantitation Report

File Name 050SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File
Method Path
Acq Time 8/12/2018 16:50
Sample Name jc71601-5
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/12/2018 16:24
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	147.20	49.33	2.180E-05	Pulse	0.25	3
B			1	190.572	ug/l	0.19	559,146.32	2.474E-01	Pulse	0.15	3
Ca			1	82205.159	ug/l	0.34	31,237,593.70	1.277E+01	Analog	0.10	3
Sr			1	555.285	ug/l	0.29	9,841,418.19	3.161E+00	Analog	0.10	3
Mo			1	1.654	ug/l	6.18	5,844.61	1.877E-03	Pulse	0.10	3
Ag			1	0.022	ug/l	32.31	266.68	7.575E-05	Pulse	0.10	3
Sn			1	0.763	ug/l	3.31	3,487.20	9.893E-04	Pulse	0.10	3
Sb			1	0.747	ug/l	4.78	5,784.63	1.064E-03	Pulse	0.10	3
Ba			1	108.962	ug/l	5.51	323,293.52	5.950E-02	Pulse	0.10	3
Tl			1	0.220	ug/l	11.05	4,110.71	1.349E-03	Pulse	0.10	3
Pb			1	1.578	ug/l	5.85	9,823.64	3.224E-03	Pulse	0.10	3
Pb			1	1.423	ug/l	3.48	7,932.37	2.603E-03	Pulse	0.10	3
Pb			1	1.470	ug/l	2.67	37,025.79	1.215E-02	Pulse	0.10	3
Na			2	67184.373	ug/l	1.43	24,700,507.35	3.555E+02	Analog	0.30	3
Mg			2	11822.464	ug/l	0.60	1,972,958.60	2.840E+01	Pulse	0.30	3
Al			2	85.320	ug/l	7.68	4,175.06	6.011E-02	Pulse	0.30	3
K			2	8038.956	ug/l	0.24	726,526.19	1.046E+01	Pulse	0.30	3
Ca			2	79429.985	ug/l	0.60	393,175.56	5.659E+00	Pulse	0.30	3
Ti			2	1.584	ug/l	11.26	63.33	9.120E-04	Pulse	0.30	3
V			2	1.245	ug/l	6.90	1,859.01	2.677E-02	Pulse	0.30	3
Cr			2	8.406	ug/l	4.47	16,263.45	2.340E-01	Pulse	0.30	3
Mn			2	486.428	ug/l	0.91	432,908.49	6.231E+00	Pulse	0.30	3
Fe			2	4261.102	ug/l	1.26	6,835,882.79	9.839E+01	Analog	0.30	3
Co			2	0.516	ug/l	5.49	1,726.78	2.485E-02	Pulse	0.30	3
Ni			2	3.975	ug/l	3.56	3,660.45	5.268E-02	Pulse	0.30	3
Cu			2	1.319	ug/l	4.49	3,484.85	5.017E-02	Pulse	0.30	3
Zn			2	23.879	ug/l	0.81	8,736.86	1.257E-01	Pulse	0.30	3
As			2	159.889	ug/l	1.52	27,235.94	3.920E-01	Pulse	1.00	3
Cd			2	0.098	ug/l	18.48	56.67	1.288E-04	Pulse	0.30	3
Sn			2	0.388	ug/l	6.01	555.57	1.264E-03	Pulse	0.30	3
Se			3	0.278	ug/l	13.12	11.00	1.805E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,259,988.00	0.23	101.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,446,369.34	0.23	100.7	Pulse	0.10	3
1	Ge		540,688.41	0.49	114.4	Pulse	0.10	3
1	Ge		750,843.19	0.48	115.0	Pulse	0.10	3
1	Rh		3,113,695.47	0.32	96.2	Pulse	0.10	3
1	In		3,525,366.43	0.99	100.8	Pulse	0.10	3
1	Tb		5,444,740.44	5.44	111.3	Mix	0.10	3
1	Ho		502,942.18	0.23	105.6	Pulse	0.10	3
1	Bi		3,047,100.27	0.85	99.1	Pulse	0.10	3
2	Sc		69,481.64	0.84	94.1	Pulse	0.30	3
2	Ge		50,245.79	1.35	109.1	Pulse	0.30	3
2	Ge		75,819.34	1.40	109.3	Pulse	0.30	3
2	Rh		1,407,183.28	0.62	93.7	Pulse	0.30	3
2	In		439,737.59	0.90	93.0	Pulse	0.30	3
2	Tb		1,974,328.19	0.44	97.9	Pulse	0.30	3
2	Ho		195,361.91	0.29	98.9	Pulse	0.30	3
2	Bi		1,316,422.34	0.78	92.5	Pulse	0.30	3
3	Sc		54,281.30	0.64	98.8	Pulse	0.30	3
3	Ge		40,100.29	3.03	113.4	Pulse	0.30	3
3	Ge		60,952.11	2.16	112.7	Pulse	0.30	3
3	Rh		574,341.42	0.61	93.2	Pulse	0.30	3
3	Tb		1,014,511.24	0.05	97.6	Pulse	0.30	3

Quantitation Report

File Name	051SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 16:55
Sample Name	mp8590-sd1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.005	ug/l	409.28	26.67	1.137E-05	Pulse	0.25	3
B			1	203.443	ug/l	0.70	136,105.50	5.802E-02	Pulse	0.15	3
Ca			1	84093.738	ug/l	0.09	6,646,563.03	2.620E+00	Analog	0.10	3
Sr			1	502.063	ug/l	0.23	1,919,509.71	5.717E-01	Pulse	0.10	3
Mo			1	1.479	ug/l	1.32	1,166.75	3.475E-04	Pulse	0.10	3
Ag			1	0.025	ug/l	97.87	113.34	3.034E-05	Pulse	0.10	3
Sn			1	1.533	ug/l	0.73	846.72	2.267E-04	Pulse	0.10	3
Sb			1	0.873	ug/l	15.34	1,603.47	2.835E-04	Pulse	0.10	3
Ba			1	109.968	ug/l	0.22	67,952.57	1.202E-02	Pulse	0.10	3
Tl			1	0.214	ug/l	6.60	946.73	2.922E-04	Pulse	0.10	3
Pb			1	1.675	ug/l	5.81	2,313.60	7.141E-04	Pulse	0.10	3
Pb			1	1.348	ug/l	4.70	1,703.49	5.258E-04	Pulse	0.10	3
Pb			1	1.484	ug/l	3.75	8,337.88	2.573E-03	Pulse	0.10	3
Na			2	67305.458	ug/l	1.33	5,235,886.87	7.129E+01	Analog	0.30	3
Mg			2	12025.039	ug/l	0.91	424,323.08	5.778E+00	Pulse	0.30	3
Al			2	99.963	ug/l	4.33	1,104.49	1.504E-02	Pulse	0.30	3
K			2	8181.995	ug/l	0.63	161,298.43	2.196E+00	Pulse	0.30	3
Ca			2	80635.125	ug/l	1.12	84,442.14	1.150E+00	Pulse	0.30	3
Ti			2	1.181	ug/l	145.34	10.00	1.360E-04	Pulse	0.30	3
V			2	1.019	ug/l	7.86	410.01	5.583E-03	Pulse	0.30	3
Cr			2	7.672	ug/l	2.92	3,324.82	4.527E-02	Pulse	0.30	3
Mn			2	495.637	ug/l	1.16	93,285.11	1.270E+00	Pulse	0.30	3
Fe			2	3991.017	ug/l	0.64	1,354,754.04	1.845E+01	Pulse	0.30	3
Co			2	0.571	ug/l	9.35	436.68	5.946E-03	Pulse	0.30	3
Ni			2	4.415	ug/l	7.25	887.82	1.209E-02	Pulse	0.30	3
Cu			2	1.433	ug/l	7.77	930.59	1.267E-02	Pulse	0.30	3
Zn			2	22.288	ug/l	4.91	2,320.19	3.159E-02	Pulse	0.30	3
As			2	176.905	ug/l	2.86	6,375.92	8.682E-02	Pulse	1.00	3
Cd			2	0.058	ug/l	29.01	11.11	2.338E-05	Pulse	0.30	3
Sn			2	0.087	ug/l	583.19	203.36	4.282E-04	Pulse	0.30	3
Se			3	0.710	ug/l	48.19	6.33	1.131E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,345,954.75	0.30	105.1	Pulse	0.10	3
1	Sc		2,536,762.82	0.45	104.5	Pulse	0.10	3
1	Ge		503,110.60	1.32	106.4	Pulse	0.10	3

Quantitation Report

1	Ge		696,711.21	0.19	106.7	Pulse	0.10	3
1	Rh		3,357,616.93	0.36	103.8	Pulse	0.10	3
1	In		3,735,003.68	0.28	106.8	Pulse	0.10	3
1	Tb		5,655,527.00	0.12	115.6	Analog	0.10	3
1	Ho		506,912.60	0.43	106.4	Pulse	0.10	3
1	Bi		3,240,037.97	0.05	105.3	Pulse	0.10	3
2	Sc		73,442.70	0.21	99.5	Pulse	0.30	3
2	Ge		47,524.43	0.68	103.1	Pulse	0.30	3
2	Ge		72,301.40	1.25	104.2	Pulse	0.30	3
2	Rh		1,520,578.13	0.69	101.2	Pulse	0.30	3
2	In		475,391.50	0.53	100.5	Pulse	0.30	3
2	Tb		2,028,223.95	0.98	100.6	Pulse	0.30	3
2	Ho		202,244.34	0.52	102.4	Pulse	0.30	3
2	Bi		1,428,417.93	0.85	100.4	Pulse	0.30	3
3	Sc		56,991.35	0.48	103.7	Pulse	0.30	3
3	Ge		37,310.33	0.77	105.5	Pulse	0.30	3
3	Ge		56,083.74	0.85	103.7	Pulse	0.30	3
3	Rh		626,219.89	0.33	101.7	Pulse	0.30	3
3	Tb		1,057,250.20	0.18	101.7	Pulse	0.30	3

Quantitation Report

File Name	052SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 17:00
Sample Name	mp8578-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	357.79	24.00	1.018E-05	Pulse	0.25	3
B			1	8.240	ug/l	2.80	40,149.73	1.701E-02	Pulse	0.15	3
Ca			1	-4.305	ug/l	-10.43	21,921.86	8.941E-03	Pulse	0.10	3
Sr			1	0.034	ug/l	15.19	1,246.76	3.727E-04	Pulse	0.10	3
Mo			1	0.067	ug/l	29.35	300.01	8.977E-05	Pulse	0.10	3
Ag			1	0.005	ug/l	22.55	113.33	3.104E-05	Pulse	0.10	3
Sn			1	0.770	ug/l	3.32	3,653.90	1.001E-03	Pulse	0.10	3
Sb			1	0.146	ug/l	8.65	1,380.11	2.441E-04	Pulse	0.10	3
Ba			1	0.030	ug/l	26.77	136.67	2.416E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	44.37	203.34	6.294E-05	Pulse	0.10	3
Pb			1	0.019	ug/l	36.61	246.68	7.636E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	90.00	170.01	5.263E-05	Pulse	0.10	3
Pb			1	0.019	ug/l	18.63	980.05	3.033E-04	Pulse	0.10	3
Na			2	10.093	ug/l	12.12	9,173.69	1.293E-01	Pulse	0.30	3
Mg			2	0.818	ug/l	34.58	235.56	3.314E-03	Pulse	0.30	3
Al			2	6.391	ug/l	6.40	401.12	5.655E-03	Pulse	0.30	3
K			2	-7.390	ug/l	-14.06	5,358.70	7.553E-02	Pulse	0.30	3
Ca			2	5.109	ug/l	43.31	97.78	1.378E-03	Pulse	0.30	3
Ti			2	0.081	ug/l	1.63	3.33	4.693E-05	Pulse	0.30	3
V			2	0.153	ug/l	28.93	322.23	4.543E-03	Pulse	0.30	3
Cr			2	0.293	ug/l	7.19	793.36	1.118E-02	Pulse	0.30	3
Mn			2	0.106	ug/l	19.82	135.56	1.913E-03	Pulse	0.30	3
Fe			2	2.385	ug/l	3.03	5,264.24	7.417E-02	Pulse	0.30	3
Co			2	0.005	ug/l	58.02	58.89	8.314E-04	Pulse	0.30	3
Ni			2	0.062	ug/l	12.73	93.33	1.314E-03	Pulse	0.30	3
Cu			2	0.102	ug/l	22.35	423.34	5.973E-03	Pulse	0.30	3
Zn			2	0.250	ug/l	25.15	794.48	1.120E-02	Pulse	0.30	3
As			2	0.360	ug/l	4.72	69.00	9.725E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.003	ug/l	-99.09	2.22	4.867E-06	Pulse	0.30	3
Sn			2	0.420	ug/l	2.14	608.91	1.334E-03	Pulse	0.30	3
Se			3	0.100	ug/l	36.70	5.67	9.234E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,359,874.29	0.53	105.7	Pulse	0.10	3
1	Sc		2,451,952.52	0.88	101.0	Pulse	0.10	3
1	Ge		547,294.86	0.43	115.8	Pulse	0.10	3
1	Ge		755,185.85	1.04	115.6	Pulse	0.10	3
1	Rh		3,345,409.22	0.62	103.4	Pulse	0.10	3
1	In		3,651,129.98	0.42	104.4	Pulse	0.10	3
1	Tb		5,654,397.21	0.53	115.6	Analog	0.10	3
1	Ho		505,108.19	0.83	106.0	Pulse	0.10	3
1	Bi		3,231,179.12	0.14	105.1	Pulse	0.10	3
2	Sc		70,963.37	1.62	96.1	Pulse	0.30	3
2	Ge		50,095.44	1.97	108.7	Pulse	0.30	3
2	Ge		75,621.78	0.39	109.0	Pulse	0.30	3
2	Rh		1,519,973.03	0.64	101.2	Pulse	0.30	3
2	In		456,401.74	0.77	96.5	Pulse	0.30	3
2	Tb		2,013,930.69	0.57	99.8	Pulse	0.30	3
2	Ho		198,359.25	0.91	100.4	Pulse	0.30	3
2	Bi		1,422,327.48	0.77	99.9	Pulse	0.30	3
3	Sc		55,565.51	1.51	101.1	Pulse	0.30	3
3	Ge		40,803.04	2.74	115.4	Pulse	0.30	3
3	Ge		61,517.58	2.45	113.8	Pulse	0.30	3
3	Rh		612,521.28	0.43	99.4	Pulse	0.30	3
3	Tb		1,030,330.10	0.47	99.1	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 17:05
Sample Name	mp8578-b2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	73.436	ug/l	0.64	288,468.58	1.216E-01	Pulse	0.25	3
B			1	87.521	ug/l	1.60	277,928.98	1.172E-01	Pulse	0.15	3
Ca			1	1633.180	ug/l	0.26	648,142.11	2.631E-01	Pulse	0.10	3
Sr			1	84.312	ug/l	0.69	1,590,484.40	4.801E-01	Pulse	0.10	3
Mo			1	83.025	ug/l	1.74	309,826.23	9.352E-02	Pulse	0.10	3
Ag			1	76.335	ug/l	0.74	749,131.29	2.055E-01	Pulse	0.10	3
Sn			1	83.269	ug/l	0.43	506,400.43	1.389E-01	Pulse	0.10	3
Sb			1	77.478	ug/l	1.57	597,818.57	1.056E-01	Pulse	0.10	3
Ba			1	75.859	ug/l	1.30	234,426.36	4.142E-02	Pulse	0.10	3
Tl			1	82.276	ug/l	0.47	1,581,867.06	4.919E-01	Pulse	0.10	3
Pb			1	82.453	ug/l	0.94	535,305.77	1.665E-01	Pulse	0.10	3
Pb			1	81.785	ug/l	0.71	473,969.15	1.474E-01	Pulse	0.10	3
Pb			1	82.419	ug/l	0.61	2,164,768.55	6.732E-01	Pulse	0.10	3
Na			2	1597.664	ug/l	0.58	604,956.09	8.529E+00	Pulse	0.30	3
Mg			2	1592.988	ug/l	0.73	271,479.82	3.827E+00	Pulse	0.30	3
Al			2	1513.788	ug/l	2.66	74,158.26	1.046E+00	Pulse	0.30	3
K			2	1579.940	ug/l	1.48	150,609.84	2.123E+00	Pulse	0.30	3
Ca			2	1983.241	ug/l	1.47	10,092.02	1.423E-01	Pulse	0.30	3
Ti			2	82.060	ug/l	2.18	3,352.60	4.726E-02	Pulse	0.30	3
V			2	84.562	ug/l	0.56	122,142.65	1.722E+00	Pulse	0.30	3
Cr			2	84.250	ug/l	1.53	164,379.75	2.318E+00	Pulse	0.30	3
Mn			2	81.629	ug/l	2.74	74,190.83	1.046E+00	Pulse	0.30	3
Fe			2	1574.406	ug/l	1.19	2,579,397.75	3.637E+01	Pulse	0.30	3
Co			2	84.832	ug/l	1.42	282,976.14	3.990E+00	Pulse	0.30	3
Ni			2	83.779	ug/l	1.23	78,035.41	1.100E+00	Pulse	0.30	3
Cu			2	83.240	ug/l	1.71	214,624.06	3.026E+00	Pulse	0.30	3
Zn			2	74.773	ug/l	1.52	26,419.10	3.725E-01	Pulse	0.30	3
As			2	79.120	ug/l	1.62	13,762.80	1.940E-01	Pulse	1.00	3
Cd			2	78.786	ug/l	1.20	43,446.05	9.632E-02	Pulse	0.30	3
Sn			2	83.286	ug/l	0.52	84,773.65	1.879E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	61.350	ug/l	2.76	1,796.97	3.036E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,371,624.91	0.89	106.2	Pulse	0.10	3
1	Sc		2,463,468.50	0.29	101.5	Pulse	0.10	3
1	Ge		548,965.58	1.36	116.1	Pulse	0.10	3
1	Ge		754,356.03	1.73	115.5	Pulse	0.10	3
1	Rh		3,313,243.49	0.81	102.4	Pulse	0.10	3
1	In		3,645,592.60	0.58	104.3	Pulse	0.10	3
1	Tb		5,659,554.92	0.52	115.7	Analog	0.10	3
1	Ho		511,296.23	0.40	107.3	Pulse	0.10	3
1	Bi		3,215,865.06	0.06	104.6	Pulse	0.10	3
2	Sc		70,934.40	0.93	96.1	Pulse	0.30	3
2	Ge		51,307.99	1.07	111.4	Pulse	0.30	3
2	Ge		77,682.32	0.92	112.0	Pulse	0.30	3
2	Rh		1,493,842.51	0.58	99.5	Pulse	0.30	3
2	In		451,094.01	1.17	95.4	Pulse	0.30	3
2	Tb		2,002,965.27	0.34	99.3	Pulse	0.30	3
2	Ho		197,437.96	0.39	100.0	Pulse	0.30	3
2	Bi		1,392,720.08	0.46	97.9	Pulse	0.30	3
3	Sc		55,760.64	1.11	101.4	Pulse	0.30	3
3	Ge		39,832.86	1.05	112.7	Pulse	0.30	3
3	Ge		59,206.85	1.74	109.5	Pulse	0.30	3
3	Rh		603,278.74	0.30	97.9	Pulse	0.30	3
3	Tb		1,028,780.10	0.22	98.9	Pulse	0.30	3

Quantitation Report

File Name 054SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File
Method Path
Acq Time 8/12/2018 17:10
Sample Name mp8578-s5
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/12/2018 16:24
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.698	ug/l	0.62	280,186.46	1.237E-01	Pulse	0.25	3
B			1	103.037	ug/l	0.45	309,796.17	1.368E-01	Pulse	0.15	3
Ca			1	64399.436	ug/l	0.35	24,394,981.30	1.001E+01	Analog	0.10	3
Sr			1	518.954	ug/l	1.21	9,103,017.78	2.954E+00	Analog	0.10	3
Mo			1	87.352	ug/l	1.01	303,200.35	9.839E-02	Pulse	0.10	3
Ag			1	74.722	ug/l	0.12	697,453.50	2.011E-01	Pulse	0.10	3
Sn			1	84.383	ug/l	0.74	488,105.92	1.408E-01	Pulse	0.10	3
Sb			1	76.030	ug/l	0.82	577,027.78	1.037E-01	Pulse	0.10	3
Ba			1	186.019	ug/l	0.24	565,376.77	1.016E-01	Pulse	0.10	3
Tl			1	83.850	ug/l	0.34	1,497,961.12	5.013E-01	Pulse	0.10	3
Pb			1	84.031	ug/l	0.74	506,913.44	1.696E-01	Pulse	0.10	3
Pb			1	83.203	ug/l	0.29	448,042.61	1.499E-01	Pulse	0.10	3
Pb			1	83.529	ug/l	0.15	2,038,561.63	6.822E-01	Pulse	0.10	3
Na			2	72283.991	ug/l	1.14	26,708,377.83	3.825E+02	Analog	0.30	3
Mg			2	26529.347	ug/l	0.78	4,449,264.68	6.372E+01	Pulse	0.30	3
Al			2	1516.511	ug/l	1.25	73,140.45	1.047E+00	Pulse	0.30	3
K			2	4065.018	ug/l	1.22	372,130.70	5.330E+00	Pulse	0.30	3
Ca			2	61881.326	ug/l	0.80	307,856.98	4.409E+00	Pulse	0.30	3
Ti			2	80.479	ug/l	4.30	3,237.03	4.635E-02	Pulse	0.30	3
V			2	84.302	ug/l	0.74	119,870.40	1.717E+00	Pulse	0.30	3
Cr			2	83.451	ug/l	0.46	160,295.62	2.296E+00	Pulse	0.30	3
Mn			2	78.514	ug/l	0.91	70,263.68	1.006E+00	Pulse	0.30	3
Fe			2	1524.562	ug/l	0.66	2,458,937.96	3.521E+01	Pulse	0.30	3
Co			2	80.060	ug/l	1.04	262,906.27	3.765E+00	Pulse	0.30	3
Ni			2	82.018	ug/l	0.59	75,210.44	1.077E+00	Pulse	0.30	3
Cu			2	78.309	ug/l	0.88	198,785.16	2.847E+00	Pulse	0.30	3
Zn			2	72.669	ug/l	1.39	25,298.44	3.623E-01	Pulse	0.30	3
As			2	78.513	ug/l	0.23	13,445.53	1.925E-01	Pulse	1.00	3
Cd			2	78.200	ug/l	1.30	41,567.75	9.560E-02	Pulse	0.30	3
Sn			2	85.263	ug/l	0.35	83,656.52	1.924E-01	Pulse	0.30	3
Se			3	57.808	ug/l	3.09	1,691.62	2.861E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,264,598.82	0.36	101.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,438,198.09	0.38	100.4	Pulse	0.10	3
1	Ge		540,994.39	0.65	114.5	Pulse	0.10	3
1	Ge		743,528.40	0.89	113.8	Pulse	0.10	3
1	Rh		3,081,745.68	0.61	95.2	Pulse	0.10	3
1	In		3,467,426.55	0.63	99.2	Pulse	0.10	3
1	Tb		5,566,653.25	0.47	113.8	Analog	0.10	3
1	Ho		496,535.77	0.26	104.2	Pulse	0.10	3
1	Bi		2,988,138.92	0.28	97.2	Pulse	0.10	3
2	Sc		69,829.70	0.96	94.6	Pulse	0.30	3
2	Ge		48,476.06	1.16	105.2	Pulse	0.30	3
2	Ge		74,350.42	1.74	107.2	Pulse	0.30	3
2	Rh		1,399,168.31	0.19	93.2	Pulse	0.30	3
2	In		434,845.00	1.49	92.0	Pulse	0.30	3
2	Tb		1,954,234.44	0.71	96.9	Pulse	0.30	3
2	Ho		193,975.00	0.68	98.2	Pulse	0.30	3
2	Bi		1,307,920.92	0.34	91.9	Pulse	0.30	3
3	Sc		54,082.91	1.38	98.4	Pulse	0.30	3
3	Ge		39,526.68	2.09	111.8	Pulse	0.30	3
3	Ge		59,147.81	1.71	109.4	Pulse	0.30	3
3	Rh		569,186.92	0.65	92.4	Pulse	0.30	3
3	Tb		1,006,455.65	0.99	96.8	Pulse	0.30	3

Quantitation Report

File Name 055SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File
Method Path
Acq Time 8/12/2018 17:15
Sample Name mp8578-s6
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/12/2018 16:24
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	75.223	ug/l	1.10	282,153.63	1.246E-01	Pulse	0.25	3
B			1	102.901	ug/l	1.86	309,392.51	1.366E-01	Pulse	0.15	3
Ca			1	64614.902	ug/l	1.09	24,554,107.97	1.004E+01	Analog	0.10	3
Sr			1	523.386	ug/l	1.60	9,176,932.15	2.979E+00	Analog	0.10	3
Mo			1	88.044	ug/l	0.93	305,488.78	9.917E-02	Pulse	0.10	3
Ag			1	73.532	ug/l	0.63	689,059.55	1.979E-01	Pulse	0.10	3
Sn			1	84.480	ug/l	0.53	490,613.65	1.409E-01	Pulse	0.10	3
Sb			1	76.337	ug/l	1.11	579,254.27	1.041E-01	Pulse	0.10	3
Ba			1	187.853	ug/l	0.39	570,859.34	1.026E-01	Pulse	0.10	3
Tl			1	84.167	ug/l	0.47	1,505,849.09	5.032E-01	Pulse	0.10	3
Pb			1	83.906	ug/l	0.99	506,923.48	1.694E-01	Pulse	0.10	3
Pb			1	82.772	ug/l	0.25	446,394.21	1.492E-01	Pulse	0.10	3
Pb			1	83.663	ug/l	0.44	2,044,914.16	6.833E-01	Pulse	0.10	3
Na			2	72320.507	ug/l	0.96	26,775,598.38	3.827E+02	Analog	0.30	3
Mg			2	26304.193	ug/l	0.38	4,420,346.91	6.318E+01	Pulse	0.30	3
Al			2	1500.205	ug/l	0.84	72,501.03	1.036E+00	Pulse	0.30	3
K			2	4069.540	ug/l	0.35	373,292.03	5.335E+00	Pulse	0.30	3
Ca			2	62067.000	ug/l	0.72	309,394.73	4.422E+00	Pulse	0.30	3
Ti			2	84.581	ug/l	2.94	3,408.17	4.871E-02	Pulse	0.30	3
V			2	84.862	ug/l	0.93	120,904.56	1.728E+00	Pulse	0.30	3
Cr			2	83.136	ug/l	1.34	160,006.54	2.287E+00	Pulse	0.30	3
Mn			2	78.882	ug/l	1.24	70,726.75	1.011E+00	Pulse	0.30	3
Fe			2	1529.402	ug/l	1.21	2,471,620.04	3.533E+01	Pulse	0.30	3
Co			2	80.349	ug/l	0.50	264,387.02	3.779E+00	Pulse	0.30	3
Ni			2	80.932	ug/l	0.31	74,360.89	1.063E+00	Pulse	0.30	3
Cu			2	77.638	ug/l	0.19	197,480.93	2.823E+00	Pulse	0.30	3
Zn			2	71.831	ug/l	0.59	25,062.55	3.582E-01	Pulse	0.30	3
As			2	78.233	ug/l	1.03	13,423.85	1.919E-01	Pulse	1.00	3
Cd			2	78.380	ug/l	1.04	41,455.18	9.582E-02	Pulse	0.30	3
Sn			2	85.633	ug/l	0.93	83,588.55	1.932E-01	Pulse	0.30	3
Se			3	57.303	ug/l	3.35	1,717.49	2.836E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,264,771.57	1.28	101.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,445,895.43	0.65	100.7	Pulse	0.10	3
1	Ge		539,283.42	1.17	114.1	Pulse	0.10	3
1	Ge		743,744.73	0.74	113.9	Pulse	0.10	3
1	Rh		3,080,493.50	0.22	95.2	Pulse	0.10	3
1	In		3,481,188.97	0.51	99.6	Pulse	0.10	3
1	Tb		5,565,874.29	0.95	113.8	Analog	0.10	3
1	Ho		498,973.52	1.29	104.7	Pulse	0.10	3
1	Bi		2,992,612.87	0.77	97.3	Pulse	0.10	3
2	Sc		69,965.98	0.20	94.8	Pulse	0.30	3
2	Ge		49,395.46	1.29	107.2	Pulse	0.30	3
2	Ge		73,883.79	1.07	106.5	Pulse	0.30	3
2	Rh		1,397,966.26	0.63	93.1	Pulse	0.30	3
2	In		432,618.13	0.97	91.5	Pulse	0.30	3
2	Tb		1,975,879.78	0.79	98.0	Pulse	0.30	3
2	Ho		194,849.07	1.01	98.6	Pulse	0.30	3
2	Bi		1,308,714.91	0.96	92.0	Pulse	0.30	3
3	Sc		54,596.83	1.22	99.3	Pulse	0.30	3
3	Ge		40,534.66	2.12	114.6	Pulse	0.30	3
3	Ge		60,595.16	2.60	112.1	Pulse	0.30	3
3	Rh		568,024.20	0.35	92.2	Pulse	0.30	3
3	Tb		1,007,778.95	0.16	96.9	Pulse	0.30	3

Quantitation Report

File Name	056_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 17:20
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	47.596	ug/l	0.79	364,061.75	1.577E-01	Pulse	0.25	3
B			1	101.269	ug/l	0.94	606,191.49	2.625E-01	Pulse	0.15	3
Ca			1	5012.015	ug/l	0.53	3,941,842.96	1.565E+00	Pulse	0.10	3
Sr			1	52.477	ug/l	1.12	1,979,712.05	5.975E-01	Pulse	0.10	3
Mo			1	51.492	ug/l	0.35	384,312.12	1.160E-01	Pulse	0.10	3
Ag			1	48.536	ug/l	0.16	951,533.55	2.613E-01	Pulse	0.10	3
Sn			1	50.319	ug/l	0.48	611,544.81	1.679E-01	Pulse	0.10	3
Sb			1	48.191	ug/l	1.01	744,345.69	1.314E-01	Pulse	0.10	3
Ba			1	46.758	ug/l	1.44	289,252.30	5.106E-02	Pulse	0.10	3
Tl			1	51.052	ug/l	0.45	1,928,366.59	6.104E-01	Pulse	0.10	3
Pb			1	51.403	ug/l	0.64	655,618.81	2.075E-01	Pulse	0.10	3
Pb			1	50.507	ug/l	0.73	575,038.12	1.820E-01	Pulse	0.10	3
Pb			1	51.106	ug/l	0.31	2,637,091.23	8.348E-01	Pulse	0.10	3
Na			2	4914.402	ug/l	0.96	3,837,203.32	5.208E+01	Pulse	0.30	3
Mg			2	4907.139	ug/l	0.80	1,736,983.37	2.357E+01	Pulse	0.30	3
Al			2	4777.910	ug/l	1.12	485,856.16	6.594E+00	Pulse	0.30	3
K			2	4988.474	ug/l	1.45	954,693.02	1.296E+01	Pulse	0.30	3
Ca			2	5235.015	ug/l	1.47	55,025.91	7.468E-01	Pulse	0.30	3
Ti			2	51.174	ug/l	2.87	4,342.84	5.894E-02	Pulse	0.30	3
V			2	51.255	ug/l	1.12	153,785.86	2.087E+00	Pulse	0.30	3
Cr			2	50.376	ug/l	1.38	204,166.16	2.771E+00	Pulse	0.30	3
Mn			2	49.146	ug/l	1.24	92,802.45	1.259E+00	Pulse	0.30	3
Fe			2	5200.724	ug/l	0.69	17,695,297.08	2.401E+02	Analog	0.30	3
Co			2	50.409	ug/l	0.80	349,373.75	4.741E+00	Pulse	0.30	3
Ni			2	50.398	ug/l	1.27	97,523.70	1.324E+00	Pulse	0.30	3
Cu			2	49.660	ug/l	0.77	266,016.83	3.610E+00	Pulse	0.30	3
Zn			2	48.956	ug/l	2.02	35,708.89	4.847E-01	Pulse	0.30	3
As			2	50.906	ug/l	1.71	18,395.66	2.497E-01	Pulse	1.00	3
Cd			2	49.544	ug/l	1.18	56,510.22	1.211E-01	Pulse	0.30	3
Sn			2	50.711	ug/l	1.02	106,723.01	2.288E-01	Pulse	0.30	3
Se			3	48.183	ug/l	4.12	2,584.61	4.766E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,309,022.17	0.24	103.4	Pulse	0.10	3
1	Sc		2,518,009.18	0.23	103.7	Pulse	0.10	3
1	Ge		500,178.04	0.79	105.8	Pulse	0.10	3

Quantitation Report

1	Ge		690,376.03	1.26	105.7	Pulse	0.10	3
1	Rh		3,313,176.30	0.47	102.4	Pulse	0.10	3
1	In		3,641,417.31	0.37	104.1	Pulse	0.10	3
1	Tb		5,665,095.96	0.89	115.8	Analog	0.10	3
1	Ho		507,412.23	0.36	106.5	Pulse	0.10	3
1	Bi		3,159,062.14	0.42	102.7	Pulse	0.10	3
2	Sc		73,688.61	0.98	99.8	Pulse	0.30	3
2	Ge		47,317.23	0.38	102.7	Pulse	0.30	3
2	Ge		70,889.72	0.64	102.2	Pulse	0.30	3
2	Rh		1,496,475.67	0.88	99.6	Pulse	0.30	3
2	In		466,513.68	0.48	98.7	Pulse	0.30	3
2	Tb		2,017,421.38	0.76	100.0	Pulse	0.30	3
2	Ho		198,386.33	0.91	100.4	Pulse	0.30	3
2	Bi		1,387,694.25	0.79	97.5	Pulse	0.30	3
3	Sc		56,507.49	0.43	102.8	Pulse	0.30	3
3	Ge		35,793.62	0.88	101.2	Pulse	0.30	3
3	Ge		54,258.76	2.26	100.3	Pulse	0.30	3
3	Rh		603,699.77	0.49	98.0	Pulse	0.30	3
3	Tb		1,037,699.72	0.45	99.8	Pulse	0.30	3

Quantitation Report

File Name	057_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 17:27
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.001	ug/l	-121.24	13.33	5.651E-06	Pulse	0.25	3
B			1	3.931	ug/l	4.28	39,194.39	1.654E-02	Pulse	0.15	3
Ca			1	-10.039	ug/l	-8.75	16,565.48	6.492E-03	Pulse	0.10	3
Sr			1	-0.002	ug/l	-9.66	510.02	1.483E-04	Pulse	0.10	3
Mo			1	0.017	ug/l	46.66	180.01	5.241E-05	Pulse	0.10	3
Ag			1	0.004	ug/l	58.24	143.34	3.817E-05	Pulse	0.10	3
Sn			1	0.177	ug/l	3.45	1,146.74	3.058E-04	Pulse	0.10	3
Sb			1	0.021	ug/l	28.22	583.36	1.021E-04	Pulse	0.10	3
Ba			1	0.001	ug/l	131.61	53.33	9.335E-06	Pulse	0.10	3
Tl			1	0.008	ug/l	33.17	433.36	1.341E-04	Pulse	0.10	3
Pb			1	0.005	ug/l	104.29	186.67	5.779E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	66.35	210.01	6.501E-05	Pulse	0.10	3
Pb			1	0.006	ug/l	28.22	806.71	2.497E-04	Pulse	0.10	3
Na			2	1.227	ug/l	15.92	6,671.39	8.892E-02	Pulse	0.30	3
Mg			2	0.049	ug/l	84.73	118.89	1.586E-03	Pulse	0.30	3
Al			2	-0.452	ug/l	-12.54	46.66	6.221E-04	Pulse	0.30	3
K			2	-4.737	ug/l	-9.97	5,464.29	7.284E-02	Pulse	0.30	3
Ca			2	-3.782	ug/l	-19.97	35.56	4.748E-04	Pulse	0.30	3
Ti			2	0.039	ug/l	100.40	3.33	4.482E-05	Pulse	0.30	3
V			2	0.007	ug/l	167.23	130.00	1.729E-03	Pulse	0.30	3
Cr			2	-0.002	ug/l	-194.87	224.45	2.993E-03	Pulse	0.30	3
Mn			2	-0.006	ug/l	-171.45	31.11	4.127E-04	Pulse	0.30	3
Fe			2	0.035	ug/l	79.05	1,555.65	2.074E-02	Pulse	0.30	3
Co			2	-0.001	ug/l	-288.89	37.78	5.019E-04	Pulse	0.30	3
Ni			2	-0.008	ug/l	-49.15	21.11	2.822E-04	Pulse	0.30	3
Cu			2	-0.006	ug/l	-82.64	136.67	1.825E-03	Pulse	0.30	3
Zn			2	-0.935	ug/l	-2.36	68.89	9.170E-04	Pulse	0.30	3
As			2	-0.003	ug/l	-362.83	5.67	7.521E-05	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.006	ug/l	143.25	11.11	2.306E-05	Pulse	0.30	3
Sn			2	0.019	ug/l	84.79	228.89	4.757E-04	Pulse	0.30	3
Se			3	0.009	ug/l	183.35	2.80	5.142E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,370,027.54	0.77	106.2	Pulse	0.10	3
1	Sc		2,551,769.23	0.70	105.1	Pulse	0.10	3
1	Ge		501,141.01	0.73	106.0	Pulse	0.10	3
1	Ge		696,718.58	0.32	106.7	Pulse	0.10	3
1	Rh		3,438,564.95	0.52	106.3	Pulse	0.10	3
1	In		3,750,764.21	0.61	107.3	Pulse	0.10	3
1	Tb		5,712,356.58	0.30	116.8	Analog	0.10	3
1	Ho		504,670.25	0.71	105.9	Pulse	0.10	3
1	Bi		3,231,392.03	0.17	105.1	Pulse	0.10	3
2	Sc		75,024.35	1.32	101.6	Pulse	0.30	3
2	Ge		47,975.74	0.48	104.1	Pulse	0.30	3
2	Ge		73,004.54	0.70	105.2	Pulse	0.30	3
2	Rh		1,551,760.88	0.35	103.3	Pulse	0.30	3
2	In		481,169.21	0.29	101.8	Pulse	0.30	3
2	Tb		2,051,651.10	0.36	101.7	Pulse	0.30	3
2	Ho		203,561.91	0.83	103.1	Pulse	0.30	3
2	Bi		1,450,755.36	0.47	101.9	Pulse	0.30	3
3	Sc		56,746.19	2.55	103.2	Pulse	0.30	3
3	Ge		37,037.56	1.52	104.7	Pulse	0.30	3
3	Ge		54,380.09	0.84	100.6	Pulse	0.30	3
3	Rh		622,276.05	0.45	101.0	Pulse	0.30	3
3	Tb		1,033,561.76	0.52	99.4	Pulse	0.30	3

Quantitation Report

File Name 058SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File
Method Path
Acq Time 8/12/2018 17:32
Sample Name jc71649-3
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/12/2018 16:24
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.024	ug/l	4.42	112.00	4.908E-05	Pulse	0.25	3
B			1	23.658	ug/l	0.61	83,286.57	3.650E-02	Pulse	0.15	3
Ca			1	61861.289	ug/l	0.09	23,615,607.98	9.611E+00	Analog	0.10	3
Sr			1	423.981	ug/l	0.53	7,459,101.97	2.413E+00	Analog	0.10	3
Mo			1	0.130	ug/l	16.35	496.69	1.607E-04	Pulse	0.10	3
Ag			1	0.031	ug/l	19.08	353.35	1.003E-04	Pulse	0.10	3
Sn			1	0.808	ug/l	6.51	3,750.58	1.064E-03	Pulse	0.10	3
Sb			1	0.103	ug/l	6.65	1,003.40	1.856E-04	Pulse	0.10	3
Ba			1	114.664	ug/l	4.73	338,432.53	6.261E-02	Pulse	0.10	3
Tl			1	0.027	ug/l	11.20	600.03	1.988E-04	Pulse	0.10	3
Pb			1	0.055	ug/l	23.48	446.69	1.481E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	34.35	243.34	8.069E-05	Pulse	0.10	3
Pb			1	0.046	ug/l	16.73	1,586.76	5.260E-04	Pulse	0.10	3
Na			2	70018.589	ug/l	0.66	26,246,453.40	3.705E+02	Analog	0.30	3
Mg			2	24769.042	ug/l	1.13	4,214,030.53	5.949E+01	Pulse	0.30	3
Al			2	183.306	ug/l	1.91	9,046.97	1.277E-01	Pulse	0.30	3
K			2	2465.823	ug/l	0.85	231,373.80	3.266E+00	Pulse	0.30	3
Ca			2	59119.171	ug/l	1.77	298,351.74	4.212E+00	Pulse	0.30	3
Ti			2	0.355	ug/l	70.58	14.44	2.046E-04	Pulse	0.30	3
V			2	0.508	ug/l	4.53	834.48	1.178E-02	Pulse	0.30	3
Cr			2	1.663	ug/l	5.07	3,457.07	4.880E-02	Pulse	0.30	3
Mn			2	0.131	ug/l	15.86	158.89	2.241E-03	Pulse	0.30	3
Fe			2	3.972	ug/l	1.97	7,850.85	1.108E-01	Pulse	0.30	3
Co			2	0.027	ug/l	2.53	128.89	1.820E-03	Pulse	0.30	3
Ni			2	3.095	ug/l	2.29	2,912.51	4.112E-02	Pulse	0.30	3
Cu			2	0.359	ug/l	3.55	1,084.49	1.531E-02	Pulse	0.30	3
Zn			2	2.877	ug/l	8.07	1,695.67	2.393E-02	Pulse	0.30	3
As			2	0.132	ug/l	50.35	29.33	4.132E-04	Pulse	1.00	3
Cd			2	0.032	ug/l	62.83	21.11	4.780E-05	Pulse	0.30	3
Sn			2	0.464	ug/l	7.03	633.35	1.434E-03	Pulse	0.30	3
Se			3	0.647	ug/l	7.48	21.60	3.624E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,282,062.10	0.35	102.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,457,069.28	0.35	101.2	Pulse	0.10	3
1	Ge		511,507.91	0.63	108.2	Pulse	0.10	3
1	Ge		704,677.78	0.38	107.9	Pulse	0.10	3
1	Rh		3,090,800.68	0.27	95.5	Pulse	0.10	3
1	In		3,523,820.21	0.28	100.8	Pulse	0.10	3
1	Tb		5,414,178.15	5.11	110.7	Mix	0.10	3
1	Ho		498,043.87	0.19	104.6	Pulse	0.10	3
1	Bi		3,018,242.66	0.75	98.1	Pulse	0.10	3
2	Sc		70,839.46	0.98	96.0	Pulse	0.30	3
2	Ge		48,049.34	0.99	104.3	Pulse	0.30	3
2	Ge		72,781.28	0.76	104.9	Pulse	0.30	3
2	Rh		1,397,458.03	1.11	93.0	Pulse	0.30	3
2	In		441,825.44	0.27	93.4	Pulse	0.30	3
2	Tb		1,968,507.70	0.40	97.6	Pulse	0.30	3
2	Ho		194,082.57	0.14	98.3	Pulse	0.30	3
2	Bi		1,309,482.13	0.48	92.0	Pulse	0.30	3
3	Sc		54,231.09	1.42	98.7	Pulse	0.30	3
3	Ge		39,308.38	0.93	111.2	Pulse	0.30	3
3	Ge		59,625.09	0.93	110.3	Pulse	0.30	3
3	Rh		568,246.99	0.24	92.2	Pulse	0.30	3
3	Tb		998,936.73	0.64	96.1	Pulse	0.30	3

Quantitation Report

File Name	059SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 17:37
Sample Name	mp8578-sd1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	15614.14	22.67	9.715E-06	Pulse	0.25	3
B			1	43.346	ug/l	2.69	40,922.70	1.756E-02	Pulse	0.15	3
Ca			1	58826.295	ug/l	0.59	4,699,821.70	1.836E+00	Pulse	0.10	3
Sr			1	377.486	ug/l	0.78	1,437,989.30	4.299E-01	Pulse	0.10	3
Mo			1	0.157	ug/l	28.06	166.68	4.987E-05	Pulse	0.10	3
Ag			1	0.040	ug/l	59.31	143.34	3.836E-05	Pulse	0.10	3
Sn			1	1.449	ug/l	4.37	743.38	1.988E-04	Pulse	0.10	3
Sb			1	0.132	ug/l	27.16	466.69	8.154E-05	Pulse	0.10	3
Ba			1	112.404	ug/l	1.33	70,302.81	1.228E-02	Pulse	0.10	3
Tl			1	0.024	ug/l	69.11	210.01	6.549E-05	Pulse	0.10	3
Pb			1	0.079	ug/l	32.49	223.34	6.974E-05	Pulse	0.10	3
Pb			1	0.108	ug/l	62.94	253.35	7.912E-05	Pulse	0.10	3
Pb			1	0.082	ug/l	36.40	906.71	2.832E-04	Pulse	0.10	3
Na			2	70676.169	ug/l	1.63	5,606,844.64	7.486E+01	Analog	0.30	3
Mg			2	25116.021	ug/l	1.25	903,751.36	1.207E+01	Pulse	0.30	3
Al			2	16.860	ug/l	24.46	267.79	3.572E-03	Pulse	0.30	3
K			2	2459.516	ug/l	3.80	53,893.02	7.197E-01	Pulse	0.30	3
Ca			2	60069.629	ug/l	0.22	64,180.57	8.568E-01	Pulse	0.30	3
Ti			2	0.506	ug/l	173.21	4.44	5.828E-05	Pulse	0.30	3
V			2	0.504	ug/l	14.14	261.12	3.486E-03	Pulse	0.30	3
Cr			2	1.256	ug/l	15.20	750.03	1.002E-02	Pulse	0.30	3
Mn			2	0.066	ug/l	122.24	54.44	7.277E-04	Pulse	0.30	3
Fe			2	3.972	ug/l	17.69	2,803.61	3.745E-02	Pulse	0.30	3
Co			2	-0.001	ug/l	-2752.61	42.22	5.653E-04	Pulse	0.30	3
Ni			2	3.298	ug/l	4.19	685.58	9.155E-03	Pulse	0.30	3
Cu			2	0.297	ug/l	36.95	331.12	4.420E-03	Pulse	0.30	3
Zn			2	-3.416	ug/l	-32.70	498.90	6.671E-03	Pulse	0.30	3
As			2	0.061	ug/l	244.83	9.00	1.194E-04	Pulse	1.00	3
Cd			2	-0.009	ug/l	-0.83	3.33	6.934E-06	Pulse	0.30	3
Sn			2	-0.329	ug/l	-35.58	115.56	2.406E-04	Pulse	0.30	3
Se			3	1.110	ug/l	30.60	8.53	1.526E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,330,949.65	0.44	104.4	Pulse	0.10	3
1	Sc		2,560,173.30	0.53	105.4	Pulse	0.10	3
1	Ge		503,238.47	0.50	106.5	Pulse	0.10	3

Quantitation Report

1	Ge		696,505.69	0.53	106.6	Pulse	0.10	3
1	Rh		3,345,209.33	0.80	103.4	Pulse	0.10	3
1	In		3,739,781.16	0.38	106.9	Pulse	0.10	3
1	Tb		5,724,447.62	0.18	117.0	Analog	0.10	3
1	Ho		507,133.73	0.69	106.5	Pulse	0.10	3
1	Bi		3,203,847.66	0.48	104.2	Pulse	0.10	3
2	Sc		74,910.53	1.61	101.5	Pulse	0.30	3
2	Ge		48,343.52	0.69	104.9	Pulse	0.30	3
2	Ge		72,705.30	1.53	104.8	Pulse	0.30	3
2	Rh		1,508,656.19	1.73	100.4	Pulse	0.30	3
2	In		480,265.50	0.26	101.6	Pulse	0.30	3
2	Tb		2,036,051.79	1.19	100.9	Pulse	0.30	3
2	Ho		200,624.97	0.53	101.6	Pulse	0.30	3
2	Bi		1,409,001.79	0.37	99.0	Pulse	0.30	3
3	Sc		56,530.85	0.51	102.8	Pulse	0.30	3
3	Ge		36,920.51	0.75	104.4	Pulse	0.30	3
3	Ge		55,916.50	1.14	103.4	Pulse	0.30	3
3	Rh		622,166.56	0.37	101.0	Pulse	0.30	3
3	Tb		1,053,782.77	0.37	101.3	Pulse	0.30	3

Quantitation Report

File Name 060SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File
Method Path
Acq Time 8/12/2018 17:42
Sample Name mp8578-s7
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/12/2018 16:24
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.703	ug/l	0.71	276,873.82	1.237E-01	Pulse	0.25	3
B			1	104.362	ug/l	0.55	309,854.89	1.385E-01	Pulse	0.15	3
Ca			1	64557.749	ug/l	0.28	24,128,351.31	1.003E+01	Analog	0.10	3
Sr			1	528.175	ug/l	0.90	9,105,644.86	3.006E+00	Analog	0.10	3
Mo			1	88.596	ug/l	0.72	302,243.31	9.979E-02	Pulse	0.10	3
Ag			1	74.516	ug/l	0.61	690,298.09	2.006E-01	Pulse	0.10	3
Sn			1	84.989	ug/l	1.17	487,918.96	1.418E-01	Pulse	0.10	3
Sb			1	78.682	ug/l	5.74	575,997.69	1.073E-01	Pulse	0.10	3
Ba			1	193.531	ug/l	4.24	567,640.62	1.057E-01	Pulse	0.10	3
Tl			1	83.993	ug/l	1.30	1,483,590.34	5.022E-01	Pulse	0.10	3
Pb			1	84.062	ug/l	0.72	501,404.41	1.697E-01	Pulse	0.10	3
Pb			1	83.449	ug/l	1.56	444,293.83	1.504E-01	Pulse	0.10	3
Pb			1	83.777	ug/l	0.85	2,021,595.49	6.842E-01	Pulse	0.10	3
Na			2	76133.803	ug/l	0.04	27,789,791.68	4.029E+02	Analog	0.30	3
Mg			2	26693.177	ug/l	0.55	4,422,491.49	6.411E+01	Pulse	0.30	3
Al			2	1509.040	ug/l	0.70	71,900.80	1.042E+00	Pulse	0.30	3
K			2	4135.621	ug/l	0.85	373,911.65	5.421E+00	Pulse	0.30	3
Ca			2	62433.617	ug/l	1.36	306,826.67	4.448E+00	Pulse	0.30	3
Ti			2	84.090	ug/l	3.26	3,340.37	4.843E-02	Pulse	0.30	3
V			2	85.419	ug/l	0.50	119,982.21	1.739E+00	Pulse	0.30	3
Cr			2	84.107	ug/l	0.34	159,591.35	2.314E+00	Pulse	0.30	3
Mn			2	80.316	ug/l	0.14	70,996.92	1.029E+00	Pulse	0.30	3
Fe			2	1550.406	ug/l	0.56	2,470,231.92	3.581E+01	Pulse	0.30	3
Co			2	80.864	ug/l	1.02	262,329.14	3.803E+00	Pulse	0.30	3
Ni			2	82.363	ug/l	1.15	74,609.95	1.082E+00	Pulse	0.30	3
Cu			2	79.290	ug/l	0.67	198,835.56	2.883E+00	Pulse	0.30	3
Zn			2	73.415	ug/l	1.89	25,238.36	3.659E-01	Pulse	0.30	3
As			2	79.630	ug/l	1.19	13,470.56	1.953E-01	Pulse	1.00	3
Cd			2	77.650	ug/l	1.10	41,166.56	9.493E-02	Pulse	0.30	3
Sn			2	85.206	ug/l	0.88	83,369.88	1.923E-01	Pulse	0.30	3
Se			3	60.981	ug/l	0.59	1,725.22	3.018E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,237,653.51	0.43	100.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,405,646.94	0.46	99.1	Pulse	0.10	3
1	Ge		512,524.10	0.31	108.4	Pulse	0.10	3
1	Ge		712,530.20	0.61	109.1	Pulse	0.10	3
1	Rh		3,028,756.83	0.19	93.6	Pulse	0.10	3
1	In		3,441,335.79	0.22	98.4	Pulse	0.10	3
1	Tb		5,379,319.71	4.81	109.9	Mix	0.10	3
1	Ho		495,098.22	0.12	103.9	Pulse	0.10	3
1	Bi		2,954,624.23	0.73	96.1	Pulse	0.10	3
2	Sc		68,979.52	0.29	93.5	Pulse	0.30	3
2	Ge		47,777.40	2.04	103.7	Pulse	0.30	3
2	Ge		73,065.90	1.21	105.3	Pulse	0.30	3
2	Rh		1,378,260.85	1.02	91.8	Pulse	0.30	3
2	In		433,625.40	0.75	91.7	Pulse	0.30	3
2	Tb		1,963,457.35	0.36	97.3	Pulse	0.30	3
2	Ho		193,897.55	0.56	98.2	Pulse	0.30	3
2	Bi		1,286,299.95	1.03	90.4	Pulse	0.30	3
3	Sc		53,611.48	0.59	97.5	Pulse	0.30	3
3	Ge		37,957.40	0.93	107.4	Pulse	0.30	3
3	Ge		57,169.58	0.37	105.7	Pulse	0.30	3
3	Rh		564,390.50	0.33	91.6	Pulse	0.30	3
3	Tb		999,337.05	1.07	96.1	Pulse	0.30	3

Quantitation Report

File Name	061SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 17:47
Sample Name	mp8578-s8
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	76.312	ug/l	0.49	280,170.43	1.264E-01	Pulse	0.25	3
B			1	104.962	ug/l	1.47	308,623.45	1.392E-01	Pulse	0.15	3
Ca			1	65363.262	ug/l	0.83	24,571,535.47	1.015E+01	Analog	0.10	3
Sr			1	534.999	ug/l	0.84	9,349,390.07	3.045E+00	Analog	0.10	3
Mo			1	89.286	ug/l	0.94	308,767.21	1.006E-01	Pulse	0.10	3
Ag			1	74.320	ug/l	0.46	693,757.44	2.001E-01	Pulse	0.10	3
Sn			1	85.788	ug/l	0.57	496,292.86	1.431E-01	Pulse	0.10	3
Sb			1	76.858	ug/l	0.91	584,979.60	1.048E-01	Pulse	0.10	3
Ba			1	189.323	ug/l	0.92	577,077.11	1.034E-01	Pulse	0.10	3
Tl			1	85.794	ug/l	0.73	1,523,097.95	5.129E-01	Pulse	0.10	3
Pb			1	85.993	ug/l	0.90	515,505.97	1.736E-01	Pulse	0.10	3
Pb			1	84.489	ug/l	0.63	452,128.52	1.523E-01	Pulse	0.10	3
Pb			1	85.227	ug/l	0.41	2,067,007.81	6.961E-01	Pulse	0.10	3
Na			2	75928.906	ug/l	0.90	27,856,765.56	4.018E+02	Analog	0.30	3
Mg			2	26888.795	ug/l	0.54	4,477,745.38	6.458E+01	Pulse	0.30	3
Al			2	1533.451	ug/l	1.83	73,431.66	1.059E+00	Pulse	0.30	3
K			2	4158.059	ug/l	1.36	377,817.28	5.450E+00	Pulse	0.30	3
Ca			2	63202.031	ug/l	1.07	312,191.68	4.503E+00	Pulse	0.30	3
Ti			2	83.652	ug/l	2.24	3,340.38	4.817E-02	Pulse	0.30	3
V			2	86.028	ug/l	0.28	121,457.53	1.752E+00	Pulse	0.30	3
Cr			2	84.913	ug/l	1.48	161,936.06	2.336E+00	Pulse	0.30	3
Mn			2	80.367	ug/l	1.93	71,400.91	1.030E+00	Pulse	0.30	3
Fe			2	1551.389	ug/l	0.84	2,484,457.75	3.583E+01	Pulse	0.30	3
Co			2	82.191	ug/l	0.68	267,997.10	3.865E+00	Pulse	0.30	3
Ni			2	82.733	ug/l	0.80	75,326.26	1.086E+00	Pulse	0.30	3
Cu			2	79.508	ug/l	0.45	200,402.14	2.890E+00	Pulse	0.30	3
Zn			2	74.045	ug/l	2.27	25,577.81	3.689E-01	Pulse	0.30	3
As			2	80.193	ug/l	1.03	13,635.03	1.967E-01	Pulse	1.00	3
Cd			2	79.982	ug/l	1.53	42,282.96	9.778E-02	Pulse	0.30	3
Sn			2	86.841	ug/l	0.55	84,734.54	1.959E-01	Pulse	0.30	3
Se			3	58.572	ug/l	1.16	1,722.16	2.899E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,216,558.68	0.10	99.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,419,748.77	0.53	99.7	Pulse	0.10	3
1	Ge		532,526.32	0.70	112.7	Pulse	0.10	3
1	Ge		729,561.55	0.64	111.7	Pulse	0.10	3
1	Rh		3,070,245.79	0.31	94.9	Pulse	0.10	3
1	In		3,467,653.31	0.33	99.2	Pulse	0.10	3
1	Tb		5,582,713.67	0.64	114.1	Analog	0.10	3
1	Ho		495,018.86	1.32	103.9	Pulse	0.10	3
1	Bi		2,969,480.69	0.54	96.5	Pulse	0.10	3
2	Sc		69,334.31	0.75	93.9	Pulse	0.30	3
2	Ge		48,842.75	0.63	106.0	Pulse	0.30	3
2	Ge		74,948.64	0.22	108.0	Pulse	0.30	3
2	Rh		1,395,862.97	0.75	92.9	Pulse	0.30	3
2	In		432,462.26	1.23	91.5	Pulse	0.30	3
2	Tb		1,944,917.91	0.61	96.4	Pulse	0.30	3
2	Ho		192,833.62	1.40	97.6	Pulse	0.30	3
2	Bi		1,297,709.25	0.28	91.2	Pulse	0.30	3
3	Sc		53,861.03	1.44	98.0	Pulse	0.30	3
3	Ge		39,272.69	1.96	111.1	Pulse	0.30	3
3	Ge		59,414.23	0.89	109.9	Pulse	0.30	3
3	Rh		567,845.53	1.00	92.2	Pulse	0.30	3
3	Tb		1,007,348.85	0.74	96.9	Pulse	0.30	3

Quantitation Report

File Name	062SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 17:52
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.004	ug/l	53.69	50.67	2.163E-05	Pulse	0.25	3
B			1	2.270	ug/l	4.34	28,887.16	1.234E-02	Pulse	0.15	3
Ca			1	-7.890	ug/l	-9.45	18,147.20	7.159E-03	Pulse	0.10	3
Sr			1	0.017	ug/l	22.38	1,270.10	3.716E-04	Pulse	0.10	3
Mo			1	0.014	ug/l	40.59	153.34	4.488E-05	Pulse	0.10	3
Ag			1	0.007	ug/l	41.96	203.34	5.412E-05	Pulse	0.10	3
Sn			1	0.166	ug/l	4.15	1,006.74	2.679E-04	Pulse	0.10	3
Sb			1	0.020	ug/l	45.88	566.69	9.918E-05	Pulse	0.10	3
Ba			1	0.010	ug/l	57.37	106.67	1.871E-05	Pulse	0.10	3
Tl			1	0.013	ug/l	11.08	636.71	1.963E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	33.55	200.01	6.165E-05	Pulse	0.10	3
Pb			1	0.006	ug/l	127.14	200.01	6.161E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	36.46	873.37	2.692E-04	Pulse	0.10	3
Na			2	3.637	ug/l	10.35	8,522.23	1.144E-01	Pulse	0.30	3
Mg			2	0.951	ug/l	32.86	441.12	5.918E-03	Pulse	0.30	3
Al			2	-0.222	ug/l	-76.96	70.00	9.404E-04	Pulse	0.30	3
K			2	-5.047	ug/l	-24.36	5,365.36	7.204E-02	Pulse	0.30	3
Ca			2	-2.290	ug/l	-89.09	51.11	6.874E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	0.016	ug/l	19.56	154.45	2.074E-03	Pulse	0.30	3
Cr			2	-0.002	ug/l	-147.90	224.45	3.014E-03	Pulse	0.30	3
Mn			2	-0.004	ug/l	-109.87	34.44	4.627E-04	Pulse	0.30	3
Fe			2	-0.006	ug/l	-448.49	1,403.41	1.885E-02	Pulse	0.30	3
Co			2	0.003	ug/l	55.69	65.56	8.805E-04	Pulse	0.30	3
Ni			2	0.002	ug/l	497.48	41.11	5.530E-04	Pulse	0.30	3
Cu			2	-0.003	ug/l	-217.49	150.00	2.012E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.928	ug/l	-2.93	73.33	9.838E-04	Pulse	0.30	3
As			2	0.001	ug/l	549.01	7.00	9.396E-05	Pulse	1.00	3
Cd			2	0.001	ug/l	424.33	5.56	1.164E-05	Pulse	0.30	3
Sn			2	-0.021	ug/l	-19.43	140.00	2.938E-04	Pulse	0.30	3
Se			3	0.011	ug/l	76.90	2.93	5.327E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,341,110.61	0.27	104.9	Pulse	0.10	3
1	Sc		2,534,418.50	0.57	104.4	Pulse	0.10	3
1	Ge		508,089.60	1.00	107.5	Pulse	0.10	3
1	Ge		697,191.27	0.25	106.7	Pulse	0.10	3
1	Rh		3,418,892.14	0.37	105.7	Pulse	0.10	3
1	In		3,757,872.55	0.16	107.5	Pulse	0.10	3
1	Tb		5,708,830.96	0.57	116.7	Analog	0.10	3
1	Ho		502,254.43	0.66	105.4	Pulse	0.10	3
1	Bi		3,243,291.31	0.40	105.4	Pulse	0.10	3
2	Sc		74,468.32	0.56	100.9	Pulse	0.30	3
2	Ge		47,843.21	1.98	103.8	Pulse	0.30	3
2	Ge		72,652.89	0.91	104.7	Pulse	0.30	3
2	Rh		1,548,874.31	0.43	103.1	Pulse	0.30	3
2	In		476,536.82	0.56	100.8	Pulse	0.30	3
2	Tb		2,038,405.27	0.56	101.1	Pulse	0.30	3
2	Ho		200,842.91	0.96	101.7	Pulse	0.30	3
2	Bi		1,434,107.17	0.18	100.8	Pulse	0.30	3
3	Sc		56,323.54	0.83	102.5	Pulse	0.30	3
3	Ge		36,237.95	2.12	102.5	Pulse	0.30	3
3	Ge		55,019.00	0.88	101.7	Pulse	0.30	3
3	Rh		618,634.05	0.33	100.4	Pulse	0.30	3
3	Tb		1,030,761.10	0.47	99.1	Pulse	0.30	3

Quantitation Report

File Name	063SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 17:57
Sample Name	jc71463-5
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.002	ug/l	-127.97	13.33	5.645E-06	Pulse	0.25	3
B			1	6.294	ug/l	1.77	34,301.68	1.456E-02	Pulse	0.15	3
Ca			1	7.938	ug/l	19.76	26,678.80	1.084E-02	Pulse	0.10	3
Sr			1	0.122	ug/l	8.11	2,907.05	8.718E-04	Pulse	0.10	3
Mo			1	0.046	ug/l	26.39	220.01	6.597E-05	Pulse	0.10	3
Ag			1	0.012	ug/l	28.24	176.68	4.831E-05	Pulse	0.10	3
Sn			1	0.671	ug/l	1.97	3,057.09	8.357E-04	Pulse	0.10	3
Sb			1	0.075	ug/l	35.49	843.38	1.479E-04	Pulse	0.10	3
Ba			1	0.124	ug/l	2.42	430.02	7.540E-05	Pulse	0.10	3
Tl			1	0.008	ug/l	47.52	270.01	8.334E-05	Pulse	0.10	3
Pb			1	0.035	ug/l	51.69	353.35	1.090E-04	Pulse	0.10	3
Pb			1	0.017	ug/l	115.56	230.01	7.099E-05	Pulse	0.10	3
Pb			1	0.028	ug/l	24.12	1,233.40	3.807E-04	Pulse	0.10	3
Na			2	10.591	ug/l	5.41	9,484.99	1.320E-01	Pulse	0.30	3
Mg			2	4.193	ug/l	7.93	821.14	1.142E-02	Pulse	0.30	3
Al			2	10.318	ug/l	6.81	601.13	8.364E-03	Pulse	0.30	3
K			2	-6.726	ug/l	-52.66	5,484.29	7.638E-02	Pulse	0.30	3
Ca			2	16.146	ug/l	9.84	155.56	2.164E-03	Pulse	0.30	3
Ti			2	2.294	ug/l	157.94	95.62	1.321E-03	Pulse	0.30	3
V			2	0.206	ug/l	17.01	403.34	5.622E-03	Pulse	0.30	3
Cr			2	0.387	ug/l	9.21	986.71	1.374E-02	Pulse	0.30	3
Mn			2	0.139	ug/l	15.35	167.78	2.336E-03	Pulse	0.30	3
Fe			2	1.649	ug/l	3.63	4,108.36	5.717E-02	Pulse	0.30	3
Co			2	0.007	ug/l	131.56	64.45	9.006E-04	Pulse	0.30	3
Ni			2	0.218	ug/l	8.35	241.12	3.354E-03	Pulse	0.30	3
Cu			2	0.247	ug/l	7.98	805.58	1.122E-02	Pulse	0.30	3
Zn			2	0.790	ug/l	7.85	992.26	1.381E-02	Pulse	0.30	3
As			2	0.030	ug/l	104.52	11.67	1.624E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.004	ug/l	265.96	6.67	1.461E-05	Pulse	0.30	3
Sn			2	0.385	ug/l	18.43	571.13	1.255E-03	Pulse	0.30	3
Se			3	0.082	ug/l	31.48	4.87	8.322E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,356,550.39	0.39	105.6	Pulse	0.10	3
1	Sc		2,460,950.33	0.16	101.3	Pulse	0.10	3
1	Ge		543,221.65	1.08	114.9	Pulse	0.10	3
1	Ge		740,062.39	1.10	113.3	Pulse	0.10	3
1	Rh		3,333,928.81	0.35	103.0	Pulse	0.10	3
1	In		3,658,003.25	0.43	104.6	Pulse	0.10	3
1	Tb		5,703,213.87	0.15	116.6	Analog	0.10	3
1	Ho		503,209.21	1.00	105.6	Pulse	0.10	3
1	Bi		3,240,284.74	0.10	105.4	Pulse	0.10	3
2	Sc		71,851.39	1.77	97.3	Pulse	0.30	3
2	Ge		50,016.22	1.06	108.6	Pulse	0.30	3
2	Ge		75,516.89	0.06	108.9	Pulse	0.30	3
2	Rh		1,502,024.52	0.23	100.0	Pulse	0.30	3
2	In		454,916.16	0.50	96.2	Pulse	0.30	3
2	Tb		1,995,590.34	0.53	98.9	Pulse	0.30	3
2	Ho		196,176.62	0.15	99.3	Pulse	0.30	3
2	Bi		1,400,563.80	0.40	98.4	Pulse	0.30	3
3	Sc		55,438.33	1.34	100.9	Pulse	0.30	3
3	Ge		39,544.48	0.49	111.8	Pulse	0.30	3
3	Ge		58,538.88	1.66	108.3	Pulse	0.30	3
3	Rh		607,140.97	0.16	98.6	Pulse	0.30	3
3	Tb		1,012,874.09	0.45	97.4	Pulse	0.30	3

Quantitation Report

File Name 064SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File
Method Path
Acq Time 8/12/2018 18:02
Sample Name jc71649-3f
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/12/2018 16:24
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.029	ug/l	34.57	130.67	5.796E-05	Pulse	0.25	3
B			1	18.687	ug/l	1.45	68,091.11	3.022E-02	Pulse	0.15	3
Ca			1	62683.386	ug/l	1.58	23,720,776.31	9.739E+00	Analog	0.10	3
Sr			1	440.217	ug/l	0.33	7,654,495.72	2.506E+00	Analog	0.10	3
Mo			1	0.158	ug/l	22.69	586.70	1.922E-04	Pulse	0.10	3
Ag			1	0.013	ug/l	32.64	176.68	5.097E-05	Pulse	0.10	3
Sn			1	0.713	ug/l	3.95	3,143.77	9.064E-04	Pulse	0.10	3
Sb			1	0.209	ug/l	1.55	1,783.50	3.310E-04	Pulse	0.10	3
Ba			1	115.876	ug/l	5.64	340,387.95	6.327E-02	Pulse	0.10	3
Tl			1	0.020	ug/l	5.14	463.36	1.571E-04	Pulse	0.10	3
Pb			1	0.041	ug/l	10.64	353.35	1.198E-04	Pulse	0.10	3
Pb			1	0.048	ug/l	18.89	373.35	1.265E-04	Pulse	0.10	3
Pb			1	0.045	ug/l	5.98	1,523.42	5.165E-04	Pulse	0.10	3
Na			2	73307.658	ug/l	1.96	27,306,016.69	3.879E+02	Analog	0.30	3
Mg			2	24785.953	ug/l	1.19	4,190,775.53	5.953E+01	Pulse	0.30	3
Al			2	6.099	ug/l	38.18	383.37	5.454E-03	Pulse	0.30	3
K			2	2518.830	ug/l	1.07	234,757.13	3.335E+00	Pulse	0.30	3
Ca			2	60471.696	ug/l	1.23	303,293.87	4.308E+00	Pulse	0.30	3
Ti			2	0.137	ug/l	35.57	5.56	7.915E-05	Pulse	0.30	3
V			2	0.455	ug/l	17.39	752.25	1.069E-02	Pulse	0.30	3
Cr			2	1.211	ug/l	3.25	2,561.34	3.639E-02	Pulse	0.30	3
Mn			2	0.070	ug/l	41.46	102.22	1.450E-03	Pulse	0.30	3
Fe			2	2.092	ug/l	2.00	4,746.30	6.741E-02	Pulse	0.30	3
Co			2	0.017	ug/l	23.60	95.56	1.358E-03	Pulse	0.30	3
Ni			2	3.074	ug/l	3.42	2,874.72	4.084E-02	Pulse	0.30	3
Cu			2	0.670	ug/l	3.13	1,872.35	2.660E-02	Pulse	0.30	3
Zn			2	2.411	ug/l	22.13	1,524.53	2.167E-02	Pulse	0.30	3
As			2	0.097	ug/l	15.00	23.00	3.266E-04	Pulse	1.00	3
Cd			2	0.045	ug/l	41.99	27.78	6.357E-05	Pulse	0.30	3
Sn			2	0.372	ug/l	20.44	534.46	1.226E-03	Pulse	0.30	3
Se			3	0.820	ug/l	8.25	25.87	4.482E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,253,469.99	0.21	101.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,435,685.80	0.06	100.3	Pulse	0.10	3
1	Ge		519,472.52	0.81	109.9	Pulse	0.10	3
1	Ge		716,922.54	0.94	109.8	Pulse	0.10	3
1	Rh		3,054,849.85	1.08	94.4	Pulse	0.10	3
1	In		3,467,940.19	0.57	99.2	Pulse	0.10	3
1	Tb		5,389,747.84	4.87	110.2	Mix	0.10	3
1	Ho		492,741.72	0.16	103.4	Pulse	0.10	3
1	Bi		2,949,954.95	0.85	95.9	Pulse	0.10	3
2	Sc		70,402.13	1.22	95.4	Pulse	0.30	3
2	Ge		48,908.51	1.24	106.2	Pulse	0.30	3
2	Ge		73,734.22	1.61	106.3	Pulse	0.30	3
2	Rh		1,404,353.38	0.15	93.5	Pulse	0.30	3
2	In		436,171.45	0.89	92.3	Pulse	0.30	3
2	Tb		1,956,906.17	0.60	97.0	Pulse	0.30	3
2	Ho		194,030.21	0.71	98.2	Pulse	0.30	3
2	Bi		1,302,844.22	0.69	91.6	Pulse	0.30	3
3	Sc		53,988.13	1.50	98.2	Pulse	0.30	3
3	Ge		38,390.62	2.40	108.6	Pulse	0.30	3
3	Ge		57,703.64	0.61	106.7	Pulse	0.30	3
3	Rh		566,528.52	0.80	92.0	Pulse	0.30	3
3	Tb		991,888.26	0.10	95.4	Pulse	0.30	3

Quantitation Report

File Name	065SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 18:07
Sample Name	mp8578-sd2
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	1.04	28.00	1.191E-05	Pulse	0.25	3
B			1	27.422	ug/l	6.04	31,807.94	1.353E-02	Pulse	0.15	3
Ca			1	59779.809	ug/l	0.69	4,744,130.03	1.865E+00	Pulse	0.10	3
Sr			1	383.123	ug/l	0.75	1,456,549.20	4.363E-01	Pulse	0.10	3
Mo			1	0.299	ug/l	4.47	273.34	8.186E-05	Pulse	0.10	3
Ag			1	0.032	ug/l	46.91	126.67	3.405E-05	Pulse	0.10	3
Sn			1	1.434	ug/l	2.21	720.04	1.937E-04	Pulse	0.10	3
Sb			1	0.276	ug/l	8.55	686.71	1.209E-04	Pulse	0.10	3
Ba			1	115.835	ug/l	1.38	71,906.25	1.266E-02	Pulse	0.10	3
Tl			1	0.036	ug/l	11.56	253.34	7.957E-05	Pulse	0.10	3
Pb			1	0.119	ug/l	24.69	273.35	8.583E-05	Pulse	0.10	3
Pb			1	0.103	ug/l	60.22	246.68	7.742E-05	Pulse	0.10	3
Pb			1	0.119	ug/l	12.92	1,093.39	3.433E-04	Pulse	0.10	3
Na			2	75604.141	ug/l	1.00	5,990,106.01	8.007E+01	Analog	0.30	3
Mg			2	25333.926	ug/l	1.20	910,421.87	1.217E+01	Pulse	0.30	3
Al			2	17.995	ug/l	14.19	278.90	3.729E-03	Pulse	0.30	3
K			2	2508.479	ug/l	0.50	54,783.52	7.323E-01	Pulse	0.30	3
Ca			2	61157.854	ug/l	1.09	65,254.62	8.723E-01	Pulse	0.30	3
Ti			2	0.257	ug/l	86.61	2.22	2.965E-05	Pulse	0.30	3
V			2	0.428	ug/l	6.23	237.78	3.179E-03	Pulse	0.30	3
Cr			2	0.844	ug/l	18.70	580.02	7.753E-03	Pulse	0.30	3
Mn			2	0.025	ug/l	200.79	46.67	6.235E-04	Pulse	0.30	3
Fe			2	1.907	ug/l	19.98	2,087.94	2.791E-02	Pulse	0.30	3
Co			2	0.018	ug/l	110.63	55.56	7.433E-04	Pulse	0.30	3
Ni			2	3.062	ug/l	11.55	638.91	8.537E-03	Pulse	0.30	3
Cu			2	0.564	ug/l	6.58	475.57	6.358E-03	Pulse	0.30	3
Zn			2	-3.511	ug/l	-17.03	492.24	6.579E-03	Pulse	0.30	3
As			2	0.253	ug/l	20.82	16.00	2.138E-04	Pulse	1.00	3
Cd			2	-0.009	ug/l	-318.73	3.33	6.947E-06	Pulse	0.30	3
Sn			2	-0.183	ug/l	-15.77	146.67	3.063E-04	Pulse	0.30	3
Se			3	1.410	ug/l	28.98	10.20	1.823E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,350,367.05	0.20	105.3	Pulse	0.10	3
1	Sc		2,543,349.23	0.30	104.7	Pulse	0.10	3
1	Ge		507,081.27	0.85	107.3	Pulse	0.10	3

Quantitation Report

1	Ge		702,437.10	0.36	107.5	Pulse	0.10	3
1	Rh		3,338,519.22	0.55	103.2	Pulse	0.10	3
1	In		3,717,993.07	0.50	106.3	Pulse	0.10	3
1	Tb		5,682,302.42	1.24	116.1	Analog	0.10	3
1	Ho		501,474.72	0.06	105.3	Pulse	0.10	3
1	Bi		3,184,311.52	0.31	103.5	Pulse	0.10	3
2	Sc		74,807.77	0.56	101.4	Pulse	0.30	3
2	Ge		47,552.33	1.13	103.2	Pulse	0.30	3
2	Ge		72,282.30	0.55	104.2	Pulse	0.30	3
2	Rh		1,513,791.85	0.61	100.8	Pulse	0.30	3
2	In		478,800.31	0.55	101.3	Pulse	0.30	3
2	Tb		2,033,827.49	1.07	100.8	Pulse	0.30	3
2	Ho		199,452.85	1.45	101.0	Pulse	0.30	3
2	Bi		1,404,754.42	0.84	98.7	Pulse	0.30	3
3	Sc		56,713.70	0.55	103.2	Pulse	0.30	3
3	Ge		36,813.61	0.57	104.1	Pulse	0.30	3
3	Ge		55,919.72	0.54	103.4	Pulse	0.30	3
3	Rh		616,634.30	0.38	100.1	Pulse	0.30	3
3	Tb		1,042,754.58	0.56	100.3	Pulse	0.30	3

Quantitation Report

File Name 066SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File
Method Path
Acq Time 8/12/2018 18:12
Sample Name jc71604-1
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/12/2018 16:24
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.014	ug/l	19.24	76.00	3.366E-05	Pulse	0.25	3
B			1	457.786	ug/l	1.07	1,320,728.77	5.851E-01	Pulse	0.15	3
Ca			1	99506.327	ug/l	0.98	37,847,435.27	1.545E+01	Analog	0.10	3
Sr			1	411.835	ug/l	0.20	7,357,481.14	2.344E+00	Analog	0.10	3
Mo			1	13.910	ug/l	0.69	49,213.04	1.568E-02	Pulse	0.10	3
Ag			1	0.011	ug/l	25.16	170.01	4.769E-05	Pulse	0.10	3
Sn			1	0.808	ug/l	1.75	3,800.58	1.065E-03	Pulse	0.10	3
Sb			1	0.295	ug/l	10.64	2,510.28	4.476E-04	Pulse	0.10	3
Ba			1	42.496	ug/l	1.11	130,135.27	2.321E-02	Pulse	0.10	3
Tl			1	0.024	ug/l	16.52	556.70	1.803E-04	Pulse	0.10	3
Pb			1	0.382	ug/l	8.28	2,500.30	8.099E-04	Pulse	0.10	3
Pb			1	0.349	ug/l	2.02	2,063.54	6.683E-04	Pulse	0.10	3
Pb			1	0.365	ug/l	3.24	9,668.24	3.132E-03	Pulse	0.10	3
Na			2	7983.709	ug/l	0.40	2,982,065.30	4.231E+01	Pulse	0.30	3
Mg			2	4540.966	ug/l	1.07	768,689.01	1.091E+01	Pulse	0.30	3
Al			2	205.803	ug/l	5.45	10,095.71	1.432E-01	Pulse	0.30	3
K			2	20583.125	ug/l	1.05	1,877,404.02	2.664E+01	Pulse	0.30	3
Ca			2	94120.544	ug/l	1.04	472,535.28	6.705E+00	Pulse	0.30	3
Ti			2	2.818	ug/l	24.01	114.45	1.623E-03	Pulse	0.30	3
V			2	1.985	ug/l	0.71	2,946.96	4.181E-02	Pulse	0.30	3
Cr			2	0.720	ug/l	5.56	1,613.43	2.290E-02	Pulse	0.30	3
Mn			2	97.058	ug/l	0.81	87,647.96	1.244E+00	Pulse	0.30	3
Fe			2	277.605	ug/l	0.46	452,991.56	6.428E+00	Pulse	0.30	3
Co			2	0.218	ug/l	1.62	762.25	1.082E-02	Pulse	0.30	3
Ni			2	1.814	ug/l	8.15	1,713.45	2.431E-02	Pulse	0.30	3
Cu			2	2.240	ug/l	1.49	5,893.34	8.362E-02	Pulse	0.30	3
Zn			2	2.914	ug/l	8.17	1,699.00	2.411E-02	Pulse	0.30	3
As			2	4.930	ug/l	0.71	858.03	1.217E-02	Pulse	1.00	3
Cd			2	0.033	ug/l	27.65	22.22	4.956E-05	Pulse	0.30	3
Sn			2	0.498	ug/l	8.68	676.69	1.510E-03	Pulse	0.30	3
Se			3	0.651	ug/l	14.13	21.27	3.644E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,257,458.27	0.35	101.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,449,083.98	0.63	100.9	Pulse	0.10	3
1	Ge		496,566.24	0.89	105.1	Pulse	0.10	3
1	Ge		688,026.58	0.26	105.3	Pulse	0.10	3
1	Rh		3,138,586.93	0.45	97.0	Pulse	0.10	3
1	In		3,567,195.92	0.68	102.0	Pulse	0.10	3
1	Tb		5,607,075.33	0.55	114.6	Analog	0.10	3
1	Ho		500,995.22	0.36	105.2	Pulse	0.10	3
1	Bi		3,087,752.35	0.78	100.4	Pulse	0.10	3
2	Sc		70,474.75	0.61	95.5	Pulse	0.30	3
2	Ge		46,772.32	1.38	101.5	Pulse	0.30	3
2	Ge		70,656.42	1.29	101.8	Pulse	0.30	3
2	Rh		1,436,151.50	0.28	95.6	Pulse	0.30	3
2	In		448,139.29	0.39	94.8	Pulse	0.30	3
2	Tb		1,987,665.48	0.50	98.5	Pulse	0.30	3
2	Ho		196,768.37	0.49	99.6	Pulse	0.30	3
2	Bi		1,355,118.56	0.50	95.2	Pulse	0.30	3
3	Sc		54,267.85	1.23	98.7	Pulse	0.30	3
3	Ge		38,212.46	2.46	108.1	Pulse	0.30	3
3	Ge		58,289.18	1.32	107.8	Pulse	0.30	3
3	Rh		580,812.88	0.73	94.3	Pulse	0.30	3
3	Tb		1,009,233.22	0.22	97.0	Pulse	0.30	3

Quantitation Report

File Name	067_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 18:17
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	47.837	ug/l	0.51	356,573.33	1.585E-01	Pulse	0.25	3
B			1	102.151	ug/l	1.29	595,737.32	2.648E-01	Pulse	0.15	3
Ca			1	5020.863	ug/l	0.24	3,889,827.86	1.568E+00	Pulse	0.10	3
Sr			1	52.297	ug/l	0.47	1,953,080.70	5.955E-01	Pulse	0.10	3
Mo			1	51.449	ug/l	0.69	380,114.39	1.159E-01	Pulse	0.10	3
Ag			1	48.349	ug/l	0.12	942,414.98	2.603E-01	Pulse	0.10	3
Sn			1	50.013	ug/l	0.68	604,328.00	1.669E-01	Pulse	0.10	3
Sb			1	47.464	ug/l	0.38	739,007.46	1.294E-01	Pulse	0.10	3
Ba			1	46.282	ug/l	1.28	288,622.30	5.054E-02	Pulse	0.10	3
Tl			1	50.795	ug/l	0.85	1,890,388.98	6.074E-01	Pulse	0.10	3
Pb			1	50.840	ug/l	1.55	638,857.66	2.053E-01	Pulse	0.10	3
Pb			1	50.352	ug/l	0.70	564,837.91	1.815E-01	Pulse	0.10	3
Pb			1	50.672	ug/l	0.78	2,576,221.33	8.277E-01	Pulse	0.10	3
Na			2	4846.664	ug/l	0.72	3,765,154.85	5.136E+01	Pulse	0.30	3
Mg			2	4864.179	ug/l	0.86	1,712,981.29	2.337E+01	Pulse	0.30	3
Al			2	4802.005	ug/l	0.70	485,828.40	6.627E+00	Pulse	0.30	3
K			2	5013.254	ug/l	1.05	954,522.01	1.302E+01	Pulse	0.30	3
Ca			2	5296.584	ug/l	1.96	55,393.82	7.556E-01	Pulse	0.30	3
Ti			2	49.000	ug/l	2.11	4,137.23	5.644E-02	Pulse	0.30	3
V			2	51.193	ug/l	0.43	152,822.67	2.085E+00	Pulse	0.30	3
Cr			2	50.325	ug/l	1.18	202,917.98	2.768E+00	Pulse	0.30	3
Mn			2	49.488	ug/l	0.78	92,976.66	1.268E+00	Pulse	0.30	3
Fe			2	5217.030	ug/l	1.46	17,659,497.63	2.409E+02	Analog	0.30	3
Co			2	50.344	ug/l	1.08	347,133.14	4.735E+00	Pulse	0.30	3
Ni			2	49.498	ug/l	0.57	95,296.29	1.300E+00	Pulse	0.30	3
Cu			2	49.417	ug/l	0.45	263,360.59	3.592E+00	Pulse	0.30	3
Zn			2	48.841	ug/l	1.69	35,446.09	4.835E-01	Pulse	0.30	3
As			2	51.576	ug/l	1.58	18,542.51	2.529E-01	Pulse	1.00	3
Cd			2	49.950	ug/l	1.83	56,426.55	1.221E-01	Pulse	0.30	3
Sn			2	51.459	ug/l	1.42	107,253.07	2.321E-01	Pulse	0.30	3
Se			3	48.767	ug/l	1.72	2,603.01	4.824E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,250,151.85	0.49	100.8	Pulse	0.10	3
1	Sc		2,480,429.86	0.47	102.2	Pulse	0.10	3
1	Ge		495,670.83	0.30	104.9	Pulse	0.10	3

Quantitation Report

1	Ge		687,268.14	0.79	105.2	Pulse	0.10	3
1	Rh		3,279,785.16	0.31	101.4	Pulse	0.10	3
1	In		3,620,531.61	0.36	103.5	Pulse	0.10	3
1	Tb		5,710,407.41	0.18	116.7	Analog	0.10	3
1	Ho		499,641.67	0.52	104.9	Pulse	0.10	3
1	Bi		3,112,710.48	1.17	101.2	Pulse	0.10	3
2	Sc		73,311.18	0.66	99.3	Pulse	0.30	3
2	Ge		47,204.60	0.91	102.5	Pulse	0.30	3
2	Ge		70,675.27	0.86	101.9	Pulse	0.30	3
2	Rh		1,495,499.73	1.00	99.6	Pulse	0.30	3
2	In		462,005.64	0.27	97.7	Pulse	0.30	3
2	Tb		2,023,285.41	0.79	100.3	Pulse	0.30	3
2	Ho		200,256.35	0.41	101.4	Pulse	0.30	3
2	Bi		1,385,468.21	1.40	97.4	Pulse	0.30	3
3	Sc		56,285.60	0.05	102.4	Pulse	0.30	3
3	Ge		36,136.64	0.43	102.2	Pulse	0.30	3
3	Ge		53,957.75	0.74	99.8	Pulse	0.30	3
3	Rh		598,733.12	0.46	97.2	Pulse	0.30	3
3	Tb		1,018,738.85	0.23	98.0	Pulse	0.30	3

Quantitation Report

File Name	068_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 18:23
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	86.70	42.67	1.855E-05	Pulse	0.25	3
B			1	3.199	ug/l	1.77	33,704.97	1.469E-02	Pulse	0.15	3
Ca			1	-10.958	ug/l	-0.27	15,507.75	6.207E-03	Pulse	0.10	3
Sr			1	0.001	ug/l	159.57	643.38	1.907E-04	Pulse	0.10	3
Mo			1	0.032	ug/l	28.92	290.01	8.594E-05	Pulse	0.10	3
Ag			1	0.010	ug/l	35.45	266.68	7.208E-05	Pulse	0.10	3
Sn			1	0.211	ug/l	8.33	1,546.80	4.181E-04	Pulse	0.10	3
Sb			1	0.030	ug/l	25.92	713.38	1.263E-04	Pulse	0.10	3
Ba			1	-0.001	ug/l	-433.95	40.00	7.093E-06	Pulse	0.10	3
Tl			1	0.017	ug/l	15.07	776.72	2.441E-04	Pulse	0.10	3
Pb			1	0.007	ug/l	56.50	216.68	6.806E-05	Pulse	0.10	3
Pb			1	0.005	ug/l	21.56	183.34	5.764E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	15.60	866.71	2.724E-04	Pulse	0.10	3
Na			2	1.212	ug/l	22.20	6,543.56	8.876E-02	Pulse	0.30	3
Mg			2	0.090	ug/l	109.49	131.11	1.781E-03	Pulse	0.30	3
Al			2	-0.334	ug/l	-76.64	57.78	7.859E-04	Pulse	0.30	3
K			2	-5.358	ug/l	-11.05	5,251.99	7.124E-02	Pulse	0.30	3
Ca			2	-2.886	ug/l	-11.30	44.45	6.025E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	-0.003	ug/l	-305.09	97.78	1.325E-03	Pulse	0.30	3
Cr			2	0.000	ug/l	-3509.34	227.78	3.094E-03	Pulse	0.30	3
Mn			2	-0.009	ug/l	-41.33	24.45	3.316E-04	Pulse	0.30	3
Fe			2	0.244	ug/l	15.10	2,239.07	3.038E-02	Pulse	0.30	3
Co			2	0.002	ug/l	107.90	54.45	7.375E-04	Pulse	0.30	3
Ni			2	-0.001	ug/l	-552.30	35.55	4.819E-04	Pulse	0.30	3
Cu			2	-0.004	ug/l	-43.71	144.45	1.960E-03	Pulse	0.30	3
Zn			2	-0.778	ug/l	-5.17	180.01	2.439E-03	Pulse	0.30	3
As			2	0.002	ug/l	486.93	7.33	9.954E-05	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.001	ug/l	316.99	5.55	1.169E-05	Pulse	0.30	3
Sn			2	0.042	ug/l	12.35	274.45	5.769E-04	Pulse	0.30	3
Se			3	0.007	ug/l	277.10	2.73	5.030E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,294,686.46	1.00	102.8	Pulse	0.10	3
1	Sc		2,498,291.94	0.56	102.9	Pulse	0.10	3
1	Ge		489,397.10	0.41	103.5	Pulse	0.10	3
1	Ge		680,119.86	0.51	104.1	Pulse	0.10	3
1	Rh		3,374,029.85	0.09	104.3	Pulse	0.10	3
1	In		3,699,990.22	0.21	105.8	Pulse	0.10	3
1	Tb		5,649,983.67	0.87	115.5	Analog	0.10	3
1	Ho		496,517.96	0.79	104.2	Pulse	0.10	3
1	Bi		3,181,202.35	0.52	103.4	Pulse	0.10	3
2	Sc		73,733.05	1.06	99.9	Pulse	0.30	3
2	Ge		47,109.88	0.57	102.2	Pulse	0.30	3
2	Ge		71,067.02	0.33	102.4	Pulse	0.30	3
2	Rh		1,531,806.54	0.34	102.0	Pulse	0.30	3
2	In		475,747.92	0.47	100.6	Pulse	0.30	3
2	Tb		2,016,276.31	0.54	100.0	Pulse	0.30	3
2	Ho		199,512.09	0.28	101.0	Pulse	0.30	3
2	Bi		1,411,553.38	0.34	99.2	Pulse	0.30	3
3	Sc		56,207.54	1.19	102.3	Pulse	0.30	3
3	Ge		36,565.31	1.54	103.4	Pulse	0.30	3
3	Ge		54,408.20	0.67	100.6	Pulse	0.30	3
3	Rh		617,447.91	0.63	100.2	Pulse	0.30	3
3	Tb		1,019,166.14	0.30	98.0	Pulse	0.30	3

Quantitation Report

File Name	069SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Method File	
Method Path	
Acq Time	8/12/2018 18:28
Sample Name	jc71661-1 1
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/12/2018 16:24
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.031	ug/l	13.30	252.01	1.139E-04	Pulse	0.25	3
B			1	23.894	ug/l	1.01	148,230.10	6.699E-02	Pulse	0.15	3
Ca			1	69279.121	ug/l	1.50	54,395,585.86	2.152E+01	Analog	0.10	3
Sr			1	59.156	ug/l	0.25	2,084,916.48	6.736E-01	Pulse	0.10	3
Mo			1	0.222	ug/l	1.80	1,590.14	5.137E-04	Pulse	0.10	3
Ag			1	0.017	ug/l	22.72	386.69	1.109E-04	Pulse	0.10	3
Sn			1	0.302	ug/l	3.87	2,526.95	7.241E-04	Pulse	0.10	3
Sb			1	0.048	ug/l	22.23	980.06	1.768E-04	Pulse	0.10	3
Ba			1	52.545	ug/l	0.21	317,827.19	5.738E-02	Pulse	0.10	3
Tl			1	0.016	ug/l	5.55	670.04	2.294E-04	Pulse	0.10	3
Pb			1	1.653	ug/l	1.03	19,600.22	6.711E-03	Pulse	0.10	3
Pb			1	1.485	ug/l	1.42	15,745.66	5.392E-03	Pulse	0.10	3
Pb			1	1.574	ug/l	0.93	75,514.60	2.586E-02	Pulse	0.10	3
Na			2	31012.586	ug/l	0.38	24,482,484.03	3.282E+02	Analog	0.30	3
Mg			2	41274.220	ug/l	1.77	14,787,146.08	1.983E+02	Analog	0.30	3
Al			2	215.263	ug/l	0.36	22,247.09	2.983E-01	Pulse	0.30	3
K			2	1761.366	ug/l	0.85	345,323.88	4.630E+00	Pulse	0.30	3
Ca			2	65934.291	ug/l	0.86	700,668.18	9.394E+00	Pulse	0.30	3
Ti			2	4.707	ug/l	20.99	404.46	5.422E-03	Pulse	0.30	3
V			2	0.835	ug/l	2.41	2,640.24	3.540E-02	Pulse	0.30	3
Cr			2	3.490	ug/l	1.09	14,533.16	1.949E-01	Pulse	0.30	3
Mn			2	85.261	ug/l	0.89	162,939.94	2.185E+00	Pulse	0.30	3
Fe			2	318.603	ug/l	0.65	1,098,620.34	1.473E+01	Pulse	0.30	3
Co			2	0.246	ug/l	4.74	1,769.00	2.372E-02	Pulse	0.30	3
Ni			2	6.131	ug/l	1.46	12,041.15	1.614E-01	Pulse	0.30	3
Cu			2	2.885	ug/l	0.31	15,802.13	2.119E-01	Pulse	0.30	3
Zn			2	3.390	ug/l	6.23	3,197.01	4.285E-02	Pulse	0.30	3
As			2	0.240	ug/l	5.96	94.33	1.265E-03	Pulse	1.00	3
Cd			2	0.005	ug/l	171.20	10.00	2.181E-05	Pulse	0.30	3
Sn			2	0.134	ug/l	9.65	455.57	9.940E-04	Pulse	0.30	3
Se			3	0.332	ug/l	7.24	20.13	3.714E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,212,924.52	0.77	99.1	Pulse	0.10	3

Current Signal

[1]



Mass	Range	Count	Avg. Count	RSD [%]
7	20000	3278	3215.5	1.61
59	50	3030	2961.4	2.62
89	20	4747	4787.3	2.21
140	20	5233	5163.2	1.49
205	100	3944	3828.4	2.04
156/140	100	0.669 %	0.751 %	7.39
70/140	1000	67.398 %	64.946 %	3.20
9	20	1	2.0	70.71
11	2000	1163	1233.7	4.00
88	100	67	74.5	7.71
95	20	9	7.0	23.33
107	20	4	6.0	49.07
121	50	24	24.3	9.74
137	20	29	31.5	11.15
208	50	36	46.5	18.95
Integration Time [sec]		0.10		

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.80	V	S/C Temp	2	℃
Smpl Depth	7.8	mm	Gas Switch	Dilution Gas	
Carrier Gas	0.55	L/min	Makeup/Dilution Gas	0.55	L/min
Option Gas	0.0	%			

Lenses Parameters

Extract 1	0.0	V	Cell Entrance	-26	V
Extract 2	-155.0	V	Cell Exit	-60	V
Omega Bias	-70	V	Deflect	16.4	V
Omega Lens	6.4	V	Plate Bias	-50	V

Cell Parameters

Use Gas	false		OctP Bias	-8.0	V
He Flow	0.0	mL/min	OctP RF	200	V
H2 Flow	0.0	mL/min	Energy Discrimination	5.0	V
3rd Gas Flow	0	%			

Meters

IF/BK Press	2.72E+2	Pa	S/C Temp (L)	2.0	℃
TMP Revolution	100.0	%	Carrier Gas(BP)	1.38E+2	kPa
Carrier Gas	0.55	L/min			

US EPA Tune Check Sample Report

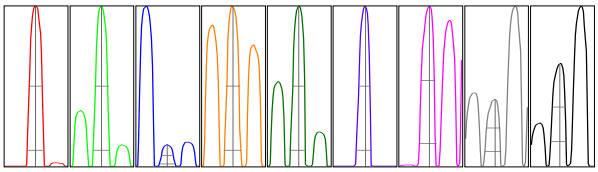
Batch Folder C:\Agilent\ICPMH\1\DATA\xa081218m1.b
Report Comment
Instrument Name G3281A JP10340551

[1]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	86535	2.04	5.00	
24	252377	1.42	5.00	
25	33169	2.10	5.00	
26	37961	1.20	5.00	
59	323595	1.39	5.00	
115	476346	1.81	5.00	
206	143252	2.00	5.00	
207	136599	2.01	5.00	
208	318049	1.71	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	85433	85432	84922	88224	88664
24	250216	251512	249132	252696	258328
25	32615	32518	32873	33921	33917
26	37778	37456	37898	37980	38695
59	321824	321057	318465	328931	327700
115	470554	471588	470000	479467	490120
206	141407	142125	140199	145690	146839
207	133611	135091	135749	137889	140655
208	313996	316401	312480	322260	325107

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	14045	9.00	8.9 - 9.1		0.768	0.900	
24	42833	24.00	23.9 - 24.1		0.754	0.900	
25	5704	25.00	24.9 - 25.1		0.731	0.900	
26	6433	26.00	25.9 - 26.1		0.755	0.900	
59	56062	59.00	58.9 - 59.1		0.716	0.900	
115	87316	115.05	114.9 - 115.1		0.710	0.900	
206	23372	205.95	205.9 - 206.1		0.766	0.900	
207	21292	206.95	206.9 - 207.1		0.745	0.900	
208	50806	207.90	207.9 - 208.1		0.739	0.900	

X% = 10 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

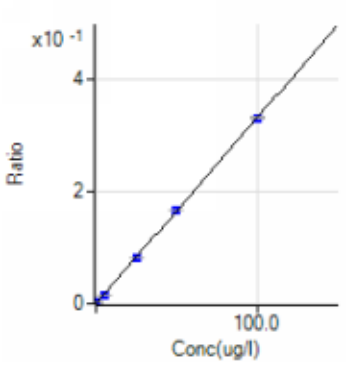
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1500	W	Carrier Gas	0.55	L/min			
RF Matching	1.80	V	Option Gas	0.0	%			
Smpl Depth	7.8	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	℃						

Lenses Parameters

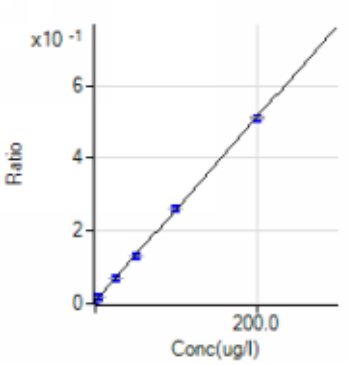
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	6.4	V			
Extract 2	-155.0	V	Cell Entrance	-26	V			
Omega Bias	-70	V	Cell Exit	-60	V			
Deflect	16.4	V						

Cell Parameters

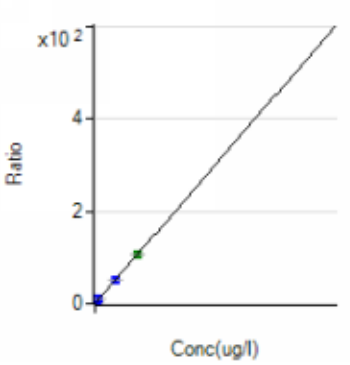
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			
Energy Discrimination	5.0	V						



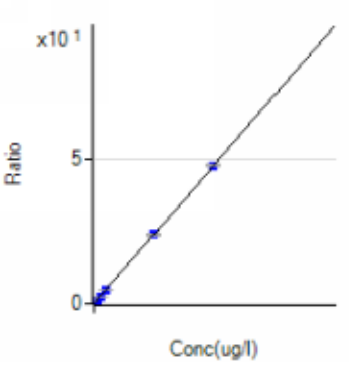
9 Be [1] / ISTD: 6 Li
y = 3.312E-3 x + 9.687E-6
R 1.0000
DL 0.007525
BEC 0.002925



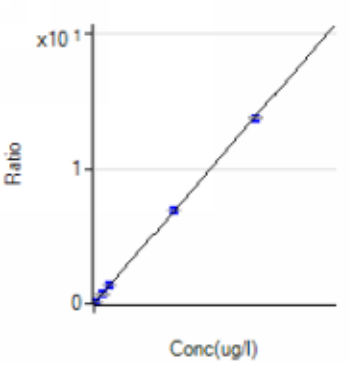
11 B [1] / ISTD: 6 Li
y = 2.527E-3 x + 6.603E-3
R 1.0000
DL 0.1735
BEC 2.613



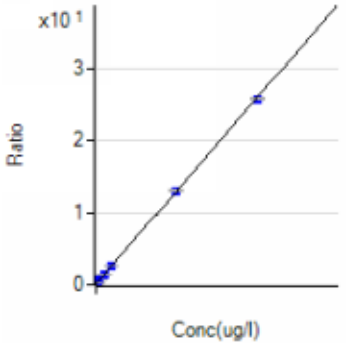
23 Na [2] / ISTD: 45 Sc
y = 1.058E-2 x + 7.594E-2
R 0.9999
DL 1.04
BEC 7.177



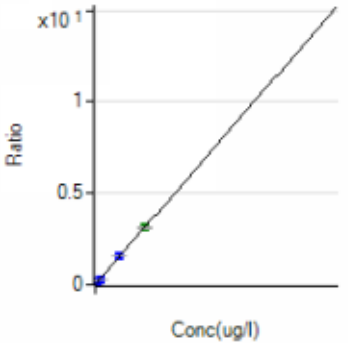
24 Mg [2] / ISTD: 45 Sc
y = 4.804E-3 x + 1.350E-3
R 1.0000
DL 0.1358
BEC 0.281



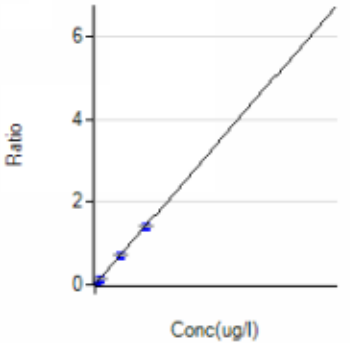
27 Al [2] / ISTD: 45 Sc
y = 1.380E-3 x + 1.246E-3
R 1.0000
DL 0.8996
BEC 0.9031



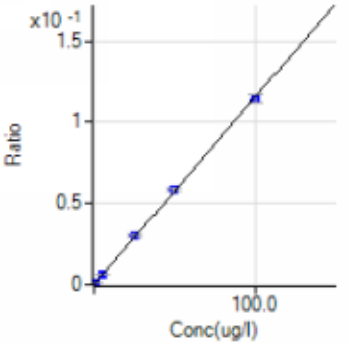
39 K [2] / ISTD: 45 Sc
y = 2.580E-3 x + 8.506E-2
R 1.0000
DL 1.8
BEC 32.97



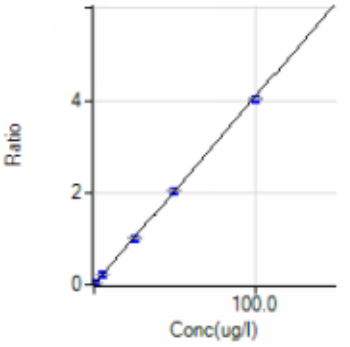
44 Ca [1] / ISTD: 45 Sc
y = 3.104E-4 x + 9.609E-3
R 1.0000
DL 1.42
BEC 30.95



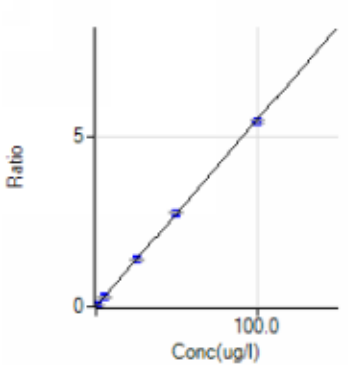
44 Ca [2] / ISTD: 45 Sc
y = 1.425E-4 x + 1.014E-3
R 1.0000
DL 5.174
BEC 7.115



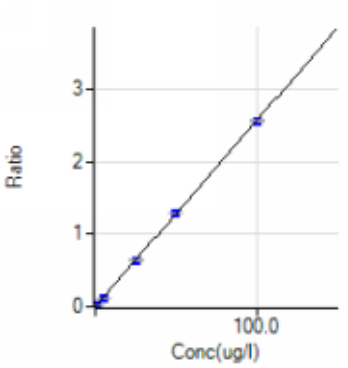
47 Ti [2] / ISTD: 45 Sc
y = 1.152E-3 x
R 0.9999
DL 0
BEC 0



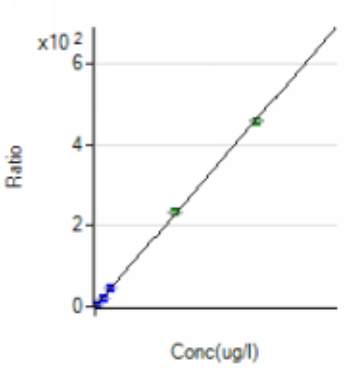
51 V [2] / ISTD: 45 Sc
y = 4.069E-2 x + 1.436E-3
R 1.0000
DL 0.01311
BEC 0.03529



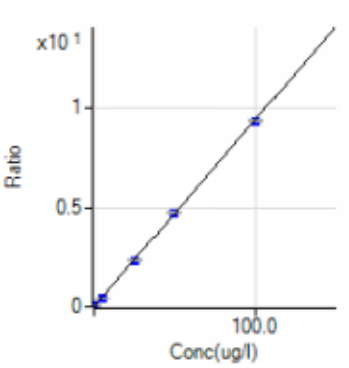
52 Cr [2] / ISTD: 45 Sc
y = 5.494E-2 x + 3.116E-3
R 1.0000
DL 0.005727
BEC 0.05671



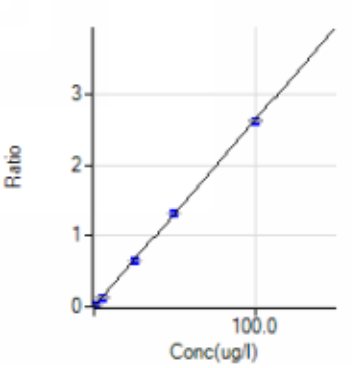
55 Mn [2] / ISTD: 45 Sc
y = 2.562E-2 x + 5.583E-4
R 1.0000
DL 0.0259
BEC 0.0218



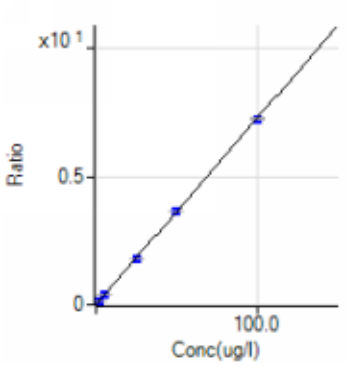
56 Fe [2] / ISTD: 45 Sc
y = 4.617E-2 x + 1.911E-2
R 1.0000
DL 0.03293
BEC 0.4139



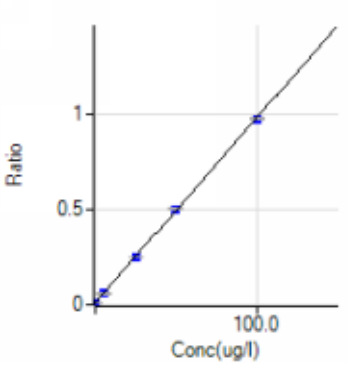
59 Co [2] / ISTD: 45 Sc
y = 9.405E-2 x + 5.728E-4
R 1.0000
DL 0.005796
BEC 0.00609



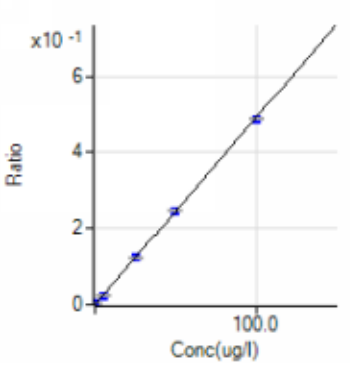
60 Ni [2] / ISTD: 45 Sc
y = 2.625E-2 x + 4.983E-4
R 1.0000
DL 0.0214
BEC 0.01898



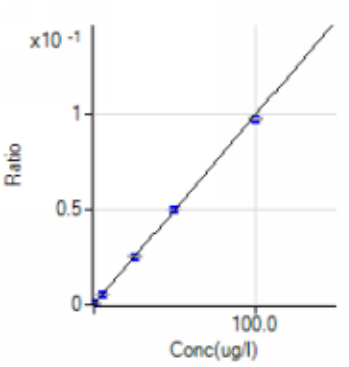
63 Cu [2] / ISTD: 45 Sc
y = 7.265E-2 x + 2.259E-3
R 1.0000
DL 0.006203
BEC 0.0311



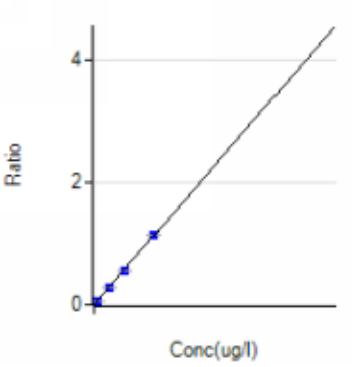
66 Zn [2] / ISTD: 45 Sc
y = 9.696E-3 x + 9.984E-3
R 0.9999
DL 0.125
BEC 1.03



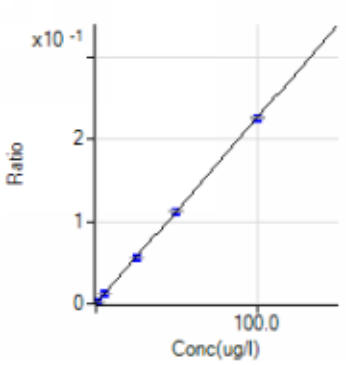
75 As [2] / ISTD: 45 Sc
y = 4.903E-3 x + 8.976E-5
R 1.0000
DL 0.01321
BEC 0.01831



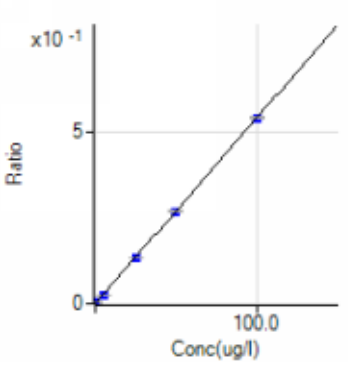
78 Se [3] / ISTD: 74 Ge
y = 9.883E-4 x + 4.289E-5
R 0.9999
DL 0.006857
BEC 0.04339



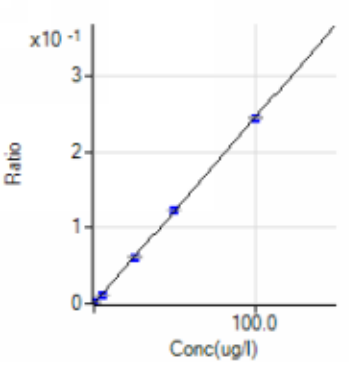
88 Sr [1] / ISTD: 103 Rh
y = 1.138E-2 x + 1.765E-4
R 1.0000
DL 0.002965
BEC 0.01551



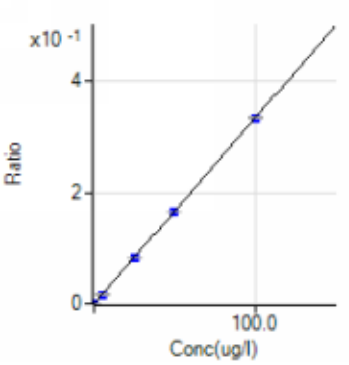
95 Mo [1] / ISTD: 103 Rh
y = 2.252E-3 x + 1.442E-5
R 1.0000
DL 0.002325
BEC 0.006402



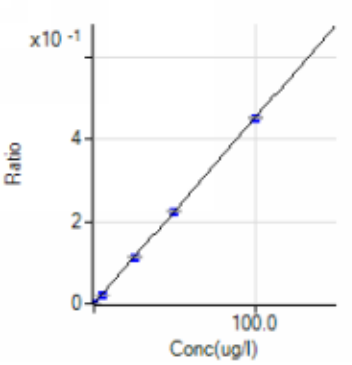
107 Ag [1] / ISTD: 115 In
y = 5.383E-3 x + 1.685E-5
R 1.0000
DL 0.00555
BEC 0.003129



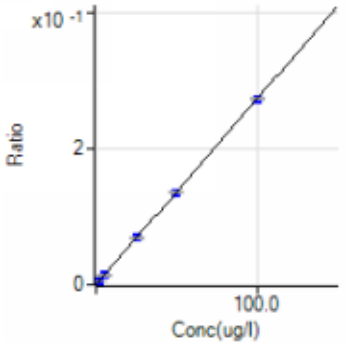
111 Cd [2] / ISTD: 115 In
y = 2.445E-3 x + 9.120E-6
R 1.0000
DL 0.00997
BEC 0.00373



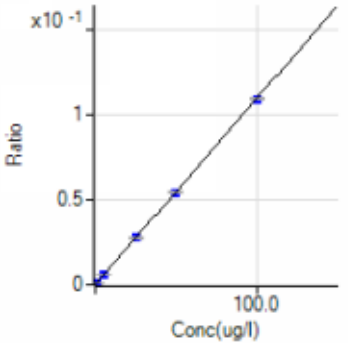
118 Sn [1] / ISTD: 115 In
y = 3.343E-3 x - 2.857E-4
R 1.0000
DL 0.01285
BEC -0.08547



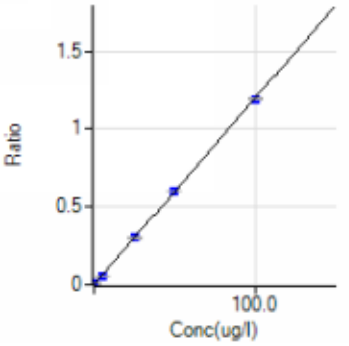
118 Sn [2] / ISTD: 115 In
y = 4.504E-3 x + 3.889E-4
R 1.0000
DL 0.06726
BEC 0.08635



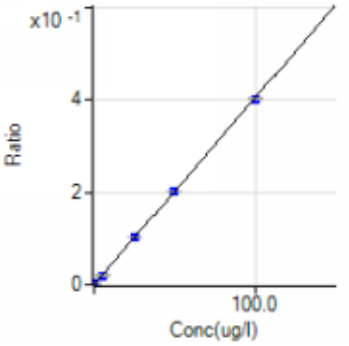
121 Sb [1] / ISTD: 159 Tb
y = 2.726E-3 x + 4.563E-5
R 1.0000
DL 0.008342
BEC 0.01674



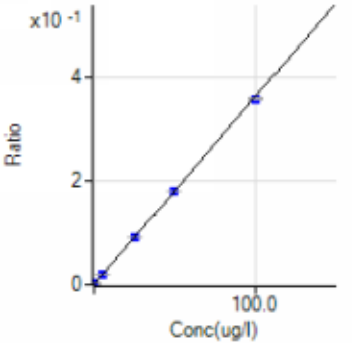
137 Ba [1] / ISTD: 159 Tb
y = 1.092E-3 x + 7.807E-6
R 1.0000
DL 0.008629
BEC 0.00715



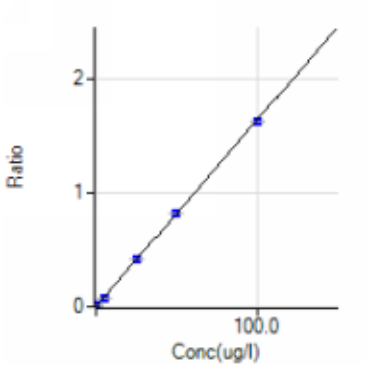
205 Tl [1] / ISTD: 209 Bi
y = 1.196E-2 x + 3.635E-5
R 1.0000
DL 0.001294
BEC 0.003041



206 Pb [1] / ISTD: 209 Bi
y = 4.037E-3 x + 3.794E-5
R 1.0000
DL 0.003608
BEC 0.009399



207 Pb [1] / ISTD: 209 Bi
y = 3.603E-3 x + 4.015E-5
R 1.0000
DL 0.004306
BEC 0.01114



208 Pb [1] / ISTD: 209 Bi

y = 1.633E-2 x + 1.495E-4

R	1.0000
DL	0.001606
BEC	0.009152

Quantitation Report

File Name	001CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 12:45
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	231.34	10.67	3.852E-06	Pulse	0.25	3
B			1	0.045	ug/l	116.35	23,583.34	8.476E-03	Pulse	0.15	3
Ca			1	-0.436	ug/l	-185.49	22,388.98	7.487E-03	Pulse	0.10	3
Sr			1	0.001	ug/l	191.08	550.03	1.438E-04	Pulse	0.10	3
Mo			1	0.002	ug/l	45.43	13.33	3.498E-06	Pulse	0.10	3
Ag			1	0.000	ug/l	-368.36	16.67	4.114E-06	Pulse	0.10	3
Sn			1	0.045	ug/l	38.56	1,236.76	3.015E-04	Pulse	0.10	3
Sb			1	-0.026	ug/l	-13.22	2,116.89	3.858E-04	Pulse	0.10	3
Ba			1	0.006	ug/l	42.68	56.67	1.034E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	117.51	40.00	1.187E-05	Pulse	0.10	3
Pb			1	-0.003	ug/l	-167.42	103.34	3.041E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-358.54	73.33	2.170E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-247.29	380.01	1.123E-04	Pulse	0.10	3
Na			2	-1.319	ug/l	-11.56	5,083.02	5.727E-02	Pulse	0.30	3
Mg			2	-0.020	ug/l	-244.01	90.00	1.014E-03	Pulse	0.30	3
Al			2	-0.063	ug/l	-290.38	48.89	5.520E-04	Pulse	0.30	3
K			2	-0.202	ug/l	-609.32	6,132.30	6.910E-02	Pulse	0.30	3
Ca			2	-1.813	ug/l	-55.94	44.44	5.010E-04	Pulse	0.30	3
Ti			2	0.011	ug/l	173.21	1.11	1.246E-05	Pulse	0.30	3
V			2	-0.002	ug/l	-392.34	178.89	2.016E-03	Pulse	0.30	3
Cr			2	-0.002	ug/l	-158.20	250.00	2.816E-03	Pulse	0.30	3
Mn			2	0.008	ug/l	10.91	25.56	2.880E-04	Pulse	0.30	3
Fe			2	0.093	ug/l	23.97	1,550.09	1.747E-02	Pulse	0.30	3
Co			2	0.002	ug/l	94.75	58.89	6.631E-04	Pulse	0.30	3
Ni			2	0.002	ug/l	93.03	33.33	3.755E-04	Pulse	0.30	3
Cu			2	-0.004	ug/l	-105.31	121.11	1.364E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.018	ug/l	-194.18	88.89	1.003E-03	Pulse	0.30	3
As			2	-0.006	ug/l	-24.07	4.67	5.260E-05	Pulse	1.00	3
Cd			2	0.002	ug/l	149.05	3.33	6.095E-06	Pulse	0.30	3
Sn			2	0.010	ug/l	96.07	210.00	3.842E-04	Pulse	0.30	3
Se			3	0.005	ug/l	246.82	2.27	4.098E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,782,167.52	1.64	100.0	Pulse	0.10	3
1	Sc		2,991,137.77	2.16	100.0	Pulse	0.10	3
1	Ge		576,510.74	1.60	100.0	Pulse	0.10	3
1	Ge		806,238.32	1.55	100.0	Pulse	0.10	3
1	Rh		3,833,248.69	1.97	100.0	Pulse	0.10	3
1	In		4,108,830.47	1.67	100.0	Pulse	0.10	3
1	Tb		5,487,328.67	1.94	100.0	Analog	0.10	3
1	Ho		528,236.19	1.95	100.0	Pulse	0.10	3
1	Bi		3,378,485.99	1.47	100.0	Pulse	0.10	3
2	Sc		88,746.48	0.70	100.0	Pulse	0.30	3
2	Ge		55,685.50	0.76	100.0	Pulse	0.30	3
2	Ge		84,699.03	0.30	100.0	Pulse	0.30	3
2	Rh		1,744,721.22	0.41	100.0	Pulse	0.30	3
2	In		546,926.10	0.82	100.0	Pulse	0.30	3
2	Tb		2,241,559.49	0.32	100.0	Pulse	0.30	3
2	Ho		220,719.99	0.36	100.0	Pulse	0.30	3
2	Bi		1,557,572.12	0.12	100.0	Pulse	0.30	3
3	Sc		55,343.82	0.68	100.0	Pulse	0.30	3
3	Ge		36,178.96	0.82	100.0	Pulse	0.30	3
3	Ge		55,256.53	0.45	100.0	Pulse	0.30	3
3	Rh		607,362.27	1.69	100.0	Pulse	0.30	3
3	Tb		975,671.63	0.89	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 12:50
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-1299.58	8.00	2.881E-06	Pulse	0.25	3
B			1	0.000	ug/l	---	23,127.18	8.367E-03	Pulse	0.15	3
Ca			1	-0.569	ug/l	-119.91	22,175.56	7.446E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	2090.29	510.03	1.333E-04	Pulse	0.10	3
Mo			1	0.000	ug/l	---	0.00		Pulse	0.10	3
Ag			1	0.000	ug/l	2752.11	23.33	5.724E-06	Pulse	0.10	3
Sn			1	0.034	ug/l	28.84	1,076.75	2.644E-04	Pulse	0.10	3
Sb			1	0.000	ug/l	---	2,503.62	4.581E-04	Pulse	0.10	3
Ba			1	0.000	ug/l	-29.79	20.00	3.660E-06	Pulse	0.10	3
Tl			1	0.000	ug/l	1387.66	33.33	9.890E-06	Pulse	0.10	3
Pb			1	0.000	ug/l	-2523.66	140.01	4.143E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-2001.10	73.33	2.166E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-6784.75	410.02	1.213E-04	Pulse	0.10	3
Na			2	1.127	ug/l	377.98	7,272.06	8.178E-02	Pulse	0.30	3
Mg			2	-0.015	ug/l	-76.23	92.22	1.038E-03	Pulse	0.30	3
Al			2	-0.009	ug/l	-1310.43	55.55	6.253E-04	Pulse	0.30	3
K			2	-0.972	ug/l	-102.13	5,962.23	6.713E-02	Pulse	0.30	3
Ca			2	-0.307	ug/l	-404.58	63.34	7.135E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00		Pulse	0.30	3
V			2	-0.002	ug/l	-480.36	181.12	2.039E-03	Pulse	0.30	3
Cr			2	0.000	ug/l	---	260.01	2.928E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	-1797.74	6.66	7.526E-05	Pulse	0.30	3
Fe			2	-0.001	ug/l	-2595.68	1,187.84	1.337E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-2367.94	44.44	4.999E-04	Pulse	0.30	3
Ni			2	0.000	ug/l	---	30.00	3.375E-04	Pulse	0.30	3
Cu			2	0.000	ug/l	---	147.78	1.663E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.000	ug/l	---	104.44	1.175E-03	Pulse	0.30	3
As			2	0.000	ug/l	-2427.56	7.00	7.892E-05	Pulse	1.00	3
Cd			2	0.000	ug/l	7585.31	1.11	2.031E-06	Pulse	0.30	3
Sn			2	0.001	ug/l	2293.15	186.67	3.402E-04	Pulse	0.30	3
Se			3	0.000	ug/l	-6256.72	2.00	3.571E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,764,088.78	0.87	100.0	Pulse	0.10	3
1	Sc		2,978,606.31	0.57	100.0	Pulse	0.10	3
1	Ge		576,339.70	0.52	100.0	Pulse	0.10	3
1	Ge		799,049.23	0.23	100.0	Pulse	0.10	3
1	Rh		3,824,830.78	0.33	100.0	Pulse	0.10	3
1	In		4,074,832.96	0.86	100.0	Pulse	0.10	3
1	Tb		5,464,668.88	0.69	100.0	Analog	0.10	3
1	Ho		529,765.33	0.58	100.0	Pulse	0.10	3
1	Bi		3,380,615.47	0.48	100.0	Pulse	0.10	3
2	Sc		88,832.41	0.58	100.0	Pulse	0.30	3
2	Ge		55,290.85	0.29	100.0	Pulse	0.30	3
2	Ge		84,681.55	1.00	100.0	Pulse	0.30	3
2	Rh		1,737,797.36	0.66	100.0	Pulse	0.30	3
2	In		548,294.21	0.60	100.0	Pulse	0.30	3
2	Tb		2,238,594.84	0.51	100.0	Pulse	0.30	3
2	Ho		219,597.69	0.64	100.0	Pulse	0.30	3
2	Bi		1,555,655.88	0.55	100.0	Pulse	0.30	3
3	Sc		55,266.70	0.65	100.0	Pulse	0.30	3
3	Ge		35,999.64	0.22	100.0	Pulse	0.30	3
3	Ge		55,915.38	0.69	100.0	Pulse	0.30	3
3	Rh		611,956.45	0.05	100.0	Pulse	0.30	3
3	Tb		992,531.32	0.70	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 12:55
Sample Name	STDB
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.518	ug/l	2.82	4,453.98	1.613E-03	Pulse	0.25	3
B			1	25.354	ug/l	1.46	192,335.68	6.965E-02	Pulse	0.15	3
Ca			1	251.009	ug/l	1.67	253,934.48	8.488E-02	Pulse	0.10	3
Sr			1	4.988	ug/l	0.32	219,619.53	5.765E-02	Pulse	0.10	3
Mo			1	1.018	ug/l	1.59	8,749.37	2.297E-03	Pulse	0.10	3
Ag			1	0.483	ug/l	4.86	10,643.92	2.597E-03	Pulse	0.10	3
Sn			1	4.920	ug/l	2.20	67,679.24	1.651E-02	Pulse	0.10	3
Sb			1	2.014	ug/l	0.74	33,770.38	6.106E-03	Pulse	0.10	3
Ba			1	1.004	ug/l	4.64	6,314.82	1.142E-03	Pulse	0.10	3
Tl			1	0.486	ug/l	3.40	19,613.52	5.798E-03	Pulse	0.10	3
Pb			1	0.514	ug/l	5.07	7,155.37	2.115E-03	Pulse	0.10	3
Pb			1	0.530	ug/l	7.05	6,431.63	1.901E-03	Pulse	0.10	3
Pb			1	0.509	ug/l	3.24	28,354.88	8.382E-03	Pulse	0.10	3
Na			2	249.726	ug/l	0.55	228,719.53	2.571E+00	Pulse	0.30	3
Mg			2	257.075	ug/l	1.07	104,026.35	1.170E+00	Pulse	0.30	3
Al			2	25.743	ug/l	4.67	3,151.44	3.543E-02	Pulse	0.30	3
K			2	251.403	ug/l	0.56	63,477.46	7.137E-01	Pulse	0.30	3
Ca			2	273.586	ug/l	4.19	3,499.30	3.935E-02	Pulse	0.30	3
Ti			2	1.237	ug/l	25.42	128.89	1.449E-03	Pulse	0.30	3
V			2	1.011	ug/l	3.36	3,871.60	4.353E-02	Pulse	0.30	3
Cr			2	1.019	ug/l	2.17	5,166.42	5.808E-02	Pulse	0.30	3
Mn			2	1.015	ug/l	2.52	2,281.30	2.565E-02	Pulse	0.30	3
Fe			2	25.103	ug/l	0.59	98,918.70	1.112E+00	Pulse	0.30	3
Co			2	0.492	ug/l	2.72	4,054.98	4.559E-02	Pulse	0.30	3
Ni			2	1.037	ug/l	1.60	2,356.86	2.650E-02	Pulse	0.30	3
Cu			2	2.012	ug/l	2.54	12,656.08	1.423E-01	Pulse	0.30	3
Zn			2	4.883	ug/l	2.58	4,207.25	4.730E-02	Pulse	0.30	3
As			2	0.500	ug/l	0.62	226.67	2.548E-03	Pulse	1.00	3
Cd			2	0.484	ug/l	1.75	643.36	1.170E-03	Pulse	0.30	3
Sn			2	4.955	ug/l	4.17	12,475.01	2.270E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.491	ug/l	22.31	28.73	5.160E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,761,575.35	0.71	99.9	Pulse	0.10	3
1	Sc		2,991,938.18	0.48	100.4	Pulse	0.10	3
1	Ge		583,867.42	0.33	101.3	Pulse	0.10	3
1	Ge		813,163.30	0.65	101.8	Pulse	0.10	3
1	Rh		3,809,156.92	0.76	99.6	Pulse	0.10	3
1	In		4,098,836.10	0.30	100.6	Pulse	0.10	3
1	Tb		5,530,870.96	0.36	101.2	Analog	0.10	3
1	Ho		532,411.90	0.46	100.5	Pulse	0.10	3
1	Bi		3,383,472.76	0.98	100.1	Pulse	0.10	3
2	Sc		88,944.27	0.36	100.1	Pulse	0.30	3
2	Ge		56,037.90	0.95	101.4	Pulse	0.30	3
2	Ge		86,319.77	1.33	101.9	Pulse	0.30	3
2	Rh		1,744,492.74	0.60	100.4	Pulse	0.30	3
2	In		549,651.13	0.87	100.2	Pulse	0.30	3
2	Tb		2,244,108.59	0.61	100.2	Pulse	0.30	3
2	Ho		219,521.29	0.86	100.0	Pulse	0.30	3
2	Bi		1,561,131.26	0.90	100.4	Pulse	0.30	3
3	Sc		55,632.30	2.09	100.7	Pulse	0.30	3
3	Ge		36,041.94	1.03	100.1	Pulse	0.30	3
3	Ge		55,727.09	2.21	99.7	Pulse	0.30	3
3	Rh		611,553.74	1.04	99.9	Pulse	0.30	3
3	Tb		991,405.48	1.75	99.9	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 13:00
Sample Name	STDC
Sample Type	CalStd
Comment	5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	4.987	ug/l	2.02	42,900.42	1.551E-02	Pulse	0.25	3
B			1	5.192	ug/l	1.69	57,853.80	2.092E-02	Pulse	0.15	3
Ca			1	7.972	ug/l	4.43	29,937.80	1.007E-02	Pulse	0.10	3
Sr			1	4.975	ug/l	0.37	219,747.51	5.751E-02	Pulse	0.10	3
Mo			1	5.004	ug/l	0.95	43,155.70	1.129E-02	Pulse	0.10	3
Ag			1	4.974	ug/l	0.69	108,784.47	2.668E-02	Pulse	0.10	3
Sn			1	5.079	ug/l	1.34	69,484.18	1.704E-02	Pulse	0.10	3
Sb			1	5.119	ug/l	1.25	81,213.63	1.481E-02	Pulse	0.10	3
Ba			1	4.995	ug/l	2.15	31,051.80	5.664E-03	Pulse	0.10	3
Tl			1	4.953	ug/l	0.69	198,245.62	5.903E-02	Pulse	0.10	3
Pb			1	5.037	ug/l	1.67	68,405.21	2.037E-02	Pulse	0.10	3
Pb			1	4.979	ug/l	1.58	59,309.69	1.766E-02	Pulse	0.10	3
Pb			1	4.993	ug/l	0.62	272,377.92	8.110E-02	Pulse	0.10	3
Na			2	4.565	ug/l	7.85	10,196.49	1.162E-01	Pulse	0.30	3
Mg			2	5.107	ug/l	1.23	2,134.61	2.432E-02	Pulse	0.30	3
Al			2	5.321	ug/l	9.90	686.69	7.829E-03	Pulse	0.30	3
K			2	4.392	ug/l	12.94	7,099.37	8.087E-02	Pulse	0.30	3
Ca			2	33.128	ug/l	12.44	476.68	5.429E-03	Pulse	0.30	3
Ti			2	4.954	ug/l	12.24	508.90	5.805E-03	Pulse	0.30	3
V			2	5.009	ug/l	0.43	18,202.34	2.074E-01	Pulse	0.30	3
Cr			2	5.076	ug/l	3.53	24,365.81	2.777E-01	Pulse	0.30	3
Mn			2	5.145	ug/l	3.62	11,378.45	1.296E-01	Pulse	0.30	3
Fe			2	5.569	ug/l	2.64	22,569.96	2.572E-01	Pulse	0.30	3
Co			2	5.101	ug/l	2.56	41,096.61	4.683E-01	Pulse	0.30	3
Ni			2	5.089	ug/l	3.78	11,295.08	1.287E-01	Pulse	0.30	3
Cu			2	5.861	ug/l	2.43	36,102.89	4.114E-01	Pulse	0.30	3
Zn			2	5.098	ug/l	3.87	4,329.51	4.933E-02	Pulse	0.30	3
As			2	5.098	ug/l	6.22	2,215.82	2.526E-02	Pulse	1.00	3
Cd			2	5.084	ug/l	3.07	6,670.37	1.228E-02	Pulse	0.30	3
Sn			2	5.037	ug/l	1.69	12,536.19	2.307E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	5.055	ug/l	3.56	277.80	4.976E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,765,782.13	1.11	100.1	Pulse	0.10	3
1	Sc		2,971,504.54	1.01	99.8	Pulse	0.10	3
1	Ge		576,239.50	0.92	100.0	Pulse	0.10	3
1	Ge		803,025.35	0.83	100.5	Pulse	0.10	3
1	Rh		3,821,207.03	1.01	99.9	Pulse	0.10	3
1	In		4,077,539.52	0.56	100.1	Pulse	0.10	3
1	Tb		5,482,674.71	1.10	100.3	Analog	0.10	3
1	Ho		528,677.02	0.71	99.8	Pulse	0.10	3
1	Bi		3,358,737.97	0.88	99.4	Pulse	0.10	3
2	Sc		87,779.18	1.72	98.8	Pulse	0.30	3
2	Ge		55,932.04	2.02	101.2	Pulse	0.30	3
2	Ge		84,471.47	1.67	99.8	Pulse	0.30	3
2	Rh		1,725,831.63	2.24	99.3	Pulse	0.30	3
2	In		543,589.77	2.28	99.1	Pulse	0.30	3
2	Tb		2,217,700.19	1.98	99.1	Pulse	0.30	3
2	Ho		218,983.47	1.49	99.7	Pulse	0.30	3
2	Bi		1,540,715.14	1.81	99.0	Pulse	0.30	3
3	Sc		55,076.09	0.78	99.7	Pulse	0.30	3
3	Ge		36,193.47	0.51	100.5	Pulse	0.30	3
3	Ge		55,836.22	0.79	99.9	Pulse	0.30	3
3	Rh		612,775.86	0.55	100.1	Pulse	0.30	3
3	Tb		990,330.45	0.26	99.8	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 13:05
Sample Name	STDD
Sample Type	CalStd
Comment	25
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	25.259	ug/l	1.07	211,033.75	7.857E-02	Pulse	0.25	3
B			1	25.018	ug/l	2.04	184,900.48	6.884E-02	Pulse	0.15	3
Ca			1	42.566	ug/l	2.01	59,831.59	2.072E-02	Pulse	0.10	3
Sr			1	25.311	ug/l	1.72	1,080,802.64	2.920E-01	Pulse	0.10	3
Mo			1	25.066	ug/l	1.49	209,371.68	5.657E-02	Pulse	0.10	3
Ag			1	25.145	ug/l	1.07	532,718.68	1.348E-01	Pulse	0.10	3
Sn			1	25.171	ug/l	1.01	331,258.24	8.385E-02	Pulse	0.10	3
Sb			1	25.695	ug/l	0.98	385,694.00	7.252E-02	Pulse	0.10	3
Ba			1	25.580	ug/l	1.99	154,175.54	2.899E-02	Pulse	0.10	3
Tl			1	25.336	ug/l	2.35	986,411.03	3.019E-01	Pulse	0.10	3
Pb			1	25.455	ug/l	2.80	335,720.78	1.028E-01	Pulse	0.10	3
Pb			1	25.554	ug/l	2.48	295,803.96	9.054E-02	Pulse	0.10	3
Pb			1	25.522	ug/l	2.82	1,352,628.84	4.140E-01	Pulse	0.10	3
Na			2	25.019	ug/l	3.04	27,978.70	3.211E-01	Pulse	0.30	3
Mg			2	25.941	ug/l	0.73	10,373.27	1.190E-01	Pulse	0.30	3
Al			2	26.023	ug/l	1.52	3,121.44	3.581E-02	Pulse	0.30	3
K			2	25.651	ug/l	3.57	11,794.27	1.353E-01	Pulse	0.30	3
Ca			2	164.303	ug/l	2.41	2,085.71	2.393E-02	Pulse	0.30	3
Ti			2	24.535	ug/l	2.36	2,505.78	2.875E-02	Pulse	0.30	3
V			2	25.062	ug/l	1.94	89,690.37	1.029E+00	Pulse	0.30	3
Cr			2	25.330	ug/l	0.42	119,766.77	1.374E+00	Pulse	0.30	3
Mn			2	25.360	ug/l	0.81	55,669.84	6.387E-01	Pulse	0.30	3
Fe			2	25.483	ug/l	2.21	98,374.54	1.129E+00	Pulse	0.30	3
Co			2	25.456	ug/l	1.97	203,463.41	2.335E+00	Pulse	0.30	3
Ni			2	25.324	ug/l	1.50	55,718.24	6.393E-01	Pulse	0.30	3
Cu			2	25.266	ug/l	0.34	154,094.67	1.768E+00	Pulse	0.30	3
Zn			2	25.355	ug/l	0.78	20,980.23	2.407E-01	Pulse	0.30	3
As			2	25.016	ug/l	1.02	10,776.90	1.236E-01	Pulse	1.00	3
Cd			2	24.907	ug/l	0.92	32,345.24	6.013E-02	Pulse	0.30	3
Sn			2	25.251	ug/l	0.79	61,479.10	1.143E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	25.124	ug/l	1.02	1,358.99	2.459E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,686,274.41	1.15	97.2	Pulse	0.10	3
1	Sc		2,887,161.21	1.25	96.9	Pulse	0.10	3
1	Ge		566,157.62	1.55	98.2	Pulse	0.10	3
1	Ge		791,386.19	1.66	99.0	Pulse	0.10	3
1	Rh		3,701,248.17	1.16	96.8	Pulse	0.10	3
1	In		3,950,807.32	0.87	97.0	Pulse	0.10	3
1	Tb		5,318,897.42	0.46	97.3	Analog	0.10	3
1	Ho		511,637.47	1.66	96.6	Pulse	0.10	3
1	Bi		3,268,311.83	2.21	96.7	Pulse	0.10	3
2	Sc		87,160.63	0.96	98.1	Pulse	0.30	3
2	Ge		56,188.35	0.58	101.6	Pulse	0.30	3
2	Ge		85,311.52	0.65	100.7	Pulse	0.30	3
2	Rh		1,717,586.39	0.35	98.8	Pulse	0.30	3
2	In		537,924.96	0.70	98.1	Pulse	0.30	3
2	Tb		2,213,727.00	0.43	98.9	Pulse	0.30	3
2	Ho		217,331.73	0.63	99.0	Pulse	0.30	3
2	Bi		1,542,167.13	0.33	99.1	Pulse	0.30	3
3	Sc		55,102.95	2.19	99.7	Pulse	0.30	3
3	Ge		35,695.63	1.23	99.2	Pulse	0.30	3
3	Ge		55,267.75	1.67	98.8	Pulse	0.30	3
3	Rh		606,428.80	1.01	99.1	Pulse	0.30	3
3	Tb		990,399.02	0.72	99.8	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 13:10
Sample Name	STDE
Sample Type	CalStd
Comment	50
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.127	ug/l	0.89	421,550.44	1.559E-01	Pulse	0.25	3
B			1	50.086	ug/l	1.21	349,950.46	1.294E-01	Pulse	0.15	3
Ca			1	68.288	ug/l	5.17	83,222.09	2.864E-02	Pulse	0.10	3
Sr			1	50.078	ug/l	0.25	2,156,097.47	5.777E-01	Pulse	0.10	3
Mo			1	49.951	ug/l	0.09	420,776.64	1.127E-01	Pulse	0.10	3
Ag			1	49.912	ug/l	1.44	1,065,619.83	2.677E-01	Pulse	0.10	3
Sn			1	49.826	ug/l	0.94	660,254.60	1.658E-01	Pulse	0.10	3
Sb			1	50.537	ug/l	0.41	764,294.36	1.422E-01	Pulse	0.10	3
Ba			1	50.295	ug/l	1.21	306,352.17	5.699E-02	Pulse	0.10	3
Tl			1	49.954	ug/l	1.91	1,962,362.73	5.953E-01	Pulse	0.10	3
Pb			1	50.294	ug/l	1.43	669,259.73	2.030E-01	Pulse	0.10	3
Pb			1	50.587	ug/l	1.75	590,809.81	1.792E-01	Pulse	0.10	3
Pb			1	50.341	ug/l	1.39	2,692,051.08	8.165E-01	Pulse	0.10	3
Na			2	49.383	ug/l	0.99	49,102.99	5.651E-01	Pulse	0.30	3
Mg			2	51.724	ug/l	2.71	20,527.02	2.362E-01	Pulse	0.30	3
Al			2	49.995	ug/l	4.94	5,926.66	6.822E-02	Pulse	0.30	3
K			2	50.614	ug/l	1.53	17,316.85	1.993E-01	Pulse	0.30	3
Ca			2	324.418	ug/l	2.29	4,042.76	4.652E-02	Pulse	0.30	3
Ti			2	49.655	ug/l	4.33	5,055.26	5.819E-02	Pulse	0.30	3
V			2	49.805	ug/l	1.28	177,522.57	2.043E+00	Pulse	0.30	3
Cr			2	50.027	ug/l	0.83	235,583.40	2.711E+00	Pulse	0.30	3
Mn			2	49.625	ug/l	1.83	108,601.17	1.250E+00	Pulse	0.30	3
Fe			2	49.784	ug/l	1.51	190,512.05	2.192E+00	Pulse	0.30	3
Co			2	49.744	ug/l	0.70	396,404.74	4.562E+00	Pulse	0.30	3
Ni			2	50.060	ug/l	0.68	109,788.44	1.263E+00	Pulse	0.30	3
Cu			2	49.806	ug/l	1.18	302,713.30	3.484E+00	Pulse	0.30	3
Zn			2	49.719	ug/l	1.72	40,917.51	4.709E-01	Pulse	0.30	3
As			2	49.982	ug/l	1.13	21,460.38	2.470E-01	Pulse	1.00	3
Cd			2	49.719	ug/l	1.28	63,840.05	1.200E-01	Pulse	0.30	3
Sn			2	49.194	ug/l	1.27	118,262.14	2.223E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	49.494	ug/l	0.98	2,701.22	4.841E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,703,894.55	1.27	97.8	Pulse	0.10	3
1	Sc		2,906,316.31	0.59	97.6	Pulse	0.10	3
1	Ge		573,077.04	1.29	99.4	Pulse	0.10	3
1	Ge		801,250.25	1.44	100.3	Pulse	0.10	3
1	Rh		3,732,320.99	1.11	97.6	Pulse	0.10	3
1	In		3,981,632.98	1.10	97.7	Pulse	0.10	3
1	Tb		5,375,433.04	0.32	98.4	Analog	0.10	3
1	Ho		513,448.38	0.47	96.9	Pulse	0.10	3
1	Bi		3,297,291.51	1.48	97.5	Pulse	0.10	3
2	Sc		86,901.41	0.88	97.8	Pulse	0.30	3
2	Ge		54,423.49	0.23	98.4	Pulse	0.30	3
2	Ge		84,080.83	0.51	99.3	Pulse	0.30	3
2	Rh		1,687,908.20	0.56	97.1	Pulse	0.30	3
2	In		531,886.69	0.49	97.0	Pulse	0.30	3
2	Tb		2,171,345.96	0.73	97.0	Pulse	0.30	3
2	Ho		214,464.65	0.52	97.7	Pulse	0.30	3
2	Bi		1,516,649.52	1.19	97.5	Pulse	0.30	3
3	Sc		55,698.16	0.86	100.8	Pulse	0.30	3
3	Ge		35,683.42	1.81	99.1	Pulse	0.30	3
3	Ge		55,802.72	1.06	99.8	Pulse	0.30	3
3	Rh		608,913.53	0.51	99.5	Pulse	0.30	3
3	Tb		998,867.01	0.29	100.6	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 13:15
Sample Name	STDF
Sample Type	CalStd
Comment	100
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	99.925	ug/l	0.22	827,931.71	3.108E-01	Pulse	0.25	3
B			1	98.530	ug/l	0.65	656,712.78	2.465E-01	Pulse	0.15	3
Ca			1	135.630	ug/l	1.74	139,530.28	4.937E-02	Pulse	0.10	3
Sr			1	99.565	ug/l	0.98	4,183,600.04	1.148E+00	Pulse	0.10	3
Mo			1	100.008	ug/l	0.58	822,283.09	2.257E-01	Pulse	0.10	3
Ag			1	99.988	ug/l	1.20	2,079,802.26	5.362E-01	Pulse	0.10	3
Sn			1	100.048	ug/l	0.88	1,291,018.26	3.328E-01	Pulse	0.10	3
Sb			1	99.551	ug/l	0.54	1,496,563.83	2.796E-01	Pulse	0.10	3
Ba			1	99.148	ug/l	0.70	601,258.55	1.123E-01	Pulse	0.10	3
Tl			1	100.153	ug/l	0.27	3,928,538.80	1.193E+00	Pulse	0.10	3
Pb			1	99.942	ug/l	0.26	1,327,760.87	4.034E-01	Pulse	0.10	3
Pb			1	99.985	ug/l	0.15	1,165,918.21	3.542E-01	Pulse	0.10	3
Pb			1	99.998	ug/l	0.08	5,338,898.51	1.622E+00	Pulse	0.10	3
Na			2	99.385	ug/l	0.94	90,034.89	1.066E+00	Pulse	0.30	3
Mg			2	102.187	ug/l	1.74	39,326.73	4.656E-01	Pulse	0.30	3
Al			2	100.798	ug/l	3.89	11,560.72	1.369E-01	Pulse	0.30	3
K			2	100.773	ug/l	2.02	27,687.41	3.278E-01	Pulse	0.30	3
Ca			2	622.892	ug/l	1.65	7,486.22	8.862E-02	Pulse	0.30	3
Ti			2	100.289	ug/l	2.23	9,926.39	1.175E-01	Pulse	0.30	3
V			2	98.495	ug/l	1.30	341,100.66	4.038E+00	Pulse	0.30	3
Cr			2	99.900	ug/l	1.48	457,054.27	5.411E+00	Pulse	0.30	3
Mn			2	99.868	ug/l	1.77	212,448.47	2.515E+00	Pulse	0.30	3
Fe			2	99.804	ug/l	1.14	370,137.61	4.382E+00	Pulse	0.30	3
Co			2	99.720	ug/l	1.32	772,412.11	9.144E+00	Pulse	0.30	3
Ni			2	99.884	ug/l	1.60	212,905.98	2.521E+00	Pulse	0.30	3
Cu			2	99.987	ug/l	1.14	590,600.32	6.992E+00	Pulse	0.30	3
Zn			2	100.058	ug/l	1.16	79,948.82	9.465E-01	Pulse	0.30	3
As			2	99.906	ug/l	1.52	41,691.55	4.936E-01	Pulse	1.00	3
Cd			2	100.311	ug/l	2.00	124,835.07	2.422E-01	Pulse	0.30	3
Sn			2	100.620	ug/l	2.92	234,228.47	4.544E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	100.406	ug/l	0.89	5,278.45	9.817E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,663,847.93	0.36	96.4	Pulse	0.10	3
1	Sc		2,826,741.10	1.09	94.9	Pulse	0.10	3
1	Ge		558,899.73	0.21	97.0	Pulse	0.10	3
1	Ge		789,038.40	0.60	98.7	Pulse	0.10	3
1	Rh		3,643,109.53	0.97	95.2	Pulse	0.10	3
1	In		3,879,079.29	0.84	95.2	Pulse	0.10	3
1	Tb		5,351,905.96	0.46	97.9	Analog	0.10	3
1	Ho		515,403.51	0.70	97.3	Pulse	0.10	3
1	Bi		3,291,830.37	0.30	97.4	Pulse	0.10	3
2	Sc		84,479.38	1.25	95.1	Pulse	0.30	3
2	Ge		53,147.28	2.39	96.1	Pulse	0.30	3
2	Ge		81,401.89	1.84	96.1	Pulse	0.30	3
2	Rh		1,641,055.21	1.53	94.4	Pulse	0.30	3
2	In		515,554.95	1.19	94.0	Pulse	0.30	3
2	Tb		2,127,970.54	0.87	95.1	Pulse	0.30	3
2	Ho		209,129.81	1.35	95.2	Pulse	0.30	3
2	Bi		1,486,891.95	1.53	95.6	Pulse	0.30	3
3	Sc		53,855.59	0.93	97.4	Pulse	0.30	3
3	Ge		35,269.17	0.75	98.0	Pulse	0.30	3
3	Ge		53,769.30	0.23	96.2	Pulse	0.30	3
3	Rh		595,695.88	1.38	97.3	Pulse	0.30	3
3	Tb		979,935.31	0.94	98.7	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 13:20
Sample Name	STDG
Sample Type	CalStd
Comment	500MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.013	ug/l	23.40	114.67	4.337E-05	Pulse	0.25	3
B			1	200.662	ug/l	0.24	1,305,497.69	4.934E-01	Pulse	0.15	3
Ca			1	507.216	ug/l	1.09	461,845.51	1.637E-01	Pulse	0.10	3
Sr			1	0.015	ug/l	23.75	1,096.74	3.044E-04	Pulse	0.10	3
Mo			1	0.076	ug/l	11.98	616.71	1.712E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	31.65	263.35	6.766E-05	Pulse	0.10	3
Sn			1	0.218	ug/l	10.51	3,407.19	8.761E-04	Pulse	0.10	3
Sb			1	0.659	ug/l	3.03	12,265.19	2.306E-03	Pulse	0.10	3
Ba			1	0.028	ug/l	38.15	190.01	3.569E-05	Pulse	0.10	3
Tl			1	0.028	ug/l	10.56	1,096.75	3.381E-04	Pulse	0.10	3
Pb			1	0.019	ug/l	27.04	383.35	1.182E-04	Pulse	0.10	3
Pb			1	0.025	ug/l	25.00	353.35	1.089E-04	Pulse	0.10	3
Pb			1	0.019	ug/l	26.11	1,406.74	4.337E-04	Pulse	0.10	3
Na			2	502.222	ug/l	0.99	430,245.89	5.100E+00	Pulse	0.30	3
Mg			2	513.506	ug/l	1.20	196,982.68	2.335E+00	Pulse	0.30	3
Al			2	505.255	ug/l	1.26	57,664.56	6.836E-01	Pulse	0.30	3
K			2	512.055	ug/l	1.12	116,534.91	1.381E+00	Pulse	0.30	3
Ca			2	503.258	ug/l	1.70	6,052.28	7.174E-02	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00		Pulse	0.30	3
V			2	-0.014	ug/l	-35.84	128.89	1.529E-03	Pulse	0.30	3
Cr			2	0.019	ug/l	54.49	332.23	3.938E-03	Pulse	0.30	3
Mn			2	0.023	ug/l	41.26	55.56	6.594E-04	Pulse	0.30	3
Fe			2	502.105	ug/l	1.52	1,854,941.87	2.199E+01	Pulse	0.30	3
Co			2	0.031	ug/l	25.07	285.56	3.392E-03	Pulse	0.30	3
Ni			2	0.040	ug/l	4.42	114.45	1.357E-03	Pulse	0.30	3
Cu			2	0.019	ug/l	21.22	254.45	3.013E-03	Pulse	0.30	3
Zn			2	0.166	ug/l	16.04	231.11	2.742E-03	Pulse	0.30	3
As			2	0.012	ug/l	85.77	11.67	1.387E-04	Pulse	1.00	3
Cd			2	0.019	ug/l	10.45	24.44	4.725E-05	Pulse	0.30	3
Sn			2	0.190	ug/l	4.54	617.80	1.192E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.059	ug/l	7.24	5.13	9.396E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,645,937.38	0.45	95.7	Pulse	0.10	3
1	Sc		2,820,775.27	0.29	94.7	Pulse	0.10	3
1	Ge		554,746.32	0.25	96.3	Pulse	0.10	3
1	Ge		776,572.72	0.51	97.2	Pulse	0.10	3
1	Rh		3,603,487.65	0.60	94.2	Pulse	0.10	3
1	In		3,888,932.40	0.61	95.4	Pulse	0.10	3
1	Tb		5,319,610.34	0.49	97.3	Analog	0.10	3
1	Ho		507,487.87	0.86	95.8	Pulse	0.10	3
1	Bi		3,244,524.33	0.23	96.0	Pulse	0.10	3
2	Sc		84,366.34	1.68	95.0	Pulse	0.30	3
2	Ge		53,276.68	2.56	96.4	Pulse	0.30	3
2	Ge		82,270.47	1.02	97.2	Pulse	0.30	3
2	Rh		1,644,279.17	1.89	94.6	Pulse	0.30	3
2	In		517,966.43	2.05	94.5	Pulse	0.30	3
2	Tb		2,138,018.87	2.24	95.5	Pulse	0.30	3
2	Ho		210,772.22	2.37	96.0	Pulse	0.30	3
2	Bi		1,468,762.30	2.06	94.4	Pulse	0.30	3
3	Sc		53,907.95	0.43	97.5	Pulse	0.30	3
3	Ge		35,030.96	0.93	97.3	Pulse	0.30	3
3	Ge		54,633.29	0.14	97.7	Pulse	0.30	3
3	Rh		599,954.30	0.61	98.0	Pulse	0.30	3
3	Tb		981,340.31	0.27	98.9	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 13:25
Sample Name	STDH
Sample Type	CalStd
Comment	1000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	68.25	36.00	1.377E-05	Pulse	0.25	3
B			1	3.452	ug/l	9.90	43,979.23	1.671E-02	Pulse	0.15	3
Ca			1	1010.410	ug/l	1.35	890,812.10	3.186E-01	Pulse	0.10	3
Sr			1	0.016	ug/l	10.16	1,103.41	3.129E-04	Pulse	0.10	3
Mo			1	0.020	ug/l	53.69	156.67	4.463E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	59.87	80.00	2.088E-05	Pulse	0.10	3
Sn			1	0.112	ug/l	34.21	1,997.87	5.242E-04	Pulse	0.10	3
Sb			1	0.243	ug/l	5.69	5,981.38	1.139E-03	Pulse	0.10	3
Ba			1	0.008	ug/l	2.65	70.00	1.334E-05	Pulse	0.10	3
Tl			1	0.008	ug/l	27.76	316.68	9.938E-05	Pulse	0.10	3
Pb			1	0.005	ug/l	77.54	193.34	6.067E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	48.45	153.34	4.844E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	19.58	733.37	2.310E-04	Pulse	0.10	3
Na			2	992.073	ug/l	4.09	855,165.16	1.001E+01	Pulse	0.30	3
Mg			2	1009.297	ug/l	4.37	392,147.19	4.589E+00	Pulse	0.30	3
Al			2	989.256	ug/l	4.66	114,318.27	1.338E+00	Pulse	0.30	3
K			2	1000.174	ug/l	5.28	224,867.22	2.632E+00	Pulse	0.30	3
Ca			2	990.869	ug/l	2.30	12,015.57	1.405E-01	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00		Pulse	0.30	3
V			2	-0.018	ug/l	-56.07	115.56	1.355E-03	Pulse	0.30	3
Cr			2	0.004	ug/l	103.81	267.79	3.134E-03	Pulse	0.30	3
Mn			2	0.018	ug/l	54.67	44.44	5.242E-04	Pulse	0.30	3
Fe			2	986.283	ug/l	4.38	3,690,253.19	4.318E+01	Pulse	0.30	3
Co			2	0.043	ug/l	17.64	383.34	4.467E-03	Pulse	0.30	3
Ni			2	0.038	ug/l	1.97	110.00	1.286E-03	Pulse	0.30	3
Cu			2	0.000	ug/l	1968.42	143.34	1.678E-03	Pulse	0.30	3
Zn			2	0.043	ug/l	38.19	135.56	1.580E-03	Pulse	0.30	3
As			2	0.003	ug/l	245.87	8.00	9.428E-05	Pulse	1.00	3
Cd			2	0.007	ug/l	65.65	10.00	1.911E-05	Pulse	0.30	3
Sn			2	0.055	ug/l	55.37	307.78	5.861E-04	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.044	ug/l	40.27	4.27	7.857E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,633,585.06	2.17	95.3	Pulse	0.10	3
1	Sc		2,796,397.67	1.85	93.9	Pulse	0.10	3
1	Ge		548,392.13	1.48	95.2	Pulse	0.10	3
1	Ge		766,241.84	1.88	95.9	Pulse	0.10	3
1	Rh		3,528,729.01	1.75	92.3	Pulse	0.10	3
1	In		3,819,860.07	2.06	93.7	Pulse	0.10	3
1	Tb		5,250,548.78	1.90	96.1	Analog	0.10	3
1	Ho		501,907.63	1.48	94.7	Pulse	0.10	3
1	Bi		3,176,052.45	2.48	93.9	Pulse	0.10	3
2	Sc		85,558.20	4.07	96.3	Pulse	0.30	3
2	Ge		53,659.12	2.86	97.0	Pulse	0.30	3
2	Ge		82,694.88	2.66	97.7	Pulse	0.30	3
2	Rh		1,657,269.41	2.76	95.4	Pulse	0.30	3
2	In		525,582.42	2.40	95.9	Pulse	0.30	3
2	Tb		2,160,339.85	3.02	96.5	Pulse	0.30	3
2	Ho		212,181.43	3.68	96.6	Pulse	0.30	3
2	Bi		1,488,631.29	2.20	95.7	Pulse	0.30	3
3	Sc		54,168.85	0.79	98.0	Pulse	0.30	3
3	Ge		35,103.19	1.54	97.5	Pulse	0.30	3
3	Ge		54,287.69	1.01	97.1	Pulse	0.30	3
3	Rh		597,584.06	0.49	97.7	Pulse	0.30	3
3	Tb		988,486.42	1.18	99.6	Pulse	0.30	3

Quantitation Report

File Name	010CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 13:30
Sample Name	STDI
Sample Type	CalStd
Comment	5000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.004	ug/l	55.27	40.00	1.529E-05	Pulse	0.25	3
B			1	1.651	ug/l	7.75	32,375.71	1.236E-02	Pulse	0.15	3
Ca			1	4979.950	ug/l	0.37	4,341,950.87	1.540E+00	Pulse	0.10	3
Sr			1	0.054	ug/l	12.30	2,663.65	7.578E-04	Pulse	0.10	3
Mo			1	0.016	ug/l	20.07	126.67	3.604E-05	Pulse	0.10	3
Ag			1	0.001	ug/l	189.51	40.00	1.057E-05	Pulse	0.10	3
Sn			1	0.101	ug/l	69.38	1,843.57	4.854E-04	Pulse	0.10	3
Sb			1	0.128	ug/l	9.88	4,307.42	8.172E-04	Pulse	0.10	3
Ba			1	0.009	ug/l	10.35	73.33	1.391E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	34.67	173.34	5.536E-05	Pulse	0.10	3
Pb			1	0.005	ug/l	53.48	196.68	6.285E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	16.64	163.34	5.219E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	34.03	773.38	2.471E-04	Pulse	0.10	3
Na			2	5002.255	ug/l	0.68	4,229,229.83	5.017E+01	Pulse	0.30	3
Mg			2	5055.552	ug/l	0.48	1,937,294.78	2.298E+01	Pulse	0.30	3
Al			2	5006.720	ug/l	0.98	570,581.56	6.768E+00	Pulse	0.30	3
K			2	5048.867	ug/l	0.74	1,096,264.89	1.300E+01	Pulse	0.30	3
Ca			2	4974.237	ug/l	1.56	59,209.02	7.024E-01	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00		Pulse	0.30	3
V			2	-0.022	ug/l	-28.87	101.11	1.200E-03	Pulse	0.30	3
Cr			2	0.010	ug/l	106.09	294.45	3.494E-03	Pulse	0.30	3
Mn			2	0.072	ug/l	20.23	158.89	1.886E-03	Pulse	0.30	3
Fe			2	5146.555	ug/l	1.65	18,990,453.69	2.253E+02	Analog	0.30	3
Co			2	0.236	ug/l	3.25	1,869.02	2.217E-02	Pulse	0.30	3
Ni			2	0.200	ug/l	8.98	453.34	5.379E-03	Pulse	0.30	3
Cu			2	0.098	ug/l	4.55	715.58	8.489E-03	Pulse	0.30	3
Zn			2	0.157	ug/l	23.61	224.45	2.661E-03	Pulse	0.30	3
As			2	0.032	ug/l	52.51	20.00	2.373E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	144.71	3.33	6.484E-06	Pulse	0.30	3
Sn			2	0.043	ug/l	16.27	272.23	5.299E-04	Pulse	0.30	3
Se			3	0.022	ug/l	69.97	3.13	5.755E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,620,238.40	0.97	94.8	Pulse	0.10	3
1	Sc		2,818,789.44	0.15	94.6	Pulse	0.10	3
1	Ge		554,009.57	0.69	96.1	Pulse	0.10	3

Quantitation Report

1	Ge		772,129.52	0.89	96.6	Pulse	0.10	3
1	Rh		3,515,616.20	0.27	91.9	Pulse	0.10	3
1	In		3,798,464.45	0.63	93.2	Pulse	0.10	3
1	Tb		5,272,772.84	1.05	96.5	Mix	0.10	3
1	Ho		500,868.81	0.81	94.5	Pulse	0.10	3
1	Bi		3,129,930.89	0.34	92.6	Pulse	0.10	3
2	Sc		84,303.94	0.69	94.9	Pulse	0.30	3
2	Ge		53,141.56	0.70	96.1	Pulse	0.30	3
2	Ge		81,734.44	0.43	96.5	Pulse	0.30	3
2	Rh		1,619,585.70	0.18	93.2	Pulse	0.30	3
2	In		513,682.66	0.74	93.7	Pulse	0.30	3
2	Tb		2,108,046.72	0.53	94.2	Pulse	0.30	3
2	Ho		210,251.10	0.87	95.7	Pulse	0.30	3
2	Bi		1,451,475.92	0.75	93.3	Pulse	0.30	3
3	Sc		54,301.42	0.87	98.3	Pulse	0.30	3
3	Ge		35,328.15	0.94	98.1	Pulse	0.30	3
3	Ge		54,496.26	0.50	97.5	Pulse	0.30	3
3	Rh		593,551.68	1.10	97.0	Pulse	0.30	3
3	Tb		993,680.45	0.76	100.1	Pulse	0.30	3

Quantitation Report

File Name	011CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 13:35
Sample Name	STDJ
Sample Type	CalStd
Comment	10000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	40.73	58.67	2.255E-05	Pulse	0.25	3
B			1	1.108	ug/l	9.44	28,780.23	1.104E-02	Pulse	0.15	3
Ca			1	10002.284	ug/l	0.32	8,682,704.87	3.086E+00	Analog	0.10	3
Sr			1	0.111	ug/l	9.23	4,917.60	1.415E-03	Pulse	0.10	3
Mo			1	0.020	ug/l	22.58	160.01	4.604E-05	Pulse	0.10	3
Ag			1	0.001	ug/l	142.76	43.33	1.147E-05	Pulse	0.10	3
Sn			1	0.131	ug/l	9.48	2,210.25	5.854E-04	Pulse	0.10	3
Sb			1	0.092	ug/l	12.61	3,790.58	7.174E-04	Pulse	0.10	3
Ba			1	0.017	ug/l	63.06	120.01	2.279E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	14.30	166.68	5.429E-05	Pulse	0.10	3
Pb			1	0.016	ug/l	21.76	330.02	1.075E-04	Pulse	0.10	3
Pb			1	0.021	ug/l	13.98	296.68	9.672E-05	Pulse	0.10	3
Pb			1	0.017	ug/l	23.76	1,240.07	4.040E-04	Pulse	0.10	3
Na			2	9980.553	ug/l	1.24	8,499,696.89	1.000E+02	Analog	0.30	3
Mg			2	9916.534	ug/l	0.75	3,830,270.54	4.507E+01	Pulse	0.30	3
Al			2	9878.082	ug/l	1.16	1,134,675.41	1.335E+01	Pulse	0.30	3
K			2	9938.862	ug/l	0.82	2,169,538.73	2.553E+01	Pulse	0.30	3
Ca			2	9872.257	ug/l	2.17	118,390.16	1.393E+00	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00		Pulse	0.30	3
V			2	-0.015	ug/l	-42.20	127.78	1.504E-03	Pulse	0.30	3
Cr			2	0.106	ug/l	6.32	737.80	8.683E-03	Pulse	0.30	3
Mn			2	0.147	ug/l	17.23	322.23	3.792E-03	Pulse	0.30	3
Fe			2	9871.416	ug/l	0.79	36,716,136.32	4.321E+02	Analog	0.30	3
Co			2	0.474	ug/l	7.15	3,733.80	4.394E-02	Pulse	0.30	3
Ni			2	0.373	ug/l	7.28	828.92	9.755E-03	Pulse	0.30	3
Cu			2	0.037	ug/l	25.82	362.23	4.263E-03	Pulse	0.30	3
Zn			2	0.467	ug/l	14.75	474.46	5.583E-03	Pulse	0.30	3
As			2	0.054	ug/l	28.62	29.33	3.452E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	1921.62	1.11	2.181E-06	Pulse	0.30	3
Sn			2	0.102	ug/l	20.09	405.57	7.962E-04	Pulse	0.30	3
Se			3	-0.002	ug/l	-24.08	1.80	3.377E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,606,184.36	0.87	94.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,813,432.46	0.66	94.5	Pulse	0.10	3
1	Ge		553,191.24	0.49	96.0	Pulse	0.10	3
1	Ge		763,131.47	0.25	95.5	Pulse	0.10	3
1	Rh		3,475,117.76	0.49	90.9	Pulse	0.10	3
1	In		3,775,804.09	0.10	92.7	Pulse	0.10	3
1	Tb		5,285,460.44	1.07	96.7	Mix	0.10	3
1	Ho		504,673.82	0.43	95.3	Pulse	0.10	3
1	Bi		3,068,611.21	0.59	90.8	Pulse	0.10	3
2	Sc		84,975.95	0.11	95.7	Pulse	0.30	3
2	Ge		52,652.28	0.46	95.2	Pulse	0.30	3
2	Ge		80,984.11	1.07	95.6	Pulse	0.30	3
2	Rh		1,583,911.88	0.61	91.1	Pulse	0.30	3
2	In		509,355.08	0.47	92.9	Pulse	0.30	3
2	Tb		2,120,416.17	0.22	94.7	Pulse	0.30	3
2	Ho		208,729.24	0.56	95.1	Pulse	0.30	3
2	Bi		1,415,245.95	0.38	91.0	Pulse	0.30	3
3	Sc		54,069.58	1.67	97.8	Pulse	0.30	3
3	Ge		35,157.83	1.92	97.7	Pulse	0.30	3
3	Ge		53,309.10	1.53	95.3	Pulse	0.30	3
3	Rh		580,316.99	1.88	94.8	Pulse	0.30	3
3	Tb		973,899.06	1.79	98.1	Pulse	0.30	3

Quantitation Report

File Name	012SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 13:40
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.004	ug/l	43.46	40.00	1.526E-05	Pulse	0.25	3
B			1	0.735	ug/l	5.06	26,585.55	1.014E-02	Pulse	0.15	3
Ca			1	0.318	ug/l	104.41	21,601.38	7.719E-03	Pulse	0.10	3
Sr			1	0.003	ug/l	33.45	590.04	1.626E-04	Pulse	0.10	3
Mo			1	0.004	ug/l	58.35	30.00	8.285E-06	Pulse	0.10	3
Ag			1	0.000	ug/l	118.72	30.00	7.719E-06	Pulse	0.10	3
Sn			1	0.046	ug/l	25.84	1,186.76	3.049E-04	Pulse	0.10	3
Sb			1	-0.005	ug/l	-199.62	2,376.93	4.447E-04	Pulse	0.10	3
Ba			1	0.005	ug/l	70.05	50.00	9.402E-06	Pulse	0.10	3
Tl			1	0.002	ug/l	50.59	93.34	2.893E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	265.27	143.34	4.445E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	100.06	96.67	2.997E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	120.76	446.68	1.385E-04	Pulse	0.10	3
Na			2	-0.347	ug/l	-53.06	5,605.50	6.701E-02	Pulse	0.30	3
Mg			2	0.371	ug/l	42.59	233.34	2.794E-03	Pulse	0.30	3
Al			2	0.453	ug/l	21.08	104.45	1.249E-03	Pulse	0.30	3
K			2	-0.509	ug/l	-220.32	5,714.38	6.831E-02	Pulse	0.30	3
Ca			2	2.918	ug/l	22.84	97.78	1.168E-03	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	-0.016	ug/l	-69.88	120.00	1.432E-03	Pulse	0.30	3
Cr			2	0.001	ug/l	871.29	248.89	2.973E-03	Pulse	0.30	3
Mn			2	0.008	ug/l	48.41	24.44	2.929E-04	Pulse	0.30	3
Fe			2	0.614	ug/l	32.90	3,366.04	4.029E-02	Pulse	0.30	3
Co			2	0.001	ug/l	256.22	52.22	6.230E-04	Pulse	0.30	3
Ni			2	0.002	ug/l	240.45	32.22	3.851E-04	Pulse	0.30	3
Cu			2	-0.002	ug/l	-147.51	125.56	1.501E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.005	ug/l	289.98	102.22	1.223E-03	Pulse	0.30	3
As			2	0.010	ug/l	168.52	10.67	1.275E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	2546.83	1.11	2.129E-06	Pulse	0.30	3
Sn			2	0.034	ug/l	36.87	255.56	4.893E-04	Pulse	0.30	3
Se			3	0.013	ug/l	55.90	2.60	4.825E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,620,589.42	0.22	94.8	Pulse	0.10	3
1	Sc		2,798,499.12	1.13	94.0	Pulse	0.10	3
1	Ge		558,100.83	0.85	96.8	Pulse	0.10	3
1	Ge		781,026.29	0.28	97.7	Pulse	0.10	3
1	Rh		3,628,762.03	0.85	94.9	Pulse	0.10	3
1	In		3,890,621.43	0.62	95.5	Pulse	0.10	3
1	Tb		5,348,253.98	2.44	97.9	Mix	0.10	3
1	Ho		507,640.40	1.00	95.8	Pulse	0.10	3
1	Bi		3,226,000.68	0.57	95.4	Pulse	0.10	3
2	Sc		83,667.30	1.08	94.2	Pulse	0.30	3
2	Ge		53,741.49	0.23	97.2	Pulse	0.30	3
2	Ge		82,768.44	1.49	97.7	Pulse	0.30	3
2	Rh		1,647,811.32	0.21	94.8	Pulse	0.30	3
2	In		522,142.54	0.36	95.2	Pulse	0.30	3
2	Tb		2,121,055.96	0.58	94.7	Pulse	0.30	3
2	Ho		209,227.67	0.47	95.3	Pulse	0.30	3
2	Bi		1,469,057.55	0.04	94.4	Pulse	0.30	3
3	Sc		53,838.76	0.48	97.4	Pulse	0.30	3
3	Ge		34,911.76	0.76	97.0	Pulse	0.30	3
3	Ge		53,832.91	1.21	96.3	Pulse	0.30	3
3	Rh		597,505.64	0.38	97.6	Pulse	0.30	3
3	Tb		973,962.74	0.19	98.1	Pulse	0.30	3

Quantitation Report

File Name	013_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 13:45
Sample Name	ICVA
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	59.852	ug/l	1.04	485,157.45	1.862E-01	Pulse	0.25	3
B			1	119.875	ug/l	0.80	776,924.97	2.981E-01	Pulse	0.15	3
Ca			1	5535.349	ug/l	0.46	4,818,390.35	1.711E+00	Pulse	0.10	3
Sr			1	61.500	ug/l	1.04	2,502,133.97	7.094E-01	Pulse	0.10	3
Mo			1	60.066	ug/l	0.43	478,165.31	1.356E-01	Pulse	0.10	3
Ag			1	58.205	ug/l	0.68	1,188,643.34	3.121E-01	Pulse	0.10	3
Sn			1	58.912	ug/l	1.71	746,557.75	1.960E-01	Pulse	0.10	3
Sb			1	62.738	ug/l	0.64	921,484.31	1.764E-01	Pulse	0.10	3
Ba			1	59.517	ug/l	1.01	352,298.90	6.744E-02	Pulse	0.10	3
Tl			1	62.917	ug/l	0.43	2,331,732.52	7.497E-01	Pulse	0.10	3
Pb			1	62.090	ug/l	0.38	779,396.45	2.506E-01	Pulse	0.10	3
Pb			1	59.293	ug/l	0.84	653,250.12	2.100E-01	Pulse	0.10	3
Pb			1	60.559	ug/l	0.55	3,054,881.02	9.823E-01	Pulse	0.10	3
Na			2	5460.137	ug/l	1.35	4,644,272.31	5.475E+01	Pulse	0.30	3
Mg			2	5582.866	ug/l	0.25	2,152,670.61	2.538E+01	Pulse	0.30	3
Al			2	5603.395	ug/l	0.68	642,536.43	7.575E+00	Pulse	0.30	3
K			2	5577.120	ug/l	1.52	1,217,806.31	1.436E+01	Pulse	0.30	3
Ca			2	5811.225	ug/l	0.84	69,593.27	8.204E-01	Pulse	0.30	3
Ti			2	58.107	ug/l	4.14	5,775.51	6.809E-02	Pulse	0.30	3
V			2	59.621	ug/l	0.77	207,410.50	2.445E+00	Pulse	0.30	3
Cr			2	59.801	ug/l	0.97	274,845.43	3.240E+00	Pulse	0.30	3
Mn			2	59.568	ug/l	2.25	127,245.12	1.500E+00	Pulse	0.30	3
Fe			2	5604.758	ug/l	1.71	20,808,805.84	2.453E+02	Analog	0.30	3
Co			2	58.857	ug/l	1.45	457,798.21	5.397E+00	Pulse	0.30	3
Ni			2	58.452	ug/l	0.41	125,130.17	1.475E+00	Pulse	0.30	3
Cu			2	58.012	ug/l	0.30	344,174.97	4.057E+00	Pulse	0.30	3
Zn			2	58.715	ug/l	1.14	47,150.85	5.559E-01	Pulse	0.30	3
As			2	59.969	ug/l	1.29	25,131.91	2.963E-01	Pulse	1.00	3
Cd			2	58.545	ug/l	2.12	72,394.34	1.413E-01	Pulse	0.30	3
Sn			2	59.720	ug/l	0.78	138,233.10	2.698E-01	Pulse	0.30	3
Se			3	58.619	ug/l	2.11	3,069.15	5.733E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,606,189.01	1.01	94.3	Pulse	0.10	3
1	Sc		2,815,639.44	0.56	94.5	Pulse	0.10	3
1	Ge		552,286.50	1.60	95.8	Pulse	0.10	3

Quantitation Report

1	Ge		773,676.39	0.57	96.8	Pulse	0.10	3
1	Rh		3,527,224.22	0.94	92.2	Pulse	0.10	3
1	In		3,808,233.73	0.65	93.5	Pulse	0.10	3
1	Tb		5,224,173.98	1.48	95.6	Mix	0.10	3
1	Ho		507,832.05	0.60	95.9	Pulse	0.10	3
1	Bi		3,110,076.62	0.72	92.0	Pulse	0.10	3
2	Sc		84,828.46	1.05	95.5	Pulse	0.30	3
2	Ge		53,660.96	1.31	97.1	Pulse	0.30	3
2	Ge		81,870.60	0.78	96.7	Pulse	0.30	3
2	Rh		1,604,476.98	0.95	92.3	Pulse	0.30	3
2	In		512,292.41	1.25	93.4	Pulse	0.30	3
2	Tb		2,154,059.22	0.25	96.2	Pulse	0.30	3
2	Ho		211,082.52	0.59	96.1	Pulse	0.30	3
2	Bi		1,437,086.82	1.16	92.4	Pulse	0.30	3
3	Sc		54,030.60	1.54	97.8	Pulse	0.30	3
3	Ge		35,164.62	0.64	97.7	Pulse	0.30	3
3	Ge		53,547.51	1.44	95.8	Pulse	0.30	3
3	Rh		582,016.73	0.56	95.1	Pulse	0.30	3
3	Tb		969,415.65	0.21	97.7	Pulse	0.30	3

Quantitation Report

File Name	014_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 13:52
Sample Name	ICV
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.004	ug/l	130.24	40.00	1.514E-05	Pulse	0.25	3
B			1	1.310	ug/l	6.25	30,391.86	1.153E-02	Pulse	0.15	3
Ca			1	0.433	ug/l	62.28	21,978.65	7.754E-03	Pulse	0.10	3
Sr			1	0.005	ug/l	51.90	703.38	1.932E-04	Pulse	0.10	3
Mo			1	0.024	ug/l	7.70	196.68	5.398E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	104.35	60.00	1.549E-05	Pulse	0.10	3
Sn			1	0.077	ug/l	6.98	1,583.48	4.082E-04	Pulse	0.10	3
Sb			1	-0.017	ug/l	-18.50	2,193.58	4.103E-04	Pulse	0.10	3
Ba			1	0.013	ug/l	33.26	100.00	1.871E-05	Pulse	0.10	3
Tl			1	0.014	ug/l	17.66	560.03	1.736E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	10.63	310.01	9.614E-05	Pulse	0.10	3
Pb			1	0.014	ug/l	46.83	233.34	7.233E-05	Pulse	0.10	3
Pb			1	0.014	ug/l	0.37	1,113.39	3.452E-04	Pulse	0.10	3
Na			2	0.457	ug/l	67.50	6,374.60	7.507E-02	Pulse	0.30	3
Mg			2	0.096	ug/l	75.51	131.11	1.543E-03	Pulse	0.30	3
Al			2	65.422	ug/l	3.57	7,563.99	8.907E-02	Pulse	0.30	3
K			2	0.290	ug/l	203.53	5,976.69	7.036E-02	Pulse	0.30	3
Ca			2	1.506	ug/l	106.03	82.22	9.693E-04	Pulse	0.30	3
Ti			2	0.044	ug/l	114.68	4.44	5.209E-05	Pulse	0.30	3
V			2	-0.017	ug/l	-4.19	118.89	1.400E-03	Pulse	0.30	3
Cr			2	0.017	ug/l	6.49	325.56	3.833E-03	Pulse	0.30	3
Mn			2	0.013	ug/l	17.50	34.44	4.053E-04	Pulse	0.30	3
Fe			2	50.903	ug/l	0.70	190,369.10	2.241E+00	Pulse	0.30	3
Co			2	0.002	ug/l	83.42	60.00	7.055E-04	Pulse	0.30	3
Ni			2	0.026	ug/l	34.95	84.44	9.953E-04	Pulse	0.30	3
Cu			2	10.042	ug/l	0.49	59,769.06	7.037E-01	Pulse	0.30	3
Zn			2	0.502	ug/l	12.14	502.24	5.913E-03	Pulse	0.30	3
As			2	0.003	ug/l	143.21	8.00	9.408E-05	Pulse	1.00	3
Cd			2	0.003	ug/l	57.06	4.44	8.437E-06	Pulse	0.30	3
Sn			2	0.043	ug/l	13.75	281.12	5.332E-04	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.018	ug/l	10.12	2.93	5.351E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,634,783.21	0.42	95.3	Pulse	0.10	3
1	Sc		2,834,543.81	0.41	95.2	Pulse	0.10	3
1	Ge		559,398.93	0.65	97.1	Pulse	0.10	3
1	Ge		781,338.71	0.40	97.8	Pulse	0.10	3
1	Rh		3,643,617.86	1.14	95.3	Pulse	0.10	3
1	In		3,879,657.29	0.71	95.2	Pulse	0.10	3
1	Tb		5,346,034.30	0.80	97.8	Analog	0.10	3
1	Ho		507,549.58	0.68	95.8	Pulse	0.10	3
1	Bi		3,225,049.64	0.50	95.4	Pulse	0.10	3
2	Sc		84,935.74	0.85	95.6	Pulse	0.30	3
2	Ge		54,475.96	0.51	98.5	Pulse	0.30	3
2	Ge		83,230.48	0.68	98.3	Pulse	0.30	3
2	Rh		1,660,148.44	0.50	95.5	Pulse	0.30	3
2	In		527,017.51	1.01	96.1	Pulse	0.30	3
2	Tb		2,139,634.15	1.23	95.6	Pulse	0.30	3
2	Ho		211,579.35	1.71	96.3	Pulse	0.30	3
2	Bi		1,490,526.09	1.29	95.8	Pulse	0.30	3
3	Sc		54,575.61	1.20	98.7	Pulse	0.30	3
3	Ge		35,195.73	2.15	97.8	Pulse	0.30	3
3	Ge		54,812.84	1.53	98.0	Pulse	0.30	3
3	Rh		604,772.60	0.41	98.8	Pulse	0.30	3
3	Tb		986,163.29	0.86	99.4	Pulse	0.30	3

Quantitation Report

File Name	015_ICB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 13:57
Sample Name	ICB
Sample Type	ICB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	50.16	26.67	1.002E-05	Pulse	0.25	3
B			1	0.784	ug/l	5.79	27,311.17	1.026E-02	Pulse	0.15	3
Ca			1	-2.521	ug/l	-14.66	19,415.37	6.845E-03	Pulse	0.10	3
Sr			1	-0.001	ug/l	-220.44	433.36	1.179E-04	Pulse	0.10	3
Mo			1	0.004	ug/l	41.28	36.67	9.975E-06	Pulse	0.10	3
Ag			1	0.002	ug/l	102.22	53.34	1.365E-05	Pulse	0.10	3
Sn			1	0.039	ug/l	25.76	1,096.74	2.799E-04	Pulse	0.10	3
Sb			1	-0.047	ug/l	-29.17	1,756.83	3.258E-04	Pulse	0.10	3
Ba			1	0.003	ug/l	125.63	36.67	6.785E-06	Pulse	0.10	3
Tl			1	0.002	ug/l	17.82	120.00	3.708E-05	Pulse	0.10	3
Pb			1	-0.003	ug/l	-100.44	100.00	3.085E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	66.17	103.34	3.197E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	40.27	423.35	1.309E-04	Pulse	0.10	3
Na			2	-1.041	ug/l	-8.19	5,100.82	6.006E-02	Pulse	0.30	3
Mg			2	0.010	ug/l	368.63	97.78	1.152E-03	Pulse	0.30	3
Al			2	0.110	ug/l	24.87	66.67	7.850E-04	Pulse	0.30	3
K			2	-0.747	ug/l	-64.91	5,748.82	6.770E-02	Pulse	0.30	3
Ca			2	-1.192	ug/l	-83.48	50.00	5.886E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	-0.016	ug/l	-64.28	124.45	1.466E-03	Pulse	0.30	3
Cr			2	-0.001	ug/l	-556.84	243.34	2.865E-03	Pulse	0.30	3
Mn			2	0.002	ug/l	1.71	10.00	1.178E-04	Pulse	0.30	3
Fe			2	-0.002	ug/l	-448.08	1,131.16	1.332E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-590.92	41.11	4.846E-04	Pulse	0.30	3
Ni			2	-0.005	ug/l	-84.64	18.89	2.221E-04	Pulse	0.30	3
Cu			2	0.000	ug/l	-1963.90	140.00	1.649E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.020	ug/l	-105.93	83.33	9.814E-04	Pulse	0.30	3
As			2	0.006	ug/l	122.08	9.33	1.100E-04	Pulse	1.00	3
Cd			2	0.001	ug/l	163.54	2.22	4.218E-06	Pulse	0.30	3
Sn			2	0.010	ug/l	70.38	202.23	3.837E-04	Pulse	0.30	3
Se			3	0.013	ug/l	104.42	2.67	4.893E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,661,606.04	0.97	96.3	Pulse	0.10	3
1	Sc		2,836,798.40	1.02	95.2	Pulse	0.10	3
1	Ge		557,040.38	1.17	96.7	Pulse	0.10	3
1	Ge		785,527.62	0.33	98.3	Pulse	0.10	3
1	Rh		3,669,913.17	0.69	95.9	Pulse	0.10	3
1	In		3,918,025.79	0.89	96.2	Pulse	0.10	3
1	Tb		5,393,003.25	0.61	98.7	Analog	0.10	3
1	Ho		504,693.91	0.76	95.3	Pulse	0.10	3
1	Bi		3,233,656.20	1.07	95.7	Pulse	0.10	3
2	Sc		84,919.96	0.56	95.6	Pulse	0.30	3
2	Ge		54,576.38	0.63	98.7	Pulse	0.30	3
2	Ge		84,070.40	0.48	99.3	Pulse	0.30	3
2	Rh		1,665,352.61	0.43	95.8	Pulse	0.30	3
2	In		527,130.14	0.55	96.1	Pulse	0.30	3
2	Tb		2,158,277.35	0.30	96.4	Pulse	0.30	3
2	Ho		211,994.62	0.73	96.5	Pulse	0.30	3
2	Bi		1,495,703.48	0.49	96.1	Pulse	0.30	3
3	Sc		54,566.69	0.38	98.7	Pulse	0.30	3
3	Ge		35,298.09	0.42	98.1	Pulse	0.30	3
3	Ge		54,681.33	2.40	97.8	Pulse	0.30	3
3	Rh		601,990.99	0.40	98.4	Pulse	0.30	3
3	Tb		981,281.21	0.47	98.9	Pulse	0.30	3

Quantitation Report

File Name	016_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 14:02
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	51.038	ug/l	0.28	420,828.83	1.588E-01	Pulse	0.25	3
B			1	100.281	ug/l	0.40	664,734.16	2.508E-01	Pulse	0.15	3
Ca			1	4988.164	ug/l	0.58	4,415,139.62	1.543E+00	Pulse	0.10	3
Sr			1	51.269	ug/l	0.83	2,100,862.52	5.914E-01	Pulse	0.10	3
Mo			1	51.401	ug/l	0.31	412,109.68	1.160E-01	Pulse	0.10	3
Ag			1	48.449	ug/l	0.96	997,537.41	2.598E-01	Pulse	0.10	3
Sn			1	49.693	ug/l	1.63	634,982.06	1.654E-01	Pulse	0.10	3
Sb			1	51.978	ug/l	1.01	776,699.26	1.462E-01	Pulse	0.10	3
Ba			1	49.636	ug/l	1.82	298,732.07	5.624E-02	Pulse	0.10	3
Tl			1	50.388	ug/l	0.55	1,877,258.93	6.004E-01	Pulse	0.10	3
Pb			1	50.366	ug/l	1.22	635,590.20	2.033E-01	Pulse	0.10	3
Pb			1	50.496	ug/l	0.70	559,298.73	1.789E-01	Pulse	0.10	3
Pb			1	50.463	ug/l	0.06	2,559,151.09	8.185E-01	Pulse	0.10	3
Na			2	5028.218	ug/l	0.39	4,278,350.94	5.043E+01	Pulse	0.30	3
Mg			2	5124.651	ug/l	0.60	1,976,303.33	2.329E+01	Pulse	0.30	3
Al			2	5114.261	ug/l	0.47	586,559.63	6.914E+00	Pulse	0.30	3
K			2	5148.496	ug/l	1.03	1,124,906.62	1.326E+01	Pulse	0.30	3
Ca			2	5249.743	ug/l	1.29	62,884.61	7.412E-01	Pulse	0.30	3
Ti			2	49.554	ug/l	2.24	4,926.35	5.807E-02	Pulse	0.30	3
V			2	50.428	ug/l	0.74	175,488.95	2.068E+00	Pulse	0.30	3
Cr			2	50.356	ug/l	0.69	231,516.10	2.729E+00	Pulse	0.30	3
Mn			2	50.285	ug/l	0.50	107,447.85	1.266E+00	Pulse	0.30	3
Fe			2	5157.707	ug/l	1.01	19,153,705.35	2.258E+02	Analog	0.30	3
Co			2	49.574	ug/l	1.21	385,686.57	4.546E+00	Pulse	0.30	3
Ni			2	49.157	ug/l	0.78	105,254.99	1.241E+00	Pulse	0.30	3
Cu			2	49.627	ug/l	0.45	294,488.27	3.471E+00	Pulse	0.30	3
Zn			2	49.866	ug/l	1.76	40,066.67	4.723E-01	Pulse	0.30	3
As			2	50.126	ug/l	1.16	21,012.48	2.477E-01	Pulse	1.00	3
Cd			2	48.993	ug/l	0.64	61,042.30	1.183E-01	Pulse	0.30	3
Sn			2	50.120	ug/l	0.49	116,909.90	2.265E-01	Pulse	0.30	3
Se			3	49.267	ug/l	2.06	2,594.94	4.819E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,650,890.82	0.29	95.9	Pulse	0.10	3
1	Sc		2,861,615.37	0.19	96.1	Pulse	0.10	3
1	Ge		566,633.07	0.82	98.3	Pulse	0.10	3

Quantitation Report

1	Ge		788,034.05	0.96	98.6	Pulse	0.10	3
1	Rh		3,552,314.74	0.73	92.9	Pulse	0.10	3
1	In		3,839,513.61	0.82	94.2	Pulse	0.10	3
1	Tb		5,312,105.23	1.24	97.2	Mix	0.10	3
1	Ho		506,285.75	0.38	95.6	Pulse	0.10	3
1	Bi		3,126,575.89	0.33	92.5	Pulse	0.10	3
2	Sc		84,842.05	0.61	95.5	Pulse	0.30	3
2	Ge		54,034.49	0.17	97.7	Pulse	0.30	3
2	Ge		82,265.73	0.83	97.1	Pulse	0.30	3
2	Rh		1,611,110.67	0.14	92.7	Pulse	0.30	3
2	In		516,106.79	0.92	94.1	Pulse	0.30	3
2	Tb		2,139,626.03	0.31	95.6	Pulse	0.30	3
2	Ho		209,261.99	0.37	95.3	Pulse	0.30	3
2	Bi		1,431,491.58	0.52	92.0	Pulse	0.30	3
3	Sc		54,314.80	1.45	98.3	Pulse	0.30	3
3	Ge		34,937.41	1.30	97.0	Pulse	0.30	3
3	Ge		53,857.56	1.08	96.3	Pulse	0.30	3
3	Rh		586,894.40	0.93	95.9	Pulse	0.30	3
3	Tb		972,317.05	0.68	98.0	Pulse	0.30	3

Quantitation Report

File Name	017_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 14:07
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	63.54	36.00	1.356E-05	Pulse	0.25	3
B			1	1.693	ug/l	12.59	33,123.76	1.246E-02	Pulse	0.15	3
Ca			1	-2.383	ug/l	-34.42	19,642.23	6.887E-03	Pulse	0.10	3
Sr			1	0.002	ug/l	150.28	576.70	1.572E-04	Pulse	0.10	3
Mo			1	0.041	ug/l	6.00	340.02	9.279E-05	Pulse	0.10	3
Ag			1	0.009	ug/l	40.19	200.01	5.135E-05	Pulse	0.10	3
Sn			1	0.087	ug/l	11.36	1,720.16	4.408E-04	Pulse	0.10	3
Sb			1	-0.041	ug/l	-38.71	1,853.51	3.428E-04	Pulse	0.10	3
Ba			1	0.004	ug/l	49.70	43.33	8.015E-06	Pulse	0.10	3
Tl			1	0.018	ug/l	5.99	710.05	2.214E-04	Pulse	0.10	3
Pb			1	0.005	ug/l	22.96	196.68	6.132E-05	Pulse	0.10	3
Pb			1	0.009	ug/l	44.73	170.01	5.305E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	8.74	806.71	2.516E-04	Pulse	0.10	3
Na			2	-0.702	ug/l	-10.65	5,355.35	6.345E-02	Pulse	0.30	3
Mg			2	0.211	ug/l	26.94	174.45	2.064E-03	Pulse	0.30	3
Al			2	0.133	ug/l	178.66	68.89	8.163E-04	Pulse	0.30	3
K			2	-0.604	ug/l	-178.96	5,744.38	6.807E-02	Pulse	0.30	3
Ca			2	-1.720	ug/l	-106.93	43.33	5.142E-04	Pulse	0.30	3
Ti			2	0.011	ug/l	173.21	1.11	1.312E-05	Pulse	0.30	3
V			2	-0.014	ug/l	-33.27	130.00	1.538E-03	Pulse	0.30	3
Cr			2	-0.009	ug/l	-69.15	207.78	2.459E-03	Pulse	0.30	3
Mn			2	0.004	ug/l	45.94	15.55	1.847E-04	Pulse	0.30	3
Fe			2	0.289	ug/l	20.15	2,200.18	2.606E-02	Pulse	0.30	3
Co			2	0.002	ug/l	68.51	61.11	7.256E-04	Pulse	0.30	3
Ni			2	-0.002	ug/l	-67.45	23.33	2.767E-04	Pulse	0.30	3
Cu			2	-0.001	ug/l	-579.35	135.56	1.603E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.020	ug/l	-94.67	83.34	9.872E-04	Pulse	0.30	3
As			2	0.002	ug/l	528.34	7.67	9.090E-05	Pulse	1.00	3
Cd			2	0.003	ug/l	149.30	4.44	8.452E-06	Pulse	0.30	3
Sn			2	0.049	ug/l	22.89	292.23	5.560E-04	Pulse	0.30	3
Se			3	-0.008	ug/l	-146.54	1.53	2.847E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,658,874.84	0.76	96.2	Pulse	0.10	3
1	Sc		2,851,788.71	0.25	95.7	Pulse	0.10	3
1	Ge		561,893.61	0.78	97.5	Pulse	0.10	3
1	Ge		786,095.40	0.81	98.4	Pulse	0.10	3
1	Rh		3,664,585.78	0.79	95.8	Pulse	0.10	3
1	In		3,901,809.62	1.23	95.8	Pulse	0.10	3
1	Tb		5,404,832.21	0.51	98.9	Analog	0.10	3
1	Ho		505,903.56	0.86	95.5	Pulse	0.10	3
1	Bi		3,206,849.95	0.42	94.9	Pulse	0.10	3
2	Sc		84,400.84	1.53	95.0	Pulse	0.30	3
2	Ge		53,703.48	0.26	97.1	Pulse	0.30	3
2	Ge		82,711.31	1.30	97.7	Pulse	0.30	3
2	Rh		1,656,162.57	0.83	95.3	Pulse	0.30	3
2	In		525,580.89	0.60	95.9	Pulse	0.30	3
2	Tb		2,126,567.83	0.70	95.0	Pulse	0.30	3
2	Ho		208,700.33	0.62	95.0	Pulse	0.30	3
2	Bi		1,471,419.35	0.74	94.6	Pulse	0.30	3
3	Sc		53,580.31	0.70	96.9	Pulse	0.30	3
3	Ge		34,989.69	0.73	97.2	Pulse	0.30	3
3	Ge		53,930.93	0.58	96.5	Pulse	0.30	3
3	Rh		596,231.94	1.12	97.4	Pulse	0.30	3
3	Tb		970,475.76	0.91	97.8	Pulse	0.30	3

Quantitation Report

File Name	018LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 14:12
Sample Name	CRI
Sample Type	LLCCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.497	ug/l	2.00	4,148.55	1.548E-03	Pulse	0.25	3
B			1	25.599	ug/l	1.34	188,204.11	7.024E-02	Pulse	0.15	3
Ca			1	248.021	ug/l	1.11	241,733.83	8.396E-02	Pulse	0.10	3
Sr			1	4.952	ug/l	1.76	209,731.87	5.724E-02	Pulse	0.10	3
Mo			1	1.024	ug/l	1.19	8,469.18	2.311E-03	Pulse	0.10	3
Ag			1	0.467	ug/l	2.82	9,860.04	2.507E-03	Pulse	0.10	3
Sn			1	4.931	ug/l	0.36	65,085.18	1.655E-02	Pulse	0.10	3
Sb			1	1.886	ug/l	1.58	31,154.84	5.748E-03	Pulse	0.10	3
Ba			1	1.003	ug/l	6.13	6,178.12	1.140E-03	Pulse	0.10	3
Tl			1	0.493	ug/l	2.59	19,099.56	5.882E-03	Pulse	0.10	3
Pb			1	0.480	ug/l	4.77	6,421.62	1.978E-03	Pulse	0.10	3
Pb			1	0.511	ug/l	3.34	5,951.41	1.833E-03	Pulse	0.10	3
Pb			1	0.503	ug/l	1.64	26,907.32	8.286E-03	Pulse	0.10	3
Na			2	246.321	ug/l	1.28	218,041.99	2.537E+00	Pulse	0.30	3
Mg			2	252.736	ug/l	1.83	98,810.93	1.150E+00	Pulse	0.30	3
Al			2	25.777	ug/l	1.56	3,049.20	3.548E-02	Pulse	0.30	3
K			2	250.482	ug/l	1.90	61,120.96	7.113E-01	Pulse	0.30	3
Ca			2	266.906	ug/l	4.74	3,299.25	3.840E-02	Pulse	0.30	3
Ti			2	1.093	ug/l	19.46	110.00	1.281E-03	Pulse	0.30	3
V			2	0.941	ug/l	3.01	3,495.97	4.067E-02	Pulse	0.30	3
Cr			2	0.972	ug/l	1.65	4,771.86	5.553E-02	Pulse	0.30	3
Mn			2	1.025	ug/l	8.49	2,223.51	2.588E-02	Pulse	0.30	3
Fe			2	25.436	ug/l	1.65	96,841.83	1.127E+00	Pulse	0.30	3
Co			2	0.499	ug/l	3.61	3,976.07	4.628E-02	Pulse	0.30	3
Ni			2	1.016	ug/l	8.89	2,231.29	2.598E-02	Pulse	0.30	3
Cu			2	2.004	ug/l	2.35	12,179.06	1.417E-01	Pulse	0.30	3
Zn			2	4.995	ug/l	0.44	4,156.12	4.836E-02	Pulse	0.30	3
As			2	0.501	ug/l	7.32	219.33	2.553E-03	Pulse	1.00	3
Cd			2	0.492	ug/l	4.76	632.24	1.190E-03	Pulse	0.30	3
Sn			2	4.830	ug/l	0.78	11,755.56	2.213E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.522	ug/l	16.08	29.73	5.457E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,679,390.02	0.25	96.9	Pulse	0.10	3
1	Sc		2,879,235.90	0.56	96.7	Pulse	0.10	3
1	Ge		565,629.27	1.17	98.1	Pulse	0.10	3
1	Ge		790,645.48	0.30	98.9	Pulse	0.10	3
1	Rh		3,664,035.36	0.80	95.8	Pulse	0.10	3
1	In		3,932,926.00	0.29	96.5	Pulse	0.10	3
1	Tb		5,419,564.50	0.49	99.2	Analog	0.10	3
1	Ho		509,249.12	0.39	96.1	Pulse	0.10	3
1	Bi		3,247,101.83	0.68	96.1	Pulse	0.10	3
2	Sc		85,937.74	1.08	96.7	Pulse	0.30	3
2	Ge		54,224.05	0.77	98.1	Pulse	0.30	3
2	Ge		83,469.58	0.99	98.6	Pulse	0.30	3
2	Rh		1,677,771.70	0.26	96.5	Pulse	0.30	3
2	In		531,170.15	0.60	96.9	Pulse	0.30	3
2	Tb		2,155,320.19	0.80	96.3	Pulse	0.30	3
2	Ho		211,992.38	0.53	96.5	Pulse	0.30	3
2	Bi		1,492,388.86	0.89	95.9	Pulse	0.30	3
3	Sc		54,620.26	0.65	98.8	Pulse	0.30	3
3	Ge		35,347.11	1.41	98.2	Pulse	0.30	3
3	Ge		54,461.80	0.55	97.4	Pulse	0.30	3
3	Rh		601,458.92	1.08	98.3	Pulse	0.30	3
3	Tb		978,684.65	0.69	98.6	Pulse	0.30	3

Quantitation Report

File Name	019ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 14:17
Sample Name	ICSA
Sample Type	ICSA
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	37.46	29.33	1.208E-05	Pulse	0.25	3
B			1	7.097	ug/l	0.64	61,887.78	2.552E-02	Pulse	0.15	3
Ca			1	93992.144	ug/l	0.49	76,691,845.53	2.894E+01	Analog	0.10	3
Sr			1	1997.766	ug/l	1.28	70,582,508.95	2.304E+01	Analog	0.10	3
Mo			1	2145.119	ug/l	0.78	14,831,341.45	4.842E+00	Analog	0.10	3
Ag			1	0.028	ug/l	26.21	540.03	1.575E-04	Pulse	0.10	3
Sn			1	1966.334	ug/l	2.57	22,390,338.00	6.539E+00	Analog	0.10	3
Sb			1	0.017	ug/l	29.19	2,456.94	5.056E-04	Pulse	0.10	3
Ba			1	0.115	ug/l	13.34	650.04	1.338E-04	Pulse	0.10	3
Tl			1	0.023	ug/l	4.93	786.72	2.888E-04	Pulse	0.10	3
Pb			1	0.102	ug/l	8.88	1,233.43	4.527E-04	Pulse	0.10	3
Pb			1	0.107	ug/l	8.83	1,090.08	4.001E-04	Pulse	0.10	3
Pb			1	0.100	ug/l	7.75	4,750.47	1.744E-03	Pulse	0.10	3
Na			2	93974.214	ug/l	1.23	72,733,003.78	9.412E+02	Analog	0.30	3
Mg			2	94710.572	ug/l	1.94	33,262,880.90	4.305E+02	Analog	0.30	3
Al			2	95739.797	ug/l	2.88	9,998,093.49	1.294E+02	Analog	0.30	3
K			2	98557.818	ug/l	2.50	19,512,933.67	2.526E+02	Analog	0.30	3
Ca			2	102853.742	ug/l	2.18	1,120,979.26	1.451E+01	Pulse	0.30	3
Ti			2	1824.531	ug/l	2.20	165,189.29	2.138E+00	Pulse	0.30	3
V			2	-0.006	ug/l	-126.80	143.34	1.853E-03	Pulse	0.30	3
Cr			2	0.205	ug/l	2.81	1,085.60	1.405E-02	Pulse	0.30	3
Mn			2	0.340	ug/l	6.08	667.80	8.634E-03	Pulse	0.30	3
Fe			2	91717.796	ug/l	1.63	310,197,943.23	4.014E+03	Analog	0.30	3
Co			2	0.076	ug/l	17.48	580.02	7.502E-03	Pulse	0.30	3
Ni			2	0.592	ug/l	12.66	1,180.06	1.526E-02	Pulse	0.30	3
Cu			2	0.220	ug/l	3.78	1,314.51	1.701E-02	Pulse	0.30	3
Zn			2	0.615	ug/l	4.89	540.02	6.987E-03	Pulse	0.30	3
As			2	0.094	ug/l	30.23	42.00	5.452E-04	Pulse	1.00	3
Cd			2	0.372	ug/l	1.31	401.12	9.006E-04	Pulse	0.30	3
Sn			2	1979.683	ug/l	2.33	3,978,822.06	8.934E+00	Pulse	0.30	3
Se			3	0.034	ug/l	32.78	3.40	6.961E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,424,841.70	0.68	87.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,650,350.38	0.35	89.0	Pulse	0.10	3
1	Ge		507,140.11	0.86	88.0	Pulse	0.10	3
1	Ge		684,126.21	0.29	85.6	Pulse	0.10	3
1	Rh		3,063,441.20	0.40	80.1	Pulse	0.10	3
1	In		3,425,207.55	1.62	84.1	Pulse	0.10	3
1	Tb		4,859,612.11	0.71	88.9	Pulse	0.10	3
1	Ho		471,187.56	0.42	88.9	Pulse	0.10	3
1	Bi		2,723,990.69	0.43	80.6	Pulse	0.10	3
2	Sc		77,288.02	2.11	87.0	Pulse	0.30	3
2	Ge		47,837.64	2.71	86.5	Pulse	0.30	3
2	Ge		70,308.32	2.58	83.0	Pulse	0.30	3
2	Rh		1,371,120.85	1.99	78.9	Pulse	0.30	3
2	In		445,487.81	2.24	81.2	Pulse	0.30	3
2	Tb		1,935,167.84	2.25	86.4	Pulse	0.30	3
2	Ho		191,377.27	2.57	87.1	Pulse	0.30	3
2	Bi		1,220,282.62	2.14	78.4	Pulse	0.30	3
3	Sc		50,161.98	0.94	90.8	Pulse	0.30	3
3	Ge		32,836.45	0.61	91.2	Pulse	0.30	3
3	Ge		48,857.29	0.49	87.4	Pulse	0.30	3
3	Rh		500,031.54	1.05	81.7	Pulse	0.30	3
3	Tb		883,720.14	0.94	89.0	Pulse	0.30	3

Quantitation Report

File Name	020ICSB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 14:22
Sample Name	ICSAB
Sample Type	ICSB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	19.43	50.67	2.173E-05	Pulse	0.25	3
B			1	52.172	ug/l	0.64	313,603.45	1.345E-01	Pulse	0.15	3
Ca			1	95270.587	ug/l	0.66	75,541,855.54	2.933E+01	Analog	0.10	3
Sr			1	1998.986	ug/l	0.30	69,929,682.29	2.305E+01	Analog	0.10	3
Mo			1	2152.511	ug/l	1.17	14,735,081.86	4.858E+00	Analog	0.10	3
Ag			1	18.249	ug/l	0.33	331,322.39	9.787E-02	Pulse	0.10	3
Sn			1	2024.204	ug/l	0.20	22,787,520.49	6.731E+00	Analog	0.10	3
Sb			1	0.011	ug/l	134.28	2,410.28	4.896E-04	Pulse	0.10	3
Ba			1	0.113	ug/l	30.51	650.04	1.320E-04	Pulse	0.10	3
Tl			1	0.023	ug/l	1.64	786.71	2.854E-04	Pulse	0.10	3
Pb			1	0.086	ug/l	6.64	1,076.74	3.906E-04	Pulse	0.10	3
Pb			1	0.098	ug/l	9.16	1,020.06	3.701E-04	Pulse	0.10	3
Pb			1	0.097	ug/l	4.11	4,663.79	1.692E-03	Pulse	0.10	3
Na			2	94151.916	ug/l	2.31	71,271,883.83	9.430E+02	Analog	0.30	3
Mg			2	94026.151	ug/l	1.74	32,303,422.05	4.274E+02	Analog	0.30	3
Al			2	94098.357	ug/l	1.91	9,613,802.67	1.272E+02	Analog	0.30	3
K			2	98362.238	ug/l	2.73	19,049,384.24	2.521E+02	Analog	0.30	3
Ca			2	102121.530	ug/l	1.93	1,088,776.38	1.441E+01	Pulse	0.30	3
Ti			2	1807.420	ug/l	1.72	160,082.59	2.118E+00	Pulse	0.30	3
V			2	20.409	ug/l	2.15	63,368.10	8.384E-01	Pulse	0.30	3
Cr			2	19.970	ug/l	1.13	81,937.42	1.084E+00	Pulse	0.30	3
Mn			2	19.876	ug/l	1.83	37,840.00	5.006E-01	Pulse	0.30	3
Fe			2	92220.339	ug/l	1.51	305,102,983.43	4.036E+03	Analog	0.30	3
Co			2	19.406	ug/l	2.78	134,515.58	1.780E+00	Pulse	0.30	3
Ni			2	19.186	ug/l	1.25	36,617.27	4.844E-01	Pulse	0.30	3
Cu			2	18.166	ug/l	1.12	96,126.23	1.272E+00	Pulse	0.30	3
Zn			2	17.608	ug/l	1.97	12,663.90	1.675E-01	Pulse	0.30	3
As			2	19.597	ug/l	2.76	7,321.99	9.688E-02	Pulse	1.00	3
Cd			2	19.427	ug/l	1.59	20,383.20	4.690E-02	Pulse	0.30	3
Sn			2	2016.732	ug/l	1.31	3,955,630.68	9.102E+00	Pulse	0.30	3
Se			3	17.397	ug/l	1.68	821.89	1.704E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,332,101.35	0.40	84.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,575,554.08	0.19	86.5	Pulse	0.10	3
1	Ge		498,212.34	0.55	86.4	Pulse	0.10	3
1	Ge		666,647.57	0.15	83.4	Pulse	0.10	3
1	Rh		3,033,178.39	0.68	79.3	Pulse	0.10	3
1	In		3,385,444.12	0.41	83.1	Pulse	0.10	3
1	Tb		4,923,303.99	0.08	90.1	Pulse	0.10	3
1	Ho		476,556.44	0.31	90.0	Pulse	0.10	3
1	Bi		2,756,637.98	0.36	81.5	Pulse	0.10	3
2	Sc		75,601.22	1.88	85.1	Pulse	0.30	3
2	Ge		46,635.26	0.43	84.3	Pulse	0.30	3
2	Ge		69,494.81	1.05	82.1	Pulse	0.30	3
2	Rh		1,353,108.97	1.07	77.9	Pulse	0.30	3
2	In		434,669.31	1.74	79.3	Pulse	0.30	3
2	Tb		1,918,188.95	0.92	85.7	Pulse	0.30	3
2	Ho		190,618.69	0.73	86.8	Pulse	0.30	3
2	Bi		1,224,687.45	1.13	78.7	Pulse	0.30	3
3	Sc		49,611.39	0.83	89.8	Pulse	0.30	3
3	Ge		32,011.42	0.37	88.9	Pulse	0.30	3
3	Ge		48,243.17	1.21	86.3	Pulse	0.30	3
3	Rh		499,725.71	0.22	81.7	Pulse	0.30	3
3	Tb		880,280.35	0.29	88.7	Pulse	0.30	3

Quantitation Report

File Name	021SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 14:27
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-247.10	5.33	2.296E-06	Pulse	0.25	3
B			1	0.060	ug/l	287.83	19,798.51	8.512E-03	Pulse	0.15	3
Ca			1	6.464	ug/l	19.69	24,381.87	9.610E-03	Pulse	0.10	3
Sr			1	0.224	ug/l	8.30	9,446.43	2.716E-03	Pulse	0.10	3
Mo			1	0.582	ug/l	6.34	4,570.80	1.314E-03	Pulse	0.10	3
Ag			1	0.005	ug/l	51.70	116.67	3.070E-05	Pulse	0.10	3
Sn			1	0.384	ug/l	2.04	5,427.83	1.427E-03	Pulse	0.10	3
Sb			1	-0.082	ug/l	-0.10	1,246.76	2.289E-04	Pulse	0.10	3
Ba			1	0.060	ug/l	27.72	390.02	7.175E-05	Pulse	0.10	3
Tl			1	0.002	ug/l	37.93	106.67	3.268E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	872.20	140.01	4.291E-05	Pulse	0.10	3
Pb			1	-0.002	ug/l	-90.99	50.00	1.533E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	166.59	470.02	1.440E-04	Pulse	0.10	3
Na			2	9.172	ug/l	11.15	12,353.51	1.623E-01	Pulse	0.30	3
Mg			2	8.178	ug/l	14.97	2,912.52	3.828E-02	Pulse	0.30	3
Al			2	7.892	ug/l	9.87	860.03	1.130E-02	Pulse	0.30	3
K			2	5.680	ug/l	16.59	6,404.63	8.417E-02	Pulse	0.30	3
Ca			2	6.747	ug/l	16.30	130.00	1.708E-03	Pulse	0.30	3
Ti			2	0.187	ug/l	40.45	16.67	2.193E-04	Pulse	0.30	3
V			2	-0.025	ug/l	-23.24	81.11	1.066E-03	Pulse	0.30	3
Cr			2	-0.006	ug/l	-80.83	196.67	2.584E-03	Pulse	0.30	3
Mn			2	0.007	ug/l	119.15	18.89	2.479E-04	Pulse	0.30	3
Fe			2	9.651	ug/l	9.32	33,163.48	4.358E-01	Pulse	0.30	3
Co			2	-0.001	ug/l	-96.23	34.45	4.528E-04	Pulse	0.30	3
Ni			2	-0.002	ug/l	-52.40	22.22	2.919E-04	Pulse	0.30	3
Cu			2	0.018	ug/l	15.90	221.11	2.906E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.049	ug/l	-35.41	54.44	7.150E-04	Pulse	0.30	3
As			2	0.002	ug/l	196.02	7.00	9.203E-05	Pulse	1.00	3
Cd			2	0.002	ug/l	244.26	3.33	6.821E-06	Pulse	0.30	3
Sn			2	0.273	ug/l	8.35	773.36	1.567E-03	Pulse	0.30	3
Se			3	0.019	ug/l	52.10	2.87	5.418E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,326,349.16	0.70	84.2	Pulse	0.10	3
1	Sc		2,536,758.03	0.59	85.2	Pulse	0.10	3
1	Ge		509,802.58	1.12	88.5	Pulse	0.10	3
1	Ge		716,283.48	0.36	89.6	Pulse	0.10	3
1	Rh		3,477,923.07	0.59	90.9	Pulse	0.10	3
1	In		3,803,004.38	0.20	93.3	Pulse	0.10	3
1	Tb		5,446,691.17	1.28	99.7	Analog	0.10	3
1	Ho		506,896.03	0.38	95.7	Pulse	0.10	3
1	Bi		3,265,356.31	0.51	96.6	Pulse	0.10	3
2	Sc		76,090.21	0.51	85.7	Pulse	0.30	3
2	Ge		49,030.03	1.41	88.7	Pulse	0.30	3
2	Ge		75,580.40	1.84	89.3	Pulse	0.30	3
2	Rh		1,591,530.60	0.49	91.6	Pulse	0.30	3
2	In		493,583.37	1.06	90.0	Pulse	0.30	3
2	Tb		2,067,651.03	0.51	92.4	Pulse	0.30	3
2	Ho		203,989.44	1.04	92.9	Pulse	0.30	3
2	Bi		1,455,841.71	0.20	93.6	Pulse	0.30	3
3	Sc		51,885.92	0.69	93.9	Pulse	0.30	3
3	Ge		34,559.86	0.88	96.0	Pulse	0.30	3
3	Ge		52,919.97	1.13	94.6	Pulse	0.30	3
3	Rh		592,216.19	0.45	96.8	Pulse	0.30	3
3	Tb		980,201.97	0.18	98.8	Pulse	0.30	3

Quantitation Report

File Name	022_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 14:32
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.913	ug/l	0.79	365,156.73	1.521E-01	Pulse	0.25	3
B			1	98.600	ug/l	0.55	592,115.22	2.467E-01	Pulse	0.15	3
Ca			1	5022.703	ug/l	1.91	4,131,575.88	1.554E+00	Pulse	0.10	3
Sr			1	51.414	ug/l	0.64	2,059,223.62	5.931E-01	Pulse	0.10	3
Mo			1	51.673	ug/l	0.39	404,919.97	1.166E-01	Pulse	0.10	3
Ag			1	48.377	ug/l	0.88	989,045.63	2.594E-01	Pulse	0.10	3
Sn			1	50.698	ug/l	0.50	643,268.39	1.687E-01	Pulse	0.10	3
Sb			1	51.164	ug/l	0.68	791,710.07	1.439E-01	Pulse	0.10	3
Ba			1	48.138	ug/l	1.09	300,014.71	5.455E-02	Pulse	0.10	3
Tl			1	50.695	ug/l	0.87	1,946,477.21	6.041E-01	Pulse	0.10	3
Pb			1	50.609	ug/l	0.38	658,201.27	2.043E-01	Pulse	0.10	3
Pb			1	51.013	ug/l	0.56	582,316.96	1.807E-01	Pulse	0.10	3
Pb			1	50.683	ug/l	0.38	2,648,966.33	8.221E-01	Pulse	0.10	3
Na			2	4974.660	ug/l	2.02	3,897,269.01	4.989E+01	Pulse	0.30	3
Mg			2	4998.411	ug/l	2.20	1,774,753.19	2.272E+01	Pulse	0.30	3
Al			2	4841.076	ug/l	2.51	511,173.84	6.544E+00	Pulse	0.30	3
K			2	5008.464	ug/l	2.93	1,007,572.39	1.290E+01	Pulse	0.30	3
Ca			2	5238.171	ug/l	2.00	57,774.07	7.396E-01	Pulse	0.30	3
Ti			2	50.113	ug/l	6.63	4,585.14	5.872E-02	Pulse	0.30	3
V			2	51.136	ug/l	2.07	163,842.98	2.097E+00	Pulse	0.30	3
Cr			2	50.834	ug/l	2.52	215,169.58	2.755E+00	Pulse	0.30	3
Mn			2	49.375	ug/l	2.45	97,137.02	1.244E+00	Pulse	0.30	3
Fe			2	5245.562	ug/l	2.02	17,936,128.73	2.296E+02	Analog	0.30	3
Co			2	50.691	ug/l	2.36	363,105.44	4.649E+00	Pulse	0.30	3
Ni			2	50.844	ug/l	2.38	100,230.95	1.283E+00	Pulse	0.30	3
Cu			2	50.721	ug/l	2.60	277,088.83	3.548E+00	Pulse	0.30	3
Zn			2	50.701	ug/l	3.29	37,500.60	4.802E-01	Pulse	0.30	3
As			2	51.198	ug/l	1.91	19,760.92	2.530E-01	Pulse	1.00	3
Cd			2	50.249	ug/l	0.50	59,242.32	1.213E-01	Pulse	0.30	3
Sn			2	50.991	ug/l	2.27	112,519.17	2.305E-01	Pulse	0.30	3
Se			3	48.508	ug/l	0.93	2,549.67	4.745E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,400,191.52	0.45	86.8	Pulse	0.10	3
1	Sc		2,659,933.81	1.33	89.3	Pulse	0.10	3
1	Ge		530,051.58	1.16	92.0	Pulse	0.10	3

Quantitation Report

1	Ge		738,321.37	0.53	92.4	Pulse	0.10	3
1	Rh		3,472,016.30	0.49	90.8	Pulse	0.10	3
1	In		3,812,396.91	0.36	93.6	Pulse	0.10	3
1	Tb		5,500,388.25	0.79	100.7	Analog	0.10	3
1	Ho		519,737.14	0.57	98.1	Pulse	0.10	3
1	Bi		3,222,211.62	0.04	95.3	Pulse	0.10	3
2	Sc		78,139.66	2.39	88.0	Pulse	0.30	3
2	Ge		50,020.76	1.72	90.5	Pulse	0.30	3
2	Ge		76,504.98	1.50	90.3	Pulse	0.30	3
2	Rh		1,556,195.63	1.93	89.5	Pulse	0.30	3
2	In		488,385.75	1.89	89.1	Pulse	0.30	3
2	Tb		2,052,982.21	0.85	91.7	Pulse	0.30	3
2	Ho		204,058.28	1.13	92.9	Pulse	0.30	3
2	Bi		1,413,527.20	1.81	90.9	Pulse	0.30	3
3	Sc		54,042.68	1.29	97.8	Pulse	0.30	3
3	Ge		34,831.59	1.58	96.8	Pulse	0.30	3
3	Ge		53,742.53	0.96	96.1	Pulse	0.30	3
3	Rh		590,294.72	0.11	96.5	Pulse	0.30	3
3	Tb		993,241.21	0.31	100.1	Pulse	0.30	3

Quantitation Report

File Name	023_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 14:37
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	50.44	50.67	2.083E-05	Pulse	0.25	3
B			1	0.833	ug/l	4.03	25,219.08	1.038E-02	Pulse	0.15	3
Ca			1	-3.719	ug/l	-7.91	17,282.91	6.476E-03	Pulse	0.10	3
Sr			1	0.012	ug/l	40.25	960.07	2.683E-04	Pulse	0.10	3
Mo			1	0.080	ug/l	10.62	646.70	1.805E-04	Pulse	0.10	3
Ag			1	0.006	ug/l	30.60	153.34	3.928E-05	Pulse	0.10	3
Sn			1	0.128	ug/l	10.02	2,246.90	5.758E-04	Pulse	0.10	3
Sb			1	-0.063	ug/l	-8.07	1,553.46	2.802E-04	Pulse	0.10	3
Ba			1	0.006	ug/l	66.26	60.00	1.079E-05	Pulse	0.10	3
Tl			1	0.015	ug/l	15.63	633.37	1.926E-04	Pulse	0.10	3
Pb			1	0.003	ug/l	96.44	183.34	5.572E-05	Pulse	0.10	3
Pb			1	0.011	ug/l	39.38	196.68	5.961E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	43.68	846.71	2.567E-04	Pulse	0.10	3
Na			2	1.455	ug/l	21.65	6,652.50	8.506E-02	Pulse	0.30	3
Mg			2	0.638	ug/l	3.25	313.34	4.005E-03	Pulse	0.30	3
Al			2	0.957	ug/l	30.09	151.11	1.931E-03	Pulse	0.30	3
K			2	0.441	ug/l	129.59	5,534.31	7.075E-02	Pulse	0.30	3
Ca			2	-2.761	ug/l	-44.32	28.89	3.673E-04	Pulse	0.30	3
Ti			2	0.037	ug/l	101.11	3.33	4.295E-05	Pulse	0.30	3
V			2	-0.021	ug/l	-26.49	95.55	1.223E-03	Pulse	0.30	3
Cr			2	-0.004	ug/l	-117.34	210.00	2.685E-03	Pulse	0.30	3
Mn			2	0.016	ug/l	17.92	37.78	4.835E-04	Pulse	0.30	3
Fe			2	0.970	ug/l	6.25	4,369.51	5.588E-02	Pulse	0.30	3
Co			2	0.002	ug/l	89.53	52.22	6.688E-04	Pulse	0.30	3
Ni			2	0.003	ug/l	200.79	32.22	4.124E-04	Pulse	0.30	3
Cu			2	0.004	ug/l	122.92	152.23	1.948E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.027	ug/l	-120.57	72.22	9.225E-04	Pulse	0.30	3
As			2	-0.002	ug/l	-172.62	5.33	6.836E-05	Pulse	1.00	3
Cd			2	0.005	ug/l	101.70	6.67	1.336E-05	Pulse	0.30	3
Sn			2	0.099	ug/l	22.39	392.23	7.838E-04	Pulse	0.30	3
Se			3	0.038	ug/l	13.36	4.07	7.325E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,429,285.00	0.67	87.9	Pulse	0.10	3
1	Sc		2,668,594.03	0.75	89.6	Pulse	0.10	3
1	Ge		532,310.08	0.89	92.4	Pulse	0.10	3
1	Ge		749,443.06	1.48	93.8	Pulse	0.10	3
1	Rh		3,582,082.14	0.84	93.7	Pulse	0.10	3
1	In		3,903,251.46	0.45	95.8	Pulse	0.10	3
1	Tb		5,545,524.92	0.87	101.5	Analog	0.10	3
1	Ho		516,899.84	0.32	97.6	Pulse	0.10	3
1	Bi		3,290,710.16	1.66	97.3	Pulse	0.10	3
2	Sc		78,239.98	1.64	88.1	Pulse	0.30	3
2	Ge		51,631.32	0.99	93.4	Pulse	0.30	3
2	Ge		78,859.29	1.04	93.1	Pulse	0.30	3
2	Rh		1,621,130.42	0.11	93.3	Pulse	0.30	3
2	In		500,244.85	0.46	91.2	Pulse	0.30	3
2	Tb		2,083,141.72	0.54	93.1	Pulse	0.30	3
2	Ho		205,801.73	0.67	93.7	Pulse	0.30	3
2	Bi		1,465,669.25	0.52	94.2	Pulse	0.30	3
3	Sc		54,966.85	1.55	99.5	Pulse	0.30	3
3	Ge		35,941.75	0.96	99.8	Pulse	0.30	3
3	Ge		55,548.62	1.24	99.3	Pulse	0.30	3
3	Rh		614,816.28	0.85	100.5	Pulse	0.30	3
3	Tb		1,002,955.90	0.65	101.1	Pulse	0.30	3

Quantitation Report

File Name	024SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 14:42
Sample Name	jc71560-16conf
Sample Type	Sample
Comment	
Prep Dilution	50.000
Auto Dilution	N/A
Total Dilution	50.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	1.090	ug/l	17.20	181.33	7.088E-05	Pulse	0.25	3
B			1	150.714	ug/l	2.31	40,054.08	1.565E-02	Pulse	0.15	3
Ca			1	27211.952	ug/l	0.26	490,607.84	1.751E-01	Pulse	0.10	3
Sr			1	366.957	ug/l	1.22	304,954.08	8.478E-02	Pulse	0.10	3
Mo			1	54.736	ug/l	6.08	8,889.42	2.471E-03	Pulse	0.10	3
Ag			1	17.805	ug/l	2.15	7,565.41	1.915E-03	Pulse	0.10	3
Sn			1	1582.160	ug/l	0.88	416,259.15	1.054E-01	Pulse	0.10	3
Sb			1	27.482	ug/l	1.57	11,174.32	2.000E-03	Pulse	0.10	3
Ba			1	226.464	ug/l	1.70	28,703.82	5.136E-03	Pulse	0.10	3
Tl			1	335.004	ug/l	0.12	269,004.83	7.985E-02	Pulse	0.10	3
Pb			1	1793.613	ug/l	0.65	487,836.76	1.448E-01	Pulse	0.10	3
Pb			1	1710.381	ug/l	0.62	408,290.67	1.212E-01	Pulse	0.10	3
Pb			1	1738.503	ug/l	0.69	1,900,144.06	5.640E-01	Pulse	0.10	3
Na			2	4681.615	ug/l	2.46	81,799.25	1.008E+00	Pulse	0.30	3
Mg			2	19646.139	ug/l	3.04	144,952.50	1.787E+00	Pulse	0.30	3
Al			2	1215449.445	ug/l	2.67	2,665,446.35	3.286E+01	Pulse	0.30	3
K			2	3256.165	ug/l	2.24	19,183.35	2.365E-01	Pulse	0.30	3
Ca			2	29588.750	ug/l	2.44	6,832.59	8.423E-02	Pulse	0.30	3
Ti			2	3908.262	ug/l	0.48	7,432.83	9.159E-02	Pulse	0.30	3
V			2	303.445	ug/l	2.99	20,342.58	2.508E-01	Pulse	0.30	3
Cr			2	1502.984	ug/l	2.47	132,236.92	1.630E+00	Pulse	0.30	3
Mn			2	4543.907	ug/l	1.52	185,684.32	2.289E+00	Pulse	0.30	3
Fe			2	104907.087	ug/l	1.66	7,451,695.26	9.185E+01	Analog	0.30	3
Co			2	49.666	ug/l	5.76	7,426.19	9.159E-02	Pulse	0.30	3
Ni			2	1496.057	ug/l	3.50	61,258.68	7.553E-01	Pulse	0.30	3
Cu			2	101714.785	ug/l	3.31	11,535,144.54	1.422E+02	Analog	0.30	3
Zn			2	9494.744	ug/l	2.59	145,622.91	1.795E+00	Pulse	0.30	3
As			2	52.647	ug/l	2.50	428.68	5.281E-03	Pulse	1.00	3
Cd			2	28.272	ug/l	11.75	690.02	1.367E-03	Pulse	0.30	3
Sn			2	1597.029	ug/l	2.10	72,959.83	1.445E-01	Pulse	0.30	3
Se			3	8.194	ug/l	19.08	10.93	1.961E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,558,830.18	0.65	92.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,801,417.15	0.58	94.1	Pulse	0.10	3
1	Ge		554,549.98	0.43	96.2	Pulse	0.10	3
1	Ge		768,817.33	0.45	96.2	Pulse	0.10	3
1	Rh		3,597,261.61	0.45	94.1	Pulse	0.10	3
1	In		3,950,413.62	0.29	96.9	Pulse	0.10	3
1	Tb		5,588,719.29	1.11	102.3	Analog	0.10	3
1	Ho		529,333.14	0.36	99.9	Pulse	0.10	3
1	Bi		3,369,040.57	0.65	99.7	Pulse	0.10	3
2	Sc		81,145.98	2.08	91.3	Pulse	0.30	3
2	Ge		53,106.07	0.85	96.0	Pulse	0.30	3
2	Ge		80,185.68	2.17	94.7	Pulse	0.30	3
2	Rh		1,616,941.36	1.63	93.0	Pulse	0.30	3
2	In		505,083.12	1.49	92.1	Pulse	0.30	3
2	Tb		2,112,949.01	1.56	94.4	Pulse	0.30	3
2	Ho		210,218.32	2.06	95.7	Pulse	0.30	3
2	Bi		1,489,244.24	1.95	95.7	Pulse	0.30	3
3	Sc		56,706.29	0.51	102.6	Pulse	0.30	3
3	Ge		36,616.58	0.40	101.7	Pulse	0.30	3
3	Ge		55,805.09	1.02	99.8	Pulse	0.30	3
3	Rh		601,460.29	0.14	98.3	Pulse	0.30	3
3	Tb		1,002,045.97	0.75	101.0	Pulse	0.30	3

Quantitation Report

File Name	025SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 14:47
Sample Name	mp8578-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.005	ug/l	40.01	28.00	1.102E-05	Pulse	0.25	3
B			1	1.334	ug/l	8.76	25,370.37	9.979E-03	Pulse	0.15	3
Ca			1	3.929	ug/l	44.11	22,235.37	8.225E-03	Pulse	0.10	3
Sr			1	0.035	ug/l	10.10	1,193.42	3.329E-04	Pulse	0.10	3
Mo			1	0.102	ug/l	10.57	413.35	1.153E-04	Pulse	0.10	3
Ag			1	0.005	ug/l	21.11	70.00	1.798E-05	Pulse	0.10	3
Sn			1	0.816	ug/l	3.26	5,874.64	1.508E-03	Pulse	0.10	3
Sb			1	-0.054	ug/l	-22.47	2,130.23	3.830E-04	Pulse	0.10	3
Ba			1	0.044	ug/l	14.59	160.01	2.878E-05	Pulse	0.10	3
Tl			1	0.014	ug/l	11.90	320.02	9.490E-05	Pulse	0.10	3
Pb			1	0.023	ug/l	27.12	300.01	8.896E-05	Pulse	0.10	3
Pb			1	0.025	ug/l	14.06	226.68	6.723E-05	Pulse	0.10	3
Pb			1	0.029	ug/l	16.15	1,213.40	3.598E-04	Pulse	0.10	3
Na			2	7.817	ug/l	13.64	8,536.69	1.096E-01	Pulse	0.30	3
Mg			2	1.416	ug/l	6.18	336.67	4.325E-03	Pulse	0.30	3
Al			2	2.919	ug/l	5.71	203.34	2.610E-03	Pulse	0.30	3
K			2	-0.204	ug/l	-1055.00	5,398.71	6.935E-02	Pulse	0.30	3
Ca			2	11.423	ug/l	54.04	121.11	1.562E-03	Pulse	0.30	3
Ti			2	0.096	ug/l	86.62	4.45	5.630E-05	Pulse	0.30	3
V			2	0.191	ug/l	6.83	468.90	6.024E-03	Pulse	0.30	3
Cr			2	0.288	ug/l	3.00	835.59	1.073E-02	Pulse	0.30	3
Mn			2	0.136	ug/l	21.07	138.89	1.788E-03	Pulse	0.30	3
Fe			2	3.270	ug/l	2.81	6,616.97	8.498E-02	Pulse	0.30	3
Co			2	0.004	ug/l	123.64	55.55	7.101E-04	Pulse	0.30	3
Ni			2	0.091	ug/l	33.38	115.56	1.490E-03	Pulse	0.30	3
Cu			2	0.404	ug/l	10.57	1,227.85	1.579E-02	Pulse	0.30	3
Zn			2	1.867	ug/l	16.99	776.69	9.994E-03	Pulse	0.30	3
As			2	0.047	ug/l	44.20	15.33	1.969E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.014	ug/l	87.84	8.89	1.835E-05	Pulse	0.30	3
Sn			2	0.732	ug/l	11.42	964.48	1.989E-03	Pulse	0.30	3
Se			3	0.077	ug/l	25.94	4.33	7.370E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,542,351.22	0.40	92.0	Pulse	0.10	3
1	Sc		2,703,520.37	0.66	90.8	Pulse	0.10	3
1	Ge		584,814.31	0.21	101.5	Pulse	0.10	3
1	Ge		816,077.33	0.23	102.1	Pulse	0.10	3
1	Rh		3,584,731.40	0.68	93.7	Pulse	0.10	3
1	In		3,895,115.43	0.50	95.6	Pulse	0.10	3
1	Tb		5,561,470.33	0.19	101.8	Analog	0.10	3
1	Ho		525,512.48	0.95	99.2	Pulse	0.10	3
1	Bi		3,372,107.14	0.30	99.7	Pulse	0.10	3
2	Sc		77,892.89	2.69	87.7	Pulse	0.30	3
2	Ge		54,280.99	0.31	98.2	Pulse	0.30	3
2	Ge		82,571.79	0.70	97.5	Pulse	0.30	3
2	Rh		1,611,724.80	0.27	92.7	Pulse	0.30	3
2	In		484,826.46	0.45	88.4	Pulse	0.30	3
2	Tb		2,073,412.28	0.72	92.6	Pulse	0.30	3
2	Ho		204,978.32	0.90	93.3	Pulse	0.30	3
2	Bi		1,461,299.98	0.81	93.9	Pulse	0.30	3
3	Sc		54,584.53	0.24	98.8	Pulse	0.30	3
3	Ge		38,193.46	0.52	106.1	Pulse	0.30	3
3	Ge		58,799.92	1.01	105.2	Pulse	0.30	3
3	Rh		601,106.50	0.06	98.2	Pulse	0.30	3
3	Tb		992,753.40	0.77	100.0	Pulse	0.30	3

Quantitation Report

File Name	026SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 14:52
Sample Name	mp8578-b2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	76.352	ug/l	1.37	298,302.04	1.187E-01	Pulse	0.25	3
B			1	83.603	ug/l	1.35	274,852.20	1.094E-01	Pulse	0.15	3
Ca			1	1632.933	ug/l	0.46	695,635.51	2.589E-01	Pulse	0.10	3
Sr			1	82.783	ug/l	0.71	1,683,040.65	4.775E-01	Pulse	0.10	3
Mo			1	83.492	ug/l	1.12	332,093.56	9.422E-02	Pulse	0.10	3
Ag			1	76.594	ug/l	1.10	790,650.82	2.054E-01	Pulse	0.10	3
Sn			1	82.894	ug/l	1.39	531,150.32	1.380E-01	Pulse	0.10	3
Sb			1	79.413	ug/l	1.06	630,540.20	1.118E-01	Pulse	0.10	3
Ba			1	76.284	ug/l	0.64	243,748.58	4.322E-02	Pulse	0.10	3
Tl			1	81.437	ug/l	1.02	1,607,799.40	4.852E-01	Pulse	0.10	3
Pb			1	81.446	ug/l	0.79	544,689.22	1.644E-01	Pulse	0.10	3
Pb			1	81.339	ug/l	1.37	477,431.14	1.441E-01	Pulse	0.10	3
Pb			1	81.536	ug/l	1.01	2,191,290.42	6.613E-01	Pulse	0.10	3
Na			2	1627.413	ug/l	0.76	636,415.62	8.220E+00	Pulse	0.30	3
Mg			2	1620.780	ug/l	0.82	285,278.80	3.685E+00	Pulse	0.30	3
Al			2	1513.677	ug/l	1.72	79,253.25	1.024E+00	Pulse	0.30	3
K			2	1590.817	ug/l	0.89	163,158.85	2.107E+00	Pulse	0.30	3
Ca			2	1999.740	ug/l	2.21	10,978.15	1.418E-01	Pulse	0.30	3
Ti			2	77.980	ug/l	3.64	3,538.20	4.569E-02	Pulse	0.30	3
V			2	83.067	ug/l	1.05	131,931.87	1.704E+00	Pulse	0.30	3
Cr			2	83.586	ug/l	0.56	175,395.82	2.265E+00	Pulse	0.30	3
Mn			2	80.058	ug/l	1.15	78,056.14	1.008E+00	Pulse	0.30	3
Fe			2	1600.657	ug/l	1.00	2,713,197.67	3.504E+01	Pulse	0.30	3
Co			2	84.783	ug/l	0.68	300,996.59	3.888E+00	Pulse	0.30	3
Ni			2	84.083	ug/l	2.12	82,148.46	1.061E+00	Pulse	0.30	3
Cu			2	83.981	ug/l	0.69	227,413.57	2.937E+00	Pulse	0.30	3
Zn			2	76.283	ug/l	2.12	27,988.39	3.615E-01	Pulse	0.30	3
As			2	78.098	ug/l	1.09	14,939.84	1.930E-01	Pulse	1.00	3
Cd			2	79.811	ug/l	0.22	45,818.20	9.634E-02	Pulse	0.30	3
Sn			2	82.967	ug/l	0.80	89,194.45	1.875E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	62.011	ug/l	0.46	1,798.43	3.034E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,512,261.17	0.61	90.9	Pulse	0.10	3
1	Sc		2,686,757.77	0.44	90.2	Pulse	0.10	3
1	Ge		585,402.79	0.98	101.6	Pulse	0.10	3
1	Ge		812,713.89	1.05	101.7	Pulse	0.10	3
1	Rh		3,524,702.03	0.29	92.2	Pulse	0.10	3
1	In		3,849,892.26	0.42	94.5	Pulse	0.10	3
1	Tb		5,639,876.79	1.26	103.2	Analog	0.10	3
1	Ho		528,453.09	0.37	99.8	Pulse	0.10	3
1	Bi		3,313,706.10	0.53	98.0	Pulse	0.10	3
2	Sc		77,428.52	0.89	87.2	Pulse	0.30	3
2	Ge		55,176.26	2.24	99.8	Pulse	0.30	3
2	Ge		84,002.48	0.92	99.2	Pulse	0.30	3
2	Rh		1,585,983.41	0.64	91.3	Pulse	0.30	3
2	In		475,592.11	0.61	86.7	Pulse	0.30	3
2	Tb		2,064,167.07	0.84	92.2	Pulse	0.30	3
2	Ho		204,188.99	0.18	93.0	Pulse	0.30	3
2	Bi		1,429,651.85	0.43	91.9	Pulse	0.30	3
3	Sc		54,434.24	1.22	98.5	Pulse	0.30	3
3	Ge		38,317.15	1.41	106.4	Pulse	0.30	3
3	Ge		59,276.10	0.81	106.0	Pulse	0.30	3
3	Rh		597,052.37	0.30	97.6	Pulse	0.30	3
3	Tb		990,771.80	0.29	99.8	Pulse	0.30	3

Quantitation Report

File Name 027SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File
Method Path
Acq Time 8/13/2018 14:57
Sample Name mp8578-s5
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/13/2018 13:57
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	76.226	ug/l	0.31	290,357.67	1.185E-01	Pulse	0.25	3
B			1	98.928	ug/l	0.40	313,333.91	1.279E-01	Pulse	0.15	3
Ca			1	61436.817	ug/l	0.30	25,269,193.79	9.462E+00	Analog	0.10	3
Sr			1	490.691	ug/l	0.60	9,381,873.61	2.830E+00	Analog	0.10	3
Mo			1	87.039	ug/l	0.80	325,658.68	9.822E-02	Pulse	0.10	3
Ag			1	73.844	ug/l	0.40	735,494.34	1.980E-01	Pulse	0.10	3
Sn			1	83.943	ug/l	0.63	518,992.17	1.397E-01	Pulse	0.10	3
Sb			1	79.109	ug/l	0.33	619,013.48	1.114E-01	Pulse	0.10	3
Ba			1	191.402	ug/l	0.59	602,647.57	1.084E-01	Pulse	0.10	3
Tl			1	82.713	ug/l	0.63	1,527,631.54	4.928E-01	Pulse	0.10	3
Pb			1	83.035	ug/l	1.35	519,460.03	1.676E-01	Pulse	0.10	3
Pb			1	83.130	ug/l	1.05	456,447.82	1.473E-01	Pulse	0.10	3
Pb			1	83.086	ug/l	0.93	2,088,827.91	6.739E-01	Pulse	0.10	3
Na			2	71820.117	ug/l	2.65	27,669,742.79	3.597E+02	Analog	0.30	3
Mg			2	26953.854	ug/l	1.67	4,713,533.15	6.126E+01	Mix	0.30	3
Al			2	1480.097	ug/l	1.86	77,004.19	1.001E+00	Pulse	0.30	3
K			2	4066.224	ug/l	2.03	406,029.50	5.278E+00	Pulse	0.30	3
Ca			2	61779.342	ug/l	2.49	335,208.39	4.358E+00	Pulse	0.30	3
Ti			2	79.563	ug/l	2.67	3,588.21	4.662E-02	Pulse	0.30	3
V			2	83.127	ug/l	2.19	131,178.34	1.705E+00	Pulse	0.30	3
Cr			2	83.115	ug/l	1.45	173,298.98	2.253E+00	Pulse	0.30	3
Mn			2	78.069	ug/l	2.73	75,621.46	9.831E-01	Pulse	0.30	3
Fe			2	1567.991	ug/l	2.65	2,640,583.78	3.433E+01	Pulse	0.30	3
Co			2	80.535	ug/l	3.21	284,030.67	3.693E+00	Pulse	0.30	3
Ni			2	82.350	ug/l	2.84	79,935.47	1.039E+00	Pulse	0.30	3
Cu			2	77.860	ug/l	1.29	209,510.79	2.723E+00	Pulse	0.30	3
Zn			2	73.289	ug/l	0.59	26,729.62	3.474E-01	Pulse	0.30	3
As			2	75.718	ug/l	2.10	14,392.00	1.871E-01	Pulse	1.00	3
Cd			2	77.770	ug/l	1.03	43,158.63	9.388E-02	Pulse	0.30	3
Sn			2	85.149	ug/l	1.91	88,481.76	1.925E-01	Pulse	0.30	3
Se			3	57.009	ug/l	0.71	1,676.22	2.789E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,449,255.28	0.51	88.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,670,516.21	0.55	89.7	Pulse	0.10	3
1	Ge		603,865.29	1.29	104.8	Pulse	0.10	3
1	Ge		836,834.26	1.21	104.7	Pulse	0.10	3
1	Rh		3,315,490.68	0.31	86.7	Pulse	0.10	3
1	In		3,714,631.86	0.30	91.2	Pulse	0.10	3
1	Tb		5,557,526.17	0.38	101.7	Analog	0.10	3
1	Ho		520,659.23	0.27	98.3	Pulse	0.10	3
1	Bi		3,100,016.93	1.15	91.7	Pulse	0.10	3
2	Sc		76,947.68	2.02	86.6	Pulse	0.30	3
2	Ge		55,181.64	1.72	99.8	Pulse	0.30	3
2	Ge		84,335.08	0.66	99.6	Pulse	0.30	3
2	Rh		1,498,892.62	1.51	86.3	Pulse	0.30	3
2	In		459,814.23	2.36	83.9	Pulse	0.30	3
2	Tb		2,042,909.22	2.27	91.3	Pulse	0.30	3
2	Ho		202,462.43	0.87	92.2	Pulse	0.30	3
2	Bi		1,350,431.23	0.53	86.8	Pulse	0.30	3
3	Sc		54,514.40	1.55	98.6	Pulse	0.30	3
3	Ge		38,699.14	0.17	107.5	Pulse	0.30	3
3	Ge		60,091.12	0.29	107.5	Pulse	0.30	3
3	Rh		574,029.00	0.16	93.8	Pulse	0.30	3
3	Tb		982,918.92	0.66	99.0	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 15:02
Sample Name	mp8578-s6
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	76.798	ug/l	1.03	288,288.32	1.194E-01	Pulse	0.25	3
B			1	100.799	ug/l	1.02	314,242.56	1.302E-01	Pulse	0.15	3
Ca			1	62296.569	ug/l	1.27	25,538,713.79	9.595E+00	Analog	0.10	3
Sr			1	493.013	ug/l	0.94	9,351,678.19	2.843E+00	Analog	0.10	3
Mo			1	86.783	ug/l	0.96	322,132.04	9.793E-02	Pulse	0.10	3
Ag			1	74.223	ug/l	1.30	728,032.04	1.990E-01	Pulse	0.10	3
Sn			1	84.424	ug/l	0.77	514,040.15	1.405E-01	Pulse	0.10	3
Sb			1	78.769	ug/l	1.04	613,348.86	1.109E-01	Pulse	0.10	3
Ba			1	189.277	ug/l	0.60	593,054.51	1.072E-01	Pulse	0.10	3
Tl			1	83.114	ug/l	0.38	1,514,282.27	4.952E-01	Pulse	0.10	3
Pb			1	83.220	ug/l	1.10	513,595.35	1.680E-01	Pulse	0.10	3
Pb			1	83.254	ug/l	0.62	450,968.01	1.475E-01	Pulse	0.10	3
Pb			1	83.296	ug/l	0.35	2,065,817.80	6.756E-01	Pulse	0.10	3
Na			2	72480.943	ug/l	1.07	27,312,509.47	3.630E+02	Analog	0.30	3
Mg			2	27246.012	ug/l	1.57	4,658,737.87	6.192E+01	Pulse	0.30	3
Al			2	1514.485	ug/l	2.47	77,054.30	1.024E+00	Pulse	0.30	3
K			2	4109.918	ug/l	1.36	401,316.92	5.334E+00	Pulse	0.30	3
Ca			2	62615.771	ug/l	0.32	332,314.04	4.417E+00	Pulse	0.30	3
Ti			2	81.986	ug/l	6.63	3,613.77	4.803E-02	Pulse	0.30	3
V			2	83.975	ug/l	1.25	129,606.04	1.723E+00	Pulse	0.30	3
Cr			2	84.128	ug/l	0.56	171,551.79	2.280E+00	Pulse	0.30	3
Mn			2	79.165	ug/l	0.55	75,007.60	9.969E-01	Pulse	0.30	3
Fe			2	1591.329	ug/l	0.16	2,621,333.09	3.484E+01	Pulse	0.30	3
Co			2	81.573	ug/l	0.67	281,434.19	3.740E+00	Pulse	0.30	3
Ni			2	82.611	ug/l	0.74	78,443.31	1.043E+00	Pulse	0.30	3
Cu			2	78.826	ug/l	1.11	207,427.45	2.757E+00	Pulse	0.30	3
Zn			2	73.868	ug/l	2.59	26,340.18	3.501E-01	Pulse	0.30	3
As			2	77.173	ug/l	0.42	14,346.64	1.907E-01	Pulse	1.00	3
Cd			2	78.923	ug/l	1.09	42,872.18	9.527E-02	Pulse	0.30	3
Sn			2	86.146	ug/l	0.60	87,633.56	1.947E-01	Pulse	0.30	3
Se			3	57.955	ug/l	1.34	1,669.69	2.836E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,413,729.92	0.08	87.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,661,838.92	0.31	89.4	Pulse	0.10	3
1	Ge		568,102.31	0.26	98.6	Pulse	0.10	3
1	Ge		786,702.96	1.28	98.5	Pulse	0.10	3
1	Rh		3,289,284.64	0.31	86.0	Pulse	0.10	3
1	In		3,658,487.41	1.05	89.8	Pulse	0.10	3
1	Tb		5,530,429.71	0.43	101.2	Analog	0.10	3
1	Ho		516,690.86	0.97	97.5	Pulse	0.10	3
1	Bi		3,057,958.39	0.28	90.5	Pulse	0.10	3
2	Sc		75,240.72	0.68	84.7	Pulse	0.30	3
2	Ge		51,918.80	0.59	93.9	Pulse	0.30	3
2	Ge		79,668.52	1.56	94.1	Pulse	0.30	3
2	Rh		1,475,705.36	1.02	84.9	Pulse	0.30	3
2	In		450,045.96	1.01	82.1	Pulse	0.30	3
2	Tb		2,018,650.40	1.07	90.2	Pulse	0.30	3
2	Ho		201,317.40	0.28	91.7	Pulse	0.30	3
2	Bi		1,339,132.62	0.94	86.1	Pulse	0.30	3
3	Sc		53,781.96	0.53	97.3	Pulse	0.30	3
3	Ge		37,774.82	0.40	104.9	Pulse	0.30	3
3	Ge		58,887.91	1.24	105.3	Pulse	0.30	3
3	Rh		566,550.38	0.48	92.6	Pulse	0.30	3
3	Tb		977,501.56	0.48	98.5	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 15:07
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.005	ug/l	23.33	50.67	1.947E-05	Pulse	0.25	3
B			1	0.153	ug/l	31.50	22,735.58	8.738E-03	Pulse	0.15	3
Ca			1	-1.748	ug/l	-3.96	19,859.18	7.083E-03	Pulse	0.10	3
Sr			1	0.024	ug/l	9.45	1,516.79	4.093E-04	Pulse	0.10	3
Mo			1	0.033	ug/l	36.71	276.68	7.476E-05	Pulse	0.10	3
Ag			1	0.005	ug/l	39.48	140.00	3.491E-05	Pulse	0.10	3
Sn			1	0.046	ug/l	26.81	1,220.09	3.041E-04	Pulse	0.10	3
Sb			1	-0.094	ug/l	-2.27	1,106.74	1.934E-04	Pulse	0.10	3
Ba			1	0.088	ug/l	14.90	593.36	1.037E-04	Pulse	0.10	3
Tl			1	0.013	ug/l	3.56	560.03	1.653E-04	Pulse	0.10	3
Pb			1	0.002	ug/l	288.77	173.34	5.116E-05	Pulse	0.10	3
Pb			1	0.011	ug/l	15.81	206.68	6.101E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	40.47	773.37	2.283E-04	Pulse	0.10	3
Na			2	3.256	ug/l	19.63	8,379.95	1.031E-01	Pulse	0.30	3
Mg			2	1.201	ug/l	13.66	533.35	6.565E-03	Pulse	0.30	3
Al			2	0.145	ug/l	27.39	67.78	8.330E-04	Pulse	0.30	3
K			2	0.523	ug/l	124.59	5,769.95	7.096E-02	Pulse	0.30	3
Ca			2	-2.261	ug/l	-53.82	35.56	4.378E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	0.010	ug/l	103.11	204.45	2.518E-03	Pulse	0.30	3
Cr			2	0.007	ug/l	162.20	267.79	3.292E-03	Pulse	0.30	3
Mn			2	0.017	ug/l	21.36	41.11	5.062E-04	Pulse	0.30	3
Fe			2	0.203	ug/l	16.18	1,814.57	2.232E-02	Pulse	0.30	3
Co			2	0.002	ug/l	102.37	56.67	6.983E-04	Pulse	0.30	3
Ni			2	0.002	ug/l	65.92	31.11	3.828E-04	Pulse	0.30	3
Cu			2	0.010	ug/l	43.40	191.12	2.347E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.042	ug/l	-42.23	63.33	7.770E-04	Pulse	0.30	3
As			2	0.000	ug/l	458.94	6.67	8.202E-05	Pulse	1.00	3
Cd			2	0.003	ug/l	146.83	4.44	8.844E-06	Pulse	0.30	3
Sn			2	0.022	ug/l	43.64	218.90	4.345E-04	Pulse	0.30	3
Se			3	0.013	ug/l	27.58	2.80	4.909E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,602,015.59	0.35	94.1	Pulse	0.10	3
1	Sc		2,803,927.98	0.15	94.1	Pulse	0.10	3
1	Ge		562,446.02	0.48	97.6	Pulse	0.10	3
1	Ge		785,142.20	0.43	98.3	Pulse	0.10	3
1	Rh		3,705,062.96	0.49	96.9	Pulse	0.10	3
1	In		4,017,750.93	1.71	98.6	Pulse	0.10	3
1	Tb		5,721,983.45	0.14	104.7	Analog	0.10	3
1	Ho		532,910.67	0.46	100.6	Pulse	0.10	3
1	Bi		3,387,777.03	0.35	100.2	Pulse	0.10	3
2	Sc		81,330.31	1.57	91.6	Pulse	0.30	3
2	Ge		52,237.59	0.99	94.5	Pulse	0.30	3
2	Ge		80,835.42	0.63	95.5	Pulse	0.30	3
2	Rh		1,653,706.11	1.37	95.2	Pulse	0.30	3
2	In		503,408.03	1.52	91.8	Pulse	0.30	3
2	Tb		2,094,238.67	1.53	93.6	Pulse	0.30	3
2	Ho		209,208.84	1.94	95.3	Pulse	0.30	3
2	Bi		1,473,648.34	1.06	94.7	Pulse	0.30	3
3	Sc		56,180.79	1.76	101.7	Pulse	0.30	3
3	Ge		36,450.68	0.71	101.3	Pulse	0.30	3
3	Ge		57,041.52	0.33	102.0	Pulse	0.30	3
3	Rh		617,365.48	0.35	100.9	Pulse	0.30	3
3	Tb		1,004,934.02	0.91	101.2	Pulse	0.30	3

Quantitation Report

File Name	030SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 15:12
Sample Name	jc71649-3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.025	ug/l	14.41	100.00	4.124E-05	Pulse	0.25	3
B			1	15.239	ug/l	3.05	64,918.94	2.678E-02	Pulse	0.15	3
Ca			1	59544.597	ug/l	0.65	24,222,431.30	9.171E+00	Analog	0.10	3
Sr			1	399.905	ug/l	1.45	7,530,450.51	2.306E+00	Analog	0.10	3
Mo			1	0.163	ug/l	16.08	600.03	1.838E-04	Pulse	0.10	3
Ag			1	0.022	ug/l	13.77	236.68	6.452E-05	Pulse	0.10	3
Sn			1	0.528	ug/l	11.82	3,777.26	1.029E-03	Pulse	0.10	3
Sb			1	-0.103	ug/l	-5.96	1,726.82	3.143E-04	Pulse	0.10	3
Ba			1	112.972	ug/l	0.57	351,667.51	6.401E-02	Pulse	0.10	3
Tl			1	0.032	ug/l	8.92	620.04	2.025E-04	Pulse	0.10	3
Pb			1	0.045	ug/l	17.56	403.35	1.317E-04	Pulse	0.10	3
Pb			1	0.060	ug/l	9.67	393.35	1.284E-04	Pulse	0.10	3
Pb			1	0.057	ug/l	8.98	1,790.11	5.849E-04	Pulse	0.10	3
Na			2	70387.968	ug/l	1.91	26,646,144.50	3.525E+02	Analog	0.30	3
Mg			2	25310.800	ug/l	1.46	4,347,989.41	5.752E+01	Pulse	0.30	3
Al			2	7.804	ug/l	6.99	446.68	5.911E-03	Pulse	0.30	3
K			2	2470.513	ug/l	1.40	244,458.21	3.234E+00	Pulse	0.30	3
Ca			2	59415.094	ug/l	0.57	316,822.88	4.191E+00	Pulse	0.30	3
Ti			2	0.125	ug/l	124.28	5.55	7.331E-05	Pulse	0.30	3
V			2	0.540	ug/l	9.62	994.49	1.316E-02	Pulse	0.30	3
Cr			2	1.694	ug/l	5.51	3,686.01	4.877E-02	Pulse	0.30	3
Mn			2	0.161	ug/l	7.78	158.89	2.103E-03	Pulse	0.30	3
Fe			2	5.201	ug/l	2.97	9,616.23	1.272E-01	Pulse	0.30	3
Co			2	0.027	ug/l	17.37	132.23	1.751E-03	Pulse	0.30	3
Ni			2	3.195	ug/l	2.83	3,072.54	4.065E-02	Pulse	0.30	3
Cu			2	0.398	ug/l	13.30	1,175.61	1.556E-02	Pulse	0.30	3
Zn			2	4.785	ug/l	3.77	1,797.90	2.378E-02	Pulse	0.30	3
As			2	0.103	ug/l	41.22	25.33	3.344E-04	Pulse	1.00	3
Cd			2	0.033	ug/l	28.80	18.89	4.142E-05	Pulse	0.30	3
Sn			2	0.505	ug/l	8.00	673.36	1.476E-03	Pulse	0.30	3
Se			3	0.654	ug/l	14.15	21.00	3.553E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,423,693.55	0.60	87.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,641,143.92	0.77	88.7	Pulse	0.10	3
1	Ge		557,021.23	0.27	96.6	Pulse	0.10	3
1	Ge		766,208.45	0.85	95.9	Pulse	0.10	3
1	Rh		3,265,374.64	0.39	85.4	Pulse	0.10	3
1	In		3,667,928.67	1.06	90.0	Pulse	0.10	3
1	Tb		5,494,361.58	0.40	100.5	Analog	0.10	3
1	Ho		512,410.72	0.52	96.7	Pulse	0.10	3
1	Bi		3,061,326.20	0.96	90.6	Pulse	0.10	3
2	Sc		75,593.71	1.10	85.1	Pulse	0.30	3
2	Ge		51,566.58	1.12	93.3	Pulse	0.30	3
2	Ge		79,533.79	2.35	93.9	Pulse	0.30	3
2	Rh		1,469,420.74	0.80	84.6	Pulse	0.30	3
2	In		456,356.58	0.77	83.2	Pulse	0.30	3
2	Tb		2,007,954.02	0.56	89.7	Pulse	0.30	3
2	Ho		200,308.31	0.63	91.2	Pulse	0.30	3
2	Bi		1,322,942.69	0.25	85.0	Pulse	0.30	3
3	Sc		53,961.35	0.54	97.6	Pulse	0.30	3
3	Ge		38,523.24	1.53	107.0	Pulse	0.30	3
3	Ge		59,126.76	1.65	105.7	Pulse	0.30	3
3	Rh		566,967.81	0.58	92.6	Pulse	0.30	3
3	Tb		969,898.57	0.43	97.7	Pulse	0.30	3

Quantitation Report

File Name	031SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 15:17
Sample Name	mp8578-sd1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.038	ug/l	26.35	38.67	1.494E-05	Pulse	0.25	3
B			1	9.907	ug/l	4.32	27,834.27	1.076E-02	Pulse	0.15	3
Ca			1	58221.924	ug/l	1.53	5,068,400.96	1.800E+00	Mix	0.10	3
Sr			1	363.346	ug/l	0.58	1,511,715.92	4.192E-01	Pulse	0.10	3
Mo			1	0.331	ug/l	28.50	270.02	7.480E-05	Pulse	0.10	3
Ag			1	0.034	ug/l	56.52	93.33	2.357E-05	Pulse	0.10	3
Sn			1	0.468	ug/l	14.26	1,213.43	3.065E-04	Pulse	0.10	3
Sb			1	-0.721	ug/l	-7.22	1,460.12	2.560E-04	Pulse	0.10	3
Ba			1	112.642	ug/l	1.91	72,841.30	1.277E-02	Pulse	0.10	3
Tl			1	0.052	ug/l	24.21	233.34	7.073E-05	Pulse	0.10	3
Pb			1	0.125	ug/l	33.19	303.35	9.209E-05	Pulse	0.10	3
Pb			1	0.238	ug/l	25.32	350.02	1.063E-04	Pulse	0.10	3
Pb			1	0.195	ug/l	13.98	1,440.08	4.372E-04	Pulse	0.10	3
Na			2	69017.519	ug/l	0.77	5,667,974.92	6.919E+01	Analog	0.30	3
Mg			2	25043.451	ug/l	0.73	932,565.76	1.138E+01	Pulse	0.30	3
Al			2	29.512	ug/l	19.64	378.90	4.626E-03	Pulse	0.30	3
K			2	2459.323	ug/l	0.39	57,314.24	6.997E-01	Pulse	0.30	3
Ca			2	59020.255	ug/l	0.61	68,256.42	8.332E-01	Pulse	0.30	3
Ti			2	0.231	ug/l	86.60	2.22	2.708E-05	Pulse	0.30	3
V			2	0.510	ug/l	18.33	343.34	4.191E-03	Pulse	0.30	3
Cr			2	1.804	ug/l	5.75	1,040.05	1.270E-02	Pulse	0.30	3
Mn			2	0.497	ug/l	10.05	108.89	1.329E-03	Pulse	0.30	3
Fe			2	15.408	ug/l	0.16	6,623.62	8.086E-02	Pulse	0.30	3
Co			2	0.019	ug/l	189.61	55.55	6.778E-04	Pulse	0.30	3
Ni			2	2.925	ug/l	7.91	632.24	7.718E-03	Pulse	0.30	3
Cu			2	0.979	ug/l	7.36	696.69	8.505E-03	Pulse	0.30	3
Zn			2	6.985	ug/l	12.51	636.69	7.773E-03	Pulse	0.30	3
As			2	0.150	ug/l	41.49	12.67	1.546E-04	Pulse	1.00	3
Cd			2	0.074	ug/l	98.22	10.00	1.994E-05	Pulse	0.30	3
Sn			2	0.161	ug/l	87.01	205.56	4.094E-04	Pulse	0.30	3
Se			3	1.061	ug/l	30.21	7.93	1.396E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,586,444.83	0.65	93.6	Pulse	0.10	3
1	Sc		2,816,217.15	0.70	94.5	Pulse	0.10	3
1	Ge		565,011.71	0.94	98.0	Pulse	0.10	3

Quantitation Report

1	Ge		791,921.97	0.49	99.1	Pulse	0.10	3
1	Rh		3,606,422.97	0.94	94.3	Pulse	0.10	3
1	In		3,959,203.94	0.09	97.2	Pulse	0.10	3
1	Tb		5,706,065.12	1.38	104.4	Analog	0.10	3
1	Ho		528,028.95	1.02	99.7	Pulse	0.10	3
1	Bi		3,294,875.78	1.17	97.5	Pulse	0.10	3
2	Sc		81,917.61	0.21	92.2	Pulse	0.30	3
2	Ge		53,009.98	1.25	95.9	Pulse	0.30	3
2	Ge		82,420.09	1.31	97.3	Pulse	0.30	3
2	Rh		1,613,370.52	0.52	92.8	Pulse	0.30	3
2	In		501,858.46	0.47	91.5	Pulse	0.30	3
2	Tb		2,098,384.29	0.66	93.7	Pulse	0.30	3
2	Ho		209,063.14	0.71	95.2	Pulse	0.30	3
2	Bi		1,445,651.33	1.13	92.9	Pulse	0.30	3
3	Sc		56,606.77	0.73	102.4	Pulse	0.30	3
3	Ge		37,113.23	1.25	103.1	Pulse	0.30	3
3	Ge		56,788.33	0.58	101.6	Pulse	0.30	3
3	Rh		611,149.17	0.81	99.9	Pulse	0.30	3
3	Tb		1,014,044.19	0.57	102.2	Pulse	0.30	3

Quantitation Report

File Name	032SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 15:22
Sample Name	mp8578-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.008	ug/l	46.87	21.33	8.126E-06	Pulse	0.25	3
B			1	-0.373	ug/l	-87.83	21,507.37	8.187E-03	Pulse	0.15	3
Ca			1	12.806	ug/l	17.16	23,410.53	8.409E-03	Pulse	0.10	3
Sr			1	0.088	ug/l	18.27	1,230.09	3.352E-04	Pulse	0.10	3
Mo			1	0.054	ug/l	11.97	90.00	2.453E-05	Pulse	0.10	3
Ag			1	0.007	ug/l	70.65	50.00	1.257E-05	Pulse	0.10	3
Sn			1	0.294	ug/l	9.14	1,376.78	3.466E-04	Pulse	0.10	3
Sb			1	-0.484	ug/l	-6.97	1,063.40	1.866E-04	Pulse	0.10	3
Ba			1	0.115	ug/l	11.80	170.01	2.983E-05	Pulse	0.10	3
Tl			1	0.013	ug/l	31.12	130.00	3.904E-05	Pulse	0.10	3
Pb			1	0.021	ug/l	54.22	196.68	5.896E-05	Pulse	0.10	3
Pb			1	0.042	ug/l	36.45	173.34	5.204E-05	Pulse	0.10	3
Pb			1	0.032	ug/l	19.43	746.71	2.239E-04	Pulse	0.10	3
Na			2	13.003	ug/l	6.86	7,761.86	9.653E-02	Pulse	0.30	3
Mg			2	3.212	ug/l	14.77	323.34	4.026E-03	Pulse	0.30	3
Al			2	5.728	ug/l	30.29	175.57	2.185E-03	Pulse	0.30	3
K			2	6.007	ug/l	128.97	5,844.42	7.269E-02	Pulse	0.30	3
Ca			2	18.724	ug/l	20.44	103.33	1.285E-03	Pulse	0.30	3
Ti			2	0.058	ug/l	173.21	1.11	1.369E-05	Pulse	0.30	3
V			2	0.136	ug/l	36.91	258.89	3.213E-03	Pulse	0.30	3
Cr			2	0.215	ug/l	12.96	422.23	5.254E-03	Pulse	0.30	3
Mn			2	0.152	ug/l	21.28	67.78	8.448E-04	Pulse	0.30	3
Fe			2	3.222	ug/l	2.44	3,348.17	4.162E-02	Pulse	0.30	3
Co			2	0.004	ug/l	140.08	46.67	5.796E-04	Pulse	0.30	3
Ni			2	0.073	ug/l	59.85	56.67	7.059E-04	Pulse	0.30	3
Cu			2	0.164	ug/l	28.52	317.79	3.959E-03	Pulse	0.30	3
Zn			2	2.333	ug/l	22.34	447.79	5.582E-03	Pulse	0.30	3
As			2	0.023	ug/l	120.28	8.33	1.035E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.005	ug/l	313.86	2.22	4.428E-06	Pulse	0.30	3
Sn			2	0.110	ug/l	15.49	216.67	4.364E-04	Pulse	0.30	3
Se			3	0.096	ug/l	9.61	3.07	5.458E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,627,084.73	0.44	95.0	Pulse	0.10	3
1	Sc		2,783,872.88	0.51	93.5	Pulse	0.10	3
1	Ge		561,575.99	0.80	97.4	Pulse	0.10	3
1	Ge		783,285.25	0.03	98.0	Pulse	0.10	3
1	Rh		3,671,557.03	0.95	96.0	Pulse	0.10	3
1	In		3,973,337.66	0.44	97.5	Pulse	0.10	3
1	Tb		5,698,973.87	0.24	104.3	Analog	0.10	3
1	Ho		528,310.67	1.05	99.7	Pulse	0.10	3
1	Bi		3,334,382.03	0.87	98.6	Pulse	0.10	3
2	Sc		80,428.22	2.24	90.5	Pulse	0.30	3
2	Ge		53,616.55	1.86	97.0	Pulse	0.30	3
2	Ge		80,976.27	0.41	95.6	Pulse	0.30	3
2	Rh		1,627,924.93	1.19	93.7	Pulse	0.30	3
2	In		496,452.81	1.51	90.5	Pulse	0.30	3
2	Tb		2,052,629.92	0.80	91.7	Pulse	0.30	3
2	Ho		204,146.14	0.76	93.0	Pulse	0.30	3
2	Bi		1,453,916.33	1.03	93.5	Pulse	0.30	3
3	Sc		56,168.59	2.13	101.6	Pulse	0.30	3
3	Ge		36,691.20	0.14	101.9	Pulse	0.30	3
3	Ge		56,191.92	2.67	100.5	Pulse	0.30	3
3	Rh		614,743.48	0.69	100.5	Pulse	0.30	3
3	Tb		1,001,208.74	0.54	100.9	Pulse	0.30	3

Quantitation Report

File Name	033_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 15:27
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.630	ug/l	0.97	377,337.61	1.513E-01	Pulse	0.25	3
B			1	99.067	ug/l	0.58	618,236.68	2.478E-01	Pulse	0.15	3
Ca			1	5006.227	ug/l	0.93	4,230,956.08	1.548E+00	Pulse	0.10	3
Sr			1	51.417	ug/l	0.33	2,054,101.43	5.931E-01	Pulse	0.10	3
Mo			1	51.054	ug/l	1.24	399,051.10	1.152E-01	Pulse	0.10	3
Ag			1	48.542	ug/l	0.48	979,043.66	2.603E-01	Pulse	0.10	3
Sn			1	49.881	ug/l	0.35	624,386.38	1.660E-01	Pulse	0.10	3
Sb			1	50.094	ug/l	0.37	774,404.39	1.409E-01	Pulse	0.10	3
Ba			1	46.790	ug/l	0.93	291,326.14	5.302E-02	Pulse	0.10	3
Tl			1	50.772	ug/l	0.48	1,902,270.49	6.050E-01	Pulse	0.10	3
Pb			1	50.785	ug/l	0.85	644,499.12	2.050E-01	Pulse	0.10	3
Pb			1	50.841	ug/l	0.44	566,307.53	1.801E-01	Pulse	0.10	3
Pb			1	50.756	ug/l	0.53	2,588,539.50	8.233E-01	Pulse	0.10	3
Na			2	5060.166	ug/l	1.98	4,088,726.23	5.075E+01	Pulse	0.30	3
Mg			2	5080.720	ug/l	2.14	1,860,707.70	2.309E+01	Pulse	0.30	3
Al			2	4822.491	ug/l	2.02	525,261.75	6.519E+00	Pulse	0.30	3
K			2	5040.942	ug/l	2.61	1,045,996.69	1.298E+01	Pulse	0.30	3
Ca			2	5214.820	ug/l	1.42	59,329.43	7.363E-01	Pulse	0.30	3
Ti			2	49.114	ug/l	3.03	4,636.25	5.755E-02	Pulse	0.30	3
V			2	50.704	ug/l	2.40	167,559.45	2.080E+00	Pulse	0.30	3
Cr			2	50.504	ug/l	3.03	220,477.98	2.737E+00	Pulse	0.30	3
Mn			2	49.428	ug/l	2.06	100,296.98	1.245E+00	Pulse	0.30	3
Fe			2	5173.722	ug/l	2.05	18,246,211.50	2.265E+02	Analog	0.30	3
Co			2	50.769	ug/l	1.90	375,106.44	4.656E+00	Pulse	0.30	3
Ni			2	50.120	ug/l	1.54	101,921.00	1.265E+00	Pulse	0.30	3
Cu			2	49.951	ug/l	1.43	281,512.59	3.494E+00	Pulse	0.30	3
Zn			2	49.305	ug/l	2.82	37,619.71	4.670E-01	Pulse	0.30	3
As			2	50.276	ug/l	2.73	20,012.55	2.484E-01	Pulse	1.00	3
Cd			2	49.844	ug/l	1.55	57,484.90	1.203E-01	Pulse	0.30	3
Sn			2	50.734	ug/l	1.76	109,535.02	2.293E-01	Pulse	0.30	3
Se			3	48.491	ug/l	1.96	2,619.54	4.743E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,494,716.65	0.93	90.3	Pulse	0.10	3
1	Sc		2,732,462.35	0.70	91.7	Pulse	0.10	3
1	Ge		546,150.05	0.49	94.8	Pulse	0.10	3

Quantitation Report

1	Ge		757,078.01	0.66	94.7	Pulse	0.10	3
1	Rh		3,463,164.43	0.64	90.5	Pulse	0.10	3
1	In		3,761,009.19	0.44	92.3	Pulse	0.10	3
1	Tb		5,494,589.09	0.40	100.5	Analog	0.10	3
1	Ho		511,558.00	0.54	96.6	Pulse	0.10	3
1	Bi		3,144,196.20	0.27	93.0	Pulse	0.10	3
2	Sc		80,589.04	1.93	90.7	Pulse	0.30	3
2	Ge		50,795.32	0.35	91.9	Pulse	0.30	3
2	Ge		78,612.36	1.00	92.8	Pulse	0.30	3
2	Rh		1,550,398.90	0.43	89.2	Pulse	0.30	3
2	In		477,827.69	2.51	87.1	Pulse	0.30	3
2	Tb		2,007,195.27	0.82	89.7	Pulse	0.30	3
2	Ho		199,172.68	0.67	90.7	Pulse	0.30	3
2	Bi		1,383,643.31	0.58	88.9	Pulse	0.30	3
3	Sc		55,833.09	1.79	101.0	Pulse	0.30	3
3	Ge		35,943.96	0.15	99.8	Pulse	0.30	3
3	Ge		55,234.15	0.62	98.8	Pulse	0.30	3
3	Rh		579,814.23	0.60	94.7	Pulse	0.30	3
3	Tb		904,748.23	0.34	91.2	Pulse	0.30	3

Quantitation Report

File Name	034_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 15:32
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.004	ug/l	12.56	40.00	1.566E-05	Pulse	0.25	3
B			1	2.021	ug/l	2.10	33,844.98	1.325E-02	Pulse	0.15	3
Ca			1	-3.601	ug/l	-24.61	18,324.11	6.512E-03	Pulse	0.10	3
Sr			1	0.004	ug/l	74.06	636.70	1.745E-04	Pulse	0.10	3
Mo			1	0.036	ug/l	27.28	300.01	8.215E-05	Pulse	0.10	3
Ag			1	0.009	ug/l	11.10	200.01	5.119E-05	Pulse	0.10	3
Sn			1	0.096	ug/l	6.22	1,830.19	4.685E-04	Pulse	0.10	3
Sb			1	-0.063	ug/l	-10.87	1,570.13	2.801E-04	Pulse	0.10	3
Ba			1	0.011	ug/l	57.70	90.00	1.605E-05	Pulse	0.10	3
Tl			1	0.012	ug/l	17.69	516.69	1.577E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	31.52	216.68	6.612E-05	Pulse	0.10	3
Pb			1	0.010	ug/l	1.07	190.01	5.798E-05	Pulse	0.10	3
Pb			1	0.009	ug/l	14.52	876.72	2.676E-04	Pulse	0.10	3
Na			2	0.494	ug/l	71.31	6,116.72	7.544E-02	Pulse	0.30	3
Mg			2	0.192	ug/l	50.99	160.00	1.979E-03	Pulse	0.30	3
Al			2	0.005	ug/l	504.52	52.22	6.441E-04	Pulse	0.30	3
K			2	0.989	ug/l	108.90	5,851.08	7.215E-02	Pulse	0.30	3
Ca			2	-2.463	ug/l	-33.57	33.33	4.093E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	-0.012	ug/l	-67.05	130.00	1.596E-03	Pulse	0.30	3
Cr			2	-0.007	ug/l	-69.61	207.78	2.561E-03	Pulse	0.30	3
Mn			2	0.011	ug/l	27.30	27.78	3.435E-04	Pulse	0.30	3
Fe			2	0.394	ug/l	6.98	2,486.89	3.066E-02	Pulse	0.30	3
Co			2	0.002	ug/l	143.27	54.44	6.730E-04	Pulse	0.30	3
Ni			2	0.001	ug/l	509.80	28.89	3.567E-04	Pulse	0.30	3
Cu			2	0.005	ug/l	21.49	165.56	2.039E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.043	ug/l	126.02	127.78	1.583E-03	Pulse	0.30	3
As			2	-0.006	ug/l	-43.60	4.00	4.948E-05	Pulse	1.00	3
Cd			2	0.014	ug/l	67.37	17.78	3.689E-05	Pulse	0.30	3
Sn			2	0.054	ug/l	14.63	283.34	5.809E-04	Pulse	0.30	3
Se			3	0.031	ug/l	8.66	3.67	6.639E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,554,085.53	0.83	92.4	Pulse	0.10	3
1	Sc		2,814,180.48	0.81	94.5	Pulse	0.10	3
1	Ge		549,342.14	1.62	95.3	Pulse	0.10	3
1	Ge		775,726.99	0.07	97.1	Pulse	0.10	3
1	Rh		3,643,888.17	1.20	95.3	Pulse	0.10	3
1	In		3,907,051.94	0.76	95.9	Pulse	0.10	3
1	Tb		5,605,148.87	0.23	102.6	Analog	0.10	3
1	Ho		517,760.37	1.24	97.7	Pulse	0.10	3
1	Bi		3,277,420.47	0.66	96.9	Pulse	0.10	3
2	Sc		81,145.10	2.58	91.3	Pulse	0.30	3
2	Ge		51,175.52	3.55	92.6	Pulse	0.30	3
2	Ge		78,328.27	3.44	92.5	Pulse	0.30	3
2	Rh		1,599,106.64	3.37	92.0	Pulse	0.30	3
2	In		488,225.43	3.25	89.0	Pulse	0.30	3
2	Tb		2,020,369.09	3.68	90.3	Pulse	0.30	3
2	Ho		200,723.31	3.84	91.4	Pulse	0.30	3
2	Bi		1,426,923.80	3.29	91.7	Pulse	0.30	3
3	Sc		56,224.22	1.27	101.7	Pulse	0.30	3
3	Ge		36,011.96	0.56	100.0	Pulse	0.30	3
3	Ge		55,242.00	0.81	98.8	Pulse	0.30	3
3	Rh		608,536.57	0.41	99.4	Pulse	0.30	3
3	Tb		964,452.98	0.54	97.2	Pulse	0.30	3

Quantitation Report

File Name	035SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 15:37
Sample Name	mp8578-b2
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	79.860	ug/l	4.05	125,974.06	4.968E-02	Pulse	0.25	3
B			1	84.458	ug/l	4.11	124,762.34	4.920E-02	Pulse	0.15	3
Ca			1	1653.601	ug/l	3.24	293,143.56	1.094E-01	Pulse	0.10	3
Sr			1	83.782	ug/l	4.94	678,976.68	1.934E-01	Pulse	0.10	3
Mo			1	83.647	ug/l	4.97	132,564.93	3.776E-02	Pulse	0.10	3
Ag			1	76.687	ug/l	4.28	315,613.59	8.225E-02	Pulse	0.10	3
Sn			1	83.497	ug/l	4.74	213,621.60	5.568E-02	Pulse	0.10	3
Sb			1	84.666	ug/l	7.26	260,480.76	4.795E-02	Pulse	0.10	3
Ba			1	80.442	ug/l	8.03	99,015.47	1.823E-02	Pulse	0.10	3
Tl			1	81.887	ug/l	3.47	635,748.90	1.952E-01	Pulse	0.10	3
Pb			1	82.264	ug/l	3.55	216,420.89	6.644E-02	Pulse	0.10	3
Pb			1	81.895	ug/l	3.49	189,069.03	5.804E-02	Pulse	0.10	3
Pb			1	82.355	ug/l	3.31	870,598.33	2.672E-01	Pulse	0.10	3
Na			2	1618.386	ug/l	1.28	265,515.87	3.312E+00	Pulse	0.30	3
Mg			2	1606.794	ug/l	1.87	117,178.97	1.462E+00	Pulse	0.30	3
Al			2	1536.370	ug/l	2.34	33,345.14	4.160E-01	Pulse	0.30	3
K			2	1595.178	ug/l	1.03	71,103.10	8.869E-01	Pulse	0.30	3
Ca			2	2009.092	ug/l	1.71	4,604.02	5.743E-02	Pulse	0.30	3
Ti			2	80.039	ug/l	5.53	1,503.42	1.876E-02	Pulse	0.30	3
V			2	81.366	ug/l	1.25	53,625.11	6.689E-01	Pulse	0.30	3
Cr			2	82.915	ug/l	1.24	72,199.29	9.006E-01	Pulse	0.30	3
Mn			2	81.065	ug/l	2.85	32,734.58	4.084E-01	Pulse	0.30	3
Fe			2	1589.095	ug/l	1.45	1,116,223.36	1.392E+01	Pulse	0.30	3
Co			2	83.994	ug/l	0.40	123,536.60	1.541E+00	Pulse	0.30	3
Ni			2	82.685	ug/l	1.23	33,476.26	4.176E-01	Pulse	0.30	3
Cu			2	83.991	ug/l	1.32	94,274.57	1.176E+00	Pulse	0.30	3
Zn			2	82.917	ug/l	2.27	12,652.76	1.578E-01	Pulse	0.30	3
As			2	81.380	ug/l	1.20	6,451.29	8.047E-02	Pulse	1.00	3
Cd			2	81.035	ug/l	1.11	19,476.49	3.913E-02	Pulse	0.30	3
Sn			2	81.800	ug/l	0.82	36,919.79	7.417E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	78.481	ug/l	1.94	857.49	1.538E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,537,978.85	3.42	91.8	Pulse	0.10	3
1	Sc		2,681,138.03	3.46	90.0	Pulse	0.10	3
1	Ge		542,261.63	3.13	94.1	Pulse	0.10	3
1	Ge		756,659.13	2.58	94.7	Pulse	0.10	3
1	Rh		3,515,509.85	3.96	91.9	Pulse	0.10	3
1	In		3,841,883.54	4.36	94.3	Pulse	0.10	3
1	Tb		5,451,866.17	7.31	99.8	Mix	0.10	3
1	Ho		513,030.70	4.34	96.8	Pulse	0.10	3
1	Bi		3,259,795.37	2.93	96.4	Pulse	0.10	3
2	Sc		80,172.53	1.12	90.3	Pulse	0.30	3
2	Ge		52,496.13	0.40	94.9	Pulse	0.30	3
2	Ge		79,798.17	0.23	94.2	Pulse	0.30	3
2	Rh		1,627,417.29	0.26	93.6	Pulse	0.30	3
2	In		497,779.86	0.55	90.8	Pulse	0.30	3
2	Tb		2,082,806.72	0.93	93.0	Pulse	0.30	3
2	Ho		206,143.81	0.89	93.9	Pulse	0.30	3
2	Bi		1,461,837.34	0.31	94.0	Pulse	0.30	3
3	Sc		55,023.86	0.44	99.6	Pulse	0.30	3
3	Ge		35,619.87	2.55	98.9	Pulse	0.30	3
3	Ge		55,766.02	0.33	99.7	Pulse	0.30	3
3	Rh		607,615.81	1.07	99.3	Pulse	0.30	3
3	Tb		997,965.45	0.30	100.5	Pulse	0.30	3

Quantitation Report

File Name	036SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 15:42
Sample Name	mp8578-s5
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	79.409	ug/l	4.41	121,874.08	4.940E-02	Pulse	0.25	3
B			1	97.200	ug/l	5.75	136,553.91	5.536E-02	Pulse	0.15	3
Ca			1	64355.444	ug/l	4.77	10,356,384.22	3.969E+00	Analog	0.10	3
Sr			1	470.645	ug/l	4.94	3,615,575.47	1.086E+00	Pulse	0.10	3
Mo			1	86.245	ug/l	4.63	129,654.32	3.893E-02	Pulse	0.10	3
Ag			1	74.969	ug/l	4.72	297,008.53	8.041E-02	Pulse	0.10	3
Sn			1	84.718	ug/l	4.89	208,650.14	5.649E-02	Pulse	0.10	3
Sb			1	83.055	ug/l	7.64	250,984.32	4.704E-02	Pulse	0.10	3
Ba			1	195.567	ug/l	7.47	236,487.37	4.432E-02	Pulse	0.10	3
Tl			1	83.313	ug/l	3.42	608,663.81	1.986E-01	Pulse	0.10	3
Pb			1	82.677	ug/l	2.73	204,708.38	6.677E-02	Pulse	0.10	3
Pb			1	82.900	ug/l	3.35	180,101.06	5.875E-02	Pulse	0.10	3
Pb			1	82.744	ug/l	3.04	823,160.83	2.685E-01	Pulse	0.10	3
Na			2	71338.316	ug/l	0.76	11,333,166.49	1.430E+02	Analog	0.30	3
Mg			2	26649.062	ug/l	0.40	1,920,547.84	2.423E+01	Pulse	0.30	3
Al			2	1508.911	ug/l	3.03	32,386.68	4.086E-01	Pulse	0.30	3
K			2	4060.558	ug/l	1.05	170,448.04	2.150E+00	Pulse	0.30	3
Ca			2	61124.838	ug/l	0.71	136,752.08	1.725E+00	Pulse	0.30	3
Ti			2	80.273	ug/l	4.19	1,491.20	1.881E-02	Pulse	0.30	3
V			2	81.116	ug/l	0.74	52,864.99	6.669E-01	Pulse	0.30	3
Cr			2	81.354	ug/l	1.05	70,057.05	8.837E-01	Pulse	0.30	3
Mn			2	78.321	ug/l	1.83	31,277.37	3.946E-01	Pulse	0.30	3
Fe			2	1555.536	ug/l	0.27	1,080,527.21	1.363E+01	Pulse	0.30	3
Co			2	80.193	ug/l	0.05	116,623.41	1.471E+00	Pulse	0.30	3
Ni			2	81.560	ug/l	1.16	32,654.65	4.119E-01	Pulse	0.30	3
Cu			2	78.210	ug/l	0.17	86,819.68	1.095E+00	Pulse	0.30	3
Zn			2	81.749	ug/l	3.49	12,336.97	1.556E-01	Pulse	0.30	3
As			2	80.450	ug/l	0.71	6,306.56	7.956E-02	Pulse	1.00	3
Cd			2	80.106	ug/l	1.50	18,526.49	3.868E-02	Pulse	0.30	3
Sn			2	81.820	ug/l	1.28	35,533.36	7.419E-02	Pulse	0.30	3
Se			3	75.300	ug/l	0.82	801.69	1.475E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,469,625.91	3.59	89.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,612,758.14	4.27	87.7	Pulse	0.10	3
1	Ge		533,246.55	4.06	92.5	Pulse	0.10	3
1	Ge		746,467.18	2.67	93.4	Pulse	0.10	3
1	Rh		3,334,875.06	4.38	87.2	Pulse	0.10	3
1	In		3,698,465.74	4.23	90.8	Pulse	0.10	3
1	Tb		5,353,857.52	6.84	98.0	Mix	0.10	3
1	Ho		497,073.00	3.54	93.8	Pulse	0.10	3
1	Bi		3,067,851.52	3.50	90.7	Pulse	0.10	3
2	Sc		79,273.75	0.39	89.2	Pulse	0.30	3
2	Ge		51,440.72	0.74	93.0	Pulse	0.30	3
2	Ge		78,743.17	0.96	93.0	Pulse	0.30	3
2	Rh		1,542,430.25	0.13	88.8	Pulse	0.30	3
2	In		479,003.21	0.64	87.4	Pulse	0.30	3
2	Tb		2,049,084.57	0.66	91.5	Pulse	0.30	3
2	Ho		203,736.46	0.53	92.8	Pulse	0.30	3
2	Bi		1,395,308.66	0.18	89.7	Pulse	0.30	3
3	Sc		54,518.81	0.92	98.6	Pulse	0.30	3
3	Ge		35,411.69	0.83	98.4	Pulse	0.30	3
3	Ge		54,332.27	1.03	97.2	Pulse	0.30	3
3	Rh		583,508.80	0.52	95.4	Pulse	0.30	3
3	Tb		982,077.15	0.24	98.9	Pulse	0.30	3

Quantitation Report

File Name	037SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 15:47
Sample Name	mp8578-s6
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	80.427	ug/l	2.50	123,233.00	5.003E-02	Pulse	0.25	3
B			1	99.209	ug/l	3.26	138,733.79	5.633E-02	Pulse	0.15	3
Ca			1	64455.702	ug/l	2.26	10,471,637.97	3.975E+00	Analog	0.10	3
Sr			1	473.882	ug/l	2.28	3,664,190.16	1.093E+00	Pulse	0.10	3
Mo			1	86.986	ug/l	1.77	131,627.19	3.927E-02	Pulse	0.10	3
Ag			1	76.002	ug/l	2.26	300,784.77	8.152E-02	Pulse	0.10	3
Sn			1	84.959	ug/l	2.38	209,026.92	5.665E-02	Pulse	0.10	3
Sb			1	82.581	ug/l	1.08	254,418.81	4.678E-02	Pulse	0.10	3
Ba			1	196.426	ug/l	1.63	242,111.64	4.452E-02	Pulse	0.10	3
Tl			1	83.406	ug/l	2.81	614,873.66	1.988E-01	Pulse	0.10	3
Pb			1	83.402	ug/l	2.64	208,347.91	6.735E-02	Pulse	0.10	3
Pb			1	83.397	ug/l	1.79	182,850.32	5.910E-02	Pulse	0.10	3
Pb			1	83.684	ug/l	2.36	840,045.30	2.716E-01	Pulse	0.10	3
Na			2	73703.739	ug/l	1.13	11,748,126.48	1.477E+02	Analog	0.30	3
Mg			2	27304.499	ug/l	0.56	1,974,419.57	2.482E+01	Pulse	0.30	3
Al			2	1529.951	ug/l	0.96	32,950.01	4.142E-01	Pulse	0.30	3
K			2	4099.083	ug/l	1.03	172,589.02	2.170E+00	Pulse	0.30	3
Ca			2	62610.157	ug/l	1.33	140,546.88	1.767E+00	Pulse	0.30	3
Ti			2	81.000	ug/l	9.21	1,510.09	1.898E-02	Pulse	0.30	3
V			2	82.352	ug/l	0.95	53,849.22	6.770E-01	Pulse	0.30	3
Cr			2	82.007	ug/l	1.43	70,853.71	8.908E-01	Pulse	0.30	3
Mn			2	79.231	ug/l	2.49	31,748.26	3.992E-01	Pulse	0.30	3
Fe			2	1566.919	ug/l	0.83	1,092,082.67	1.373E+01	Pulse	0.30	3
Co			2	80.380	ug/l	1.07	117,288.21	1.475E+00	Pulse	0.30	3
Ni			2	82.439	ug/l	1.85	33,116.65	4.163E-01	Pulse	0.30	3
Cu			2	79.510	ug/l	2.28	88,556.50	1.113E+00	Pulse	0.30	3
Zn			2	81.046	ug/l	2.59	12,273.58	1.543E-01	Pulse	0.30	3
As			2	81.329	ug/l	1.17	6,396.94	8.042E-02	Pulse	1.00	3
Cd			2	79.723	ug/l	4.29	18,527.60	3.849E-02	Pulse	0.30	3
Sn			2	83.228	ug/l	1.02	36,327.31	7.546E-02	Pulse	0.30	3
Se			3	76.942	ug/l	1.96	818.82	1.508E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,464,014.72	2.65	89.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,635,327.36	2.94	88.5	Pulse	0.10	3
1	Ge		535,975.00	3.01	93.0	Pulse	0.10	3
1	Ge		746,286.97	2.73	93.4	Pulse	0.10	3
1	Rh		3,353,070.05	2.50	87.7	Pulse	0.10	3
1	In		3,691,473.88	3.08	90.6	Pulse	0.10	3
1	Tb		5,439,904.92	2.08	99.5	Analog	0.10	3
1	Ho		502,716.65	2.22	94.9	Pulse	0.10	3
1	Bi		3,094,567.45	2.32	91.5	Pulse	0.10	3
2	Sc		79,540.56	0.20	89.5	Pulse	0.30	3
2	Ge		51,507.50	0.89	93.2	Pulse	0.30	3
2	Ge		79,673.16	1.39	94.1	Pulse	0.30	3
2	Rh		1,550,661.50	0.45	89.2	Pulse	0.30	3
2	In		481,408.31	0.78	87.8	Pulse	0.30	3
2	Tb		2,050,760.75	0.62	91.6	Pulse	0.30	3
2	Ho		203,569.45	1.01	92.7	Pulse	0.30	3
2	Bi		1,400,920.29	0.38	90.1	Pulse	0.30	3
3	Sc		54,222.34	0.85	98.1	Pulse	0.30	3
3	Ge		35,132.23	2.00	97.6	Pulse	0.30	3
3	Ge		54,324.62	1.56	97.2	Pulse	0.30	3
3	Rh		581,718.90	0.40	95.1	Pulse	0.30	3
3	Tb		976,860.00	0.44	98.4	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 15:52
Sample Name	jc71649-3
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.026	ug/l	36.79	48.00	1.908E-05	Pulse	0.25	3
B			1	15.155	ug/l	2.55	39,552.89	1.569E-02	Pulse	0.15	3
Ca			1	60007.416	ug/l	0.88	10,102,337.77	3.701E+00	Analog	0.10	3
Sr			1	375.924	ug/l	0.48	2,980,165.16	8.672E-01	Pulse	0.10	3
Mo			1	0.155	ug/l	10.88	240.01	6.984E-05	Pulse	0.10	3
Ag			1	0.034	ug/l	37.75	160.01	4.187E-05	Pulse	0.10	3
Sn			1	0.464	ug/l	5.10	1,756.82	4.593E-04	Pulse	0.10	3
Sb			1	-0.387	ug/l	-18.73	1,350.11	2.408E-04	Pulse	0.10	3
Ba			1	113.964	ug/l	0.62	144,698.93	2.583E-02	Pulse	0.10	3
Tl			1	0.085	ug/l	10.77	670.04	2.115E-04	Pulse	0.10	3
Pb			1	0.076	ug/l	12.33	326.68	1.031E-04	Pulse	0.10	3
Pb			1	0.090	ug/l	13.91	273.34	8.619E-05	Pulse	0.10	3
Pb			1	0.082	ug/l	8.75	1,226.73	3.869E-04	Pulse	0.10	3
Na			2	71485.168	ug/l	2.57	11,173,584.56	1.433E+02	Analog	0.30	3
Mg			2	25859.503	ug/l	3.05	1,833,520.62	2.351E+01	Pulse	0.30	3
Al			2	6.433	ug/l	16.30	185.56	2.376E-03	Pulse	0.30	3
K			2	2543.800	ug/l	3.00	107,083.52	1.373E+00	Pulse	0.30	3
Ca			2	60526.801	ug/l	2.47	133,240.28	1.708E+00	Pulse	0.30	3
Ti			2	0.784	ug/l	152.91	14.44	1.836E-04	Pulse	0.30	3
V			2	0.437	ug/l	26.16	442.23	5.679E-03	Pulse	0.30	3
Cr			2	1.537	ug/l	10.12	1,524.54	1.957E-02	Pulse	0.30	3
Mn			2	0.154	ug/l	11.57	66.67	8.556E-04	Pulse	0.30	3
Fe			2	4.813	ug/l	2.35	4,335.06	5.555E-02	Pulse	0.30	3
Co			2	0.018	ug/l	80.06	64.44	8.289E-04	Pulse	0.30	3
Ni			2	3.303	ug/l	4.19	1,327.85	1.700E-02	Pulse	0.30	3
Cu			2	0.301	ug/l	11.61	458.90	5.872E-03	Pulse	0.30	3
Zn			2	4.075	ug/l	5.75	692.24	8.874E-03	Pulse	0.30	3
As			2	0.725	ug/l	23.36	62.00	7.965E-04	Pulse	1.00	3
Cd			2	0.025	ug/l	117.65	6.67	1.396E-05	Pulse	0.30	3
Sn			2	0.321	ug/l	6.11	302.23	6.272E-04	Pulse	0.30	3
Se			3	0.790	ug/l	27.40	10.47	1.903E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,520,504.09	1.12	91.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,729,249.54	0.57	91.6	Pulse	0.10	3
1	Ge		547,632.87	0.58	95.0	Pulse	0.10	3
1	Ge		764,564.18	0.63	95.7	Pulse	0.10	3
1	Rh		3,436,328.60	0.16	89.8	Pulse	0.10	3
1	In		3,825,170.02	0.52	93.9	Pulse	0.10	3
1	Tb		5,602,153.04	0.58	102.5	Analog	0.10	3
1	Ho		516,311.78	0.39	97.5	Pulse	0.10	3
1	Bi		3,169,635.06	0.98	93.8	Pulse	0.10	3
2	Sc		78,033.65	2.70	87.8	Pulse	0.30	3
2	Ge		51,165.47	2.30	92.5	Pulse	0.30	3
2	Ge		78,315.53	2.20	92.5	Pulse	0.30	3
2	Rh		1,529,918.45	2.38	88.0	Pulse	0.30	3
2	In		481,905.72	1.57	87.9	Pulse	0.30	3
2	Tb		2,029,980.47	2.02	90.7	Pulse	0.30	3
2	Ho		200,525.68	1.97	91.3	Pulse	0.30	3
2	Bi		1,370,530.54	2.64	88.1	Pulse	0.30	3
3	Sc		54,101.83	1.13	97.9	Pulse	0.30	3
3	Ge		35,596.55	0.37	98.9	Pulse	0.30	3
3	Ge		55,000.12	1.44	98.4	Pulse	0.30	3
3	Rh		582,584.25	0.59	95.2	Pulse	0.30	3
3	Tb		984,438.30	0.77	99.2	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 15:57
Sample Name	mp8578-sd1
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.033	ug/l	213.57	18.67	7.248E-06	Pulse	0.25	3
B			1	7.559	ug/l	37.30	23,561.22	9.098E-03	Pulse	0.15	3
Ca			1	58471.775	ug/l	0.53	2,044,065.07	7.275E-01	Pulse	0.10	3
Sr			1	360.322	ug/l	0.06	603,532.36	1.664E-01	Pulse	0.10	3
Mo			1	0.732	ug/l	41.01	240.01	6.613E-05	Pulse	0.10	3
Ag			1	0.053	ug/l	77.64	66.67	1.688E-05	Pulse	0.10	3
Sn			1	0.009	ug/l	1449.09	600.04	1.521E-04	Pulse	0.10	3
Sb			1	-2.737	ug/l	-0.93	853.38	1.512E-04	Pulse	0.10	3
Ba			1	113.420	ug/l	2.96	29,041.29	5.144E-03	Pulse	0.10	3
Tl			1	0.128	ug/l	37.10	230.01	7.000E-05	Pulse	0.10	3
Pb			1	0.510	ug/l	19.04	406.69	1.240E-04	Pulse	0.10	3
Pb			1	0.504	ug/l	17.85	306.68	9.351E-05	Pulse	0.10	3
Pb			1	0.548	ug/l	16.97	1,563.42	4.768E-04	Pulse	0.10	3
Na			2	67048.260	ug/l	0.40	2,226,862.20	2.693E+01	Pulse	0.30	3
Mg			2	25612.493	ug/l	0.80	385,148.22	4.658E+00	Pulse	0.30	3
Al			2	176.344	ug/l	4.05	841.14	1.017E-02	Pulse	0.30	3
K			2	2534.698	ug/l	1.69	27,233.33	3.294E-01	Pulse	0.30	3
Ca			2	60434.587	ug/l	2.15	28,256.27	3.417E-01	Pulse	0.30	3
Ti			2	0.574	ug/l	86.61	2.22	2.693E-05	Pulse	0.30	3
V			2	-0.340	ug/l	-6.39	127.78	1.545E-03	Pulse	0.30	3
Cr			2	1.292	ug/l	17.62	473.35	5.725E-03	Pulse	0.30	3
Mn			2	2.884	ug/l	15.82	246.67	2.984E-03	Pulse	0.30	3
Fe			2	65.974	ug/l	1.87	10,661.32	1.289E-01	Pulse	0.30	3
Co			2	0.034	ug/l	15.03	52.22	6.314E-04	Pulse	0.30	3
Ni			2	4.154	ug/l	11.63	374.45	4.530E-03	Pulse	0.30	3
Cu			2	9.351	ug/l	3.45	2,300.18	2.781E-02	Pulse	0.30	3
Zn			2	30.678	ug/l	6.73	1,055.60	1.277E-02	Pulse	0.30	3
As			2	0.267	ug/l	83.69	11.00	1.331E-04	Pulse	1.00	3
Cd			2	0.136	ug/l	75.40	7.78	1.515E-05	Pulse	0.30	3
Sn			2	-0.704	ug/l	-20.87	107.78	2.100E-04	Pulse	0.30	3
Se			3	1.156	ug/l	32.16	4.53	8.112E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,590,053.69	0.69	93.7	Pulse	0.10	3
1	Sc		2,809,833.92	0.71	94.3	Pulse	0.10	3
1	Ge		549,331.80	0.66	95.3	Pulse	0.10	3

Quantitation Report

1	Ge		768,256.26	0.93	96.1	Pulse	0.10	3
1	Rh		3,627,895.68	0.55	94.9	Pulse	0.10	3
1	In		3,946,666.62	0.92	96.9	Pulse	0.10	3
1	Tb		5,645,226.58	0.15	103.3	Analog	0.10	3
1	Ho		517,386.85	0.78	97.7	Pulse	0.10	3
1	Bi		3,281,110.47	0.73	97.1	Pulse	0.10	3
2	Sc		82,692.29	0.75	93.1	Pulse	0.30	3
2	Ge		53,369.04	2.12	96.5	Pulse	0.30	3
2	Ge		81,314.39	0.94	96.0	Pulse	0.30	3
2	Rh		1,637,862.68	0.68	94.2	Pulse	0.30	3
2	In		513,329.60	0.18	93.6	Pulse	0.30	3
2	Tb		2,102,504.08	0.40	93.9	Pulse	0.30	3
2	Ho		206,776.61	0.36	94.2	Pulse	0.30	3
2	Bi		1,463,731.02	0.51	94.1	Pulse	0.30	3
3	Sc		56,505.34	0.78	102.2	Pulse	0.30	3
3	Ge		36,212.30	0.77	100.6	Pulse	0.30	3
3	Ge		55,849.64	0.76	99.9	Pulse	0.30	3
3	Rh		613,021.18	0.54	100.2	Pulse	0.30	3
3	Tb		1,005,000.20	0.24	101.3	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 16:02
Sample Name	mp8578-s7
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	79.725	ug/l	0.12	124,319.49	4.960E-02	Pulse	0.25	3
B			1	98.287	ug/l	0.40	140,071.09	5.588E-02	Pulse	0.15	3
Ca			1	63939.708	ug/l	0.60	10,676,123.59	3.944E+00	Analog	0.10	3
Sr			1	470.101	ug/l	0.15	3,704,650.57	1.084E+00	Pulse	0.10	3
Mo			1	86.619	ug/l	1.91	133,555.88	3.910E-02	Pulse	0.10	3
Ag			1	75.109	ug/l	0.22	305,507.87	8.056E-02	Pulse	0.10	3
Sn			1	83.887	ug/l	0.97	212,127.61	5.594E-02	Pulse	0.10	3
Sb			1	81.251	ug/l	0.61	256,841.72	4.603E-02	Pulse	0.10	3
Ba			1	191.929	ug/l	1.30	242,705.11	4.350E-02	Pulse	0.10	3
Tl			1	83.398	ug/l	0.61	620,388.62	1.988E-01	Pulse	0.10	3
Pb			1	82.916	ug/l	1.69	209,002.26	6.696E-02	Pulse	0.10	3
Pb			1	82.625	ug/l	0.82	182,770.65	5.856E-02	Pulse	0.10	3
Pb			1	82.903	ug/l	1.03	839,683.46	2.690E-01	Pulse	0.10	3
Na			2	78308.830	ug/l	1.89	12,151,473.96	1.569E+02	Analog	0.30	3
Mg			2	28277.956	ug/l	1.44	1,990,785.62	2.571E+01	Pulse	0.30	3
Al			2	1615.546	ug/l	2.71	33,868.45	4.374E-01	Pulse	0.30	3
K			2	4303.032	ug/l	2.36	176,110.63	2.274E+00	Pulse	0.30	3
Ca			2	64469.131	ug/l	2.39	140,886.76	1.819E+00	Pulse	0.30	3
Ti			2	78.548	ug/l	3.03	1,425.63	1.841E-02	Pulse	0.30	3
V			2	86.075	ug/l	2.75	54,783.45	7.075E-01	Pulse	0.30	3
Cr			2	86.731	ug/l	1.37	72,943.82	9.419E-01	Pulse	0.30	3
Mn			2	81.767	ug/l	2.41	31,896.34	4.119E-01	Pulse	0.30	3
Fe			2	1646.447	ug/l	2.11	1,117,107.66	1.443E+01	Pulse	0.30	3
Co			2	83.839	ug/l	1.98	119,096.51	1.538E+00	Pulse	0.30	3
Ni			2	86.426	ug/l	2.82	33,798.07	4.365E-01	Pulse	0.30	3
Cu			2	82.387	ug/l	1.44	89,334.05	1.154E+00	Pulse	0.30	3
Zn			2	84.009	ug/l	3.66	12,381.47	1.599E-01	Pulse	0.30	3
As			2	84.335	ug/l	0.99	6,458.29	8.339E-02	Pulse	1.00	3
Cd			2	80.928	ug/l	4.41	18,594.37	3.908E-02	Pulse	0.30	3
Sn			2	85.578	ug/l	2.98	36,921.00	7.758E-02	Pulse	0.30	3
Se			3	77.040	ug/l	2.96	815.82	1.509E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,506,546.88	0.38	90.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,707,269.23	0.23	90.9	Pulse	0.10	3
1	Ge		535,286.48	0.62	92.9	Pulse	0.10	3
1	Ge		748,293.95	0.32	93.6	Pulse	0.10	3
1	Rh		3,416,055.36	0.60	89.3	Pulse	0.10	3
1	In		3,792,331.12	1.00	93.1	Pulse	0.10	3
1	Tb		5,580,210.33	1.31	102.1	Analog	0.10	3
1	Ho		515,318.01	0.59	97.3	Pulse	0.10	3
1	Bi		3,121,357.97	0.59	92.3	Pulse	0.10	3
2	Sc		77,448.68	1.31	87.2	Pulse	0.30	3
2	Ge		50,474.47	2.16	91.3	Pulse	0.30	3
2	Ge		76,632.17	1.64	90.5	Pulse	0.30	3
2	Rh		1,522,522.34	1.50	87.6	Pulse	0.30	3
2	In		476,141.49	2.34	86.8	Pulse	0.30	3
2	Tb		2,031,120.34	1.82	90.7	Pulse	0.30	3
2	Ho		200,798.17	1.39	91.4	Pulse	0.30	3
2	Bi		1,371,696.51	0.57	88.2	Pulse	0.30	3
3	Sc		54,204.41	0.71	98.1	Pulse	0.30	3
3	Ge		34,926.22	0.56	97.0	Pulse	0.30	3
3	Ge		54,061.41	1.50	96.7	Pulse	0.30	3
3	Rh		576,946.96	0.48	94.3	Pulse	0.30	3
3	Tb		972,397.08	0.43	98.0	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 16:07
Sample Name	mp8578-s8
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	82.059	ug/l	0.28	126,810.74	5.105E-02	Pulse	0.25	3
B			1	98.896	ug/l	0.65	139,547.72	5.618E-02	Pulse	0.15	3
Ca			1	65173.713	ug/l	0.79	10,813,529.01	4.019E+00	Analog	0.10	3
Sr			1	481.061	ug/l	0.25	3,752,228.80	1.110E+00	Pulse	0.10	3
Mo			1	87.689	ug/l	1.30	133,836.20	3.958E-02	Pulse	0.10	3
Ag			1	76.084	ug/l	0.18	306,997.25	8.161E-02	Pulse	0.10	3
Sn			1	84.557	ug/l	0.79	212,103.13	5.638E-02	Pulse	0.10	3
Sb			1	82.883	ug/l	1.56	259,798.61	4.695E-02	Pulse	0.10	3
Ba			1	197.580	ug/l	0.59	247,819.09	4.478E-02	Pulse	0.10	3
Tl			1	83.807	ug/l	1.06	624,580.07	1.997E-01	Pulse	0.10	3
Pb			1	84.466	ug/l	0.74	213,303.82	6.821E-02	Pulse	0.10	3
Pb			1	84.466	ug/l	0.44	187,189.38	5.986E-02	Pulse	0.10	3
Pb			1	84.453	ug/l	0.38	856,973.57	2.741E-01	Pulse	0.10	3
Na			2	78648.924	ug/l	2.12	12,179,901.18	1.576E+02	Analog	0.30	3
Mg			2	28448.902	ug/l	1.76	1,998,854.30	2.586E+01	Pulse	0.30	3
Al			2	1623.380	ug/l	5.46	33,947.50	4.395E-01	Pulse	0.30	3
K			2	4339.164	ug/l	3.29	177,164.07	2.293E+00	Pulse	0.30	3
Ca			2	65425.568	ug/l	2.75	142,678.55	1.846E+00	Pulse	0.30	3
Ti			2	87.426	ug/l	6.59	1,582.32	2.049E-02	Pulse	0.30	3
V			2	86.455	ug/l	2.52	54,914.96	7.106E-01	Pulse	0.30	3
Cr			2	87.155	ug/l	2.09	73,149.15	9.465E-01	Pulse	0.30	3
Mn			2	84.346	ug/l	3.96	32,828.16	4.249E-01	Pulse	0.30	3
Fe			2	1653.040	ug/l	3.20	1,119,138.25	1.448E+01	Pulse	0.30	3
Co			2	84.045	ug/l	1.80	119,156.77	1.542E+00	Pulse	0.30	3
Ni			2	85.884	ug/l	2.32	33,523.01	4.337E-01	Pulse	0.30	3
Cu			2	83.571	ug/l	2.58	90,424.22	1.170E+00	Pulse	0.30	3
Zn			2	85.558	ug/l	4.04	12,580.50	1.628E-01	Pulse	0.30	3
As			2	84.080	ug/l	2.80	6,424.61	8.314E-02	Pulse	1.00	3
Cd			2	83.685	ug/l	2.20	19,088.31	4.041E-02	Pulse	0.30	3
Sn			2	87.124	ug/l	2.86	37,296.23	7.897E-02	Pulse	0.30	3
Se			3	78.412	ug/l	1.87	827.75	1.536E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,484,067.05	0.55	89.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,690,205.17	0.53	90.3	Pulse	0.10	3
1	Ge		538,704.11	0.62	93.5	Pulse	0.10	3
1	Ge		751,510.22	1.29	94.1	Pulse	0.10	3
1	Rh		3,381,106.82	0.40	88.4	Pulse	0.10	3
1	In		3,761,919.61	1.06	92.3	Pulse	0.10	3
1	Tb		5,534,594.50	0.90	101.3	Analog	0.10	3
1	Ho		510,872.75	0.40	96.4	Pulse	0.10	3
1	Bi		3,127,057.04	0.36	92.5	Pulse	0.10	3
2	Sc		77,306.81	2.39	87.0	Pulse	0.30	3
2	Ge		50,709.60	1.65	91.7	Pulse	0.30	3
2	Ge		76,818.48	1.76	90.7	Pulse	0.30	3
2	Rh		1,510,070.04	1.84	86.9	Pulse	0.30	3
2	In		472,354.20	1.10	86.1	Pulse	0.30	3
2	Tb		2,025,173.26	1.65	90.5	Pulse	0.30	3
2	Ho		199,842.18	1.50	91.0	Pulse	0.30	3
2	Bi		1,363,795.78	1.76	87.7	Pulse	0.30	3
3	Sc		53,880.03	0.89	97.5	Pulse	0.30	3
3	Ge		35,193.49	1.45	97.8	Pulse	0.30	3
3	Ge		53,884.14	0.73	96.4	Pulse	0.30	3
3	Rh		576,387.61	0.61	94.2	Pulse	0.30	3
3	Tb		971,227.15	0.60	97.9	Pulse	0.30	3

Quantitation Report

File Name 042SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File
Method Path
Acq Time 8/13/2018 16:12
Sample Name jc71649-3f
Sample Type Sample
Comment
Prep Dilution 5.000
Auto Dilution N/A
Total Dilution 5.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/13/2018 13:57
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.032	ug/l	50.77	58.67	2.330E-05	Pulse	0.25	3
B			1	15.411	ug/l	4.61	39,842.29	1.582E-02	Pulse	0.15	3
Ca			1	62835.320	ug/l	1.54	10,436,660.89	3.876E+00	Analog	0.10	3
Sr			1	388.366	ug/l	0.46	3,061,159.85	8.959E-01	Pulse	0.10	3
Mo			1	0.264	ug/l	3.88	406.69	1.190E-04	Pulse	0.10	3
Ag			1	0.040	ug/l	19.44	183.34	4.847E-05	Pulse	0.10	3
Sn			1	0.408	ug/l	9.11	1,596.81	4.223E-04	Pulse	0.10	3
Sb			1	-0.414	ug/l	-7.76	1,256.76	2.259E-04	Pulse	0.10	3
Ba			1	114.678	ug/l	1.88	144,644.54	2.599E-02	Pulse	0.10	3
Tl			1	0.158	ug/l	3.47	1,216.76	3.868E-04	Pulse	0.10	3
Pb			1	0.077	ug/l	36.05	326.68	1.038E-04	Pulse	0.10	3
Pb			1	0.081	ug/l	9.49	250.01	7.948E-05	Pulse	0.10	3
Pb			1	0.083	ug/l	11.52	1,230.07	3.910E-04	Pulse	0.10	3
Na			2	76648.335	ug/l	1.35	12,037,670.63	1.536E+02	Analog	0.30	3
Mg			2	26461.547	ug/l	1.50	1,885,264.99	2.406E+01	Pulse	0.30	3
Al			2	4.150	ug/l	26.27	137.78	1.759E-03	Pulse	0.30	3
K			2	2639.602	ug/l	0.69	111,456.21	1.422E+00	Pulse	0.30	3
Ca			2	62108.180	ug/l	1.03	137,373.73	1.753E+00	Pulse	0.30	3
Ti			2	0.425	ug/l	50.09	7.78	9.957E-05	Pulse	0.30	3
V			2	0.462	ug/l	20.71	461.12	5.887E-03	Pulse	0.30	3
Cr			2	1.092	ug/l	5.52	1,155.61	1.475E-02	Pulse	0.30	3
Mn			2	0.111	ug/l	8.92	50.00	6.383E-04	Pulse	0.30	3
Fe			2	2.183	ug/l	12.55	2,548.00	3.253E-02	Pulse	0.30	3
Co			2	0.010	ug/l	87.68	53.33	6.815E-04	Pulse	0.30	3
Ni			2	2.988	ug/l	5.11	1,207.83	1.542E-02	Pulse	0.30	3
Cu			2	0.414	ug/l	6.97	584.46	7.459E-03	Pulse	0.30	3
Zn			2	4.749	ug/l	8.96	795.58	1.015E-02	Pulse	0.30	3
As			2	0.138	ug/l	41.24	17.00	2.165E-04	Pulse	1.00	3
Cd			2	0.064	ug/l	48.56	15.55	3.294E-05	Pulse	0.30	3
Sn			2	0.239	ug/l	42.92	262.23	5.526E-04	Pulse	0.30	3
Se			3	0.983	ug/l	11.16	12.33	2.280E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,518,888.79	0.18	91.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,692,917.87	0.23	90.4	Pulse	0.10	3
1	Ge		535,550.57	0.36	92.9	Pulse	0.10	3
1	Ge		745,833.22	0.70	93.3	Pulse	0.10	3
1	Rh		3,416,614.84	0.59	89.3	Pulse	0.10	3
1	In		3,781,874.17	0.63	92.8	Pulse	0.10	3
1	Tb		5,565,673.46	0.91	101.8	Analog	0.10	3
1	Ho		510,583.98	0.86	96.4	Pulse	0.10	3
1	Bi		3,145,537.14	0.54	93.0	Pulse	0.10	3
2	Sc		78,377.63	1.17	88.2	Pulse	0.30	3
2	Ge		50,396.39	0.83	91.1	Pulse	0.30	3
2	Ge		77,487.23	0.87	91.5	Pulse	0.30	3
2	Rh		1,528,133.65	1.36	87.9	Pulse	0.30	3
2	In		473,827.62	1.47	86.4	Pulse	0.30	3
2	Tb		2,022,679.43	2.23	90.4	Pulse	0.30	3
2	Ho		202,025.46	2.01	92.0	Pulse	0.30	3
2	Bi		1,378,418.03	1.25	88.6	Pulse	0.30	3
3	Sc		53,546.75	0.55	96.9	Pulse	0.30	3
3	Ge		35,055.37	0.36	97.4	Pulse	0.30	3
3	Ge		54,114.94	0.62	96.8	Pulse	0.30	3
3	Rh		576,065.89	0.86	94.1	Pulse	0.30	3
3	Tb		969,738.82	0.10	97.7	Pulse	0.30	3

Quantitation Report

File Name	043SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 16:17
Sample Name	mp8578-sd2
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.084	ug/l	81.14	34.67	1.361E-05	Pulse	0.25	3
B			1	12.045	ug/l	38.56	23,972.85	9.532E-03	Pulse	0.15	3
Ca			1	62458.387	ug/l	4.79	2,111,520.33	7.766E-01	Pulse	0.10	3
Sr			1	388.657	ug/l	3.23	625,651.19	1.794E-01	Pulse	0.10	3
Mo			1	7.076	ug/l	5.53	2,226.90	6.388E-04	Pulse	0.10	3
Ag			1	0.065	ug/l	16.22	73.33	1.937E-05	Pulse	0.10	3
Sn			1	0.148	ug/l	81.16	646.70	1.707E-04	Pulse	0.10	3
Sb			1	-1.703	ug/l	-10.01	1,466.79	2.671E-04	Pulse	0.10	3
Ba			1	121.084	ug/l	5.29	30,160.04	5.492E-03	Pulse	0.10	3
Tl			1	0.649	ug/l	7.64	1,013.41	3.187E-04	Pulse	0.10	3
Pb			1	0.782	ug/l	28.19	530.03	1.680E-04	Pulse	0.10	3
Pb			1	1.023	ug/l	36.74	533.36	1.670E-04	Pulse	0.10	3
Pb			1	0.841	ug/l	7.97	2,116.80	6.668E-04	Pulse	0.10	3
Na			2	71891.041	ug/l	0.64	2,401,434.28	2.887E+01	Pulse	0.30	3
Mg			2	26221.568	ug/l	0.44	396,652.51	4.769E+00	Pulse	0.30	3
Al			2	156.202	ug/l	1.80	755.58	9.082E-03	Pulse	0.30	3
K			2	2683.441	ug/l	1.00	28,663.46	3.446E-01	Pulse	0.30	3
Ca			2	62031.054	ug/l	1.90	29,172.31	3.507E-01	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	0.078	ug/l	200.14	185.56	2.229E-03	Pulse	0.30	3
Cr			2	0.758	ug/l	10.15	380.01	4.568E-03	Pulse	0.30	3
Mn			2	3.647	ug/l	10.28	312.23	3.753E-03	Pulse	0.30	3
Fe			2	60.962	ug/l	2.92	9,995.35	1.201E-01	Pulse	0.30	3
Co			2	0.000	ug/l	6263.00	42.22	5.081E-04	Pulse	0.30	3
Ni			2	3.985	ug/l	19.15	362.23	4.359E-03	Pulse	0.30	3
Cu			2	8.959	ug/l	2.32	2,222.40	2.672E-02	Pulse	0.30	3
Zn			2	31.937	ug/l	8.64	1,101.16	1.324E-02	Pulse	0.30	3
As			2	3.674	ug/l	17.02	67.00	8.062E-04	Pulse	1.00	3
Cd			2	0.091	ug/l	42.93	5.56	1.081E-05	Pulse	0.30	3
Sn			2	-0.635	ug/l	-38.20	114.45	2.224E-04	Pulse	0.30	3
Se			3	10.790	ug/l	3.10	25.47	4.577E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,518,313.50	4.28	91.1	Pulse	0.10	3
1	Sc		2,723,146.11	4.84	91.4	Pulse	0.10	3
1	Ge		529,672.45	3.97	91.9	Pulse	0.10	3

Quantitation Report

1	Ge		744,947.72	3.49	93.2	Pulse	0.10	3
1	Rh		3,489,297.45	3.68	91.2	Pulse	0.10	3
1	In		3,796,219.68	3.94	93.2	Pulse	0.10	3
1	Tb		5,499,440.75	3.93	100.6	Analog	0.10	3
1	Ho		499,974.25	4.26	94.4	Pulse	0.10	3
1	Bi		3,172,287.24	4.50	93.8	Pulse	0.10	3
2	Sc		83,183.50	0.89	93.6	Pulse	0.30	3
2	Ge		52,735.99	2.32	95.4	Pulse	0.30	3
2	Ge		81,640.45	0.73	96.4	Pulse	0.30	3
2	Rh		1,626,051.98	0.56	93.6	Pulse	0.30	3
2	In		514,822.58	0.61	93.9	Pulse	0.30	3
2	Tb		2,100,464.85	0.36	93.8	Pulse	0.30	3
2	Ho		207,857.18	0.20	94.7	Pulse	0.30	3
2	Bi		1,471,531.36	0.59	94.6	Pulse	0.30	3
3	Sc		55,406.07	0.70	100.3	Pulse	0.30	3
3	Ge		36,105.43	1.18	100.3	Pulse	0.30	3
3	Ge		55,634.47	0.91	99.5	Pulse	0.30	3
3	Rh		609,766.74	0.42	99.6	Pulse	0.30	3
3	Tb		995,369.61	0.28	100.3	Pulse	0.30	3

Quantitation Report

File Name	044_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 16:22
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.733	ug/l	0.40	381,733.67	1.516E-01	Pulse	0.25	3
B			1	99.488	ug/l	0.43	626,687.82	2.488E-01	Pulse	0.15	3
Ca			1	4965.260	ug/l	0.71	4,213,147.23	1.536E+00	Pulse	0.10	3
Sr			1	51.073	ug/l	0.77	2,060,657.47	5.892E-01	Pulse	0.10	3
Mo			1	50.868	ug/l	0.60	401,567.51	1.148E-01	Pulse	0.10	3
Ag			1	47.933	ug/l	0.50	978,902.82	2.570E-01	Pulse	0.10	3
Sn			1	49.641	ug/l	0.73	629,181.02	1.652E-01	Pulse	0.10	3
Sb			1	48.855	ug/l	0.78	771,730.02	1.375E-01	Pulse	0.10	3
Ba			1	46.393	ug/l	0.83	295,131.15	5.257E-02	Pulse	0.10	3
Tl			1	50.271	ug/l	0.44	1,906,515.13	5.990E-01	Pulse	0.10	3
Pb			1	49.960	ug/l	1.14	641,796.79	2.017E-01	Pulse	0.10	3
Pb			1	50.363	ug/l	0.74	567,840.79	1.784E-01	Pulse	0.10	3
Pb			1	50.248	ug/l	0.88	2,594,001.09	8.150E-01	Pulse	0.10	3
Na			2	5018.923	ug/l	1.22	4,035,343.73	5.033E+01	Pulse	0.30	3
Mg			2	5021.291	ug/l	1.42	1,829,837.08	2.282E+01	Pulse	0.30	3
Al			2	4845.614	ug/l	0.08	525,163.41	6.551E+00	Pulse	0.30	3
K			2	5015.364	ug/l	0.19	1,035,663.08	1.292E+01	Pulse	0.30	3
Ca			2	5245.247	ug/l	0.42	59,375.12	7.406E-01	Pulse	0.30	3
Ti			2	48.781	ug/l	3.22	4,582.90	5.716E-02	Pulse	0.30	3
V			2	50.222	ug/l	0.84	165,152.51	2.060E+00	Pulse	0.30	3
Cr			2	50.243	ug/l	0.67	218,285.60	2.723E+00	Pulse	0.30	3
Mn			2	49.408	ug/l	0.44	99,762.51	1.244E+00	Pulse	0.30	3
Fe			2	5245.082	ug/l	0.22	18,406,341.49	2.296E+02	Analog	0.30	3
Co			2	50.529	ug/l	0.28	371,489.03	4.634E+00	Pulse	0.30	3
Ni			2	50.041	ug/l	0.24	101,251.24	1.263E+00	Pulse	0.30	3
Cu			2	49.526	ug/l	0.67	277,712.48	3.464E+00	Pulse	0.30	3
Zn			2	50.020	ug/l	0.98	37,979.44	4.737E-01	Pulse	0.30	3
As			2	50.871	ug/l	1.34	20,151.41	2.514E-01	Pulse	1.00	3
Cd			2	49.411	ug/l	0.37	58,327.88	1.193E-01	Pulse	0.30	3
Sn			2	49.761	ug/l	0.53	109,977.50	2.249E-01	Pulse	0.30	3
Se			3	49.545	ug/l	2.01	2,565.94	4.846E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,518,379.02	0.60	91.1	Pulse	0.10	3
1	Sc		2,743,308.50	0.75	92.1	Pulse	0.10	3
1	Ge		536,147.09	0.72	93.0	Pulse	0.10	3

Quantitation Report

1	Ge		747,031.21	0.39	93.5	Pulse	0.10	3
1	Rh		3,497,695.15	0.68	91.4	Pulse	0.10	3
1	In		3,808,219.10	0.03	93.5	Pulse	0.10	3
1	Tb		5,614,133.04	0.82	102.7	Analog	0.10	3
1	Ho		516,255.97	0.80	97.4	Pulse	0.10	3
1	Bi		3,182,708.18	0.18	94.1	Pulse	0.10	3
2	Sc		80,171.17	0.22	90.2	Pulse	0.30	3
2	Ge		50,504.40	0.90	91.3	Pulse	0.30	3
2	Ge		77,285.08	0.49	91.3	Pulse	0.30	3
2	Rh		1,570,400.53	0.51	90.4	Pulse	0.30	3
2	In		488,976.49	1.39	89.2	Pulse	0.30	3
2	Tb		2,064,623.88	0.05	92.2	Pulse	0.30	3
2	Ho		204,198.91	0.32	93.0	Pulse	0.30	3
2	Bi		1,403,810.46	0.94	90.2	Pulse	0.30	3
3	Sc		53,768.51	1.18	97.3	Pulse	0.30	3
3	Ge		34,394.04	0.93	95.5	Pulse	0.30	3
3	Ge		52,958.99	1.20	94.7	Pulse	0.30	3
3	Rh		577,878.14	0.12	94.4	Pulse	0.30	3
3	Tb		966,780.41	0.25	97.4	Pulse	0.30	3

Quantitation Report

File Name	045_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 16:27
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.008	ug/l	28.42	68.00	2.670E-05	Pulse	0.25	3
B			1	1.167	ug/l	5.92	28,468.67	1.119E-02	Pulse	0.15	3
Ca			1	-4.011	ug/l	-28.41	17,373.06	6.386E-03	Pulse	0.10	3
Sr			1	0.004	ug/l	93.28	623.37	1.744E-04	Pulse	0.10	3
Mo			1	0.036	ug/l	14.07	293.35	8.213E-05	Pulse	0.10	3
Ag			1	0.007	ug/l	31.00	176.67	4.555E-05	Pulse	0.10	3
Sn			1	0.079	ug/l	12.05	1,603.47	4.139E-04	Pulse	0.10	3
Sb			1	-0.095	ug/l	-2.11	1,066.74	1.909E-04	Pulse	0.10	3
Ba			1	0.017	ug/l	25.21	130.01	2.329E-05	Pulse	0.10	3
Tl			1	0.018	ug/l	2.78	706.71	2.179E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	90.53	216.68	6.679E-05	Pulse	0.10	3
Pb			1	0.009	ug/l	77.08	170.01	5.246E-05	Pulse	0.10	3
Pb			1	0.009	ug/l	41.73	870.05	2.681E-04	Pulse	0.10	3
Na			2	0.611	ug/l	117.66	6,218.23	7.661E-02	Pulse	0.30	3
Mg			2	0.247	ug/l	29.26	181.11	2.229E-03	Pulse	0.30	3
Al			2	0.288	ug/l	24.03	83.33	1.026E-03	Pulse	0.30	3
K			2	0.727	ug/l	55.23	5,808.85	7.148E-02	Pulse	0.30	3
Ca			2	-2.744	ug/l	-12.18	30.00	3.697E-04	Pulse	0.30	3
Ti			2	0.047	ug/l	173.21	4.44	5.489E-05	Pulse	0.30	3
V			2	-0.007	ug/l	-158.39	147.78	1.815E-03	Pulse	0.30	3
Cr			2	-0.008	ug/l	-45.61	203.34	2.504E-03	Pulse	0.30	3
Mn			2	0.006	ug/l	61.63	17.78	2.189E-04	Pulse	0.30	3
Fe			2	0.362	ug/l	11.13	2,376.86	2.926E-02	Pulse	0.30	3
Co			2	-0.003	ug/l	-43.22	21.11	2.604E-04	Pulse	0.30	3
Ni			2	0.002	ug/l	278.93	31.11	3.832E-04	Pulse	0.30	3
Cu			2	-0.001	ug/l	-617.50	131.12	1.615E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.069	ug/l	61.50	148.89	1.828E-03	Pulse	0.30	3
As			2	0.009	ug/l	31.04	10.00	1.231E-04	Pulse	1.00	3
Cd			2	0.005	ug/l	57.93	6.67	1.334E-05	Pulse	0.30	3
Sn			2	0.051	ug/l	27.61	283.34	5.691E-04	Pulse	0.30	3
Se			3	0.038	ug/l	41.18	3.87	7.294E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,544,640.71	1.03	92.1	Pulse	0.10	3
1	Sc		2,719,986.52	0.45	91.3	Pulse	0.10	3
1	Ge		530,803.62	0.35	92.1	Pulse	0.10	3
1	Ge		749,647.07	1.05	93.8	Pulse	0.10	3
1	Rh		3,572,800.88	0.27	93.4	Pulse	0.10	3
1	In		3,873,136.05	0.85	95.1	Pulse	0.10	3
1	Tb		5,588,247.21	0.84	102.3	Analog	0.10	3
1	Ho		510,029.37	1.17	96.3	Pulse	0.10	3
1	Bi		3,244,055.16	0.64	96.0	Pulse	0.10	3
2	Sc		81,252.91	1.72	91.5	Pulse	0.30	3
2	Ge		50,879.96	1.07	92.0	Pulse	0.30	3
2	Ge		78,418.17	0.99	92.6	Pulse	0.30	3
2	Rh		1,615,654.87	0.72	93.0	Pulse	0.30	3
2	In		498,151.73	0.95	90.9	Pulse	0.30	3
2	Tb		2,065,801.58	0.79	92.3	Pulse	0.30	3
2	Ho		205,038.36	0.42	93.4	Pulse	0.30	3
2	Bi		1,443,759.35	0.51	92.8	Pulse	0.30	3
3	Sc		53,546.75	0.54	96.9	Pulse	0.30	3
3	Ge		34,486.39	0.58	95.8	Pulse	0.30	3
3	Ge		53,006.89	0.39	94.8	Pulse	0.30	3
3	Rh		589,377.28	1.59	96.3	Pulse	0.30	3
3	Tb		960,516.52	0.56	96.8	Pulse	0.30	3

Quantitation Report

File Name 046SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File
Method Path
Acq Time 8/13/2018 16:32
Sample Name jc71604-1
Sample Type Sample
Comment
Prep Dilution 5.000
Auto Dilution N/A
Total Dilution 5.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 8/13/2018 13:57
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.010	ug/l	42.72	24.00	9.594E-06	Pulse	0.25	3
B			1	445.074	ug/l	0.91	559,228.88	2.235E-01	Pulse	0.15	3
Ca			1	96772.619	ug/l	0.54	16,119,521.84	5.965E+00	Analog	0.10	3
Sr			1	360.854	ug/l	0.82	2,876,630.27	8.325E-01	Pulse	0.10	3
Mo			1	14.186	ug/l	2.62	22,125.94	6.403E-03	Pulse	0.10	3
Ag			1	0.039	ug/l	11.21	180.01	4.724E-05	Pulse	0.10	3
Sn			1	0.667	ug/l	11.40	2,266.94	5.946E-04	Pulse	0.10	3
Sb			1	-0.015	ug/l	-233.44	2,506.97	4.499E-04	Pulse	0.10	3
Ba			1	43.341	ug/l	2.23	54,734.19	9.825E-03	Pulse	0.10	3
Tl			1	0.058	ug/l	2.68	473.36	1.464E-04	Pulse	0.10	3
Pb			1	0.326	ug/l	13.89	986.73	3.051E-04	Pulse	0.10	3
Pb			1	0.392	ug/l	7.17	970.07	3.000E-04	Pulse	0.10	3
Pb			1	0.366	ug/l	6.17	4,227.07	1.307E-03	Pulse	0.10	3
Na			2	8301.272	ug/l	2.71	1,287,588.80	1.670E+01	Pulse	0.30	3
Mg			2	4795.249	ug/l	3.47	336,182.15	4.360E+00	Pulse	0.30	3
Al			2	209.438	ug/l	2.97	4,415.09	5.726E-02	Pulse	0.30	3
K			2	21109.526	ug/l	2.95	839,353.25	1.089E+01	Pulse	0.30	3
Ca			2	97158.581	ug/l	2.37	211,419.80	2.742E+00	Pulse	0.30	3
Ti			2	2.539	ug/l	51.28	45.56	5.951E-04	Pulse	0.30	3
V			2	1.999	ug/l	3.42	1,425.63	1.849E-02	Pulse	0.30	3
Cr			2	0.584	ug/l	3.84	713.35	9.250E-03	Pulse	0.30	3
Mn			2	98.030	ug/l	3.07	38,079.39	4.938E-01	Pulse	0.30	3
Fe			2	293.245	ug/l	2.44	198,990.14	2.580E+00	Pulse	0.30	3
Co			2	0.236	ug/l	4.37	373.34	4.838E-03	Pulse	0.30	3
Ni			2	2.223	ug/l	7.27	891.14	1.156E-02	Pulse	0.30	3
Cu			2	2.416	ug/l	5.53	2,732.48	3.545E-02	Pulse	0.30	3
Zn			2	4.192	ug/l	7.25	701.14	9.095E-03	Pulse	0.30	3
As			2	5.321	ug/l	1.86	411.68	5.337E-03	Pulse	1.00	3
Cd			2	0.025	ug/l	57.53	6.67	1.395E-05	Pulse	0.30	3
Sn			2	0.507	ug/l	10.07	380.01	7.942E-04	Pulse	0.30	3
Se			3	0.816	ug/l	16.57	10.53	1.955E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,501,811.05	0.27	90.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,702,553.40	0.68	90.7	Pulse	0.10	3
1	Ge		536,907.27	0.59	93.2	Pulse	0.10	3
1	Ge		747,846.00	0.07	93.6	Pulse	0.10	3
1	Rh		3,455,497.76	0.43	90.3	Pulse	0.10	3
1	In		3,811,479.81	0.42	93.5	Pulse	0.10	3
1	Tb		5,571,294.92	0.97	102.0	Analog	0.10	3
1	Ho		513,589.84	1.13	96.9	Pulse	0.10	3
1	Bi		3,233,606.20	0.14	95.7	Pulse	0.10	3
2	Sc		77,146.15	2.55	86.8	Pulse	0.30	3
2	Ge		49,727.87	3.39	89.9	Pulse	0.30	3
2	Ge		75,786.16	3.04	89.5	Pulse	0.30	3
2	Rh		1,528,719.38	2.41	88.0	Pulse	0.30	3
2	In		478,582.07	3.05	87.3	Pulse	0.30	3
2	Tb		2,008,546.87	2.44	89.7	Pulse	0.30	3
2	Ho		200,248.75	2.22	91.2	Pulse	0.30	3
2	Bi		1,399,584.56	2.43	90.0	Pulse	0.30	3
3	Sc		53,164.42	0.69	96.2	Pulse	0.30	3
3	Ge		34,945.21	1.14	97.1	Pulse	0.30	3
3	Ge		53,849.60	1.19	96.3	Pulse	0.30	3
3	Rh		578,808.52	0.06	94.6	Pulse	0.30	3
3	Tb		967,979.10	0.53	97.5	Pulse	0.30	3

Quantitation Report

File Name	047SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 16:37
Sample Name	jc71604-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.020	ug/l	27.15	82.67	3.400E-05	Pulse	0.25	3
B			1	465.399	ug/l	0.48	1,388,462.93	5.708E-01	Pulse	0.15	3
Ca			1	96410.402	ug/l	0.27	39,066,999.42	1.484E+01	Analog	0.10	3
Sr			1	393.376	ug/l	1.07	7,484,294.89	2.269E+00	Analog	0.10	3
Mo			1	13.948	ug/l	1.21	51,928.04	1.574E-02	Pulse	0.10	3
Ag			1	0.016	ug/l	28.30	180.01	4.877E-05	Pulse	0.10	3
Sn			1	0.781	ug/l	1.37	5,344.42	1.449E-03	Pulse	0.10	3
Sb			1	0.159	ug/l	30.87	3,780.57	6.809E-04	Pulse	0.10	3
Ba			1	42.526	ug/l	2.21	133,788.65	2.410E-02	Pulse	0.10	3
Tl			1	0.035	ug/l	18.80	690.04	2.196E-04	Pulse	0.10	3
Pb			1	0.370	ug/l	8.12	2,476.98	7.884E-04	Pulse	0.10	3
Pb			1	0.378	ug/l	8.81	2,170.27	6.909E-04	Pulse	0.10	3
Pb			1	0.371	ug/l	0.74	9,821.69	3.126E-03	Pulse	0.10	3
Na			2	8240.074	ug/l	1.46	3,131,156.96	4.133E+01	Pulse	0.30	3
Mg			2	4688.617	ug/l	1.87	807,275.35	1.066E+01	Pulse	0.30	3
Al			2	206.728	ug/l	1.77	10,632.43	1.404E-01	Pulse	0.30	3
K			2	20665.079	ug/l	1.65	2,010,541.73	2.654E+01	Pulse	0.30	3
Ca			2	94670.206	ug/l	1.86	505,837.74	6.677E+00	Pulse	0.30	3
Ti			2	3.273	ug/l	21.18	145.56	1.918E-03	Pulse	0.30	3
V			2	1.904	ug/l	4.50	3,114.77	4.111E-02	Pulse	0.30	3
Cr			2	0.793	ug/l	6.87	1,847.90	2.439E-02	Pulse	0.30	3
Mn			2	97.629	ug/l	2.44	93,131.03	1.229E+00	Pulse	0.30	3
Fe			2	287.516	ug/l	1.59	477,679.93	6.306E+00	Pulse	0.30	3
Co			2	0.235	ug/l	10.46	854.48	1.129E-02	Pulse	0.30	3
Ni			2	1.943	ug/l	6.19	1,882.35	2.485E-02	Pulse	0.30	3
Cu			2	2.340	ug/l	0.75	6,323.50	8.347E-02	Pulse	0.30	3
Zn			2	3.357	ug/l	3.93	1,290.07	1.703E-02	Pulse	0.30	3
As			2	4.890	ug/l	0.16	921.03	1.216E-02	Pulse	1.00	3
Cd			2	0.028	ug/l	40.82	16.67	3.588E-05	Pulse	0.30	3
Sn			2	0.697	ug/l	4.16	883.37	1.909E-03	Pulse	0.30	3
Se			3	0.722	ug/l	9.19	22.33	3.887E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,432,366.36	0.32	88.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,631,786.42	0.33	88.4	Pulse	0.10	3
1	Ge		546,524.05	1.39	94.8	Pulse	0.10	3
1	Ge		759,300.25	0.39	95.0	Pulse	0.10	3
1	Rh		3,299,192.03	0.25	86.3	Pulse	0.10	3
1	In		3,689,192.18	0.35	90.5	Pulse	0.10	3
1	Tb		5,552,367.00	0.21	101.6	Analog	0.10	3
1	Ho		507,131.51	1.22	95.7	Pulse	0.10	3
1	Bi		3,141,577.04	0.20	92.9	Pulse	0.10	3
2	Sc		75,765.46	1.41	85.3	Pulse	0.30	3
2	Ge		51,444.02	1.73	93.0	Pulse	0.30	3
2	Ge		78,750.99	2.21	93.0	Pulse	0.30	3
2	Rh		1,487,809.04	1.94	85.6	Pulse	0.30	3
2	In		462,898.56	1.66	84.4	Pulse	0.30	3
2	Tb		2,012,052.49	3.09	89.9	Pulse	0.30	3
2	Ho		199,271.85	2.36	90.7	Pulse	0.30	3
2	Bi		1,366,140.99	1.82	87.8	Pulse	0.30	3
3	Sc		52,180.17	0.25	94.4	Pulse	0.30	3
3	Ge		37,311.53	1.46	103.6	Pulse	0.30	3
3	Ge		57,445.16	1.01	102.7	Pulse	0.30	3
3	Rh		558,447.10	0.27	91.3	Pulse	0.30	3
3	Tb		957,842.08	0.81	96.5	Pulse	0.30	3

Quantitation Report

File Name	048SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 16:42
Sample Name	mp8535-s3 4
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	81.766	ug/l	3.21	63,050.12	2.544E-02	Pulse	0.25	3
B			1	203.671	ug/l	1.55	142,816.58	5.760E-02	Pulse	0.15	3
Ca			1	53976.036	ug/l	2.72	4,432,181.81	1.669E+00	Pulse	0.10	3
Sr			1	406.444	ug/l	2.24	1,608,744.14	4.689E-01	Pulse	0.10	3
Mo			1	99.329	ug/l	3.80	76,898.48	2.242E-02	Pulse	0.10	3
Ag			1	78.235	ug/l	3.44	158,008.55	4.196E-02	Pulse	0.10	3
Sn			1	87.567	ug/l	2.79	110,230.58	2.927E-02	Pulse	0.10	3
Sb			1	84.575	ug/l	3.48	132,734.20	2.418E-02	Pulse	0.10	3
Ba			1	120.563	ug/l	3.34	75,021.39	1.366E-02	Pulse	0.10	3
Tl			1	84.759	ug/l	3.47	319,707.53	1.010E-01	Pulse	0.10	3
Pb			1	86.298	ug/l	2.64	110,376.72	3.487E-02	Pulse	0.10	3
Pb			1	86.989	ug/l	3.35	97,601.29	3.084E-02	Pulse	0.10	3
Pb			1	86.723	ug/l	3.40	445,569.35	1.408E-01	Pulse	0.10	3
Na			2	38466.928	ug/l	1.26	3,092,836.61	3.860E+01	Pulse	0.30	3
Mg			2	8569.844	ug/l	0.90	312,243.08	3.896E+00	Pulse	0.30	3
Al			2	1616.371	ug/l	2.13	17,560.35	2.191E-01	Pulse	0.30	3
K			2	6397.035	ug/l	0.76	136,909.53	1.708E+00	Pulse	0.30	3
Ca			2	53411.150	ug/l	1.62	60,435.57	7.541E-01	Pulse	0.30	3
Ti			2	77.267	ug/l	2.94	725.58	9.054E-03	Pulse	0.30	3
V			2	86.993	ug/l	0.75	28,734.95	3.586E-01	Pulse	0.30	3
Cr			2	84.724	ug/l	1.56	36,988.02	4.616E-01	Pulse	0.30	3
Mn			2	113.393	ug/l	1.83	22,892.62	2.856E-01	Pulse	0.30	3
Fe			2	1810.499	ug/l	0.80	636,132.25	7.938E+00	Pulse	0.30	3
Co			2	83.747	ug/l	0.99	61,580.90	7.684E-01	Pulse	0.30	3
Ni			2	89.729	ug/l	0.96	18,171.28	2.267E-01	Pulse	0.30	3
Cu			2	97.183	ug/l	0.59	54,581.39	6.811E-01	Pulse	0.30	3
Zn			2	99.684	ug/l	1.50	7,641.86	9.535E-02	Pulse	0.30	3
As			2	85.623	ug/l	0.97	3,395.69	4.237E-02	Pulse	1.00	3
Cd			2	80.709	ug/l	2.03	9,653.01	1.949E-02	Pulse	0.30	3
Sn			2	85.067	ug/l	1.26	19,184.01	3.873E-02	Pulse	0.30	3
Se			3	76.995	ug/l	1.86	414.48	7.561E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,480,078.70	2.34	89.7	Pulse	0.10	3
1	Sc		2,657,126.06	2.92	89.2	Pulse	0.10	3
1	Ge		543,654.44	2.23	94.3	Pulse	0.10	3

Quantitation Report

1	Ge		755,946.19	2.51	94.6	Pulse	0.10	3
1	Rh		3,432,276.30	2.57	89.7	Pulse	0.10	3
1	In		3,767,714.18	2.27	92.5	Pulse	0.10	3
1	Tb		5,494,229.50	3.22	100.5	Analog	0.10	3
1	Ho		502,231.26	2.51	94.8	Pulse	0.10	3
1	Bi		3,167,283.91	2.87	93.7	Pulse	0.10	3
2	Sc		80,140.00	0.69	90.2	Pulse	0.30	3
2	Ge		52,117.26	1.82	94.3	Pulse	0.30	3
2	Ge		80,483.85	0.89	95.0	Pulse	0.30	3
2	Rh		1,593,150.14	1.29	91.7	Pulse	0.30	3
2	In		495,414.38	1.10	90.4	Pulse	0.30	3
2	Tb		2,073,028.32	0.55	92.6	Pulse	0.30	3
2	Ho		205,674.19	1.08	93.7	Pulse	0.30	3
2	Bi		1,429,814.91	0.71	91.9	Pulse	0.30	3
3	Sc		53,678.23	1.25	97.1	Pulse	0.30	3
3	Ge		35,450.76	2.53	98.5	Pulse	0.30	3
3	Ge		54,818.48	0.73	98.0	Pulse	0.30	3
3	Rh		586,156.66	0.90	95.8	Pulse	0.30	3
3	Tb		974,053.36	1.10	98.1	Pulse	0.30	3

Quantitation Report

File Name	049SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 16:47
Sample Name	mp8535-s4
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	81.833	ug/l	5.02	62,687.65	2.546E-02	Pulse	0.25	3
B			1	194.916	ug/l	4.10	136,679.58	5.548E-02	Pulse	0.15	3
Ca			1	55432.211	ug/l	4.75	4,470,836.39	1.714E+00	Pulse	0.10	3
Sr			1	413.087	ug/l	4.46	1,610,806.02	4.766E-01	Pulse	0.10	3
Mo			1	99.679	ug/l	4.08	76,054.28	2.250E-02	Pulse	0.10	3
Ag			1	79.218	ug/l	2.89	158,696.09	4.249E-02	Pulse	0.10	3
Sn			1	88.391	ug/l	5.66	110,268.19	2.954E-02	Pulse	0.10	3
Sb			1	87.479	ug/l	8.95	133,438.61	2.499E-02	Pulse	0.10	3
Ba			1	124.577	ug/l	7.17	75,446.55	1.412E-02	Pulse	0.10	3
Tl			1	86.107	ug/l	4.10	319,680.64	1.026E-01	Pulse	0.10	3
Pb			1	87.434	ug/l	4.18	110,050.72	3.533E-02	Pulse	0.10	3
Pb			1	86.902	ug/l	3.25	95,994.46	3.080E-02	Pulse	0.10	3
Pb			1	87.134	ug/l	4.02	440,630.25	1.414E-01	Pulse	0.10	3
Na			2	39628.618	ug/l	1.23	3,146,018.49	3.976E+01	Pulse	0.30	3
Mg			2	8830.742	ug/l	1.32	317,693.56	4.015E+00	Pulse	0.30	3
Al			2	1704.088	ug/l	2.77	18,275.55	2.310E-01	Pulse	0.30	3
K			2	6467.145	ug/l	0.43	136,612.77	1.726E+00	Pulse	0.30	3
Ca			2	54008.973	ug/l	1.11	60,339.65	7.626E-01	Pulse	0.30	3
Ti			2	88.258	ug/l	11.83	818.92	1.034E-02	Pulse	0.30	3
V			2	86.190	ug/l	0.56	28,115.02	3.553E-01	Pulse	0.30	3
Cr			2	85.503	ug/l	0.36	36,859.82	4.658E-01	Pulse	0.30	3
Mn			2	114.488	ug/l	1.25	22,823.62	2.884E-01	Pulse	0.30	3
Fe			2	1842.421	ug/l	1.03	639,167.75	8.078E+00	Pulse	0.30	3
Co			2	84.259	ug/l	0.41	61,179.63	7.731E-01	Pulse	0.30	3
Ni			2	89.986	ug/l	1.60	17,993.25	2.274E-01	Pulse	0.30	3
Cu			2	100.170	ug/l	1.56	55,542.26	7.019E-01	Pulse	0.30	3
Zn			2	102.824	ug/l	2.84	7,779.69	9.832E-02	Pulse	0.30	3
As			2	84.538	ug/l	0.30	3,310.68	4.184E-02	Pulse	1.00	3
Cd			2	80.656	ug/l	1.51	9,549.65	1.947E-02	Pulse	0.30	3
Sn			2	84.559	ug/l	2.19	18,878.05	3.850E-02	Pulse	0.30	3
Se			3	75.636	ug/l	3.38	400.34	7.428E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,465,693.38	3.79	89.2	Pulse	0.10	3
1	Sc		2,612,853.81	4.88	87.7	Pulse	0.10	3
1	Ge		528,602.79	3.73	91.7	Pulse	0.10	3

Quantitation Report

1	Ge		737,653.71	3.47	92.3	Pulse	0.10	3
1	Rh		3,384,028.07	3.89	88.5	Pulse	0.10	3
1	In		3,738,072.36	3.98	91.7	Pulse	0.10	3
1	Tb		5,360,842.84	6.81	98.1	Mix	0.10	3
1	Ho		497,083.84	3.57	93.8	Pulse	0.10	3
1	Bi		3,118,528.91	3.68	92.2	Pulse	0.10	3
2	Sc		79,133.11	0.83	89.1	Pulse	0.30	3
2	Ge		51,553.24	0.83	93.2	Pulse	0.30	3
2	Ge		78,567.93	0.46	92.8	Pulse	0.30	3
2	Rh		1,570,490.94	0.85	90.4	Pulse	0.30	3
2	In		490,464.25	1.48	89.5	Pulse	0.30	3
2	Tb		2,058,092.07	0.79	91.9	Pulse	0.30	3
2	Ho		202,433.16	1.19	92.2	Pulse	0.30	3
2	Bi		1,413,890.46	0.32	90.9	Pulse	0.30	3
3	Sc		53,574.58	1.39	96.9	Pulse	0.30	3
3	Ge		34,864.98	0.36	96.8	Pulse	0.30	3
3	Ge		53,904.25	0.85	96.4	Pulse	0.30	3
3	Rh		581,151.26	0.19	95.0	Pulse	0.30	3
3	Tb		964,510.03	1.05	97.2	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 16:52
Sample Name	mp8535-mb1conf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.008	ug/l	47.74	37.33	1.497E-05	Pulse	0.25	3
B			1	4.854	ug/l	3.03	35,506.22	1.423E-02	Pulse	0.15	3
Ca			1	19.867	ug/l	8.08	28,001.11	1.068E-02	Pulse	0.10	3
Sr			1	0.054	ug/l	2.38	1,530.12	4.418E-04	Pulse	0.10	3
Mo			1	0.055	ug/l	16.73	213.34	6.162E-05	Pulse	0.10	3
Ag			1	0.012	ug/l	46.73	143.34	3.822E-05	Pulse	0.10	3
Sn			1	0.412	ug/l	9.32	3,133.92	8.354E-04	Pulse	0.10	3
Sb			1	-0.133	ug/l	-9.46	1,513.46	2.716E-04	Pulse	0.10	3
Ba			1	0.094	ug/l	37.61	316.68	5.677E-05	Pulse	0.10	3
Tl			1	0.019	ug/l	7.95	400.02	1.242E-04	Pulse	0.10	3
Pb			1	0.036	ug/l	13.61	370.02	1.149E-04	Pulse	0.10	3
Pb			1	0.055	ug/l	11.25	383.35	1.191E-04	Pulse	0.10	3
Pb			1	0.049	ug/l	5.05	1,660.10	5.158E-04	Pulse	0.10	3
Na			2	9.872	ug/l	7.86	9,244.84	1.199E-01	Pulse	0.30	3
Mg			2	2.578	ug/l	15.60	536.68	6.965E-03	Pulse	0.30	3
Al			2	4.334	ug/l	14.60	274.45	3.566E-03	Pulse	0.30	3
K			2	6.096	ug/l	44.59	5,966.68	7.742E-02	Pulse	0.30	3
Ca			2	23.341	ug/l	11.86	185.56	2.403E-03	Pulse	0.30	3
Ti			2	0.247	ug/l	45.98	11.11	1.445E-04	Pulse	0.30	3
V			2	0.157	ug/l	17.03	410.01	5.325E-03	Pulse	0.30	3
Cr			2	0.281	ug/l	19.12	810.03	1.052E-02	Pulse	0.30	3
Mn			2	0.197	ug/l	14.26	196.67	2.556E-03	Pulse	0.30	3
Fe			2	2.651	ug/l	4.27	5,506.54	7.143E-02	Pulse	0.30	3
Co			2	0.015	ug/l	31.85	91.11	1.182E-03	Pulse	0.30	3
Ni			2	0.098	ug/l	21.47	121.11	1.573E-03	Pulse	0.30	3
Cu			2	0.279	ug/l	12.91	878.92	1.142E-02	Pulse	0.30	3
Zn			2	3.163	ug/l	1.87	1,242.29	1.611E-02	Pulse	0.30	3
As			2	0.048	ug/l	61.05	15.33	1.994E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.010	ug/l	55.92	6.67	1.399E-05	Pulse	0.30	3
Sn			2	0.320	ug/l	12.97	501.12	1.059E-03	Pulse	0.30	3
Se			3	0.046	ug/l	78.09	3.80	5.818E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,494,491.56	0.26	90.2	Pulse	0.10	3
1	Sc		2,622,325.48	0.32	88.0	Pulse	0.10	3
1	Ge		590,196.25	1.13	102.4	Pulse	0.10	3
1	Ge		822,808.40	0.69	103.0	Pulse	0.10	3
1	Rh		3,463,138.91	0.28	90.5	Pulse	0.10	3
1	In		3,752,342.41	1.03	92.1	Pulse	0.10	3
1	Tb		5,573,744.92	0.37	102.0	Analog	0.10	3
1	Ho		513,454.19	0.57	96.9	Pulse	0.10	3
1	Bi		3,219,435.27	1.20	95.2	Pulse	0.10	3
2	Sc		77,119.46	2.67	86.8	Pulse	0.30	3
2	Ge		55,313.35	2.65	100.0	Pulse	0.30	3
2	Ge		85,099.18	2.14	100.5	Pulse	0.30	3
2	Rh		1,556,629.52	2.41	89.6	Pulse	0.30	3
2	In		472,811.07	2.38	86.2	Pulse	0.30	3
2	Tb		2,018,221.79	2.71	90.2	Pulse	0.30	3
2	Ho		200,176.52	2.89	91.2	Pulse	0.30	3
2	Bi		1,407,287.72	2.56	90.5	Pulse	0.30	3
3	Sc		52,898.01	0.59	95.7	Pulse	0.30	3
3	Ge		42,358.13	0.67	117.7	Pulse	0.30	3
3	Ge		65,374.69	1.16	116.9	Pulse	0.30	3
3	Rh		580,922.56	0.26	94.9	Pulse	0.30	3
3	Tb		957,952.63	0.29	96.5	Pulse	0.30	3

Quantitation Report

File Name	051SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 16:57
Sample Name	jc71363-1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.047	ug/l	12.66	45.33	1.781E-05	Pulse	0.25	3
B			1	91.559	ug/l	2.16	77,622.35	3.050E-02	Pulse	0.15	3
Ca			1	49786.409	ug/l	0.72	4,189,080.25	1.540E+00	Pulse	0.10	3
Sr			1	304.799	ug/l	0.44	1,227,533.21	3.517E-01	Pulse	0.10	3
Mo			1	11.986	ug/l	1.70	9,443.18	2.705E-03	Pulse	0.10	3
Ag			1	0.036	ug/l	27.41	96.67	2.501E-05	Pulse	0.10	3
Sn			1	1.580	ug/l	8.27	2,613.63	6.764E-04	Pulse	0.10	3
Sb			1	0.725	ug/l	16.06	3,753.92	6.615E-04	Pulse	0.10	3
Ba			1	39.314	ug/l	1.32	25,294.72	4.458E-03	Pulse	0.10	3
Tl			1	0.091	ug/l	22.05	376.68	1.172E-04	Pulse	0.10	3
Pb			1	1.668	ug/l	5.98	2,296.93	7.147E-04	Pulse	0.10	3
Pb			1	1.703	ug/l	2.71	2,010.22	6.255E-04	Pulse	0.10	3
Pb			1	1.628	ug/l	3.06	8,874.67	2.762E-03	Pulse	0.10	3
Na			2	37026.058	ug/l	0.66	2,911,505.99	3.715E+01	Pulse	0.30	3
Mg			2	6939.056	ug/l	1.37	247,251.91	3.155E+00	Pulse	0.30	3
Al			2	53.718	ug/l	8.93	618.92	7.898E-03	Pulse	0.30	3
K			2	4773.735	ug/l	1.68	101,291.27	1.293E+00	Pulse	0.30	3
Ca			2	51246.863	ug/l	0.60	56,709.28	7.236E-01	Pulse	0.30	3
Ti			2	1.821	ug/l	60.49	16.67	2.133E-04	Pulse	0.30	3
V			2	3.601	ug/l	3.16	1,321.18	1.686E-02	Pulse	0.30	3
Cr			2	1.552	ug/l	0.81	887.81	1.133E-02	Pulse	0.30	3
Mn			2	32.296	ug/l	4.18	6,379.08	8.141E-02	Pulse	0.30	3
Fe			2	452.403	ug/l	0.51	156,231.34	1.994E+00	Pulse	0.30	3
Co			2	0.424	ug/l	10.41	344.45	4.394E-03	Pulse	0.30	3
Ni			2	7.861	ug/l	5.12	1,581.21	2.017E-02	Pulse	0.30	3
Cu			2	30.443	ug/l	0.87	16,808.70	2.145E-01	Pulse	0.30	3
Zn			2	34.135	ug/l	2.38	2,619.13	3.342E-02	Pulse	0.30	3
As			2	3.016	ug/l	6.89	123.00	1.570E-03	Pulse	1.00	3
Cd			2	0.182	ug/l	57.90	22.22	4.582E-05	Pulse	0.30	3
Sn			2	1.589	ug/l	3.44	508.90	1.054E-03	Pulse	0.30	3
Se			3	1.198	ug/l	15.10	8.47	1.530E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,545,213.62	0.31	92.1	Pulse	0.10	3
1	Sc		2,720,254.65	0.29	91.3	Pulse	0.10	3
1	Ge		550,816.31	0.50	95.6	Pulse	0.10	3

Quantitation Report

1	Ge		772,686.00	0.41	96.7	Pulse	0.10	3
1	Rh		3,490,711.09	0.51	91.3	Pulse	0.10	3
1	In		3,864,144.02	0.45	94.8	Pulse	0.10	3
1	Tb		5,674,140.75	1.56	103.8	Analog	0.10	3
1	Ho		513,596.18	0.61	96.9	Pulse	0.10	3
1	Bi		3,213,757.35	0.43	95.1	Pulse	0.10	3
2	Sc		78,369.74	0.72	88.2	Pulse	0.30	3
2	Ge		51,576.73	1.68	93.3	Pulse	0.30	3
2	Ge		78,743.28	0.23	93.0	Pulse	0.30	3
2	Rh		1,556,586.26	1.19	89.6	Pulse	0.30	3
2	In		482,617.80	1.47	88.0	Pulse	0.30	3
2	Tb		2,033,254.22	0.92	90.8	Pulse	0.30	3
2	Ho		199,331.91	1.29	90.8	Pulse	0.30	3
2	Bi		1,393,184.28	1.41	89.6	Pulse	0.30	3
3	Sc		53,964.81	0.82	97.6	Pulse	0.30	3
3	Ge		35,795.86	1.58	99.4	Pulse	0.30	3
3	Ge		55,330.14	0.60	99.0	Pulse	0.30	3
3	Rh		587,573.68	0.24	96.0	Pulse	0.30	3
3	Tb		969,289.89	0.36	97.7	Pulse	0.30	3

Quantitation Report

File Name	052SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 17:02
Sample Name	mp8535-sd1
Sample Type	Sample
Comment	
Prep Dilution	50.000
Auto Dilution	N/A
Total Dilution	50.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.016	ug/l	85.74	10.67	4.117E-06	Pulse	0.25	3
B			1	120.318	ug/l	7.32	36,713.27	1.418E-02	Pulse	0.15	3
Ca			1	49315.155	ug/l	0.88	865,952.31	3.112E-01	Pulse	0.10	3
Sr			1	295.409	ug/l	0.35	246,848.20	6.827E-02	Pulse	0.10	3
Mo			1	10.883	ug/l	9.08	1,776.82	4.913E-04	Pulse	0.10	3
Ag			1	0.098	ug/l	36.39	63.33	1.606E-05	Pulse	0.10	3
Sn			1	3.170	ug/l	13.55	1,426.78	3.618E-04	Pulse	0.10	3
Sb			1	-4.348	ug/l	-3.59	1,206.76	2.143E-04	Pulse	0.10	3
Ba			1	37.849	ug/l	2.38	4,850.91	8.615E-04	Pulse	0.10	3
Tl			1	0.115	ug/l	22.96	120.00	3.658E-05	Pulse	0.10	3
Pb			1	1.800	ug/l	8.34	613.37	1.869E-04	Pulse	0.10	3
Pb			1	1.909	ug/l	16.89	516.70	1.573E-04	Pulse	0.10	3
Pb			1	1.849	ug/l	1.80	2,366.83	7.212E-04	Pulse	0.10	3
Na			2	36862.383	ug/l	0.92	598,140.95	7.454E+00	Pulse	0.30	3
Mg			2	6977.376	ug/l	0.85	50,988.64	6.354E-01	Pulse	0.30	3
Al			2	51.273	ug/l	15.67	162.22	2.023E-03	Pulse	0.30	3
K			2	4798.916	ug/l	4.49	25,314.81	3.155E-01	Pulse	0.30	3
Ca			2	51083.675	ug/l	1.31	11,625.26	1.449E-01	Pulse	0.30	3
Ti			2	3.579	ug/l	132.79	6.67	8.389E-05	Pulse	0.30	3
V			2	3.557	ug/l	23.35	402.23	5.017E-03	Pulse	0.30	3
Cr			2	1.174	ug/l	82.82	336.68	4.199E-03	Pulse	0.30	3
Mn			2	33.680	ug/l	4.25	1,367.85	1.704E-02	Pulse	0.30	3
Fe			2	460.286	ug/l	0.99	33,409.42	4.163E-01	Pulse	0.30	3
Co			2	0.396	ug/l	18.40	98.89	1.233E-03	Pulse	0.30	3
Ni			2	7.897	ug/l	15.68	346.67	4.322E-03	Pulse	0.30	3
Cu			2	30.795	ug/l	3.65	3,588.20	4.472E-02	Pulse	0.30	3
Zn			2	42.365	ug/l	6.11	736.69	9.179E-03	Pulse	0.30	3
As			2	3.226	ug/l	15.36	32.00	3.991E-04	Pulse	1.00	3
Cd			2	0.190	ug/l	42.62	5.56	1.116E-05	Pulse	0.30	3
Sn			2	1.131	ug/l	12.23	218.89	4.391E-04	Pulse	0.30	3
Se			3	0.832	ug/l	52.59	2.87	5.217E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,588,689.88	0.69	93.7	Pulse	0.10	3
1	Sc		2,782,762.77	0.22	93.4	Pulse	0.10	3
1	Ge		547,712.68	0.51	95.0	Pulse	0.10	3

Quantitation Report

1	Ge		767,893.84	0.50	96.1	Pulse	0.10	3
1	Rh		3,615,608.91	0.55	94.5	Pulse	0.10	3
1	In		3,942,727.74	0.72	96.8	Pulse	0.10	3
1	Tb		5,630,942.63	0.99	103.0	Analog	0.10	3
1	Ho		517,210.70	1.28	97.6	Pulse	0.10	3
1	Bi		3,282,071.52	0.65	97.1	Pulse	0.10	3
2	Sc		80,249.53	1.10	90.3	Pulse	0.30	3
2	Ge		51,445.20	2.15	93.0	Pulse	0.30	3
2	Ge		79,044.75	1.69	93.3	Pulse	0.30	3
2	Rh		1,600,068.34	1.10	92.1	Pulse	0.30	3
2	In		498,466.89	1.39	90.9	Pulse	0.30	3
2	Tb		2,049,031.86	0.35	91.5	Pulse	0.30	3
2	Ho		203,525.78	0.81	92.7	Pulse	0.30	3
2	Bi		1,436,247.72	0.66	92.3	Pulse	0.30	3
3	Sc		54,088.51	0.87	97.9	Pulse	0.30	3
3	Ge		35,839.28	1.23	99.6	Pulse	0.30	3
3	Ge		54,964.43	0.29	98.3	Pulse	0.30	3
3	Rh		593,069.26	0.80	96.9	Pulse	0.30	3
3	Tb		967,151.94	0.23	97.4	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 17:07
Sample Name	jc71255-1
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.018	ug/l	152.80	13.33	5.364E-06	Pulse	0.25	3
B			1	1164.873	ug/l	4.61	304,143.88	1.210E-01	Pulse	0.15	3
Ca			1	71593.847	ug/l	6.32	2,385,548.77	8.890E-01	Pulse	0.10	3
Sr			1	231.391	ug/l	5.49	368,886.80	1.069E-01	Pulse	0.10	3
Mo			1	1.451	ug/l	19.82	450.03	1.310E-04	Pulse	0.10	3
Ag			1	0.120	ug/l	55.85	116.67	3.134E-05	Pulse	0.10	3
Sn			1	1.173	ug/l	8.27	1,163.43	3.070E-04	Pulse	0.10	3
Sb			1	-1.907	ug/l	-12.82	1,350.12	2.442E-04	Pulse	0.10	3
Ba			1	237.041	ug/l	7.58	59,447.96	1.075E-02	Pulse	0.10	3
Tl			1	0.072	ug/l	9.20	136.67	4.351E-05	Pulse	0.10	3
Pb			1	0.627	ug/l	8.15	450.02	1.429E-04	Pulse	0.10	3
Pb			1	0.597	ug/l	10.25	336.69	1.068E-04	Pulse	0.10	3
Pb			1	0.549	ug/l	6.11	1,503.42	4.773E-04	Pulse	0.10	3
Na			2	84152.166	ug/l	1.45	2,697,408.37	3.378E+01	Pulse	0.30	3
Mg			2	9620.672	ug/l	1.28	139,758.67	1.750E+00	Pulse	0.30	3
Al			2	850.413	ug/l	3.72	3,721.56	4.662E-02	Pulse	0.30	3
K			2	2462.708	ug/l	3.22	25,706.51	3.220E-01	Pulse	0.30	3
Ca			2	70607.629	ug/l	1.81	31,868.31	3.991E-01	Pulse	0.30	3
Ti			2	9.850	ug/l	66.48	36.67	4.617E-04	Pulse	0.30	3
V			2	2.142	ug/l	19.73	447.79	5.612E-03	Pulse	0.30	3
Cr			2	1.113	ug/l	19.35	426.68	5.338E-03	Pulse	0.30	3
Mn			2	2335.143	ug/l	1.81	187,827.02	2.352E+00	Pulse	0.30	3
Fe			2	7552.344	ug/l	1.78	1,056,823.29	1.324E+01	Pulse	0.30	3
Co			2	0.906	ug/l	5.64	305.56	3.828E-03	Pulse	0.30	3
Ni			2	1.362	ug/l	8.02	136.67	1.712E-03	Pulse	0.30	3
Cu			2	10.678	ug/l	6.21	2,515.77	3.152E-02	Pulse	0.30	3
Zn			2	11.528	ug/l	13.60	442.23	5.531E-03	Pulse	0.30	3
As			2	2.422	ug/l	22.52	44.67	5.589E-04	Pulse	1.00	3
Cd			2	0.026	ug/l	155.34	2.22	4.485E-06	Pulse	0.30	3
Sn			2	0.427	ug/l	31.74	204.45	4.142E-04	Pulse	0.30	3
Se			3	0.160	ug/l	283.61	2.27	4.215E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,516,348.63	3.69	91.0	Pulse	0.10	3
1	Sc		2,689,554.70	5.58	90.3	Pulse	0.10	3
1	Ge		528,128.35	4.00	91.6	Pulse	0.10	3

Quantitation Report

1	Ge		739,044.05	4.32	92.5	Pulse	0.10	3
1	Rh		3,458,108.07	5.31	90.4	Pulse	0.10	3
1	In		3,788,230.84	5.63	93.0	Pulse	0.10	3
1	Tb		5,547,763.87	5.88	101.5	Analog	0.10	3
1	Ho		504,291.28	5.76	95.2	Pulse	0.10	3
1	Bi		3,146,796.52	4.10	93.1	Pulse	0.10	3
2	Sc		79,861.02	1.70	89.9	Pulse	0.30	3
2	Ge		50,611.61	0.50	91.5	Pulse	0.30	3
2	Ge		78,026.60	1.15	92.1	Pulse	0.30	3
2	Rh		1,584,385.94	0.12	91.2	Pulse	0.30	3
2	In		493,694.23	0.95	90.0	Pulse	0.30	3
2	Tb		2,046,568.04	0.71	91.4	Pulse	0.30	3
2	Ho		203,525.78	0.47	92.7	Pulse	0.30	3
2	Bi		1,418,446.68	0.98	91.2	Pulse	0.30	3
3	Sc		52,713.10	1.25	95.4	Pulse	0.30	3
3	Ge		34,531.05	1.19	95.9	Pulse	0.30	3
3	Ge		53,828.50	0.41	96.3	Pulse	0.30	3
3	Rh		577,454.13	0.70	94.4	Pulse	0.30	3
3	Tb		952,563.78	0.33	96.0	Pulse	0.30	3

Quantitation Report

File Name	054SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 17:12
Sample Name	jc71255-2
Sample Type	Sample
Comment	
Prep Dilution	50.000
Auto Dilution	N/A
Total Dilution	50.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.072	ug/l	92.43	18.67	7.579E-06	Pulse	0.25	3
B			1	161.810	ug/l	8.96	40,198.68	1.619E-02	Pulse	0.15	3
Ca			1	171382.596	ug/l	5.26	2,803,726.73	1.063E+00	Pulse	0.10	3
Sr			1	2960.445	ug/l	3.91	2,326,804.91	6.830E-01	Pulse	0.10	3
Mo			1	7.695	ug/l	7.57	1,186.75	3.474E-04	Pulse	0.10	3
Ag			1	0.073	ug/l	51.24	50.00	1.339E-05	Pulse	0.10	3
Sn			1	2.088	ug/l	53.73	1,066.93	2.898E-04	Pulse	0.10	3
Sb			1	-5.386	ug/l	-8.52	843.38	1.560E-04	Pulse	0.10	3
Ba			1	135.259	ug/l	4.19	16,589.33	3.069E-03	Pulse	0.10	3
Tl			1	0.069	ug/l	57.11	80.00	2.575E-05	Pulse	0.10	3
Pb			1	0.198	ug/l	77.12	180.01	5.768E-05	Pulse	0.10	3
Pb			1	0.729	ug/l	41.41	233.34	7.377E-05	Pulse	0.10	3
Pb			1	0.513	ug/l	24.31	903.38	2.877E-04	Pulse	0.10	3
Na			2	327440.419	ug/l	1.87	5,331,258.82	6.566E+01	Analog	0.30	3
Mg			2	35.188	ug/l	26.22	348.90	4.305E-03	Pulse	0.30	3
Al			2	2775.625	ug/l	1.58	6,145.63	7.567E-02	Pulse	0.30	3
K			2	29861.710	ug/l	1.50	129,894.61	1.600E+00	Pulse	0.30	3
Ca			2	175351.313	ug/l	2.33	40,226.12	4.954E-01	Pulse	0.30	3
Ti			2	2.311	ug/l	113.47	4.44	5.416E-05	Pulse	0.30	3
V			2	3.760	ug/l	20.86	421.12	5.183E-03	Pulse	0.30	3
Cr			2	2.436	ug/l	14.02	452.23	5.565E-03	Pulse	0.30	3
Mn			2	2.397	ug/l	2.92	104.45	1.286E-03	Pulse	0.30	3
Fe			2	62.251	ug/l	0.36	5,515.43	6.791E-02	Pulse	0.30	3
Co			2	0.357	ug/l	23.09	94.44	1.161E-03	Pulse	0.30	3
Ni			2	2.960	ug/l	20.43	148.89	1.831E-03	Pulse	0.30	3
Cu			2	4.898	ug/l	9.25	691.14	8.512E-03	Pulse	0.30	3
Zn			2	15.298	ug/l	15.04	330.01	4.065E-03	Pulse	0.30	3
As			2	0.437	ug/l	132.90	10.00	1.235E-04	Pulse	1.00	3
Cd			2	0.050	ug/l	314.39	2.22	4.418E-06	Pulse	0.30	3
Sn			2	-0.149	ug/l	-737.21	162.23	3.236E-04	Pulse	0.30	3
Se			3	0.704	ug/l	134.19	2.67	4.967E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,485,698.33	4.06	89.9	Pulse	0.10	3
1	Sc		2,643,499.80	5.36	88.7	Pulse	0.10	3
1	Ge		525,631.18	4.61	91.2	Pulse	0.10	3

Quantitation Report

1	Ge		732,409.91	4.76	91.7	Pulse	0.10	3
1	Rh		3,410,701.62	4.44	89.2	Pulse	0.10	3
1	In		3,705,091.55	4.82	90.9	Pulse	0.10	3
1	Tb		5,412,587.00	4.71	99.0	Analog	0.10	3
1	Ho		488,173.64	4.72	92.1	Pulse	0.10	3
1	Bi		3,142,150.06	4.78	92.9	Pulse	0.10	3
2	Sc		81,215.16	1.61	91.4	Pulse	0.30	3
2	Ge		51,955.64	0.81	94.0	Pulse	0.30	3
2	Ge		78,451.72	0.65	92.6	Pulse	0.30	3
2	Rh		1,595,303.17	0.93	91.8	Pulse	0.30	3
2	In		499,909.61	1.53	91.2	Pulse	0.30	3
2	Tb		2,057,418.25	0.78	91.9	Pulse	0.30	3
2	Ho		202,842.80	0.42	92.4	Pulse	0.30	3
2	Bi		1,436,308.94	0.71	92.3	Pulse	0.30	3
3	Sc		53,321.54	0.66	96.5	Pulse	0.30	3
3	Ge		34,945.13	1.54	97.1	Pulse	0.30	3
3	Ge		53,718.12	0.96	96.1	Pulse	0.30	3
3	Rh		583,642.90	0.56	95.4	Pulse	0.30	3
3	Tb		958,700.52	0.83	96.6	Pulse	0.30	3

Quantitation Report

File Name	055_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 17:17
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	49.558	ug/l	1.57	382,635.95	1.541E-01	Pulse	0.25	3
B			1	100.932	ug/l	1.90	626,357.58	2.523E-01	Pulse	0.15	3
Ca			1	5060.574	ug/l	1.23	4,149,570.15	1.565E+00	Pulse	0.10	3
Sr			1	51.933	ug/l	2.25	2,031,125.44	5.991E-01	Pulse	0.10	3
Mo			1	51.414	ug/l	2.33	393,423.47	1.160E-01	Pulse	0.10	3
Ag			1	48.818	ug/l	2.73	966,131.29	2.618E-01	Pulse	0.10	3
Sn			1	50.574	ug/l	2.40	621,191.72	1.683E-01	Pulse	0.10	3
Sb			1	50.502	ug/l	1.29	765,745.43	1.421E-01	Pulse	0.10	3
Ba			1	47.882	ug/l	1.61	292,413.06	5.426E-02	Pulse	0.10	3
Tl			1	50.947	ug/l	1.88	1,865,544.35	6.071E-01	Pulse	0.10	3
Pb			1	50.872	ug/l	1.70	630,982.27	2.053E-01	Pulse	0.10	3
Pb			1	50.955	ug/l	1.62	554,712.08	1.805E-01	Pulse	0.10	3
Pb			1	50.903	ug/l	1.77	2,537,200.37	8.257E-01	Pulse	0.10	3
Na			2	5043.406	ug/l	0.90	3,997,051.79	5.058E+01	Pulse	0.30	3
Mg			2	5047.611	ug/l	1.10	1,813,109.37	2.294E+01	Pulse	0.30	3
Al			2	4864.554	ug/l	1.98	519,621.16	6.576E+00	Pulse	0.30	3
K			2	5053.799	ug/l	1.01	1,028,623.64	1.302E+01	Pulse	0.30	3
Ca			2	5231.388	ug/l	1.70	58,370.51	7.386E-01	Pulse	0.30	3
Ti			2	49.706	ug/l	1.33	4,602.91	5.825E-02	Pulse	0.30	3
V			2	50.371	ug/l	2.01	163,260.69	2.066E+00	Pulse	0.30	3
Cr			2	50.480	ug/l	1.68	216,167.60	2.736E+00	Pulse	0.30	3
Mn			2	50.052	ug/l	1.76	99,608.43	1.261E+00	Pulse	0.30	3
Fe			2	5282.459	ug/l	2.38	18,269,867.05	2.312E+02	Analog	0.30	3
Co			2	49.876	ug/l	1.45	361,422.61	4.574E+00	Pulse	0.30	3
Ni			2	49.522	ug/l	1.16	98,766.41	1.250E+00	Pulse	0.30	3
Cu			2	49.601	ug/l	2.03	274,122.68	3.469E+00	Pulse	0.30	3
Zn			2	50.020	ug/l	2.40	37,431.51	4.737E-01	Pulse	0.30	3
As			2	50.178	ug/l	0.37	19,593.38	2.479E-01	Pulse	1.00	3
Cd			2	49.352	ug/l	1.17	57,602.83	1.191E-01	Pulse	0.30	3
Sn			2	49.874	ug/l	1.25	108,985.82	2.254E-01	Pulse	0.30	3
Se			3	48.794	ug/l	1.64	2,486.99	4.772E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,482,597.61	1.17	89.8	Pulse	0.10	3
1	Sc		2,651,513.92	1.59	89.0	Pulse	0.10	3
1	Ge		519,121.48	1.20	90.1	Pulse	0.10	3

Quantitation Report

1	Ge		727,804.97	0.72	91.1	Pulse	0.10	3
1	Rh		3,391,466.51	2.16	88.7	Pulse	0.10	3
1	In		3,691,813.04	2.12	90.6	Pulse	0.10	3
1	Tb		5,389,696.38	0.64	98.6	Analog	0.10	3
1	Ho		496,337.41	1.91	93.7	Pulse	0.10	3
1	Bi		3,073,531.31	1.65	90.9	Pulse	0.10	3
2	Sc		79,030.48	1.37	89.0	Pulse	0.30	3
2	Ge		50,954.72	0.52	92.2	Pulse	0.30	3
2	Ge		76,899.96	1.24	90.8	Pulse	0.30	3
2	Rh		1,543,958.41	0.75	88.8	Pulse	0.30	3
2	In		483,503.00	1.04	88.2	Pulse	0.30	3
2	Tb		2,052,123.25	1.01	91.7	Pulse	0.30	3
2	Ho		203,839.00	0.51	92.8	Pulse	0.30	3
2	Bi		1,385,947.20	0.53	89.1	Pulse	0.30	3
3	Sc		52,620.48	1.64	95.2	Pulse	0.30	3
3	Ge		33,861.76	0.45	94.1	Pulse	0.30	3
3	Ge		52,114.04	0.81	93.2	Pulse	0.30	3
3	Rh		561,186.39	1.19	91.7	Pulse	0.30	3
3	Tb		941,304.27	1.67	94.8	Pulse	0.30	3

Quantitation Report

File Name	056_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 17:22
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.005	ug/l	66.56	48.00	1.947E-05	Pulse	0.25	3
B			1	2.091	ug/l	7.25	32,731.76	1.342E-02	Pulse	0.15	3
Ca			1	-3.113	ug/l	-17.90	17,206.20	6.662E-03	Pulse	0.10	3
Sr			1	0.006	ug/l	72.52	670.04	1.976E-04	Pulse	0.10	3
Mo			1	0.044	ug/l	13.25	340.02	1.001E-04	Pulse	0.10	3
Ag			1	0.008	ug/l	48.76	176.67	4.822E-05	Pulse	0.10	3
Sn			1	0.087	ug/l	20.70	1,613.56	4.412E-04	Pulse	0.10	3
Sb			1	-0.099	ug/l	-8.12	976.73	1.818E-04	Pulse	0.10	3
Ba			1	0.011	ug/l	40.17	90.00	1.667E-05	Pulse	0.10	3
Tl			1	0.015	ug/l	5.24	583.36	1.888E-04	Pulse	0.10	3
Pb			1	0.003	ug/l	185.66	160.01	5.210E-05	Pulse	0.10	3
Pb			1	0.010	ug/l	57.58	183.34	5.897E-05	Pulse	0.10	3
Pb			1	0.009	ug/l	23.53	830.04	2.686E-04	Pulse	0.10	3
Na			2	0.305	ug/l	236.93	5,851.60	7.354E-02	Pulse	0.30	3
Mg			2	0.135	ug/l	43.79	136.67	1.718E-03	Pulse	0.30	3
Al			2	-0.006	ug/l	-1007.84	50.00	6.283E-04	Pulse	0.30	3
K			2	1.263	ug/l	12.75	5,799.95	7.285E-02	Pulse	0.30	3
Ca			2	-3.093	ug/l	-23.58	25.56	3.205E-04	Pulse	0.30	3
Ti			2	0.012	ug/l	173.21	1.11	1.393E-05	Pulse	0.30	3
V			2	-0.015	ug/l	-61.04	117.78	1.481E-03	Pulse	0.30	3
Cr			2	-0.005	ug/l	-107.35	213.34	2.681E-03	Pulse	0.30	3
Mn			2	0.006	ug/l	45.53	17.78	2.236E-04	Pulse	0.30	3
Fe			2	0.359	ug/l	17.83	2,316.86	2.911E-02	Pulse	0.30	3
Co			2	0.001	ug/l	185.01	50.00	6.292E-04	Pulse	0.30	3
Ni			2	0.001	ug/l	628.70	28.89	3.622E-04	Pulse	0.30	3
Cu			2	0.000	ug/l	2851.15	133.34	1.677E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.040	ug/l	32.89	123.34	1.550E-03	Pulse	0.30	3
As			2	0.006	ug/l	112.29	8.67	1.089E-04	Pulse	1.00	3
Cd			2	0.009	ug/l	45.30	12.22	2.490E-05	Pulse	0.30	3
Sn			2	0.064	ug/l	34.92	306.69	6.245E-04	Pulse	0.30	3
Se			3	0.027	ug/l	149.71	3.33	6.266E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,440,181.64	2.89	88.3	Pulse	0.10	3
1	Sc		2,583,472.20	2.51	86.7	Pulse	0.10	3
1	Ge		510,792.23	2.75	88.6	Pulse	0.10	3
1	Ge		711,009.05	1.69	89.0	Pulse	0.10	3
1	Rh		3,407,836.82	3.38	89.1	Pulse	0.10	3
1	In		3,665,158.93	2.67	89.9	Pulse	0.10	3
1	Tb		5,374,098.88	2.37	98.3	Analog	0.10	3
1	Ho		483,555.02	1.70	91.3	Pulse	0.10	3
1	Bi		3,091,201.52	2.91	91.4	Pulse	0.10	3
2	Sc		79,612.09	0.82	89.6	Pulse	0.30	3
2	Ge		50,565.63	0.86	91.5	Pulse	0.30	3
2	Ge		76,791.63	0.94	90.7	Pulse	0.30	3
2	Rh		1,587,426.85	0.54	91.3	Pulse	0.30	3
2	In		490,886.75	0.41	89.5	Pulse	0.30	3
2	Tb		2,037,844.09	0.59	91.0	Pulse	0.30	3
2	Ho		201,954.40	0.69	92.0	Pulse	0.30	3
2	Bi		1,416,080.43	0.73	91.0	Pulse	0.30	3
3	Sc		52,601.42	1.27	95.2	Pulse	0.30	3
3	Ge		33,987.53	2.31	94.4	Pulse	0.30	3
3	Ge		53,137.31	1.59	95.0	Pulse	0.30	3
3	Rh		585,033.33	0.70	95.6	Pulse	0.30	3
3	Tb		954,292.22	0.91	96.1	Pulse	0.30	3

Quantitation Report

File Name	057SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Method File	
Method Path	
Acq Time	8/13/2018 17:27
Sample Name	jc71255-3
Sample Type	Sample
Comment	
Prep Dilution	50.000
Auto Dilution	N/A
Total Dilution	50.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	8/13/2018 13:57
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.053	ug/l	49.57	16.00	6.405E-06	Pulse	0.25	3
B			1	156.548	ug/l	3.42	39,840.13	1.594E-02	Pulse	0.15	3
Ca			1	180027.435	ug/l	1.50	2,983,231.62	1.116E+00	Pulse	0.10	3
Sr			1	3195.539	ug/l	2.00	2,546,668.66	7.372E-01	Pulse	0.10	3
Mo			1	9.531	ug/l	2.34	1,486.78	4.302E-04	Pulse	0.10	3
Ag			1	0.122	ug/l	54.16	70.00	1.857E-05	Pulse	0.10	3
Sn			1	2.463	ug/l	29.69	1,186.76	3.147E-04	Pulse	0.10	3
Sb			1	-4.561	ug/l	-6.96	1,100.08	2.023E-04	Pulse	0.10	3
Ba			1	155.200	ug/l	1.51	19,122.34	3.521E-03	Pulse	0.10	3
Tl			1	0.128	ug/l	6.66	126.68	3.982E-05	Pulse	0.10	3
Pb			1	0.574	ug/l	6.11	280.01	8.799E-05	Pulse	0.10	3
Pb			1	0.739	ug/l	34.12	236.68	7.445E-05	Pulse	0.10	3
Pb			1	0.708	ug/l	16.99	1,116.73	3.511E-04	Pulse	0.10	3
Na			2	367605.708	ug/l	5.06	5,814,512.69	7.370E+01	Analog	0.30	3
Mg			2	22.249	ug/l	19.52	246.67	3.129E-03	Pulse	0.30	3
Al			2	3011.026	ug/l	2.76	6,476.86	8.204E-02	Pulse	0.30	3
K			2	34571.531	ug/l	5.45	145,227.79	1.841E+00	Pulse	0.30	3
Ca			2	194723.737	ug/l	4.82	43,399.71	5.501E-01	Pulse	0.30	3
Ti			2	1.801	ug/l	4.73	3.33	4.221E-05	Pulse	0.30	3
V			2	2.922	ug/l	15.54	354.45	4.497E-03	Pulse	0.30	3
Cr			2	2.704	ug/l	5.81	462.23	5.855E-03	Pulse	0.30	3
Mn			2	1.728	ug/l	45.23	74.45	9.492E-04	Pulse	0.30	3
Fe			2	34.129	ug/l	11.55	3,412.62	4.329E-02	Pulse	0.30	3
Co			2	0.402	ug/l	38.17	97.78	1.243E-03	Pulse	0.30	3
Ni			2	2.537	ug/l	1.75	127.78	1.618E-03	Pulse	0.30	3
Cu			2	6.069	ug/l	18.91	798.92	1.015E-02	Pulse	0.30	3
Zn			2	11.972	ug/l	8.25	271.12	3.437E-03	Pulse	0.30	3
As			2	0.763	ug/l	16.23	12.33	1.557E-04	Pulse	1.00	3
Cd			2	0.005	ug/l	1541.25	1.11	2.235E-06	Pulse	0.30	3
Sn			2	0.181	ug/l	268.21	172.23	3.533E-04	Pulse	0.30	3
Se			3	1.759	ug/l	43.96	3.73	7.030E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,500,260.35	0.62	90.5	Pulse	0.10	3
1	Sc		2,673,935.07	1.40	89.8	Pulse	0.10	3
1	Ge		524,773.31	0.55	91.1	Pulse	0.10	3

Current Signal

[1]



Mass	Range	Count	Avg. Count	RSD [%]
7	20000	3431	3482.5	1.58
59	50	3195	3210.4	1.11
89	20	5656	5698.6	0.90
140	20	5830	5862.9	2.05
205	100	4140	4086.6	2.04
156/140	100	0.841 %	0.734 %	12.62
70/140	1000	4.117 %	4.021 %	11.88
9	20	6	6.0	0.00
11	2000	4099	4088.5	1.86
88	100	101	98.7	8.86
95	20	4	5.0	34.64
107	20	8	6.0	72.65
121	50	135	128.7	4.42
137	20	35	36.3	4.20
208	50	41	49.3	18.39
Integration Time [sec]		0.10		

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.80	V	S/C Temp	2	℃
Smpl Depth	7.8	mm	Gas Switch	Dilution Gas	
Carrier Gas	0.55	L/min	Makeup/Dilution Gas	0.55	L/min
Option Gas	0.0	%			

Lenses Parameters

Extract 1	0.0	V	Cell Entrance	-26	V
Extract 2	-155.0	V	Cell Exit	-60	V
Omega Bias	-70	V	Deflect	16.4	V
Omega Lens	6.4	V	Plate Bias	-50	V

Cell Parameters

Use Gas	false		OctP Bias	-8.0	V
He Flow	0.0	mL/min	OctP RF	200	V
H2 Flow	0.0	mL/min	Energy Discrimination	5.0	V
3rd Gas Flow	0	%			

Meters

IF/BK Press	2.66E+2	Pa	S/C Temp (L)	2.0	℃
TMP Revolution	100.0	%	Carrier Gas(BP)	1.36E+2	kPa
Carrier Gas	0.55	L/min			

US EPA Tune Check Sample Report

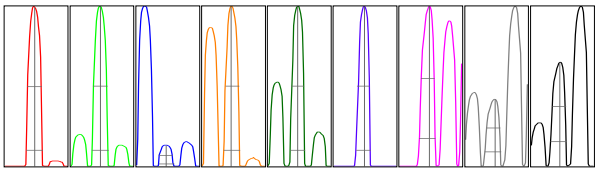
Batch Folder C:\Agilent\ICPMH\1\DATA\xa081318m1.b
Report Comment
Instrument Name G3281A JP10340551

[1]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	105251	0.46	5.00	
24	313415	0.29	5.00	
25	41072	0.49	5.00	
26	47168	0.50	5.00	
59	391386	0.32	5.00	
115	574415	0.33	5.00	
206	162148	0.30	5.00	
207	156445	0.39	5.00	
208	365291	0.29	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	104596	105175	105689	105039	105752
24	312128	313448	313523	313299	314680
25	41101	41053	41361	41049	40794
26	46851	47428	47195	47022	47345
59	389293	392210	391317	392561	391551
115	573882	576020	572256	573226	576689
206	162201	162931	161847	161640	162123
207	156798	157268	155825	156415	155921
208	364939	364662	364327	367061	365463

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	17064	8.95	8.9 - 9.1		0.768	0.900	
24	52785	23.95	23.9 - 24.1		0.756	0.900	
25	6954	24.95	24.9 - 25.1		0.711	0.900	
26	8017	25.90	25.9 - 26.1		0.753	0.900	
59	69473	58.95	58.9 - 59.1		0.679	0.900	
115	105619	115.00	114.9 - 115.1		0.682	0.900	
206	26783	205.95	205.9 - 206.1		0.757	0.900	
207	24304	206.95	206.9 - 207.1		0.746	0.900	
208	58159	207.90	207.9 - 208.1		0.741	0.900	

X% = 10 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

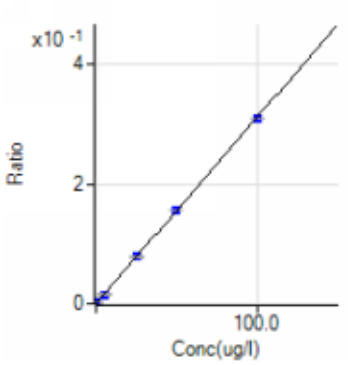
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1500	W	Carrier Gas	0.55	L/min			
RF Matching	1.80	V	Option Gas	0.0	%			
Smpl Depth	7.8	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	℃						

Lenses Parameters

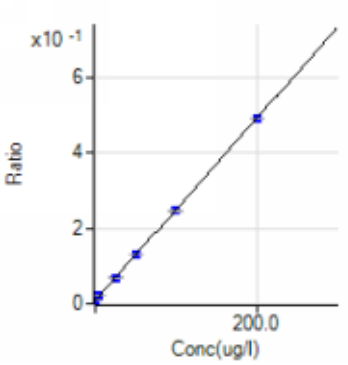
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	6.6	V			
Extract 2	-140.0	V	Cell Entrance	-24	V			
Omega Bias	-65	V	Cell Exit	-60	V			
Deflect	16.4	V						

Cell Parameters

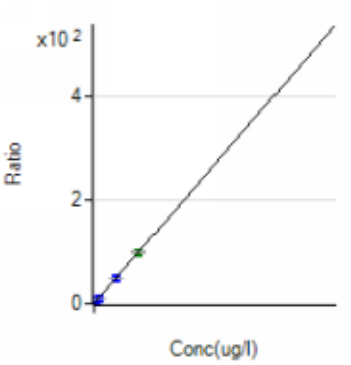
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			
Energy Discrimination	5.0	V						



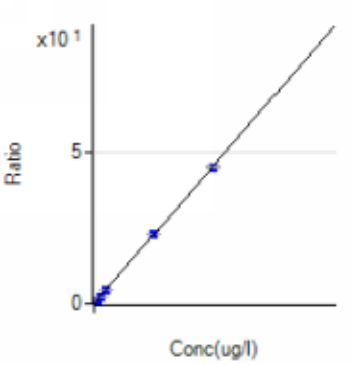
9 Be [1] / ISTD: 6 Li
y = 3.110E-3 x + 3.101E-6
R 1.0000
DL 0.002764
BEC 0.0009971



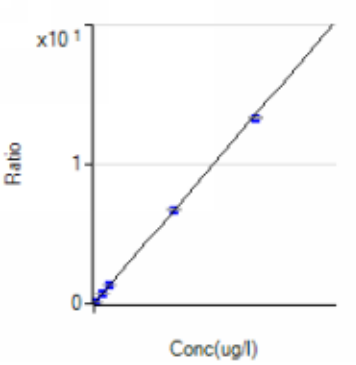
11 B [1] / ISTD: 6 Li
y = 2.417E-3 x + 8.367E-3
R 1.0000
DL 0.1677
BEC 3.462



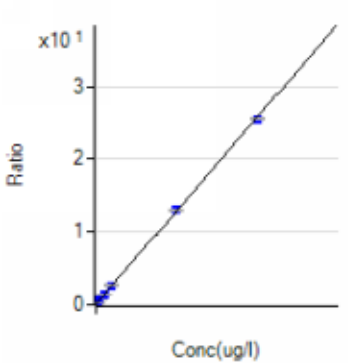
23 Na [2] / ISTD: 45 Sc
y = 1.001E-2 x + 7.049E-2
R 1.0000
DL 12.78
BEC 7.038



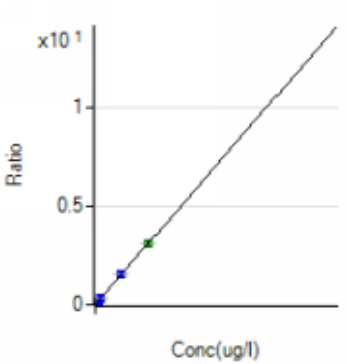
24 Mg [2] / ISTD: 45 Sc
y = 4.545E-3 x + 1.106E-3
R 1.0000
DL 0.03424
BEC 0.2433



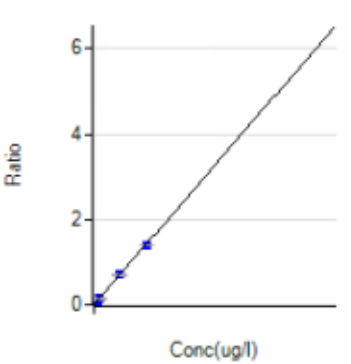
27 Al [2] / ISTD: 45 Sc
y = 1.352E-3 x + 6.368E-4
R 1.0000
DL 0.3343
BEC 0.4711



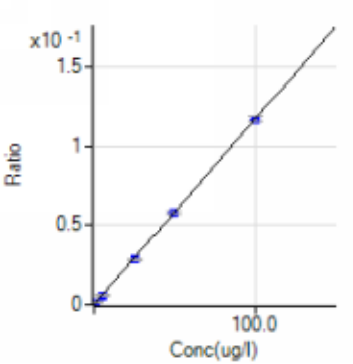
39 K [2] / ISTD: 45 Sc
y = 2.562E-3 x + 6.962E-2
R 1.0000
DL 2.978
BEC 27.17



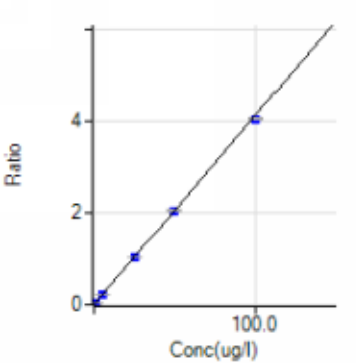
44 Ca [1] / ISTD: 45 Sc
y = 3.078E-4 x + 7.621E-3
R 1.0000
DL 2.045
BEC 24.76



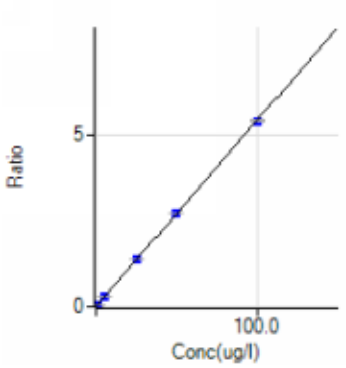
44 Ca [2] / ISTD: 45 Sc
y = 1.411E-4 x + 7.568E-4
R 1.0000
DL 3.725
BEC 5.365



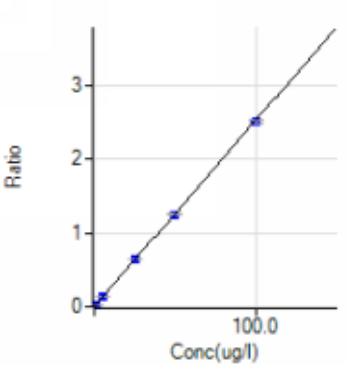
47 Ti [2] / ISTD: 45 Sc
y = 1.172E-3 x
R 1.0000
DL 0
BEC 0



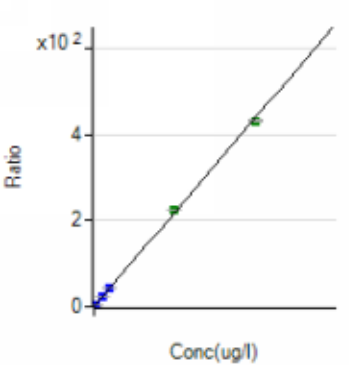
51 V [2] / ISTD: 45 Sc
y = 4.098E-2 x + 2.102E-3
R 1.0000
DL 0.02206
BEC 0.05129



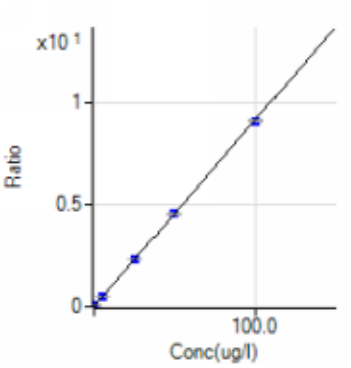
52 Cr [2] / ISTD: 45 Sc
y = 5.413E-2 x + 2.928E-3
R 1.0000
DL 0.01125
BEC 0.05408



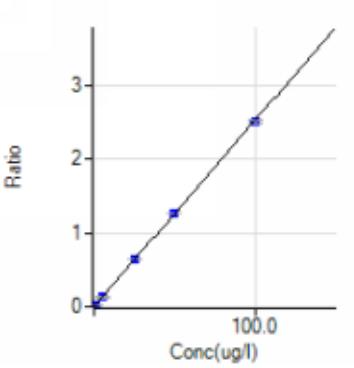
55 Mn [2] / ISTD: 45 Sc
y = 2.518E-2 x + 7.891E-5
R 1.0000
DL 0.00782
BEC 0.003133



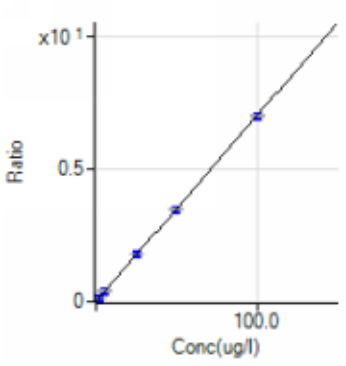
56 Fe [2] / ISTD: 45 Sc
y = 4.377E-2 x + 1.342E-2
R 0.9998
DL 0.08375
BEC 0.3065



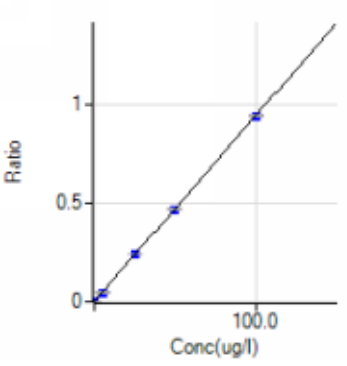
59 Co [2] / ISTD: 45 Sc
y = 9.169E-2 x + 5.064E-4
R 1.0000
DL 0.005048
BEC 0.005523



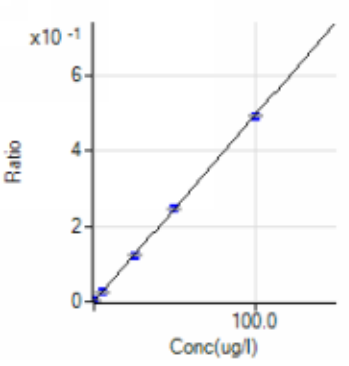
60 Ni [2] / ISTD: 45 Sc
y = 2.523E-2 x + 3.375E-4
R 1.0000
DL 0.01164
BEC 0.01337



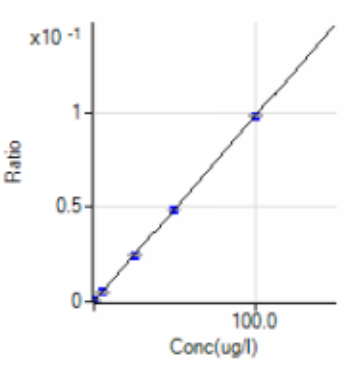
63 Cu [2] / ISTD: 45 Sc
y = 6.991E-2 x + 1.663E-3
R 1.0000
DL 0.007756
BEC 0.02379



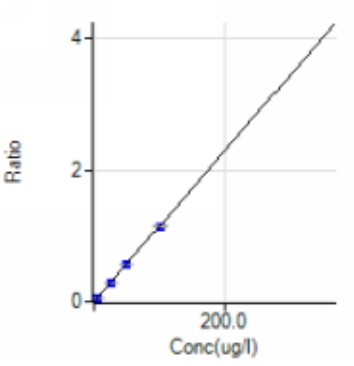
66 Zn [2] / ISTD: 45 Sc
y = 9.447E-3 x + 1.175E-3
R 1.0000
DL 0.101
BEC 0.1243



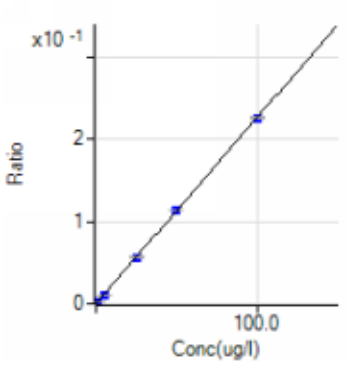
75 As [2] / ISTD: 45 Sc
y = 4.939E-3 x + 8.033E-5
R 1.0000
DL 0.02079
BEC 0.01626



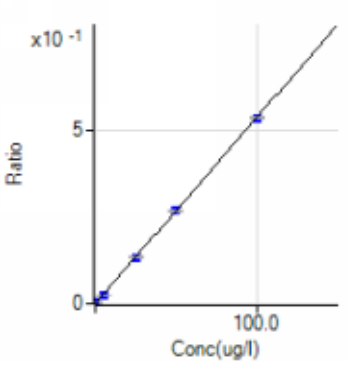
78 Se [3] / ISTD: 74 Ge
y = 9.773E-4 x + 3.591E-5
R 1.0000
DL 0.03873
BEC 0.03674



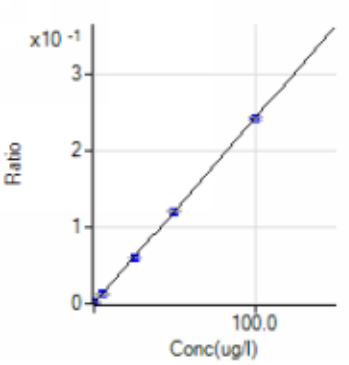
88 Sr [1] / ISTD: 103 Rh
y = 1.153E-2 x + 1.327E-4
R 1.0000
DL 0.003333
BEC 0.01151



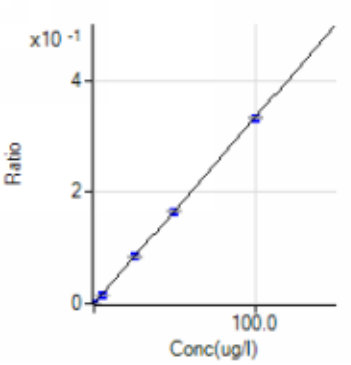
95 Mo [1] / ISTD: 103 Rh
y = 2.257E-3 x
R 1.0000
DL 0
BEC 0



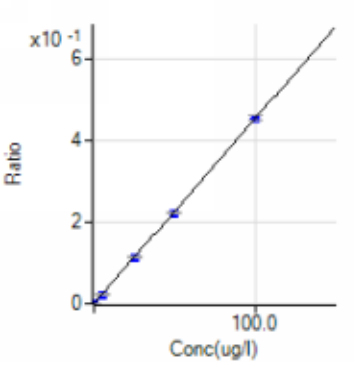
107 Ag [1] / ISTD: 115 In
y = 5.363E-3 x + 5.518E-6
R 1.0000
DL 0.003168
BEC 0.001029



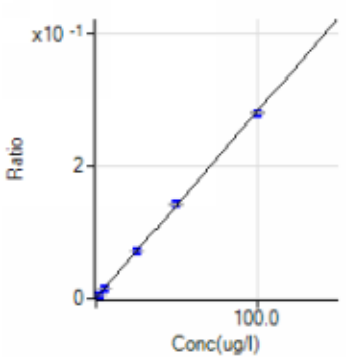
111 Cd [2] / ISTD: 115 In
y = 2.414E-3 x + 1.984E-6
R 1.0000
DL 0.004371
BEC 0.0008219



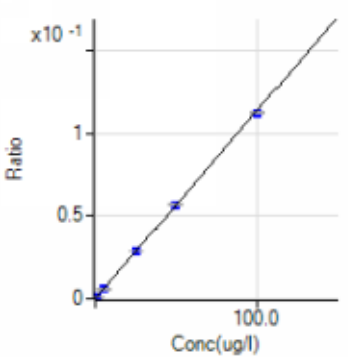
118 Sn [1] / ISTD: 115 In
y = 3.325E-3 x + 1.510E-4
R 1.0000
DL 0.02952
BEC 0.0454



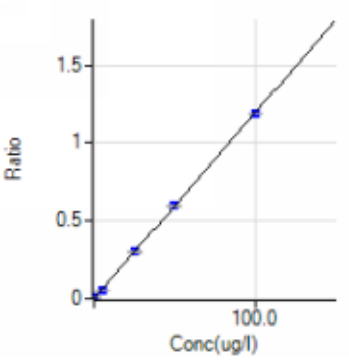
118 Sn [2] / ISTD: 115 In
y = 4.513E-3 x + 3.370E-4
R 0.9999
DL 0.04817
BEC 0.07468



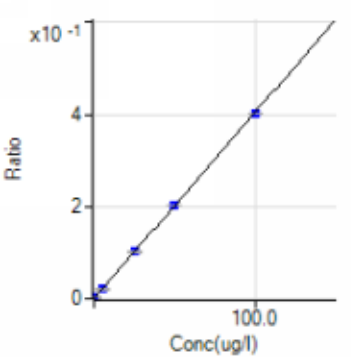
121 Sb [1] / ISTD: 159 Tb
y = 2.804E-3 x + 4.581E-4
R 1.0000
DL 0.0295
BEC 0.1634



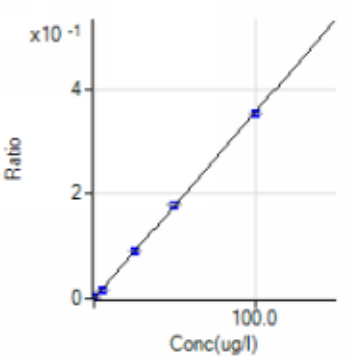
137 Ba [1] / ISTD: 159 Tb
y = 1.133E-3 x + 3.745E-6
R 1.0000
DL 6.7E-05
BEC 0.003305



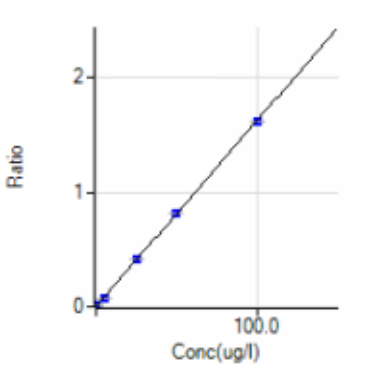
205 Tl [1] / ISTD: 209 Bi
y = 1.192E-2 x + 9.200E-6
R 1.0000
DL 0.002412
BEC 0.0007721



206 Pb [1] / ISTD: 209 Bi
y = 4.035E-3 x + 4.167E-5
R 1.0000
DL 0.004537
BEC 0.01033



207 Pb [1] / ISTD: 209 Bi
y = 3.542E-3 x + 2.211E-5
R 1.0000
DL 0.007585
BEC 0.006243



208 Pb [1] / ISTD: 209 Bi

y = 1.622E-2 x + 1.214E-4

R	1.0000
DL	0.001559
BEC	0.007488

ACCUTEST LABORATORIES

Mercury Hot Block Digestion Log

Product HG / EHG / HGCLP
Matrix: Aq / Liq / DW

Methods (Circle as appropriate)
EPA 245.1 SW846 7470A

Required corrected Temp. Range is 90-95 C.
Hot Block # 8 Start Time: 10:30 End Time: 12:30 Tube # 1-43
Start Temp: 96°C Corrected Start Temp: 94°C Correction: -2 Thermometer ID: 11517
End Temp: 96°C Corrected Start Temp: 94°C Correction: -2 Thermometer ID: 11517

MA Batch #: MA45052
Analyst: EAL
Date: 8/10/2018
Balance ID: N/A
Reagents: See attached sheet
Auto pipet ID: M-72

Bot #	Sample ID	pH <2 Y/N	Initial Sample Vol ml	Final Samp Vol ml	Spiked Used Amount Spiked	Spiked Used Added-Y or N	Spikelot and Conc (mg/L)	MP Number	Comments/Lot # and Vendor
1	ICV (External)	N	30	30	3.0 ml	Y	0.03		HG-18-138-306-HGB3, Ultra Scientific
2	ICB	N	30	30					
CCV	CCV	N	30	30	2.5 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
CCB	CCB	N	30	30					
3	CRI	N	30	30	2.0 ml	Y	0.003		HG-18-138-305-HGA4, Inorganic Venture
4	MP8547-MB2	N	30	30				MP8547	TCLP/MB27 SW846 7470A
5	MP8547-B2	N	30	30	2.0 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
6	JC71223-1	Y	30	30					
7	JC71336-1	Y	30	30					
8	MP8562-MB1	N	30	30					TCLP/29MB SW846 7470A
9	MP8562-MB2	N	30	30					TCLP/30MB
10	MP8562-B1	N	30	30	2.0 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
11	MP8562-B2	N	30	30	2.0 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
12	MP8562-S1	N	30	30	2.0 ml	Y	0.03		JC68615-8UA,HG-18-138-304-HGA3(IV)
CCV	CCV	N	30	30	2.5 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
CCB	CCB	N	30	30					
13	MP8562-S2	N	30	30	2.0 ml	Y	0.03		JC68615-8UA,HG-18-138-304-HGA3,(IV0
14	JC68615-8UA	N	30	30					
15	JC68615-9UA	Y	30	30					
16	JC68615-10UA	Y	30	30					
17	JC71454-2A	Y	30	30					
18	JC71344-1	Y	30	30					
19	JC71456-6A	Y	30	30					
20	JC71477-1B	Y	30	30					
21	JC71130-1	Y	30	30					
22	JC71496-2	Y	30	30					
CCV	CCV	N	30	30	2.5 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
CCB	CCB	N	30	30					
23	MP8567-MB1	N	30	30				MP8567	SW846 7470A
24	MP8567-B1	N	30	30	2.0 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
25	MP8567-S1	Y	30	30	2.0 ml	Y	0.03		JC71534-1,HG-18-138-304-HGA3,(IV)
26	MP8567-S2	Y	30	30	2.0 ml	Y	0.03		JC71534-1,HG-18-138-304-HGA3,(IV)
27	JC71534-1	Y	30	30					
28	JC71534-2	Y	30	30					
29	JC71534-3	Y	30	30					
30	JC71534-4	Y	30	30					
31	JC71534-5	Y	30	30					
32	JC71553-1	Y	30	30					
CCV	CCV	N	30	30	2.5 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
CCB	CCB	N	30	30					

4 Extra 0.5ml conc HNO3 was added before digestion

ANALYST: EAL DATE: 8/10/18
Spike witness: AP DATE: 8/10/18
QC REVIEWER: DATE:

Form HG022-03
Revision Date: 8/24/15

ACCUTEST LABORATORIES

Mercury Hot Block Digestion Log

Product HG / EHG / HGCLP
Matrix: Aq / Liq / DW

Methods (Circle as appropriate)
EPA 245.1 **SW846 7470A**

Required corrected Temp. Range is 90-95 C.
Hot Block # 7 Start Time: 12:40 End Time: 14:40 Tube # 45-71
Start Temp: 97C Corrected Start Temp: 94C Correction: -3 Thermometer ID: 4156488
End Temp: 97C Corrected Start Temp: 94C Correction: -3 Thermometer ID: 4156488

MA Batch #:	MA45052
Analyst:	EAL
Date:	8/10/2018
Balance ID:	N/A
Reagents:	See attached sheet
Auto pipet ID:	M-72

Bot #	Sample ID	pH <2 Y/N	Initial Sample Vol ml	Final Samp Vol ml	Spiked Used Amount Spiked	Spiked Used Added-Y or N	Spikelot and Conc (mg/L)	MP Number	Comments/Lot # and Vendor
33	JC71575-6	Y	30	30					
34	JC71575-7	Y	30	30					
35	JC71575-8	Y	30	30					
36	JC71575-9	Y	30	30					
37	JC71567-6	Y	30	30					
38	JC71580-1	Y	30	30					
39	JC71580-2	Y	30	30					
40	JC71580-3	Y	30	30					
41	JC71580-4	Y	30	30					
42	JC71337-16	Y	30	30					
CCV	CCV	N	30	30	2.5 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
CCB	CCB	N	30	30					
43	JC71604-1	Y	30	30					
44	SAMPLECONF	Y	30	30					
# 45	MP8573-MB1	N	1.0	30				MP8573	STLCE/32MB SW846 7470A
# 46	MP8573-B1	N	1.0	30	2.0 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
# 47	MP8573-S1	N	1.0	30	2.0 ml	Y	0.03		JC71477-1A
* 48	MP8573-S2	N	1.0	30	2.0 ml	Y	0.03		JC71477-1A
* 49	JC71477-1A	N	1.0	30					
* 50	MP8576-MB1	N	30	30				MP8576	TCLP/33MB SW846 7470A
* 51	MP8576-B1	N	30	30	2.0 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
* 52	MP8576-S1	N	30	30	2.0 ml	Y	0.03		JC71587-2A,HG-18-138-304-HGA3,(IV)
CCV	CCV	N	30	30	2.5 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
CCB	CCB	N	30	30					
* 53	MP8576-S2	N	30	30	2.0 ml	Y	0.03		JC71587-2A,HG-18-138-304-HGA3,(IV)
* 54	JC71587-2A	N	30	30					
55	JC71491-1	Y	5.0	30					MILKY WHITE
56	JC71523-1	Y	30	30					
57	JC71523-2	Y	30	30					
58	JC71523-3	Y	30	30					
59	JC71523-4	Y	30	30					
60	JC71523-5	Y	30	30					
61	JC71523-6	Y	30	30					
62	JC71523-7	Y	30	30					
CCV	CCV	N	30	30	2.5 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
CCB	CCB	N	30	30					

* 0.5ml extra Conc HNO3 was added before digestion.

ANALYST: EM DATE 8/10/18
Spike witness: BP DATE: 8/10/18
QC: REVIEWER: DATE

Form HG022-03
Revision Date: 8/24/15

ACCUTEST LABORATORIES

Mercury Hot Block Digestion Log

Product HG / EHG / HGCLP
Matrix: Aq / Liq / DW

MA Batch #: MA45052
Analyst: EAL
Date: 8/10/2018
Balance ID: N/A
Reagents: See attached sheet
Auto pipet ID: M-72

Methods (Circle as appropriate)
EPA 245.1 SW846 7470A

Required corrected Temp. Range is 90-95 C.
Hot Block #_____Start Time:_____End Time:_____Tube #_____.

Start Temp:_____Corrected Start Temp:_____Correction:_____Thermometer ID:_____.
End Temp:_____Corrected Start Temp:_____Correction:_____Thermometer ID:_____.

Bot #	Sample ID	pH <2 Y/N	Initial Sample Vol ml	Final Samp Vol ml	Spiked Used Amount Spiked	Spiked Used Added- Y or N	Spikelot and Conc (mg/L)	MP Number	Comments/Lot # and Vendor
63	MP8577-MB1	N	30	30				MP8577	TCLP /34MB SW846 7470A
64	MP8577-B1	N	30	30	2.0 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
65	MP8577-S1	N	30	30	2.0 ml	Y	0.03		JC71187-1R,HG-18-138-304-HGA3,(IV)
66	MP8577-S2	N	30	30	2.0 ml	Y	0.03		JC71187-1R,,HG-18-138-304-HGA3,(IV)
67	JC71187-1R	N	30	30					
68	JC71187-2R	Y	30	30					
69	JC71187-3R	Y	30	30					
70	JC71187-4R	Y	30	30					
71	JC71187-5R	Y	30	30					
72									
CCV	CCV	N	30	30	2.5 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
CCB	CCB	N	30	30					
73									
74									
75									
76									
77									
78									
79									
80									
81									
82									
CCV	CCV	N	30	30	2.5 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
CCB	CCB	N	30	30					
83									
84									
85									
86									
87									
88									
89									
90									
91									
92									
CCV	CCV	N	30	30	2.5 ml	Y	0.03		HG-18-138-304-HGA3, Inorganic Venture
CCB	CCB	N	30	30					

ANALYST: CM
Spike witness: BP
QC: REVIEWER:

DATE: 8/10/18
DATE: 8/10/18
DATE:

Form HG022-03
Revision Date: 8/24/15

13.4.1
13

ACCUTEST LABORATORIES

Mercury Hot Block Digestion Log

Product HG / EHG / HGCLP
Matrix: Aq / Liq / DW

MA Batch #: MA45052
Analyst: EAL
Date: 8/10/2018
Balance ID: B-24
Reagents: See attached sheet
Auto pipet ID: M-72

Methods (Circle as appropriate)
EPA 245.1 SW846 7470A

Required corrected Temp. Range is 90-95 C.
Hot Block # 8 Start Time: 10:30 End Time: 12:30 Tube #

Start Temp: 96c Corrected Start Temp: 94c Correction: -2 Thermometer ID: 11517
End Temp: 96c Corrected Start Temp: 94c Correction: -2 Thermometer ID: 11517

Bot #	Sample ID	pH <2 Y/N	Initial Sample Vol ml	Final Samp Vol ml	Spiked Used Amount Spiked	Spiked Used Added- Y or N	Spikelot and Conc (mg/L)	MP Number	Comments/Lot # and Vendor
S-1	Calibration Blank	N	30 ml	30 ml	0.0 ml	N			
S-2	0.2 ug/l Standard	N	30 ml	30 ml	2.0 ml	Y	0.003		HG-18-138-305-HGA4, Inorganic Venture
S-3	0.5 ug/l Standard	N	30 ml	30 ml	5.0 ml	Y	0.003		HG-18-138-305-HGA4, Inorganic Venture
S-4	1.0 ug/l Standard	N	30 ml	30 ml	1.0 ml	Y	0.030		HG-18-138-304-HGA3, Inorganic Venture
S-5	2.5 ug/l Standard	N	30 ml	30 ml	2.5 ml	Y	0.030		HG-18-138-304-HGA3, Inorganic Venture
S-6	5.0 ug/l Standard	N	30 ml	30 ml	5.0 ml	Y	0.030		HG-18-138-304-HGA3, Inorganic Venture

Form HG022-03
Revision Date: 8/24/15

ANALYST:
QC: REVIEWER:

DATE:
DATE:

SGS

Reagent Information Log- Hg Waters

MA # MA45052

Reagents	Exp. Date	Reagent # or manufacturer lot #
Conc. Sulfuric Acid	7/17/2020	Fisher -178261
Conc. Nitric Acid	8/8/2020	Baker - 197345
Sodium Chloride-Hydroxylamine Hydrochloride	3/6/2019	HG-18-136- 52 -HGHCL
Potassium Permanganate 5%	1/23/2019	HG-18-136- 50 -HGKM2
Potassium Persulfate	3/6/2019	HG-18-136- 51 -HGKS
Stannous Chloride	8/11/2018	HG-18-138- 307 -HGS
STD Hg standard solution 1000 ppm	3/1/2019	Inorganic Ventures K2-HG653768
STD Hg standard solu tion 30 ppb	8/11/2018	HG-18-138- 304 -HGA3
STD Hg standard solu tion 3ppb	8/11/2018	HG-18-138- 305 -HGA4
ICV Hg standard solution 1000 ppm	6/16/2020	Ultra T00601
ICV Hg standard solution 30ppb	7/9/2020	HG-18-138- 306 -HGB3
Dilution Acid	1/8/2019	HG-18-138- 299 HGD2
Digestion Tubes Lot	N/A	Environmental Express 1804377
ph Paper	N/A	Hydrion: 200814

Form:GN087A79-03
Rev. Date: 6/6/17

SGS North America Inc.

Accutest Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP8578	8/11/2018	07:30	8/11/2018	13:00	JC71649-3	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	8	4156517	96	-2	94
1	End	8	4156517	97	-2	95
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-74	1804377	

Sample ID	Bottle Number	Pres (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP8578-MB1	N/A	N	50	50	AB		✗
MP8578-B1	N/A	N	50	50	AB	ABCD	✗
MP8578-S1	4	Y	50	50	AB	ABCD	✗
MP8578-S2	4	Y	50	50	AB	ABCD	✗
MP8578-SD1	4	Y	50	50	AB		✗
JC71463-1	3	Y	1	50	AB		✗ MUDDY BROWN
JC71463-2	3	Y	1	50	AB		✗ MUDDY BROWN
JC71463-3	3	Y	1	50	AB		✗ MUDDY RED
JC71463-4	3	Y	25	50	AB		✗ RED
JC71463-5	7	Y	50	50	AB		
JC71604-1	7	Y	50	50	AB		
JC71649-3	4	Y	50	50	AB		
JC71649-3F	6	Y	50	50	AB		
JC71649-4	3	Y	50	50	AB		
JC71649-4F	4	Y	50	50	AB		
JC71649-7	3	Y	50	50	AB		
JC71649-7F	4	Y	50	50	AB		
JC71661-1A	1	Y	50	50	AB		
JC71661-2A	1	Y	50	50	AB		
JC71661-3A	1	Y	50	50	AB		
JC71661-4A	1	Y	50	50	AB		
MP8578-B2	N/A	N	50	50	AB	EFGH	✗
MP8578-S3	6	Y	50	50	AB	ABCD	✗
MP8578-S4	6	Y	50	50	AB	ABCD	✗
MP8578-S5	4	Y	50	50	AB	EFGH	✗
MP8578-S6	4	Y	50	50	AB	EFGH	✗
MP8578-S7	6	Y	50	50	AB	EFGH	✗
MP8578-S8	6	Y	50	50	AB	EFGH	✗
MP8578-SD2	6	Y	50	50	AB		✗

Reagents Groups

Group	Description	MLs Used
A	CONC HNO3	3
B	1:1 HCL	1
C		
D		
E		
F		
G		
H		

Spike Groups

Group	Description	MLs Used
A	ACCUTEST 13A REV 1	0.5
B	ACCUTEST 14A REV 1	0.5
C	AG 20PPM	0.625
D	MINERALS 500PPM	0.25
E	ACCUTEST 13B REV 1	0.2
F	MINERALS 5000PPM	0.25
G	AG 2PPM	0.2
H	MINERALS 40PPM	0.2

BP 8/11/18

F ACCUTEST 14BREV-1 0.2

Comments: ✗ FILTERED AFTER DIGESTION

Analyst: BHOOMAP Approved by: Approved on:

Note: Reagent traceability for batch Start Date can be seen on the reagent traceability page for this batch.
Serial Dilution samples shown for QC purposes only.
Acceptable Temperature range is 90-95 degrees C unless otherwise noted

SGS

Metals Digestion Reagents Information Log

Digestion Batch ID: MP 8578 Date: 8/11/18

Matrix: ALL

Standard/Reagent Type	Exp. Date	Standard/Reagent ID
Spiking Solution - (ACCUTEST -13A Rev1)	1/30/2019	MP-015-1075
Spiking Solution - (ACCUTEST -14A Rev1)	1/30/2019	MP-015-1076
Spiking Solution - 5000 mg/l Minerals	5/11/2019	N2-MEB667268 MFG: INO VENT
Spiking Solution - Sulfur 1000ppm	2/8/2020	LOT: 020817 MFG: ABS GRADE
Spiking Solution - Si 1000ppm	5/11/2019	K2-SI654310 MFG: INO VENT
Spiking Solution - Bi 1000ppm	12/1/2018	M2-B1658289 MFG: INO VENT
Spiking Solution - Se 20ppm	6/6/2019	MA-18-339-01
Spiking Solution - Li 1000ppm	11/14/2018	M2-LI657553 MFG: INO VENT
Spiking Solution- Ag 20 ppm	1/2/2019	MA-18-339-16
Spiking Solution - (ACCUTEST -13B Rev1)	10/25/2018	MP-015-1053
Spiking Solution - (ACCUTEST -14B Rev1)	12/14/2018	MP-015-1065
Spiking Solution - 400ppm Minerals	11/5/2018	MP-015-1068
Spiking Solution- P		
Nitric Acid	8/10/2020	LOT: 0197345 MFG: J.T. BAKER
Nitric Acid (1:1)	2/10/2019	MP-018-42-44 1:1 HNO3
Hydrochloric Acid	8/9/2020	LOT: 198300 MFG: J.T. BAKER
Hydrochloric Acid (1:1)	2/9/2019	MP-018-42-43 1:1 HCL
Hydrogen Peroxide	7/26/2020	LOT: 179149 MFG: FISHER
Soil Lab Control/Soil LC	3/21/2020	LOT: D094-540 MFG: ERA
Teflon Chips(For Soil MB and Blank Spike)	N/A	LOT: 23430173 MFG: SAINT-GOBAIN
Digestion Tubes	N/A	LOT: 1804377 MFG: ENV EXPRESS
pH Paper	11/30/2018	LOT: 232515 MFG: HYDRION
Filter paper Q8	N/A	LOT: 9802858 MFG: FISHER
Filter paper 0.45µm	N/A	LOT: F7NA69768 MFG: FISHER

Spike witnessed By: _____ Validated By: _____

Validated On: _____

AA014-06 (Metals Digest Stds)-DAYT-MET-0039-06-FORM-Metals Digestion Reagents Info Log.xls
1/17/18

13.4.2 13

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chemical Oxygen Demand	GP15280/GN84281	20	0.0	mg/l				
Chemical Oxygen Demand	GP15280/GN84281	20	0.0	mg/l	50	53.1	106.2	90-110%
HEM Oil and Grease	GP15240/GN84202	5.0	0.0	mg/l	40.29	34.2	84.9	78-114%
Solids, Total Suspended	GN84085	4.0	0.0	mg/l				
Total Organic Carbon	GP15279/GN84249	1.0	0.0	mg/l	10	9.73	97.3	90-110%

Associated Samples:
Batch GN84085: JC71604-1
Batch GP15240: JC71604-1
Batch GP15279: JC71604-1
Batch GP15280: JC71604-1
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chemical Oxygen Demand	GP15280/GN84281	JC71604-1	mg/l	25.3	25.3	0.0	0-25%
HEM Oil and Grease	GP15240/GN84202	JC71500-1	mg/l	0.0	0.0	0.0	0-18%
Solids, Total Suspended	GN84085	JC71638-2	mg/l	351	356	1.4	0-17%

Associated Samples:
Batch GN84085: JC71604-1
Batch GP15240: JC71604-1
Batch GP15280: JC71604-1
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chemical Oxygen Demand	GP15280/GN84281	JC71604-1	mg/l	25.3	50	78.4	106.2	55-133%
HEM Oil and Grease	GP15240/GN84202	JC71381-6	mg/l	3.2 U	40.29	35.6	88.4	78-114%
Total Organic Carbon	GP15279/GN84249	JC71131-2	mg/l	0.0	10	9.8	98.0	71-132%

Associated Samples:
Batch GP15240: JC71604-1
Batch GP15279: JC71604-1
Batch GP15280: JC71604-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Total Organic Carbon	GP15279/GN84249	JC71131-2	mg/l	0.0	10	9.9	1.0	10%

Associated Samples:
Batch GP15279: JC71604-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: D80814W2.TXT Date Analyzed: 08/14/18 Methods: SM5310 B-11
Analyst: CD Run ID: GN84249
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:36	GN84249-STD1	1		STDA
11:57	GN84249-STD2	1		STDB
12:14	GN84249-STD3	1		STDC
12:33	GN84249-STD4	1		STDD
12:51	GN84249-STD5	1		STDE
13:06	GN84249-STD6	1		STDF
13:17	GN84249-STD7	1		STDG
13:29	GN84249-STD8	1		STDH
09:30	ZZZZZZ	1		
09:45	GN84249-CRI1	1		
09:59	GN84249-HSTD1	1		
10:11	GN84249-ICV1	1		
10:27	GN84249-ICB1	1		
10:42	GN84249-CCV1	1		
10:58	GN84249-CCB1	1		
11:15	ZZZZZZ	1		
15:12	GN84249-CCVA1	1		
15:28	GN84249-CCB2	1		
16:50	GN84249-CCV2	1		
17:05	GN84249-CCB3	1		
17:22	ZZZZZZ	1		
17:39	GP15276-MB1	1		
17:51	GP15276-B1	1		
18:01	ZZZZZZ	1		
18:13	ZZZZZZ	1		
18:24	ZZZZZZ	1		
18:42	ZZZZZZ	1		
19:06	ZZZZZZ	1		
19:18	ZZZZZZ	1		
19:30	ZZZZZZ	1		
19:40	GN84249-CCVA2	1		
19:55	GN84249-CCB4	1		
20:05	JC71017-8	1		(sample used for QC only; not part of login JC71604)

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: D80814W2.TXT Date Analyzed: 08/14/18 Methods: SM5310 B-11
Analyst: CD Run ID: GN84249
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:14	GP15276-S1	1		
20:25	GP15276-MSD1	1		
20:37	ZZZZZZ	1		
20:49	ZZZZZZ	1		
21:04	GP15277-MB1	1		
21:12	GP15277-B1	1		
21:24	JC71017-11	1		(sample used for QC only; not part of login JC71604)
21:35	GP15277-S1	1		
21:46	GP15277-MSD1	1		
21:57	GN84249-CCV3	1		
22:14	GN84249-CCB5	1		
22:22	ZZZZZZ	1		
22:33	ZZZZZZ	1		
22:45	ZZZZZZ	1		
22:58	ZZZZZZ	1		
23:07	ZZZZZZ	3		
23:18	ZZZZZZ	1		
23:38	ZZZZZZ	1		
23:49	ZZZZZZ	1		
23:59	ZZZZZZ	1		
00:11	GP15278-MB1	1		
00:22	GN84249-CCVA3	1		
00:34	GN84249-CCB6	1		
00:47	GP15278-B1	1		
00:58	ZZZZZZ	1		
01:12	JC71027-4	1		(sample used for QC only; not part of login JC71604)
01:23	GP15278-S1	1		
01:35	GP15278-MSD1	1		
01:47	ZZZZZZ	1		
02:01	ZZZZZZ	1		
02:10	ZZZZZZ	1		
02:21	ZZZZZZ	1		
02:35	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: D80814W2.TXT Date Analyzed: 08/14/18 Methods: SM5310 B-11
Analyst: CD Run ID: GN84249
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
02:42	GN84249-CCV4	1		
02:58	GN84249-CCB7	1		
03:18	ZZZZZZ	1		
03:29	ZZZZZZ	1		
03:45	ZZZZZZ	1		
03:57	GP15279-MB1	1		
04:05	GP15279-B1	1		
04:17	JC71131-2	1		(sample used for QC only; not part of login JC71604)
04:28	GP15279-S1	1		
04:38	GP15279-MSD1	1		
04:53	ZZZZZZ	1		
05:02	ZZZZZZ	1		
05:21	GN84249-CCVA4	1		
05:36	GN84249-CCB8	1		
05:44	JC71604-1	1		
05:56	ZZZZZZ	1		
06:06	ZZZZZZ	1		
06:17	GN84249-CCV5	1		
06:29	GN84249-CCB9	1		
06:42	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JC71604
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: D80814W2.TXT Date Analyzed: 08/14/18 Methods: SM5310 B-11
Run ID: GN84249 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN84249-CRI1	Total Organic Carbon	0.830	1.0	0.72	1	83.0	70-130
GN84249-HSTD1	Total Organic Carbon	50.6	1.0	0.72	50	101.2	90-110
GN84249-ICV1	Total Organic Carbon	18.3	1.0	0.72	20	91.5	90-110
GN84249-ICB1	Total Organic Carbon	0.72 U	1.0	0.72			
GN84249-CCV1	Total Organic Carbon	25.5	1.0	0.72	25	102.0	90-110
GN84249-CCB1	Total Organic Carbon	0.72 U	1.0	0.72			
GN84249-CCVA1	Total Organic Carbon	50.1	1.0	0.72	50	100.2	
GN84249-CCB2	Total Organic Carbon	0.72 U	1.0	0.72			
GN84249-CCV2	Total Organic Carbon	24.0	1.0	0.72	25	96.0	90-110
GN84249-CCB3	Total Organic Carbon	0.72 U	1.0	0.72			
GN84249-CCVA2	Total Organic Carbon	51.1	1.0	0.72	50	102.2	
GN84249-CCB4	Total Organic Carbon	0.72 U	1.0	0.72			
GN84249-CCV3	Total Organic Carbon	25.3	1.0	0.72	25	101.2	90-110
GN84249-CCB5	Total Organic Carbon	0.72 U	1.0	0.72			
GN84249-CCVA3	Total Organic Carbon	51.3	1.0	0.72	50	102.6	
GN84249-CCB6	Total Organic Carbon	0.72 U	1.0	0.72			
GN84249-CCV4	Total Organic Carbon	24.7	1.0	0.72	25	98.8	90-110
GN84249-CCB7	Total Organic Carbon	0.72 U	1.0	0.72			
GN84249-CCVA4	Total Organic Carbon	51.1	1.0	0.72	50	102.2	
GN84249-CCB8	Total Organic Carbon	0.72 U	1.0	0.72			
GN84249-CCV5	Total Organic Carbon	24.8	1.0	0.72	25	99.2	90-110
GN84249-CCB9	Total Organic Carbon	0.72 U	1.0	0.72			

(!) Outside of QC limits

General Chemistry

Raw Data

Test: Total Suspended Solids
Method: SM2540 D-11

Product: TSS
Units: mg/l
RL: 4.0

GN Batch ID: GN84085
Analyst: RC
Date: 8/10/2018
Balance ID: B53

QC Summary

Filtration Date: 8/10/18
Filtration Time: 10:54

MB ID: GN84085-MB1 Result: <RDL RDL: 4 < RDL yes
Dup ID: GN84085-D1 Samp Resu 351.11 Dup Result: 355.56 % RPD: 1.26
Dup ID: GN84085-D2 Samp Mass 0.18 Dup Mass: 0.18 % RPD: 0

Acceptable Temp. Range = 103 to 105 deg. C.

Therm ID: 5624416
Corr Factor: 0

Date:					8/10/2018	8/10/2018										
Time (Start/Finish):					12:13/14:08	14:24/15:05										
UnCorr Temp (Start/Finish):					104/104	104/104										
Corr Temp (Start/Finish):					104/104	104/104										
Bot #	Dish #	Sample ID	Filter Size*	Volume Filtered (ml)	Filter Tare Weight in g*	Weight after drying at 104 deg. C in g	Redry #1 Weight in g (a)	Redry ?	Redry # 2 Weight in g (a)	Redry ?	Redry # 3 Weight in g (a)	Constant Weight in g (a)	TSS in mg/l (Calculated)	Final TSS in mg/l**	Mass %RPD	Mass %RPD > 5%
	Z1	GN84085-MB1	42	1000.0	0.09510	0.09510	0.09510	NO				0.09510		0.00		1000
	Z2	GN84085-D1	42	45.0	0.09580	0.11190	0.11180	NO				0.11180		355.56	1.26%	45
6	Z3	JC71638-2	42	45.0	0.09560	0.11150	0.11140	NO				0.11140		351.11		45
	Z4	GN84085-D2	42	550.0	0.09730	0.09740	0.09740	NO				0.09740		0.18	0.00%	550
2	Z5	JC71622-2	42	550.0	0.09690	0.09700	0.09700	NO				0.09700		0.18		550
4	Z6	JC71645-2	42	1000.0	0.09650	0.09920	0.09910	NO				0.09910		2.60		1000
2	Z7	JC71649-2	42	800.0	0.09620	0.11060	0.11060	NO				0.11060		18.00		800
9	Z8	JC71649-3	42	1000.0	0.09580	0.09580	0.09580	NO				0.09580		0.00		1000
5	Z9	JC71649-4	42	1000.0	0.09600	0.09600	0.09600	NO				0.09600		0.00		1000
5	Z10	JC71649-7	42	1000.0	0.09560	0.09910	0.09900	NO				0.09900		3.40		1000
4	Z11	JC71651-1	42	1000.0	0.09660	0.09750	0.09750	NO				0.09750		0.90		1000
5	Z12	JC71645-1	42	1000.0	0.09480	0.09860	0.09850	NO				0.09850		3.70		1000
3	Z13	JC71623-2	42	1000.0	0.09510	0.09710	0.09710	NO				0.09710		2.00		1000
3	Z14	JC71616-1	42	600.0	0.09610	0.10280	0.10270	NO				0.10270		11.00		600
2	Z15	JC71615-1	42	1000.0	0.09600	0.09920	0.09920	NO				0.09920		3.20		1000
3	Z16	JC71613-2	42	930.0	0.09610	0.09870	0.09870	NO				0.09870		2.80		930
7	Z17	JC71607-1	42	120.0	0.09510	0.11130	0.11130	NO				0.11130		135.00		120
6	Z18	JC71605-1	42	1000.0	0.09600	0.09660	0.09660	NO				0.09660		0.60		1000
9	Z19	JC71604-1	42	1000.0	0.09430	0.10610	0.10610	NO				0.10610		11.80		1000
1	Z20	JC71680-2	42	170.0	0.09560	0.10130	0.10130	NO				0.10130		33.53		170
1	Z21	JC71680-3	42	330.0	0.09550	0.10010	0.10010	NO				0.10010		13.94		330

(a) Redries when result is <DL after the initial weighing. Note: Constant weight is a change of <4% of the sample mass or 0.0005 g, whichever is

*Filters are dried and dessicated for a minimum of 12 hours ensure constant tare weight.

**Final TSS, mg/L = [(constant weight - filter tare mass, g) × 1000] ÷ (initial volume, mL ÷ 1000)

Comments:

TSS Worksheet

SGS ACCUTEST

Acceptable Temp. Range = 103 to 105 deg. C.

** Note - Filters are dried for a minimum of 1.5 h and dessicated for a minimum of 12 h. Constant mass is determined prior to filtering.

Date:		8/9/2018	8/10/2018				
Time (Start/Finish):		13:00/14:00	8:48/10:39				
Uncorr Temp Deg C (Start/Finish):		104/104	104/104				
Corr Temp Deg C (Start/Finish):		104/104	104/104				
Dish #	Filter size	Initial weight after drying** (mg)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)
Z1	42.00000	0.09510	0.09510	NO		FALSE	
Z2	42.00000	0.09570	0.09580	NO		FALSE	
Z3	42.00000	0.09580	0.09560	NO		FALSE	
Z4	42.00000	0.09730	0.09730	NO		FALSE	
Z5	42.00000	0.09690	0.09690	NO		FALSE	
Z6	42.00000	0.09650	0.09650	NO		FALSE	
Z7	42.00000	0.09630	0.09620	NO		FALSE	
Z8	42.00000	0.09610	0.09580	NO		FALSE	
Z9	42.00000	0.09610	0.09600	NO		FALSE	
Z10	42.00000	0.09590	0.09560	NO		FALSE	
Z11	42.00000	0.09670	0.09660	NO		FALSE	
Z12	42.00000	0.09490	0.09480	NO		FALSE	
Z13	42.00000	0.09480	0.09510	NO		FALSE	
Z14	42.00000	0.09610	0.09610	NO		FALSE	
Z15	42.00000	0.09610	0.09600	NO		FALSE	
Z16	42.00000	0.09610	0.09610	NO		FALSE	
Z17	42.00000	0.09510	0.09510	NO		FALSE	
Z18	42.00000	0.09580	0.09600	NO		FALSE	
Z19	42.00000	0.09430	0.09430	NO		FALSE	
Z20	42.00000	0.09580	0.09560	NO		FALSE	
Z21	42.00000	0.09540	0.09550	NO		FALSE	
				FALSE		FALSE	
				FALSE		FALSE	
				FALSE		FALSE	
				FALSE		FALSE	
				FALSE		FALSE	
				FALSE		FALSE	
				FALSE		FALSE	
				FALSE		FALSE	
				FALSE		FALSE	
				FALSE		FALSE	
				FALSE		FALSE	
				FALSE		FALSE	

Constant Weight	
0.0951	X
0.0972	
0.0956	
0.0973	
0.0969	
0.0965	
0.0962	
0.0958	
0.0960	
0.0956	
0.0966	
0.0948	
0.0951	
0.0961	
0.0960	
0.0961	
0.0951	
0.0960	
0.0943	
0.0956	
0.0955	

JJY

SGS ACCUTEST

GN84085

TSS SAMPLE DESCRIPTION SHEET

	Accutest Sample ID	Appearance (clarity, color, etc.)	Filter size	Non-standard volumes. Comment with reason as shown below.	Limited Volume	
6	JC71638-2	cloudy, light Brown		45a		QC D1
2	JC71622-2	Clear		550	✓	
4	JC71645-2	Cloudy & Pale		1000		
2	JC71649-2	Pale, Cloudy		800a		
9	JC71649-3	Clear		1000		
5	JC71649-4	Clear		1000		
5	JC71649-7	Clear		1000		
4	JC71651-1	Clear		1000		
5	JC71645-1	Pale		1000		
3	JC71623-2	Clear		1000		
3	JC71616-1	Pale		600a		
2	JC71615-1	Hazy		1000		
3	JC71613-2	Pale		930	✓	
7	JC71607-1	Cloudy, Smelly, Particles		120a		
6	JC71605-1	Clear		1000		
9	JC71604-1	Pale		1000		
1	JC71680-2	Cloudy, Smelly, Yellow & Particles		170a		
1	JC71680-3	Cloudy, Yellow & Particles		330a		

Form: GN215-01
Rev. Date: 11/16/09

SGS

TEST: HEM Oil and Grease		OG1664		GN Group:	GN84202
Method: EPA 1664A		Reporting Date:	8/13/2018	GP Group:	GP15240
Date Extracted:	8/13/2018	Final Date Weighed:	8/13/2018	Analyst:	TM
Balance # Used:	B16	(Refer to balance log for balance calibration)		Units:	mg/L

QC Summary — Units: mg/l

Dup Sample ID:	JC71500-1	Samp Res:	1.1	Dup Result:	1.089	% RPD:	
MS Sample ID:	JC71381-6	Samp Res:	0.1	Spike:	40.29	MS Res:	35.6
Method Blank Date:	8/13/2018	Result:	0.2	RL:	5		
Blank Spike Date:	8/13/2018	Result:	34.2	Spk Amt.	40.29		
External:	NA	Control Limit:	NA	Result:	NA		

% Rec.	88.3593944
<RL:	yes
% Rec.	84.8845867
% Rec.	NA

Speed Vap Temperature During Evaporation: 40 deg. C

See attached Reagent Log for Reagent info

(c) refer to Determination of Constant weights page for balance check weight results.

Flask #	Sample ID	Sample pH	Sample Volume (ml)	Total Weight (g)	Tare Weight (g)	Sample Weight (g)	Calc Result	Final Result	RL	Analysis Time
	0.002 g check (c)	na	na	0.0020	0.0020	na	na	na	na	10:00
	1.000 g check (c)	na	na	1.0000	1.0001	na	na	na	na	
	5.000 g check (c)	na	na	5.0006	5.0004	na	na	na	na	
	100 g check (c)	na	na	100.0124	100.0121	na	na	na	na	
MB	GP15240-MB1	<2	1000	2.4785	2.4783	0.0002	0.200	<5	5.00	10:00
BSP	GP15240-B1	<2	1000	2.5242	2.4900	0.0342	34.200	34.200	5.00	
MS	GP15240-S1	<2	1000	2.5254	2.4898	0.0356	35.600	35.600	5.00	
DUP	GP15240-D1	<2	1010	2.4813	2.4802	0.0011	1.089	<4.95	4.95	
1	JC71381-5	<2	990	2.4827	2.4826	0.0001	0.101	<5.05	5.05	
2	JC71381-6	<2	1000	2.4785	2.4784	0.0001	0.100	<5	5.00	
3	JC71538-1	<2	1000	2.4776	2.4772	0.0004	0.400	<5	5.00	
4	JC71538-2	<2	1000	2.5073	2.5059	0.0014	1.400	<5	5.00	
5	JC71500-1	<2	1000	2.4768	2.4757	0.0011	1.100	<5	5.00	
6	JC71500-3	<2	1010	2.4722	2.4718	0.0004	0.396	<4.95	4.95	
7	JC71604-1	<2	1000	2.4614	2.4603	0.0011	1.100	<5	5.00	
8	JC71641-1	<2	930	2.5149	2.5145	0.0004	0.430	<5.38	5.38	
9	JC71641-2	<2	1010	2.4724	2.4714	0.0010	0.990	<4.95	4.95	
10	JC71641-3	<2	1000	2.4796	2.4788	0.0008	0.800	<5	5.00	16:00
	0.002g check(a)	na	na	0.0020	0.0020	na	na	na	na	
	1.000g check(b)	na	na	1.0000	1.0000	na	na	na	na	

SGS ACCUTEST

DETERMINATION OF CONSTANT WEIGHT

Test: HEM Oil and Grease
Method: EPA 1664A
Test Code: OG1664 10A

GN Group: GN84202
GP Group: GP15240
Analyst: TM
Units: mg/l

Balance ID#: B-16
Thermometer ID#: 73133
Thermometer correction facto -0.1

Definition of Constant Weight: Weight loss is less than 0.5 mg (0.0005 g).

Date:		8/13/2018	8/13/2018					
Start Time, End Time, Temp (Corrected, Uncorrected)	NA	13:00-13:30	14:15-14:45					
Sample ID	Flask #	Initial Weight (g)	Second Weight (g)	Re-Weigh ?	Third Weight (g)	Re-Weigh ?	Fourth Weight (g)	Description
0.002 g check (c)		0.0020	0.0020	N				
1.000 g check (c)		1.0000	1.0000	N				
5.000 g check (c)		5.0004	5.0003					
100 g check (c)		100.0130	100.0126	N				
GP15240-MB1	MB	2.4785	2.4785	N				
GP15240-B1	BSP	2.5242	2.5242	N				
GP15240-S1	MS	2.5254	2.5254	N				
GP15240-D1	DUP	2.4813	2.4813	N				
JC71381-5	1	2.4827	2.4827	N				
JC71381-6	2	2.4785	2.4785	N				
JC71538-1	3	2.4776	2.4776	N				
JC71538-2	4	2.5073	2.5073	N				
JC71500-1	5	2.4768	2.4768	N				
JC71500-3	6	2.4722	2.4722	N				
JC71604-1	7	2.4614	2.4614	N				
JC71641-1	8	2.5149	2.5149	N				
JC71641-2	9	2.4724	2.4724	N				
JC71641-3	10	2.4796	2.4796	N				
0.002g check(a)		0.0020	0.0020	N				
1.000g check(b)		1.0000	1.0000	N				
5.000g check(c)		5.0004	5.0004	N				

Note: Samples must be dried at 70 +/- 2 deg. For a minimum of 30 minutes for each drying cycle.

SGS

GP15240- OG1664

TRAY B

SAMPLE DESCRIPTION SHEET

	Accutest Sample ID	Bottle #	Volume (mL)	Appearance (clarity, color, etc.)	Odor
MB	GP15240-MB1	NA	1000	CLEAR	NONE
BSP	GP15240-B1	NA	1000	CLEAR	NONE
MS	GP15240-S1	2	1000	CLEAR	NONE
DUP	GP15240-D1	2	1010	CLEAR	NONE
1	JC71381-5	1	990	CLEAR	NONE
2	JC71381-6	1	1000	CLEAR	NONE
3	JC71538-1	1	1000	CLEAR	NONE
4	JC71538-2	1	1000	CLEAR	NONE
5	JC71500-1	1	1000	CLEAR	NONE
6	JC71500-3	2	1010	CLEAR	NONE
7	JC71604-1	1	1000	CLEAR	NONE
8	JC71641-1	2	930	CLEAR	NONE
9	JC71641-2	2	1010	CLEAR	NONE
10	JC71641-3	1	1000	CLEAR	NONE
				B1/S1= 5.0ml of 8.058 mg/L HEM SPIKE	
				HEX= 4.029 mg/L	
				GNE8-55481-OG1664	
				XP: 9/03/2018	

Form: GN-110
Rev. Date:8/13/2018

SGS

Reagent Information Log - OG1664 Water by EPA 1664A

Reagent	Expiration Date	Reagent # or Manufacturer/Lot
Hexane	12/12/2022	FISHER Lot #173528
HEM Spike	9/3/2018	GNE8-55481-OG1664
Methanol	4/4/2021	FISHER LOT #180813
Disk Filter	NA	LABORATORYSALES&SER.#103522
1:1 HCL	8/18/2018	GNE2-53792-PHC/OG1664
Sodium Sulfate	8/13/2018	GNE7-55250-PHC/OG1664
Filter 47mm	NA	LABORATORYSALES&SER.#150125
Pre-Filter 47mm	NA	LABORATORYSALES&SER.#141347
Filter 90/100mm	NA	LABORATORYSALES&SER.#140294
Pre-Filter 90/100mm	NA	LABORATORYSALES&SER.#141272
pH paper	6/1/2019	HYDRON LOT#215316
HEM Spike (ICV)	9/3/2018	GNE8-55482-1664

B1/S1= 5.0ml of 8.058 mg/L HEM SPIKE
HEX= 4.029 mg/L

Form: GN-087 1-44
Rev. Date: 11/4/08

15.2
15

LABORATORY REVIEW SIGNATURE FORM
(To be stored with the raw data)

File ID: D80814W2.TXT
Analyst: CD

Date Analyzed: 08/14/18
Run ID: GN84249

Methods: SM5310 B-11

The following analyst(s) have reviewd this run and attest that, to the best of their knowledge, this documentation is complete and correct:

Analyst: CD Date 8/15/18

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

The following supervisor or their designee has reviewed this run and attests that, to the best of their knowledge, this documentation is complete and correct:

Supervisor (or designee): _____ Date _____

C:\TOC-L\Data\d80814w2.toc.tlx

	Type	Sample Nam	Sample ID	Origin	Manual Dilut	Result	Comment	Status
1	Unknown	WASHCONF		TOCAQSW84	1.000	NPOC:-0.46		Completed
2	Unknown	CRI		TOCAQSW84	1.000	NPOC:0.82		Completed
3	Unknown	HSTD		TOCAQSW84	1.000	NPOC:50.5		Completed
4	Unknown	ICV		TOCAQSW84	1.000	NPOC:18.3		Completed
5	Unknown	ICB		TOCAQSW84	1.000	NPOC:-0.40		Completed
6	Unknown	CCV		TOCAQSW84	1.000	NPOC:25.5		Completed
7	Unknown	CCB		TOCAQSW84	1.000	NPOC:-0.35		Completed
8	Unknown	SPARGERC		TOCAQSW84	1.000	NPOC:-0.48		Completed
9	Unknown	CCVA		TOCAQSW84	1.000	NPOC:50.0		Completed
10	Unknown	CCB		TOCAQSW84	1.000	NPOC:-0.27		Completed
11	Unknown	CCV		TOCAQSW84	1.000	NPOC:24.0		Completed
12	Unknown	CCB		TOCAQSW84	1.000	NPOC:-0.47		Completed
13	Unknown	SPARGERC		TOCAQSW84	1.000	NPOC:-0.57		Completed
14	Unknown	GP15276-M	TOC	TOCAQ.met	1.000	NPOC:-0.76		Completed
15	Unknown	GP15276-B1		TOCAQ.met	1.000	NPOC:9.84		Completed
16	Unknown	JC71017-1		TOCAQ.met	1.000	NPOC:9.07		Completed
17	Unknown	JC71017-2		TOCAQ.met	1.000	NPOC:5.65		Completed
18	Unknown	JC71017-3		TOCAQ.met	1.000	NPOC:11.3		Completed
19	Unknown	JC71017-4		TOCAQ.met	1.000	NPOC:10.6		Completed
20	Unknown	JC71017-5		TOCAQ.met	1.000	NPOC:13.0		Completed
21	Unknown	JC71017-6		TOCAQ.met	1.000	NPOC:6.97		Completed
22	Unknown	JC71017-7		TOCAQ.met	1.000	NPOC:5.42		Completed
23	Unknown	CCVA		TOCAQ.met	1.000	NPOC:51.1		Completed
24	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.16		Completed
25	Unknown	JC71017-8		TOCAQ.met	1.000	NPOC:5.59		Completed
26	Unknown	GP15276-S1	JC71017-8	TOCAQ.met	1.000	NPOC:16.4		Completed
27	Unknown	GP15276-M	JC71017-8	TOCAQ.met	1.000	NPOC:16.5		Completed
28	Unknown	JC71017-9		TOCAQ.met	1.000	NPOC:8.64		Completed
29	Unknown	JC71017-10		TOCAQ.met	1.000	NPOC:9.31		Completed
30	Unknown	GP15277-M	TOC	TOCAQ.met	1.000	NPOC:-0.12		Completed
31	Unknown	GP15277-B1		TOCAQ.met	1.000	NPOC:9.92		Completed
32	Unknown	JC71017-11		TOCAQ.met	1.000	NPOC:6.38		Completed
33	Unknown	GP15277-S1	JC71017-11	TOCAQ.met	1.000	NPOC:17.4		Completed
34	Unknown	GP15277-M	JC71017-11	TOCAQ.met	1.000	NPOC:17.5		Completed
35	Unknown	CCV		TOCAQ.met	1.000	NPOC:25.2		Completed
36	Unknown	CCB		TOCAQ.met	1.000	NPOC:-0.12		Completed
37	Unknown	JC71017-12		TOCAQ.met	1.000	NPOC:9.73		Completed
38	Unknown	JC71017-13		TOCAQ.met	1.000	NPOC:11.4		Completed
39	Unknown	JC71049-1		TOCAQ.met	1.000	NPOC:6.37	average 3	Completed
40	Unknown	JC71062-2		TOCAQ.met	1.000	NPOC:0.38		Completed
41	Unknown	JC71710-1		TOCAQ.met	3.000	NPOC:60.7		Completed
42	Unknown	JC71710-2		TOCAQ.met	1.000	NPOC:19.6		Completed
43	Unknown	JC71710-4		TOCAQ.met	1.000	NPOC:0.87		Completed
44	Unknown	JC71128-1		TOCAQ.met	1.000	NPOC:0.59		Completed
45	Unknown	JC71179-1		TOCAQ.met	1.000	NPOC:8.67		Completed
46	Unknown	GP15278-M	TOC	TOCAQ.met	1.000	NPOC:-0.49		Completed
47	Unknown	CCVA		TOCAQ.met	1.000	NPOC:51.3		Completed
48	Unknown	CCB		TOCAQ.met	1.000	NPOC:-0.09		Completed
49	Unknown	GP15278-B1		TOCAQ.met	1.000	NPOC:10.2		Completed
50	Unknown	JC71027-3		TOCAQ.met	1.000	NPOC:-0.06		Completed
51	Unknown	JC71027-4		TOCAQ.met	1.000	NPOC:0.36		Completed

8/15/2018 8:06:59 AM

GN84249 d80814w2.toc CZD 8/15/18

1/4

15.3 15

C:\TOC-L\Data\d80814w2.toc.tlx

	Type	Sample Nam	Sample ID	Origin	Manual Dilut	Result	Comment	Status
52	Unknown	GP15278-S1	JC71027-4	TOCAQ.met	1.000	NPOC:10.6		Completed
53	Unknown	GP15278-M	JC71027-4	TOCAQ.met	1.000	NPOC:11.0		Completed
54	Unknown	JC71027-5		TOCAQ.met	1.000	NPOC:0.17		Completed
55	Unknown	JC71027-6		TOCAQ.met	1.000	NPOC:-0.00		Completed
56	Unknown	JC71027-7		TOCAQ.met	1.000	NPOC:0.45		Completed
57	Unknown	JC71027-8		TOCAQ.met	1.000	NPOC:0.99		Completed
58	Unknown	JC71027-9		TOCAQ.met	1.000	NPOC:0.09		Completed
59	Unknown	CCV		TOCAQ.met	1.000	NPOC:24.7		Completed
60	Unknown	CCB		TOCAQ.met	1.000	NPOC:-0.28		Completed
61	Unknown	JC71027-10		TOCAQ.met	1.000	NPOC:0.19		Completed
62	Unknown	JC71027-11		TOCAQ.met	1.000	NPOC:34.9		Completed
63	Unknown	JC71027-12		TOCAQ.met	1.000	NPOC:-0.00		Completed
64	Unknown	GP15279-M	TOC	TOCAQ.met	1.000	NPOC:-0.68		Completed
65	Unknown	GP15279-B1		TOCAQ.met	1.000	NPOC:9.72		Completed
66	Unknown	JC71131-2		TOCAQ.met	1.000	NPOC:0.26		Completed
67	Unknown	GP15279-S1	JC71131-2	TOCAQ.met	1.000	NPOC:9.82		Completed
68	Unknown	GP15279-M	JC71131-2	TOCAQ.met	1.000	NPOC:9.87		Completed
69	Unknown	JC71131-3		TOCAQ.met	1.000	NPOC:0.61		Completed
70	Unknown	JC71152-1		TOCAQ.met	1.000	NPOC:6.94		Completed
71	Unknown	CCVA		TOCAQ.met	1.000	NPOC:51.0		Completed
72	Unknown	CCB		TOCAQ.met	1.000	NPOC:-0.15		Completed
73	Unknown	JC71604-1		TOCAQ.met	1.000	NPOC:7.29		Completed
74	Unknown	JC71615-1		TOCAQ.met	1.000	NPOC:2.79		Completed
75	Unknown	JC71244-1		TOCAQ.met	1.000	NPOC:29.2		Completed
76	Unknown	CCV		TOCAQ.met	1.000	NPOC:24.7		Completed
77	Unknown	CCB		TOCAQ.met	1.000	NPOC:-0.34		Completed
78	Unknown	SPARGERC		TOCAQ.met	1.000	NPOC:-0.36		Completed

GN84249 d80814w2.toC

CZO 8/15/18

15.3

15

SGS

GN Batch ID: GN84249
Date: 8/14/18

Test: Total Organic Carbon
Product: TOC or DOC
Method: SM5310 B, C, or D-11, SW846 9060M

d180814w2.toc

Note: Refer to raw data and LIMS for information not shown below.

Autosampler Position #	Sample ID	pH	Dilution Factor	Bottle #	Comments
1	WASHCONF	<2			
2	CRI				
3	HSTD				
4	ICV				
5	ICB				
6	CCV				
7	CCB				
8	SPARGERCHK				
18	CCVA				
19	CCB				
23	CCV				
24	CCB				
25	SPARGERCHK				
26	GAS276MB1	TOC			
27	GP15276-B1				
28	JC71017-1			8	
29	JC71017-2			8	
30	JC71017-3			8	
31	JC71017-4			8	
32	JC71017-5			8	
33	JC71017-6			8	
34	JC71017-7			8	
35	CCVA				
36	CCB				
37	JC71017-8			8	
38	GP15276-S1			8,	JC71017-8
39	GP15276MSD1	↓		8	JC71017-8

Analyst: CZO Date: 8/14/18 QCReviewer: _____ Date: _____

Comments: BSP: 500ul of 1000ppm KHP → 50ml of DI H_2O TV=10 mg/L
MS/MSD: 200ul of 1000ppm KHP → 20ml of sample TV= 10 mg/L
ICV: 5ml of 100ppm sucrose → 25ml of DI H_2O TV=20 mg/L

Form: GN054-04
Rev. Date: 2/27/18

SGS

GN Batch ID: GN84249
Date: 8/14/18

Test: Total Organic Carbon

Product: TOC or DOC

Method: SM5310 B, C, or D-11, SW846 9060M

Note: Refer to raw data and LIMS for information not shown below.

Autosampler Position #	Sample ID	pH	Dilution Factor	Bottle #	Comments
40	JC71017-9	<2		8	
41	JC71017-10	"		8	
42	GP15299-MB1	TOC			
43	GP15299-B1				
44	JC71017-11			8	
45	GP15299-S1			8	JC71017-11
46	GP15299-MSD1			8	JC71017-11
47	CCV				
48	CCB				
49	JC71017-12			8	
50	JC71017-13			8	
51	JC71049-1			5	
52	JC71062-2			5	
53	JC71710-1		1:3	2	Clear, Chemical odour
54	JC71710-2			1	
55	JC71710-4			1	
56	JC71128-1			1	
57	JC71179-1			3	
58	GP15278 MB1	TOC			
59	CCVA				
60	CCB				
61	GP15278-B1				
62	JC71027-3			7	
	~~S~~		~~TOC~~	~~7~~	~~JC71027-3~~
	~~MSD~~		~~TOC~~	~~7~~	~~JC71027-3~~
			~~TOC~~		
63	JC71027-4	↓		21	

Analyst: CZO Date: 8/14/18 QCReviewer: _____ Date: _____

Comments:

Form: GN054-04
Rev. Date: 2/27/18

SGS

GN Batch ID: GN84249
Date: 8/14/18

Test: Total Organic Carbon
Product: TOC or DOC
Method: SM5310 B, C, or D-11, SW846 9060M
Note: Refer to raw data and LIMS for information not shown below.

Autosampler Position #	Sample ID	pH.	Dilution Factor	Bottle #	Comments
64	GP15278 S1	<2		21	JC71027-4
65	GP15278 MSD1			21	JC71027-4
66	JC71027-5			7	
67	JC71027-6			7	
68	JC71027-7			7	
69	JC71027-8			7	
70	JC71027-9			7	
71	CCV				
72	CCB				
1	JC71027-10			7	
2	JC71027-11			7	
3	JC71027-12			7	
4	GP15279 MB1	TOC			
5	GP15279 B1				
6	JC71131-2			7	
7	GP15279 S1			7	JC71131-2
8	GP15279 MSD1			7	JC71131-2
9	JC71131-3			7	
10	JC71152-1			6	
14	CCVA				
15	CCB				
16	JC71604-1			12	
17	JC71615-1			3	
18	JC71244-1			5	
19	CCV				
20	CCB				
21	SPARGER CHK				

Analyst: CKD Date: 8/14/18 QCReviewer: _____ Date: _____
Comments:

Form: GN054-04
Rev. Date: 2/27/18

ACCUTEST

Analyst JOHN Product TOC Autopipette #

Date 8/14/18 Batch ID GN84249 Class A Vol. Flask

Sample Dilution Prep Log

Sample ID	Dilution	Initial Volume	Final Volume	Comments
JC71710-1	1:3	10 mL	30 mL	

QC Reviewer: Date:

Form: GN165-01
Rev Date: 2/25/03

ACCUTEST.

Balance: B-39
Pipet : Class A

GENERAL CHEMISTRY STANDARD PREPARATION LOG

Product: TOC

(GN) or GP Number: GN84249

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume or weight used with units	Balance or Autopipet ID (*)	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
GNE5-54792-TOC	Acros A0376652	KHP	2.125g	B-39	DI H_2O	1000 mL	1000ppm	8/29/18	CZO	7/24/18
GNE7-55363-TOC	GNE5-54792-TOC	1000ppm	20mL	A	↓	200mL	100ppm	8/21/18	↓	↓
GNE7-55362-TOC	Fisher 173322	sucrose	0.0474g	B-39	↓	↓	↓	↓	↓	↓

Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Balance or Autopipet ID (*)	Diluent	Final Volume	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
KHP STDs										
GNE7-55364-TOC	GNE7-55363-TOC	100ppm	1.0	A	DI H_2O	100mL	1.0	8/21/18	CZO	7/24/18
GNE7-55365-TOC	↓	↓	2.0	↓	↓	↓	2.0	↓	↓	↓
GNE7-55366-TOC			5.0				5.0			
GNE7-55367-TOC			10.0				10.0			
GNE7-55368-TOC			20.0				20.0			
GNE7-55369-TOC			30.0				30.0			
GNE7-55370-TOC	↓	↓	50.0	↓	↓	↓	50.0	↓	↓	↓
KHP STDs										
GNE7-55359-TOC	Acros A0383564	KHP	0.2125g	B-39	DI H_2O	1000mL	100ppm	8/21/18	CZO	7/24/18
GNE7-55360-TOC	GNE7-55359-TOC	100ppm	50 mL	A	↓	200mL	25ppm	↓	↓	↓
GNE7-55361-TOC	↓	↓	100mL	↓	↓	↓	50ppm	↓	↓	↓

* If Class A glass pipets are used, enter an A. For balances or autopipets, then enter the appropriate Accutest ID number.

Form: GN121-01
Rev. Date: 1/13/09

SGS

GN84249

Reagent Information Log - TOC/DOC - Water

Reagent	Reagent # or Manufacturer/Lot	Exp. Date
Potassium Hydrogen Phthlate (KHP), Stock Solution 1000 mg/L	GNE5-54792-TOC	8/29/18
Carbonate/Bicarbonate Stock Solution	GNE7-55357-TOC	10/24/18
Sparger Check Solution	GNE7-55358-TOC	8/21/18
CCV Solution	GNE7-55360-TOC	8/21/18
CCVA Solution (50 ppm)	GNE7-55361-TOC	8/21/18
Spiking Solution	GNE5-54792-TOC	8/29/18
CRI Check	GNE7-55364-TOC	8/21/18
HCl	JT Baker 0000198300	7/17/20
pH Hydron paper	hydrion 223016	8/15/19
Sucrose solution	GNE7-55362-TOC	8/21/18

All standards and stocks were made as described in the SOP for this method (circle one): Y or N
If no (N), see attached page for standards prep.

Form: GN087A67-04
Rev. Date: 4/6/18

15.3
15

TOC-Control L Report

d80813w1.toc.tfs

Instr.Information

Instrument Options	TOC ASI Sparge Kit
Catalyst	Regular Sensitivity

Cal. Curve

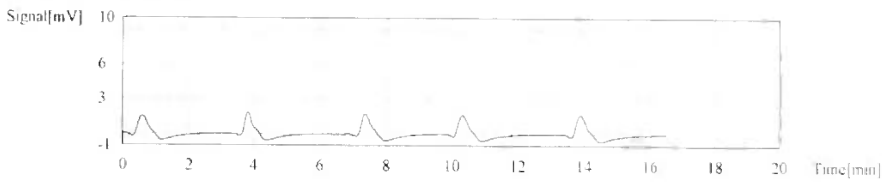
Sample Name	Untitled
Sample ID	Untitled
Cal. Curve	d80813w1 2018_08_13_11_29_33.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc. 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1.817	100uL	1.000	*******		8/13/2018 11:36:01 AM
2	2.000	100uL	1.000	*******		8/13/2018 11:39:54 AM
3	1.817	100uL	1.000	*******		8/13/2018 11:43:11 AM
4	2.431	100uL	1.000	*******	E	8/13/2018 11:47:06 AM
5	2.077	100uL	1.000	*******		8/13/2018 11:50:37 AM

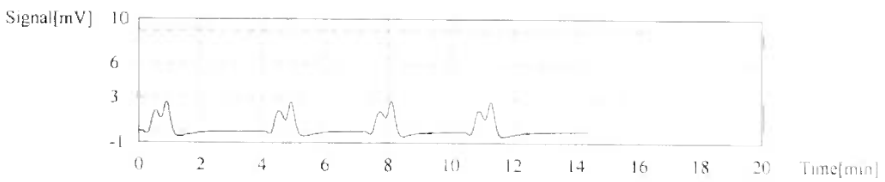
Acid Add	0.000%
Sp. Time	600.0sec
Mean Area	1.928



Conc. 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	6.937	100uL	1.000	*******		8/13/2018 11:57:04 AM
2	7.124	100uL	1.000	*******		8/13/2018 12:00:37 PM
3	7.012	100uL	1.000	*******		8/13/2018 12:04:09 PM
4	7.225	100uL	1.000	*******		8/13/2018 12:08:32 PM

Acid Add	0.000%
Sp. Time	600.0sec
Mean Area	7.074



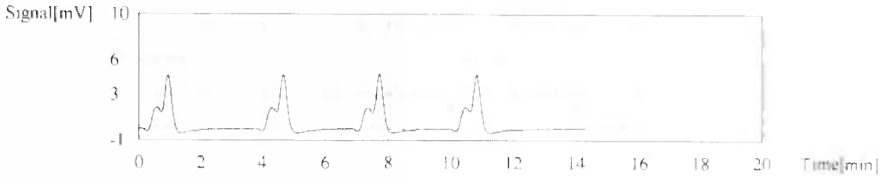
Conc. 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	10.62	100uL	1.000	*******		8/13/2018 12:14:58 PM
2	10.65	100uL	1.000	*******		8/13/2018 12:18:22 PM
3	11.07	100uL	1.000	*******		8/13/2018 12:21:51 PM
4	11.23	100uL	1.000	*******		8/13/2018 12:26:35 PM

TOC-Control L Report

d180813w1 toc tlx

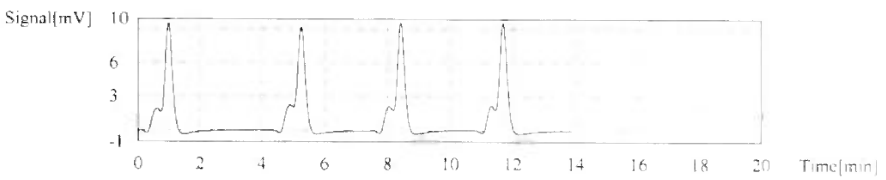
Acid Add 0.000%
Sp. Time 600.0sec
Mean Area 10.89



Conc. 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	10.60	100uL	1.000	*******		8/13/2018 12:33:36 PM
2	10.12	100uL	1.000	*******		8/13/2018 12:37:07 PM
3	10.85	100uL	1.000	*******		8/13/2018 12:40:46 PM
4	10.29	100uL	1.000	*******		8/13/2018 12:44:14 PM

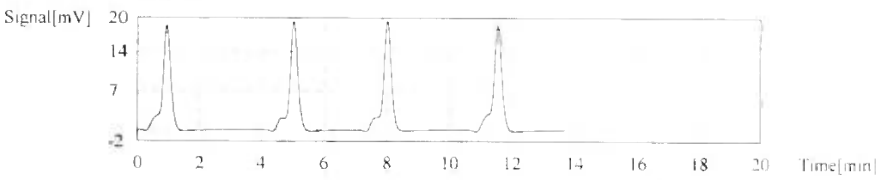
Acid Add 0.000%
Sp. Time 600.0sec
Mean Area 19.42



Conc. 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	35.55	100uL	1.000	*******		8/13/2018 12:51:03 PM
2	35.24	100uL	1.000	*******		8/13/2018 12:54:22 PM
3	36.40	100uL	1.000	*******		8/13/2018 12:58:16 PM
4	35.88	100uL	1.000	*******		8/13/2018 1:01:39 PM

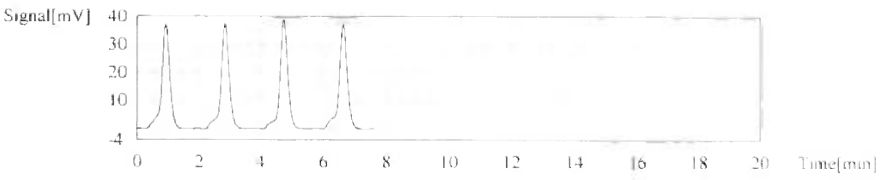
Acid Add 0.000%
Sp. Time 600.0sec
Mean Area 35.77



Conc. 20.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	67.74	100uL	1.000	*******		8/13/2018 1:06:16 PM
2	68.24	100uL	1.000	*******		8/13/2018 1:08:31 PM
3	68.82	100uL	1.000	*******		8/13/2018 1:10:46 PM
4	68.33	100uL	1.000	*******		8/13/2018 1:13:01 PM

Acid Add 0.000%
Sp. Time 600.0sec
Mean Area 68.28



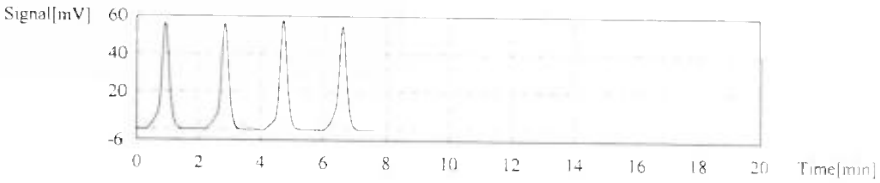
Conc. 30.00mg/L

TOC-Control L Report

d80813cl.toc tk

No.	Area	Inj. Vol	Aut. Dil.	Rem.	Ex.	Date / Time
1	102.3	100uL	1.000	*******		8/13/2018 1:17:38 PM
2	102.0	100uL	1.000	*******		8/13/2018 1:19:53 PM
3	101.6	100uL	1.000	*******		8/13/2018 1:22:08 PM
4	102.0	100uL	1.000	*******		8/13/2018 1:24:23 PM

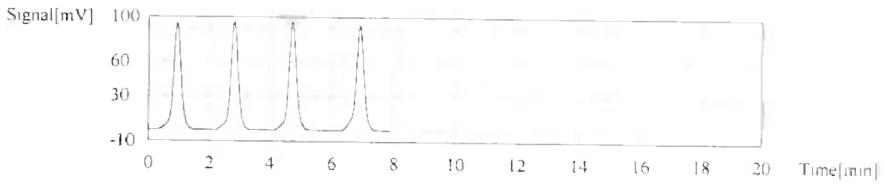
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 102.0



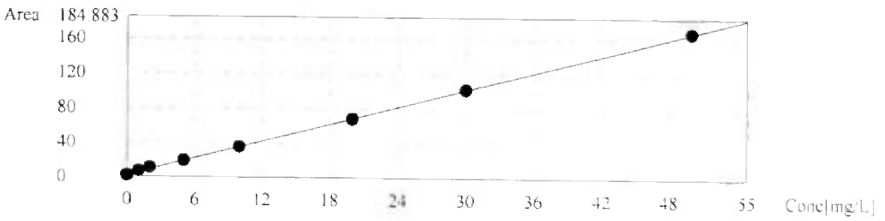
Conc. 50.00mg/L

No.	Area	Inj. Vol	Aut. Dil.	Rem.	Ex.	Date / Time
1	167.6	100uL	1.000	*******		8/13/2018 1:29:00 PM
2	167.9	100uL	1.000	*******		8/13/2018 1:31:15 PM
3	169.1	100uL	1.000	*******		8/13/2018 1:33:46 PM
4	167.7	100uL	1.000	*******		8/13/2018 1:36:01 PM

Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 168.1



Slope 3.295
Intercept 3.074
r^2 0.9998
r 0.9999
Zero Shift No



TOC-Control L Report

d80813w2.toc

Instr.Information

Instrument Options	TOC-ASI Sparge Kit
Catalyst	Regular Sensitivity

Sample

Sample Name	WASHCONF
Sample ID	
Origin	TOC-AQSW846.met
Status	Completed
Chk. Result	

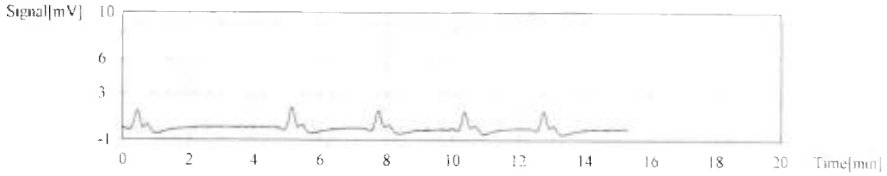
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.4615mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.417	-0.1995mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:27:41 AM
2	1.616	-0.4426mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:30:32 AM
3	1.578	-0.4541mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:33:20 AM
4	1.612	-0.4438mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:35:58 AM
5	1.409	-0.5054mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:39:05 AM

Mean Conc. -0.4615mg/L
CV Conc -6.44%



Sample

Sample Name	CR1
Sample ID	
Origin	TOC-AQSW846.met
Status	Completed
Chk. Result	

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.8299mg/L

1. Det.

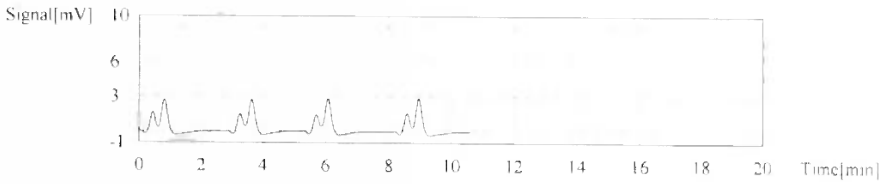
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.803	0.8281mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:45:26 AM
2	5.934	0.8678mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:48:06 AM
3	5.782	0.8217mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:51:10 AM
4	5.717	0.8020mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:53:51 AM

TOC-Control L Report

d80814w2.toc tls

Mean Conc 0.8299mg/L
CV Conc 3.33%



Sample

Sample Name HSTD
Sample ID
Origin TOCAQSW846.met
Status Completed
Chk. Result

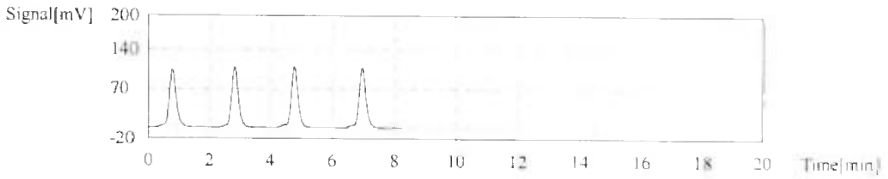
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 50.58mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	167.6	49.93mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:59:30 AM
2	170.8	50.90mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 10:01:40 AM
3	171.2	51.02mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 10:04:02 AM
4	169.4	50.48mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 10:06:21 AM

Mean Conc 50.58mg/L
CV Conc 0.98%



Sample

Sample Name ICV
Sample ID
Origin TOCAQSW846.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 18.33mg/L

1. Det

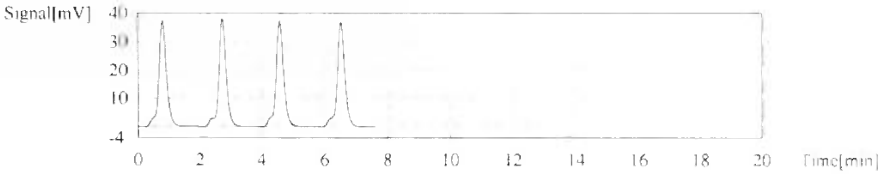
Anal.: NPOC

TOC-Control L Report

d80813wl2 toc dx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.93	18.47mg/L	100uL	1.000		d80813wl 2018_08_13_11_29_33 cal	8/14/2018 10:11:53 AM
2	63.97	18.48mg/L	100uL	1.000		d80813wl 2018_08_13_11_29_33 cal	8/14/2018 10:14:01 AM
3	63.42	18.31mg/L	100uL	1.000		d80813wl 2018_08_13_11_29_33 cal	8/14/2018 10:16:07 AM
4	62.60	18.07mg/L	100uL	1.000		d80813wl 2018_08_13_11_29_33 cal	8/14/2018 10:18:11 AM

Mean Conc 18.33mg/L
CV Conc 1.06%



Sample

Sample Name ICB
Sample ID
Origin TOCAQSW846.met
Status Completed
Chk. Result

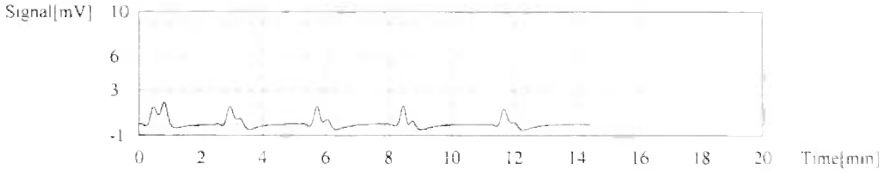
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.4011mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.629	-0.4718mg/L	100uL	1.000	E	d80813wl 2018_08_13_11_29_33 cal	8/14/2018 10:24:17 AM
2	2.275	-0.2426mg/L	100uL	1.000		d80813wl 2018_08_13_11_29_33 cal	8/14/2018 10:27:19 AM
3	1.818	-0.3813mg/L	100uL	1.000		d80813wl 2018_08_13_11_29_33 cal	8/14/2018 10:30:15 AM
4	1.410	-0.5051mg/L	100uL	1.000		d80813wl 2018_08_13_11_29_33 cal	8/14/2018 10:33:39 AM
5	1.568	-0.4754mg/L	100uL	1.000		d80813wl 2018_08_13_11_29_33 cal	8/14/2018 10:37:02 AM

Mean Conc -0.4011mg/L
CV Conc -29.45%



Sample

Sample Name CCV
Sample ID
Origin TOCAQSW846.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 25.50mg/L

TOC-Control L Report

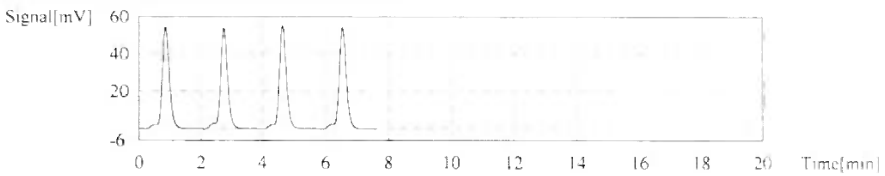
d80813w2 toc tlx

1 Det

Anal NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	87.40	25.59mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 10:42:27 AM
2	86.42	25.29mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 10:44:35 AM
3	87.57	25.64mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 10:46:40 AM
4	86.94	25.45mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 10:48:48 AM

Mean Conc 25.50mg/L
CV Conc 0.61%



Sample

Sample Name CCB
Sample ID
Origin TOCAQSW846.met
Status Completed
Chk. Result

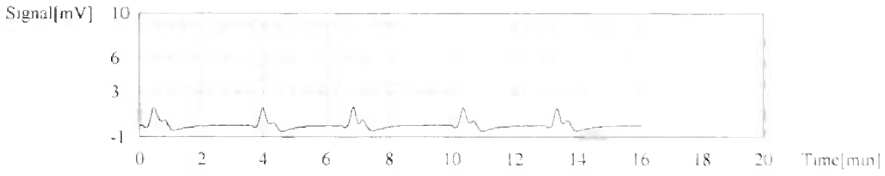
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.3575mg/L

1 Det

Anal NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.457	-0.1874mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33 cal	8/14/2018 10:55:55 AM
2	1.738	-0.4056mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 10:58:59 AM
3	2.156	-0.2787mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 11:02:40 AM
4	1.848	-0.3722mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 11:05:50 AM
5	1.844	-0.3734mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 11:09:10 AM

Mean Conc -0.3575mg/L
CV Conc -15.31%



Sample

Sample Name SPARGERCHK
Sample ID
Origin TOCAQSW846.met
Status Completed
Chk. Result

15.3
15

TOC-Control L Report

d80813w2.toc tlx

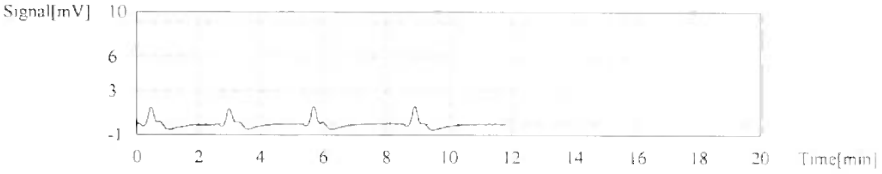
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.4872mg/L

1: Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.406	-0.5063mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 11:15:15 AM
2	1.533	-0.4678mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 11:18:12 AM
3	1.513	-0.4739mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 11:21:36 AM
4	1.424	-0.5009mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 11:25:09 AM

Mean Conc -0.4872mg/L
CV Conc -3.94%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQSW846.met
Status: Completed
Chk. Result:

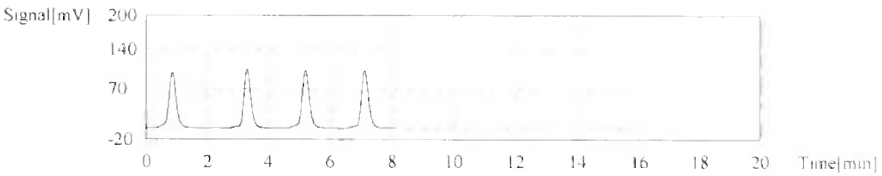
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 50.09mg/L

1: Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	168.9	49.72mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 3:12:51 PM
2	168.4	50.17mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 3:15:00 PM
3	169.3	50.45mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 3:17:10 PM
4	167.9	50.02mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 3:19:15 PM

Mean Conc 50.09mg/L
CV Conc 0.61%



Sample

TOC-Control L Report

d80814w2.toc

Sample Name CCB
Sample ID
Origin TOCAQSW846.met
Status Completed
Chk. Result

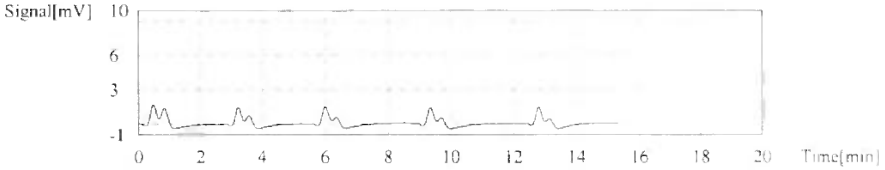
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.2795mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.731	0.1993mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/14/2018 3:25:39 PM
2	2.321	-0.2287mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 3:28:41 PM
3	2.217	-0.2602mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 3:32:14 PM
4	2.279	-0.2414mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 3:35:52 PM
5	1.797	-0.3877mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 3:39:01 PM

Mean Conc. -0.2795mg/L
CV Conc. -26.22%



Sample

Sample Name CCV
Sample ID
Origin TOCAQSW846.met
Status Completed
Chk. Result

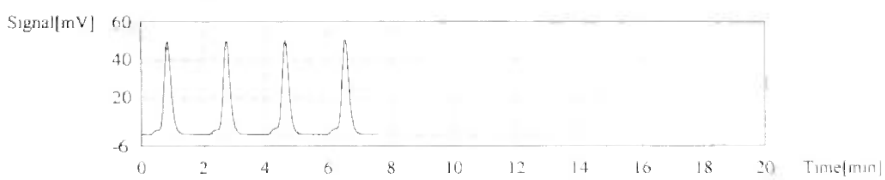
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 24.00mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.49	23.80mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 4:50:20 PM
2	81.61	23.83mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 4:52:29 PM
3	82.30	24.04mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 4:54:34 PM
4	83.24	24.33mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 4:56:39 PM

Mean Conc. 24.00mg/L
CV Conc. 1.02%



TOC-Control L Report

d80813w2.toc (K)

Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQSW846.met
Status: Completed
Chk. Result:

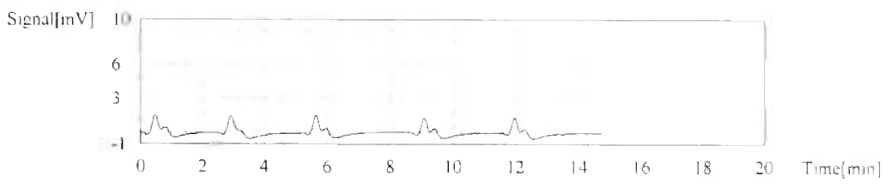
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.4707mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.208	-0.2630mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/14/2018 5:02:43 PM
2	1.151	-0.5837mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 5:05:37 PM
3	1.957	-0.3391mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 5:09:21 PM
4	1.548	-0.4633mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 5:12:25 PM
5	1.438	-0.4966mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 5:15:49 PM

Mean Conc: -0.4707mg/L
CV Conc: -21.53%



Sample

Sample Name: SPARGERCHK
Sample ID:
Origin: TOCAQSW846.met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.5745mg/L

1. Det

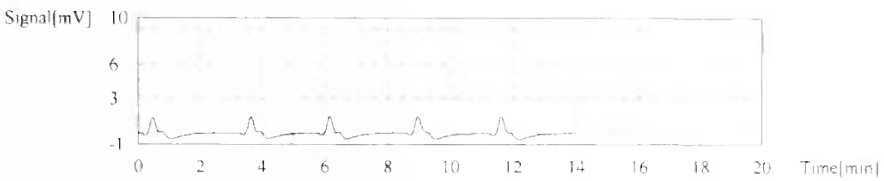
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.344	-0.5252mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 5:22:32 PM
2	0.8799	-0.6660mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/14/2018 5:25:14 PM
3	1.305	-0.5370mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 5:28:13 PM
4	1.116	-0.5944mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 5:31:03 PM
5	0.9611	-0.6414mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 5:34:04 PM

TOC-Control L Report

d80813w2 toc lx

Mean Conc -0.5745mg/L
CV Conc -9.38%



Sample

Sample Name GP15276-MB1
Sample ID TOC
Origin TOCAQ met
Status Completed
Chk. Result

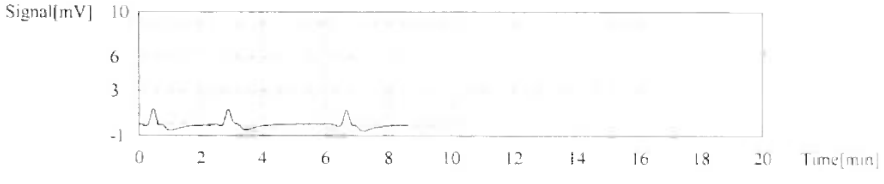
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.7676mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6378	-0.7395mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 5:39:19 PM
2	0.8546	-0.6737mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33 cal	8/14/2018 5:43:21 PM
3	0.4523	-0.7958mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 5:46:02 PM

Mean Conc -0.7676mg/L
CV Conc -5.19%



Sample

Sample Name GP15276-B1
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 9.845mg/L

1. Det

Anal.: NPOC

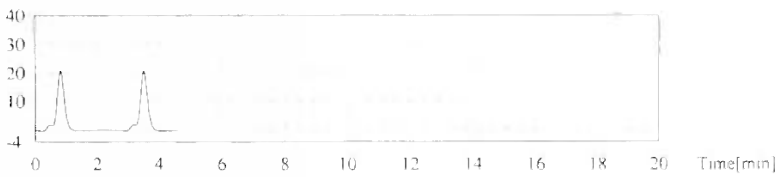
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	35.64	9.883mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 5:51:33 PM
2	35.39	9.807mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 5:53:39 PM

15.3 15

TOC-Control L Report

d80814w2 toc tk

Mean Conc. 9.845mg/L
CV Conc. 0.54%



Sample

Sample Name: JC71017-1
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

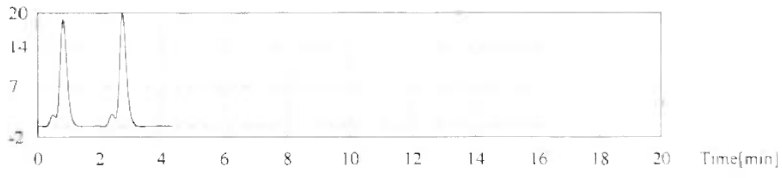
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 9.074mg/L

1 Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.18	8.824mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 6:01:55 PM
2	33.80	9.325mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 6:04:33 PM

Mean Conc. 9.074mg/L
CV Conc. 3.90%



Sample

Sample Name: JC71017-2
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 5.65mg/L

1 Det

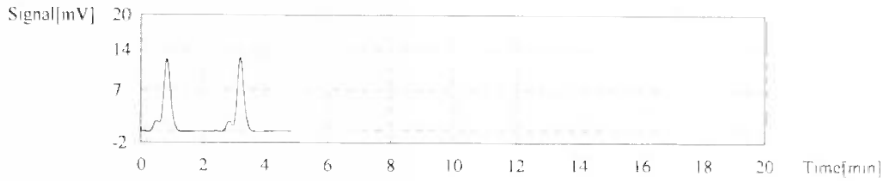
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.98	5.738mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 6:13:31 PM
2	21.44	5.574mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 6:16:15 PM

TOC-Control L Report

d80814w2 toc tlx

Mean Conc 5.656mg/L
CV Conc 2.05%



Sample

Sample Name JC71017-3
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

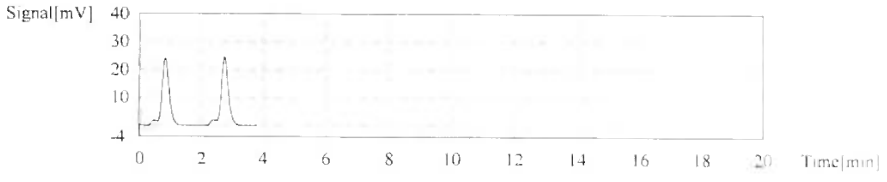
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 11.33mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	40.01	11.21mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 6:24:14 PM
2	40.82	11.46mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 6:26:19 PM

Mean Conc. 11.33mg/L
CV Conc 1.53%



Sample

Sample Name JC71017-4
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 10.68mg/L

1. Det

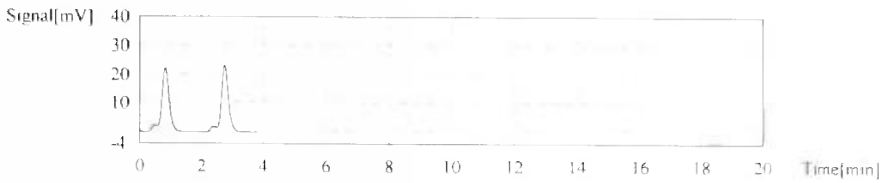
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.97	10.59mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 6:42:31 PM
2	38.53	10.76mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 6:44:36 PM

TOC-Control L Report

d80814w2 toc tlx

Mean Conc. 10.68mg/L
CV Conc. 1.13%



Sample

Sample Name: JC71017-5
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

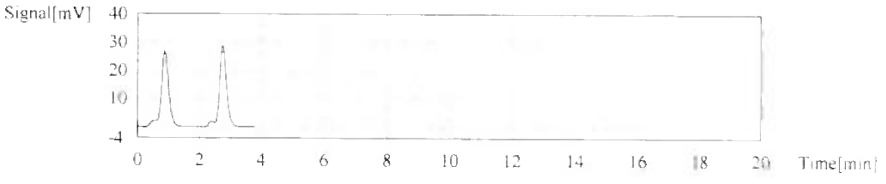
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 13.09mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	45.41	12.85mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 7:06:55 PM
2	47.02	13.34mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 7:09:00 PM

Mean Conc. 13.09mg/L
CV Conc. 2.64%



Sample

Sample Name: JC71017-6
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 6.971mg/L

1. Det

Anal.: NPOC

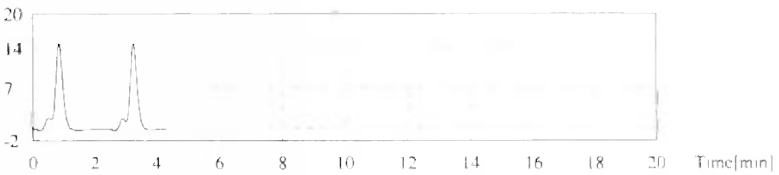
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.31	7.052mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 7:18:36 PM
2	25.78	6.891mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 7:20:45 PM

15.3
15

TOC-Control L Report

d80814w2 toc tlx

Mean Conc 6.971mg/L
CV Conc 1.63%



Sample

Sample Name JC71017-7
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

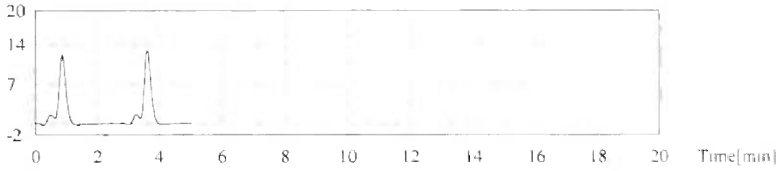
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 5.423mg/L

1 Det

Anal. NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.26	5.216mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 7:30:07 PM
2	21.63	5.631mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 7:32:34 PM

Mean Conc 5.423mg/L
CV Conc 5.42%



Sample

Sample Name CCVA
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 51.10mg/L

1 Det

Anal. NPOC

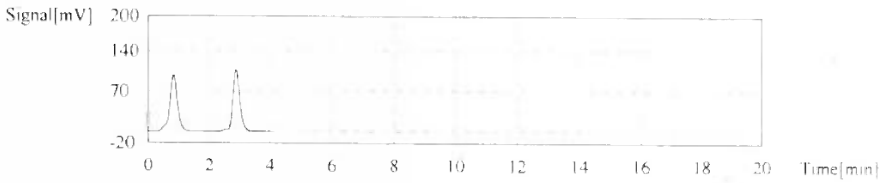
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	190.5	50.81mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 7:40:33 PM
2	172.4	51.39mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 7:42:51 PM

15.3
15

TOC-Control L Report

d80814w2.toc.ifs

Mean Conc 51.10mg/L
CV Conc 0.80%



Sample

Sample Name CCB
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

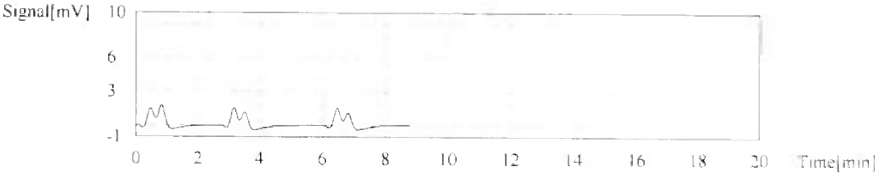
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.1622mg/L

1. Det

Anal. NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.803	0.5246mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33 cal	8/14/2018 7:52:24 PM
2	3.719	0.1956mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 7:55:53 PM
3	3.499	0.1289mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 7:58:52 PM

Mean Conc 0.1622mg/L
CV Conc 29.10%



Sample

Sample Name JC71017-8
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 5.590mg/L

1. Det

Anal. NPOC

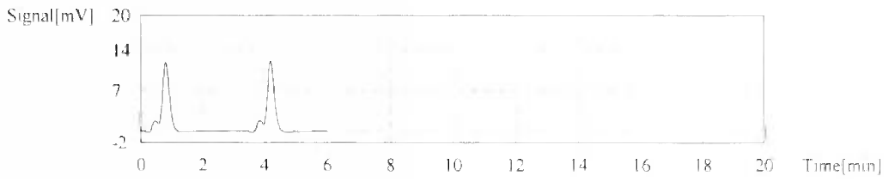
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.36	5.549mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 8:05:07 PM
2	21.63	5.631mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 8:07:58 PM

15.3
15

TOC-Control L Report

d80814w2.toc tlx

Mean Conc 5.590mg/L
CV Conc 1.04%



Sample

Sample Name GP15276-S1
Sample ID JC71017-8
Origin TOCAQ met
Status Completed
Chk. Result

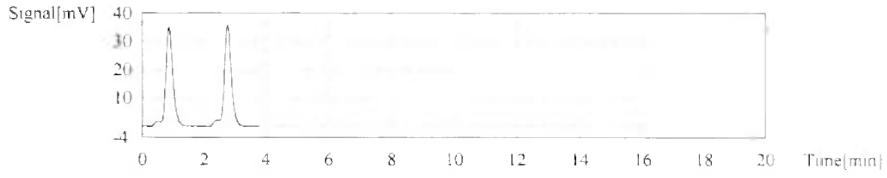
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 16.47mg/L

1. Det

Anal. NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.73	16.28mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 8:14:47 PM
2	57.99	16.67mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 8:16:52 PM

Mean Conc 16.47mg/L
CV Conc 1.64%



Sample

Sample Name GP15276-MSD1
Sample ID JC71017-8
Origin TOCAQ met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 16.59mg/L

1. Det

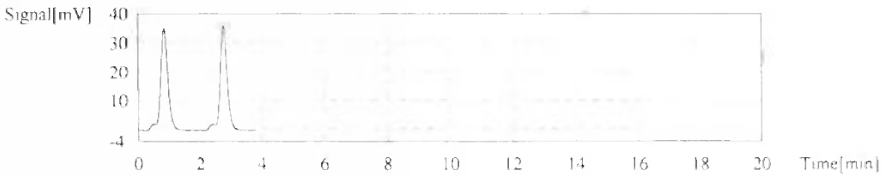
Anal. NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.02	16.55mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 8:25:57 PM
2	57.88	16.63mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 8:28:07 PM

TOC-Control L Report

d80814w2 toc ll

Mean Conc 16.59mg/L
CV Conc 0.34%



Sample

Sample Name JC71017-9
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

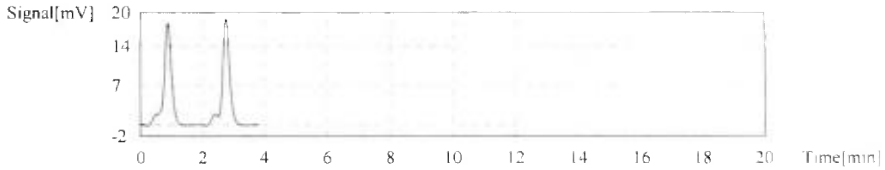
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 8.640mg/L

1 Det

Anal. NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.32	8.572mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 8:37:07 PM
2	31.77	8.709mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 8:39:12 PM

Mean Conc 8.640mg/L
CV Conc 1.12%



Sample

Sample Name JC71017-10
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 9.319mg/L

1 Det

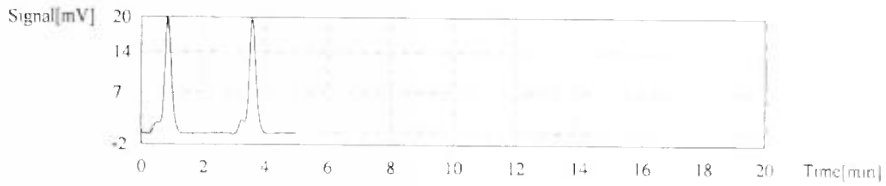
Anal. NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.01	9.389mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 8:49:10 PM
2	33.55	9.249mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 8:51:34 PM

TOC-Control L Report

d80814w2 toc tlx

Mean Conc. 9.319mg/L
CV Conc. 1.06%



Sample

Sample Name: GP15277-MB1
Sample ID: TOC
Origin: TOCAQ met
Status: Completed
Chk. Result:

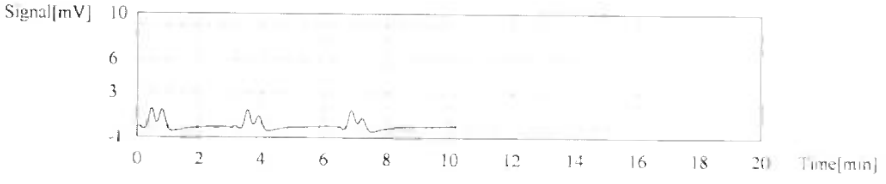
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.1270mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.013	0.2848mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:00:40 PM
2	2.818	-0.07782mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:04:14 PM
3	2.494	-0.1762mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:08:14 PM

Mean Conc. -0.1270mg/L
CV Conc. -54.75%



Sample

Sample Name: GP15277-B1
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 9.921mg/L

1. Det

Anal.: NPOC

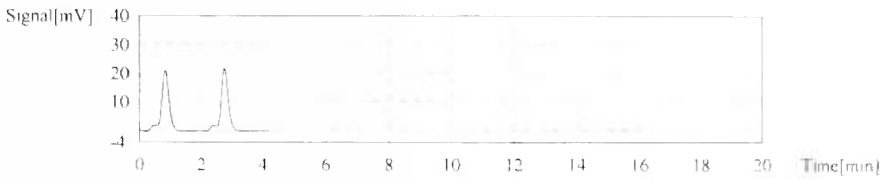
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	35.50	9.841mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:12:59 PM
2	36.03	10.00mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:15:31 PM

15.3
15

TOC-Control L Report

d80814w2.toc tlx

Mean Conc. 9.921mg/L
CV Conc. 1.15%



Sample

Sample Name: JC71017-11
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

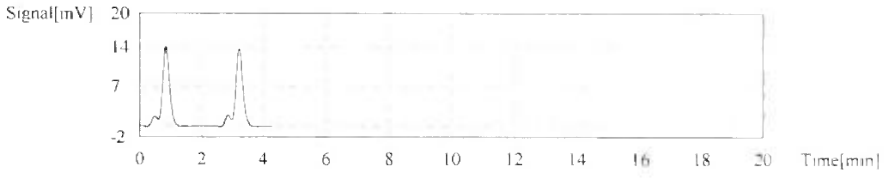
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 6.389mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	24.30	6.442mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:24:38 PM
2	23.95	6.335mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:26:48 PM

Mean Conc. 6.389mg/L
CV Conc. 1.18%



Sample

Sample Name: GP15277-S1
Sample ID: JC71017-11
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 17.4 1mg/L

1. Det

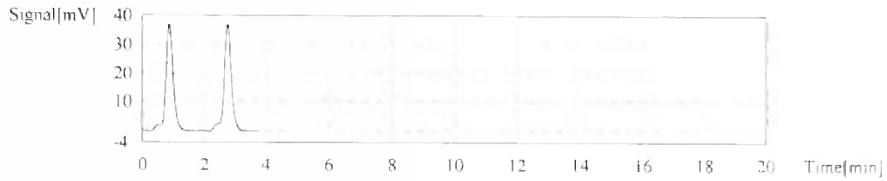
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.42	17.40mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:35:19 PM
2	60.45	17.41mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 9:37:24 PM

TOC-Control L Report

d80814w2 toc tlx

Mean Conc. 17.41mg/L
CV Conc. 0.04%



Sample

Sample Name: GP15277-MSD1
Sample ID: JC71017-11
Origin: TOCAQ.met
Status: Completed
Chk. Result:

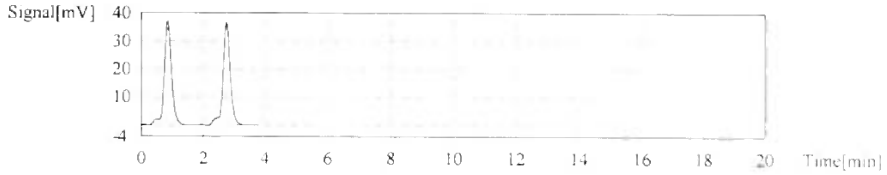
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 17.54mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.77	17.51mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 9:46:29 PM
2	60.94	17.56mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 9:48:34 PM

Mean Conc. 17.54mg/L
CV Conc. 0.21%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 25.26mg/L

1. Det

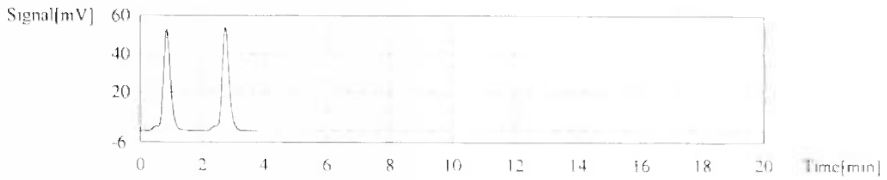
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.57	25.04mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 9:57:39 PM
2	87.04	25.48mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 9:59:44 PM

TOC-Control L Report

d80814w2 toc ilx

Mean Conc. 25.26mg/L
CV Conc. 1.25%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result:

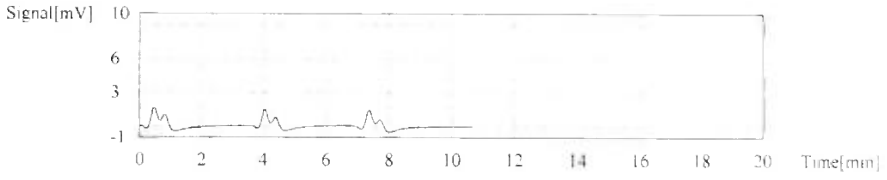
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.1224mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.888	0.2469mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/14/2018 10:10:31 PM
2	2.585	-0.1485mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 10:14:01 PM
3	2.757	-0.09634mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 10:17:58 PM

Mean Conc. -0.1224mg/L
CV Conc. -30.15%



Sample

Sample Name: JC71017-12
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 9.735mg/L

1. Det

Anal.: NPOC

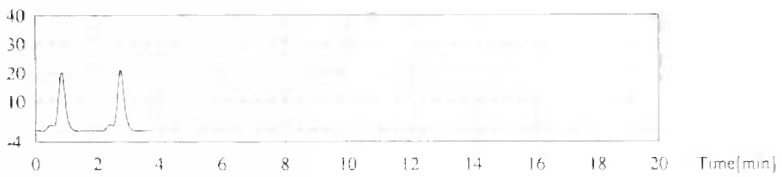
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.71	9.601mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 10:22:43 PM
2	35.56	9.868mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 10:24:52 PM

15.3
15

TOC-Control L Report

d80814w2 toc rlx

Mean Conc 9.735mg/L
CV Conc 1.94%



Sample

Sample Name JC71017-13
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

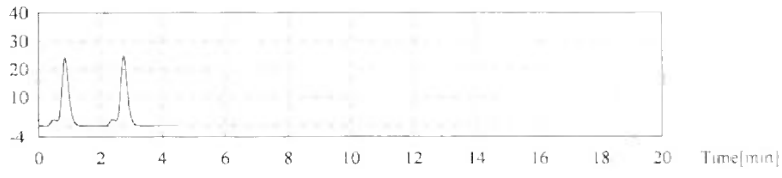
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 11.43mg/L

1 Det

Anal. NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	40.92	11.30mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 10:33:53 PM
2	41.13	11.55mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 10:36:38 PM

Mean Conc 11.43mg/L
CV Conc 1.52%



Sample

Sample Name JC71049-1
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 6.372mg/L

1 Det

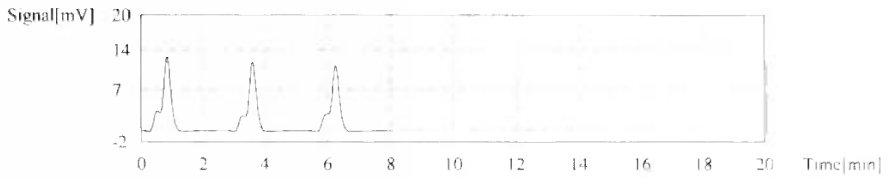
Anal. NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.98	6.952mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 10:45:55 PM
2	25.09	6.674mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 10:48:47 PM
3	23.14	6.090mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 10:51:36 PM

TOC-Control L Report

d80814w2 toc tlx

Mean Conc 6.372mg/L
CV Conc 7.88%



Sample

Sample Name JC71062-2
Sample ID
Origin TOCAQ met
Status Completed
Chk Result

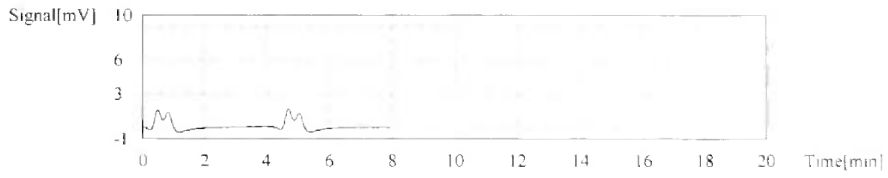
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.3827mg/L

1 Det

Anal. NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.282	0.3665mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 10:58:33 PM
2	4.389	0.3990mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 11:02:29 PM

Mean Conc 0.3827mg/L
CV Conc 6.00%



Sample

Sample Name JC71710-1
Sample ID
Origin TOCAQ met
Status Completed
Chk Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	3.000	NPOC 60.74mg/L

1 Det

Anal. NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.61	60.58mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 11:07:23 PM
2	69.96	60.90mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 11:09:28 PM

15.3
15

TOC-Control L Report

d80814w2 toc tlx

Mean Conc. 60.74mg/L
CV Conc. 0.37%



Sample

Sample Name: JC71710-2
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

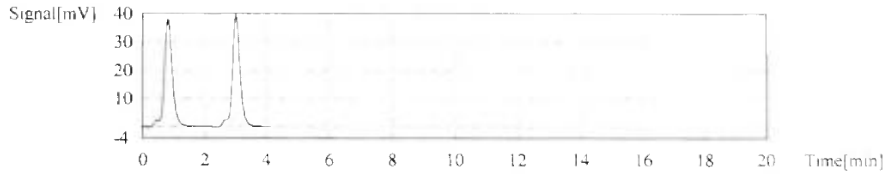
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 19.63mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	66.85	19.36mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 11:18:52 PM
2	68.68	19.91mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 11:21:02 PM

Mean Conc. 19.63mg/L
CV Conc. 2.00%



Sample

Sample Name: JC71710-4
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.8770mg/L

1. Det

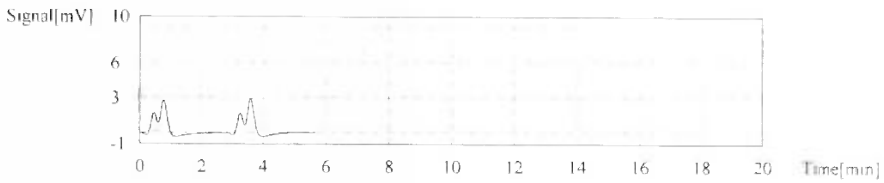
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.029	0.8567mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 11:38:09 PM
2	5.993	0.8584mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/14/2018 11:41:16 PM

TOC-Control L Report

d80814w2 toc tlx

Mean Conc 0.8776mg/L
CV Conc 3.08%



Sample

Sample Name JC71128-1
Sample ID
Origin TOCAQ.met
Status Completed
Chk Result

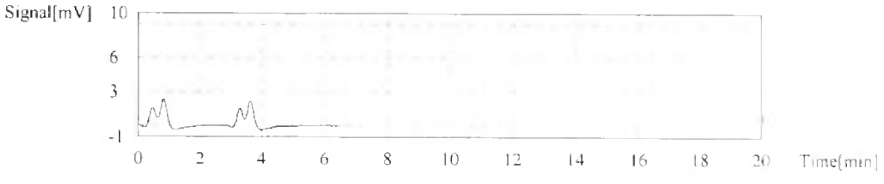
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.5944mg/L

1 Det

Anal NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5162	0.6335mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 11:49:22 PM
2	4.904	0.5552mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 11:53:14 PM

Mean Conc 0.5944mg/L
CV Conc 9.31%



Sample

Sample Name JC71179-1
Sample ID
Origin TOCAQ.met
Status Completed
Chk Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 8.675mg/L

1 Det

Anal NPOC

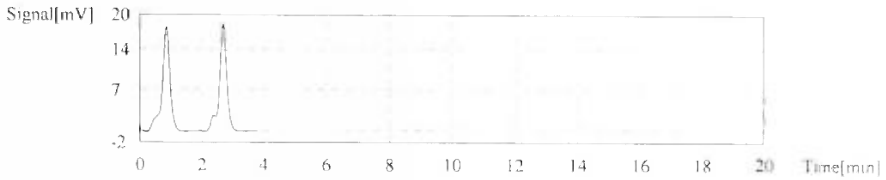
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.94	8.760mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/14/2018 11:59:37 PM
2	31.36	8.590mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 12:01:44 AM

15.3
15

TOC-Control L Report

d80814w2.toc tlx

Mean Conc. 8.675mg/L
CV Conc. 1.39%



Sample

Sample Name: GP15278-MB1
Sample ID: TOC
Origin: TOCAQ.met
Status: Completed
Chk. Result:

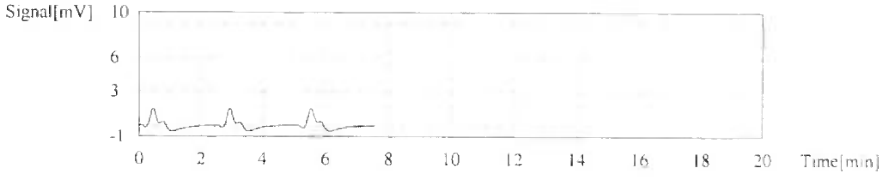
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.4959mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.348	-0.5240mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 12:11:25 AM
2	1.535	-0.4678mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 12:14:15 AM
3	1.856	-0.3698mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/15/2018 12:16:55 AM

Mean Conc. -0.4959mg/L
CV Conc. -8.01%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 51.36mg/L

1. Det

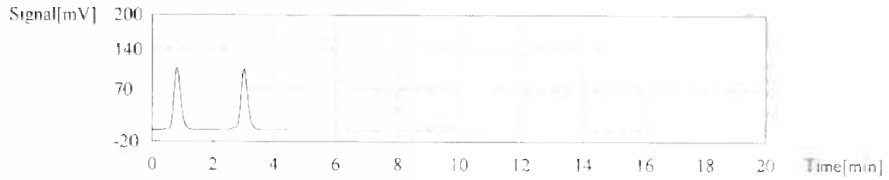
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	171.9	51.24mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 12:22:16 AM
2	172.3	51.36mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 12:24:47 AM

TOC-Control L Report

d80814w2 toc tlx

Mean Conc. 51.30mg/L
CV Conc. 0.17%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

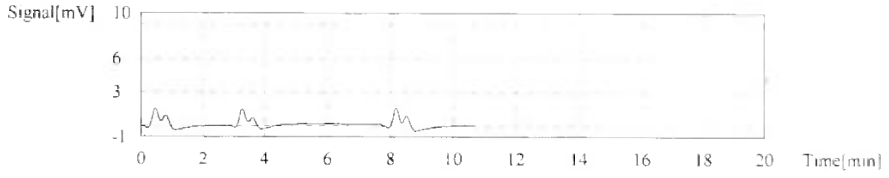
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.09664mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.131	0.01717mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 12:34:05 AM
2	4.872	0.4545mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33 cal	8/15/2018 12:39:10 AM
3	2.381	-0.2104mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 12:42:26 AM

Mean Conc. -0.09664mg/L
CV Conc. -166.54%



Sample

Sample Name: GP15278-B1
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 10.20mg/L

1. Det

Anal.: NPOC

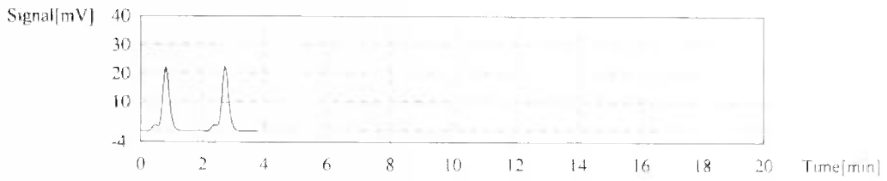
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.30	10.08mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 12:47:12 AM
2	37.10	10.33mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 12:49:17 AM

15.3 15

TOC-Control L Report

d80813w2 toc dt

Mean Conc. 10.20mg/L
CV Conc. 1.68%



Sample

Sample Name: JC71027-3
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

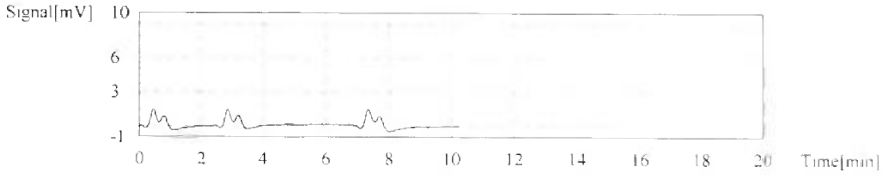
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.06022mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.544	-0.1610mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 12:58:53 AM
2	4.510	0.4357mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33 cal	8/15/2018 1:03:34 AM
3	3.208	0.04054mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 1:07:11 AM

Mean Conc. -0.06022mg/L
CV Conc. -236.61%



Sample

Sample Name: JC71027-4
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.3648mg/L

1. Det

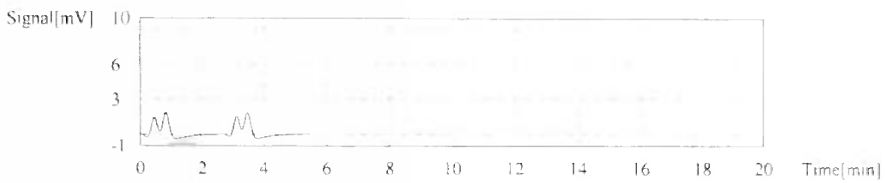
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.232	0.3513mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 1:12:43 AM
2	4.321	0.3783mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 1:15:40 AM

TOC-Control L Report

d80814w2 toc tk

Mean Conc 0.3648mg/L
CV Conc 5.24%



Sample

Sample Name: GP15278-S1
Sample ID JC71027-4
Origin TOCAQ met
Status Completed
Chk. Result

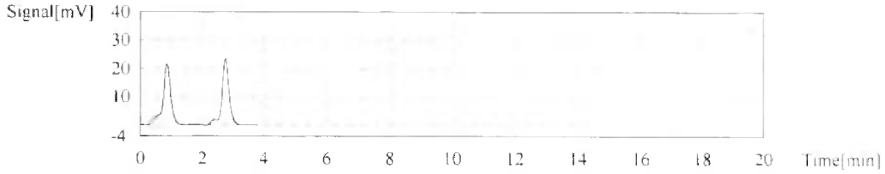
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 10.64mg/L

1 Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.99	10.60mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 1:23:09 AM
2	38.28	10.68mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 1:25:14 AM

Mean Conc 10.64mg/L
CV Conc 0.58%



Sample

Sample Name GP15278-MSD1
Sample ID JC71027-4
Origin TOCAQ met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 11.02mg/L

1 Det

Anal.: NPOC

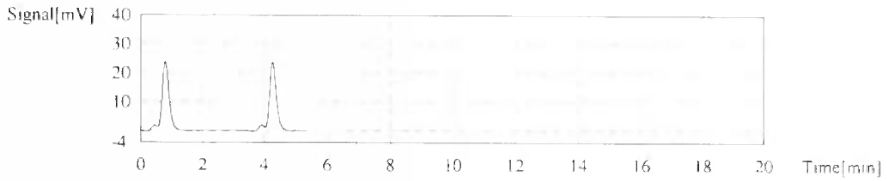
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	40.59	11.39mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 1:35:52 AM
2	38.19	10.66mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 1:38:01 AM

15.3 15

TOC-Control L Report

d80814w2.toc

Mean Conc 11.02mg/L
CV Conc 4.67%



Sample

Sample Name JC71027-5
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

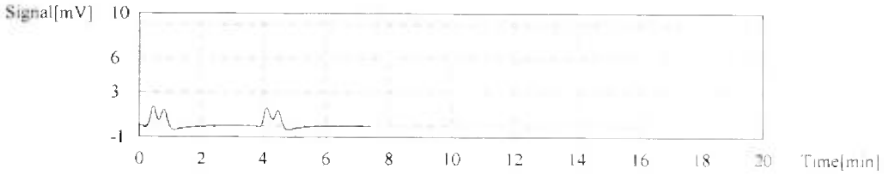
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.1774mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.586	0.1553mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 1:47:16 AM
2	3.732	0.1996mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 1:51:13 AM

Mean Conc 0.1774mg/L
CV Conc 17.66%



Sample

Sample Name JC71027-6
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.00499mg/L

1. Det

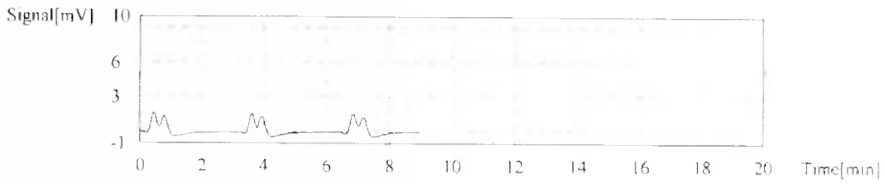
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.476	0.1219mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/15/2018 1:57:57 AM
2	3.008	-0.02016mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:01:22 AM
3	3.108	0.01019mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:04:06 AM

TOC-Control L Report

d80814w2 toc tlx

Mean Conc. -0.00499mg/L
CV Conc. -430.26%



Sample

Sample Name JC71027-7
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

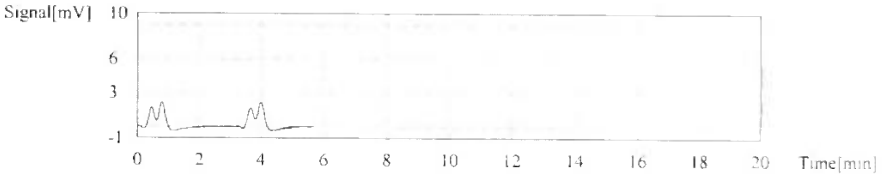
Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.4569mg/L

1, Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.641	0.4754mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:10:10 AM
2	4.519	0.4384mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:12:50 AM

Mean Conc. 0.4569mg/L
CV Conc. 5.73%



Sample

Sample Name JC71027-8
Sample ID
Origin TOCAQ met
Status Completed
Chk. Result

Type	Anal	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.9993mg/L

1, Det

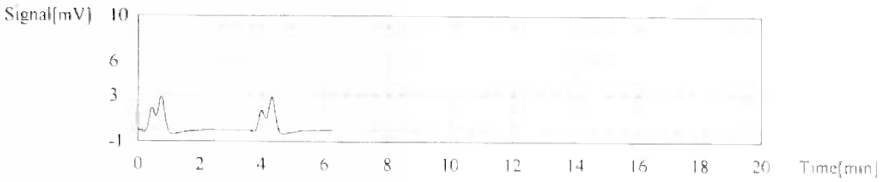
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.497	0.9399mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:21:42 AM
2	9.237	0.9598mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:24:35 AM

TOC-Control L Report

d80814w2.toc.tfs

Mean Conc 0.9993mg/L
CV Conc 5.58%



Sample

Sample Name: JC71027-9
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result:

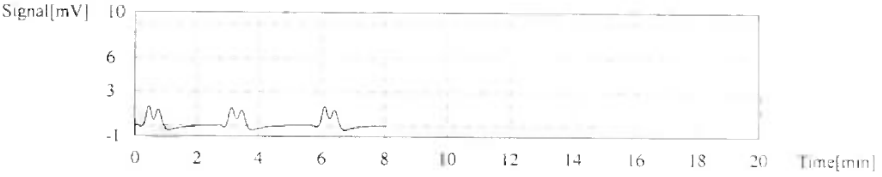
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.09107mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.871	-0.06174mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:32:00 AM
2	3.294	0.06664mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:35:10 AM
3	3.455	0.1155mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:37:45 AM

Mean Conc 0.09107mg/L
CV Conc 37.94%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 24.74mg/L

1. Det

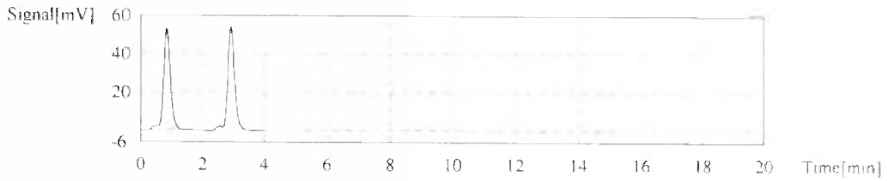
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.28	24.64mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:42:36 AM
2	84.91	24.84mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:44:45 AM

TOC-Control L Report

d80814w2.toc tlS

Mean Conc. 24.74mg/L
CV Conc. 0.55%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

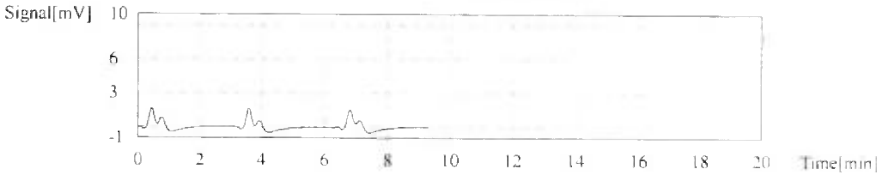
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.2871mg/L

1: Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.552	-0.1586mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:54:50 AM
2	2.208	-0.2630mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 2:58:15 AM
3	2.049	-0.3112mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 3:01:24 AM

Mean Conc. -0.2871mg/L
CV Conc. -11.89%



Sample

Sample Name: JC71027-10
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.1973mg/L

1: Det

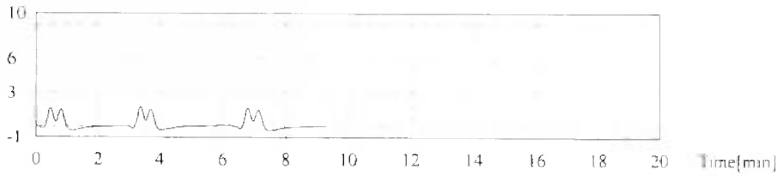
Anal.: NPOC

TOC-Control L Report

d80814w2 toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.740	0.2020mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 3:18:14 AM
2	4.268	0.3622mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33 cal	8/15/2018 3:21:51 AM
3	3.709	0.1926mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 3:25:03 AM

Mean Conc. 0.1973mg/L
CV Conc. 3.37%



Sample

Sample Name: JC71027-11
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

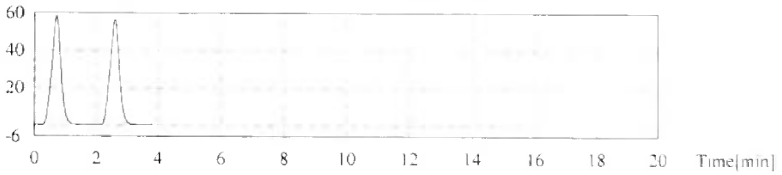
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 34.98mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	117.7	34.79mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 3:29:46 AM
2	119.0	35.18mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33 cal	8/15/2018 3:31:51 AM

Mean Conc. 34.98mg/L
CV Conc. 0.80%



Sample

Sample Name: JC71027-12
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.00195mg/L

1. Det

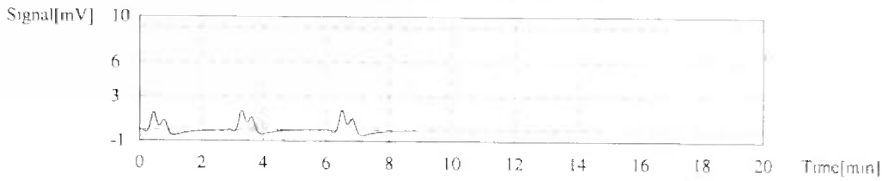
Anal.: NPOC

TOC-Control L Report

d80813w2 toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.320	-0.2290mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/15/2018 3:41:56 AM
2	3.065	-0.00286mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 3:45:23 AM
3	3.071	-0.00104mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 3:48:25 AM

Mean Conc. -0.00195mg/L
CV Conc. -65.94%



Sample

Sample Name: GP15279-MB1
Sample ID: TOC
Origin: TOCAQ met
Status: Completed
Chk. Result:

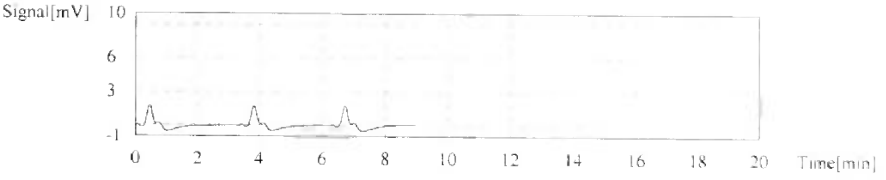
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.6822mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.731	-0.4077mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/15/2018 3:54:38 AM
2	0.8425	-0.6777mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 3:57:48 AM
3	0.8118	-0.6867mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 4:00:41 AM

Mean Conc. -0.6822mg/L
CV Conc. -0.93%



Sample

Sample Name: GP15279-B1
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 9.725mg/L

1. Det

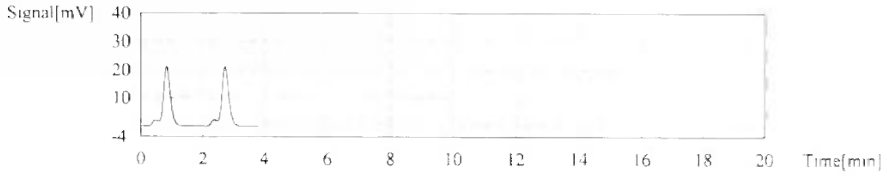
TOC-Control L Report

d80813w2 toc tlx

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.93	9.668mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 4:05:25 AM
2	35.31	9.783mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 4:07:30 AM

Mean Conc. 9.725mg/L
CV Conc. 0.84%



Sample

Sample Name: JC71131-2
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result:

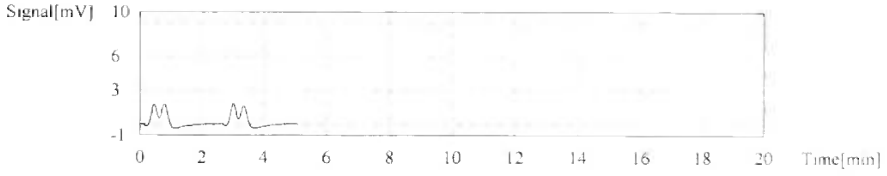
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.2648mg/L

1. Det

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.946	0.2645mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 4:17:14 AM
2	3.948	0.2651mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 4:19:58 AM

Mean Conc. 0.2648mg/L
CV Conc. 0.16%



Sample

Sample Name: GP15279-S1
Sample ID: JC71131-2
Origin: TOCAQ.met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 9.829mg/L

1. Det

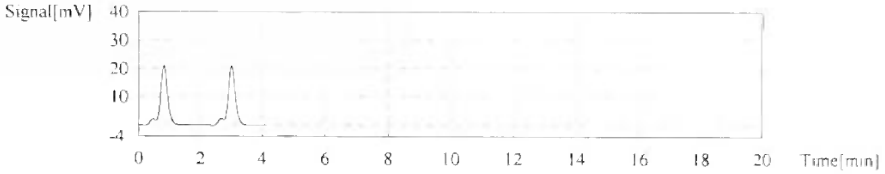
TOC-Control L Report

d80814w2.toc.tlx

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	35.24	9.762mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 4:28:02 AM
2	35.68	9.895mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 4:30:07 AM

Mean Conc. 9.829mg/L
CV Conc. 0.96%



Sample

Sample Name: GP15279-MSDI
Sample ID: JC71131-2
Origin: TOCAQ met
Status: Completed
Chk. Result:

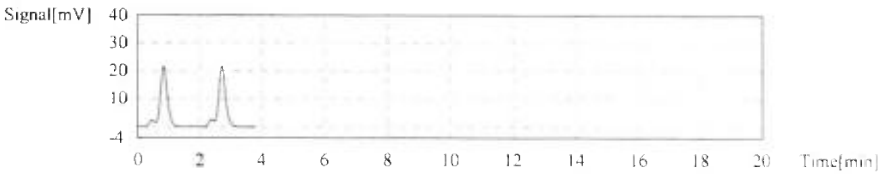
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 9.879mg/L

1. Det

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	35.18	9.744mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 4:38:53 AM
2	36.07	10.01mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 4:40:58 AM

Mean Conc. 9.879mg/L
CV Conc. 1.93%



Sample

Sample Name: JC71131-3
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.6176mg/L

1. Det

15.3
15

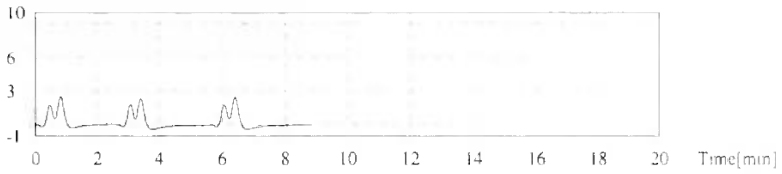
TOC-Control L Report

d80814w2.toc tlx

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.674	0.7589mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/15/2018 4:50:45 AM
2	4.636	0.5659mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 4:53:56 AM
3	5.280	0.6694mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 4:57:21 AM

Mean Conc. 0.6176mg/L
CV Conc. 11.85%



Sample

Sample Name: JC71152-1
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 6.944mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.47	6.797mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 5:02:49 AM
2	26.44	7.091mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 5:04:54 AM

Mean Conc. 6.944mg/L
CV Conc. 3.00%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 51.08mg/L

1. Det

15.3
15

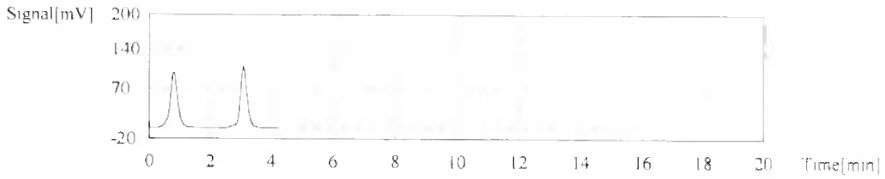
TOC-Control L Report

d80814w2.toc (N

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	170.3	50.75mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 5:21:10 AM
2	172.5	51.42mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 5:23:24 AM

Mean Conc: 51.08mg/L
CV Conc: 0.92%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result:

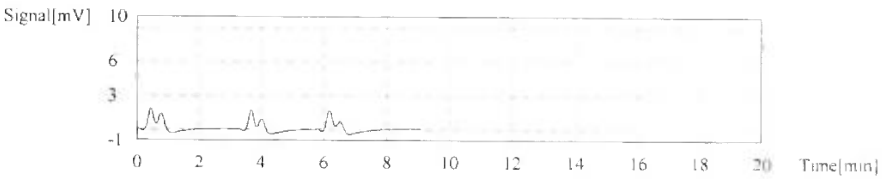
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.1554mg/L

1. Det

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.652	0.1753mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/15/2018 5:33:19 AM
2	2.403	-0.2038mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 5:36:00 AM
3	2.722	-0.1070mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 5:39:37 AM

Mean Conc: -0.1554mg/L
CV Conc: -44.06%



Sample

Sample Name: JC71604-1
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 7.290mg/L

1. Det

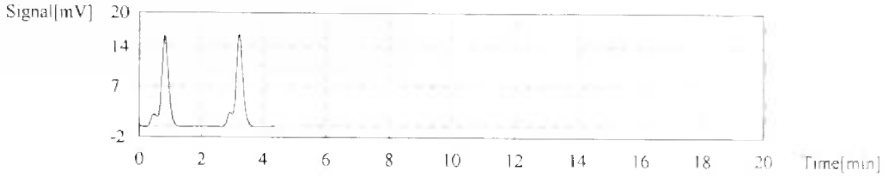
TOC-Control L Report

d80814w2.toc.ltx

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.08	7.285mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 5:44:55 AM
2	27.11	7.294mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 5:47:00 AM

Mean Conc. 7.290mg/L
CV Conc. 0.09%



Sample

Sample Name: JC71615-1
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result:

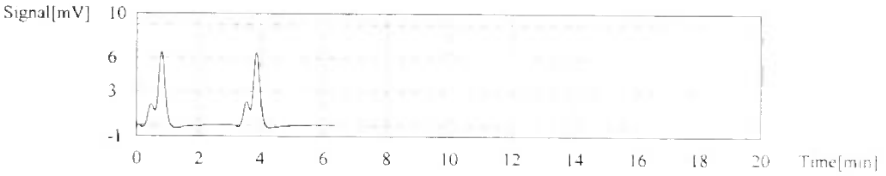
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 2.791mg/L

1. Det

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.36	2.818mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 5:56:42 AM
2	12.18	2.763mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 6:00:10 AM

Mean Conc. 2.791mg/L
CV Conc. 1.38%



Sample

Sample Name: JC71244-1
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 29.25mg/L

1. Det

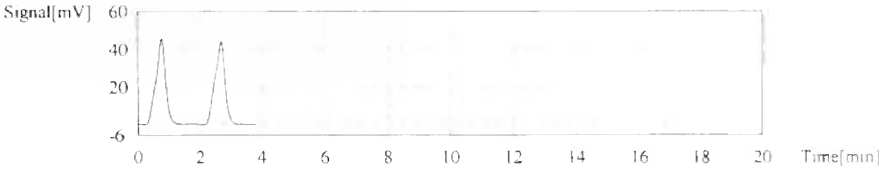
TOC-Control L Report

d80814w2 toc tlx

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	98.29	28.90mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 6:06:40 AM
2	100.6	29.60mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 6:08:49 AM

Mean Conc: 29.25mg/L
CV Conc: 1.69%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 24.79mg/L

1. Det

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.32	24.96mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 6:17:49 AM
2	84.20	24.62mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 6:19:58 AM

Mean Conc: 24.79mg/L
CV Conc: 0.97%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.349mg/L

1. Det

15.3
15

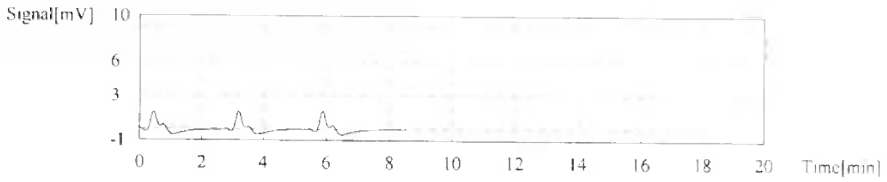
TOC-Control L Report

d80813w2 toc tlx

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1823	-0.3798mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 6:29:50 AM
2	1359	-0.5200mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/15/2018 6:32:42 AM
3	2022	-0.3194mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 6:35:59 AM

Mean Conc. -0.3496mg/L
CV Conc. -12.22%



Sample

Sample Name: SPARGERCHK
Sample ID:
Origin: TOCAQ met
Status: Completed
Chk. Result:

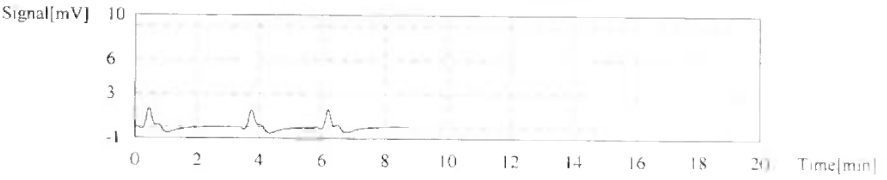
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC -0.3663mg/L

1 Det

Anal: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1965	-0.3367mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 6:42:08 AM
2	1345	-0.5249mg/L	100uL	1.000	E	d80813w1 2018_08_13_11_29_33.cal	8/15/2018 6:44:51 AM
3	1770	-0.3950mg/L	100uL	1.000		d80813w1 2018_08_13_11_29_33.cal	8/15/2018 6:48:06 AM

Mean Conc. -0.3663mg/L
CV Conc. -11.42%



SGS ACCUTEST

Test: Chemical Oxygen Demand (Low Level)
Product: COD AQ Methods: Hach 8000/SM5220 B or C-11
Method: Hach 8000 + (see above) Units: mg/l
Hach 8000 /SM5220M mg/kg

Analyst: MRP
GN Batch ID: GN84281
GP Batch ID: GP15280
Date: 8/15/2018

Ave ml of FAS for Blank (A) = 3.95 Molarity of FAS: 0.0127

COD = { (A-B) x M x 8000 } / (sample amount in ml or g)

QC Summary:

Method Blank ID:	GP15280-MB1	Date:	8/15/2018	Result:	0.0	DL:	20	<DL	Y
Spike Blank ID (± 10%):	BSLCONF	Date:	8/15/2018	Result:	20.2	Spike:	20	% Rec:	101.2
Standard Check Low (±30%):	GP15280-B2	Date:	8/15/2018	Result:	53.1	Spike:	50	% Rec:	106.2
Standard Check Mid (±10%):		Date:	8/15/2018	Result:		Spike:	50	% Rec:	
Duplicate ID:	JC71604-1	Samp Result:		Dup Result:		% RPD:			
MS ID:	JC71604-1	Samp Result:	25.3	MS Result:	78.4	Spike:	50	% Rec:	106.2
External:		Result:		Known:		% Rec:			

Bottle #	Sample ID	Sample Volume (ml)	Dilution	Initial ml of FAS (C)	Final ml of FAS (D)	Total Vol FAS used in ml (D - C) = B	Blank FAS - Total FAS (A - B)	Calculated Result	Final Result	Detection Limit
MB1	GP15280-MB1	2.0000	1	0.00	3.95	3.95	0.00	0.0	0.00	20
MB2	GP15280-MB2	2.0000	1	0.00	3.95	3.95	0.00	0.0	0.00	20
BSP	BSLCONF	2.0000	1	0.00	3.55	3.55	0.40	20.2	20.24	20
BSP	GP15280-B2	2.0000	1	0.00	2.90	2.90	1.05	53.1	53.13	20
	GP15280-S1	2.0000	1	0.00	2.40	2.40	1.55	78.4	78.43	20
	GP15280-D1	2.0000	1	0.00	3.45	3.45	0.50	25.3	25.30	20
	JC71604-1	2.0000	1	0.00	3.45	3.45	0.50	25.3	25.30	20
	JC71600-1	2.0000	1	0.00	1.75	1.75	2.20	111.3	111.32	20
	JC71600-2conf	2.0000	1	0.00	over					20
	JC71600-3	2.0000	1	0.00	3.20	3.20	0.75	38.0	37.95	20
	JC71600-4conf	2.0000	1	0.00	over					20
	JC71600-5	2.0000	1	0.00	3.95	3.95	0.00	0.0	0.00	20
	JC71613-2	2.0000	1	0.00	2.25	2.25	1.70	86.0	86.02	20
	JC71616-1	2.0000	1	0.00	3.20	3.20	0.75	38.0	37.95	20
	JC71644-1	2.0000	1	0.00	2.40	2.40	1.55	78.4	78.43	20
	JC71792-1	2.0000	1	0.00	3.75	3.75	0.20	10.1	10.12	20
	JC71792-2	2.0000	1	0.00	3.80	3.80	0.15	7.6	7.59	20
	JC71792-3	2.0000	1	0.00	3.70	3.70	0.25	12.7	12.65	20
	JC71795-1conf	2.0000	1	0.00	3.05	3.05	0.90	45.5	45.54	20
	JC71600-2	2.0000	2	0.00	2.25	2.25	1.70	172.0	172.04	40
	JC71600-4	2.0000	2	0.00	2.30	2.30	1.65	167.0	166.98	40

Comments:

Validated By: C M Alaimo Validated Date: 8/28/2012
Analyst Date: QC Reviewer Date:
Document Control #: ~~AGN-CGD-20RL-02~~ 5/31/2013

gm 84281

Reagent Information Log - COD LOW (20 ppm)

Reagent	Reagent # or Manufacturer/Lot
Digestion Solution Tubes Low	GREEN WOOD #171121Axp11/2021
Ferroin Indicator Solution Low	GNE5-54847-COD Exp# 11/31/2018
Potassium Hydrogen Phthalate (KHP) Source	GNE7-55169-COD EXP#10/3/2018
Standard Ferrous Ammonium Sulfate (FAS) Titrant 0.0124N/0.125N	GNE7-55405-COD EXP: 1/30/2019
H_2SO_4, Conc.	FISHER# 178261 XP:07/20/2023
Standard Potassium Dichromate Solution 0.025N/0.25N	GNE6-55030-COD XP12/20/18
Potassium Hydrogen Phthalate ext source	GNE7-55170-COD EXP: 10/3/2018

Form: GN087-COD-01 Low 20 ppm
Rev Date:3/28/17

GENERAL CHEMISTRY STANDARD PREPARATION LOG FOR FE2

Product: COD

GN or GP Number: GN 84281

Description	standard	concentration	Stock vol used	Autopipet ID	al	Diluent	Volume	of	(a)	Analyst	Date
1000 ppm(STD)	GNE7-55169-COD	10,000 MG/L	10ML	A		DI water	100 ml	1000.00	10/3/2018	tripathi	8/14/2018
1000PPM(EXT)	GNE7-55170-COD	10,000MG/L	10ML	A		DI water	100ml	1000	10/3/2018	tripathi	8/14/2018
100ppm9STD)	GNE7-55171-COD	1000mg/l	10ML	A		DI water	100ML	100	10/3/2018	tripathi	8/14/2018
100PPM(EXT)	GNE7-55172-COD	1000mg/l	10ML	A		DI water	100ml	100	10/3/2018	tripathi	8/14/2018
Standard Description	used to prepare	Stock	Stock volume	Autopipet ID	al	Diluent	Volume	of Standard	(a)		
20	100PPM	20.00	2.00	A		DI water	10ML	20.00	8/14/2018	tripathi	8/14/2018
100	1000PPM	100.00	10.00	A		DI water	10ML	100.00	8/14/2018	tripathi	8/14/2018
150	1000PPM	150.00	1.50	A		DI water	10ML	150.00	8/14/2018	tripathi	8/14/2018
500	1000PPM	500.00	5.00	A		DI water	10ML	500.00	10/3/2018	tripathi	8/14/2018
10	100PPM	10.00	1.00	A		DI water	10ML	10.00		tripathi	8/14/2018
[EXT]50	100PPM	50.00	5.00	A		DI water	10ML	50.00	8/28/2018	tripathi	8/14/2018
[EXT]750	1000PPM	750.00	7.50	A		DI water	10ML	750.00	8/28/2018	tripathi	8/14/2018

Form: GN121-02 FE2
Rev Date: 11/14/11

SGS GN 84281

Test: Chemical Oxygen Demand Digestion Log
Method: SM5220 C-11, Hach 8000
SM5220 C-11 Mod, Hach 8000 Mod

Balance ID: NA

Product: COD gp15280
Analyst: TRIPATHI Date: 8/14/2018
Hach Low Level (20 to 150 mg/l) Lot #: 171121A
Hach High Level (50 to 1500 mg/l)
Pipet ID: #35 lot no xp11/2018

Standardization of FAS with Potassium Dichromate
Potassium Dichromate reagent number: see attached

Potassium Dichromate normality (N 0.025 N)

mL of FAS for Standardization Blank 1: 3.95

ml of FAS for Standardization Blank 2: 3.95

Molarity of FAS = (N x vol. of dichromate digestion solution)/(ml of FAS for Standardization Blank)
Average molarity (Blank 1 and Blank 2) = 0.01265

Digestion START Time: 15:30
Digestion ENDTime: 17:30

Digestion Temperature (deg. C): 150 C
Digestion Block ID: COD-3

Sample ID	Digestion Tube #	Initial Wt. (g) or Vol. (ml)	Final Vol. (ml)	Comments	GP #
GP15280-MB1	MB1	2 ML	2 ML		BO NO
GP15280-MB2	MB2	2 ML	2 ML		
GP15280-B1	1	2 ML	2 ML	2MLOF20 PPM	
GP15280-B2	2	2 ML	2 ML	2MLOF50 PPM	
JC71604-1 MS	3	2 ML	2 ML	1MLOF100 PPM	11
JC71604-1 DUP	4	2 ML	2 ML		11
JC71604-1	5	2 ML	2 ML		11
JC71600-1	6	2 ML	2 ML		8
JC71600-2	7	2 ML	2 ML		1
JC71600-3	8	2 ML	2 ML		5
JC71600-4	9	2 ML	2 ML		5
JC71600-5	10	2 ML	2 ML	F.B.	3
JC71607-1	11	2 ML	2 ML	TURNED GREEN	3
JC71613-2	12	2 ML	2 ML		3
JC71616-1	13	2 ML	2 ML		5
JC71638-2	14	2 ML	2 ML	TURNED GREEN	3
JC71644-1	15	2 ML	2 ML		3
JC71792-1	16	2 ML	2 ML		5
JC71792-2	17	2 ML	2 ML		5
JC71792-3	18	2 ML	2 ML		5
JC71795-1	19	2 ML	2 ML		8
JC71600-2	20	2 ML	2 ML	1ml sample +1ml di/dw	1
JC71600-4	21	2 ML	2 ML	1ml sample +1ml di/dw	5

Form: GN018-04
Revised: 06/15/17

Jennifer Parshall

From: Mark Lovejoy
Sent: Tuesday, September 10, 2019 3:05 PM
To: Jennifer Parshall
Subject: FW: Buffalo Nike - Water Treatment Proposal - Final Phase of Silo Closures
Attachments: 031419_PROPOSED WATER MANAGEMENT APPROACH TO NYSDEC_NIKE LAUNCH AREA.docx; Goepfert September 12 2018.pdf

-----Original Message-----
From: Goepfert, Gregory J CIV USARMY CENAN (US) <Gregory.J.Goepfert@usace.army.mil>
Sent: Friday, March 15, 2019 3:02 PM
To: Rink, Richard (DEC) <richard.rink@dec.ny.gov>
Cc: Reddy, Penelope W CIV (US) <PENELOPE.W.REDDY@usace.army.mil>; Mark Lovejoy <mlovejoy@tantaracorp.com>; Doug Reid <dreid@lenderconsulting.com>; Salvatore, Joseph A CIV CENAN CENAD (US) <Joseph.A.Salvatore@usace.army.mil>
Subject: FW: Buffalo Nike - Water Treatment Proposal - Final Phase of Silo Closures

Dear Mr. Rink,

Please see the attached letter (word file) with the proposed approach for dewatering during our final phase of silo closure efforts.

We are expecting to sample existing water contained within the footprint of the silos, the results of which will be provided to you prior to finalizing the process pathway prior to discharge; those results will be provided to you in advance of setting up the process train.
Our intention is to re-mobilize to the site in early April 2019.

Please provide your concurrence with the proposed approach as outlined in the attached letter (word file). A signed copy of the letter will be forwarded to you under separate cover.

Thanks in advance for your attention to this matter.

Sincerely,

Greg G.

Gregory J. Goepfert, P.E., PMP
Project Manager
U. S. Army Corps of Engineers
New York District
26 Federal Plaza
Rm 1811 (CENAN-PP-E)
New York, New York 10278

(O) 917-790-8235
(C) 732-841-8062

TANTARA CORPORATION
EDWOSB | SDB / WBE / DBE-Certified

March 14, 2019

Mr. Richard Rink, P.E.
Environmental Engineer 2
NYS DEC – Division of Water, Region 9
270 Michigan Avenue
Buffalo, NY 14203-2915

Re: Silo Water Management Plan for 2019
Closure of Underground Nike Missile Silos
Defense Battery BU-34/35
Town of Aurora, New York

Dear Mr. Rink:

As discussed with you on our February 28, 2019 telephone call, TANTARA plans to resume former Nike missile silo closure activities next month after taking a break over the winter months. These activities will involve the further demolition of three silos and filling in all six silos with soil to grade. We expect that when we return next month there will be up to 600,000 gallons of water staged within the three silos remaining to be demolished. This water is primarily from groundwater infiltration into the drained and cleaned silos. The quality of this water is, at worst, like the water that was approved for onsite treatment and discharge in your September 12, 2018 letter (attached). Our plan to manage this water is to first collect water samples from each of the three silos and analyze for VOCs, SVOCs, RCRA 8 metals plus aluminum, copper and iron, PCBs, oil and grease, total suspended solids, COD, TOC and pH. The results of this sampling will be used to evaluate the extent of treatment and discharge sampling needed. Any change to your September 12, 2018 letter will require approval by the NYS DEC. If treatment is needed, we will re-mobilize the onsite treatment system as specified in your September 12, 2018 letter and begin treatment and discharge within three weeks of remobilizing to the site. Discharge of the treated water would be to the existing onsite straw bale discharge structure. This discharge structure will be repaired if it was damaged over the winter. Sampling of the discharge will be as specified in your approval letter and the discharge rate will be approximately 100 gallons per minute or less.

Filling the six demolished silos with soil will require groundwater dewatering in order to achieve the specified compaction requirements. We propose to manage this water by pumping to a weir tank to remove a bulk of the expected sediment and then discharge through the onsite straw bale discharge structure at a flow rate of approximately 100 gpm or less. No treatment is expected to be needed for this water except for sediment removal. At your request, TANTARA will collect one water sample from each of the three currently demolished silos (Silos 1, 4 and 6) and analyze these samples for VOCs, SVOCs, RCRA 8 metals plus aluminum, copper and iron, PCBs, oil and grease, total suspended solids, COD, TOC and pH. A copy of the analytical results will be submitted to you for review. If it is determined based on these results that treatment is necessary, TANTARA will be prepared to use the onsite treatment system to treat the pumped water prior to discharge.

At the completion of the project, TANTARA will prepare a report that summarizes the water management activities and provides copies of the analytical reports for the discharge sampling of the treated water.

TANTARA requests your approval of this approach. Please let me know if you would like additional information.

Sincerely,

TANTARA Corporation

Mark A. Lovejoy, P.E., LSP, CHMM
Project Manager

cc: Gregory Goepfert, P.E., PMP – USACE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Region 9
270 Michigan Avenue, Buffalo, NY 14203-2915
P: (716) 851-7070 I F: (716) 851-7009
www.dec.ny.gov

September 12, 2018

Gregory J. Goepfert, P.E.
Project Manager
U.S. Army Corps of Engineers
New York District
26 Federal Plaza, Room 1811
New York, New York 10278

Dear Mr. Goepfert:

Silo Water Treatment & Discharge
Scope of Work Plan
Closure of Underground Nike Missile Silo 6
Defense Battery BU 34/35
East Aurora, New York

This letter is pursuant to your letter of September 5, 2018 and the previous submittal of August 27, 2018 from the Tantara Engineering Company and the United Rentals Fluid Solutions Company [URFS Co.], formerly the Baker Corp. The proposed process flow and scope of work outlines the treatment and discharge of missile silo water from Silo 6 to a tributary of Cazenovia Creek along Willardshire Road near Davis Road in the Town of Aurora, Erie County.

There are six (6) Nike Missile Silos at the above location. The ground and surface water in five (5) of the silos was recently pumped out, treated and discharged in a similar fashion to that proposed for Silo 6. The silos are 60' x 60' x 16' deep and each contain approximately 250,000 - 300,000 gals of ground and surface water. The water contained in Silo 6 needs to be removed [and treated] to perform an interior inspection, cleaning and proper decommissioning.

It is our understanding that Silo 6 has been filled with some construction/demolition debris and equipment. The water in this silo is also thought to contain more sediment than the previous silos. The treated flow rate for Silo 6 will be reduced to 100 gpm from 300 gpm and, if needed, a biodegradable polymer will be available to aid in settling and TSS removal. The proposed process flow and scope of work from the URFS Co. [8/24/18] as submitted by Tantara Engineering Corp. on 8/27/18 describes the proposed process to treat the water on site before discharging to a well-defined tributary of Cazenovia Creek in the Town of Aurora. Cazenovia Creek flows to the Town of Orchard Park then on toward the City of Buffalo.

The proposed process flow and scope of work of August 24, 2018 shows the following treatment units to be brought to the silo site. The treatment system will be provided by the United Rentals Fluid Solutions Company [formerly the Barker Corporation].

- One- 4" Hydraulic Submersible Pump with Poser Unit,
- Two-21,000 Gallon Fixed Axle Frac Tanks,
- One-Sound Attenuated Diesel Transfer Pump,
- One-6" 5-Plex Bag Filter Housing,
- Two-3" Duplex Bag Filter Skids,
- Two-KW -2,000 HPV Specialty Media Vessels,
- 4" Lay-flat hose used from Hydraulic Pumps to Frac Tanks and from end of treatment system to discharge point,
- 4" Rigid Hose for rest of treatment system,
- All fittings to be steel or aluminum,
- The Flowmeter to be mechanical propeller style with totalizer,
- Optional semi-passive Bio-Polymer System,
- Constructed hay bale energy dissipation discharge structure.

The discharge shall be approximately 100 gpm from the energy dissipation structure located near the Cazenovia Creek Tributary.

The procedures outlined above, in the Tantara Engineering correspondence of 8/27/18 and the 8/24/18 proposed process flow and scope of work from the URFS Co. regarding treatment and discharge of the ground and surface water contained in missile Silo 6 in the Town of Aurora are acceptable to this office.

Please notify the NYSDEC Division of Water (716/851-7070) 48 hours in advance of discharging.

A Discharge Water Report as discussed in this letter must be submitted to this Office within 30 days of test completion.

The following are the minimum conditions that the U.S.A.C.O.E (Tantara Co./URFS Co.) must meet to release the treated missile silo waters described above.

1. The treated discharge from the silos shall not be directly to any watercourse, but shall be to an upland location sufficiently distant from any stream to prevent the entry of silt and suspended solids.

2. On-site treatment of the silo waters must be provided exactly as described in your previous correspondences. The discharge must occur in such a manner so as to prevent erosion of the bed or banks of the receiving streams. The entry of silt, suspended solids or contaminants is prohibited.

3. The discharge of the silo waters shall be made at a rate and in a manner such that no downstream flooding shall occur. We recommend that the lowest feasible discharge rate occur. This will reduce the likelihood of downstream flooding or erosion. Energy dissipating devices such as that previously provided shall be used.

4. A positive means of controlling and metering the rate of treated silo water discharge and, if necessary, terminating the discharge shall be provided.

5. If deemed necessary at any time, the discharge of the waters shall be terminated upon direction of the Department.

6. The Department's Division of Water shall be notified, by telephone (716/851-7070), of exact date and time at which the discharge of the treated silo waters will begin. This notification shall be made at least 48 hours prior to the commencement of the discharge.

7. The area used for on-site treatment and routing of flows to the creek shall be restored to its original condition. Residuals generated during treatment and discharge must be disposed of in accordance with Department requirements.

8. The water discharged to the streams shall be monitored as follows. To prevent water quality problems, the settled and filtered silo waters shall be at or below the following concentrations. Exceeding these levels could result in legal action by this office.

Parameter	Sample Type & Frequency	Max Concentrations
Flow (gpm)	Monitor and Report	N.A.
Duration (hours)	Monitor and Report	N.A.
Suspended Solids	Grab, 3 per tank*	60 mg/l
Chemical Oxygen Demand	Grab, 3 per tank*	N.A.
Oil and Grease	Grab, 3 per tank*	15 mg/l
Iron	Grab, 3 per tank*	3 mg/l
Aluminum	Grab, 3 per tank*	0.3 mg/l
Arsenic	Grab, 3 per tank*	0.15 mg/l
Barium	Grab, 3 per tank*	3.0 mg/l
Cadmium	Grab, 3 per tank*	0.015 mg/l
Lead	Grab, 3 per tank*	0.15 mg/l
BTX (total)	Grab, 3 per tank*	0.1 mg/l
Dissolved Oxygen	Grab, 3 per tank*	Minimum of 5.0 mg/l
pH	Grab, 3 per tank*	6.0 – 9.0
Temperature	Grab, 3 per tank*	N.A.

*The first grab shall be taken through the upper 1/3 of each silo. The second grab shall be taken at approximately the ½ point in the silo. The third grab shall be taken through the bottom 1/3 of each silo.

9. Pumping from the silos shall not begin from the bottom of the tanks in the event that there are solids at the tank bottom. Rather, it is recommended that the pump be set at 1/3, then 2/3's, the depth from the surface. During dewatering of the bottom third of each tank, the pump should be lowered periodically from the 2/3's level to determine if there are solids at the bottom.

If so, the water should be pumped and treated only to that interface. If the solids are in a slurry or sludge form, this material cannot be pumped and treated, but must be trucked off site and disposed of per Department requirements.

10. Periodically during the duration of the water discharge, the receiving water body shall be visually monitored (and reported) for turbidity; suspended, colloidal and settleable solids; oil and floating substances; and fish impairment. Should any of the preceding parameters be greater than ambient, the discharge shall be terminated and this Department's Division of Water notified.

11. The discharge of the treated silo waters shall occur only during daylight hours.

12. A report summarizing the treatment and discharge operations, including a compilation of all monitoring data and visual observations, shall be submitted to this Department's Division of Water within thirty (30) days after completion of discharge.

13. All owners of property to which treated silo waters will be discharged shall be notified prior to the start of the discharge.

14. Please have a copy of this letter, the September 5, 2018 letter from the Department of the Army, the August 27, 2018 correspondence from the Tantara Corp, along with the process flow and scope of work plan from the URFS Company [8/24/18] available at the dewatering site.

If you have any questions regarding this letter, please call me at 716/851-7070.

Sincerely,

Richard A. Rink

Richard A. Rink, P.E.
Environmental Engineer 2

RAR/slr

ecc: Mr. Jeffrey Konsella, NYSDEC, Regional Water Engineer
Lt. Bob O'Connor, acting Captain, NYSDEC, Law Enforcement
Mr. David Denk, NYSDEC, Environmental Permits
Mr. Michael Todd, NYSDEC, Fisheries
Mr. Jaspal Walia, NYSDEC, Remediation

cc: Town of Aurora
Erie County Health Department

Jennifer Parshall

From: Mark Lovejoy
Sent: Tuesday, September 10, 2019 3:02 PM
To: Jennifer Parshall
Subject: FW: NIKE SITE - DISCHARGE REQUEST
Attachments: image001.png; 041119_DISCHARGE REQUEST LETTER TO NYSDEC.docx; Weir Drawing Tantara.pdf; LAB RESULTS MINUS FILTERED SAMPLES_R1902767.docx

-----Original Message-----
From: Goepfert, Gregory J CIV USARMY CENAN (US) <Gregory.J.Goepfert@usace.army.mil>
Sent: Friday, April 12, 2019 4:24 PM
To: Rink, Richard (DEC) <richard.rink@dec.ny.gov>
Cc: Reddy, Penelope W CIV (US) <PENELOPE.W.REDDY@usace.army.mil>; Mark Lovejoy <mlovejoy@tantaracorp.com>
Subject: NIKE SITE - DISCHARGE REQUEST

Richard,

Please see attached revised letter, as promised, subsequent to receipt of the attached lab results and weir tank drawing (you requested for silos 1, 4 & 6).

We would like to start-up the dewatering process on Tuesday, April 16, 2019.

Please advise us if you concur with the approach presented in the attached letter.

Thank you in advance for your cooperation in this matter.

Sincerely,

Greg G.

Gregory J. Goepfert, P.E., PMP
Project Manager
U. S. Army Corps of Engineers
New York District
26 Federal Plaza
Rm 1811 (CENAN-PP-E)
New York, New York 10278

(O) 917-790-8235
(C) 732-841-8062

TANTARA CORPORATION
EDWOSB | SDB / WBE / DBE-Certified

April 11, 2019

Mr. Richard Rink, P.E.
Environmental Engineer 2
NYS DEC – Division of Water, Region 9
270 Michigan Avenue
Buffalo, NY 14203-2915

Re: Silo Water Management Plan for 2019
Closure of Underground Nike Missile Silos
Defense Battery BU-34/35
Town of Aurora, New York

Dear Mr. Rink:

As requested, please find attached to this letter the analytical results for water samples collected from the three open silo excavations (Nos. 1, 4 and 6). The purpose of collecting and analyzing these surface water samples was to evaluate the need for treatment of this water prior to onsite discharge and ultimate flow into Cazenovia Creek. As noted, the results indicate concentrations are below the discharge limits specified in your September 12, 2018 letter, except for iron, aluminum, and total suspended solids (TSS). The water samples were not filtered, and the results represent total iron and aluminum concentrations. It is likely that these elevated concentrations are associated with the suspended solids, and their concentrations appear to be proportional to the concentrations of TSS in their respective samples. The laboratory is currently re-analyzing filtered samples for these parameters and the results are expected the week of April 15, 2019. If these filtered samples exhibit concentrations of metals below the specified discharge limits, TANTARA requests that the water from the open silo excavations be managed as follows:

1. Water will be pumped from the excavation at a flow rate of up to 200 gallons per minute (gpm).
2. Treatment of the pumped water will be initially through a 18,000-gallon weir tank (see attached diagram) for the purpose of removing a bulk of any sediment that exists in the water. Residence time in the weir tank is estimated to be a minimum of 90 minutes.
3. Following the weir tank, the water will be run through bag filters and then discharged into the onsite straw bale/geotextile energy dissipation structure used previously at the site.
4. No discharge sampling is necessary for this discharge; however, flow rate will be continuously monitored to ensure that the flow rate does not exceed 200 gpm, and the outfall to the Cazenovia Creek will be visually monitored daily.

We will await your response to this request before beginning to discharge this water.

Three silos still need to be demolished. These silos (Nos. 2, 3 and 5) are full of water from runoff/snowmelt over the winter months and will require dewatering before demolition can proceed. Last year, these silos were dewatered, hydraulic equipment removed (with the exception of the elevator pistons), and pressure washed. The elevator pistons will be removed subsequent to dewatering.

TANTARA proposes to manage this water the same as the water contained within the silos a year ago, including bag filtration, organoclay treatment, and granular activated carbon (GAC) treatment, and discharged onsite through the straw bale/geotextile energy dissipation structure. This includes water sampling and analysis prior to discharge per your September 12 letter. The flow rate will not exceed 200 gpm. We would like to start pumping and treating this water on Tuesday, April 16.

TANTARA requests your approval of this approach. Please let me know if you would like additional information.

Sincerely,

TANTARA Corporation

Mark A. Lovejoy, P.E., LSP, CHMM
Project Manager

cc: Gregory Goepfert, P.E., PMP – USACE

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Tantara Corporation

USACE Buffalo Nike Missle UST, East Aurora, NY

SGS Job Number: JC86089

Sampling Date: 04/09/19



Report to:

Tantara Corporation
54 Mason Street
Worcester, MA 01610
MLovejoy@TantaraCorp.com

ATTN: Mark Lovejoy

Total number of pages in report: **1238**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Brian McGuire
General Manager

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

SGS is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

Please share your ideas about
how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Sections: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Table of Contents

Section 1: Sample Summary 5
Section 2: Case Narrative/Conformance Summary 6
Section 3: Summary of Hits 9
Section 4: Sample Results 11
4.1: JC86089-1: SILO 3 12
4.2: JC86089-1F: SILO 3 21
4.3: JC86089-2: SILO 5 22
4.4: JC86089-2F: SILO 5 31
Section 5: Misc. Forms 32
5.1: Chain of Custody 33
5.2: Sample Tracking Chronicle 37
5.3: Internal Chain of Custody 39
Section 6: MS Volatiles - QC Data Summaries 44
6.1: Method Blank Summary 45
6.2: Blank Spike Summary 48
6.3: Matrix Spike Summary 51
6.4: Duplicate Summary 53
6.5: Instrument Performance Checks (BFB) 55
6.6: Internal Standard Area Summaries 57
6.7: Surrogate Recovery Summaries 58
6.8: Initial and Continuing Calibration Summaries 59
Section 7: MS Volatiles - Raw Data 73
7.1: Samples 74
7.2: Method Blanks 79
7.3: Blank Spikes 82
7.4: Matrix Spikes 86
7.5: Duplicates 90
7.6: Instrument Performance Checks (BFB) 102
7.7: Initial and Continuing Calibrations 106
7.8: Instrument Run Logs 154
Section 8: MS Semi-volatiles - QC Data Summaries 158
8.1: Method Blank Summary 159
8.2: Blank Spike/Blank Spike Duplicate Summary 162
8.3: Instrument Performance Checks (DFTPP) 165
8.4: Internal Standard Area Summaries 171
8.5: Surrogate Recovery Summaries 172
8.6: Initial and Continuing Calibration Summaries 173
Section 9: MS Semi-volatiles - Raw Data 193
9.1: Samples 194
9.2: Method Blanks 200
9.3: Blank Spike/Blank Spike Duplicates 204
9.4: Instrument Performance Checks (DFTPP) 212

Table of Contents

9.5: Initial and Continuing Calibrations 242
9.6: Instrument Run Logs 342
9.7: Prep Logs 352
Section 10: GC/LC Semi-volatiles - QC Data Summaries 353
10.1: Method Blank Summary 354
10.2: Blank Spike/Blank Spike Duplicate Summary 355
10.3: GC Identification Summaries (Hits) 356
10.4: Surrogate Recovery Summaries 358
10.5: GC Surrogate Retention Time Summaries 359
10.6: Initial and Continuing Calibration Summaries 360
Section 11: GC/LC Semi-volatiles - Raw Data 384
11.1: Samples 385
11.2: Method Blanks 389
11.3: Blank Spike/Blank Spike Duplicates 391
11.4: Initial and Continuing Calibrations 409
11.5: Instrument Run Logs 547
11.6: Prep Logs 551
Section 12: Metals Analysis - QC Data Summaries 552
12.1: Inst QC MA46497: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag 553
12.2: Inst QC MA46511: Hg 591
12.3: Inst QC MA46517: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag 611
12.4: Inst QC MA46528: Se 657
12.5: Prep QC MP14115: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag 688
12.6: Prep QC MP14185A: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag 693
12.7: Prep QC MP14257: Hg 698
12.8: IDL and Linear Range Summaries 702
Section 13: Metals Analysis - Raw Data 712
13.1: Raw Data MA46497 713
13.2: Raw Data MA46511 948
13.3: Raw Data MA46517 952
13.4: Raw Data MA46528 1067
13.5: Prep Logs 1160
Section 14: General Chemistry - QC Data Summaries 1170
14.1: Method Blank and Spike Results Summary 1171
14.2: Duplicate Results Summary 1172
14.3: Matrix Spike Results Summary 1173
14.4: Matrix Spike Duplicate Results Summary 1174
14.5: Inst QC GN94012: Total Organic Carbon 1175
Section 15: General Chemistry - Raw Data 1179
15.1: Raw Data GN94012: Total Organic Carbon 1180
15.2: Raw Data GN94107: HEM Oil and Grease 1223
15.3: Raw Data GN94111: Solids, Total Suspended 1227

Sections:

Table of Contents

15.4: Raw Data GN94211: Chemical Oxygen Demand 1230
Section 16: Misc. Raw Data 1236
16.1: Sample Filtration, Metals: 04/11/19 1237

SGS North America Inc.

Sample Summary

Tantara Corporation

Job No: JC86089

USACE Buffalo Nike Missle UST, East Aurora, NY

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC86089-1	04/09/19	09:35	ML	04/10/19	AQ	Water	SILO 3
JC86089-1F	04/09/19	09:35	ML	04/10/19	AQ	Water Filtered	SILO 3
JC86089-2	04/09/19	09:45	ML	04/10/19	AQ	Water	SILO 5
JC86089-2F	04/09/19	09:45	ML	04/10/19	AQ	Water Filtered	SILO 5

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Tantara Corporation	**Job No**	JC86089
Site:	USACE Buffalo Nike Missle UST, East Aurora, NY	**Report Date**	4/18/2019 10:54:20 A

On 04/10/2019, 4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 0.8 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC86089 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** V4D4101

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC86113-1DUP, JC86113-2MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 1,2-Dichloropropane, Acetone, Bromomethane are outside control limits. High percent recoveries and no associated positive reported in the QC batch.
- JC86089-2 for Bromomethane: Associated CCV and BS outside of control limits high, sample was ND.
- JC86089-2 for 1,2-Dichloropropane: Associated CCV and BS outside of control limits high, sample was ND.
- JC86089-1 for Acetone: This compound in BS is outside in house QC limits bias high.
- JC86089-1 for Bromomethane: Associated CCV and BS outside of control limits high, sample was ND.
- JC86089-1 for 1,2-Dichloropropane: Associated CCV and BS outside of control limits high, sample was ND.
- JC86089-2 for Acetone: This compound in BS is outside in house QC limits bias high.

MS Semi-volatiles By Method SW846 8270D

Matrix: AQ **Batch ID:** OP19680

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JC86089-1 for 4,6-Dinitro-o-cresol: Associated CCV outside of control limits low.
- JC86089-2 for 2,4-Dinitrophenol: Associated CCV outside of control limits low.
- JC86089-1 for Benzidine: Associated CCV outside of control limits low.
- JC86089-1 for 2,4-Dimethylphenol: Associated CCV outside of control limits high, sample was ND.
- JC86089-1 for 2,4-Dinitrophenol: Associated CCV outside of control limits low.
- JC86089-2 for 2,4-Dimethylphenol: Associated CCV outside of control limits high, sample was ND.
- JC86089-1 for Benzoic Acid: Associated CCV outside of control limits low.
- JC86089-2 for Benzidine: Associated CCV outside of control limits low.
- JC86089-1 for 2-Nitrophenol: Associated CCV outside of control limits low.
- JC86089-2 for Benzoic Acid: Associated CCV outside of control limits low.
- JC86089-2 for 2-Nitrophenol: Associated CCV outside of control limits low.
- JC86089-2 for 4,6-Dinitro-o-cresol: Associated CCV outside of control limits low.

GC/LC Semi-volatiles By Method SW846 8082A

Matrix: AQ **Batch ID:** OP19691

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP19691-BSD for Aroclor 1260: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP19691-BS1 for Aroclor 1260: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

Metals Analysis By Method SW846 6020B

Matrix: AQ **Batch ID:** MP14115

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC86081-4SDL, JC86081-4MS, JC86081-4MSD were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Barium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Arsenic, Silver are outside control limits for sample MP14115-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Samples(s) JC86089-1, JC86089-2: New York does not offer 3010A certification for antimony and silver. The laboratory is certified for method 3010A (Acid Digestion for Total Metals) for all other metals and is certified for the associated analytical methods of 6010C (ICP Analysis) and 6020A (ICP-MS Analysis). New York does certify for method 3005A (Acid Digestion for Total Recoverable or Dissolved Metals) for antimony and silver and the laboratory holds that certification, but that provides total recoverable rather than total metals results.
- MP14115-SD1 for Chromium: Serial dilution indicates possible matrix interference.

Matrix: AQ **Batch ID:** MP14185A

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC85901-2MS, JC85901-2MSD, JC85901-2SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Cadmium, Lead, Selenium, Silver are outside control limits for sample MP14185A-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Samples(s) JC86089-1F, JC86089-2F: New York does not offer 3010A certification for antimony and silver. The laboratory is certified for method 3010A (Acid Digestion for Total Metals) for all other metals and is certified for the associated analytical methods of 6010C (ICP Analysis) and 6020A (ICP-MS Analysis). New York does certify for method 3005A (Acid Digestion for Total Recoverable or Dissolved Metals) for antimony and silver and the laboratory holds that certification, but that provides total recoverable rather than total metals results.
- RPD(s) for Serial Dilution for Arsenic, Chromium, Copper are outside control limits for sample MP14185A-SD1. Serial dilution indicates possible matrix interference.

Metals Analysis By Method SW846 7470A

Matrix: AQ **Batch ID:** MP14257

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC86320-4MS, JC86320-4MSD were used as the QC samples for metals.

General Chemistry By Method EPA 1664A

Matrix: AQ **Batch ID:** GP20614

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC85624-2MS, JC85762-6DUP were used as the QC samples for HEM Oil and Grease.

General Chemistry By Method SM2540 D-11

Matrix: AQ **Batch ID:** GN94111

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC86036-5DUP were used as the QC samples for Solids, Total Suspended.

General Chemistry By Method SM4500H+ B-11

Matrix: AQ **Batch ID:** R177538

- The data for SM4500H+ B-11 meets quality control requirements.
- JC86089-1 for pH: Sample received out of holding time for pH analysis.
- JC86089-2 for pH: Sample received out of holding time for pH analysis.

General Chemistry By Method SM5220 C-11,HACH8000

Matrix: AQ **Batch ID:** GP20663

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC85706-2DUP, JC85706-2MS were used as the QC samples for Chemical Oxygen Demand.

General Chemistry By Method SM5310 B-11

Matrix: AQ **Batch ID:** GP20570

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC85602-1MS, JC85602-1MSD were used as the QC samples for Total Organic Carbon.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JC86089
Account: Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Collected: 04/09/19

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC86089-1	**SILO 3**					
Fluoranthene		0.25 J	1.0	0.17	ug/l	SW846 8270D
Phenanthrene		0.31 J	1.0	0.18	ug/l	SW846 8270D
Aluminum		228	50	32	ug/l	SW846 6020B
Barium		10.6	2.0	0.73	ug/l	SW846 6020B
Chromium		1.2 B	2.0	0.62	ug/l	SW846 6020B
Copper		3.5 B	4.0	1.9	ug/l	SW846 6020B
Iron		306	50	19	ug/l	SW846 6020B
Lead		2.1	1.0	0.52	ug/l	SW846 6020B
Solids, Total Suspended		7.9	4.0	1.5	mg/l	SM2540 D-11
Total Organic Carbon		2.8	1.0	0.72	mg/l	SM5310 B-11
pH [a]		6.85			su	SM4500H+ B-11
JC86089-1F	**SILO 3**					
Barium		9.4	2.0	0.73	ug/l	SW846 6020B
Cadmium		0.18 B	1.0	0.17	ug/l	SW846 6020B
Chromium		0.80 B	2.0	0.62	ug/l	SW846 6020B
Copper		3.1 B	4.0	1.9	ug/l	SW846 6020B
Iron		28.0 B	50	19	ug/l	SW846 6020B
JC86089-2	**SILO 5**					
Butyl benzyl phthalate		0.95 J	2.0	0.45	ug/l	SW846 8270D
2-Methylnaphthalene		0.26 J	0.98	0.21	ug/l	SW846 8270D
Aluminum		848	50	32	ug/l	SW846 6020B
Barium		15.8	2.0	0.73	ug/l	SW846 6020B
Cadmium		0.67 B	1.0	0.17	ug/l	SW846 6020B
Chromium		2.2	2.0	0.62	ug/l	SW846 6020B
Copper		3.4 B	4.0	1.9	ug/l	SW846 6020B
Iron		1020	50	19	ug/l	SW846 6020B
Lead		31.0	1.0	0.52	ug/l	SW846 6020B
Solids, Total Suspended		20.6	4.0	1.5	mg/l	SM2540 D-11
Total Organic Carbon		2.7	1.0	0.72	mg/l	SM5310 B-11
pH [a]		6.82			su	SM4500H+ B-11
JC86089-2F	**SILO 5**					
Barium		12.4	2.0	0.73	ug/l	SW846 6020B
Cadmium		0.62 B	1.0	0.17	ug/l	SW846 6020B
Chromium		0.87 B	2.0	0.62	ug/l	SW846 6020B
Copper		2.3 B	4.0	1.9	ug/l	SW846 6020B
Iron		46.5 B	50	19	ug/l	SW846 6020B
Lead		2.2	1.0	0.52	ug/l	SW846 6020B

Summary of Hits

Job Number: JC86089
Account: Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Collected: 04/09/19

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

(a) Sample received out of holding time for pH analysis.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	SILO 3		
Lab Sample ID:	JC86089-1	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D93391.D	1	04/11/19 02:45	JTP	n/a	n/a	V4D4101
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane [b]	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SILO 3		
Lab Sample ID:	JC86089-1	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		80-120%
17060-07-0	1,2-Dichloroethane-D4	105%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	106%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SILO 3		
Lab Sample ID:	JC86089-1	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) This compound in BS is outside in house QC limits bias high.
(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	SILO 3		
Lab Sample ID:	JC86089-1	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M153387.D	1	04/12/19 12:04	CS	04/11/19 06:00	OP19680	EM6555
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid [a]	ND	20	2.0	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol [b]	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol [a]	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol [a]	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine [a]	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.27	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SILO 3
Lab Sample ID: JC86089-1
Matrix: AQ - Water
Method: SW846 8270D SW846 3510C
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Date Sampled: 04/09/19
Date Received: 04/10/19
Percent Solids: n/a

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	0.25	1.0	0.17	ug/l	J
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	0.31	1.0	0.18	ug/l	J
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SILO 3		
Lab Sample ID:	JC86089-1	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		10-110%
4165-62-2	Phenol-d5	28%		10-110%
118-79-6	2,4,6-Tribromophenol	112%		36-151%
4165-60-0	Nitrobenzene-d5	85%		34-128%
321-60-8	2-Fluorobiphenyl	87%		38-119%
1718-51-0	Terphenyl-d14	86%		26-129%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.

SGS North America Inc.

Report of Analysis

Client Sample ID:	SILO 3		
Lab Sample ID:	JC86089-1	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8082A SW846 3510C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G178324.D	1	04/12/19 00:05	TR	04/11/19 17:30	OP19691	G2G4629
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.098	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.21	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.063	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.21	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.076	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	0.087	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	0.097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	135%		11-166%
877-09-8	Tetrachloro-m-xylene	87%		11-166%
2051-24-3	Decachlorobiphenyl	63%		10-150%
2051-24-3	Decachlorobiphenyl	68%		10-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SILO 3
Lab Sample ID: JC86089-1
Matrix: AQ - Water
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Date Sampled: 04/09/19
Date Received: 04/10/19
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	228	50	32	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Arsenic	0.94 U	1.0	0.94	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Barium	10.6	2.0	0.73	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Cadmium	0.17 U	1.0	0.17	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Chromium	1.2 B	2.0	0.62	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Copper	3.5 B	4.0	1.9	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Iron	306	50	19	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Lead	2.1	1.0	0.52	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Mercury	0.095 U	0.20	0.095	ug/l	1	04/16/19	04/16/19	EAL	SW846 7470A [2]	SW846 7470A [4]
Selenium	0.55 U	1.0	0.55	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Silver	0.16 U	1.0	0.16	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA46497
(2) Instrument QC Batch: MA46511
(3) Prep QC Batch: MP14115
(4) Prep QC Batch: MP14257

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SILO 3		
Lab Sample ID:	JC86089-1	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
		Percent Solids:	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chemical Oxygen Demand	11 U	20	11	mg/l	1	04/17/19 11:45	MP	SM5220 C-11,HACH8000
HEM Oil and Grease	3.2 U	5.0	3.2	mg/l	1	04/14/19 17:20	TM	EPA 1664A
Solids, Total Suspended	7.9	4.0	1.5	mg/l	1	04/15/19 10:17	RC	SM2540 D-11
Total Organic Carbon	2.8	1.0	0.72	mg/l	1	04/12/19 03:57	JO	SM5310 B-11
pH [a]	6.85			su	1	04/16/19 15:20	DDH	SM4500H + B-11

(a) Sample received out of holding time for pH analysis.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SILO 3
Lab Sample ID: JC86089-1F
Matrix: AQ - Water Filtered
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Date Sampled: 04/09/19
Date Received: 04/10/19
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	32 U	50	32	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Arsenic	0.94 U	1.0	0.94	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Barium	9.4	2.0	0.73	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Cadmium	0.18 B	1.0	0.17	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Chromium	0.80 B	2.0	0.62	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Copper	3.1 B	4.0	1.9	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Iron	28.0 B	50	19	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Lead	0.52 U	1.0	0.52	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Mercury	0.095 U	0.20	0.095	ug/l	1	04/16/19	04/16/19	EAL	SW846 7470A [1]	SW846 7470A [5]
Selenium	0.55 U	1.0	0.55	ug/l	2	04/15/19	04/17/19	ZC	SW846 6020B [3]	SW846 3010A [4]
Silver	0.16 U	1.0	0.16	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA46511
(2) Instrument QC Batch: MA46517
(3) Instrument QC Batch: MA46528
(4) Prep QC Batch: MP14185A
(5) Prep QC Batch: MP14257

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

SGS North America Inc.

Report of Analysis

Client Sample ID:	SILO 5		
Lab Sample ID:	JC86089-2	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D93392.D	1	04/11/19 03:13	JTP	n/a	n/a	V4D4101
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane [b]	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SILO 5		
Lab Sample ID:	JC86089-2	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		80-120%
17060-07-0	1,2-Dichloroethane-D4	105%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	106%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SILO 5		
Lab Sample ID:	JC86089-2	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q

(a) This compound in BS is outside in house QC limits bias high.
(b) Associated CCV and BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	SILO 5		
Lab Sample ID:	JC86089-2	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M153388.D	1	04/12/19 12:33	CS	04/11/19 06:00	OP19680	EM6555
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid [a]	ND	20	1.9	ug/l	
95-57-8	2-Chlorophenol	ND	4.9	0.80	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.9	0.87	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.2	ug/l	
105-67-9	2,4-Dimethylphenol [b]	ND	4.9	2.4	ug/l	
51-28-5	2,4-Dinitrophenol [a]	ND	4.9	1.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol [a]	ND	4.9	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.87	ug/l	
	3&4-Methylphenol	ND	2.0	0.86	ug/l	
88-75-5	2-Nitrophenol [a]	ND	4.9	0.94	ug/l	
100-02-7	4-Nitrophenol	ND	9.8	1.1	ug/l	
87-86-5	Pentachlorophenol	ND	3.9	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.38	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.9	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.9	0.91	ug/l	
83-32-9	Acenaphthene	ND	0.98	0.19	ug/l	
208-96-8	Acenaphthylene	ND	0.98	0.13	ug/l	
62-53-3	Aniline	ND	2.0	0.31	ug/l	
120-12-7	Anthracene	ND	0.98	0.21	ug/l	
92-87-5	Benzidine [a]	ND	9.8	0.88	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.98	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.98	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.98	0.20	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.98	0.33	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.98	0.20	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	0.95	2.0	0.45	ug/l	J
100-51-6	Benzyl Alcohol	ND	2.0	0.27	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.23	ug/l	
106-47-8	4-Chloroaniline	ND	4.9	0.33	ug/l	
86-74-8	Carbazole	ND	0.98	0.22	ug/l	
218-01-9	Chrysene	ND	0.98	0.17	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SILO 5		
Lab Sample ID:	JC86089-2	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.27	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.24	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.36	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	0.98	0.16	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	0.98	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	0.98	0.18	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	0.98	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.98	0.54	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.98	0.47	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.50	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.98	0.32	ug/l	
132-64-9	Dibenzofuran	ND	4.9	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.49	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.21	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.6	ug/l	
206-44-0	Fluoranthene	ND	0.98	0.17	ug/l	
86-73-7	Fluorene	ND	0.98	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	0.98	0.32	ug/l	
87-68-3	Hexachlorobutadiene	ND	0.98	0.48	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	9.8	2.7	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.38	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.98	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.27	ug/l	
90-12-0	1-Methylnaphthalene	ND	0.98	0.26	ug/l	
91-57-6	2-Methylnaphthalene	0.26	0.98	0.21	ug/l	J
88-74-4	2-Nitroaniline	ND	4.9	0.27	ug/l	
99-09-2	3-Nitroaniline	ND	4.9	0.38	ug/l	
100-01-6	4-Nitroaniline	ND	4.9	0.43	ug/l	
91-20-3	Naphthalene	ND	0.98	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.63	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.80	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.9	0.22	ug/l	
85-01-8	Phenanthrene	ND	0.98	0.17	ug/l	
129-00-0	Pyrene	ND	0.98	0.21	ug/l	
110-86-1	Pyridine	ND	2.0	0.38	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.98	0.25	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SILO 5		
Lab Sample ID:	JC86089-2	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	39%		10-110%
4165-62-2	Phenol-d5	27%		10-110%
118-79-6	2,4,6-Tribromophenol	103%		36-151%
4165-60-0	Nitrobenzene-d5	84%		34-128%
321-60-8	2-Fluorobiphenyl	92%		38-119%
1718-51-0	Terphenyl-d14	79%		26-129%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	SILO 5		
Lab Sample ID:	JC86089-2	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
Method:	SW846 8082A SW846 3510C	**Percent Solids:**	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G178325.D	1	04/12/19 00:22	TR	04/11/19 17:30	OP19691	G2G4629
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.098	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.21	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.063	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.21	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.076	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	0.087	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	0.097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	117%		11-166%
877-09-8	Tetrachloro-m-xylene	81%		11-166%
2051-24-3	Decachlorobiphenyl	51%		10-150%
2051-24-3	Decachlorobiphenyl	54%		10-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SILO 5
Lab Sample ID: JC86089-2
Matrix: AQ - Water
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Date Sampled: 04/09/19
Date Received: 04/10/19
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	848	50	32	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Arsenic	0.94 U	1.0	0.94	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Barium	15.8	2.0	0.73	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Cadmium	0.67 B	1.0	0.17	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Chromium	2.2	2.0	0.62	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Copper	3.4 B	4.0	1.9	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Iron	1020	50	19	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Lead	31.0	1.0	0.52	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Mercury	0.095 U	0.20	0.095	ug/l	1	04/16/19	04/16/19	EAL	SW846 7470A [2]	SW846 7470A [4]
Selenium	0.55 U	1.0	0.55	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]
Silver	0.16 U	1.0	0.16	ug/l	2	04/12/19	04/12/19	ZC	SW846 6020B [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA46497
(2) Instrument QC Batch: MA46511
(3) Prep QC Batch: MP14115
(4) Prep QC Batch: MP14257

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SILO 5		
Lab Sample ID:	JC86089-2	**Date Sampled:**	04/09/19
Matrix:	AQ - Water	**Date Received:**	04/10/19
		Percent Solids:	n/a
Project:	USACE Buffalo Nike Missle UST, East Aurora, NY		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chemical Oxygen Demand	11 U	20	11	mg/l	1	04/17/19 11:45	MP	SM5220 C-11,HACH8000
HEM Oil and Grease	3.2 U	5.0	3.2	mg/l	1	04/14/19 17:20	TM	EPA 1664A
Solids, Total Suspended	20.6	4.0	1.5	mg/l	1	04/15/19 10:17	RC	SM2540 D-11
Total Organic Carbon	2.7	1.0	0.72	mg/l	1	04/12/19 04:37	JO	SM5310 B-11
pH [a]	6.82			su	1	04/16/19 15:26	DDH	SM4500H + B-11

(a) Sample received out of holding time for pH analysis.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: SILO 5
Lab Sample ID: JC86089-2F
Matrix: AQ - Water Filtered
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Date Sampled: 04/09/19
Date Received: 04/10/19
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	32 U	50	32	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Arsenic	0.94 U	1.0	0.94	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Barium	12.4	2.0	0.73	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Cadmium	0.62 B	1.0	0.17	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Chromium	0.87 B	2.0	0.62	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Copper	2.3 B	4.0	1.9	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Iron	46.5 B	50	19	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Lead	2.2	1.0	0.52	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]
Mercury	0.095 U	0.20	0.095	ug/l	1	04/16/19	04/16/19	EAL	SW846 7470A [1]	SW846 7470A [5]
Selenium	0.55 U	1.0	0.55	ug/l	2	04/15/19	04/17/19	ZC	SW846 6020B [3]	SW846 3010A [4]
Silver	0.16 U	1.0	0.16	ug/l	2	04/15/19	04/16/19	ZC	SW846 6020B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA46511
(2) Instrument QC Batch: MA46517
(3) Instrument QC Batch: MA46528
(4) Prep QC Batch: MP14185A
(5) Prep QC Batch: MP14257

RL = Reporting Limit
MDL = Method Detection Limit

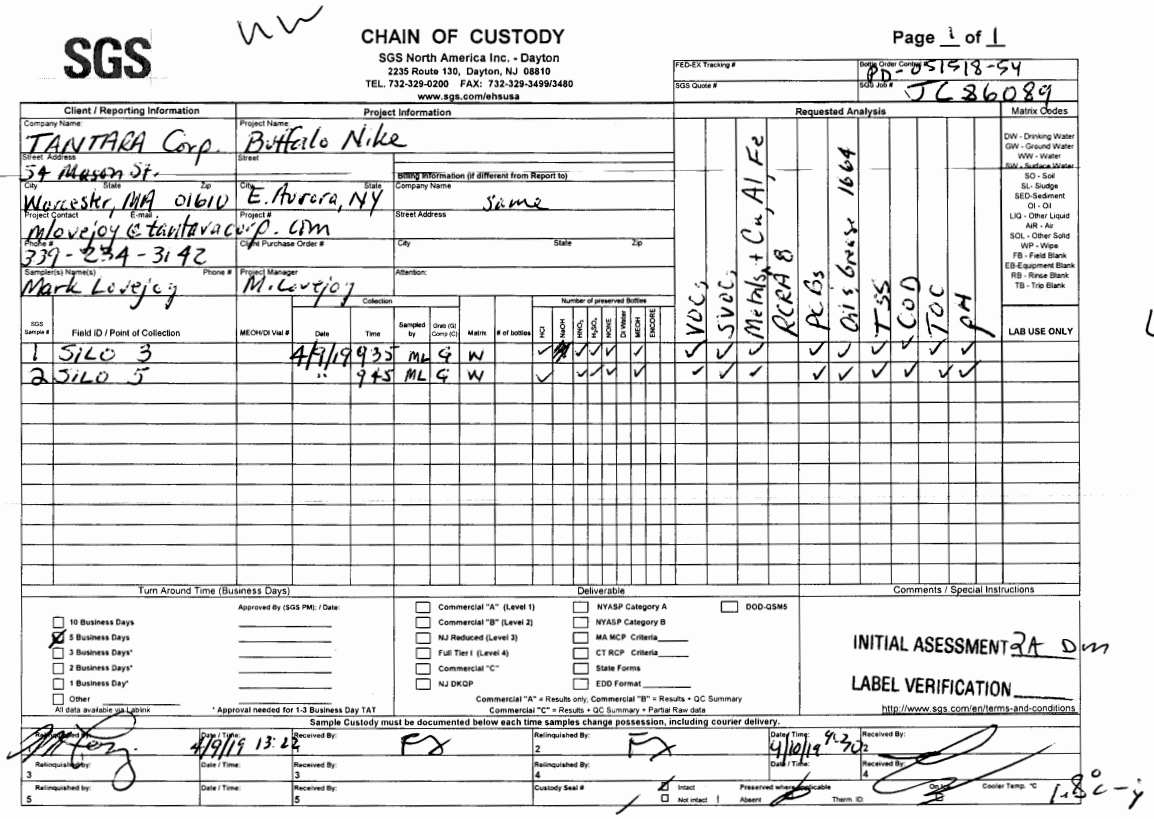
U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

Page 1 of 1

FED-EX Tracking #
Bottle Order Control # PD-051518-54
SGS Quote #
SGS Job # JC86089

Client / Reporting Information

Company Name: TANTARA Corp.
Street Address: 54 Mason St.
City / State / Zip: Worcester, MA 01610
Project Contact / E-mail: mlovejoy@tantaracorp.com
Phone #: 339-234-3142
Sampler(s) Name(s) / Phone #: Mark Lovejoy

Project Information

Project Name: Buffalo Nike
Street:
City / State: E. Aurora, NY
Project #:
Client Purchase Order #:
Project Manager: M. Lovejoy
Collection: Date / Time

Billing Information (if different from Report to)

Company Name: Same
Street Address:
City / State / Zip:
Attention:

Requested Analysis

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	Number of preserved Bottles: ICI	MeOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOCs	SVOCs	Metals + Cu, Al, Fe	RCRA 8	PCBs	Oil & Grease 1664	TSS	COD	TOC	pH	LAB USE ONLY
1	SILO 3		4/9/19	9:35	ML	G	W		✓	~~✓~~	✓	✓	✓		✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	
2	SILO 5		"	9:45	ML	G	W		✓		✓	✓	✓		✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	

L21
1E74
A12
659
1983
V345

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [ ] 10 Business Days
- [x] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other

All data available via Labink
* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [ ] EDD Format
- [ ] DOD-QSM5

Commercial "A" = Results only, Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

INITIAL ASESSMENT 2A DM
LABEL VERIFICATION
http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1	4/9/19 13:22	1 FX	2 FX	4/10/19 9:30	2
3		3	4		4
5		5	Custody Seal #	Intact / Not intact	Preserved where applicable / Absent

Therm. ID: Cooler Temp. °C: 1.8°C-y

EHSA-OAC-0023-02-FORM-Dayton - Standard COC.xlsx

SGS Sample Receipt Summary

Job Number: JC86089 **Client:** TANTARA CORPORATION **Project:** USACE BUFFALO NIKE MISSLE UST, EAST AU

Date / Time Received: 4/10/2019 9:30:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (1.8);

Cooler Temps (Corrected) °C: Cooler 1: (0.8);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 206717 pH 12+: 208717 Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

Job Change Order: JC86089

Requested Date: 4/11/2019 **Received Date:** 4/10/2019

Account Name: Tantara Corporation **Due Date:** 4/17/2019

Project Description: USACE Buffalo Nike Missle UST, East Aurora, NY **Deliverable:** FULT1

C/O Initiated By: TAMMY **PM:** TM **TAT (Days):** 7

==========

Sample #: JC86089-1 **Change:**

Dept: also log for FILTERMET, ALMS, CUMS, FEMS, HM8MS. Aliquot from 1 x TSS poly liter.

TAT: 7

SILO 3

==========

==========

Sample #: JC86089-2 **Change:**

Dept: also log for FILTERMET, ALMS, CUMS, FEMS, HM8MS. Aliquot from 1 x TSS poly liter.

TAT: 7

SILO 5

==========

Above Changes Per: Mark Lovejoy **Date/Time:** 4/11/2019 1:40:57 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JC86089

Requested Date:	4/16/2019	**Received Date:**	4/10/2019
Account Name:	Tantara Corporation	**Due Date:**	4/17/2019
Project Description:	USACE Buffalo Nike Missle UST, East Aurora, NY	**Deliverable:**	FULT1
C/O Initiated By:	TAMMY **PM:** TM	**TAT (Days):**	7

==========

Sample #: JC86089-1F, 2F

Dept:

TAT: 7

Change:
revise HM8MS to HM8ICPMS (removing AG, BA, CD, CR, PB & SE and no out data. Add AGMS, BAMS, CDMS, CRMS, PBMS, SEMS

==========

Above Changes Per: Tammy Esposito McCloskey **Date/Time:** 4/16/2019 1:00:19 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

Internal Sample Tracking Chronicle

Tantara Corporation

Job No: JC86089

USACE Buffalo Nike Missle UST, East Aurora, NY

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC86089-1 SILO 3	Collected: 09-APR-19 09:35 By: ML		Received: 10-APR-19 By: DG			
JC86089-1	SW846 8260C	11-APR-19 02:45	JTP			V8260STD
JC86089-1	SW846 8082A	12-APR-19 00:05	TR	11-APR-19	NT	P8082PCB11
JC86089-1	SM5310 B-11	12-APR-19 03:57	JO	11-APR-19	JO	TOC
JC86089-1	SW846 8270D	12-APR-19 12:04	CS	11-APR-19	MT	AB8270STD
JC86089-1	SW846 6020B	12-APR-19 20:32	ZC	12-APR-19	BP	AGMS,ALMS,ASMS,BAMS,CDMS, CRMS,CUMS,FEMS,PBMS,SEMS
JC86089-1	EPA 1664A	14-APR-19 17:20	TM	14-APR-19	TM	OG1664
JC86089-1	SM2540 D-11	15-APR-19 10:17	RC			TSS
JC86089-1	SW846 7470A	16-APR-19 12:47	EAL	16-APR-19	EAL	HG
JC86089-1	SM4500H+ B-11	16-APR-19 15:20	DDH			PH
JC86089-1	SM5220 C-11,HACH8000	17-APR-19 11:45	MP	17-APR-19	MP	COD
JC86089-2 SILO 5	Collected: 09-APR-19 09:45 By: ML		Received: 10-APR-19 By: DG			
JC86089-2	SW846 8260C	11-APR-19 03:13	JTP			V8260STD
JC86089-2	SW846 8082A	12-APR-19 00:22	TR	11-APR-19	NT	P8082PCB11
JC86089-2	SM5310 B-11	12-APR-19 04:37	JO	11-APR-19	JO	TOC
JC86089-2	SW846 8270D	12-APR-19 12:33	CS	11-APR-19	MT	AB8270STD
JC86089-2	SW846 6020B	12-APR-19 20:38	ZC	12-APR-19	BP	AGMS,ALMS,ASMS,BAMS,CDMS, CRMS,CUMS,FEMS,PBMS,SEMS
JC86089-2	EPA 1664A	14-APR-19 17:20	TM	14-APR-19	TM	OG1664
JC86089-2	SM2540 D-11	15-APR-19 10:17	RC			TSS
JC86089-2	SW846 7470A	16-APR-19 12:50	EAL	16-APR-19	EAL	HG
JC86089-2	SM4500H+ B-11	16-APR-19 15:26	DDH			PH
JC86089-2	SM5220 C-11,HACH8000	17-APR-19 11:45	MP	17-APR-19	MP	COD
JC86089-1F SILO 3	Collected: 09-APR-19 09:35 By: ML		Received: 10-APR-19 By: DG			
JC86089-1F	SW846 7470A	16-APR-19 12:48	EAL	16-APR-19	EAL	HG
JC86089-1F	SW846 6020B	16-APR-19 14:03	ZC	15-APR-19	WWZ	AGMS,ALMS,ASMS,BAMS,CDMS, CRMS,CUMS,FEMS,PBMS
JC86089-1F	SW846 6020B	17-APR-19 18:09	ZC	15-APR-19	WWZ	SEMS

Internal Sample Tracking Chronicle

Tantara Corporation

Job No: JC86089

USACE Buffalo Nike Missle UST, East Aurora, NY

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC86089-2F	Collected: 09-APR-19 09:45 By: ML SILO 5			Received: 10-APR-19 By: DG		
JC86089-2F	SW846 7470A	16-APR-19 12:54	EAL	16-APR-19	EAL	HG
JC86089-2F	SW846 6020B	16-APR-19 14:08	ZC	15-APR-19	WWZ	AGMS,ALMS,ASMS,BAMS,CDMS, CRMS,CUMS,FEMS,PBMS
JC86089-2F	SW846 6020B	17-APR-19 18:14	ZC	15-APR-19	WWZ	SEMS

SGS Internal Chain of Custody

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Received: 04/10/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC86089-1.1	Secured Storage	Sahara Feliciano	04/12/19 17:41	Retrieve from Storage
JC86089-1.1	Sahara Feliciano	Secured Staging Area	04/12/19 17:41	Return to Storage
JC86089-1.1	Secured Staging Area	Tharun Murali	04/13/19 08:55	Retrieve from Storage
JC86089-1.1	Tharun Murali	Secured Storage	04/13/19 21:47	Return to Storage
JC86089-1.1	Secured Storage	Tharun Murali	04/14/19 17:02	Retrieve from Storage
JC86089-1.1	Tharun Murali		04/14/19 17:03	Depleted
JC86089-1.1.1	Tharun Murali	TCLP	04/13/19 08:55	Leachate from JC86089-1.1
JC86089-1.1.1	TCLP	Tharun Murali	04/18/19 08:49	Leachate from JC86089-1.1
JC86089-1.1.1	Tharun Murali	Secured Storage	04/18/19 08:50	Return to Storage
JC86089-1.3	Secured Storage	Sahara Feliciano	04/10/19 18:14	Retrieve from Storage
JC86089-1.3	Sahara Feliciano	Secured Staging Area	04/10/19 18:14	Return to Storage
JC86089-1.3	Secured Staging Area	Brian Johnson	04/11/19 05:06	Retrieve from Storage
JC86089-1.3	Brian Johnson		04/15/19 06:14	Depleted
JC86089-1.3.1	Brian Johnson	Organics Prep	04/11/19 05:06	Extract from JC86089-1.3
JC86089-1.3.1	Organics Prep	Mohamed Turay	04/11/19 13:15	Extract from JC86089-1.3
JC86089-1.3.1	Mohamed Turay	Extract Storage	04/11/19 13:15	Return to Storage
JC86089-1.3.1	Extract Storage	Christopher Sowa	04/12/19 06:08	Retrieve from Storage
JC86089-1.3.1	Christopher Sowa	GCMSM	04/12/19 06:08	Load on Instrument
JC86089-1.3.1	GCMSM	Christine Change	04/12/19 16:38	Unload from Instrument
JC86089-1.3.1	Christine Change	Extract Freezer	04/12/19 16:38	Return to Storage
JC86089-1.5	Secured Storage	Naisha Torres	04/11/19 15:32	Retrieve from Storage
JC86089-1.5	Naisha Torres		04/11/19 19:19	Depleted
JC86089-1.5.1	Naisha Torres	Organics Prep	04/11/19 15:32	Extract from JC86089-1.5
JC86089-1.5.1	Organics Prep	Naisha Torres	04/11/19 22:46	Extract from JC86089-1.5
JC86089-1.5.1	Naisha Torres	Extract Storage	04/11/19 22:46	Return to Storage
JC86089-1.5.1	Extract Storage	Christine Phillips	04/11/19 23:10	Retrieve from Storage
JC86089-1.5.1	Christine Phillips	GC2G	04/11/19 23:10	Load on Instrument
JC86089-1.6	Secured Storage	Matthew Robbins	04/11/19 17:10	Retrieve from Storage
JC86089-1.6	Matthew Robbins	Secured Staging Area	04/11/19 17:10	Return to Storage
JC86089-1.6	Secured Staging Area	Bhooma Patel	04/12/19 06:46	Retrieve from Storage
JC86089-1.6	Bhooma Patel	Secured Storage	04/12/19 10:13	Return to Storage
JC86089-1.6	Secured Storage	Matthew Robbins	04/15/19 20:42	Retrieve from Storage
JC86089-1.6	Matthew Robbins	Secured Staging Area	04/15/19 20:42	Return to Storage
JC86089-1.6	Secured Staging Area	Colleen Hill	04/16/19 07:12	Retrieve from Storage
JC86089-1.6	Colleen Hill	Secured Storage	04/16/19 14:23	Return to Storage
JC86089-1.6.1	Bhooma Patel	Metals Digestion	04/12/19 09:37	Digestate from JC86089-1.6
JC86089-1.6.1	Metals Digestion	Bhooma Patel	04/12/19 09:38	Digestate from JC86089-1.6

SGS Internal Chain of Custody

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Received: 04/10/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC86089-1.6.1	Bhooma Patel	Metals Digestate Storage	04/12/19 09:38	Return to Storage
JC86089-1.8	Secured Storage	Dwayne Johnson	04/12/19 08:49	Retrieve from Storage
JC86089-1.8	Dwayne Johnson	Secured Staging Area	04/12/19 08:49	Return to Storage
JC86089-1.8	Secured Staging Area	Ruchitaben Chauhan	04/12/19 17:15	Retrieve from Storage
JC86089-1.8	Ruchitaben Chauhan	Secured Storage	04/12/19 17:25	Return to Storage
JC86089-1.8	Secured Storage	Sahara Feliciano	04/14/19 08:51	Retrieve from Storage
JC86089-1.8	Sahara Feliciano	Secured Staging Area	04/14/19 08:51	Return to Storage
JC86089-1.8	Secured Staging Area	Ruchitaben Chauhan	04/15/19 14:46	Retrieve from Storage
JC86089-1.8	Ruchitaben Chauhan	Secured Storage	04/15/19 17:33	Return to Storage
JC86089-1.9	Secured Storage	Matthew Robbins	04/16/19 19:24	Retrieve from Storage
JC86089-1.9	Matthew Robbins	Secured Staging Area	04/16/19 19:24	Return to Storage
JC86089-1.9	Secured Staging Area	Mahendra Patel	04/17/19 08:40	Retrieve from Storage
JC86089-1.9	Mahendra Patel	Secured Storage	04/17/19 13:39	Return to Storage
JC86089-1.10	Secured Storage	Todd Shoemaker	04/11/19 14:16	Retrieve from Storage
JC86089-1.10	Todd Shoemaker	Secured Staging Area	04/11/19 14:17	Return to Storage
JC86089-1.10	Secured Staging Area	John Oborne	04/11/19 15:34	Retrieve from Storage
JC86089-1.10	John Oborne	Secured Storage	04/11/19 23:23	Return to Storage
JC86089-1.12	Secured Storage	Payal Rana	04/10/19 20:47	Retrieve from Storage
JC86089-1.12	Payal Rana	GCMS4D	04/10/19 20:47	Load on Instrument
JC86089-1.12	GCMS4D	Edward Durner	04/11/19 06:37	Unload from Instrument
JC86089-1.12	Edward Durner	Secured Storage	04/11/19 06:37	Return to Storage
JC86089-1F.14	Secured Storage	Dwayne Johnson	04/11/19 15:34	Retrieve from Storage
JC86089-1F.14	Dwayne Johnson	Secured Staging Area	04/11/19 15:34	Return to Storage
JC86089-1F.14	Secured Staging Area	Colleen Hill	04/11/19 15:57	Retrieve from Storage
JC86089-1F.14	Colleen Hill	Secured Storage	04/11/19 15:57	Return to Storage
JC86089-1F.14	Secured Storage	Sahara Feliciano	04/11/19 18:16	Retrieve from Storage
JC86089-1F.14	Sahara Feliciano	Secured Staging Area	04/11/19 18:16	Return to Storage
JC86089-1F.14	Secured Staging Area	Colleen Hill	04/12/19 08:51	Retrieve from Storage
JC86089-1F.14	Colleen Hill	Secured Storage	04/12/19 10:16	Return to Storage
JC86089-1F.14	Secured Storage	Sahara Feliciano	04/14/19 10:59	Retrieve from Storage
JC86089-1F.14	Sahara Feliciano	Secured Staging Area	04/14/19 10:59	Return to Storage
JC86089-1F.14	Secured Staging Area	Taylor Gorman	04/15/19 07:25	Retrieve from Storage
JC86089-1F.14	Taylor Gorman	Secured Storage	04/15/19 10:11	Return to Storage
JC86089-1F.14	Secured Storage	Matthew Robbins	04/15/19 20:42	Retrieve from Storage
JC86089-1F.14	Matthew Robbins	Secured Staging Area	04/15/19 20:42	Return to Storage
JC86089-1F.14	Secured Staging Area	Colleen Hill	04/16/19 07:12	Retrieve from Storage
JC86089-1F.14	Colleen Hill	Secured Storage	04/16/19 14:23	Return to Storage
JC86089-1F.14.1	Taylor Gorman	Metals Digestion	04/15/19 10:06	Digestate from JC86089-1F.14

SGS Internal Chain of Custody

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Received: 04/10/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC86089-1F.14.1	Metals Digestion	Taylor Gorman	04/15/19 10:07	Digestate from JC86089-1F.14
JC86089-1F.14.1	Taylor Gorman		04/15/19 10:11	Depleted
JC86089-1F.14.2	Taylor Gorman	Metals Digestion	04/15/19 10:08	Digestate from JC86089-1F.14
JC86089-1F.14.2	Metals Digestion	Taylor Gorman	04/15/19 10:08	Digestate from JC86089-1F.14
JC86089-1F.14.2	Taylor Gorman	Metals Digestate Storage	04/15/19 10:08	Return to Storage
JC86089-1F.14.2	Metals Digestate Storage	Rakesh Pathak	04/15/19 15:44	Retrieve from Storage
JC86089-1F.14.2	Rakesh Pathak	Metals Digestate Storage	04/15/19 19:50	Return to Storage
JC86089-2.1	Secured Storage	Sahara Feliciano	04/12/19 17:41	Retrieve from Storage
JC86089-2.1	Sahara Feliciano	Secured Staging Area	04/12/19 17:41	Return to Storage
JC86089-2.1	Secured Staging Area	Tharun Murali	04/13/19 08:55	Retrieve from Storage
JC86089-2.1	Tharun Murali	Secured Storage	04/13/19 21:47	Return to Storage
JC86089-2.1	Secured Storage	Tharun Murali	04/14/19 17:02	Retrieve from Storage
JC86089-2.1	Tharun Murali		04/14/19 17:03	Depleted
JC86089-2.1.1	Tharun Murali	TCLP	04/13/19 08:55	Leachate from JC86089-2.1
JC86089-2.1.1	TCLP	Tharun Murali	04/18/19 08:49	Leachate from JC86089-2.1
JC86089-2.1.1	Tharun Murali	Secured Storage	04/18/19 08:50	Return to Storage
JC86089-2.2	Secured Storage	Sahara Feliciano	04/10/19 18:14	Retrieve from Storage
JC86089-2.2	Sahara Feliciano	Secured Staging Area	04/10/19 18:14	Return to Storage
JC86089-2.2	Secured Staging Area	Brian Johnson	04/11/19 05:06	Retrieve from Storage
JC86089-2.2	Brian Johnson		04/15/19 06:14	Depleted
JC86089-2.2.1	Brian Johnson	Organics Prep	04/11/19 05:06	Extract from JC86089-2.2
JC86089-2.2.1	Organics Prep	Mohamed Turay	04/11/19 13:15	Extract from JC86089-2.2
JC86089-2.2.1	Mohamed Turay	Extract Storage	04/11/19 13:15	Return to Storage
JC86089-2.2.1	Extract Storage	Christopher Sowa	04/12/19 06:08	Retrieve from Storage
JC86089-2.2.1	Christopher Sowa	GCMSM	04/12/19 06:08	Load on Instrument
JC86089-2.2.1	GCMSM	Christine Change	04/12/19 16:38	Unload from Instrument
JC86089-2.2.1	Christine Change	Extract Freezer	04/12/19 16:38	Return to Storage
JC86089-2.3	Secured Storage	Naisha Torres	04/11/19 15:32	Retrieve from Storage
JC86089-2.3	Naisha Torres		04/11/19 19:19	Depleted
JC86089-2.3.1	Naisha Torres	Organics Prep	04/11/19 15:32	Extract from JC86089-2.3
JC86089-2.3.1	Organics Prep	Naisha Torres	04/11/19 22:46	Extract from JC86089-2.3
JC86089-2.3.1	Naisha Torres	Extract Storage	04/11/19 22:46	Return to Storage
JC86089-2.3.1	Extract Storage	Christine Phillips	04/11/19 23:10	Retrieve from Storage
JC86089-2.3.1	Christine Phillips	GC2G	04/11/19 23:10	Load on Instrument
JC86089-2.6	Secured Storage	Matthew Robbins	04/11/19 17:10	Retrieve from Storage
JC86089-2.6	Matthew Robbins	Secured Staging Area	04/11/19 17:10	Return to Storage

SGS Internal Chain of Custody

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Received: 04/10/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC86089-2.6	Secured Staging Area	Bhooma Patel	04/12/19 06:46	Retrieve from Storage
JC86089-2.6	Bhooma Patel	Secured Storage	04/12/19 10:13	Return to Storage
JC86089-2.6	Secured Storage	Matthew Robbins	04/15/19 20:42	Retrieve from Storage
JC86089-2.6	Matthew Robbins	Secured Staging Area	04/15/19 20:42	Return to Storage
JC86089-2.6	Secured Staging Area	Colleen Hill	04/16/19 07:12	Retrieve from Storage
JC86089-2.6	Colleen Hill	Secured Storage	04/16/19 14:23	Return to Storage
JC86089-2.6.1	Bhooma Patel	Metals Digestion	04/12/19 09:37	Digestate from JC86089-2.6
JC86089-2.6.1	Metals Digestion	Bhooma Patel	04/12/19 09:38	Digestate from JC86089-2.6
JC86089-2.6.1	Bhooma Patel	Metals Digestate Storage	04/12/19 09:38	Return to Storage
JC86089-2.8	Secured Storage	Dwayne Johnson	04/12/19 08:49	Retrieve from Storage
JC86089-2.8	Dwayne Johnson	Secured Staging Area	04/12/19 08:49	Return to Storage
JC86089-2.8	Secured Staging Area	Ruchitaben Chauhan	04/12/19 17:15	Retrieve from Storage
JC86089-2.8	Ruchitaben Chauhan	Secured Storage	04/12/19 17:25	Return to Storage
JC86089-2.8	Secured Storage	Sahara Feliciano	04/14/19 08:51	Retrieve from Storage
JC86089-2.8	Sahara Feliciano	Secured Staging Area	04/14/19 08:51	Return to Storage
JC86089-2.8	Secured Staging Area	Ruchitaben Chauhan	04/15/19 14:46	Retrieve from Storage
JC86089-2.8	Ruchitaben Chauhan		04/15/19 17:27	Depleted
JC86089-2.9	Secured Storage	Matthew Robbins	04/16/19 19:24	Retrieve from Storage
JC86089-2.9	Matthew Robbins	Secured Staging Area	04/16/19 19:24	Return to Storage
JC86089-2.9	Secured Staging Area	Mahendra Patel	04/17/19 08:40	Retrieve from Storage
JC86089-2.9	Mahendra Patel	Secured Storage	04/17/19 13:39	Return to Storage
JC86089-2.10	Secured Storage	Todd Shoemaker	04/11/19 14:16	Retrieve from Storage
JC86089-2.10	Todd Shoemaker	Secured Staging Area	04/11/19 14:17	Return to Storage
JC86089-2.10	Secured Staging Area	John Oborne	04/11/19 15:34	Retrieve from Storage
JC86089-2.10	John Oborne	Secured Storage	04/11/19 23:23	Return to Storage
JC86089-2.12	Secured Storage	Payal Rana	04/10/19 20:47	Retrieve from Storage
JC86089-2.12	Payal Rana	GCMS4D	04/10/19 20:47	Load on Instrument
JC86089-2.12	GCMS4D	Edward Durner	04/11/19 06:37	Unload from Instrument
JC86089-2.12	Edward Durner	Secured Storage	04/11/19 06:37	Return to Storage
JC86089-2F.14	Secured Storage	Dwayne Johnson	04/11/19 15:34	Retrieve from Storage
JC86089-2F.14	Dwayne Johnson	Secured Staging Area	04/11/19 15:34	Return to Storage
JC86089-2F.14	Secured Staging Area	Colleen Hill	04/11/19 15:57	Retrieve from Storage
JC86089-2F.14	Colleen Hill	Secured Storage	04/11/19 15:57	Return to Storage
JC86089-2F.14	Secured Storage	Sahara Feliciano	04/11/19 18:16	Retrieve from Storage
JC86089-2F.14	Sahara Feliciano	Secured Staging Area	04/11/19 18:16	Return to Storage
JC86089-2F.14	Secured Staging Area	Colleen Hill	04/12/19 08:51	Retrieve from Storage
JC86089-2F.14	Colleen Hill	Secured Storage	04/12/19 10:16	Return to Storage
JC86089-2F.14	Secured Storage	Sahara Feliciano	04/14/19 10:59	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Received: 04/10/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC86089-2F.14	Sahara Feliciano	Secured Staging Area	04/14/19 10:59	Return to Storage
JC86089-2F.14	Secured Staging Area	Taylor Gorman	04/15/19 07:25	Retrieve from Storage
JC86089-2F.14	Taylor Gorman	Secured Storage	04/15/19 10:11	Return to Storage
JC86089-2F.14	Secured Storage	Matthew Robbins	04/15/19 20:42	Retrieve from Storage
JC86089-2F.14	Matthew Robbins	Secured Staging Area	04/15/19 20:42	Return to Storage
JC86089-2F.14	Secured Staging Area	Colleen Hill	04/16/19 07:12	Retrieve from Storage
JC86089-2F.14	Colleen Hill	Secured Storage	04/16/19 14:23	Return to Storage
JC86089-2F.14.1	Taylor Gorman	Metals Digestion	04/15/19 10:06	Digestate from JC86089-2F.14
JC86089-2F.14.1	Metals Digestion	Taylor Gorman	04/15/19 10:07	Digestate from JC86089-2F.14
JC86089-2F.14.1	Taylor Gorman		04/15/19 10:11	Depleted
JC86089-2F.14.2	Taylor Gorman	Metals Digestion	04/15/19 10:08	Digestate from JC86089-2F.14
JC86089-2F.14.2	Metals Digestion	Taylor Gorman	04/15/19 10:08	Digestate from JC86089-2F.14
JC86089-2F.14.2	Taylor Gorman	Metals Digestate Storage	04/15/19 10:08	Return to Storage
JC86089-2F.14.2	Metals Digestate Storage	Rakesh Pathak	04/15/19 15:44	Retrieve from Storage
JC86089-2F.14.2	Rakesh Pathak	Metals Digestate Storage	04/15/19 19:50	Return to Storage

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D4101-MB	4D93374.D	1	04/10/19	JTP	n/a	n/a	V4D4101

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC86089-1, JC86089-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	

Method Blank Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D4101-MB	4D93374.D	1	04/10/19	JTP	n/a	n/a	V4D4101

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC86089-1, JC86089-2

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	90%	80-120%
17060-07-0	1,2-Dichloroethane-D4	103%	81-124%
2037-26-5	Toluene-D8	104%	80-120%
460-00-4	4-Bromofluorobenzene	107%	80-120%

Method Blank Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D4101-MB	4D93374.D	1	04/10/19	JTP	n/a	n/a	V4D4101

The QC reported here applies to the following samples: **Method:**

JC86089-1, JC86089-2

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	4.14	9.9	ug/l	J
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D4101-BS	4D93372.D	1	04/10/19	JTP	n/a	n/a	V4D4101

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC86089-1, JC86089-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	321	161* [a]	42-150
71-43-2	Benzene	50	56.7	113	80-120
108-86-1	Bromobenzene	50	49.2	98	82-118
74-97-5	Bromochloromethane	50	51.3	103	84-121
75-27-4	Bromodichloromethane	50	54.2	108	83-120
75-25-2	Bromoform	50	51.3	103	76-129
74-83-9	Bromomethane	50	76.0	152* [a]	57-138
78-93-3	2-Butanone (MEK)	200	247	124	64-137
104-51-8	n-Butylbenzene	50	55.6	111	81-123
135-98-8	sec-Butylbenzene	50	51.3	103	84-121
98-06-6	tert-Butylbenzene	50	49.2	98	83-122
56-23-5	Carbon tetrachloride	50	46.5	93	75-135
108-90-7	Chlorobenzene	50	49.8	100	84-117
75-00-3	Chloroethane	50	58.3	117	63-132
67-66-3	Chloroform	50	50.2	100	80-119
74-87-3	Chloromethane	50	51.9	104	46-136
95-49-8	o-Chlorotoluene	50	51.1	102	84-118
106-43-4	p-Chlorotoluene	50	50.9	102	83-116
96-12-8	1,2-Dibromo-3-chloropropane	50	52.0	104	72-127
124-48-1	Dibromochloromethane	50	52.9	106	80-123
106-93-4	1,2-Dibromoethane	50	57.6	115	84-117
95-50-1	1,2-Dichlorobenzene	50	48.8	98	84-119
541-73-1	1,3-Dichlorobenzene	50	48.9	98	81-117
106-46-7	1,4-Dichlorobenzene	50	48.3	97	82-117
75-71-8	Dichlorodifluoromethane	50	60.4	121	36-149
75-34-3	1,1-Dichloroethane	50	58.7	117	79-120
107-06-2	1,2-Dichloroethane	50	50.1	100	78-126
75-35-4	1,1-Dichloroethene	50	54.9	110	69-126
156-59-2	cis-1,2-Dichloroethene	50	53.3	107	80-120
156-60-5	trans-1,2-Dichloroethene	50	53.8	108	76-120
78-87-5	1,2-Dichloropropane	50	60.8	122* [a]	82-121
142-28-9	1,3-Dichloropropane	50	53.5	107	83-115
594-20-7	2,2-Dichloropropane	50	51.8	104	65-133
563-58-6	1,1-Dichloropropene	50	52.6	105	80-121
10061-01-5	cis-1,3-Dichloropropene	50	55.1	110	83-120
10061-02-6	trans-1,3-Dichloropropene	50	56.8	114	82-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D4101-BS	4D93372.D	1	04/10/19	JTP	n/a	n/a	V4D4101

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC86089-1, JC86089-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	50	52.0	104	80-120
87-68-3	Hexachlorobutadiene	50	49.6	99	75-129
98-82-8	Isopropylbenzene	50	50.7	101	83-120
99-87-6	p-Isopropyltoluene	50	51.8	104	83-122
1634-04-4	Methyl Tert Butyl Ether	50	53.8	108	80-119
108-10-1	4-Methyl-2-pentanone(MIBK)	200	231	116	71-131
74-95-3	Methylene bromide	50	52.1	104	85-120
75-09-2	Methylene chloride	50	52.5	105	77-120
91-20-3	Naphthalene	50	46.4	93	73-131
103-65-1	n-Propylbenzene	50	51.7	103	82-119
100-42-5	Styrene	50	56.3	113	82-122
630-20-6	1,1,1,2-Tetrachloroethane	50	51.4	103	82-121
79-34-5	1,1,2,2-Tetrachloroethane	50	52.0	104	76-119
127-18-4	Tetrachloroethene	50	48.7	97	70-131
108-88-3	Toluene	50	52.4	105	80-120
87-61-6	1,2,3-Trichlorobenzene	50	46.0	92	76-134
120-82-1	1,2,4-Trichlorobenzene	50	48.5	97	79-132
71-55-6	1,1,1-Trichloroethane	50	49.2	98	81-128
79-00-5	1,1,2-Trichloroethane	50	56.5	113	83-118
79-01-6	Trichloroethene	50	52.2	104	80-120
75-69-4	Trichlorofluoromethane	50	50.8	102	64-136
96-18-4	1,2,3-Trichloropropane	50	49.0	98	79-120
95-63-6	1,2,4-Trimethylbenzene	50	51.3	103	84-120
108-67-8	1,3,5-Trimethylbenzene	50	51.7	103	83-119
75-01-4	Vinyl chloride	50	55.4	111	51-135
	m,p-Xylene	100	104	104	80-120
95-47-6	o-Xylene	50	53.1	106	80-120
1330-20-7	Xylene (total)	150	157	105	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	91%	80-120%
17060-07-0	1,2-Dichloroethane-D4	103%	81-124%
2037-26-5	Toluene-D8	103%	80-120%
460-00-4	4-Bromofluorobenzene	106%	80-120%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D4101-BS	4D93372.D	1	04/10/19	JTP	n/a	n/a	V4D4101

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC86089-1, JC86089-2

(a) High percent recoveries and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC86113-2MS	4D93380.D	1	04/10/19	JTP	n/a	n/a	V4D4101
JC86113-2	4D93377.D	1	04/10/19	JTP	n/a	n/a	V4D4101

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC86089-1, JC86089-2

CAS No.	Compound	JC86113-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
67-64-1	Acetone	ND		200	203	102	34-149
71-43-2	Benzene	0.73		50	56.2	111	54-136
108-86-1	Bromobenzene	ND		50	47.5	95	78-122
74-97-5	Bromochloromethane	ND		50	48.9	98	79-124
75-27-4	Bromodichloromethane	ND		50	52.2	104	79-124
75-25-2	Bromoform	ND		50	48.4	97	71-130
74-83-9	Bromomethane	ND		50	64.3	129	53-142
78-93-3	2-Butanone (MEK)	ND		200	201	101	54-142
104-51-8	n-Butylbenzene	2.4		50	56.3	108	73-133
135-98-8	sec-Butylbenzene	4.0		50	52.3	97	76-132
98-06-6	tert-Butylbenzene	ND		50	48.3	97	76-131
56-23-5	Carbon tetrachloride	ND		50	47.8	96	70-143
108-90-7	Chlorobenzene	ND		50	48.4	97	78-123
75-00-3	Chloroethane	ND		50	59.0	118	57-141
67-66-3	Chloroform	ND		50	48.3	97	76-123
74-87-3	Chloromethane	ND		50	44.1	88	43-141
95-49-8	o-Chlorotoluene	ND		50	49.0	98	78-124
106-43-4	p-Chlorotoluene	ND		50	48.6	97	77-122
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	49.0	98	66-130
124-48-1	Dibromochloromethane	ND		50	50.8	102	76-125
106-93-4	1,2-Dibromoethane	ND		50	55.4	111	78-119
95-50-1	1,2-Dichlorobenzene	ND		50	47.4	95	77-123
541-73-1	1,3-Dichlorobenzene	ND		50	46.8	94	76-122
106-46-7	1,4-Dichlorobenzene	ND		50	46.3	93	76-122
75-71-8	Dichlorodifluoromethane	ND		50	57.9	116	31-159
75-34-3	1,1-Dichloroethane	ND		50	56.2	112	73-126
107-06-2	1,2-Dichloroethane	ND		50	47.7	95	72-131
75-35-4	1,1-Dichloroethene	ND		50	54.9	110	63-136
156-59-2	cis-1,2-Dichloroethene	ND		50	51.7	103	60-136
156-60-5	trans-1,2-Dichloroethene	ND		50	52.4	105	70-126
78-87-5	1,2-Dichloropropane	ND		50	58.2	116	78-124
142-28-9	1,3-Dichloropropane	ND		50	51.1	102	78-118
594-20-7	2,2-Dichloropropane	ND		50	51.6	103	59-141
563-58-6	1,1-Dichloropropene	ND		50	52.3	105	75-130
10061-01-5	cis-1,3-Dichloropropene	ND		50	53.1	106	79-123
10061-02-6	trans-1,3-Dichloropropene	ND		50	53.7	107	77-123

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC86113-2MS	4D93380.D	1	04/10/19	JTP	n/a	n/a	V4D4101
JC86113-2	4D93377.D	1	04/10/19	JTP	n/a	n/a	V4D4101

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC86089-1, JC86089-2

CAS No.	Compound	JC86113-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
100-41-4	Ethylbenzene	29.1		50	74.9	92	51-140
87-68-3	Hexachlorobutadiene	ND		50	48.6	97	64-141
98-82-8	Isopropylbenzene	10.1		50	57.4	95	75-129
99-87-6	p-Isopropyltoluene	2.6		50	51.6	98	76-131
1634-04-4	Methyl Tert Butyl Ether	ND		50	50.7	101	72-123
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	222	111	66-136
74-95-3	Methylene bromide	ND		50	49.4	99	81-121
75-09-2	Methylene chloride	ND		50	50.0	100	73-125
91-20-3	Naphthalene	77.6		50	110	65	62-141
103-65-1	n-Propylbenzene	15.9		50	62.1	92	68-133
100-42-5	Styrene	ND		50	54.0	108	75-129
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	50.0	100	77-124
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	49.5	99	71-122
127-18-4	Tetrachloroethene	ND		50	47.8	96	61-139
108-88-3	Toluene	ND		50	51.3	103	60-135
87-61-6	1,2,3-Trichlorobenzene	ND		50	43.4	87	70-138
120-82-1	1,2,4-Trichlorobenzene	ND		50	45.5	91	72-137
71-55-6	1,1,1-Trichloroethane	ND		50	48.9	98	74-138
79-00-5	1,1,2-Trichloroethane	ND		50	53.9	108	78-121
79-01-6	Trichloroethene	ND		50	51.5	103	62-141
75-69-4	Trichlorofluoromethane	ND		50	54.0	108	57-149
96-18-4	1,2,3-Trichloropropane	ND		50	46.0	92	74-122
95-63-6	1,2,4-Trimethylbenzene	45.0		50	85.2	80	54-143
108-67-8	1,3,5-Trimethylbenzene	6.6		50	54.6	96	67-133
75-01-4	Vinyl chloride	ND		50	54.4	109	43-146
	m,p-Xylene	4.8		100	105	100	50-144
95-47-6	o-Xylene	1.9		50	52.7	102	63-134
1330-20-7	Xylene (total)	6.7		150	158	101	56-139

CAS No.	Surrogate Recoveries	MS	JC86113-2	Limits
1868-53-7	Dibromofluoromethane	91%	91%	80-120%
17060-07-0	1,2-Dichloroethane-D4	101%	105%	81-124%
2037-26-5	Toluene-D8	103%	104%	80-120%
460-00-4	4-Bromofluorobenzene	105%	106%	80-120%

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC86113-1DUP	4D93379.D	1	04/10/19	JTP	n/a	n/a	V4D4101
JC86113-1	4D93378.D	1	04/10/19	JTP	n/a	n/a	V4D4101

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC86089-1, JC86089-2

CAS No.	Compound	JC86113-1 ug/l	Q	DUP ug/l	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	20
71-43-2	Benzene	0.95		0.97		2	20
108-86-1	Bromobenzene	ND		ND		nc	20
74-97-5	Bromochloromethane	ND		ND		nc	20
75-27-4	Bromodichloromethane	ND		ND		nc	20
75-25-2	Bromoform	ND		ND		nc	20
74-83-9	Bromomethane	ND		ND		nc	20
78-93-3	2-Butanone (MEK)	ND		ND		nc	20
104-51-8	n-Butylbenzene	3.2		3.4		6	20
135-98-8	sec-Butylbenzene	5.3		5.6		6	20
98-06-6	tert-Butylbenzene	ND		ND		nc	20
56-23-5	Carbon tetrachloride	ND		ND		nc	20
108-90-7	Chlorobenzene	ND		ND		nc	20
75-00-3	Chloroethane	ND		ND		nc	20
67-66-3	Chloroform	ND		ND		nc	20
74-87-3	Chloromethane	ND		ND		nc	20
95-49-8	o-Chlorotoluene	ND		ND		nc	20
106-43-4	p-Chlorotoluene	ND		ND		nc	20
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	20
124-48-1	Dibromochloromethane	ND		ND		nc	20
106-93-4	1,2-Dibromoethane	ND		ND		nc	20
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	20
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	20
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	20
75-71-8	Dichlorodifluoromethane	ND		ND		nc	20
75-34-3	1,1-Dichloroethane	ND		ND		nc	20
107-06-2	1,2-Dichloroethane	ND		ND		nc	20
75-35-4	1,1-Dichloroethene	ND		ND		nc	20
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	20
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	20
78-87-5	1,2-Dichloropropane	ND		ND		nc	20
142-28-9	1,3-Dichloropropane	ND		ND		nc	20
594-20-7	2,2-Dichloropropane	ND		ND		nc	20
563-58-6	1,1-Dichloropropene	ND		ND		nc	20
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	20
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	20

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC86113-1DUP	4D93379.D	1	04/10/19	JTP	n/a	n/a	V4D4101
JC86113-1	4D93378.D	1	04/10/19	JTP	n/a	n/a	V4D4101

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC86089-1, JC86089-2

CAS No.	Compound	JC86113-1 ug/l	Q	DUP ug/l	Q	RPD	Limits
100-41-4	Ethylbenzene	36.6		37.4		2	20
87-68-3	Hexachlorobutadiene	ND		ND		nc	20
98-82-8	Isopropylbenzene	12.5		12.9		3	20
99-87-6	p-Isopropyltoluene	3.4		3.6		6	20
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	20
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	20
74-95-3	Methylene bromide	ND		ND		nc	20
75-09-2	Methylene chloride	ND		ND		nc	20
91-20-3	Naphthalene	103		108		5	20
103-65-1	n-Propylbenzene	20.3		20.9		3	20
100-42-5	Styrene	ND		ND		nc	20
630-20-6	1,1,1,2-Tetrachloroethane	ND		ND		nc	20
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	20
127-18-4	Tetrachloroethene	ND		ND		nc	20
108-88-3	Toluene	ND		ND		nc	20
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	20
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	20
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	20
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	20
79-01-6	Trichloroethene	ND		ND		nc	20
75-69-4	Trichlorofluoromethane	ND		ND		nc	20
96-18-4	1,2,3-Trichloropropane	ND		ND		nc	20
95-63-6	1,2,4-Trimethylbenzene	52.3		53.5		2	20
108-67-8	1,3,5-Trimethylbenzene	7.6		7.8		3	20
75-01-4	Vinyl chloride	ND		ND		nc	20
	m,p-Xylene	5.4		5.4		0	20
95-47-6	o-Xylene	2.1		2.1		0	20
1330-20-7	Xylene (total)	7.5		7.6		1	20

CAS No.	Surrogate Recoveries	DUP	JC86113-1	Limits
1868-53-7	Dibromofluoromethane	89%	91%	80-120%
17060-07-0	1,2-Dichloroethane-D4	102%	104%	81-124%
2037-26-5	Toluene-D8	105%	104%	80-120%
460-00-4	4-Bromofluorobenzene	108%	106%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: V4D4028-BFB
Lab File ID: 4D92103.D
Instrument ID: GCMS4D
Injection Date: 01/29/19
Injection Time: 14:06

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	14107	16.7		Pass
75	30.0 - 60.0% of mass 95	37203	44.0		Pass
95	Base peak, 100% relative abundance	84643	100.0		Pass
96	5.0 - 9.0% of mass 95	5706	6.74		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	71216	84.1		Pass
175	5.0 - 9.0% of mass 174	5348	6.32	(7.51) [a]	Pass
176	95.0 - 101.0% of mass 174	69448	82.0	(97.5) [a]	Pass
177	5.0 - 9.0% of mass 176	4487	5.30	(6.46) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V4D4028-IC4028	4D92104.D	01/29/19	14:41	00:35	Initial cal 0.2
V4D4028-IC4028	4D92105.D	01/29/19	15:10	01:04	Initial cal 0.5
V4D4028-IC4028	4D92106.D	01/29/19	15:39	01:33	Initial cal 1
V4D4028-IC4028	4D92107.D	01/29/19	16:08	02:02	Initial cal 2
V4D4028-IC4028	4D92108.D	01/29/19	16:37	02:31	Initial cal 4
V4D4028-IC4028	4D92109.D	01/29/19	17:06	03:00	Initial cal 8
V4D4028-IC4028	4D92110.D	01/29/19	17:35	03:29	Initial cal 20
V4D4028-ICC4028	4D92111.D	01/29/19	18:04	03:58	Initial cal 50
V4D4028-IC4028	4D92112.D	01/29/19	18:33	04:27	Initial cal 100
V4D4028-IC4028	4D92113.D	01/29/19	19:02	04:56	Initial cal 200
V4D4028-ICV4028	4D92116.D	01/29/19	20:29	06:23	Initial cal verification 50
V4D4028-ICV4028	4D92117.D	01/29/19	20:58	06:52	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	V4D4101-BFB	**Injection Date:**	04/10/19
Lab File ID:	4D93371.D	**Injection Time:**	16:49
Instrument ID:	GCMS4D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	12356	17.8		Pass
75	30.0 - 60.0% of mass 95	31696	45.7		Pass
95	Base peak, 100% relative abundance	69381	100.0		Pass
96	5.0 - 9.0% of mass 95	4530	6.53		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	55504	80.0		Pass
175	5.0 - 9.0% of mass 174	4272	6.16	(7.70) [a]	Pass
176	95.0 - 101.0% of mass 174	54432	78.5	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	3588	5.17	(6.59) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V4D4101-CC4028	4D93371.D	04/10/19	16:49	00:00	Continuing cal 50
V4D4101-BS	4D93372.D	04/10/19	17:17	00:28	Blank Spike
V4D4101-MB	4D93374.D	04/10/19	18:15	01:26	Method Blank
ZZZZZZ	4D93375.D	04/10/19	18:58	02:09	(unrelated sample)
ZZZZZZ	4D93376.D	04/10/19	19:26	02:37	(unrelated sample)
JC86113-2	4D93377.D	04/10/19	19:55	03:06	(used for QC only; not part of job JC86089)
JC86113-1	4D93378.D	04/10/19	20:23	03:34	(used for QC only; not part of job JC86089)
JC86113-1DUP	4D93379.D	04/10/19	21:03	04:14	Duplicate
JC86113-2MS	4D93380.D	04/10/19	21:32	04:43	Matrix Spike
ZZZZZZ	4D93382.D	04/10/19	22:29	05:40	(unrelated sample)
ZZZZZZ	4D93383.D	04/10/19	22:57	06:08	(unrelated sample)
ZZZZZZ	4D93384.D	04/10/19	23:26	06:37	(unrelated sample)
ZZZZZZ	4D93385.D	04/10/19	23:54	07:05	(unrelated sample)
ZZZZZZ	4D93386.D	04/11/19	00:23	07:34	(unrelated sample)
ZZZZZZ	4D93387.D	04/11/19	00:51	08:02	(unrelated sample)
ZZZZZZ	4D93388.D	04/11/19	01:20	08:31	(unrelated sample)
ZZZZZZ	4D93389.D	04/11/19	01:48	08:59	(unrelated sample)
ZZZZZZ	4D93390.D	04/11/19	02:17	09:28	(unrelated sample)
JC86089-1	4D93391.D	04/11/19	02:45	09:56	SILO 3
JC86089-2	4D93392.D	04/11/19	03:13	10:24	SILO 5

Internal Standard Area Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Check Std:	V4D4101-CC4028	**Injection Date:**	04/10/19
Lab File ID:	4D93371.D	**Injection Time:**	16:49
Instrument ID:	GCMS4D	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	159510	8.66	185939	11.14	278233	12.03	236094	14.93	102989	17.03
Upper Limit [a]	319020	9.16	371878	11.64	556466	12.53	472188	15.43	205978	17.53
Lower Limit [b]	79755	8.16	92970	10.64	139117	11.53	118047	14.43	51495	16.53

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V4D4101-BS	169257	8.66	183022	11.15	275442	12.03	235109	14.93	105179	17.03
V4D4101-MB	164664	8.66	200313	11.15	303917	12.03	260056	14.93	114448	17.03
ZZZZZZ	164279	8.65	203480	11.14	309084	12.03	263010	14.93	116507	17.03
ZZZZZZ	161499	8.66	198571	11.15	306367	12.03	258298	14.93	114530	17.03
JC86113-2	161069	8.66	196510	11.15	300857	12.03	258098	14.93	115361	17.03
JC86113-1	161411	8.66	196374	11.15	299246	12.03	255557	14.93	115150	17.03
JC86113-1DUP	166070	8.65	201633	11.14	305310	12.03	258279	14.93	114135	17.03
JC86113-2MS	163508	8.66	185483	11.15	277608	12.03	238537	14.93	106629	17.03
ZZZZZZ	164152	8.66	206311	11.15	312651	12.03	265499	14.93	119238	17.03
ZZZZZZ	165399	8.66	203519	11.15	308415	12.03	262743	14.93	118023	17.03
ZZZZZZ	170038	8.66	204615	11.15	311212	12.03	264811	14.93	119731	17.03
ZZZZZZ	161903	8.66	202962	11.15	308556	12.03	264174	14.93	118336	17.03
ZZZZZZ	163867	8.66	201714	11.15	307652	12.03	264163	14.93	119253	17.03
ZZZZZZ	158788	8.66	194985	11.15	298491	12.03	255466	14.93	114775	17.03
ZZZZZZ	158815	8.66	195642	11.15	299653	12.03	256169	14.93	114153	17.03
ZZZZZZ	158662	8.66	197570	11.15	303365	12.03	256739	14.93	114258	17.03
ZZZZZZ	158727	8.66	195745	11.15	297770	12.03	254278	14.93	113516	17.03
JC86089-1	150422	8.66	190963	11.15	294447	12.03	252689	14.93	113498	17.03
JC86089-2	153381	8.66	192692	11.15	293266	12.03	252407	14.93	112122	17.03

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC86089-1	4D93391.D	92	105	103	106
JC86089-2	4D93392.D	91	105	104	106
JC86113-1DUP	4D93379.D	89	102	105	108
JC86113-2MS	4D93380.D	91	101	103	105
V4D4101-BS	4D93372.D	91	103	103	106
V4D4101-MB	4D93374.D	90	103	104	107

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	81-124%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

Initial Calibration Summary

Job Number: JC86089 **Sample:** V4D4028-ICC4028
Account: TCMAW Tantara Corporation **Lab FileID:** 4D92111.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Response Factor Report MS4D

Method : C:\MSDCHEM\1\METHODS\M4D4028.M (RTE Integrator)
Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

Calibration Files
1 =4D92106.D 0.5 =4D92105.D 100 =4D92112.D 50 =4D92111.D
20 =4D92110.D 200 =4D92113.D 4 =4D92108.D 2 =4D92107.D
8 =4D92109.D 0.2 =4D92104.D = =

Compound	1	0.5	100	50	20	200	4	2	8	0.2	Avg	%RSD
1) tert butyl alcohol-d9	----------ISTD----------											
2) tertiary butyl alcohol	0.898	1.179	1.120	1.112	1.167	1.075	1.023	1.094			1.084	8.29
3) ethanol	0.077	0.121	0.114	0.110	0.119	0.103	0.091	0.110			0.106	14.07
4) 1,4-dioxane	0.096	0.106	0.107	0.114	0.098	0.116	0.110	0.118			0.108	7.31
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	0.482	0.401	0.559	0.516	0.521	0.535	0.522	0.523	0.519		0.509	8.88
7) dichlorodifluoromethane	0.427	0.618	0.578	0.576	0.631	0.532	0.495	0.571			0.554	12.11
8) chloromethane	0.850	1.009	0.819	0.809	0.795	0.847	0.811	0.856	0.797		0.844	7.84
9) vinyl chloride	0.587	0.557	0.661	0.642	0.650	0.673	0.653	0.639	0.666		0.636	6.10
10) bromomethane	0.241	0.214	0.194	0.244	0.155	0.144	0.183				0.196	19.76
11) chloroethane	0.262	0.357	0.337	0.327	0.367	0.313	0.301	0.323			0.323	10.19
12) trichlorofluoromethane	0.600	0.622	0.810	0.768	0.761	0.831	0.726	0.676	0.752		0.727	10.97
13) vinyl bromide	0.280	0.423	0.395	0.383	0.441	0.366	0.352	0.374			0.377	13.00
14) ethyl ether	0.299	0.272	0.253	0.294	0.228	0.206	0.238				0.256	13.43
15) acrolein	0.141	0.126	0.109	0.140			0.098				0.123	15.46
16) freon 113	0.240	0.361	0.332	0.333	0.356	0.317	0.276	0.306			0.315	12.94
17) 1,1-dichloroethene	0.329	0.450	0.417	0.410	0.447	0.393	0.367	0.392			0.401	10.04
18) acetone	0.231	0.216	0.205	0.212	0.186	0.163	0.192				0.201	11.19
19) acetonitrile	0.070	0.103	0.096	0.089	0.098	0.084	0.077	0.085			0.088	12.57
20) iodomethane *This compound fails Initial Calibration criteria*	0.342	0.283	0.233	0.373	0.158	0.141	0.183				0.245	37.17
21) carbon disulfide	1.016	1.040	1.148	1.067	1.020	1.136	1.015	1.026	1.012	1.381	1.086	10.58
22) methylene chloride	0.436	0.509	0.520	0.485	0.465	0.512	0.456	0.445	0.459	0.552	0.484	7.85
23) methyl acetate												

```
                0.588 0.544 0.518 0.560 0.512 0.531 0.502        0.536    5.61
24)  methyl tert butyl ether
      1.254 1.233 1.572 1.469 1.414 1.516 1.361 1.299 1.374 1.243  1.374    8.66
25)  trans-1,2-dichloroethene
      0.372       0.482 0.452 0.441 0.473 0.424 0.413 0.421        0.435    8.11
26)  di-isopropyl ether
      1.267 1.205 1.678 1.587 1.519 1.594 1.420 1.394 1.451 1.326  1.444   10.55
27)  2-butanone
                0.098 0.091 0.084 0.092 0.076 0.065 0.079        0.084   13.44
28)  1,1-dichloroethane
      0.711 0.678 0.901 0.850 0.833 0.869 0.791 0.758 0.796 0.629  0.782   11.19
29)  chloroprene
      0.521       0.720 0.682 0.661 0.699 0.614 0.575 0.625        0.637   10.50
30)  acrylonitrile
                0.246 0.223 0.203 0.240 0.176       0.182        0.212   13.80
31)  hexane
                0.319 0.295 0.285 0.316 0.267 0.214 0.258        0.279   13.20
32)  vinyl acetate
                0.130 0.118 0.108 0.126             0.089        0.114   14.46
33)  ethyl tert-butyl ether
      1.299 1.238 1.664 1.563 1.492 1.606 1.419 1.373 1.438 1.354  1.445    9.46
34)  ethyl acetate
                0.091 0.086 0.078 0.087 0.060       0.072        0.079   14.90
35)  2,2-dichloropropane
      0.657 0.633 0.725 0.711 0.720 0.674 0.697 0.690 0.700        0.690    4.39
36)  cis-1,2-dichloroethene
      0.420 0.426 0.563 0.532 0.518 0.542 0.495 0.481 0.498        0.497    9.85
37)  methyl acrylate
                0.116 0.108 0.100 0.112 0.074       0.086        0.099   16.36
38)  propionitrile
      0.081       0.120 0.115 0.107 0.109 0.099 0.090 0.101        0.103   12.34
39)  bromochloromethane
      0.185       0.260 0.252 0.250 0.250 0.233 0.219 0.241        0.236   10.33
40)  tetrahydrofuran
                0.106 0.100 0.094 0.100 0.079       0.087        0.094   10.76
41)  chloroform
      0.523 0.489 0.585 0.561 0.564 0.560 0.545 0.518 0.550 0.569  0.546    5.26
42)  t-butyl formate
      0.398 0.364 0.554 0.530 0.518 0.526 0.457 0.434 0.482        0.474   13.74
43)  dibromofluoromethane (s)
      0.539 0.535 0.557 0.568 0.557 0.566 0.555 0.553 0.562 0.521  0.551    2.71
44)  methacrylonitrile
                0.291 0.271 0.255 0.276             0.227        0.264    9.11
45)  1,1,1-trichloroethane
      0.673 0.647 0.770 0.739 0.754 0.747 0.734 0.697 0.734 0.579  0.707    8.37
46)  cyclohexane
      0.559 0.543 0.708 0.688 0.701 0.708 0.647 0.602 0.691        0.650   10.12
47)  1,1-dichloropropene
      0.553 0.569 0.663 0.636 0.656 0.640 0.626 0.601 0.632 0.505  0.608    8.36
48)  isobutyl alcohol
                0.004 0.004 0.004 0.004 0.003       0.004        0.004   15.06
49)  carbon tetrachloride
      0.523 0.492 0.667 0.641 0.662 0.646 0.631 0.596 0.643        0.611   10.25
50)  tert amyl alcohol
      0.025       0.038 0.037 0.037 0.035 0.033 0.029 0.035        0.033   13.04

51) I   1,4-difluorobenzene   ----------------ISTD---------------------
52)  1,2-dichloroethane-d4 (s)
      0.338 0.345 0.331 0.339 0.345 0.325 0.337 0.339 0.338 0.340  0.337    1.78
53)  n-butyl alcohol
```

```
      0.011       0.018 0.017 0.017 0.016 0.015 0.013 0.015        0.015   15.96
54)  2,2,4-trimethylpentane
      0.591 0.469 0.739 0.722 0.732 0.716 0.679 0.617 0.677 0.712  0.665   12.73
55)  benzene
      1.020 1.019 1.136 1.087 1.103 1.083 1.065 1.039 1.073 1.184  1.081    4.77
56)  tert-amyl methyl ether
      0.176 0.165 0.231 0.222 0.220 0.218 0.207 0.197 0.212        0.205   10.81
57)  heptane
      0.117       0.177 0.170 0.171 0.177 0.155 0.133 0.154        0.157   13.98
58)  isopropyl acetate
                  0.093 0.087 0.085 0.088 0.071 0.062 0.077        0.080   13.45
59)  1,2-dichloroethane
      0.436 0.503 0.424 0.415 0.423 0.395 0.427 0.435 0.422        0.431    6.81
60)  trichloroethene
      0.265 0.249 0.310 0.296 0.303 0.297 0.295 0.286 0.291 0.283  0.288    6.35
61)  ethyl acrylate
      0.341       0.533 0.519 0.518 0.493 0.446 0.402 0.505        0.470   14.44
62)  2-nitropropane
      0.079       0.103 0.100 0.099 0.093 0.094 0.088 0.095        0.094    7.87
63)  2-chloroethyl vinyl ether
      0.164 0.152 0.231 0.230 0.231 0.198 0.200 0.183 0.215        0.200   14.63
64)  methyl methacrylate
                  0.108 0.101 0.099 0.102 0.086 0.069 0.089        0.093   14.25
65)  1,2-dichloropropane
      0.264 0.251 0.309 0.298 0.301 0.289 0.289 0.277 0.292 0.238  0.281    8.21
66)  dibromomethane
      0.189 0.175 0.214 0.207 0.209 0.202 0.202 0.199 0.207        0.200    5.89
67)  methylcyclohexane
      0.326 0.272 0.416 0.399 0.417 0.399 0.392 0.353 0.386        0.373   12.90
68)  bromodichloromethane
      0.375 0.363 0.426 0.409 0.412 0.408 0.405 0.387 0.400 0.327  0.391    7.46
69)  epichlorohydrin
      0.026       0.038 0.035 0.035 0.036 0.032 0.031 0.033        0.033   10.95
70)  cis-1,3-dichloropropene
      0.440 0.437 0.509 0.490 0.495 0.484 0.475 0.467 0.485 0.474  0.476    4.84
71)  4-methyl-2-pentanone
      0.146 0.132 0.168 0.169 0.173 0.142 0.167 0.154 0.168 0.137  0.155    9.79
72)  3-methyl-1-butanol
      0.009       0.017 0.016 0.016 0.014 0.014 0.011 0.014        0.014   17.99

73) I   chlorobenzene-d5      ----------------ISTD---------------------
74)  toluene-d8 (s)
      1.289 1.279 1.298 1.299 1.313 1.291 1.296 1.284 1.298 1.303  1.295    0.74
75)  toluene
      0.739 0.741 0.812 0.765 0.796 0.760 0.782 0.776 0.773 0.873  0.782    5.02
76)  trans-1,3-dichloropropene
      0.431 0.409 0.537 0.509 0.514 0.501 0.486 0.465 0.489 0.418  0.476    9.16
77)  ethyl methacrylate
      0.360       0.530 0.500 0.495 0.487 0.436 0.412 0.457        0.459   12.03
78)  1,1,2-trichloroethane
      0.246 0.213 0.293 0.276 0.280 0.273 0.268 0.255 0.274 0.204  0.258   11.35
79)  tetrachloroethene
      0.256 0.246 0.279 0.267 0.277 0.261 0.271 0.272 0.271 0.276  0.268    3.95
80)  1,3-dichloropropane
      0.486 0.455 0.527 0.512 0.530 0.468 0.516 0.495 0.519 0.526  0.504    5.22
81)  2-hexanone
      0.152 0.151 0.205 0.198 0.201 0.174 0.187 0.166 0.189        0.180   11.41
82)  butyl acetate
      0.201       0.318 0.301 0.303 0.286 0.271 0.256 0.287        0.278   13.17
83)  dibromochloromethane
```

```
      0.320 0.289 0.399 0.371 0.372 0.380 0.345 0.320 0.352 0.292  0.344   10.98
 84)  1,2-dibromoethane
      0.366 0.353 0.438 0.412 0.416 0.412 0.396 0.378 0.399 0.389  0.396    6.40
 85)  n-butyl ether
      1.220 1.174 1.427 1.375 1.406 1.314 1.317 1.253 1.334 1.407  1.323    6.45
 86)  chlorobenzene
      0.837 0.785 0.885 0.837 0.857 0.832 0.849 0.843 0.842 0.956  0.852    5.17
 87)  1,1,1,2-tetrachloroethane
      0.273 0.258 0.332 0.312 0.315 0.309 0.304 0.294 0.306 0.274  0.298    7.71
 88)  ethylbenzene
      1.340 1.328 1.460 1.404 1.440 1.340 1.415 1.391 1.419 1.562  1.410    4.94
 89)  m,p-xylene
      0.498 0.499 0.547 0.529 0.551 0.494 0.533 0.527 0.536 0.542  0.526    4.02
 90)  o-xylene
      0.484 0.456 0.527 0.513 0.535 0.462 0.521 0.506 0.529 0.473  0.501    5.88
 91)  styrene
      0.725 0.675 0.913 0.882 0.894 0.809 0.819 0.785 0.860 0.786  0.815    9.31
 92)  bromoform
      0.209 0.201 0.295 0.269 0.263 0.281 0.239 0.219 0.247        0.247   13.25
 93)  butyl acrylate
      0.489       0.771 0.725 0.705 0.701 0.614 0.553 0.652        0.651   14.50
 94)  isopropylbenzene
      1.228 1.195 1.327 1.273 1.317 1.245 1.289 1.255 1.306 1.402  1.284    4.56
 95)  cis-1,4-dichloro-2-butene
                  0.183 0.166 0.158 0.170 0.128       0.140        0.158   12.90

 96) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 97)  4-bromofluorobenzene (s)
      1.015 1.005 1.012 0.999 1.009 1.009 1.017 1.011 1.005 1.004  1.009    0.54
 98)  bromobenzene
      0.736 0.763 0.860 0.791 0.825 0.802 0.773 0.748 0.788 0.772  0.786    4.66
 99)  1,1,2,2-tetrachloroethane
      1.049 0.952 1.220 1.118 1.154 1.108 1.070 1.021 1.107 1.104  1.090    6.72
100)  trans-1,4-dichloro-2-butene
                  0.275 0.245 0.240 0.256 0.194       0.214        0.237   12.42
101)  1,2,3-trichloropropane
      0.250       0.316 0.288 0.297 0.285 0.282 0.272 0.286        0.284    6.65
102)  n-propylbenzene
      3.225 3.221 3.549 3.382 3.560 3.257 3.453 3.373 3.432 3.559  3.401    3.93
103)  2-chlorotoluene
      0.651 0.604 0.751 0.709 0.749 0.671 0.725 0.683 0.725 0.634  0.690    7.23
104)  4-chlorotoluene
      1.975 1.952 2.156 2.036 2.125 2.003 2.097 2.048 2.066 2.291  2.075    4.78
105)  1,3,5-trimethylbenzene
      2.177 2.070 2.431 2.326 2.447 2.158 2.319 2.250 2.341 2.340  2.286    5.29
106)  tert-butylbenzene
      0.395 0.368 0.449 0.429 0.443 0.422 0.427 0.388 0.434        0.417    6.54
107)  1,2,4-trimethylbenzene
      2.175 2.056 2.442 2.345 2.457 2.256 2.309 2.247 2.374 2.403  2.307    5.46
108)  sec-butylbenzene
      2.575 2.514 2.862 2.723 2.870 2.670 2.782 2.658 2.766 2.805  2.723    4.34
109)  1,3-dichlorobenzene
      1.250 1.266 1.419 1.328 1.369 1.328 1.345 1.282 1.359 1.484  1.343    5.28
110)  p-isopropyltoluene
      2.012 1.956 2.382 2.262 2.341 2.220 2.253 2.150 2.286 2.138  2.200    6.22
111)  1,4-dichlorobenzene
      1.331 1.343 1.443 1.358 1.395 1.352 1.373 1.348 1.381 1.491  1.382    3.63
112)  benzyl chloride
      1.583 1.449 2.081 1.921 1.942 1.870 1.768 1.720 1.798 1.638  1.777   10.56
113)  1,2-dichlorobenzene
```

Initial Calibration Summary

Job Number: JC86089 **Sample:** V4D4028-ICC4028
Account: TCMAW Tantara Corporation **Lab FileID:** 4D92111.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

```
       1.149 1.151 1.379 1.297 1.334 1.287 1.284 1.250 1.277 1.272  1.268    5.66
114)  n-butylbenzene
       0.924 0.837 1.174 1.119 1.155 1.107 1.063 1.017 1.104        1.056   10.56
115)  1,2-dibromo-3-chloropropane
       0.149       0.243 0.223 0.224 0.226 0.197 0.184 0.206        0.207   14.38
116)  1,3,5-trichlorobenzene
       0.757 0.697 0.959 0.897 0.918 0.911 0.845 0.797 0.878 0.770  0.843   10.00
117)  2-ethylhexyl acrylate
                   0.409 0.347 0.329 0.369 0.201       0.259        0.319   23.90
              ----- Linear regression -----  Coefficient =  0.9962
                Response Ratio = -0.00222 + 0.37918 *A

118)  1,2,4-trichlorobenzene
       0.662       0.867 0.804 0.813 0.802 0.732 0.677 0.757        0.764    9.25
119)  hexachlorobutadiene
       0.245       0.307 0.295 0.304 0.294 0.283 0.264 0.292        0.286    7.37
120)  naphthalene
       2.087       2.663 2.526 2.589 2.436 2.308 2.134 2.365        2.388    8.66
121)  1,2,3-trichlorobenzene
       0.649       0.804 0.755 0.766 0.729 0.681 0.661 0.716        0.720    7.52
122)  hexachloroethane
       0.271       0.398 0.360 0.356 0.388 0.324 0.310 0.338        0.343   12.20
123)  2-methylnaphthalene
                   0.924 0.965 1.011 0.743 0.845 0.749 0.912        0.879   11.80
124)  bis(chloromethyl)ether
                                                                    0.000   -1.00
125)  ethylenimine
                                                                    0.000   -1.00
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M4D4028.M         Fri Feb 01 10:20:45 2019   RPT1
```

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: V4D4028-ICV4028
Lab FileID: 4D92116.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V4D4028\4D92116.D Vial: 17
Acq On : 29 Jan 2019 8:29 pm Operator: roberts
Sample : icv4028-50 Inst : MS4D
Misc : MS31310,V4D4028,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D4028.M (RTE Integrator)
Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Fri Feb 01 10:17:00 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	104	0.00	8.66
2	M	tertiary butyl alcohol	1.084	1.217	-12.3	113	0.00	8.79
3		ethanol	0.106	0.119	-12.3	110	0.00	7.19
4	M	1,4-dioxane	0.108	0.110	-1.9	108	0.00	12.69
5	I	pentafluorobenzene	1.000	1.000	0.0	107	0.00	11.15
6	M	chlorodifluoromethane	0.509	0.569	-11.8	118	0.00	4.65
7	M	dichlorodifluoromethane	0.554	0.578	-4.3	107	0.00	4.61
8	M	chloromethane	0.844	0.721	14.6	96	0.00	5.10
9	M	vinyl chloride	0.636	0.599	5.8	100	0.00	5.37
10	M	bromomethane	0.196	0.252	-28.6	127	0.00	6.16
11	M	chloroethane	0.323	0.332	-2.8	106	0.00	6.40
12	M	trichlorofluoromethane	0.727	0.745	-2.5	104	0.00	6.97
13		vinyl bromide	0.377	0.382	-1.3	104	0.00	6.82
14	M	ethyl ether	0.256	0.290	-13.3	114	0.00	7.49
15	M	acrolein	0.123	0.139	-13.0	119	0.00	7.71
16		freon 113	0.315	0.353	-12.1	114	0.00	7.95
17	M	1,1-dichloroethene	0.401	0.402	-0.2	104	0.00	7.96
18	M	acetone	0.201	0.222	-10.4	110	0.00	7.96
19	M	acetonitrile	0.088	0.094	-6.8	106	0.00	8.40
20	M	iodomethane	0.245	0.345	-40.8#	131	0.00	8.25
21	M	carbon disulfide	1.086	1.223	-12.6	123	0.00	8.41
22	M	methylene chloride	0.484	0.492	-1.7	109	0.00	8.73
23	M	methyl acetate	0.536	0.514	4.1	102	0.00	8.53
24	M	methyl tert butyl ether	1.374	1.564	-13.8	115	0.00	9.16
25	M	trans-1,2-dichloroethene	0.435	0.451	-3.7	107	0.00	9.19
26	M	di-isopropyl ether	1.444	1.563	-8.2	106	0.00	9.85
27	M	2-butanone	0.084	0.092	-9.5	109	0.00	10.53
28	M	1,1-dichloroethane	0.782	0.844	-7.9	107	0.00	9.79
29	M	chloroprene	0.637	0.714	-12.1	112	0.00	9.94
30	M	acrylonitrile	0.212	0.236	-11.3	114	0.00	9.05
31		hexane	0.279	0.290	-3.9	106	0.00	9.61
32	M	vinyl acetate	0.114	0.120	-5.3	110	0.00	9.79
33	M	ethyl tert-butyl ether	1.445	1.549	-7.2	106	0.00	10.34
34	M	ethyl acetate	0.079	0.083	-5.1	103	0.00	10.59
35	M	2,2-dichloropropane	0.690	0.669	3.0	101	0.00	10.61
36	M	cis-1,2-dichloroethene	0.497	0.538	-8.2	109	0.00	10.58
37		methyl acrylate	0.099	0.111	-12.1	110	0.00	10.66
38	M	propionitrile	0.103	0.113	-9.7	106	0.00	10.59
39	M	bromochloromethane	0.236	0.253	-7.2	108	0.00	10.89
40	M	tetrahydrofuran	0.094	0.101	-7.4	109	0.00	10.96
41	M	chloroform	0.546	0.559	-2.4	107	0.00	10.95

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: V4D4028-ICV4028
Lab FileID: 4D92116.D

42	M	t-butyl formate	0.474	0.451	4.9	91	0.00	11.03
43	S	dibromofluoromethane (s)	0.551	0.560	-1.6	106	0.00	11.15
44	M	methacrylonitrile	0.264	0.272	-3.0	108	0.00	10.82
45	M	1,1,1-trichloroethane	0.707	0.709	-0.3	103	0.00	11.26
46		cyclohexane	0.650	0.595	8.5	93	0.00	11.37
47		1,1-dichloropropene	0.608	0.629	-3.5	106	0.00	11.45
48		isobutyl alcohol	0.004	0.004	0.0	103	0.00	11.45
49		carbon tetrachloride	0.611	0.627	-2.6	105	0.00	11.48
50		tert amyl alcohol	0.033	0.037	-12.1	108	0.00	11.52
51	I	1,4-difluorobenzene	1.000	1.000	0.0	106	0.00	12.04
52	S	1,2-dichloroethane-d4 (s)	0.337	0.331	1.8	103	0.00	11.58
53	M	n-butyl alcohol	0.015	0.017	-13.3	105	0.00	12.10
54		2,2,4-trimethylpentane	0.665	0.661	0.6	97	0.00	11.77
55	M	benzene	1.081	1.093	-1.1	106	0.00	11.69
56	M	tert-amyl methyl ether	0.205	0.214	-4.4	102	0.00	11.75
57	M	heptane	0.157	0.173	-10.2	108	0.00	11.92
58	M	isopropyl acetate	0.080	0.085	-6.3	104	0.00	11.61
59	M	1,2-dichloroethane	0.431	0.412	4.4	105	0.00	11.67
60	M	trichloroethene	0.288	0.300	-4.2	107	0.00	12.37
61		ethyl acrylate	0.470	0.500	-6.4	102	0.00	12.36
62	M	2-nitropropane	0.094	0.102	-8.5	108	0.00	13.02
63	M	2-chloroethyl vinyl ether	0.200	0.228	-14.0	105	0.00	13.07
64	M	methyl methacrylate	0.093	0.105	-12.9	110	0.00	12.61
65	M	1,2-dichloropropane	0.281	0.291	-3.6	103	0.00	12.59
66	M	dibromomethane	0.200	0.209	-4.5	107	0.00	12.72
67	M	methylcyclohexane	0.373	0.376	-0.8	100	0.00	12.62
68	M	bromodichloromethane	0.391	0.396	-1.3	102	0.00	12.84
69		epichlorohydrin	0.033	0.035	-6.1	104	0.00	13.16
70	M	cis-1,3-dichloropropene	0.476	0.482	-1.3	104	0.00	13.28
71	M	4-methyl-2-pentanone	0.155	0.163	-5.2	102	0.00	13.36
72	M	3-methyl-1-butanol	0.014	0.016	-14.3	103	0.00	13.35
73	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	14.93
74	S	toluene-d8 (s)	1.295	1.300	-0.4	103	0.00	13.57
75		toluene	0.782	0.785	-0.4	105	0.00	13.64
76		trans-1,3-dichloropropene	0.476	0.490	-2.9	99	0.00	13.77
77		ethyl methacrylate	0.459	0.487	-6.1	100	0.00	13.79
78		1,1,2-trichloroethane	0.258	0.280	-8.5	104	0.00	13.96
79	M	tetrachloroethene	0.268	0.276	-3.0	106	0.00	14.18
80	M	1,3-dichloropropane	0.504	0.523	-3.8	105	0.00	14.14
81		2-hexanone	0.180	0.194	-7.8	100	0.00	14.14
82	M	butyl acetate	0.278	0.303	-9.0	103	0.00	14.21
83	M	dibromochloromethane	0.344	0.388	-12.8	107	0.00	14.37
84	M	1,2-dibromoethane	0.396	0.418	-5.6	104	0.00	14.52
85		n-butyl ether	1.323	1.326	-0.2	99	0.00	14.91
86	M	chlorobenzene	0.852	0.850	0.2	104	0.00	14.96
87	M	1,1,1,2-tetrachloroethane	0.298	0.323	-8.4	106	0.00	15.01
88	M	ethylbenzene	1.410	1.429	-1.3	104	0.00	15.02
89	M	m,p-xylene	0.526	0.545	-3.6	106	0.00	15.12
90	M	o-xylene	0.501	0.522	-4.2	104	0.00	15.49
91	M	styrene	0.815	0.909	-11.5	106	0.00	15.49
92	M	bromoform	0.247	0.287	-16.2	110	0.00	15.70
93		butyl acrylate	0.651	0.741	-13.8	105	0.00	15.31
94		isopropylbenzene	1.284	1.296	-0.9	104	0.00	15.81
95		cis-1,4-dichloro-2-butene	0.158	0.157	0.6	97	0.00	15.82
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	17.03
97	S	4-bromofluorobenzene (s)	1.009	1.002	0.7	103	0.00	15.97
98	M	bromobenzene	0.786	0.817	-3.9	106	0.00	16.15

Initial Calibration Verification

Job Number: JC86089 **Sample:** V4D4028-ICV4028
Account: TCMAW Tantara Corporation **Lab FileID:** 4D92116.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

99	M	1,1,2,2-tetrachloroethane	1.090	1.117	-2.5	103	0.00	16.02
100	M	trans-1,4-dichloro-2-bute	0.237	0.278	-17.3	116	0.00	16.07
101	M	1,2,3-trichloropropane	0.284	0.291	-2.5	104	0.00	16.10
102	M	n-propylbenzene	3.401	3.419	-0.5	104	0.00	16.17
103	M	2-chlorotoluene	0.690	0.712	-3.2	103	0.00	16.30
104	M	4-chlorotoluene	2.075	2.117	-2.0	107	0.00	16.39
105	M	1,3,5-trimethylbenzene	2.286	2.345	-2.6	103	0.00	16.31
106	M	tert-butylbenzene	0.417	0.435	-4.3	104	0.00	16.64
107	M	1,2,4-trimethylbenzene	2.307	2.417	-4.8	106	0.00	16.67
108	M	sec-butylbenzene	2.723	2.770	-1.7	104	0.00	16.84
109	M	1,3-dichlorobenzene	1.343	1.375	-2.4	106	0.00	16.99
110	M	p-isopropyltoluene	2.200	2.328	-5.8	106	0.00	16.94
111	M	1,4-dichlorobenzene	1.382	1.387	-0.4	105	0.00	17.06
112		benzyl chloride	1.777	1.469	17.3	78	0.00	17.15
113	M	1,2-dichlorobenzene	1.268	1.327	-4.7	105	0.00	17.42
114	M	n-butylbenzene	1.056	1.137	-7.7	104	0.00	17.32
115	M	1,2-dibromo-3-chloropropa	0.207	0.220	-6.3	101	0.00	18.12
116		1,3,5-trichlorobenzene	0.843	0.916	-8.7	105	0.00	18.33
		----------	True	Calc.	% Drift	----------		
117		2-ethylhexyl acrylate	10.000	10.775	-7.8	118	0.00	18.92
		----------	AvgRF	CCRF	% Dev	----------		
118	M	1,2,4-trichlorobenzene	0.764	0.824	-7.9	105	0.00	18.93
119	M	hexachlorobutadiene	0.286	0.293	-2.4	102	0.00	19.07
120	M	naphthalene	2.388	2.599	-8.8	106	0.00	19.19
121	M	1,2,3-trichlorobenzene	0.720	0.763	-6.0	104	0.00	19.42
122	m	hexachloroethane	0.343	0.381	-11.1	108	0.00	17.70
123		2-methylnaphthalene	0.879	1.077	-22.5	114	0.00	20.28
124		bis(chloromethyl)ether		----------NA----------				
125		ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4D92111.D M4D4028.M Fri Feb 01 10:20:35 2019 RPT1

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: V4D4028-ICV4028
Lab FileID: 4D92117.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V4D4028\4D92117.D Vial: 18
Acq On : 29 Jan 2019 8:58 pm Operator: roberts
Sample : icv4028-50 Inst : MS4D
Misc : MS31310,V4D4028,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D4028.M (RTE Integrator)
Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Thu Jan 31 10:54:24 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	108	0.00	8.66
2	M	tertiary butyl alcohol		----------NA----------				
3		ethanol		----------NA----------				
4	M	1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	112	0.00	11.15
6	M	chlorodifluoromethane		----------NA----------				
7	M	dichlorodifluoromethane		----------NA----------				
8	M	chloromethane		----------NA----------				
9	M	vinyl chloride		----------NA----------				
10	M	bromomethane		----------NA----------				
11	M	chloroethane		----------NA----------				
12	M	trichlorofluoromethane		----------NA----------				
13		vinyl bromide		----------NA----------				
14	M	ethyl ether		----------NA----------				
15	M	acrolein		----------NA----------				
16		freon 113		----------NA----------				
17	M	1,1-dichloroethene		----------NA----------				
18	M	acetone	0.201	0.221	-10.0	114	0.00	7.96
19	M	acetonitrile	0.088	0.092	-4.5	108	0.00	8.40
20	M	iodomethane		----------NA----------				
21	M	carbon disulfide		----------NA----------				
22	M	methylene chloride		----------NA----------				
23	M	methyl acetate		----------NA----------				
24	M	methyl tert butyl ether		----------NA----------				
25	M	trans-1,2-dichloroethene		----------NA----------				
26	M	di-isopropyl ether		----------NA----------				
27	M	2-butanone		----------NA----------				
28	M	1,1-dichloroethane		----------NA----------				
29	M	chloroprene		----------NA----------				
30	M	acrylonitrile		----------NA----------				
31		hexane		----------NA----------				
32	M	vinyl acetate		----------NA----------				
33	M	ethyl tert-butyl ether		----------NA----------				
34	M	ethyl acetate		----------NA----------				
35	M	2,2-dichloropropane		----------NA----------				
36	M	cis-1,2-dichloroethene		----------NA----------				
37		methyl acrylate		----------NA----------				
38	M	propionitrile		----------NA----------				
39	M	bromochloromethane		----------NA----------				
40	M	tetrahydrofuran		----------NA----------				
41	M	chloroform		----------NA----------				

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: V4D4028-ICV4028
Lab FileID: 4D92117.D

42	M	t-butyl formate		----------NA----------					
43	S	dibromofluoromethane (s)	0.551	0.554	-0.5	109	0.00	11.15	
		----------	True	Calc.	% Drift	----------			
44	M	methacrylonitrile		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
45	M	1,1,1-trichloroethane		----------NA----------					
46		cyclohexane		----------NA----------					
47		1,1-dichloropropene		----------NA----------					
48		isobutyl alcohol		----------NA----------					
49		carbon tetrachloride		----------NA----------					
50		tert amyl alcohol		----------NA----------					
51	I	1,4-difluorobenzene	1.000	1.000	0.0	112	0.00	12.04	
52	S	1,2-dichloroethane-d4 (s)	0.337	0.336	0.3	111	0.00	11.58	
53	M	n-butyl alcohol		----------NA----------					
54		2,2,4-trimethylpentane		----------NA----------					
55	M	benzene		----------NA----------					
56	M	tert-amyl methyl ether		----------NA----------					
57	M	heptane		----------NA----------					
58	M	isopropyl acetate		----------NA----------					
59	M	1,2-dichloroethane		----------NA----------					
60	M	trichloroethene		----------NA----------					
61		ethyl acrylate		----------NA----------					
62	M	2-nitropropane		----------NA----------					
63	M	2-chloroethyl vinyl ether		----------NA----------					
64	M	methyl methacrylate		----------NA----------					
65	M	1,2-dichloropropane		----------NA----------					
66	M	dibromomethane		----------NA----------					
67	M	methylcyclohexane		----------NA----------					
68	M	bromodichloromethane		----------NA----------					
69		epichlorohydrin		----------NA----------					
70	M	cis-1,3-dichloropropene		----------NA----------					
71	M	4-methyl-2-pentanone		----------NA----------					
72	M	3-methyl-1-butanol		----------NA----------					
73	I	chlorobenzene-d5	1.000	1.000	0.0	111	0.00	14.93	
74	S	toluene-d8 (s)	1.295	1.304	-0.7	111	0.00	13.57	
75		toluene		----------NA----------					
76		trans-1,3-dichloropropene		----------NA----------					
77		ethyl methacrylate		----------NA----------					
78		1,1,2-trichloroethane		----------NA----------					
79	M	tetrachloroethene	0.268	0.245	8.6	102	0.00	14.18	
80	M	1,3-dichloropropane		----------NA----------					
81		2-hexanone		----------NA----------					
82	M	butyl acetate		----------NA----------					
83	M	dibromochloromethane		----------NA----------					
84	M	1,2-dibromoethane		----------NA----------					
85		n-butyl ether		----------NA----------					
86	M	chlorobenzene		----------NA----------					
87	M	1,1,1,2-tetrachloroethane		----------NA----------					
88	M	ethylbenzene		----------NA----------					
89	M	m,p-xylene		----------NA----------					
90	M	o-xylene		----------NA----------					
91	M	styrene		----------NA----------					
92	M	bromoform		----------NA----------					
93		butyl acrylate		----------NA----------					
94		isopropylbenzene		----------NA----------					
95		cis-1,4-dichloro-2-butene		----------NA----------					

Initial Calibration Verification

Job Number: JC86089 **Sample:** V4D4028-ICV4028
Account: TCMAW Tantara Corporation **Lab FileID:** 4D92117.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	110	0.00	17.03
97	S	4-bromofluorobenzene (s)	1.009	0.999	1.0	110	0.00	15.97
98	M	bromobenzene		----------NA----------				
99	M	1,1,2,2-tetrachloroethane		----------NA----------				
100	M	trans-1,4-dichloro-2-bute		----------NA----------				
101	M	1,2,3-trichloropropane		----------NA----------				
102	M	n-propylbenzene		----------NA----------				
103	M	2-chlorotoluene		----------NA----------				
104	M	4-chlorotoluene		----------NA----------				
105	M	1,3,5-trimethylbenzene		----------NA----------				
106	M	tert-butylbenzene		----------NA----------				
107	M	1,2,4-trimethylbenzene		----------NA----------				
108	M	sec-butylbenzene		----------NA----------				
109	M	1,3-dichlorobenzene		----------NA----------				
110	M	p-isopropyltoluene		----------NA----------				
111	M	1,4-dichlorobenzene		----------NA----------				
112		benzyl chloride		----------NA----------				
113	M	1,2-dichlorobenzene		----------NA----------				
114	M	n-butylbenzene		----------NA----------				
115	M	1,2-dibromo-3-chloropropa		----------NA----------				
116		1,3,5-trichlorobenzene		----------NA----------				
		----------	True	Calc.	% Drift	----------		
117		2-ethylhexyl acrylate		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
118	M	1,2,4-trichlorobenzene		----------NA----------				
119	M	hexachlorobutadiene		----------NA----------				
120	M	naphthalene		----------NA----------				
121	M	1,2,3-trichlorobenzene		----------NA----------				
122	m	hexachloroethane		----------NA----------				
123		2-methylnaphthalene		----------NA----------				
124		bis(chloromethyl)ether		----------NA----------				
125		ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4D92111.D M4D4028.M Thu Jan 31 11:31:19 2019 RPT1

Continuing Calibration Summary

Job Number: JC86089 **Sample:** V4D4101-CC4028
Account: TCMAW Tantara Corporation **Lab FileID:** 4D93371.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ja...-19\v4d4101\4d93371.d Vial: 1
Acq On : 10 Apr 2019 4:49 pm Operator: juntaep
Sample : cc4028-50 Inst : MS4D
Misc : MS33802,V4D4101,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D4028.M (RTE Integrator)
Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Fri Feb 01 10:17:00 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	94	0.00	8.66
2	M	tertiary butyl alcohol	1.084	1.192	-10.0	100	0.00	8.79
3		ethanol	0.106	0.129	-21.7#	107	0.00	7.19
4	M	1,4-dioxane	0.108	0.098	9.3	86	0.00	12.69
5	I	pentafluorobenzene	1.000	1.000	0.0	106	0.00	11.14
6	M	chlorodifluoromethane	0.509	0.620	-21.8#	128	-0.01	4.63
7	M	dichlorodifluoromethane	0.554	0.660	-19.1	121	0.00	4.61
8	M	chloromethane	0.844	0.839	0.6	110	-0.01	5.09
9	M	vinyl chloride	0.636	0.702	-10.4	116	0.00	5.38
10	M	bromomethane	0.196	0.284	-44.9#	141	0.00	6.16
11	M	chloroethane	0.323	0.378	-17.0	119	0.00	6.40
12	M	trichlorofluoromethane	0.727	0.735	-1.1	102	0.00	6.97
13		vinyl bromide	0.377	0.351	6.9	95	0.00	6.82
14	M	ethyl ether	0.256	0.286	-11.7	112	-0.01	7.49
15	M	acrolein	0.123	0.123	0.0	105	0.00	7.70
16		freon 113	0.315	0.311	1.3	100	0.00	7.95
17	M	1,1-dichloroethene	0.401	0.436	-8.7	111	0.00	7.95
18	M	acetone	0.201	0.214	-6.5	105	-0.01	7.95
19	M	acetonitrile	0.088	0.099	-12.5	110	0.00	8.40
20	M	iodomethane	0.245	0.216	11.8	81	0.00	8.24
21	M	carbon disulfide	1.086	1.222	-12.5	122	0.00	8.40
22	M	methylene chloride	0.484	0.506	-4.5	111	0.00	8.72
23	M	methyl acetate	0.536	0.537	-0.2	105	0.00	8.52
24	M	methyl tert butyl ether	1.374	1.459	-6.2	106	0.00	9.16
25	M	trans-1,2-dichloroethene	0.435	0.466	-7.1	110	0.00	9.19
26	M	di-isopropyl ether	1.444	1.702	-17.9	114	0.00	9.84
27	M	2-butanone	0.084	0.086	-2.4	101	0.00	10.52
28	M	1,1-dichloroethane	0.782	0.913	-16.8	114	0.00	9.79
29	M	chloroprene	0.637	0.731	-14.8	114	0.00	9.94
30	M	acrylonitrile	0.212	0.240	-13.2	114	0.00	9.05
31		hexane	0.279	0.343	-22.9#	124	0.00	9.60
32	M	vinyl acetate	0.114	0.116	-1.8	105	0.00	9.79
33	M	ethyl tert-butyl ether	1.445	1.583	-9.6	108	0.00	10.34
34	M	ethyl acetate	0.079	0.077	2.5	95	0.00	10.58
35	M	2,2-dichloropropane	0.690	0.713	-3.3	107	0.00	10.60
36	M	cis-1,2-dichloroethene	0.497	0.527	-6.0	106	0.00	10.58
37		methyl acrylate	0.099	0.100	-1.0	98	-0.01	10.65
38	M	propionitrile	0.103	0.111	-7.8	103	0.00	10.58
39	M	bromochloromethane	0.236	0.243	-3.0	103	0.00	10.88
40	M	tetrahydrofuran	0.094	0.094	0.0	100	0.00	10.96
41	M	chloroform	0.546	0.543	0.5	103	0.00	10.95

Continuing Calibration Summary

Job Number: JC86089 **Sample:** V4D4101-CC4028
Account: TCMAW Tantara Corporation **Lab FileID:** 4D93371.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

42	M	t-butyl formate	0.474	0.408	13.9	82	0.00	11.03
43	S	dibromofluoromethane (s)	0.551	0.498	9.6	93	0.00	11.15
44	M	methacrylonitrile	0.264	0.265	-0.4	104	-0.01	10.81
45	M	1,1,1-trichloroethane	0.707	0.687	2.8	99	0.00	11.25
46		cyclohexane	0.650	0.605	6.9	94	0.00	11.37
47		1,1-dichloropropene	0.608	0.633	-4.1	106	0.00	11.44
48		isobutyl alcohol	0.004	0.004#	0.0	100	0.00	11.44
49		carbon tetrachloride	0.611	0.561	8.2	93	0.00	11.47
50		tert amyl alcohol	0.033	0.032#	3.0	93	0.00	11.52
51	I	1,4-difluorobenzene	1.000	1.000	0.0	94	0.00	12.03
52	S	1,2-dichloroethane-d4 (s)	0.337	0.343	-1.8	95	0.00	11.57
53	M	n-butyl alcohol	0.015	0.018#	-20.0	95	0.00	12.10
54		2,2,4-trimethylpentane	0.665	0.861	-29.5#	112	0.00	11.76
55	M	benzene	1.081	1.223	-13.1	106	0.00	11.69
56	M	tert-amyl methyl ether	0.205	0.219	-6.8	93	0.00	11.75
57	M	heptane	0.157	0.199	-26.8#	110	0.00	11.92
58	M	isopropyl acetate	0.080	0.088	-10.0	96	0.00	11.61
59	M	1,2-dichloroethane	0.431	0.430	0.2	97	0.00	11.66
60	M	trichloroethene	0.288	0.301	-4.5	96	0.00	12.36
61		ethyl acrylate	0.470	0.533	-13.4	97	0.00	12.35
62	M	2-nitropropane	0.094	0.099	-5.3	93	0.00	13.02
63	M	2-chloroethyl vinyl ether	0.200	0.070	65.0#	29#	0.00	13.07
64	M	methyl methacrylate	0.093	0.100	-7.5	93	0.00	12.60
65	M	1,2-dichloropropane	0.281	0.341	-21.4#	107	0.00	12.59
66	M	dibromomethane	0.200	0.208	-4.0	94	0.00	12.71
67	M	methylcyclohexane	0.373	0.433	-16.1	102	0.00	12.62
68	M	bromodichloromethane	0.391	0.423	-8.2	97	0.00	12.83
69		epichlorohydrin	0.033	0.039#	-18.2	104	0.00	13.15
70	M	cis-1,3-dichloropropene	0.476	0.525	-10.3	101	0.00	13.27
71	M	4-methyl-2-pentanone	0.155	0.175	-12.9	97	0.00	13.36
72	M	3-methyl-1-butanol	0.014	0.015#	-7.1	85	0.00	13.35
73	I	chlorobenzene-d5	1.000	1.000	0.0	91	0.00	14.93
74	S	toluene-d8 (s)	1.295	1.354	-4.6	95	0.00	13.56
75		toluene	0.782	0.826	-5.6	98	0.00	13.63
76		trans-1,3-dichloropropene	0.476	0.539	-13.2	96	0.00	13.77
77		ethyl methacrylate	0.459	0.529	-15.3	96	0.00	13.79
78		1,1,2-trichloroethane	0.258	0.293	-13.6	96	0.00	13.96
79	M	tetrachloroethene	0.268	0.263	1.9	90	0.00	14.18
80	M	1,3-dichloropropane	0.504	0.539	-6.9	96	0.00	14.13
81		2-hexanone	0.180	0.207	-15.0	95	0.00	14.13
82	M	butyl acetate	0.278	0.319	-14.7	96	0.00	14.21
83	M	dibromochloromethane	0.344	0.361	-4.9	88	0.00	14.37
84	M	1,2-dibromoethane	0.396	0.456	-15.2	101	0.00	14.52
85		n-butyl ether	1.323	1.467	-10.9	97	0.00	14.91
86	M	chlorobenzene	0.852	0.858	-0.7	93	0.00	14.95
87	M	1,1,1,2-tetrachloroethane	0.298	0.307	-3.0	90	0.00	15.00
88	M	ethylbenzene	1.410	1.482	-5.1	96	0.00	15.02
89	M	m,p-xylene	0.526	0.549	-4.4	94	0.00	15.12
90	M	o-xylene	0.501	0.525	-4.8	93	0.00	15.49
91	M	styrene	0.815	0.912	-11.9	94	0.00	15.49
92	M	bromoform	0.247	0.251	-1.6	85	0.00	15.70
93		butyl acrylate	0.651	0.811	-24.6#	102	0.00	15.31
94		isopropylbenzene	1.284	1.294	-0.8	92	0.00	15.80
95		cis-1,4-dichloro-2-butene	0.158	0.145	8.2	79	0.00	15.82
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	89	0.00	17.03
97	S	4-bromofluorobenzene (s)	1.009	1.082	-7.2	96	0.00	15.96
98	M	bromobenzene	0.786	0.793	-0.9	89	0.00	16.15

Continuing Calibration Summary

Job Number: JC86089 **Sample:** V4D4101-CC4028
Account: TCMAW Tantara Corporation **Lab FileID:** 4D93371.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

99	M	1,1,2,2-tetrachloroethane	1.090	1.156	-6.1	92	0.00	16.02
100	M	trans-1,4-dichloro-2-bute	0.237	0.247	-4.2	89	0.00	16.06
101	M	1,2,3-trichloropropane	0.284	0.279	1.8	86	0.00	16.10
102	M	n-propylbenzene	3.401	3.608	-6.1	95	0.00	16.17
103	M	2-chlorotoluene	0.690	0.718	-4.1	90	0.00	16.30
104	M	4-chlorotoluene	2.075	2.150	-3.6	94	0.00	16.38
105	M	1,3,5-trimethylbenzene	2.286	2.420	-5.9	92	0.00	16.31
106	M	tert-butylbenzene	0.417	0.423	-1.4	88	0.00	16.63
107	M	1,2,4-trimethylbenzene	2.307	2.397	-3.9	91	0.00	16.67
108	M	sec-butylbenzene	2.723	2.860	-5.0	93	0.00	16.83
109	M	1,3-dichlorobenzene	1.343	1.318	1.9	88	0.00	16.98
110	M	p-isopropyltoluene	2.200	2.309	-5.0	91	0.00	16.94
111	M	1,4-dichlorobenzene	1.382	1.354	2.0	89	0.00	17.06
112		benzyl chloride	1.777	1.871	-5.3	87	0.00	17.15
113	M	1,2-dichlorobenzene	1.268	1.258	0.8	86	0.00	17.42
114	M	n-butylbenzene	1.056	1.186	-12.3	94	0.00	17.32
115	M	1,2-dibromo-3-chloropropa	0.207	0.209	-1.0	83	0.00	18.11
116		1,3,5-trichlorobenzene	0.843	0.855	-1.4	85	0.00	18.33
		----------	True	Calc.	% Drift	----------		
117		2-ethylhexyl acrylate	10.000	3.893	61.1#	35	0.00	18.92
		----------	AvgRF	CCRF	% Dev	----------		
118	M	1,2,4-trichlorobenzene	0.764	0.731	4.3	81	0.00	18.93
119	M	hexachlorobutadiene	0.286	0.289	-1.0	87	0.00	19.06
120	M	naphthalene	2.388	2.150	10.0	76	0.00	19.19
121	M	1,2,3-trichlorobenzene	0.720	0.646	10.3	76	0.00	19.41
122	m	hexachloroethane	0.343	0.353	-2.9	87	0.00	17.69
123		2-methylnaphthalene	0.879	0.726	17.4	67	0.00	20.28
124		bis(chloromethyl)ether		----------NA----------				
125		ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4D92111.D M4D4028.M Fri Apr 12 01:45:57 2019

MS Volatiles

Raw Data

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93391.d
Acq On : 11 Apr 2019 2:45 am
Operator : payalr
Sample : JC86089-1 Inst : MS4D
Misc : MS33875,V4D4101,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 12 01:40:23 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

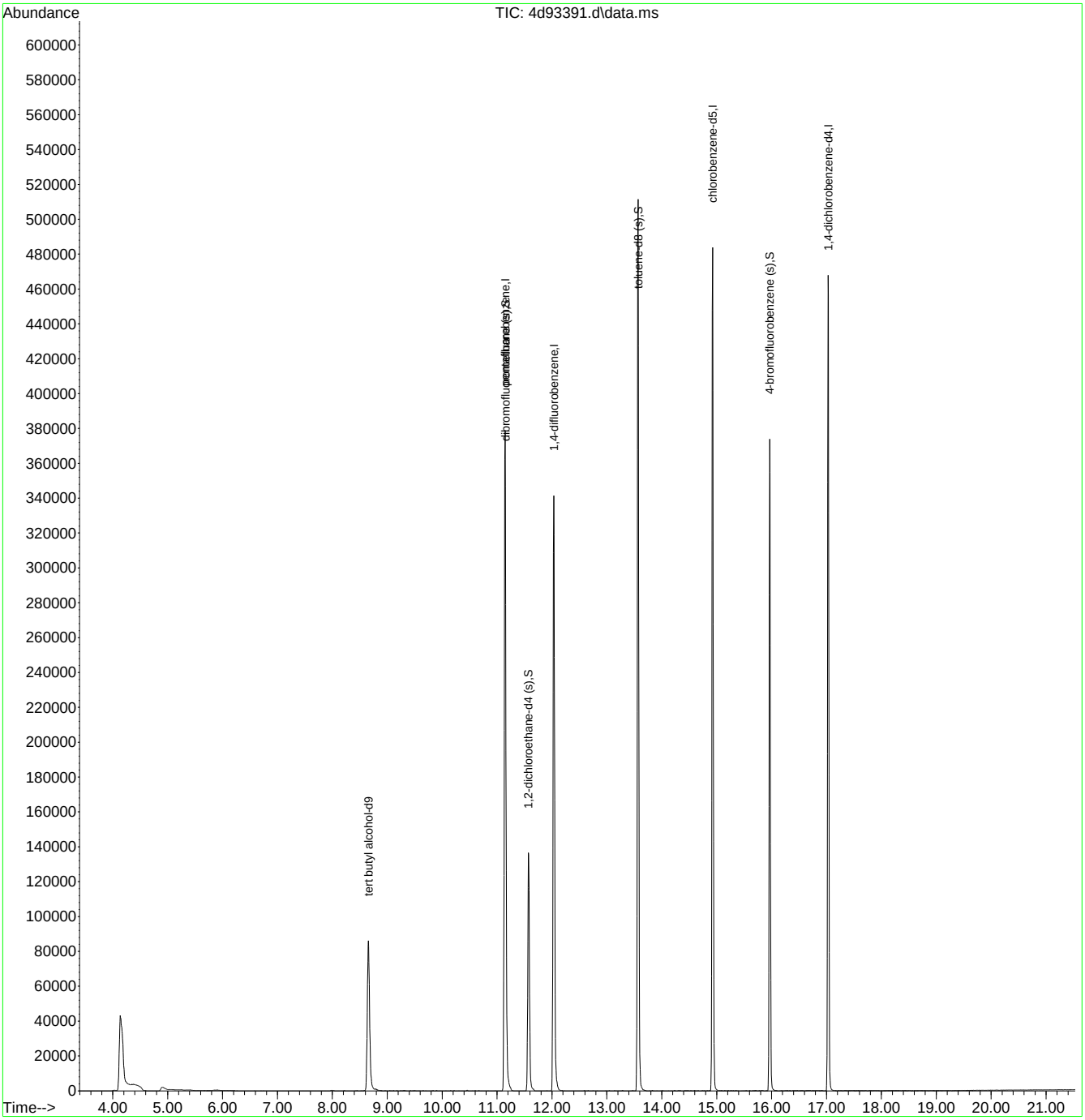
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.656	65	150422	500.00	ug/L	0.00
5) pentafluorobenzene	11.147	168	190963	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.033	114	294447	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	252689	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.035	152	113498	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.152	113	97283	46.19	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 92.38%			
52) 1,2-dichloroethane-d4 (s)	11.571	65	104798	52.73	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 105.46%			
74) toluene-d8 (s)	13.569	98	338091	51.66	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.32%			
97) 4-bromofluorobenzene (s)	15.965	95	121005	52.85	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.70%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93391.d
Acq On : 11 Apr 2019 2:45 am
Operator : payalr
Sample : JC86089-1 Inst : MS4D
Misc : MS33875,V4D4101,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 12 01:40:23 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93392.d
Acq On : 11 Apr 2019 3:13 am
Operator : payalr
Sample : JC86089-2 Inst : MS4D
Misc : MS33875,V4D4101,5,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 12 01:41:41 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

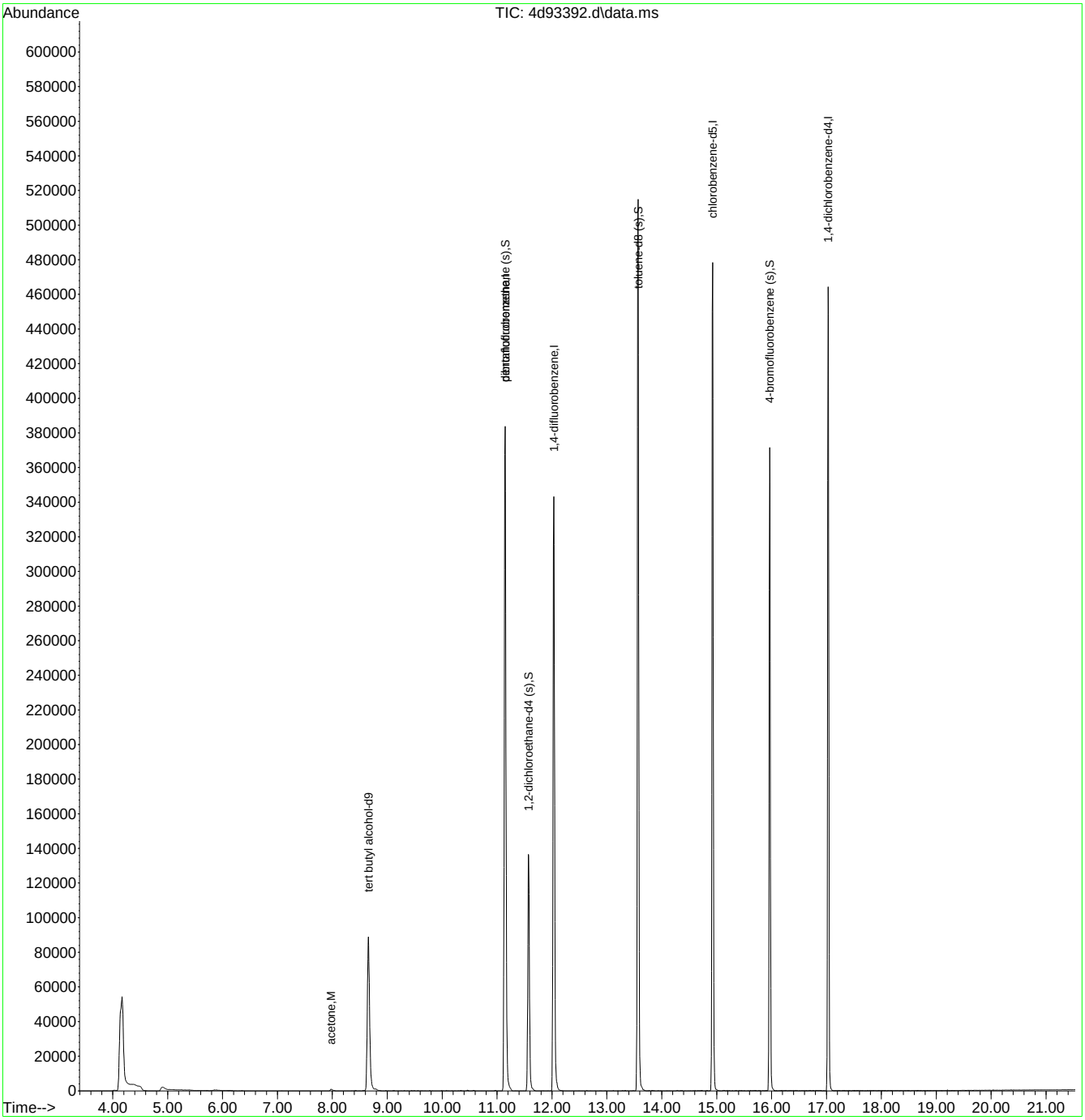
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.656	65	153381	500.00	ug/L	0.00
5) pentafluorobenzene	11.147	168	192692	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.033	114	293266	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	252407	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.029	152	112122	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.147	113	96493	45.40	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 90.80%			
52) 1,2-dichloroethane-d4 (s)	11.577	65	104338	52.71	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 105.42%			
74) toluene-d8 (s)	13.569	98	340713	52.12	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.24%			
97) 4-bromofluorobenzene (s)	15.965	95	120198	53.14	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.28%			
Target Compounds						Qvalue
18) acetone	7.975	43	2401	3.10	ug/L	91

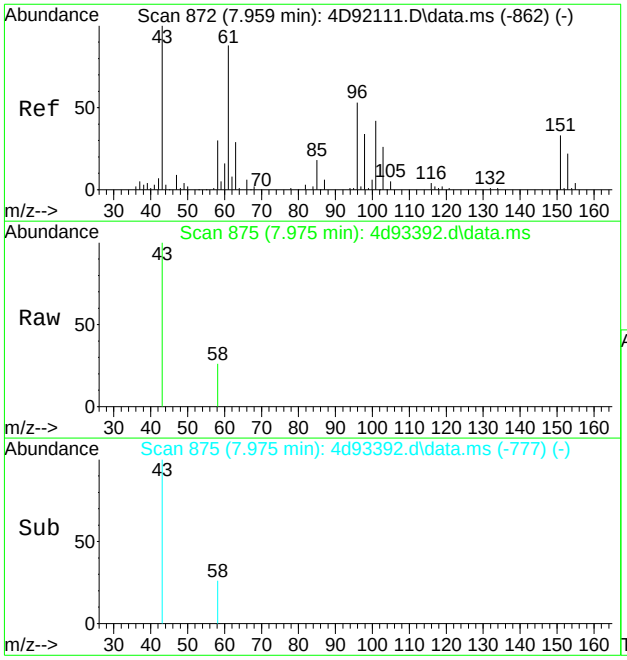
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93392.d
Acq On : 11 Apr 2019 3:13 am
Operator : payalr
Sample : JC86089-2 Inst : MS4D
Misc : MS33875,V4D4101,5,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 12 01:41:41 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

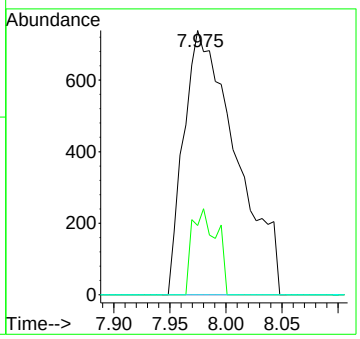




#18
acetone
Concen: 3.10 ug/L
RT: 7.975 min Scan# 875
Delta R.T. 0.016 min
Lab File: 4d93392.d
Acq: 11 Apr 2019 3:13 am

Tgt Ion: 43 Resp: 2401

Ion	Ratio	Lower	Upper
43	100		
58	26.3	0.0	59.8
42	0.0	0.0	37.4



Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93374.d
Acq On : 10 Apr 2019 6:15 pm
Operator : juntaep
Sample : mb Inst : MS4D
Misc : MS33852,V4D4101,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 12 01:16:24 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

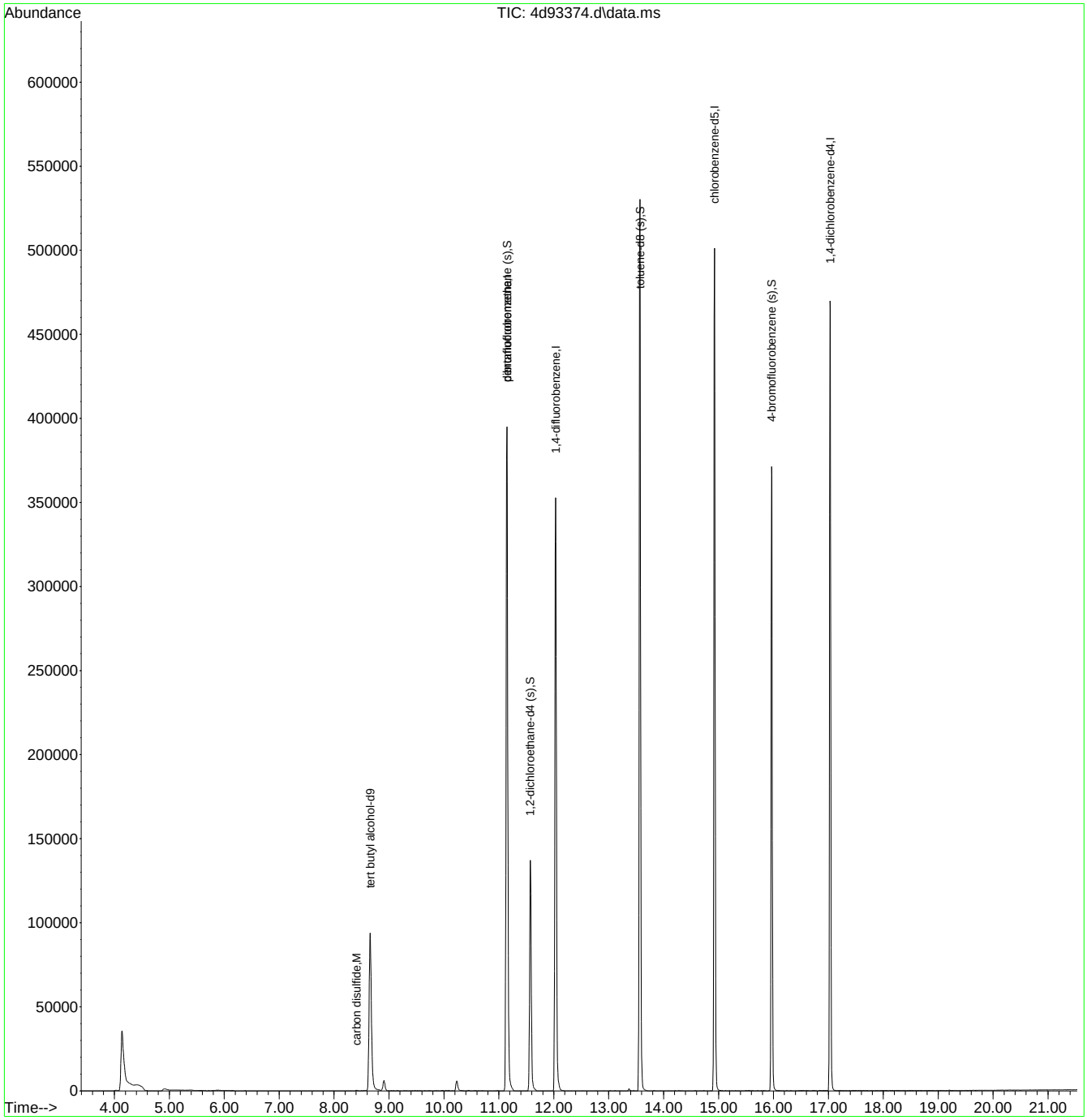
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.656	65	164664	500.00	ug/L	0.00
5) pentafluorobenzene	11.147	168	200313	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.033	114	303917	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	260056	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.034	152	114448	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.147	113	99691	45.12	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 90.24%			
52) 1,2-dichloroethane-d4 (s)	11.571	65	106046	51.70	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 103.40%			
74) toluene-d8 (s)	13.569	98	349860	51.94	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.88%			
97) 4-bromofluorobenzene (s)	15.965	95	123136	53.34	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.68%			
Target Compounds						Qvalue
21) carbon disulfide	8.410	76	476	0.11	ug/L	69

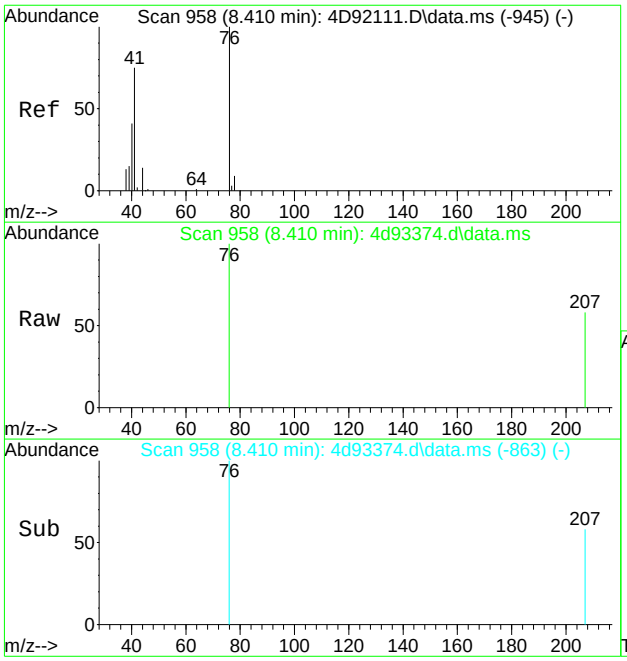
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93374.d
Acq On : 10 Apr 2019 6:15 pm
Operator : juntaep
Sample : mb Inst : MS4D
Misc : MS33852,V4D4101,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 12 01:16:24 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

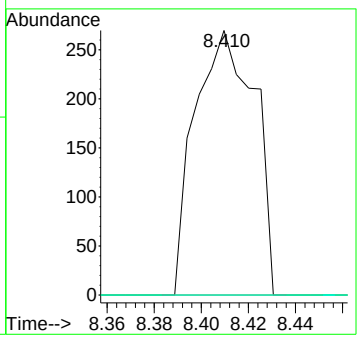




#21
carbon disulfide
Concen: 0.11 ug/L
RT: 8.410 min Scan# 958
Delta R.T. -0.000 min
Lab File: 4d93374.d
Acq: 10 Apr 2019 6:15 pm

Tgt Ion: 76 Resp: 476

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	39.0
44	0.0	0.0	43.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93372.d
Acq On : 10 Apr 2019 5:17 pm
Operator : juntaep
Sample : bs Inst : MS4D
Misc : MS33717,V4D4101,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 11 18:02:24 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.661	65	169257	500.00	ug/L	0.00
5) pentafluorobenzene	11.147	168	183022	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.033	114	275442	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	235109	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.029	152	105179	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.147	113	92326	45.74	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 91.48%			
52) 1,2-dichloroethane-d4 (s)	11.571	65	96128	51.71	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 103.42%			
74) toluene-d8 (s)	13.569	98	313912	51.55	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.10%			
97) 4-bromofluorobenzene (s)	15.965	95	112413	52.98	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.96%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.792	59	98724	269.16	ug/L	99
3) ethanol	7.193	45	216367	6047.47	ug/L	99
4) 1,4-dioxane	12.688	88	41319	1128.37	ug/L	98
6) chlorodifluoromethane	4.640	51	113033	60.71	ug/L	97
7) dichlorodifluoromethane	4.614	85	122390	60.39	ug/L	98
8) chloromethane	5.096	50	160350	51.93	ug/L	100
9) vinyl chloride	5.379	62	129009	55.38	ug/L	98
10) bromomethane	6.160	94	54605	75.96	ug/L	97
11) chloroethane	6.396	64	68973	58.25	ug/L	99
12) trichlorofluoromethane	6.968	101	135283	50.81	ug/L	100
13) vinyl bromide	6.816	106	64328	46.67	ug/L	97
14) ethyl ether	7.492	74	53462	57.10	ug/L	89
15) acrolein	7.702	56	23298	51.86	ug/L	95
16) freon 113	7.948	151	58215	50.45	ug/L	95
17) 1,1-dichloroethene	7.959	96	80544	54.93	ug/L	99
18) acetone	7.954	43	236379	321.44	ug/L	98
19) acetonitrile	8.399	41	188299	586.26	ug/L	99
20) iodomethane	8.242	142	45627	50.97	ug/L	99
21) carbon disulfide	8.404	76	222108	55.86	ug/L	98
22) methylene chloride	8.724	84	93046	52.53	ug/L	96
23) methyl acetate	8.525	43	101162	51.53	ug/L	97
24) methyl tert butyl ether	9.159	73	270572	53.82	ug/L	97
25) trans-1,2-dichloroethene	9.186	96	85594	53.79	ug/L	95
26) di-isopropyl ether	9.846	45	314486	59.50	ug/L	96
27) 2-butanone	10.528	72	75577	247.19	ug/L	95
28) 1,1-dichloroethane	9.789	63	168065	58.74	ug/L	99
29) chloroprene	9.935	53	134337	57.58	ug/L	98
30) acrylonitrile	9.049	53	44201	57.03	ug/L	100
31) hexane	9.605	56	63756	62.39	ug/L	96
32) vinyl acetate	9.789	86	21805	52.19	ug/L #	80
33) ethyl tert-butyl ether	10.344	59	295611	55.90	ug/L	97
34) ethyl acetate	10.586	70	14501	50.12	ug/L	100
35) 2,2-dichloropropane	10.607	77	130788	51.81	ug/L	99
36) cis-1,2-dichloroethene	10.575	96	96936	53.25	ug/L	95
37) methyl acrylate	10.659	85	18833	51.73	ug/L #	84
38) propionitrile	10.586	54	213147	566.28	ug/L	99
39) bromochloromethane	10.890	128	44365	51.34	ug/L	94
40) tetrahydrofuran	10.958	72	17840	51.64	ug/L	95
41) chloroform	10.953	85	100430	50.21	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93372.d
Acq On : 10 Apr 2019 5:17 pm
Operator : juntaep
Sample : bs Inst : MS4D
Misc : MS33717,V4D4101,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 11 18:02:24 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) t-butyl formate	11.026	59	81476	46.97	ug/L		95
44) methacrylonitrile	10.811	67	49778	51.51	ug/L		98
45) 1,1,1-trichloroethane	11.257	97	127313	49.17	ug/L		99
46) cyclohexane	11.367	84	113893	47.90	ug/L	#	84
47) 1,1-dichloropropene	11.440	75	116987	52.57	ug/L		98
48) isobutyl alcohol	11.440	74	7497	517.70	ug/L		93
49) carbon tetrachloride	11.477	117	104039	46.50	ug/L		99
50) tert amyl alcohol	11.519	55	31547	257.99	ug/L		94
53) n-butyl alcohol	12.101	56	262422	3128.03	ug/L		99
54) 2,2,4-trimethylpentane	11.760	57	235000	64.11	ug/L		97
55) benzene	11.692	78	337390	56.66	ug/L		100
56) tert-amyl methyl ether	11.749	87	61709	54.51	ug/L		93
57) heptane	11.923	71	54315	62.89	ug/L		96
58) isopropyl acetate	11.613	87	24961	56.50	ug/L	#	87
59) 1,2-dichloroethane	11.660	62	119069	50.12	ug/L		96
60) trichloroethene	12.368	130	82678	52.19	ug/L		99
61) ethyl acrylate	12.352	55	149790	57.89	ug/L		97
62) 2-nitropropane	13.018	41	27567	53.28	ug/L		97
63) 2-chloroethyl vinyl ether	13.066	63	120896	109.49	ug/L		98
64) methyl methacrylate	12.604	100	28166	54.73	ug/L		92
65) 1,2-dichloropropane	12.594	63	94020	60.78	ug/L		99
66) dibromomethane	12.714	93	57536	52.10	ug/L		97
67) methylcyclohexane	12.620	83	122676	59.66	ug/L		98
68) bromodichloromethane	12.835	83	116779	54.20	ug/L		98
69) epichlorohydrin	13.155	57	56993	310.83	ug/L		98
70) cis-1,3-dichloropropene	13.270	75	144299	55.08	ug/L		100
71) 4-methyl-2-pentanone	13.364	58	197723	230.88	ug/L		97
72) 3-methyl-1-butanol	13.349	70	88912	1161.63	ug/L		95
75) toluene	13.632	92	192514	52.37	ug/L		99
76) trans-1,3-dichloropropene	13.768	75	127009	56.76	ug/L		99
77) ethyl methacrylate	13.789	69	125973	58.31	ug/L		96
78) 1,1,2-trichloroethane	13.962	83	68562	56.48	ug/L		99
79) tetrachloroethene	14.177	164	61241	48.67	ug/L		99
80) 1,3-dichloropropane	14.130	76	126562	53.46	ug/L		95
81) 2-hexanone	14.130	58	210340	248.41	ug/L		96
82) butyl acetate	14.214	56	75840	58.04	ug/L		98
83) dibromochloromethane	14.371	129	85523	52.89	ug/L		99
84) 1,2-dibromoethane	14.518	107	107243	57.61	ug/L		100
85) n-butyl ether	14.906	57	343082	55.16	ug/L		98
86) chlorobenzene	14.953	112	199636	49.82	ug/L		97
87) 1,1,1,2-tetrachloroethane	15.000	131	71886	51.35	ug/L		97
88) ethylbenzene	15.016	91	344497	51.96	ug/L		99
89) m,p-xylene	15.110	106	257242	104.09	ug/L		98
90) o-xylene	15.488	106	125077	53.14	ug/L		99
91) styrene	15.488	104	215855	56.33	ug/L		98
92) bromoform	15.698	173	59551	51.28	ug/L		98
93) butyl acrylate	15.315	55	190951	62.35	ug/L		99
94) isopropylbenzene	15.802	105	306019	50.70	ug/L		99
95) cis-1,4-dichloro-2-butene	15.818	88	34995	47.25	ug/L		95
98) bromobenzene	16.148	156	81363	49.22	ug/L		92
99) 1,1,2,2-tetrachloroethane	16.023	83	119314	52.02	ug/L		99
100) trans-1,4-dichloro-2-b...	16.065	53	25968	52.00	ug/L		95
101) 1,2,3-trichloropropane	16.096	110	29295	48.98	ug/L		99
102) n-propylbenzene	16.175	91	370155	51.74	ug/L		99
103) 2-chlorotoluene	16.300	126	74174	51.09	ug/L		92
104) 4-chlorotoluene	16.384	91	222104	50.88	ug/L		97
105) 1,3,5-trimethylbenzene	16.306	105	248530	51.69	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93372.d
Acq On : 10 Apr 2019 5:17 pm
Operator : juntaep
Sample : bs Inst : MS4D
Misc : MS33717,V4D4101,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 11 18:02:24 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

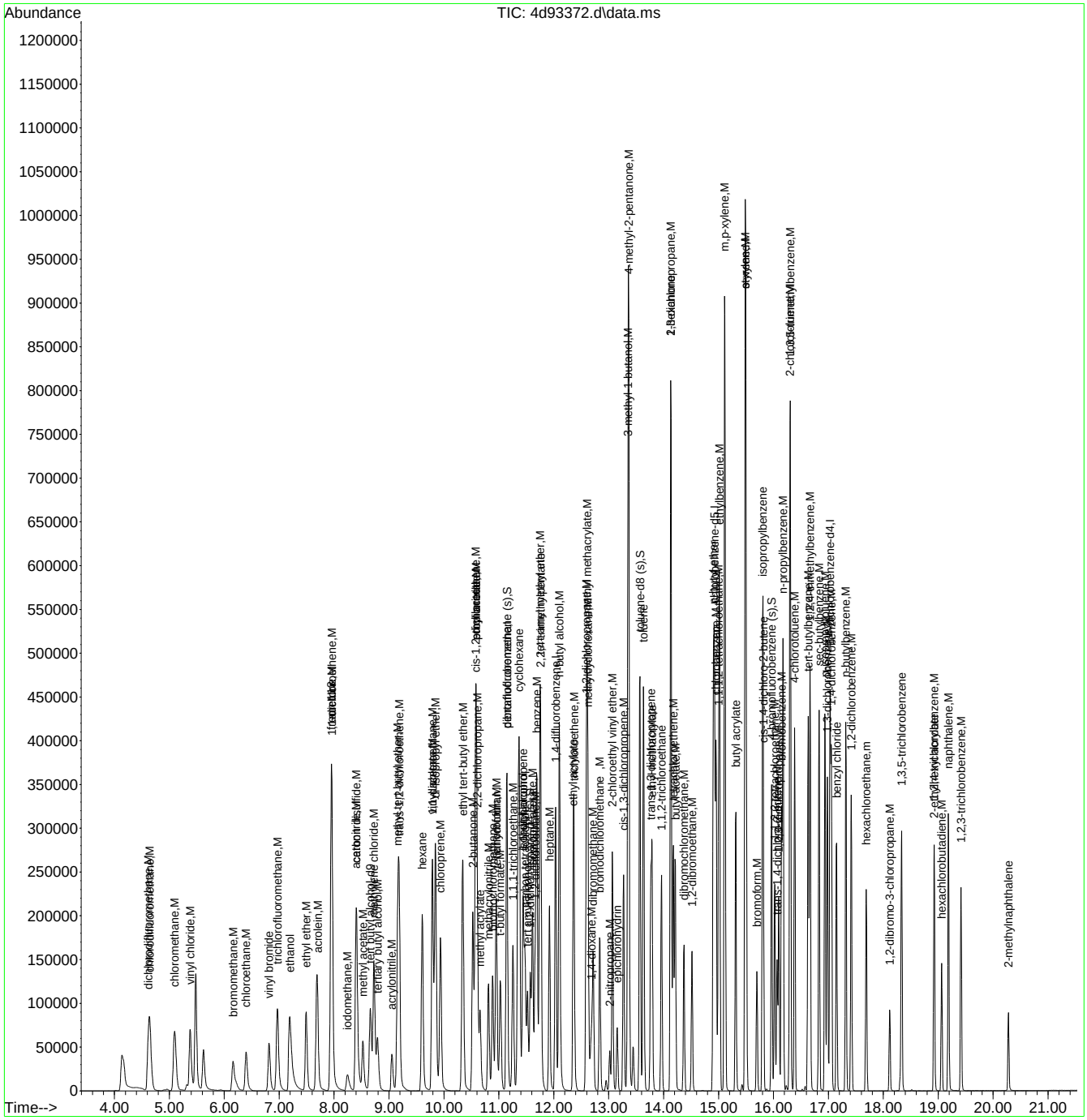
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106) tert-butylbenzene	16.631	134	43185	49.19	ug/L		88
107) 1,2,4-trimethylbenzene	16.667	105	249041	51.33	ug/L		100
108) sec-butylbenzene	16.830	105	293544	51.25	ug/L		99
109) 1,3-dichlorobenzene	16.982	146	138242	48.93	ug/L		99
110) p-isopropyltoluene	16.940	119	239542	51.76	ug/L		99
111) 1,4-dichlorobenzene	17.055	146	140280	48.27	ug/L		100
112) benzyl chloride	17.150	91	196336	52.52	ug/L		99
113) 1,2-dichlorobenzene	17.417	146	130208	48.81	ug/L		99
114) n-butylbenzene	17.318	92	123511	55.63	ug/L		96
115) 1,2-dibromo-3-chloropr...	18.115	75	22601	52.02	ug/L		88
116) 1,3,5-trichlorobenzene	18.335	180	90309	50.93	ug/L		99
117) 2-ethylhexyl acrylate	18.922	70	4442	5.86	ug/L	#	85
118) 1,2,4-trichlorobenzene	18.927	180	78029	48.54	ug/L		100
119) hexachlorobutadiene	19.064	225	29816	49.62	ug/L		100
120) naphthalene	19.184	128	233154	46.40	ug/L		100
121) 1,2,3-trichlorobenzene	19.415	180	69691	46.00	ug/L		99
122) hexachloroethane	17.690	201	36948	51.18	ug/L		98
123) 2-methylnaphthalene	20.280	142	41898	22.67	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93372.d
Acq On : 10 Apr 2019 5:17 pm
Operator : juntaep
Sample : bs Inst : MS4D
Misc : MS33717,V4D4101,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 11 18:02:24 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93380.d
Acq On : 10 Apr 2019 9:32 pm
Operator : payalr
Sample : JC86113-2MS Inst : MS4D
Misc : MS33871,V4D4101,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 12 01:29:19 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.661	65	163508	500.00	ug/L		0.00
5) pentafluorobenzene	11.147	168	185483	50.00	ug/L		0.00
51) 1,4-difluorobenzene	12.033	114	277608	50.00	ug/L		0.00
73) chlorobenzene-d5	14.927	117	238537	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	17.029	152	106629	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	11.147	113	92855	45.39	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 90.78%				
52) 1,2-dichloroethane-d4 (s)	11.571	65	94672	50.53	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.06%				
74) toluene-d8 (s)	13.569	98	317310	51.36	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.72%				
97) 4-bromofluorobenzene (s)	15.965	95	113050	52.56	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.12%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	8.792	59	96327	271.86	ug/L		99
3) ethanol	7.193	45	207028	5989.90	ug/L		98
4) 1,4-dioxane	12.688	88	39025	1103.20	ug/L		95
6) chlorodifluoromethane	4.640	51	111294	58.99	ug/L		97
7) dichlorodifluoromethane	4.614	85	118869	57.88	ug/L		100
8) chloromethane	5.096	50	138005	44.10	ug/L		99
9) vinyl chloride	5.379	62	128445	54.40	ug/L		99
10) bromomethane	6.160	94	46821	64.27	ug/L		98
11) chloroethane	6.402	64	70753	58.96	ug/L		99
12) trichlorofluoromethane	6.968	101	145679	53.99	ug/L		99
13) vinyl bromide	6.816	106	66040	47.27	ug/L		96
14) ethyl ether	7.492	74	50659	53.39	ug/L		90
15) acrolein	7.702	56	21784	47.85	ug/L		99
16) freon 113	7.948	151	61541	52.63	ug/L		95
17) 1,1-dichloroethene	7.959	96	81533	54.86	ug/L		99
18) acetone	7.954	43	151102	202.75	ug/L		97
19) acetonitrile	8.399	41	176721	542.92	ug/L		98
20) iodomethane	8.242	142	68874	75.92	ug/L		99
21) carbon disulfide	8.404	76	221051	54.86	ug/L		98
22) methylene chloride	8.730	84	89788	50.01	ug/L		98
23) methyl acetate	8.525	43	93757	47.13	ug/L		97
24) methyl tert butyl ether	9.159	73	258457	50.73	ug/L		96
25) trans-1,2-dichloroethene	9.186	96	84557	52.43	ug/L		97
26) di-isopropyl ether	9.846	45	305140	56.97	ug/L		95
27) 2-butanone	10.528	72	62317	201.11	ug/L		95
28) 1,1-dichloroethane	9.789	63	163016	56.22	ug/L		98
29) chloroprene	9.935	53	134692	56.97	ug/L		97
30) acrylonitrile	9.049	53	41887	53.32	ug/L		98
31) hexane	9.605	56	67670	65.34	ug/L		96
32) vinyl acetate	9.794	86	21317	50.35	ug/L	#	93
33) ethyl tert-butyl ether	10.344	59	286031	53.37	ug/L		97
34) ethyl acetate	10.580	70	13870	47.30	ug/L	#	77
35) 2,2-dichloropropane	10.607	77	131934	51.58	ug/L		99
36) cis-1,2-dichloroethene	10.575	96	95445	51.74	ug/L		98
37) methyl acrylate	10.659	85	17958	48.67	ug/L	#	87
38) propionitrile	10.586	54	201034	527.01	ug/L		99
39) bromochloromethane	10.884	128	42860	48.94	ug/L		89
40) tetrahydrofuran	10.958	72	17015	48.60	ug/L		97
41) chloroform	10.953	85	97853	48.27	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93380.d
Acq On : 10 Apr 2019 9:32 pm
Operator : payalr
Sample : JC86113-2MS Inst : MS4D
Misc : MS33871,V4D4101,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 12 01:29:19 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) t-butyl formate	11.026	59	58794	33.45	ug/L		97
44) methacrylonitrile	10.811	67	47279	48.27	ug/L		97
45) 1,1,1-trichloroethane	11.257	97	128237	48.87	ug/L		99
46) cyclohexane	11.367	84	126436	52.47	ug/L		91
47) 1,1-dichloropropene	11.440	75	118005	52.32	ug/L		98
48) isobutyl alcohol	11.440	74	7475	509.33	ug/L		83
49) carbon tetrachloride	11.477	117	108451	47.83	ug/L		98
50) tert amyl alcohol	11.519	55	30235	243.98	ug/L		97
53) n-butyl alcohol	12.101	56	247683	2929.30	ug/L		99
54) 2,2,4-trimethylpentane	11.765	57	248572	67.28	ug/L		93
55) benzene	11.692	78	337101	56.17	ug/L		100
56) tert-amyl methyl ether	11.749	87	59862	52.47	ug/L		94
57) heptane	11.923	71	58671	67.40	ug/L		99
58) isopropyl acetate	11.613	87	23886	53.64	ug/L	#	91
59) 1,2-dichloroethane	11.660	62	114159	47.68	ug/L		95
60) trichloroethene	12.368	130	82226	51.50	ug/L		99
61) ethyl acrylate	12.352	55	142720	54.73	ug/L		97
62) 2-nitropropane	13.018	41	25584	49.06	ug/L		99
64) methyl methacrylate	12.604	100	27130	52.31	ug/L	#	89
65) 1,2-dichloropropane	12.594	63	90783	58.23	ug/L		100
66) dibromomethane	12.714	93	55018	49.43	ug/L		98
67) methylcyclohexane	12.620	83	132205	63.79	ug/L		99
68) bromodichloromethane	12.835	83	113433	52.24	ug/L		99
69) epichlorohydrin	13.155	57	43079	233.11	ug/L		98
70) cis-1,3-dichloropropene	13.270	75	140209	53.11	ug/L		100
71) 4-methyl-2-pentanone	13.364	58	191247	221.57	ug/L		98
72) 3-methyl-1-butanol	13.349	70	83851	1086.96	ug/L		94
75) toluene	13.632	92	191297	51.29	ug/L		99
76) trans-1,3-dichloropropene	13.768	75	121981	53.73	ug/L		100
77) ethyl methacrylate	13.789	69	121429	55.39	ug/L		96
78) 1,1,2-trichloroethane	13.962	83	66367	53.89	ug/L		98
79) tetrachloroethene	14.177	164	60979	47.76	ug/L		99
80) 1,3-dichloropropane	14.130	76	122639	51.06	ug/L		98
81) 2-hexanone	14.130	58	192460	224.03	ug/L		96
82) butyl acetate	14.208	56	73416	55.38	ug/L		96
83) dibromochloromethane	14.371	129	83340	50.80	ug/L		99
84) 1,2-dibromoethane	14.518	107	104664	55.42	ug/L		99
85) n-butyl ether	14.906	57	336145	53.27	ug/L		98
86) chlorobenzene	14.953	112	196701	48.39	ug/L		96
87) 1,1,1,2-tetrachloroethane	15.000	131	71083	50.05	ug/L		99
88) ethylbenzene	15.016	91	504050	74.94	ug/L		98
89) m,p-xylene	15.116	106	262770	104.80	ug/L		99
90) o-xylene	15.488	106	125856	52.70	ug/L		99
91) styrene	15.488	104	209754	53.95	ug/L		98
92) bromoform	15.698	173	57005	48.38	ug/L		100
93) butyl acrylate	15.315	55	185261	59.62	ug/L		99
94) isopropylbenzene	15.802	105	351294	57.36	ug/L		99
95) cis-1,4-dichloro-2-butene	15.818	88	32413	43.13	ug/L		95
98) bromobenzene	16.148	156	79528	47.46	ug/L		93
99) 1,1,2,2-tetrachloroethane	16.023	83	114994	49.46	ug/L		98
100) trans-1,4-dichloro-2-b...	16.065	53	24137	47.67	ug/L		98
101) 1,2,3-trichloropropane	16.096	110	27887	45.99	ug/L		98
102) n-propylbenzene	16.175	91	450669	62.13	ug/L		99
103) 2-chlorotoluene	16.300	126	72178	49.04	ug/L		93
104) 4-chlorotoluene	16.384	91	215152	48.62	ug/L		97
105) 1,3,5-trimethylbenzene	16.306	105	266145	54.60	ug/L		97
106) tert-butylbenzene	16.636	134	42985	48.30	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93380.d
Acq On : 10 Apr 2019 9:32 pm
Operator : payalr
Sample : JC86113-2MS Inst : MS4D
Misc : MS33871,V4D4101,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 12 01:29:19 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

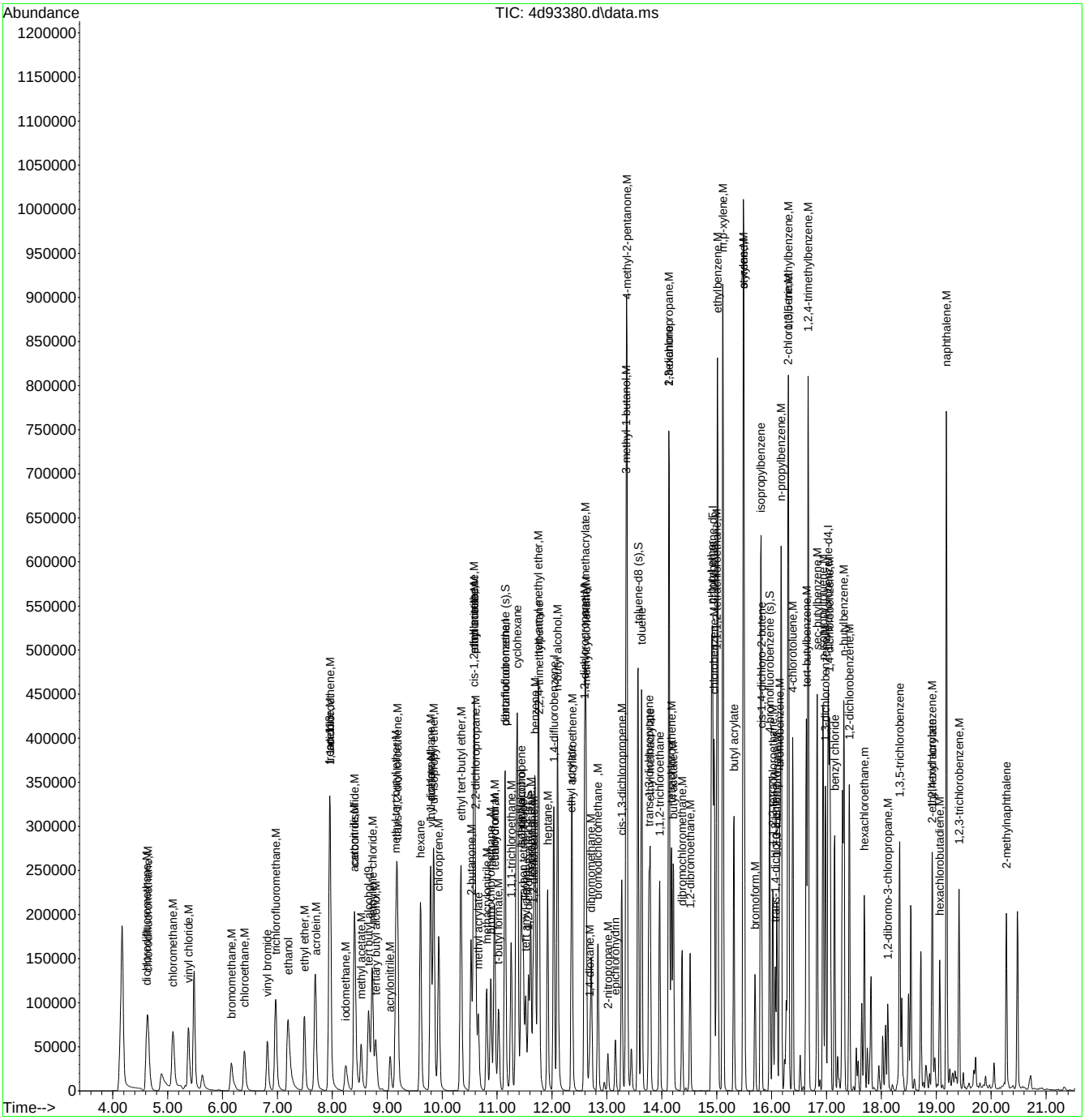
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
107) 1,2,4-trimethylbenzene	16.667	105	419318	85.25	ug/L		100
108) sec-butylbenzene	16.830	105	303676	52.30	ug/L		99
109) 1,3-dichlorobenzene	16.982	146	133904	46.75	ug/L		99
110) p-isopropyltoluene	16.935	119	242270	51.63	ug/L		99
111) 1,4-dichlorobenzene	17.055	146	136270	46.25	ug/L		100
112) benzyl chloride	17.150	91	193085	50.95	ug/L		100
113) 1,2-dichlorobenzene	17.417	146	128225	47.42	ug/L		99
114) n-butylbenzene	17.318	92	126839	56.35	ug/L		96
115) 1,2-dibromo-3-chloropr...	18.115	75	21578	48.99	ug/L		91
116) 1,3,5-trichlorobenzene	18.335	180	86014	47.85	ug/L		100
117) 2-ethylhexyl acrylate	18.922	70	3219	4.27	ug/L	#	79
118) 1,2,4-trichlorobenzene	18.927	180	74207	45.53	ug/L		99
119) hexachlorobutadiene	19.064	225	29631	48.64	ug/L		99
120) naphthalene	19.184	128	562775	110.49	ug/L		99
121) 1,2,3-trichlorobenzene	19.415	180	66674	43.41	ug/L		98
122) hexachloroethane	17.690	201	35659	48.72	ug/L		98
123) 2-methylnaphthalene	20.275	142	88525	47.25	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93380.d
Acq On : 10 Apr 2019 9:32 pm
Operator : payalr
Sample : JC86113-2MS Inst : MS4D
Misc : MS33871,V4D4101,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 12 01:29:19 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 04/16/19 02:28

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93379.d
Acq On : 10 Apr 2019 9:03 pm
Operator : payalr
Sample : JC86113-1DUP Inst : MS4D
Misc : MS33871,V4D4101,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 12 01:28:58 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

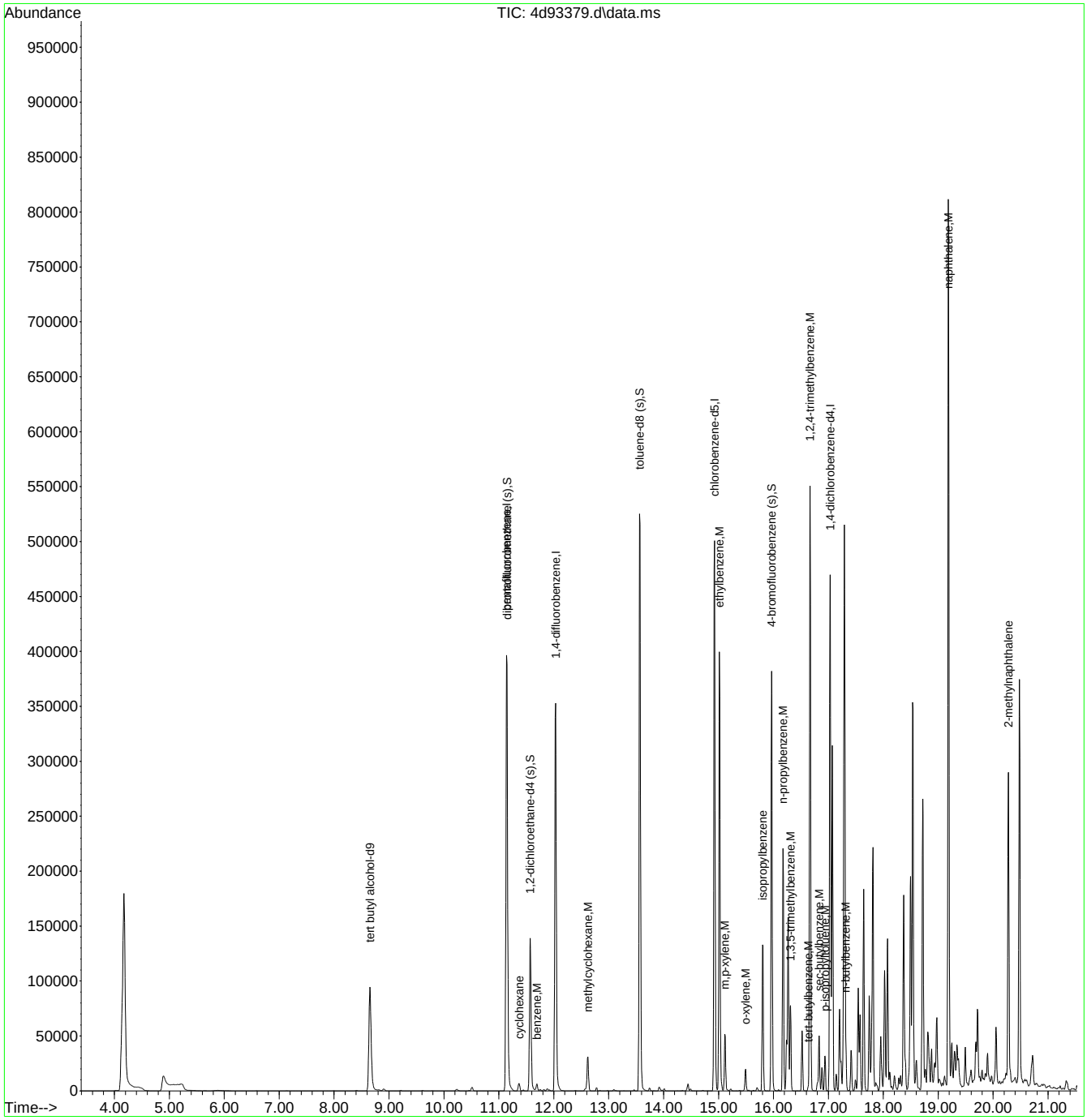
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.651	65	166070	500.00	ug/L	-0.01
5) pentafluorobenzene	11.141	168	201633	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.033	114	305310	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	258279	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.034	152	114135	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.147	113	99410	44.70	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 89.40%			
52) 1,2-dichloroethane-d4 (s)	11.571	65	104599	50.76	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.52%			
74) toluene-d8 (s)	13.564	98	350425	52.38	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.76%			
97) 4-bromofluorobenzene (s)	15.965	95	124137	53.92	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 107.84%			
Target Compounds						Qvalue
46) cyclohexane	11.372	84	3017	1.15	ug/L #	68
55) benzene	11.692	78	6382	0.97	ug/L	98
67) methylcyclohexane	12.620	83	13250	5.81	ug/L	95
88) ethylbenzene	15.016	91	272314	37.39	ug/L	98
89) m,p-xylene	15.116	106	14734	5.43	ug/L	98
90) o-xylene	15.493	106	5489	2.12	ug/L	98
94) isopropylbenzene	15.802	105	85355	12.87	ug/L	97
102) n-propylbenzene	16.175	91	162615	20.95	ug/L	99
105) 1,3,5-trimethylbenzene	16.311	105	40871	7.83	ug/L	99
106) tert-butylbenzene	16.631	134	232	0.24	ug/L #	93
107) 1,2,4-trimethylbenzene	16.667	105	281496	53.46	ug/L	99
108) sec-butylbenzene	16.830	105	34658	5.58	ug/L	99
110) p-isopropyltoluene	16.940	119	18063	3.60	ug/L	98
114) n-butylbenzene	17.318	92	8169m	3.39	ug/L	
120) naphthalene	19.184	128	590147	108.24	ug/L	99
123) 2-methylnaphthalene	20.280	142	127545	63.60	ug/L	99

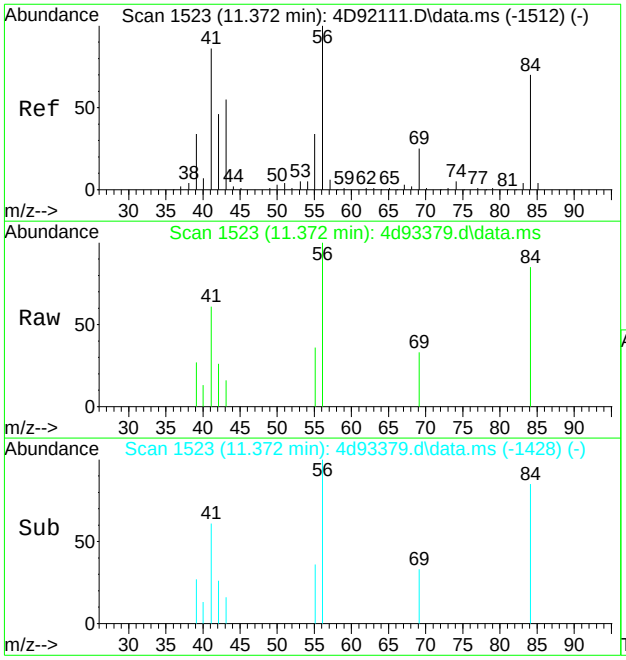
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93379.d
Acq On : 10 Apr 2019 9:03 pm
Operator : payalr
Sample : JC86113-1DUP Inst : MS4D
Misc : MS33871,V4D4101,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 12 01:28:58 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

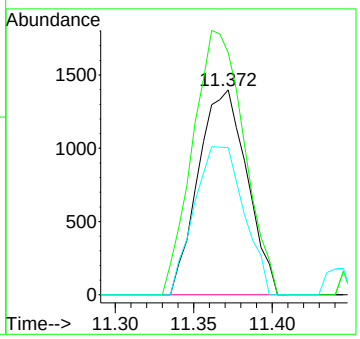


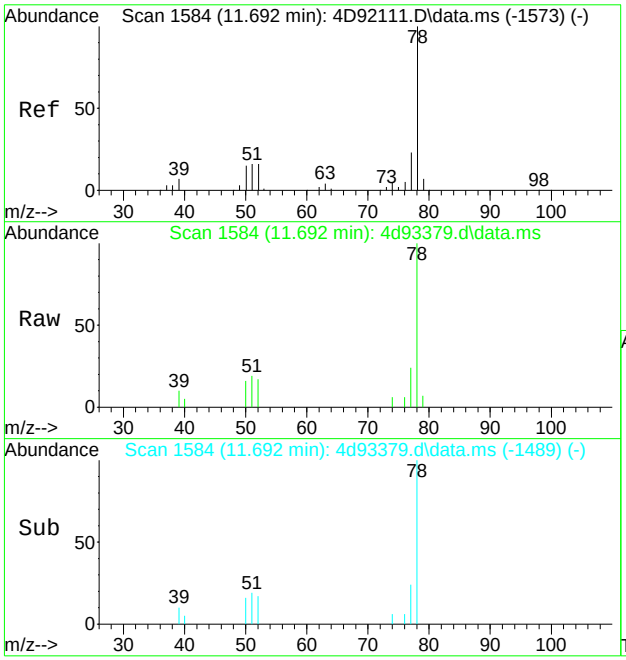


#46
cyclohexane
Concen: 1.15 ug/L
RT: 11.372 min Scan# 1523
Delta R.T. -0.000 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion: 84 Resp: 3017

Ion	Ratio	Lower	Upper
84	100		
56	118.2	124.4	164.4#
41	71.8	102.4	142.4#

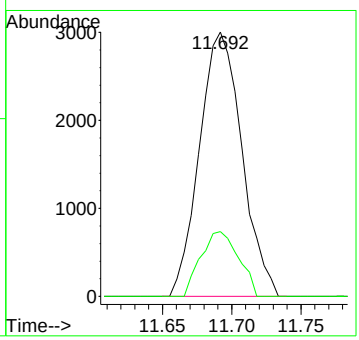


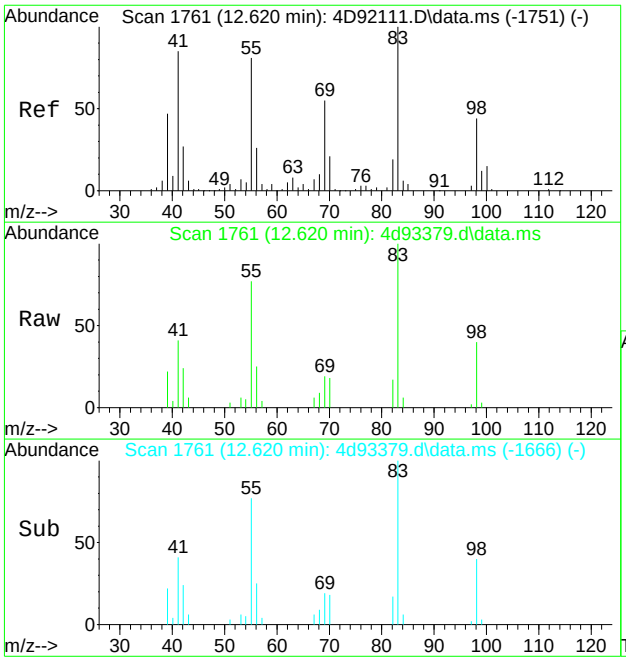


#55
benzene
Concen: 0.97 ug/L
RT: 11.692 min Scan# 1584
Delta R.T. -0.000 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion: 78 Resp: 6382

Ion	Ratio	Lower	Upper
78	100		
77	24.5	0.0	53.3

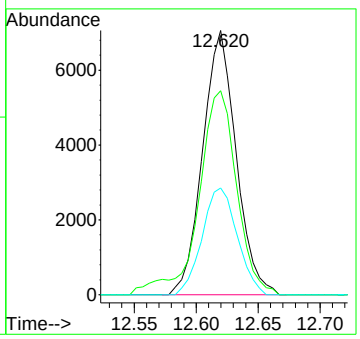


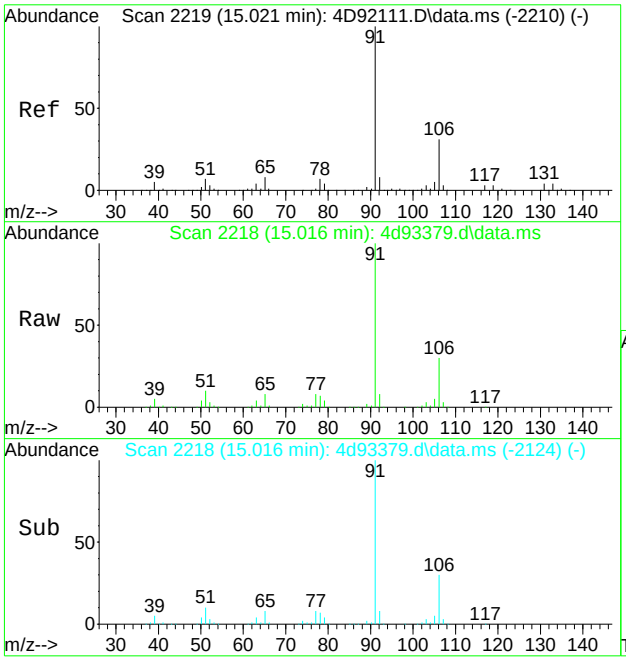


#67
methylcyclohexane
Concen: 5.81 ug/L
RT: 12.620 min Scan# 1761
Delta R.T. -0.000 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion: 83 Resp: 13250

Ion	Ratio	Lower	Upper
83	100		
55	77.2	51.1	111.1
98	40.4	13.7	73.7

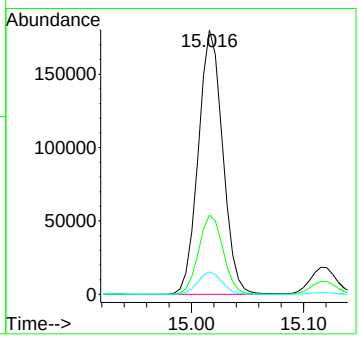


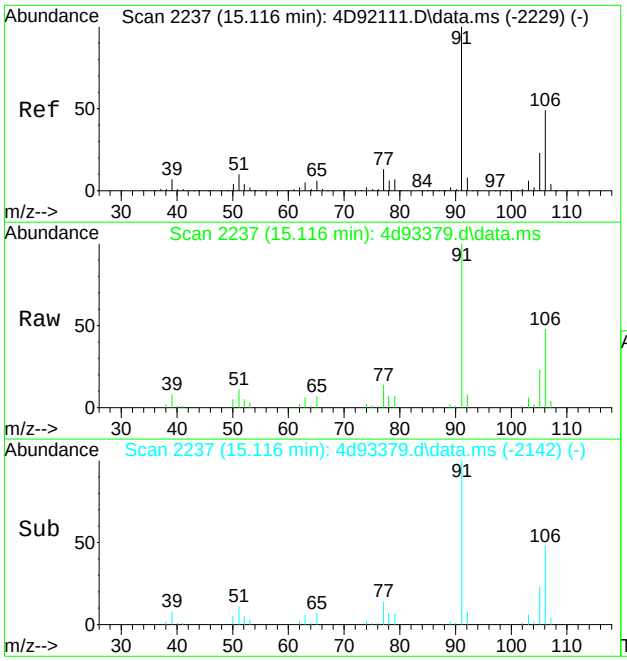


#88
ethylbenzene
Concen: 37.39 ug/L
RT: 15.016 min Scan# 2218
Delta R.T. -0.005 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion: 91 Resp: 272314

Ion	Ratio	Lower	Upper
91	100		
106	30.1	1.3	61.3
65	8.5	0.0	38.2

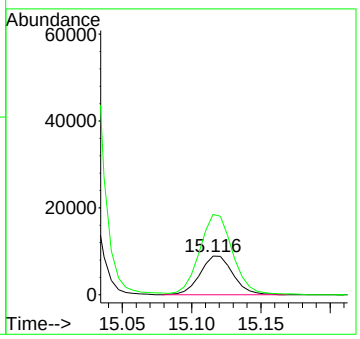


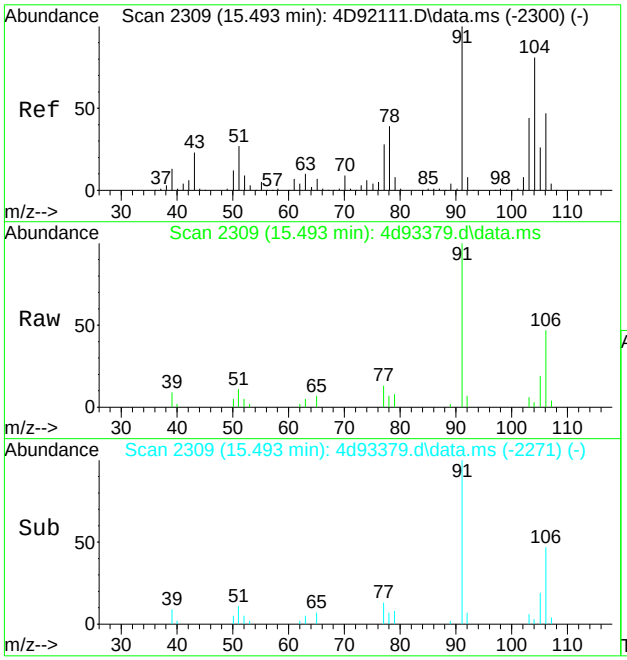


#89
m,p-xylene
Concen: 5.43 ug/L
RT: 15.116 min Scan# 2237
Delta R.T. -0.000 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion:106 Resp: 14734

Ion	Ratio	Lower	Upper
106	100		
91	206.0	173.1	233.1

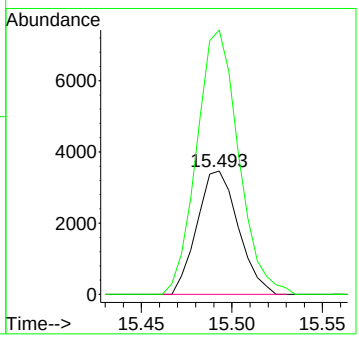


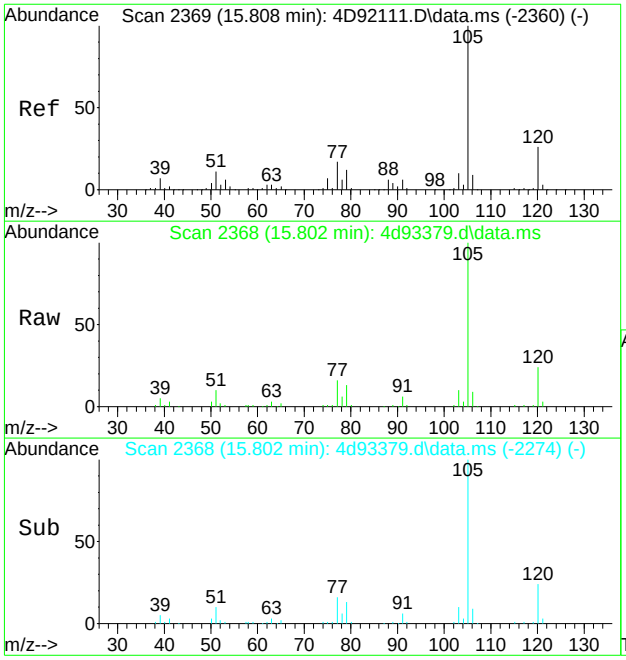


#90
o-xylene
Concen: 2.12 ug/L
RT: 15.493 min Scan# 2309
Delta R.T. 0.000 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion:106 Resp: 5489

Ion	Ratio	Lower	Upper
106	100		
91	214.3	181.0	241.0

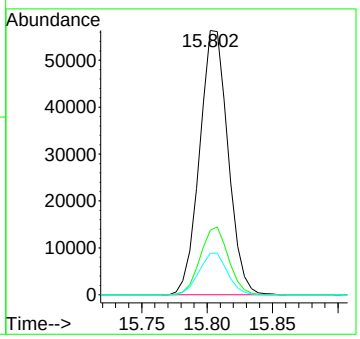


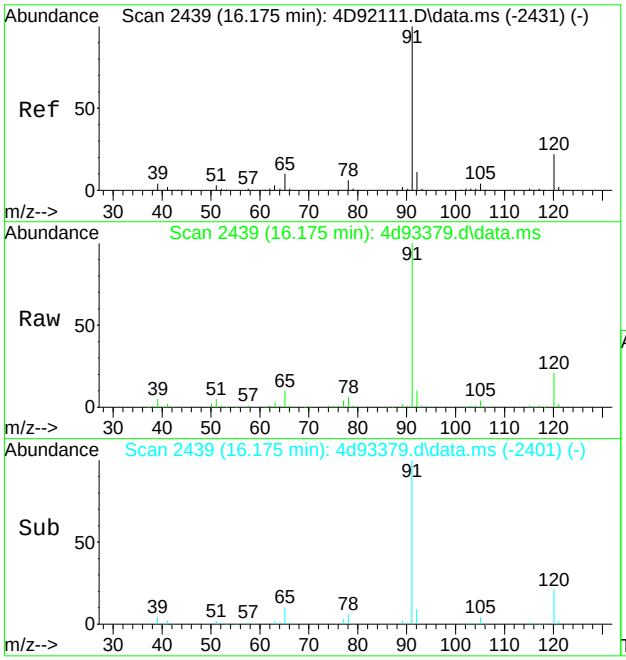


#94
isopropylbenzene
Concen: 12.87 ug/L
RT: 15.802 min Scan# 2368
Delta R.T. -0.006 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion:105 Resp: 85355

Ion	Ratio	Lower	Upper
105	100		
120	24.4	6.1	46.1
77	15.7	0.0	36.8

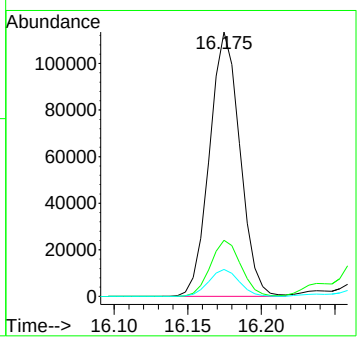


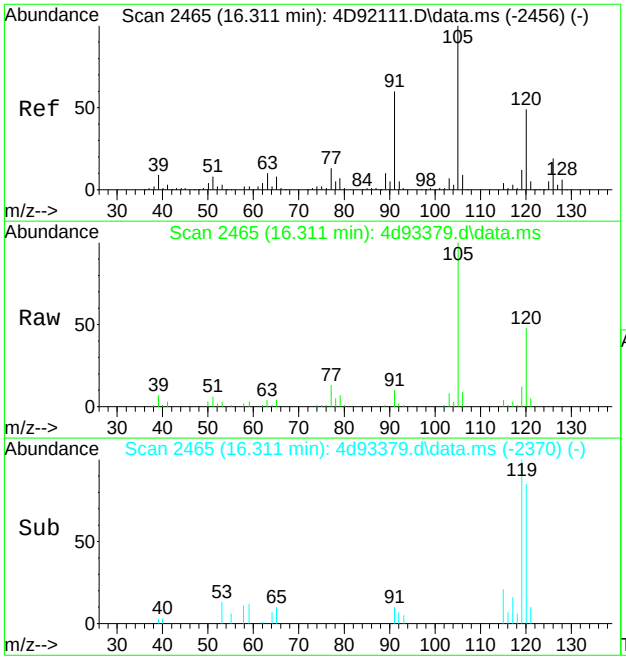


#102
n-propylbenzene
Concen: 20.95 ug/L
RT: 16.175 min Scan# 2439
Delta R.T. -0.000 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion: 91 Resp: 162615

Ion	Ratio	Lower	Upper
91	100		
120	21.2	0.0	51.9
65	10.2	0.0	40.1

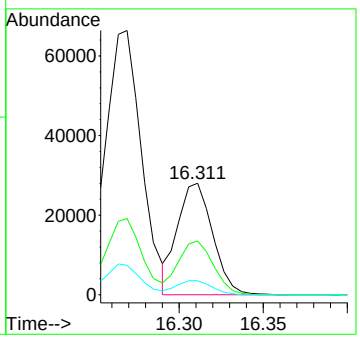


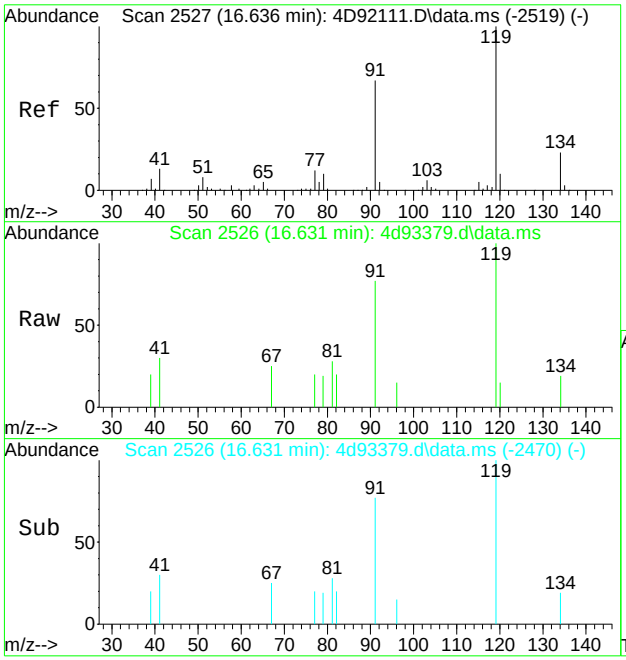


#105
1,3,5-trimethylbenzene
Concen: 7.83 ug/L
RT: 16.311 min Scan# 2465
Delta R.T. -0.000 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion:105 Resp: 40871

Ion	Ratio	Lower	Upper
105	100		
120	48.4	19.4	79.4
77	12.6	0.0	42.7

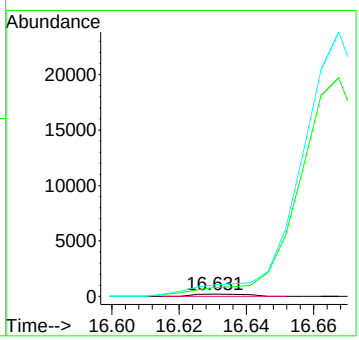


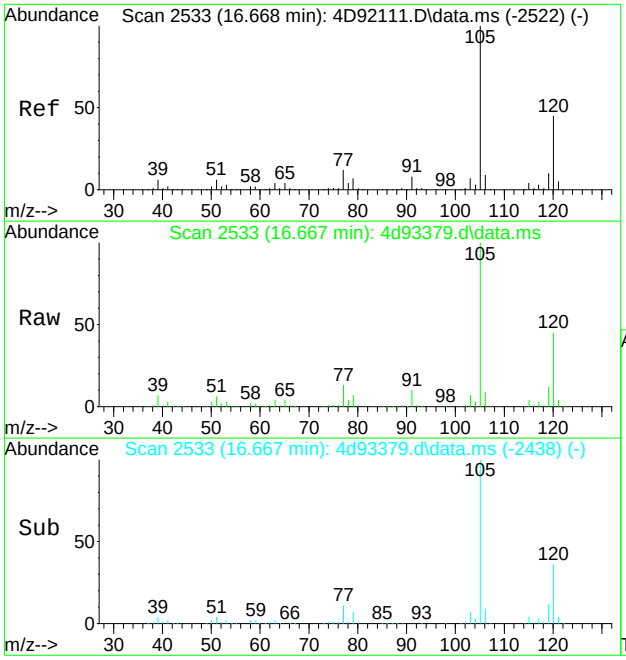


#106
tert-butylbenzene
Concen: 0.24 ug/L
RT: 16.631 min Scan# 2526
Delta R.T. -0.005 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion:134 Resp: 232

Ion	Ratio	Lower	Upper
134	100		
91	323.4	260.6	320.6#
119	434.8	403.9	463.9

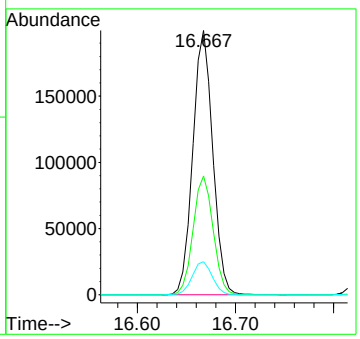


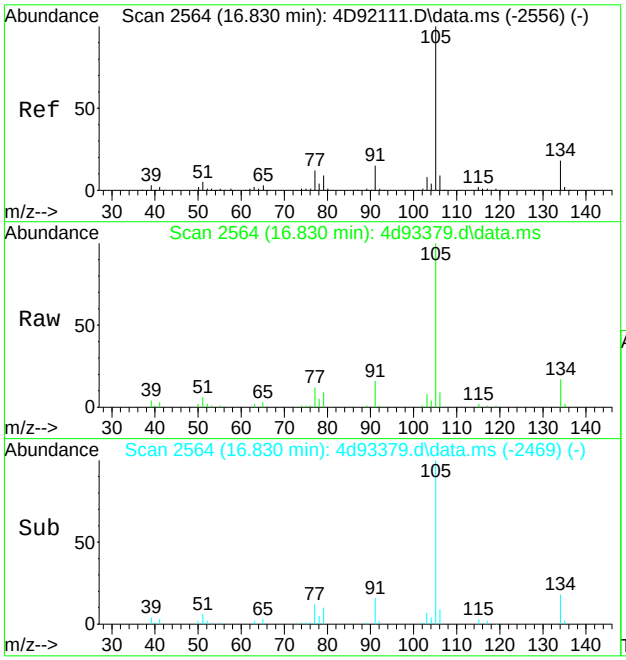


#107
1,2,4-trimethylbenzene
Concen: 53.46 ug/L
RT: 16.667 min Scan# 2533
Delta R.T. -0.001 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion:105 Resp: 281496

Ion	Ratio	Lower	Upper
105	100		
120	44.9	15.6	75.6
77	12.6	0.0	42.3

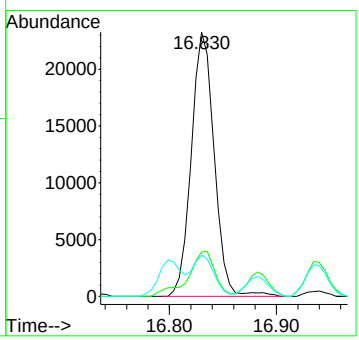


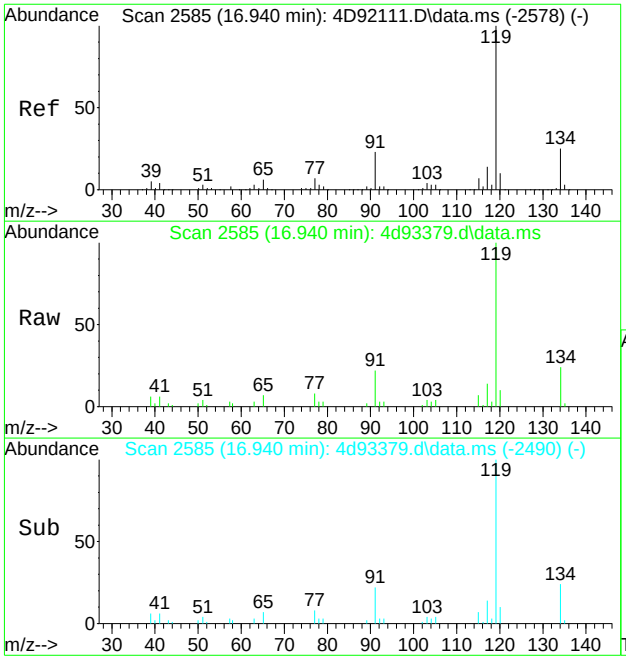


#108
sec-butylbenzene
Concen: 5.58 ug/L
RT: 16.830 min Scan# 2564
Delta R.T. -0.000 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion:105 Resp: 34658

Ion	Ratio	Lower	Upper
105	100		
134	16.7	0.0	47.8
91	15.6	0.0	45.5

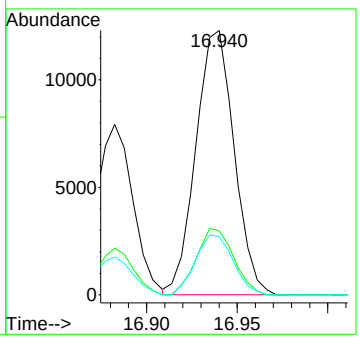


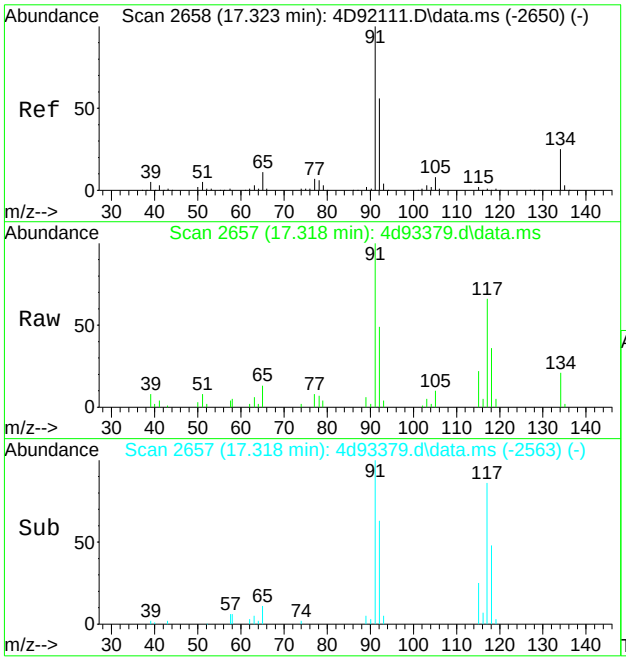


#110
p-isopropyltoluene
Concen: 3.60 ug/L
RT: 16.940 min Scan# 2585
Delta R.T. 0.000 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion:119 Resp: 18063

Ion	Ratio	Lower	Upper
119	100		
134	24.1	0.0	55.3
91	22.0	0.0	52.8

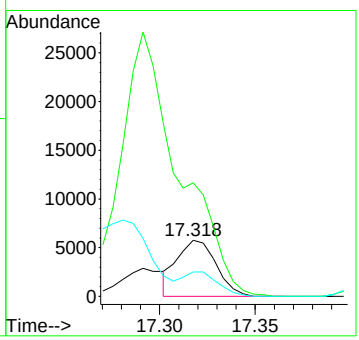


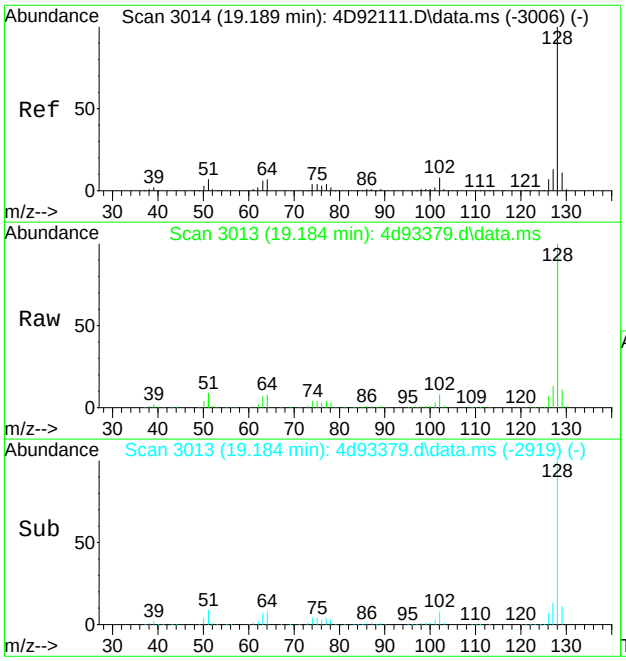


#114
n-butylbenzene
Concen: 3.39 ug/L m
RT: 17.318 min Scan# 2657
Delta R.T. -0.005 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion: 92 Resp: 8169

Ion	Ratio	Lower	Upper
92	100		
91	202.9	149.2	209.2
134	43.4	15.6	75.6

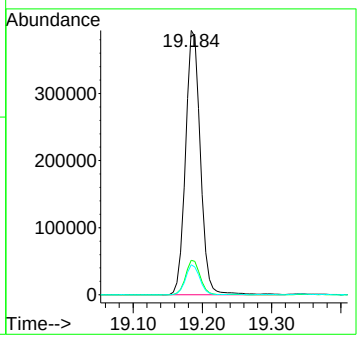


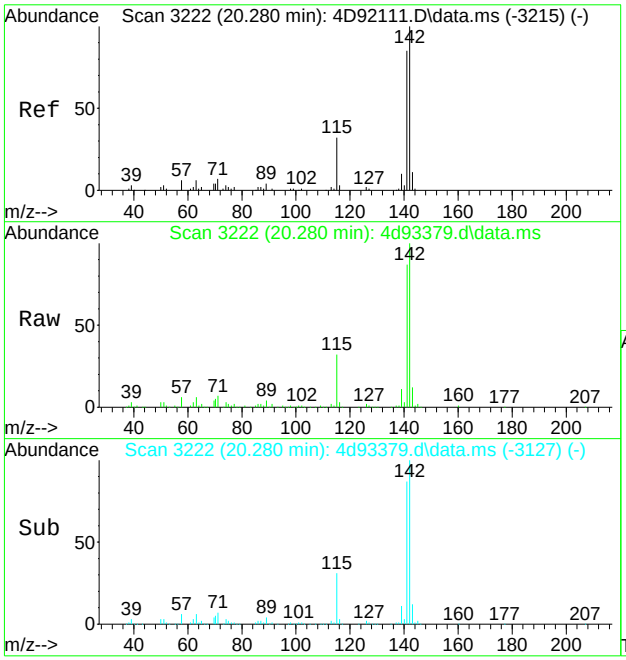


#120
naphthalene
Concen: 108.24 ug/L
RT: 19.184 min Scan# 3013
Delta R.T. -0.005 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion:128 Resp: 590147

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	42.8
129	11.3	0.0	40.8

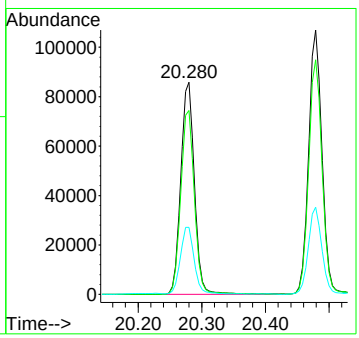




#123
2-methylnaphthalene
Concen: 63.60 ug/L
RT: 20.280 min Scan# 3222
Delta R.T. -0.000 min
Lab File: 4d93379.d
Acq: 10 Apr 2019 9:03 pm

Tgt Ion:142 Resp: 127545

Ion	Ratio	Lower	Upper
142	100		
141	86.7	65.3	105.3
115	31.7	11.5	51.5



Manual Integration Approval Summary

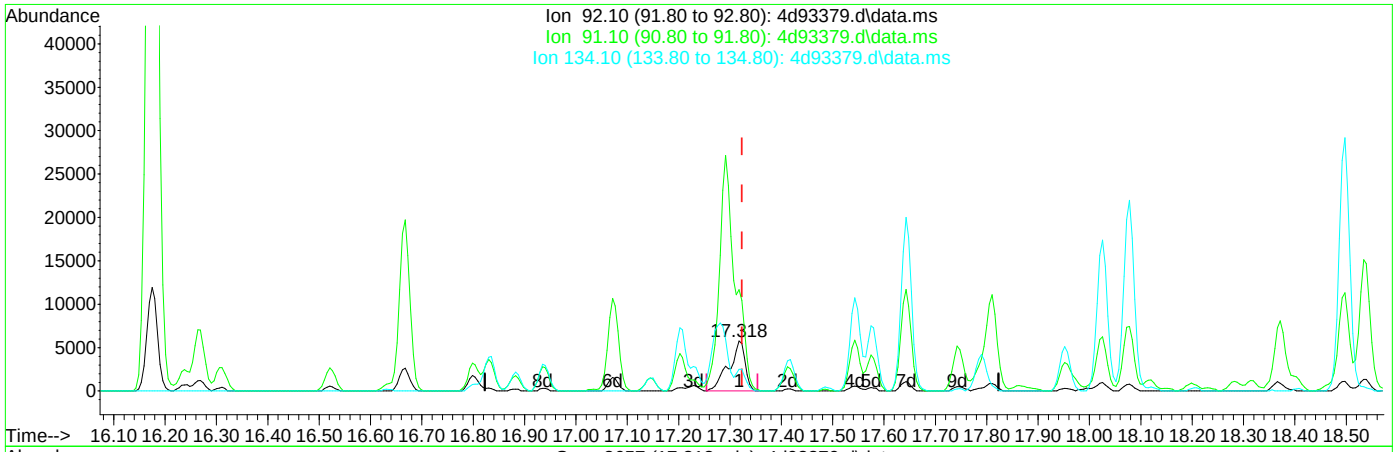
Sample Number:	JC86113-1DUP	**Method:**	SW846 8260C
Lab FileID:	4D93379.D	**Analyst approved:**	04/12/19 01:52 Janelle Cordova
Injection Time:	04/10/19 21:03	**Supervisor approved:**	04/16/19 02:28 Kanya Veerawat

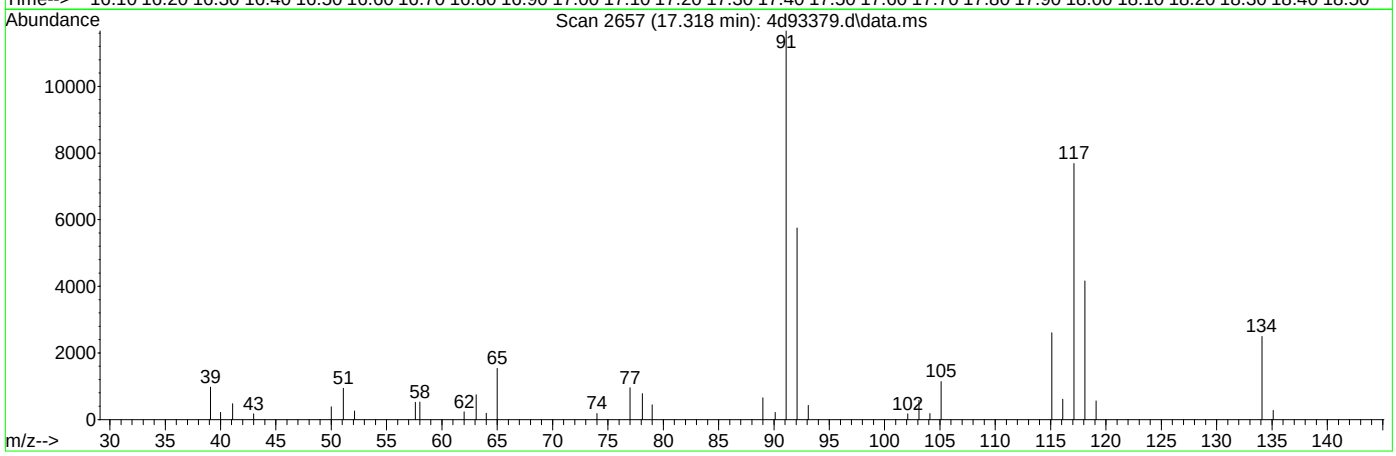
Parameter	CAS	Sig#	R.T. (min.)	Reason
n-Butylbenzene	104-51-8		17.32	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93379.d
Acq On : 10 Apr 2019 9:03 pm
Operator : payalr
Sample : JC86113-1DUP Inst : MS4D
Misc : MS33871,V4D4101,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 11 18:03:07 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration





TIC: 4d93379.d\data.ms

(114) n-butylbenzene (M)

17.318min (-0.005) 5.26ug/L

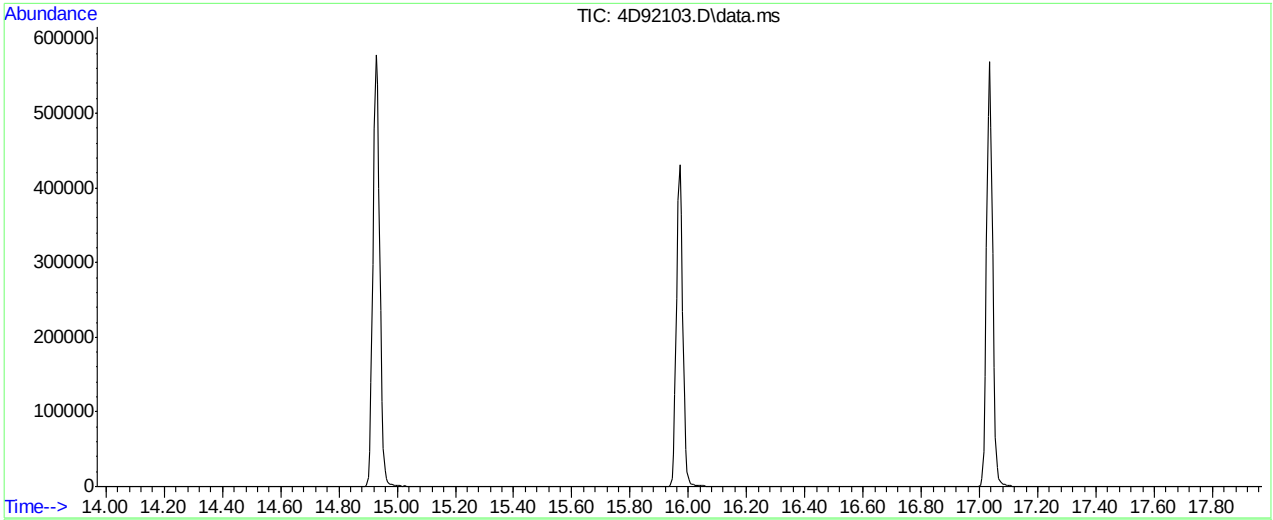
response 12666

Ion	Exp%	Act%
92.10	100	100
91.10	179.20	199.97
134.10	45.60	43.40
0.00	0.00	0.00

SW-846 Method 8260

Data File : C:\msdchem\1\data\V4D4028\4D92103.D Vial: 4
Acq On : 29 Jan 2019 2:06 pm Operator: roberts
Sample : bfb Inst : MS4D
Misc : MS31310,V4D4028,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D4028.M (RTE Integrator)
Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um



AutoFind: Scans 2399, 2400, 2401; Background Corrected with Scan 2391

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.7	14107	PASS
75	95	30	60	44.0	37203	PASS
95	95	100	100	100.0	84643	PASS
96	95	5	9	6.7	5706	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	84.1	71216	PASS
175	174	5	9	7.5	5348	PASS
176	174	95	101	97.5	69448	PASS
177	176	5	9	6.5	4487	PASS

4D92103.D M4D4028.M Thu Jan 31 10:12:19 2019 RPT1

Average of 15.965 to 15.975 min.: 4D92103.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	626	51.10	4409	68.00	7863	80.00	624
37.10	3475	52.00	184	69.00	7642	80.90	2143
38.10	2931	55.00	182	70.00	606	81.90	500
39.10	1206	56.00	1068	72.00	375	87.00	4296
40.00	180	57.05	1936	73.00	3129	88.00	4044
44.00	373	60.00	666	74.00	12083	90.95	260
45.00	636	61.00	3365	75.05	37203	92.00	2005
47.00	1088	62.00	3296	76.00	3245	93.00	3140
48.00	431	63.05	2436	77.00	494	94.00	9015
49.05	3045	64.00	224	77.95	369	95.00	84643
50.05	14107	67.00	189	78.90	2049	96.00	5706

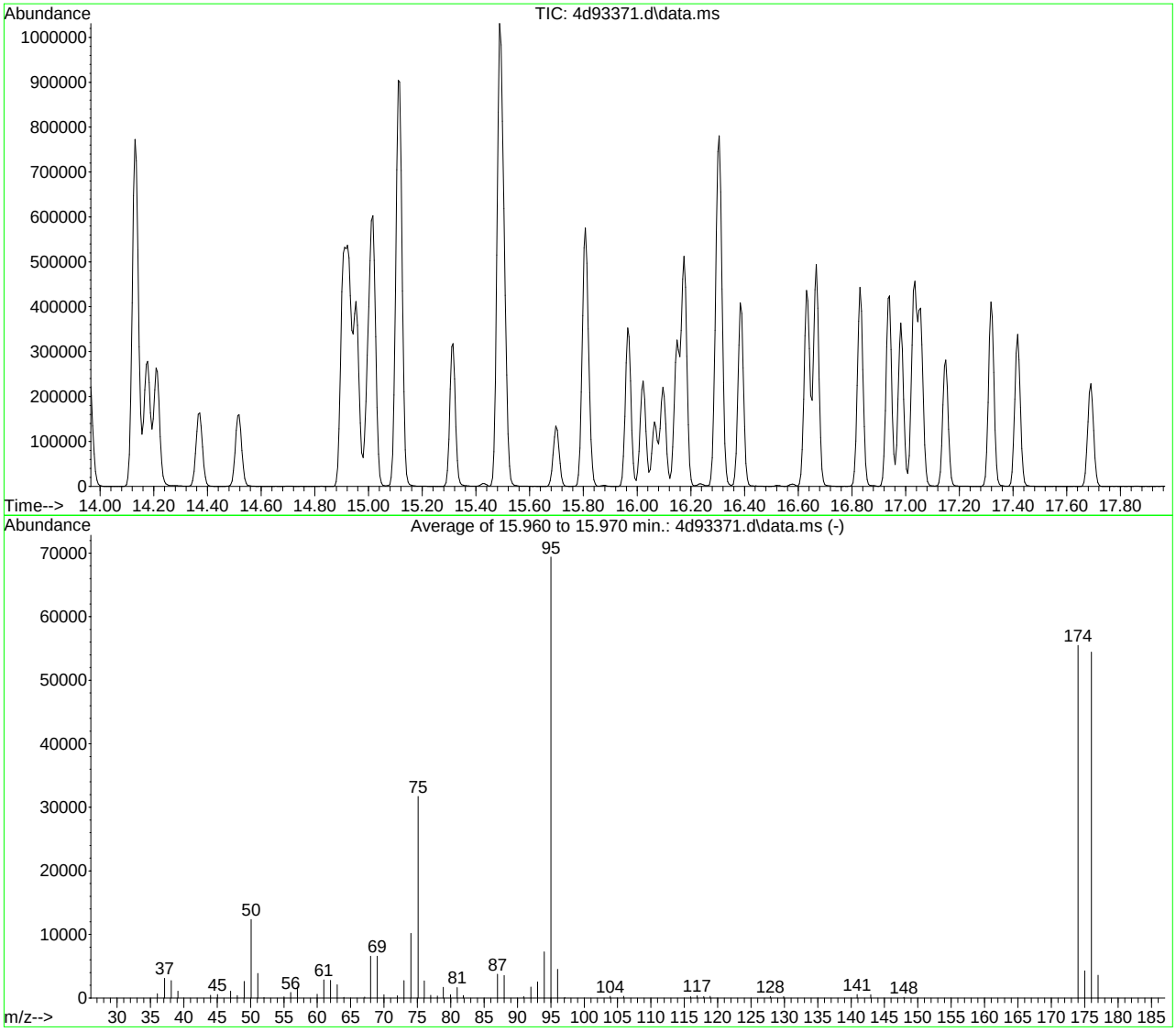
Average of 15.965 to 15.975 min.: 4D92103.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.95	174	140.90	683				
103.90	336	142.95	691				
105.90	306	147.90	183				
115.90	246	154.80	53				
116.90	439	154.95	135				
117.90	270	156.90	53				
118.90	400	174.00	71216				
127.90	279	175.00	5348				
129.90	274	175.95	69448				
134.80	50	176.95	4487				
136.90	52						

SW-846 Method 8260

Data File : C:\msdchem\1\data\ja...-19\v4d4101\4d93371.d Vial: 1
Acq On : 10 Apr 2019 4:49 pm Operator: juntaep
Sample : bfb Inst : MS4D
Misc : MS33802,V4D4101,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D4028.M (RTE Integrator)
Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um



AutoFind: Scans 2398, 2399, 2400; Background Corrected with Scan 2390

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	12356	PASS
75	95	30	60	45.7	31696	PASS
95	95	100	100	100.0	69381	PASS
96	95	5	9	6.5	4530	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	80.0	55504	PASS
175	174	5	9	7.7	4272	PASS
176	174	95	101	98.1	54432	PASS
177	176	5	9	6.6	3588	PASS

4d93371.d M4D4028.M Fri Apr 12 01:13:21 2019

Average of 15.960 to 15.970 min.: 4d93371.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	668	52.00	54	69.00	6573	80.95	1635
37.10	3078	55.00	178	70.00	503	81.90	380
38.10	2735	56.00	889	72.00	329	87.00	3735
39.10	1077	57.00	1720	73.00	2737	88.00	3520
44.00	415	60.00	576	74.05	10180	90.95	228
45.05	551	61.00	2850	75.10	31696	92.00	1708
47.00	1072	62.00	2758	76.05	2702	93.00	2549
48.00	385	63.00	2077	77.00	418	94.00	7264
49.05	2595	64.00	113	78.00	293	95.00	69381
50.10	12356	67.10	130	78.90	1668	96.00	4530
51.10	3844	68.00	6557	79.95	518	97.10	53

Average of 15.960 to 15.970 min.: 4d93371.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
103.90	264	174.00	55504				
105.90	262	175.00	4272				
115.95	194	176.00	54432				
116.90	331	177.00	3588				
117.90	214						
118.90	284						
127.90	232						
129.90	232						
140.90	529						
142.95	497						
147.90	117						

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92104.D
Acq On : 29 Jan 2019 2:41 pm
Operator : roberts
Sample : ic4028-0.2
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 01 10:15:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:07:44 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.656	65	178642	500.00	ug/L		0.00
5) pentafluorobenzene	11.147	168	218199	50.00	ug/L		0.00
51) 1,4-difluorobenzene	12.038	114	356302	50.00	ug/L		0.00
73) chlorobenzene-d5	14.927	117	314653	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	17.035	152	137954	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	11.152	113	113733	45.85	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 91.70%				
52) 1,2-dichloroethane-d4 (s)	11.577	65	121256	50.18	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.36%				
74) toluene-d8 (s)	13.569	98	409865	50.14	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.28%				
97) 4-bromofluorobenzene (s)	15.970	95	138553	50.28	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.56%				
Target Compounds							Qvalue
21) carbon disulfide	8.405	76	1205	0.26	ug/L		57
22) methylene chloride	8.735	84	482	0.23	ug/L		93
24) methyl tert butyl ether	9.165	73	1085	0.17	ug/L		55
26) di-isopropyl ether	9.852	45	1157	0.17	ug/L		80
28) 1,1-dichloroethane	9.794	63	549	0.15	ug/L	#	49
33) ethyl tert-butyl ether	10.350	59	1182	0.17	ug/L		89
41) chloroform	10.958	85	497	0.20	ug/L	#	77
45) 1,1,1-trichloroethane	11.251	97	505	0.16	ug/L	#	70
47) 1,1-dichloropropene	11.445	75	441	0.16	ug/L	#	41
54) 2,2,4-trimethylpentane	11.760	57	1015	0.20	ug/L	#	73
55) benzene	11.697	78	1688	0.22	ug/L		86
60) trichloroethene	12.373	130	403	0.19	ug/L		87
65) 1,2-dichloropropane	12.599	63	339	0.16	ug/L	#	48
68) bromodichloromethane	12.845	83	466	0.16	ug/L		89
70) cis-1,3-dichloropropene	13.281	75	675	0.19	ug/L	#	75
71) 4-methyl-2-pentanone	13.375	58	780	0.65	ug/L	#	78
75) toluene	13.637	92	1099	0.23	ug/L		98
76) trans-1,3-dichloropropene	13.784	75	526	0.16	ug/L	#	46
78) 1,1,2-trichloroethane	13.967	83	257	0.15	ug/L	#	50
79) tetrachloroethene	14.182	164	348	0.21	ug/L		83
80) 1,3-dichloropropane	14.140	76	662	0.21	ug/L	#	67
83) dibromochloromethane	14.376	129	367	0.16	ug/L		83
84) 1,2-dibromoethane	14.528	107	489	0.19	ug/L		83
85) n-butyl ether	14.922	57	1771	0.20	ug/L	#	1
86) chlorobenzene	14.958	112	1203	0.23	ug/L		84
87) 1,1,1,2-tetrachloroethane	15.005	131	345	0.18	ug/L	#	68
88) ethylbenzene	15.026	91	1966	0.22	ug/L		91
89) m,p-xylene	15.126	106	1364	0.41	ug/L		96
90) o-xylene	15.493	106	595	0.18	ug/L		88
91) styrene	15.509	104	989	0.18	ug/L		96
94) isopropylbenzene	15.813	105	1764	0.22	ug/L		99
98) bromobenzene	16.154	156	426	0.20	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92104.D
Acq On : 29 Jan 2019 2:41 pm
Operator : roberts
Sample : ic4028-0.2
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 01 10:15:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:07:44 2019
Response via : Initial Calibration

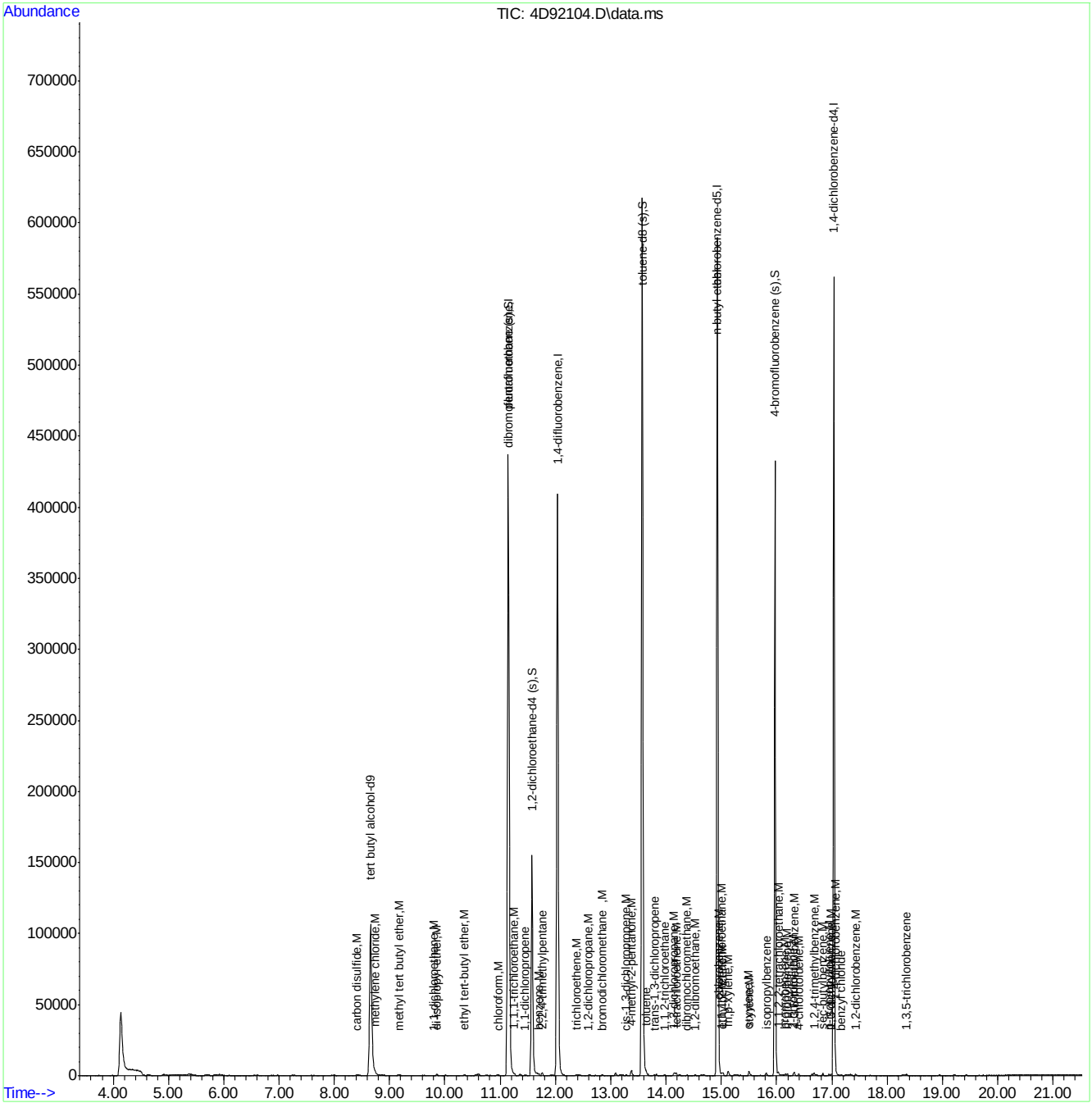
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99) 1,1,2,2-tetrachloroethane	16.028	83	609	0.20	ug/L		92
102) n-propylbenzene	16.185	91	1964	0.21	ug/L		85
103) 2-chlorotoluene	16.306	126	350	0.18	ug/L	#	69
104) 4-chlorotoluene	16.400	91	1264	0.22	ug/L		87
105) 1,3,5-trimethylbenzene	16.316	105	1291	0.20	ug/L		93
107) 1,2,4-trimethylbenzene	16.678	105	1326	0.20	ug/L		89
108) sec-butylbenzene	16.835	105	1548	0.21	ug/L		99
109) 1,3-dichlorobenzene	16.987	146	819	0.22	ug/L		97
110) p-isopropyltoluene	16.945	119	1180	0.19	ug/L		93
111) 1,4-dichlorobenzene	17.061	146	823	0.22	ug/L		85
112) benzyl chloride	17.160	91	904	0.17	ug/L		61
113) 1,2-dichlorobenzene	17.428	146	702	0.20	ug/L		94
116) 1,3,5-trichlorobenzene	18.351	180	425	0.17	ug/L		80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92104.D
Acq On : 29 Jan 2019 2:41 pm
Operator : roberts
Sample : ic4028-0.2
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 01 10:15:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:07:44 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92105.D
Acq On : 29 Jan 2019 3:10 pm
Operator : roberts
Sample : ic4028-0.5
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 31 11:22:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:07:44 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.656	65	171557	500.00	ug/L		0.00
5) pentafluorobenzene	11.146	168	200619	50.00	ug/L		0.00
51) 1,4-difluorobenzene	12.038	114	333228	50.00	ug/L		0.00
73) chlorobenzene-d5	14.927	117	300895	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	17.034	152	132818	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	11.152	113	107386	47.09	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.18%				
52) 1,2-dichloroethane-d4 (s)	11.576	65	114884	50.84	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.68%				
74) toluene-d8 (s)	13.569	98	384947	49.24	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.48%				
97) 4-bromofluorobenzene (s)	15.970	95	133464	50.31	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.62%				
Target Compounds							Qvalue
6) chlorodifluoromethane	4.650	51	804	0.39	ug/L		62
8) chloromethane	5.091	50	2024	0.62	ug/L	#	49
9) vinyl chloride	5.374	62	1118	0.43	ug/L		95
12) trichlorofluoromethane	6.968	101	1248	0.40	ug/L		88
21) carbon disulfide	8.410	76	2087	0.49	ug/L		71
22) methylene chloride	8.735	84	1022	0.52	ug/L		98
24) methyl tert butyl ether	9.165	73	2473	0.42	ug/L		97
26) di-isopropyl ether	9.851	45	2417	0.38	ug/L		84
28) 1,1-dichloroethane	9.794	63	1361	0.40	ug/L		90
33) ethyl tert-butyl ether	10.344	59	2483	0.40	ug/L		99
35) 2,2-dichloropropane	10.612	77	1269	0.44	ug/L		87
36) cis-1,2-dichloroethene	10.580	96	855	0.40	ug/L		100
41) chloroform	10.958	85	981	0.44	ug/L		100
42) t-butyl formate	11.042	59	731	0.34	ug/L		95
45) 1,1,1-trichloroethane	11.262	97	1299	0.44	ug/L		88
46) cyclohexane	11.367	84	1090	0.39	ug/L	#	71
47) 1,1-dichloropropene	11.445	75	1141	0.45	ug/L		95
49) carbon tetrachloride	11.477	117	987	0.38	ug/L	#	80
54) 2,2,4-trimethylpentane	11.765	57	1563	0.32	ug/L		82
55) benzene	11.697	78	3396	0.47	ug/L		96
56) tert-amyl methyl ether	11.749	87	551	0.37	ug/L	#	60
59) 1,2-dichloroethane	11.671	62	1675	0.61	ug/L		92
60) trichloroethene	12.373	130	830	0.42	ug/L		89
63) 2-chloroethyl vinyl ether	13.081	63	2536	1.66	ug/L		97
65) 1,2-dichloropropane	12.604	63	837	0.42	ug/L	#	48
66) dibromomethane	12.719	93	584	0.42	ug/L		94
67) methylcyclohexane	12.620	83	905	0.34	ug/L		96
68) bromodichloromethane	12.850	83	1210	0.44	ug/L		86
70) cis-1,3-dichloropropene	13.280	75	1455	0.45	ug/L		98
71) 4-methyl-2-pentanone	13.369	58	1765	1.57	ug/L		95
75) toluene	13.637	92	2229	0.48	ug/L		94
76) trans-1,3-dichloropropene	13.784	75	1232	0.40	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92105.D
Acq On : 29 Jan 2019 3:10 pm
Operator : roberts
Sample : ic4028-0.5
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 31 11:22:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:07:44 2019
Response via : Initial Calibration

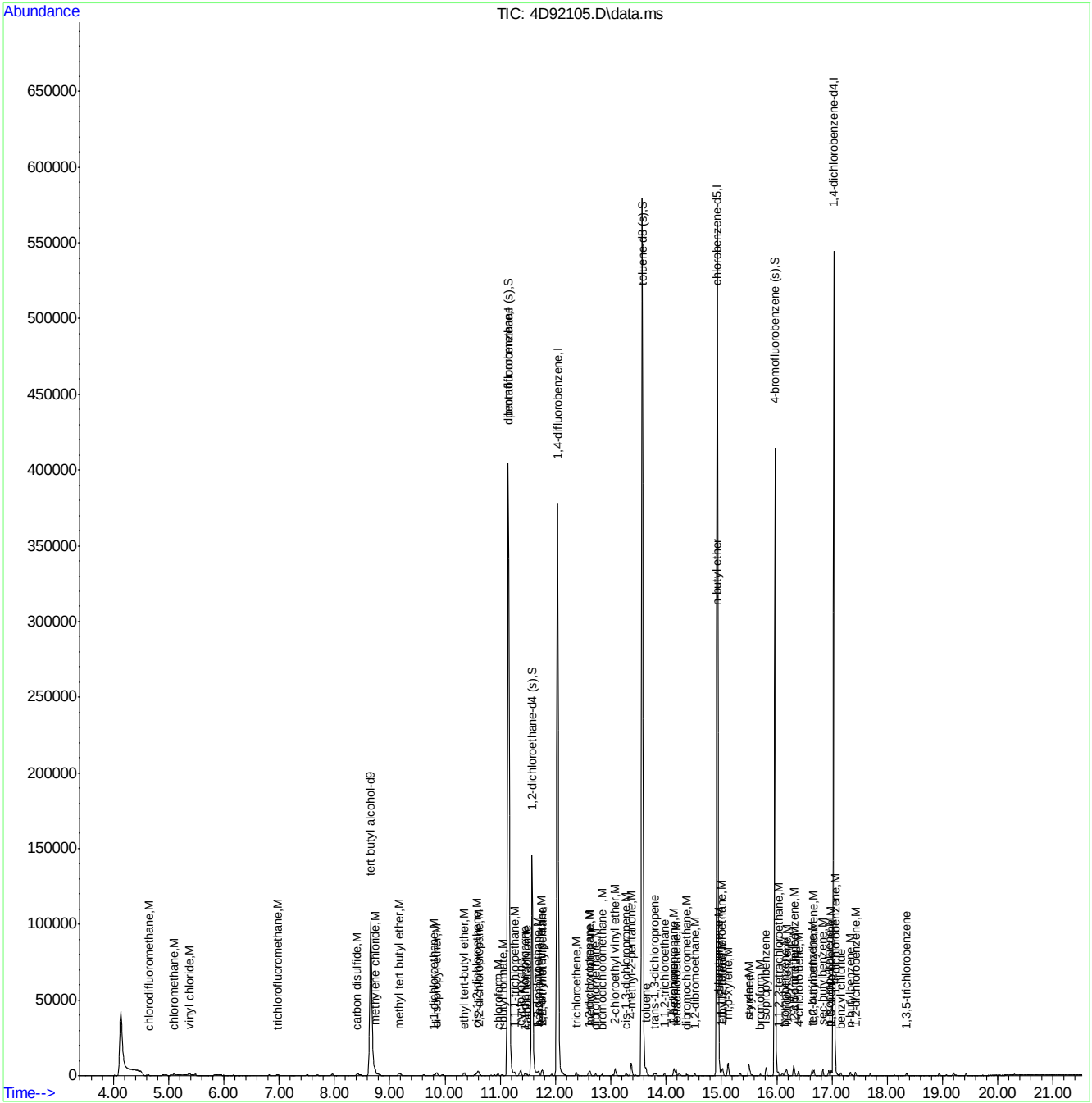
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) 1,1,2-trichloroethane	13.967	83	640	0.39	ug/L		90
79) tetrachloroethene	14.182	164	739	0.46	ug/L		94
80) 1,3-dichloropropane	14.140	76	1370	0.44	ug/L		84
81) 2-hexanone	14.145	58	1812	1.52	ug/L		82
83) dibromochloromethane	14.376	129	869	0.39	ug/L		84
84) 1,2-dibromoethane	14.523	107	1063	0.43	ug/L		89
85) n-butyl ether	14.916	57	3533	0.43	ug/L	#	1
86) chlorobenzene	14.958	112	2361	0.47	ug/L		86
87) 1,1,1,2-tetrachloroethane	15.005	131	775	0.41	ug/L		90
88) ethylbenzene	15.026	91	3997	0.47	ug/L		99
89) m,p-xylene	15.126	106	3004	0.94	ug/L		89
90) o-xylene	15.498	106	1371	0.44	ug/L		86
91) styrene	15.503	104	2032	0.38	ug/L		95
92) bromoform	15.708	173	606	0.37	ug/L		95
94) isopropylbenzene	15.807	105	3595	0.47	ug/L		97
98) bromobenzene	16.154	156	1014	0.48	ug/L		98
99) 1,1,2,2-tetrachloroethane	16.028	83	1265	0.43	ug/L		93
102) n-propylbenzene	16.185	91	4278	0.48	ug/L		99
103) 2-chlorotoluene	16.311	126	802	0.43	ug/L	#	76
104) 4-chlorotoluene	16.400	91	2592	0.48	ug/L		99
105) 1,3,5-trimethylbenzene	16.316	105	2749	0.44	ug/L		99
106) tert-butylbenzene	16.641	134	489	0.43	ug/L	#	78
107) 1,2,4-trimethylbenzene	16.673	105	2731	0.44	ug/L		98
108) sec-butylbenzene	16.835	105	3339	0.46	ug/L		97
109) 1,3-dichlorobenzene	16.987	146	1682	0.48	ug/L		94
110) p-isopropyltoluene	16.940	119	2598	0.43	ug/L		95
111) 1,4-dichlorobenzene	17.061	146	1784	0.49	ug/L		91
112) benzyl chloride	17.160	91	1925	0.38	ug/L		98
113) 1,2-dichlorobenzene	17.428	146	1529	0.44	ug/L		99
114) n-butylbenzene	17.328	92	1112	0.37	ug/L		92
116) 1,3,5-trichlorobenzene	18.345	180	926	0.39	ug/L		92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92105.D
Acq On : 29 Jan 2019 3:10 pm
Operator : roberts
Sample : ic4028-0.5
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 31 11:22:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:07:44 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92106.D
Acq On : 29 Jan 2019 3:39 pm
Operator : roberts
Sample : ic4028-1
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 31 11:25:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:07:44 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.656	65	165307	500.00	ug/L		0.00
5) pentafluorobenzene	11.147	168	187804	50.00	ug/L		0.00
51) 1,4-difluorobenzene	12.038	114	319697	50.00	ug/L		0.00
73) chlorobenzene-d5	14.927	117	286907	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	17.034	152	125324	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	11.152	113	101299	47.45	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.90%				
52) 1,2-dichloroethane-d4 (s)	11.576	65	107960	49.80	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.60%				
74) toluene-d8 (s)	13.569	98	369910	49.63	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.26%				
97) 4-bromofluorobenzene (s)	15.970	95	127255	50.83	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.66%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	8.798	59	1484	4.01	ug/L		76
3) ethanol	7.214	45	2551	67.93	ug/L		91
4) 1,4-dioxane	12.693	88	796	22.57	ug/L		86
6) chlorodifluoromethane	4.656	51	1809	0.93	ug/L		62
7) dichlorodifluoromethane	4.614	85	1604	0.74	ug/L	#	50
8) chloromethane	5.096	50	3192	1.05	ug/L		93
9) vinyl chloride	5.374	62	2203	0.91	ug/L		93
11) chloroethane	6.407	64	985	0.78	ug/L		71
12) trichlorofluoromethane	6.968	101	2255	0.78	ug/L		93
13) vinyl bromide	6.826	106	1050	0.71	ug/L		87
16) freon 113	7.959	151	903	0.73	ug/L		98
17) 1,1-dichloroethene	7.954	96	1237	0.79	ug/L		88
19) acetonitrile	8.431	41	2625	7.31	ug/L		89
21) carbon disulfide	8.415	76	3818	0.95	ug/L		88
22) methylene chloride	8.729	84	1637	0.90	ug/L		97
24) methyl tert butyl ether	9.165	73	4711	0.85	ug/L		98
25) trans-1,2-dichloroethene	9.201	96	1398	0.82	ug/L		89
26) di-isopropyl ether	9.851	45	4758	0.80	ug/L		88
28) 1,1-dichloroethane	9.794	63	2672	0.84	ug/L		96
29) chloroprene	9.951	53	1957	0.76	ug/L		90
33) ethyl tert-butyl ether	10.344	59	4879	0.83	ug/L		94
35) 2,2-dichloropropane	10.612	77	2469	0.92	ug/L		99
36) cis-1,2-dichloroethene	10.586	96	1578	0.79	ug/L		95
38) propionitrile	10.606	54	3061	7.11	ug/L		93
39) bromochloromethane	10.900	128	694	0.73	ug/L		92
41) chloroform	10.958	85	1964	0.93	ug/L		91
42) t-butyl formate	11.031	59	1496	0.75	ug/L		89
45) 1,1,1-trichloroethane	11.262	97	2528	0.91	ug/L		96
46) cyclohexane	11.372	84	2098	0.81	ug/L	#	80
47) 1,1-dichloropropene	11.451	75	2076	0.87	ug/L		94
49) carbon tetrachloride	11.482	117	1965	0.82	ug/L		98
50) tert amyl alcohol	11.524	55	467	3.41	ug/L	#	84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92106.D
Acq On : 29 Jan 2019 3:39 pm
Operator : roberts
Sample : ic4028-1
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 31 11:25:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:07:44 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
53)	n-butyl alcohol	12.111	56	3484	31.24	ug/L		97
54)	2,2,4-trimethylpentane	11.765	57	3778	0.82	ug/L		95
55)	benzene	11.697	78	6519	0.94	ug/L		98
56)	tert-amyl methyl ether	11.760	87	1123	0.79	ug/L	#	70
57)	heptane	11.922	71	747	0.69	ug/L		85
59)	1,2-dichloroethane	11.666	62	2787	1.05	ug/L		90
60)	trichloroethene	12.373	130	1695	0.89	ug/L		97
61)	ethyl acrylate	12.373	55	2181	0.66	ug/L		82
62)	2-nitropropane	13.029	41	508	0.80	ug/L	#	82
63)	2-chloroethyl vinyl ether	13.076	63	5259	3.58	ug/L		98
65)	1,2-dichloropropane	12.594	63	1685	0.88	ug/L		92
66)	dibromomethane	12.725	93	1209	0.91	ug/L		93
67)	methylcyclohexane	12.625	83	2084	0.82	ug/L		98
68)	bromodichloromethane	12.845	83	2395	0.92	ug/L		90
69)	epichlorohydrin	13.170	57	842	3.72	ug/L	#	48
70)	cis-1,3-dichloropropene	13.280	75	2813	0.90	ug/L		99
71)	4-methyl-2-pentanone	13.370	58	3723	3.45	ug/L		95
72)	3-methyl-1-butanol	13.359	70	1182	11.46	ug/L		79
75)	toluene	13.637	92	4238	0.97	ug/L		96
76)	trans-1,3-dichloropropene	13.779	75	2472	0.85	ug/L		100
77)	ethyl methacrylate	13.805	69	2064	0.72	ug/L		98
78)	1,1,2-trichloroethane	13.962	83	1411	0.89	ug/L		98
79)	tetrachloroethene	14.177	164	1467	0.96	ug/L		93
80)	1,3-dichloropropane	14.140	76	2788	0.95	ug/L		92
81)	2-hexanone	14.146	58	3483	3.07	ug/L		89
82)	butyl acetate	14.229	56	1152	0.67	ug/L	#	76
83)	dibromochloromethane	14.376	129	1836	0.86	ug/L		97
84)	1,2-dibromoethane	14.518	107	2100	0.89	ug/L		90
85)	n-butyl ether	14.911	57	7000	0.89	ug/L		81
86)	chlorobenzene	14.958	112	4802	1.00	ug/L		95
87)	1,1,1,2-tetrachloroethane	15.005	131	1565	0.87	ug/L		92
88)	ethylbenzene	15.021	91	7688	0.95	ug/L		99
89)	m,p-xylene	15.121	106	5717	1.88	ug/L		94
90)	o-xylene	15.498	106	2777	0.94	ug/L		99
91)	styrene	15.498	104	4162	0.82	ug/L		95
92)	bromoform	15.708	173	1197	0.78	ug/L		91
93)	butyl acrylate	15.330	55	2808	0.67	ug/L	#	95
94)	isopropylbenzene	15.808	105	7047	0.96	ug/L		98
98)	bromobenzene	16.154	156	1845	0.93	ug/L		96
99)	1,1,2,2-tetrachloroethane	16.028	83	2629	0.94	ug/L		98
101)	1,2,3-trichloropropane	16.106	110	626	0.87	ug/L		95
102)	n-propylbenzene	16.180	91	8083	0.95	ug/L		97
103)	2-chlorotoluene	16.306	126	1632	0.92	ug/L		87
104)	4-chlorotoluene	16.395	91	4951	0.97	ug/L		97
105)	1,3,5-trimethylbenzene	16.316	105	5456	0.94	ug/L		100
106)	tert-butylbenzene	16.636	134	990	0.92	ug/L		90
107)	1,2,4-trimethylbenzene	16.673	105	5452	0.93	ug/L		99
108)	sec-butylbenzene	16.835	105	6455	0.95	ug/L		98
109)	1,3-dichlorobenzene	16.987	146	3132	0.94	ug/L		97
110)	p-isopropyltoluene	16.940	119	5043	0.89	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92106.D
Acq On : 29 Jan 2019 3:39 pm
Operator : roberts
Sample : ic4028-1
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 31 11:25:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:07:44 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
111) 1,4-dichlorobenzene	17.061	146	3335	0.98	ug/L		98
112) benzyl chloride	17.155	91	3968	0.82	ug/L		98
113) 1,2-dichlorobenzene	17.428	146	2880	0.89	ug/L		92
114) n-butylbenzene	17.328	92	2315	0.83	ug/L		90
115) 1,2-dibromo-3-chloropr...	18.125	75	373	0.67	ug/L	#	70
116) 1,3,5-trichlorobenzene	18.340	180	1897	0.84	ug/L		96
118) 1,2,4-trichlorobenzene	18.932	180	1660	0.82	ug/L		96
119) hexachlorobutadiene	19.064	225	615	0.83	ug/L		98
120) naphthalene	19.195	128	5231	0.83	ug/L		95
121) 1,2,3-trichlorobenzene	19.425	180	1627	0.86	ug/L		97
122) hexachloroethane	17.695	201	679	0.75	ug/L		94

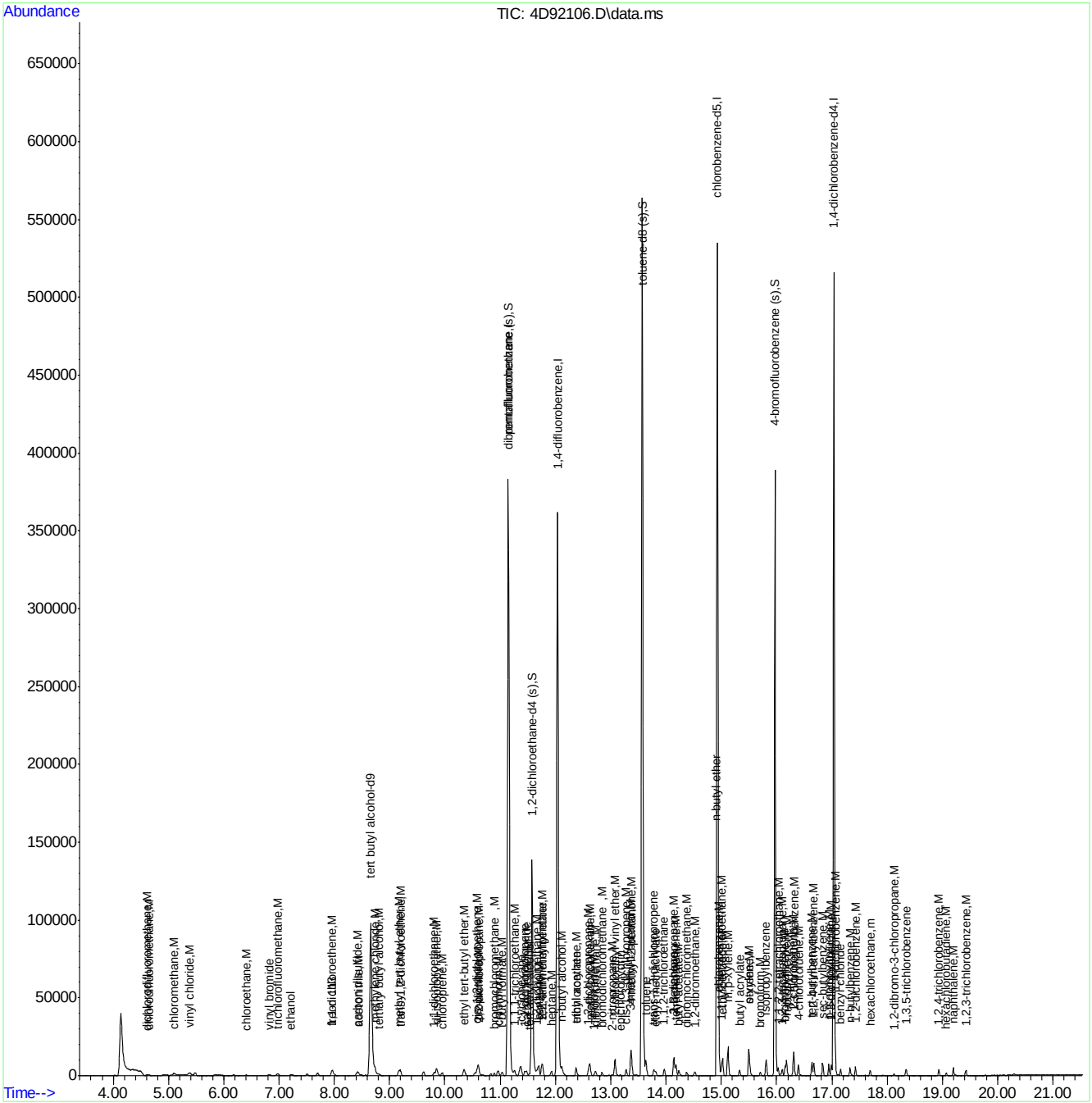
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92106.D
Acq On : 29 Jan 2019 3:39 pm
Operator : roberts
Sample : ic4028-1
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 31 11:25:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:07:44 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92107.D
Acq On : 29 Jan 2019 4:08 pm
Operator : roberts
Sample : ic4028-2
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 31 11:26:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.656	65	159185	500.00	ug/L	0.00
5) pentafluorobenzene	11.147	168	182615	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.038	114	314912	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	284712	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.034	152	127557	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.152	113	101000	48.65	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.30%			
52) 1,2-dichloroethane-d4 (s)	11.576	65	106598	49.91	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.82%			
74) toluene-d8 (s)	13.569	98	365662	49.43	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.86%			
97) 4-bromofluorobenzene (s)	15.970	95	128972	50.62	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.24%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.803	59	3258	9.14	ug/L	99
3) ethanol	7.209	45	5813	160.75	ug/L	95
4) 1,4-dioxane	12.693	88	1754	51.65	ug/L	92
6) chlorodifluoromethane	4.645	51	3820	2.03	ug/L	84
7) dichlorodifluoromethane	4.614	85	3619	1.71	ug/L	93
8) chloromethane	5.101	50	6253	2.12	ug/L	99
9) vinyl chloride	5.374	62	4669	1.99	ug/L	95
10) bromomethane	6.171	94	1055	1.35	ug/L	90
11) chloroethane	6.412	64	2198	1.78	ug/L	97
12) trichlorofluoromethane	6.968	101	4935	1.76	ug/L	97
13) vinyl bromide	6.821	106	2568	1.78	ug/L	95
14) ethyl ether	7.497	74	1508	1.52	ug/L	95
16) freon 113	7.948	151	2014	1.66	ug/L	94
17) 1,1-dichloroethene	7.959	96	2681	1.76	ug/L	99
18) acetone	7.974	43	4759	6.02	ug/L	93
19) acetonitrile	8.420	41	5642	16.17	ug/L	93
20) iodomethane	8.252	142	1028	0.99	ug/L	88
21) carbon disulfide	8.415	76	7494	1.92	ug/L	96
22) methylene chloride	8.735	84	3247	1.83	ug/L	95
23) methyl acetate	8.546	43	3879	1.95	ug/L	98
24) methyl tert butyl ether	9.165	73	9491	1.77	ug/L	99
25) trans-1,2-dichloroethene	9.196	96	3018	1.83	ug/L	99
26) di-isopropyl ether	9.852	45	10184	1.76	ug/L	98
27) 2-butanone	10.538	72	1908	5.75	ug/L	94
28) 1,1-dichloroethane	9.799	63	5538	1.78	ug/L	97
29) chloroprene	9.946	53	4200	1.68	ug/L	98
31) hexane	9.610	56	1563	1.45	ug/L	92
33) ethyl tert-butyl ether	10.350	59	10031	1.76	ug/L	100
35) 2,2-dichloropropane	10.607	77	5043	1.94	ug/L	97
36) cis-1,2-dichloroethene	10.580	96	3513	1.81	ug/L	91
38) propionitrile	10.601	54	6594	15.74	ug/L	92
39) bromochloromethane	10.895	128	1598	1.74	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92107.D
Acq On : 29 Jan 2019 4:08 pm
Operator : roberts
Sample : ic4028-2
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 31 11:26:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41)	chloroform	10.958	85	3782	1.85	ug/L		95
42)	t-butyl formate	11.036	59	3171	1.64	ug/L		95
45)	1,1,1-trichloroethane	11.262	97	5089	1.88	ug/L		96
46)	cyclohexane	11.372	84	4395	1.75	ug/L	#	89
47)	1,1-dichloropropene	11.445	75	4387	1.89	ug/L		95
49)	carbon tetrachloride	11.482	117	4354	1.86	ug/L		96
50)	tert amyl alcohol	11.524	55	1073	8.05	ug/L		90
53)	n-butyl alcohol	12.111	56	8096	73.69	ug/L		97
54)	2,2,4-trimethylpentane	11.765	57	7766	1.71	ug/L		91
55)	benzene	11.692	78	13089	1.91	ug/L		99
56)	tert-amyl methyl ether	11.755	87	2485	1.77	ug/L		94
57)	heptane	11.928	71	1679	1.57	ug/L		96
58)	isopropyl acetate	11.624	87	785	1.44	ug/L	#	67
59)	1,2-dichloroethane	11.666	62	5482	2.10	ug/L		100
60)	trichloroethene	12.368	130	3606	1.93	ug/L		99
61)	ethyl acrylate	12.368	55	5065	1.55	ug/L		89
62)	2-nitropropane	13.024	41	1112	1.77	ug/L		92
63)	2-chloroethyl vinyl ether	13.076	63	11502	7.94	ug/L		98
64)	methyl methacrylate	12.615	100	864	1.35	ug/L		91
65)	1,2-dichloropropane	12.599	63	3495	1.86	ug/L		97
66)	dibromomethane	12.725	93	2505	1.92	ug/L		97
67)	methylcyclohexane	12.620	83	4447	1.77	ug/L		98
68)	bromodichloromethane	12.845	83	4881	1.90	ug/L		98
69)	epichlorohydrin	13.165	57	1926	8.63	ug/L		96
70)	cis-1,3-dichloropropene	13.280	75	5881	1.90	ug/L		98
71)	4-methyl-2-pentanone	13.370	58	7758	7.30	ug/L		98
72)	3-methyl-1-butanol	13.354	70	2849	28.04	ug/L		92
75)	toluene	13.637	92	8842	2.03	ug/L		99
76)	trans-1,3-dichloropropene	13.773	75	5295	1.83	ug/L		99
77)	ethyl methacrylate	13.800	69	4688	1.65	ug/L		96
78)	1,1,2-trichloroethane	13.967	83	2903	1.85	ug/L		95
79)	tetrachloroethene	14.177	164	3099	2.04	ug/L		97
80)	1,3-dichloropropane	14.135	76	5639	1.94	ug/L		96
81)	2-hexanone	14.140	58	7569	6.72	ug/L		90
82)	butyl acetate	14.224	56	2920	1.70	ug/L		91
83)	dibromochloromethane	14.371	129	3644	1.72	ug/L		97
84)	1,2-dibromoethane	14.523	107	4303	1.83	ug/L		96
85)	n-butyl ether	14.911	57	14265	1.82	ug/L		89
86)	chlorobenzene	14.958	112	9595	2.01	ug/L		97
87)	1,1,1,2-tetrachloroethane	15.005	131	3350	1.89	ug/L		96
88)	ethylbenzene	15.021	91	15846	1.98	ug/L		100
89)	m,p-xylene	15.116	106	12006	3.99	ug/L		98
90)	o-xylene	15.493	106	5768	1.97	ug/L		98
91)	styrene	15.493	104	8940	1.78	ug/L		96
92)	bromoform	15.703	173	2498	1.63	ug/L		94
93)	butyl acrylate	15.325	55	6300	1.53	ug/L		99
94)	isopropylbenzene	15.808	105	14294	1.97	ug/L		99
98)	bromobenzene	16.154	156	3815	1.89	ug/L		99
99)	1,1,2,2-tetrachloroethane	16.028	83	5208	1.83	ug/L		96
101)	1,2,3-trichloropropane	16.101	110	1388	1.89	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92107.D
Acq On : 29 Jan 2019 4:08 pm
Operator : roberts
Sample : ic4028-2
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 31 11:26:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

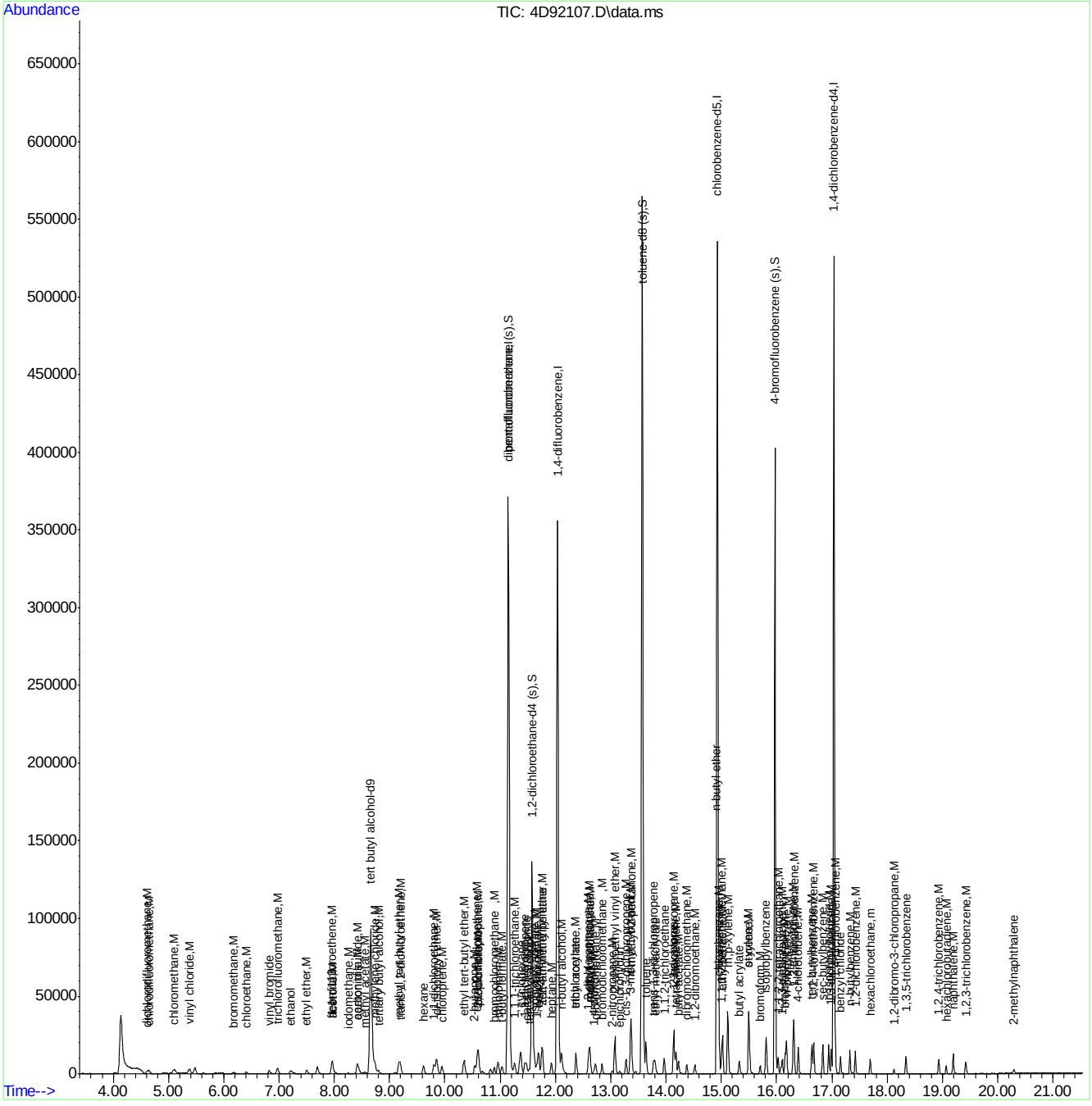
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
102) n-propylbenzene	16.180	91	17210	1.99	ug/L	98
103) 2-chlorotoluene	16.306	126	3485	1.93	ug/L	97
104) 4-chlorotoluene	16.390	91	10451	2.01	ug/L	98
105) 1,3,5-trimethylbenzene	16.316	105	11482	1.94	ug/L	100
106) tert-butylbenzene	16.636	134	1982	1.81	ug/L	93
107) 1,2,4-trimethylbenzene	16.673	105	11463	1.92	ug/L	99
108) sec-butylbenzene	16.835	105	13562	1.95	ug/L	98
109) 1,3-dichlorobenzene	16.987	146	6543	1.93	ug/L	99
110) p-isopropyltoluene	16.940	119	10972	1.90	ug/L	98
111) 1,4-dichlorobenzene	17.061	146	6880	1.99	ug/L	96
112) benzyl chloride	17.155	91	8776	1.79	ug/L	96
113) 1,2-dichlorobenzene	17.422	146	6377	1.93	ug/L	95
114) n-butylbenzene	17.323	92	5189	1.82	ug/L	95
115) 1,2-dibromo-3-chloropr...	18.125	75	940	1.65	ug/L	85
116) 1,3,5-trichlorobenzene	18.340	180	4066	1.78	ug/L	92
118) 1,2,4-trichlorobenzene	18.932	180	3454	1.68	ug/L	95
119) hexachlorobutadiene	19.069	225	1347	1.79	ug/L	98
120) naphthalene	19.195	128	10888	1.69	ug/L	98
121) 1,2,3-trichlorobenzene	19.420	180	3373	1.75	ug/L	96
122) hexachloroethane	17.695	201	1580	1.72	ug/L	95
123) 2-methylnaphthalene	20.290	142	1910	0.78	ug/L	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92107.D
Acq On : 29 Jan 2019 4:08 pm
Operator : roberts
Sample : ic4028-2
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 31 11:26:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92108.D
Acq On : 29 Jan 2019 4:37 pm
Operator : roberts
Sample : ic4028-4
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 31 11:27:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.656	65	159314	500.00	ug/L	0.00
5) pentafluorobenzene	11.147	168	179008	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.038	114	312089	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	279877	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.035	152	123986	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.152	113	99381	48.84	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.68%			
52) 1,2-dichloroethane-d4 (s)	11.576	65	105044	49.63	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.26%			
74) toluene-d8 (s)	13.569	98	362634	49.87	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.74%			
97) 4-bromofluorobenzene (s)	15.970	95	126038	50.89	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.78%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.798	59	6853	19.20	ug/L	95
3) ethanol	7.193	45	13150	363.35	ug/L	97
4) 1,4-dioxane	12.693	88	3701	108.90	ug/L	96
6) chlorodifluoromethane	4.645	51	7479	4.05	ug/L	95
7) dichlorodifluoromethane	4.614	85	7619	3.68	ug/L	94
8) chloromethane	5.101	50	11616	4.01	ug/L	98
9) vinyl chloride	5.374	62	9350	4.07	ug/L	97
10) bromomethane	6.171	94	2225	2.91	ug/L	92
11) chloroethane	6.407	64	4484	3.71	ug/L	96
12) trichlorofluoromethane	6.973	101	10395	3.78	ug/L	98
13) vinyl bromide	6.821	106	5235	3.70	ug/L	98
14) ethyl ether	7.497	74	3264	3.35	ug/L	95
16) freon 113	7.954	151	4544	3.83	ug/L	97
17) 1,1-dichloroethene	7.964	96	5622	3.77	ug/L	96
18) acetone	7.969	43	10674	13.77	ug/L	98
19) acetonitrile	8.420	41	11987	35.04	ug/L	97
20) iodomethane	8.247	142	2260	2.23	ug/L	91
21) carbon disulfide	8.410	76	14535	3.80	ug/L	99
22) methylene chloride	8.735	84	6533	3.76	ug/L	93
23) methyl acetate	8.536	43	7335	3.77	ug/L	97
24) methyl tert butyl ether	9.165	73	19492	3.71	ug/L	99
25) trans-1,2-dichloroethene	9.191	96	6066	3.75	ug/L	97
26) di-isopropyl ether	9.846	45	20329	3.58	ug/L	92
27) 2-butanone	10.533	72	4343	13.36	ug/L	96
28) 1,1-dichloroethane	9.794	63	11333	3.72	ug/L	98
29) chloroprene	9.946	53	8800	3.60	ug/L	98
30) acrylonitrile	9.076	53	2521	3.15	ug/L	92
31) hexane	9.610	56	3824	3.62	ug/L	97
33) ethyl tert-butyl ether	10.344	59	20328	3.63	ug/L	98
34) ethyl acetate	10.591	70	854	2.77	ug/L	98
35) 2,2-dichloropropane	10.612	77	9976	3.92	ug/L	96
36) cis-1,2-dichloroethene	10.580	96	7092	3.72	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92108.D
Acq On : 29 Jan 2019 4:37 pm
Operator : roberts
Sample : ic4028-4
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 31 11:27:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) methyl acrylate	10.680	85	1065	2.76	ug/L	#	62
38) propionitrile	10.591	54	14168	34.51	ug/L		97
39) bromochloromethane	10.895	128	3336	3.70	ug/L		96
40) tetrahydrofuran	10.963	72	1125	3.13	ug/L	#	69
41) chloroform	10.958	85	7803	3.88	ug/L		96
42) t-butyl formate	11.031	59	6550	3.45	ug/L		96
45) 1,1,1-trichloroethane	11.262	97	10506	3.97	ug/L		98
46) cyclohexane	11.372	84	9263	3.76	ug/L		98
47) 1,1-dichloropropene	11.445	75	8966	3.94	ug/L		97
48) isobutyl alcohol	11.440	74	401	28.80	ug/L		52
49) carbon tetrachloride	11.477	117	9033	3.93	ug/L		99
50) tert amyl alcohol	11.529	55	2333	17.85	ug/L		98
53) n-butyl alcohol	12.106	56	18135	166.56	ug/L		96
54) 2,2,4-trimethylpentane	11.765	57	16964	3.77	ug/L		93
55) benzene	11.692	78	26581	3.92	ug/L		100
56) tert-amyl methyl ether	11.755	87	5166	3.72	ug/L		93
57) heptane	11.928	71	3876	3.66	ug/L		95
58) isopropyl acetate	11.618	87	1761	3.26	ug/L	#	80
59) 1,2-dichloroethane	11.666	62	10656	4.11	ug/L		98
60) trichloroethene	12.373	130	7362	3.98	ug/L		98
61) ethyl acrylate	12.363	55	11140	3.44	ug/L		94
62) 2-nitropropane	13.029	41	2350	3.77	ug/L		93
63) 2-chloroethyl vinyl ether	13.071	63	24980	17.41	ug/L		99
64) methyl methacrylate	12.609	100	2148	3.39	ug/L		97
65) 1,2-dichloropropane	12.599	63	7227	3.88	ug/L		98
66) dibromomethane	12.719	93	5050	3.91	ug/L		97
67) methylcyclohexane	12.620	83	9781	3.93	ug/L		97
68) bromodichloromethane	12.840	83	10107	3.96	ug/L		97
69) epichlorohydrin	13.160	57	4013	18.14	ug/L		95
70) cis-1,3-dichloropropene	13.275	75	11847	3.87	ug/L		95
71) 4-methyl-2-pentanone	13.364	58	16714	15.87	ug/L		95
72) 3-methyl-1-butanol	13.354	70	6897	68.49	ug/L		95
75) toluene	13.637	92	17518	4.09	ug/L		98
76) trans-1,3-dichloropropene	13.773	75	10871	3.82	ug/L		98
77) ethyl methacrylate	13.794	69	9764	3.49	ug/L		95
78) 1,1,2-trichloroethane	13.967	83	5992	3.88	ug/L		97
79) tetrachloroethene	14.182	164	6072	4.07	ug/L		99
80) 1,3-dichloropropane	14.135	76	11563	4.04	ug/L		97
81) 2-hexanone	14.135	58	16719	15.10	ug/L		95
82) butyl acetate	14.219	56	6067	3.60	ug/L		99
83) dibromochloromethane	14.371	129	7723	3.72	ug/L		97
84) 1,2-dibromoethane	14.523	107	8864	3.84	ug/L		96
85) n-butyl ether	14.911	57	29492	3.83	ug/L		96
86) chlorobenzene	14.958	112	19010	4.06	ug/L		95
87) 1,1,1,2-tetrachloroethane	15.005	131	6806	3.90	ug/L		99
88) ethylbenzene	15.021	91	31690	4.03	ug/L		98
89) m,p-xylene	15.116	106	23862	8.06	ug/L		95
90) o-xylene	15.493	106	11670	4.06	ug/L		98
91) styrene	15.493	104	18334	3.71	ug/L		98
92) bromoform	15.703	173	5343	3.55	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92108.D
Acq On : 29 Jan 2019 4:37 pm
Operator : roberts
Sample : ic4028-4
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 31 11:27:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

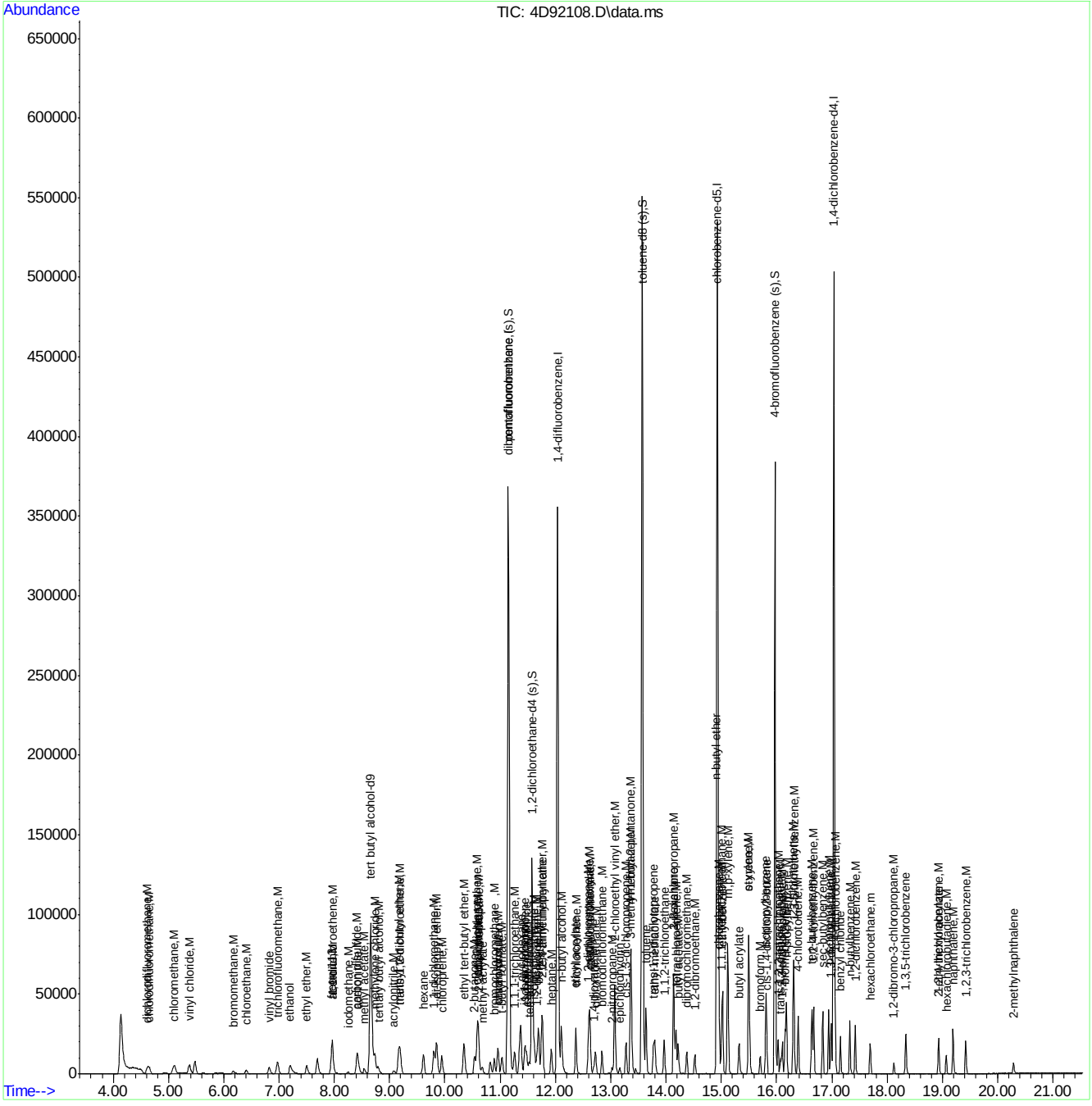
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
93) butyl acrylate	15.320	55	13750	3.39	ug/L		99
94) isopropylbenzene	15.808	105	28860	4.05	ug/L		99
95) cis-1,4-dichloro-2-butene	15.823	88	2876	3.10	ug/L		99
98) bromobenzene	16.154	156	7664	3.91	ug/L		98
99) 1,1,2,2-tetrachloroethane	16.028	83	10618	3.83	ug/L		96
100) trans-1,4-dichloro-2-b...	16.070	53	1920	3.16	ug/L		88
101) 1,2,3-trichloropropane	16.101	110	2799	3.92	ug/L		97
102) n-propylbenzene	16.180	91	34253	4.08	ug/L		99
103) 2-chlorotoluene	16.306	126	7193	4.09	ug/L		96
104) 4-chlorotoluene	16.390	91	20798	4.12	ug/L		97
105) 1,3,5-trimethylbenzene	16.311	105	23002	3.99	ug/L		98
106) tert-butylbenzene	16.636	134	4239	3.99	ug/L		96
107) 1,2,4-trimethylbenzene	16.673	105	22906	3.94	ug/L		98
108) sec-butylbenzene	16.830	105	27599	4.09	ug/L		100
109) 1,3-dichlorobenzene	16.987	146	13338	4.05	ug/L		98
110) p-isopropyltoluene	16.940	119	22352	3.99	ug/L		99
111) 1,4-dichlorobenzene	17.061	146	13614	4.04	ug/L		99
112) benzyl chloride	17.155	91	17541	3.68	ug/L		100
113) 1,2-dichlorobenzene	17.422	146	12736	3.96	ug/L		99
114) n-butylbenzene	17.323	92	10545	3.80	ug/L		95
115) 1,2-dibromo-3-chloropr...	18.120	75	1957	3.53	ug/L		81
116) 1,3,5-trichlorobenzene	18.335	180	8386	3.77	ug/L		91
117) 2-ethylhexyl acrylate	18.927	70	398	0.46	ug/L	#	70
118) 1,2,4-trichlorobenzene	18.932	180	7261	3.64	ug/L		98
119) hexachlorobutadiene	19.069	225	2810	3.83	ug/L		98
120) naphthalene	19.189	128	22893	3.65	ug/L		99
121) 1,2,3-trichlorobenzene	19.420	180	6754	3.61	ug/L		95
122) hexachloroethane	17.695	201	3216	3.60	ug/L		96
123) 2-methylnaphthalene	20.285	142	4193	1.75	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92108.D
Acq On : 29 Jan 2019 4:37 pm
Operator : roberts
Sample : ic4028-4
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 31 11:27:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92109.D
Acq On : 29 Jan 2019 5:06 pm
Operator : roberts
Sample : ic4028-8
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 31 10:35:30 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.661	65	153556	500.00	ug/L		0.00
5) pentafluorobenzene	11.146	168	176494	50.00	ug/L		0.00
51) 1,4-difluorobenzene	12.038	114	307506	50.00	ug/L		0.00
73) chlorobenzene-d5	14.927	117	275696	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	17.034	152	122172	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	11.152	113	99265	49.48	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.96%				
52) 1,2-dichloroethane-d4 (s)	11.576	65	103808	49.78	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.56%				
74) toluene-d8 (s)	13.569	98	357919	49.97	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.94%				
97) 4-bromofluorobenzene (s)	15.970	95	122798	50.32	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.64%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	8.792	59	13437	39.07	ug/L		96
3) ethanol	7.198	45	26923	771.82	ug/L		100
4) 1,4-dioxane	12.693	88	7235	220.87	ug/L		99
6) chlorodifluoromethane	4.645	51	14660	8.05	ug/L		98
7) dichlorodifluoromethane	4.614	85	16114	7.89	ug/L		98
8) chloromethane	5.101	50	22497	7.88	ug/L		99
9) vinyl chloride	5.374	62	18796	8.30	ug/L		98
10) bromomethane	6.176	94	5174	6.86	ug/L		98
11) chloroethane	6.407	64	9128	7.67	ug/L		97
12) trichlorofluoromethane	6.973	101	21232	7.83	ug/L		98
13) vinyl bromide	6.821	106	10566	7.57	ug/L		98
14) ethyl ether	7.497	74	6727	7.01	ug/L		96
15) acrolein	7.718	56	2764	6.23	ug/L		96
16) freon 113	7.959	151	8639	7.38	ug/L		97
17) 1,1-dichloroethene	7.964	96	11074	7.53	ug/L		98
18) acetone	7.964	43	21721	28.42	ug/L		97
19) acetonitrile	8.410	41	24108	71.48	ug/L		98
20) iodomethane	8.252	142	5159	5.16	ug/L		98
21) carbon disulfide	8.415	76	28591	7.59	ug/L		98
22) methylene chloride	8.729	84	12957	7.56	ug/L		98
23) methyl acetate	8.535	43	14162	7.37	ug/L		99
24) methyl tert butyl ether	9.165	73	38793	7.48	ug/L		99
25) trans-1,2-dichloroethene	9.196	96	11887	7.45	ug/L		98
26) di-isopropyl ether	9.846	45	40969	7.31	ug/L		95
27) 2-butanone	10.533	72	8872	27.68	ug/L	#	87
28) 1,1-dichloroethane	9.794	63	22470	7.49	ug/L		98
29) chloroprene	9.941	53	17662	7.33	ug/L		99
30) acrylonitrile	9.065	53	5150	6.53	ug/L		96
31) hexane	9.610	56	7278	6.99	ug/L		97
32) vinyl acetate	9.804	86	2510	6.04	ug/L		98
33) ethyl tert-butyl ether	10.344	59	40616	7.36	ug/L		100
34) ethyl acetate	10.585	70	2035	6.69	ug/L	#	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92109.D
Acq On : 29 Jan 2019 5:06 pm
Operator : roberts
Sample : ic4028-8
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 31 10:35:30 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	10.606	77	19759	7.88	ug/L		100
36) cis-1,2-dichloroethene	10.580	96	14068	7.49	ug/L		99
37) methyl acrylate	10.664	85	2431	6.38	ug/L		95
38) propionitrile	10.591	54	28416	70.20	ug/L		97
39) bromochloromethane	10.890	128	6804	7.65	ug/L		96
40) tetrahydrofuran	10.963	72	2463	6.95	ug/L		92
41) chloroform	10.952	85	15539	7.84	ug/L		96
42) t-butyl formate	11.031	59	13624	7.28	ug/L		97
44) methacrylonitrile	10.821	67	6422	6.71	ug/L		96
45) 1,1,1-trichloroethane	11.262	97	20729	7.94	ug/L		99
46) cyclohexane	11.372	84	19522	8.04	ug/L		97
47) 1,1-dichloropropene	11.445	75	17844	7.95	ug/L		96
48) isobutyl alcohol	11.445	74	1088	79.26	ug/L		71
49) carbon tetrachloride	11.477	117	18159	8.02	ug/L		99
50) tert amyl alcohol	11.524	55	4891	37.95	ug/L		96
53) n-butyl alcohol	12.101	56	36962	344.54	ug/L		98
54) 2,2,4-trimethylpentane	11.765	57	33333	7.51	ug/L		95
55) benzene	11.692	78	52799	7.90	ug/L		100
56) tert-amyl methyl ether	11.755	87	10432	7.63	ug/L		96
57) heptane	11.922	71	7564	7.25	ug/L		98
58) isopropyl acetate	11.618	87	3778	7.10	ug/L	#	83
59) 1,2-dichloroethane	11.666	62	20779	8.13	ug/L		98
60) trichloroethene	12.368	130	14318	7.86	ug/L		99
61) ethyl acrylate	12.358	55	24851	7.78	ug/L		100
62) 2-nitropropane	13.023	41	4652	7.58	ug/L		96
63) 2-chloroethyl vinyl ether	13.071	63	52848	37.38	ug/L		99
64) methyl methacrylate	12.615	100	4401	7.05	ug/L	#	95
65) 1,2-dichloropropane	12.594	63	14346	7.82	ug/L		99
66) dibromomethane	12.719	93	10176	8.00	ug/L		98
67) methylcyclohexane	12.625	83	18987	7.73	ug/L		98
68) bromodichloromethane	12.840	83	19660	7.82	ug/L		97
69) epichlorohydrin	13.160	57	8069	37.02	ug/L		96
70) cis-1,3-dichloropropene	13.275	75	23875	7.92	ug/L		98
71) 4-methyl-2-pentanone	13.370	58	32968	31.78	ug/L		97
72) 3-methyl-1-butanol	13.354	70	13990	141.00	ug/L		97
75) toluene	13.637	92	34078	8.08	ug/L		98
76) trans-1,3-dichloropropene	13.773	75	21590	7.70	ug/L		99
77) ethyl methacrylate	13.794	69	20173	7.32	ug/L		96
78) 1,1,2-trichloroethane	13.962	83	12089	7.94	ug/L		98
79) tetrachloroethene	14.177	164	11968	8.14	ug/L		99
80) 1,3-dichloropropane	14.135	76	22914	8.12	ug/L		97
81) 2-hexanone	14.135	58	33298	30.52	ug/L		94
82) butyl acetate	14.214	56	12655	7.62	ug/L		98
83) dibromochloromethane	14.371	129	15513	7.58	ug/L		99
84) 1,2-dibromoethane	14.523	107	17616	7.75	ug/L		98
85) n-butyl ether	14.906	57	58848	7.76	ug/L		99
86) chlorobenzene	14.958	112	37141	8.05	ug/L		98
87) 1,1,1,2-tetrachloroethane	15.005	131	13497	7.85	ug/L		96
88) ethylbenzene	15.021	91	62576	8.08	ug/L		100
89) m,p-xylene	15.115	106	47295	16.23	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92109.D
Acq On : 29 Jan 2019 5:06 pm
Operator : roberts
Sample : ic4028-8
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 31 10:35:30 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

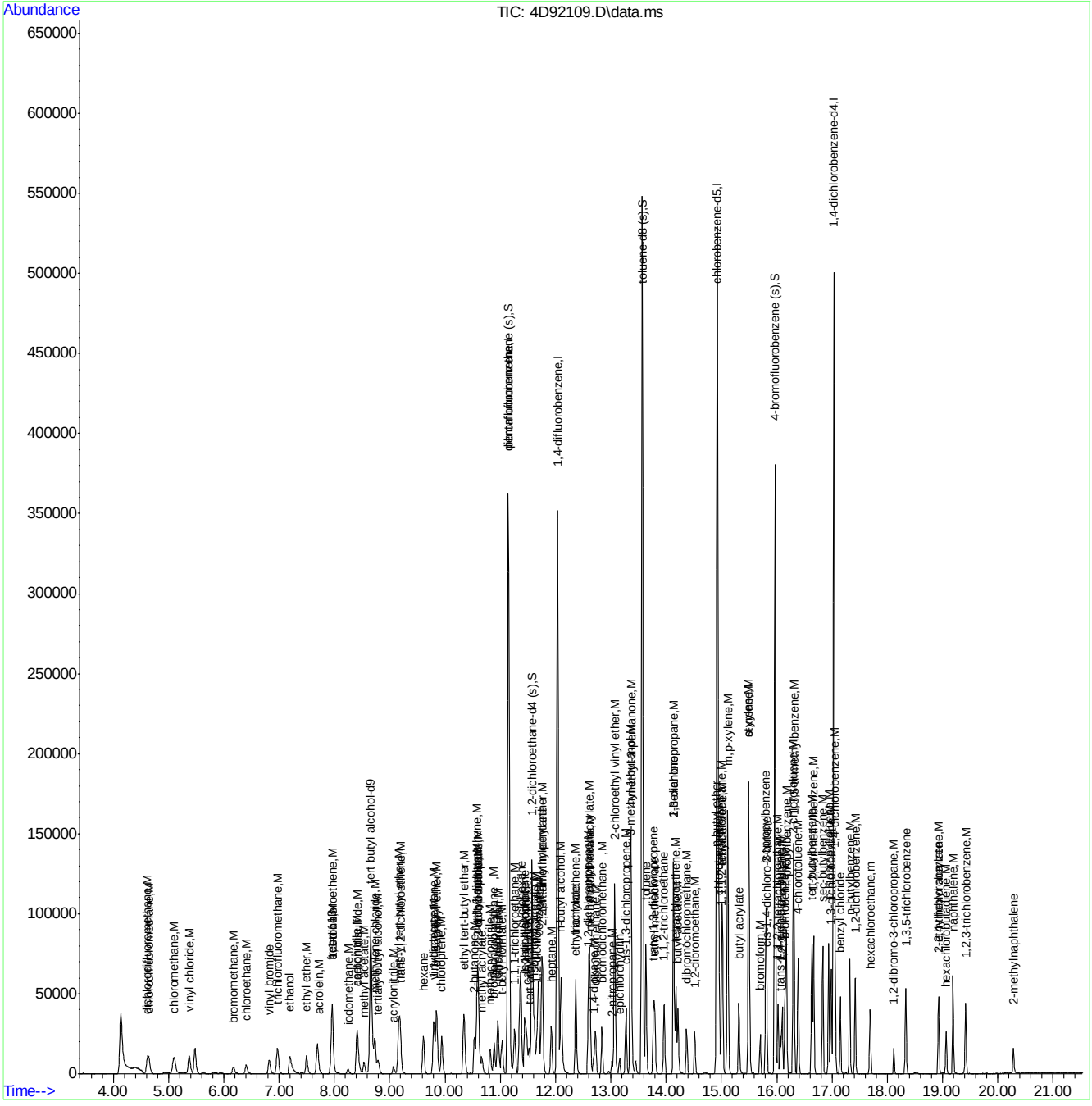
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) o-xylene	15.493	106	23317	8.24	ug/L	99
91) styrene	15.493	104	37951	7.80	ug/L	98
92) bromoform	15.703	173	10897	7.36	ug/L	98
93) butyl acrylate	15.315	55	28758	7.19	ug/L	99
94) isopropylbenzene	15.808	105	57625	8.21	ug/L	100
95) cis-1,4-dichloro-2-butene	15.823	88	6158	6.73	ug/L	98
98) bromobenzene	16.154	156	15413	7.98	ug/L	98
99) 1,1,2,2-tetrachloroethane	16.022	83	21645	7.92	ug/L	99
100) trans-1,4-dichloro-2-b...	16.070	53	4176	6.97	ug/L	89
101) 1,2,3-trichloropropane	16.101	110	5582	7.94	ug/L	96
102) n-propylbenzene	16.180	91	67079	8.12	ug/L	100
103) 2-chlorotoluene	16.300	126	14170	8.18	ug/L	97
104) 4-chlorotoluene	16.389	91	40392	8.12	ug/L	100
105) 1,3,5-trimethylbenzene	16.311	105	45766	8.05	ug/L	99
106) tert-butylbenzene	16.636	134	8487	8.11	ug/L	99
107) 1,2,4-trimethylbenzene	16.667	105	46415	8.10	ug/L	99
108) sec-butylbenzene	16.835	105	54069	8.13	ug/L	100
109) 1,3-dichlorobenzene	16.987	146	26570	8.19	ug/L	99
110) p-isopropyltoluene	16.940	119	44690	8.09	ug/L	99
111) 1,4-dichlorobenzene	17.055	146	27004	8.14	ug/L	99
112) benzyl chloride	17.155	91	35141	7.49	ug/L	99
113) 1,2-dichlorobenzene	17.422	146	24969	7.88	ug/L	98
114) n-butylbenzene	17.323	92	21585	7.89	ug/L	98
115) 1,2-dibromo-3-chloropr...	18.120	75	4033	7.39	ug/L	87
116) 1,3,5-trichlorobenzene	18.340	180	17154	7.83	ug/L	98
117) 2-ethylhexyl acrylate	18.927	70	1013	1.20	ug/L	98
118) 1,2,4-trichlorobenzene	18.932	180	14794	7.53	ug/L	98
119) hexachlorobutadiene	19.063	225	5705	7.90	ug/L	96
120) naphthalene	19.189	128	46230	7.49	ug/L	99
121) 1,2,3-trichlorobenzene	19.420	180	13996	7.59	ug/L	99
122) hexachloroethane	17.695	201	6603	7.50	ug/L	97
123) 2-methylnaphthalene	20.285	142	8910	3.78	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92109.D
Acq On : 29 Jan 2019 5:06 pm
Operator : roberts
Sample : ic4028-8
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 31 10:35:30 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92110.D
Acq On : 29 Jan 2019 5:35 pm
Operator : roberts
Sample : ic4028-20
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 31 10:35:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.661	65	162692	500.00	ug/L	0.00
5) pentafluorobenzene	11.146	168	176570	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.032	114	300757	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	263553	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.034	152	114803	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.152	113	98413	49.03	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.06%			
52) 1,2-dichloroethane-d4 (s)	11.576	65	103642	50.81	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.62%			
74) toluene-d8 (s)	13.569	98	346018	50.53	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.06%			
97) 4-bromofluorobenzene (s)	15.970	95	115801	50.50	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.00%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.792	59	36174	99.27	ug/L	99
3) ethanol	7.188	45	71894	1945.29	ug/L	100
4) 1,4-dioxane	12.688	88	18524	533.74	ug/L	100
6) chlorodifluoromethane	4.640	51	36769	20.18	ug/L	98
7) dichlorodifluoromethane	4.614	85	40694	19.92	ug/L	99
8) chloromethane	5.096	50	56123	19.64	ug/L	99
9) vinyl chloride	5.374	62	45928	20.26	ug/L	99
10) bromomethane	6.171	94	13701	18.16	ug/L	99
11) chloroethane	6.401	64	23093	19.39	ug/L	99
12) trichlorofluoromethane	6.968	101	53732	19.80	ug/L	100
13) vinyl bromide	6.821	106	27069	19.39	ug/L	98
14) ethyl ether	7.497	74	17899	18.64	ug/L	99
15) acrolein	7.712	56	7710	17.38	ug/L	99
16) freon 113	7.953	151	23554	20.12	ug/L	98
17) 1,1-dichloroethene	7.964	96	28937	19.67	ug/L	95
18) acetone	7.959	43	57983	75.84	ug/L	98
19) acetonitrile	8.410	41	63103	187.01	ug/L	99
20) iodomethane	8.247	142	16474	16.48	ug/L	97
21) carbon disulfide	8.410	76	72065	19.12	ug/L	98
22) methylene chloride	8.729	84	32873	19.18	ug/L	100
23) methyl acetate	8.530	43	36571	19.03	ug/L	98
24) methyl tert butyl ether	9.165	73	99841	19.24	ug/L	98
25) trans-1,2-dichloroethene	9.191	96	31150	19.52	ug/L	97
26) di-isopropyl ether	9.846	45	107257	19.14	ug/L	96
27) 2-butanone	10.528	72	23708	73.95	ug/L	97
28) 1,1-dichloroethane	9.794	63	58821	19.60	ug/L	100
29) chloroprene	9.941	53	46711	19.38	ug/L	99
30) acrylonitrile	9.060	53	14365	18.21	ug/L	97
31) hexane	9.610	56	20099	19.29	ug/L	95
32) vinyl acetate	9.799	86	7619	18.32	ug/L	96
33) ethyl tert-butyl ether	10.344	59	105370	19.09	ug/L	99
34) ethyl acetate	10.585	70	5513	18.12	ug/L #	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92110.D
Acq On : 29 Jan 2019 5:35 pm
Operator : roberts
Sample : ic4028-20
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 31 10:35:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	10.606	77	50876	20.27	ug/L		97
36) cis-1,2-dichloroethene	10.580	96	36591	19.48	ug/L		97
37) methyl acrylate	10.659	85	7066	18.55	ug/L		92
38) propionitrile	10.585	54	75877	187.36	ug/L		98
39) bromochloromethane	10.889	128	17623	19.80	ug/L		98
40) tetrahydrofuran	10.963	72	6609	18.65	ug/L		98
41) chloroform	10.952	85	39826	20.10	ug/L		99
42) t-butyl formate	11.031	59	36585	19.54	ug/L		98
44) methacrylonitrile	10.816	67	18018	18.82	ug/L		98
45) 1,1,1-trichloroethane	11.262	97	53264	20.40	ug/L		99
46) cyclohexane	11.372	84	49525	20.38	ug/L		99
47) 1,1-dichloropropene	11.445	75	46337	20.64	ug/L		99
48) isobutyl alcohol	11.440	74	3034	220.93	ug/L		78
49) carbon tetrachloride	11.477	117	46727	20.63	ug/L		99
50) tert amyl alcohol	11.524	55	12972	100.60	ug/L		93
53) n-butyl alcohol	12.101	56	100855	961.21	ug/L		99
54) 2,2,4-trimethylpentane	11.765	57	88061	20.28	ug/L		99
55) benzene	11.692	78	132667	20.29	ug/L		99
56) tert-amyl methyl ether	11.755	87	26456	19.78	ug/L		97
57) heptane	11.922	71	20609	20.18	ug/L		99
58) isopropyl acetate	11.618	87	10206	19.60	ug/L	#	87
59) 1,2-dichloroethane	11.665	62	50934	20.39	ug/L		99
60) trichloroethene	12.368	130	36477	20.47	ug/L		100
61) ethyl acrylate	12.358	55	62280	19.94	ug/L		99
62) 2-nitropropane	13.023	41	11902	19.84	ug/L		99
63) 2-chloroethyl vinyl ether	13.071	63	139078	100.57	ug/L		99
64) methyl methacrylate	12.609	100	11862	19.43	ug/L		92
65) 1,2-dichloropropane	12.593	63	36218	20.20	ug/L		100
66) dibromomethane	12.719	93	25152	20.22	ug/L		100
67) methylcyclohexane	12.620	83	50126	20.87	ug/L		98
68) bromodichloromethane	12.840	83	49546	20.15	ug/L		97
69) epichlorohydrin	13.160	57	21303	99.93	ug/L		97
70) cis-1,3-dichloropropene	13.275	75	59569	20.20	ug/L		99
71) 4-methyl-2-pentanone	13.364	58	83172	81.97	ug/L		98
72) 3-methyl-1-butanol	13.348	70	37544	386.88	ug/L		98
75) toluene	13.637	92	83948	20.81	ug/L		99
76) trans-1,3-dichloropropene	13.768	75	54140	20.19	ug/L		99
77) ethyl methacrylate	13.794	69	52137	19.80	ug/L		97
78) 1,1,2-trichloroethane	13.962	83	29541	20.30	ug/L		99
79) tetrachloroethene	14.177	164	29178	20.75	ug/L		100
80) 1,3-dichloropropane	14.135	76	55884	20.72	ug/L		99
81) 2-hexanone	14.135	58	84585	81.10	ug/L		98
82) butyl acetate	14.214	56	31984	20.15	ug/L		98
83) dibromochloromethane	14.371	129	39171	20.03	ug/L		99
84) 1,2-dibromoethane	14.518	107	43844	20.18	ug/L		99
85) n-butyl ether	14.906	57	148268	20.45	ug/L		100
86) chlorobenzene	14.958	112	90327	20.48	ug/L		99
87) 1,1,1,2-tetrachloroethane	15.005	131	33185	20.18	ug/L		99
88) ethylbenzene	15.021	91	151786	20.51	ug/L		100
89) m,p-xylene	15.115	106	116102	41.67	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92110.D
Acq On : 29 Jan 2019 5:35 pm
Operator : roberts
Sample : ic4028-20
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 31 10:35:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

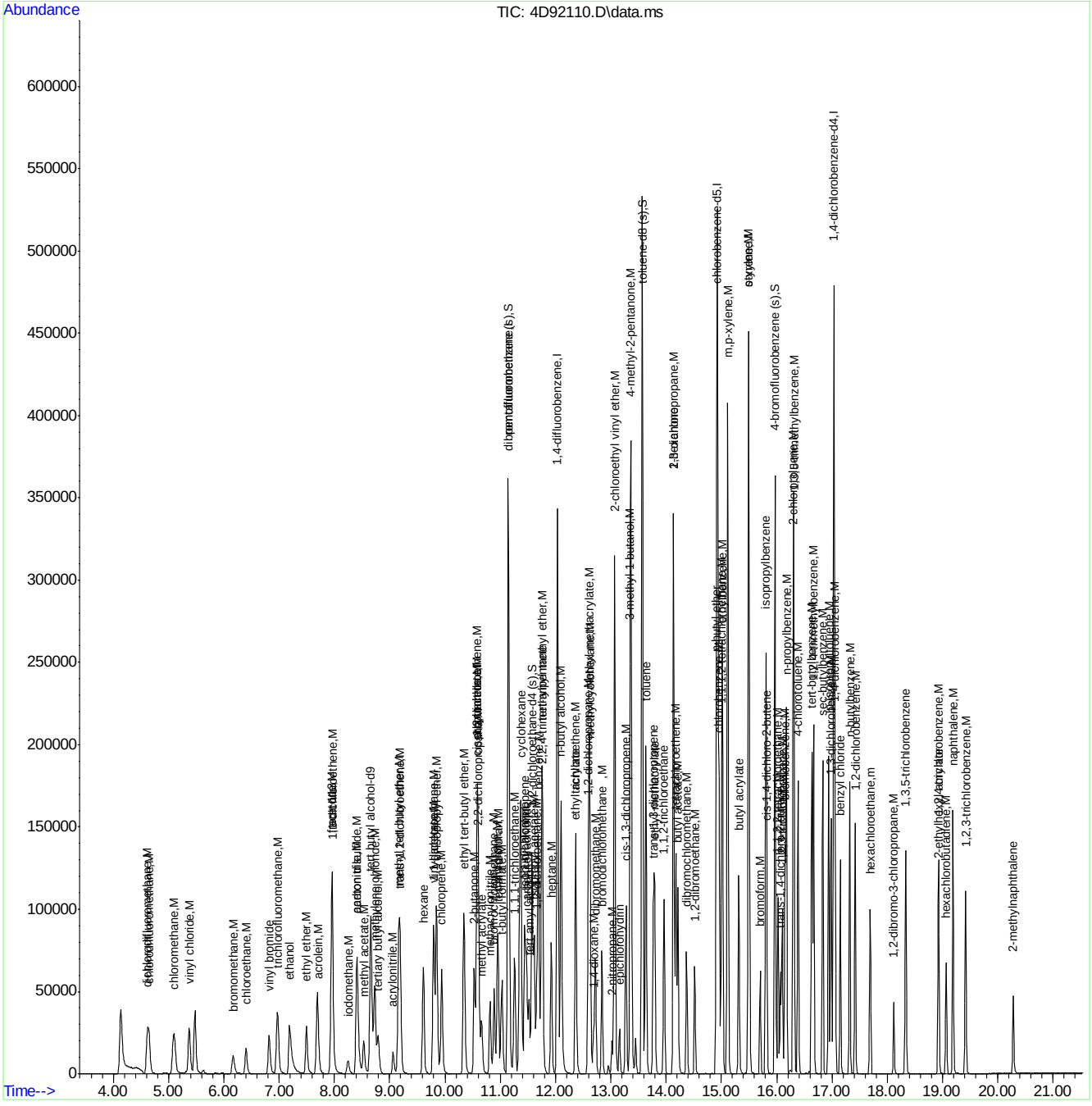
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) o-xylene	15.493	106	56358	20.84	ug/L	100
91) styrene	15.493	104	94214	20.26	ug/L	99
92) bromoform	15.703	173	27741	19.59	ug/L	100
93) butyl acrylate	15.315	55	74303	19.43	ug/L	99
94) isopropylbenzene	15.807	105	138826	20.69	ug/L	100
95) cis-1,4-dichloro-2-butene	15.823	88	16607	19.00	ug/L	95
98) bromobenzene	16.154	156	37883	20.86	ug/L	98
99) 1,1,2,2-tetrachloroethane	16.022	83	53011	20.65	ug/L	99
100) trans-1,4-dichloro-2-b...	16.070	53	11036	19.59	ug/L	99
101) 1,2,3-trichloropropane	16.101	110	13646	20.64	ug/L	100
102) n-propylbenzene	16.180	91	163491	21.05	ug/L	99
103) 2-chlorotoluene	16.300	126	34399	21.14	ug/L	100
104) 4-chlorotoluene	16.389	91	97604	20.87	ug/L	100
105) 1,3,5-trimethylbenzene	16.311	105	112358	21.04	ug/L	100
106) tert-butylbenzene	16.636	134	20344	20.68	ug/L	95
107) 1,2,4-trimethylbenzene	16.667	105	112828	20.96	ug/L	100
108) sec-butylbenzene	16.835	105	131810	21.08	ug/L	99
109) 1,3-dichlorobenzene	16.987	146	62844	20.61	ug/L	99
110) p-isopropyltoluene	16.940	119	107506	20.70	ug/L	99
111) 1,4-dichlorobenzene	17.055	146	64074	20.56	ug/L	99
112) benzyl chloride	17.150	91	89200	20.23	ug/L	99
113) 1,2-dichlorobenzene	17.422	146	61262	20.57	ug/L	99
114) n-butylbenzene	17.323	92	53026	20.64	ug/L	98
115) 1,2-dibromo-3-chloropr...	18.120	75	10265	20.02	ug/L	96
116) 1,3,5-trichlorobenzene	18.335	180	42144	20.46	ug/L	98
117) 2-ethylhexyl acrylate	18.922	70	3020	3.79	ug/L	96
118) 1,2,4-trichlorobenzene	18.927	180	37349	20.23	ug/L	98
119) hexachlorobutadiene	19.063	225	13964	20.58	ug/L	98
120) naphthalene	19.189	128	118891	20.50	ug/L	100
121) 1,2,3-trichlorobenzene	19.420	180	35195	20.31	ug/L	99
122) hexachloroethane	17.695	201	16347	19.76	ug/L	96
123) 2-methylnaphthalene	20.280	142	23224	10.48	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92110.D
Acq On : 29 Jan 2019 5:35 pm
Operator : roberts
Sample : ic4028-20
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 31 10:35:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92111.D
Acq On : 29 Jan 2019 6:04 pm
Operator : roberts
Sample : icc4028-50
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 31 10:35:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.661	65	170089	500.00	ug/L	0.00
5) pentafluorobenzene	11.147	168	174602	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.033	114	295870	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	259574	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.035	152	115841	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.152	113	99239	50.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.00%			
52) 1,2-dichloroethane-d4 (s)	11.577	65	100323	50.00	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.00%			
74) toluene-d8 (s)	13.569	98	337193	50.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.00%			
97) 4-bromofluorobenzene (s)	15.970	95	115694	50.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.00%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.793	59	95246	250.00	ug/L	100
3) ethanol	7.193	45	193192	5000.00	ug/L	100
4) 1,4-dioxane	12.688	88	45355	1250.00	ug/L	100
6) chlorodifluoromethane	4.645	51	90086	50.00	ug/L	100
7) dichlorodifluoromethane	4.614	85	101001	50.00	ug/L	100
8) chloromethane	5.101	50	141252	50.00	ug/L	100
9) vinyl chloride	5.374	62	112080	50.00	ug/L	100
10) bromomethane	6.160	94	37297	50.00	ug/L	100
11) chloroethane	6.396	64	58888	50.00	ug/L	100
12) trichlorofluoromethane	6.968	101	134170	50.00	ug/L	100
13) vinyl bromide	6.816	106	69032	50.00	ug/L	100
14) ethyl ether	7.497	74	47479	50.00	ug/L	100
15) acrolein	7.707	56	21937	50.00	ug/L	100
16) freon 113	7.954	151	57893	50.00	ug/L	100
17) 1,1-dichloroethene	7.959	96	72736	50.00	ug/L	100
18) acetone	7.959	43	151200	200.00	ug/L	100
19) acetonitrile	8.405	41	166832	500.00	ug/L	100
20) iodomethane	8.242	142	49434	50.00	ug/L	100
21) carbon disulfide	8.410	76	186316	50.00	ug/L	100
22) methylene chloride	8.730	84	84725	50.00	ug/L	100
23) methyl acetate	8.525	43	95002	50.00	ug/L	100
24) methyl tert butyl ether	9.165	73	256524	50.00	ug/L	100
25) trans-1,2-dichloroethene	9.186	96	78917	50.00	ug/L	100
26) di-isopropyl ether	9.846	45	277129	50.00	ug/L	100
27) 2-butanone	10.528	72	63408	200.00	ug/L	100
28) 1,1-dichloroethane	9.794	63	148412	50.00	ug/L	100
29) chloroprene	9.941	53	119162	50.00	ug/L	100
30) acrylonitrile	9.055	53	38998	50.00	ug/L	100
31) hexane	9.605	56	51504	50.00	ug/L	100
32) vinyl acetate	9.794	86	20561	50.00	ug/L	100
33) ethyl tert-butyl ether	10.344	59	272951	50.00	ug/L	100
34) ethyl acetate	10.586	70	15044	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92111.D
Acq On : 29 Jan 2019 6:04 pm
Operator : roberts
Sample : icc4028-50
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 31 10:35:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) 2,2-dichloropropane	10.607	77	124109	50.00	ug/L	100
36) cis-1,2-dichloroethene	10.575	96	92863	50.00	ug/L	100
37) methyl acrylate	10.664	85	18835	50.00	ug/L	100
38) propionitrile	10.586	54	200236	500.00	ug/L	100
39) bromochloromethane	10.890	128	44014	50.00	ug/L	100
40) tetrahydrofuran	10.958	72	17517	50.00	ug/L	100
41) chloroform	10.953	85	97981	50.00	ug/L	100
42) t-butyl formate	11.031	59	92572	50.00	ug/L	100
44) methacrylonitrile	10.816	67	47332	50.00	ug/L	100
45) 1,1,1-trichloroethane	11.257	97	129068	50.00	ug/L	100
46) cyclohexane	11.372	84	120161	50.00	ug/L	100
47) 1,1-dichloropropene	11.445	75	110975	50.00	ug/L	100
48) isobutyl alcohol	11.440	74	7513	553.24	ug/L	61
49) carbon tetrachloride	11.477	117	111991	50.00	ug/L	100
50) tert amyl alcohol	11.524	55	31877	250.00	ug/L	100
53) n-butyl alcohol	12.101	56	258049	2500.00	ug/L	100
54) 2,2,4-trimethylpentane	11.765	57	213537	50.00	ug/L	100
55) benzene	11.692	78	321670	50.00	ug/L	100
56) tert-amyl methyl ether	11.750	87	65801	50.00	ug/L	100
57) heptane	11.923	71	50223	50.00	ug/L	100
58) isopropyl acetate	11.613	87	25609	50.00	ug/L	100
59) 1,2-dichloroethane	11.660	62	122883	50.00	ug/L	100
60) trichloroethene	12.368	130	87666	50.00	ug/L	100
61) ethyl acrylate	12.358	55	153627	50.00	ug/L	100
62) 2-nitropropane	13.018	41	29510	50.00	ug/L	100
63) 2-chloroethyl vinyl ether	13.071	63	340116	250.00	ug/L	100
64) methyl methacrylate	12.604	100	30025	50.00	ug/L	100
65) 1,2-dichloropropane	12.594	63	88201	50.00	ug/L	100
66) dibromomethane	12.720	93	61198	50.00	ug/L	100
67) methylcyclohexane	12.620	83	118119	50.00	ug/L	100
68) bromodichloromethane	12.840	83	120925	50.00	ug/L	100
69) epichlorohydrin	13.160	57	52429	250.00	ug/L	100
70) cis-1,3-dichloropropene	13.275	75	145072	50.00	ug/L	100
71) 4-methyl-2-pentanone	13.364	58	199641	200.00	ug/L	100
72) 3-methyl-1-butanol	13.349	70	95465	1000.00	ug/L	100
75) toluene	13.637	92	198656	50.00	ug/L	100
76) trans-1,3-dichloropropene	13.768	75	132023	50.00	ug/L	100
77) ethyl methacrylate	13.794	69	129676	50.00	ug/L	100
78) 1,1,2-trichloroethane	13.962	83	71676	50.00	ug/L	100
79) tetrachloroethene	14.177	164	69253	50.00	ug/L	100
80) 1,3-dichloropropane	14.135	76	132837	50.00	ug/L	100
81) 2-hexanone	14.135	58	205434	200.00	ug/L	100
82) butyl acetate	14.214	56	78184	50.00	ug/L	100
83) dibromochloromethane	14.371	129	96305	50.00	ug/L	100
84) 1,2-dibromoethane	14.518	107	106995	50.00	ug/L	100
85) n-butyl ether	14.906	57	356967	50.00	ug/L	100
86) chlorobenzene	14.958	112	217169	50.00	ug/L	100
87) 1,1,1,2-tetrachloroethane	15.000	131	80971	50.00	ug/L	100
88) ethylbenzene	15.021	91	364372	50.00	ug/L	100
89) m,p-xylene	15.116	106	274425	100.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92111.D
Acq On : 29 Jan 2019 6:04 pm
Operator : roberts
Sample : icc4028-50
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 31 10:35:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

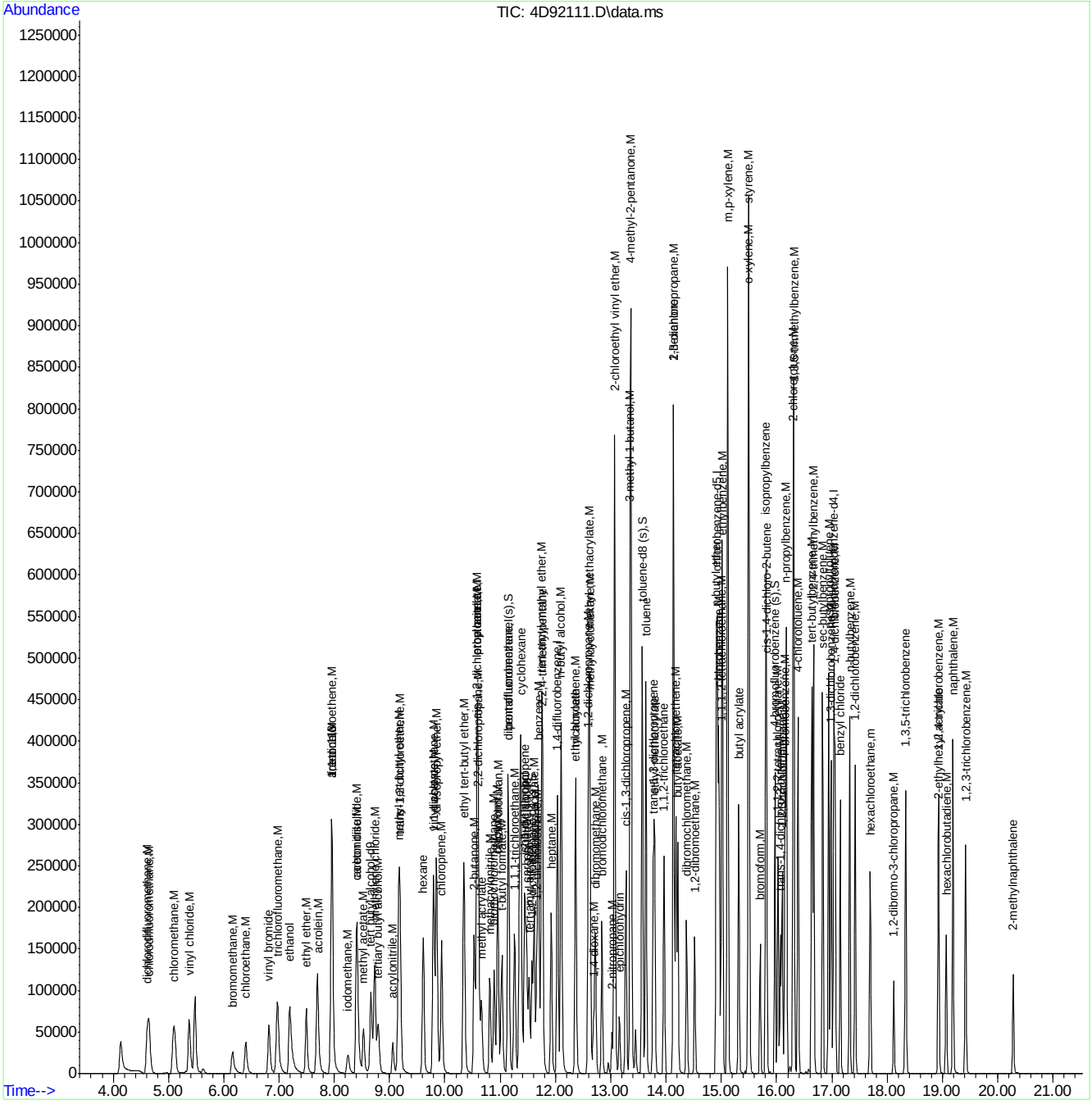
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) o-xylene	15.493	106	133193	50.00	ug/L	100
91) styrene	15.488	104	229031	50.00	ug/L	100
92) bromoform	15.703	173	69739	50.00	ug/L	100
93) butyl acrylate	15.315	55	188293	50.00	ug/L	100
94) isopropylbenzene	15.808	105	330479	50.00	ug/L	100
95) cis-1,4-dichloro-2-butene	15.818	88	43050	50.00	ug/L	100
98) bromobenzene	16.154	156	91604	50.00	ug/L	100
99) 1,1,2,2-tetrachloroethane	16.023	83	129496	50.00	ug/L	100
100) trans-1,4-dichloro-2-b...	16.070	53	28422	50.00	ug/L	100
101) 1,2,3-trichloropropane	16.101	110	33349	50.00	ug/L	100
102) n-propylbenzene	16.175	91	391814	50.00	ug/L	100
103) 2-chlorotoluene	16.301	126	82088	50.00	ug/L	100
104) 4-chlorotoluene	16.390	91	235905	50.00	ug/L	100
105) 1,3,5-trimethylbenzene	16.311	105	269402	50.00	ug/L	100
106) tert-butylbenzene	16.636	134	49639	50.00	ug/L	100
107) 1,2,4-trimethylbenzene	16.668	105	271634	50.00	ug/L	100
108) sec-butylbenzene	16.830	105	315454	50.00	ug/L	100
109) 1,3-dichlorobenzene	16.987	146	153851	50.00	ug/L	100
110) p-isopropyltoluene	16.940	119	261984	50.00	ug/L	100
111) 1,4-dichlorobenzene	17.056	146	157267	50.00	ug/L	100
112) benzyl chloride	17.150	91	222497	50.00	ug/L	100
113) 1,2-dichlorobenzene	17.417	146	150293	50.00	ug/L	100
114) n-butylbenzene	17.323	92	129641	50.00	ug/L	100
115) 1,2-dibromo-3-chloropr...	18.120	75	25870	50.00	ug/L	100
116) 1,3,5-trichlorobenzene	18.335	180	103928	50.00	ug/L	100
117) 2-ethylhexyl acrylate	18.922	70	8032	10.00	ug/L	100
118) 1,2,4-trichlorobenzene	18.927	180	93128	50.00	ug/L	100
119) hexachlorobutadiene	19.069	225	34230	50.00	ug/L	100
120) naphthalene	19.189	128	292658	50.00	ug/L	100
121) 1,2,3-trichlorobenzene	19.420	180	87449	50.00	ug/L	100
122) hexachloroethane	17.695	201	41729	50.00	ug/L	100
123) 2-methylnaphthalene	20.280	142	55886	25.00	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92111.D
Acq On : 29 Jan 2019 6:04 pm
Operator : roberts
Sample : icc4028-50
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 31 10:35:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92112.D
Acq On : 29 Jan 2019 6:33 pm
Operator : roberts
Sample : ic4028-100
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 31 10:35:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.672	65	170772	500.00	ug/L	0.01
5) pentafluorobenzene	11.147	168	170846	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.033	114	286537	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	246879	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.035	152	108346	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.152	113	95081	48.96	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.92%			
52) 1,2-dichloroethane-d4 (s)	11.577	65	94818	48.80	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.60%			
74) toluene-d8 (s)	13.569	98	320466	49.96	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.92%			
97) 4-bromofluorobenzene (s)	15.970	95	109674	50.68	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.36%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.798	59	201317	526.30	ug/L	99
3) ethanol	7.204	45	414025	10672.52	ug/L	98
4) 1,4-dioxane	12.693	88	90615	2487.39	ug/L	98
6) chlorodifluoromethane	4.645	51	191169	108.44	ug/L	99
7) dichlorodifluoromethane	4.614	85	211300	106.90	ug/L	99
8) chloromethane	5.101	50	279695	101.18	ug/L	99
9) vinyl chloride	5.374	62	225868	102.98	ug/L	99
10) bromomethane	6.139	94	82207	112.63	ug/L	98
11) chloroethane	6.386	64	121849	105.73	ug/L	99
12) trichlorofluoromethane	6.963	101	276772	105.41	ug/L	99
13) vinyl bromide	6.811	106	144424	106.91	ug/L	97
14) ethyl ether	7.492	74	102001	109.78	ug/L	97
15) acrolein	7.702	56	48129	112.11	ug/L	96
16) freon 113	7.948	151	123498	109.01	ug/L	99
17) 1,1-dichloroethene	7.959	96	153916	108.13	ug/L	98
18) acetone	7.959	43	315951	427.11	ug/L	98
19) acetonitrile	8.404	41	352598	1079.98	ug/L	99
20) iodomethane	8.242	142	116768	120.70	ug/L	99
21) carbon disulfide	8.404	76	392142	107.55	ug/L	99
22) methylene chloride	8.730	84	177660	107.15	ug/L	99
23) methyl acetate	8.525	43	200853	108.03	ug/L	99
24) methyl tert butyl ether	9.165	73	537222	107.01	ug/L	99
25) trans-1,2-dichloroethene	9.186	96	164624	106.60	ug/L	99
26) di-isopropyl ether	9.846	45	573389	105.73	ug/L	99
27) 2-butanone	10.528	72	133993	431.93	ug/L	96
28) 1,1-dichloroethane	9.794	63	307725	105.95	ug/L	100
29) chloroprene	9.941	53	245969	105.48	ug/L	99
30) acrylonitrile	9.055	53	83890	109.92	ug/L	97
31) hexane	9.605	56	109151	108.29	ug/L	99
32) vinyl acetate	9.794	86	44585	110.80	ug/L	94
33) ethyl tert-butyl ether	10.344	59	568412	106.41	ug/L	99
34) ethyl acetate	10.586	70	31254	106.16	ug/L #	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92112.D
Acq On : 29 Jan 2019 6:33 pm
Operator : roberts
Sample : ic4028-100
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 31 10:35:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	10.607	77	247651	101.97	ug/L		98
36) cis-1,2-dichloroethene	10.575	96	192240	105.78	ug/L		99
37) methyl acrylate	10.659	85	39800	107.98	ug/L		93
38) propionitrile	10.591	54	409573	1045.21	ug/L		99
39) bromochloromethane	10.890	128	88869	103.17	ug/L		99
40) tetrahydrofuran	10.958	72	36360	106.07	ug/L		97
41) chloroform	10.953	85	199981	104.29	ug/L		98
42) t-butyl formate	11.031	59	189429	104.56	ug/L		99
44) methacrylonitrile	10.816	67	99295	107.20	ug/L		97
45) 1,1,1-trichloroethane	11.257	97	263212	104.21	ug/L		100
46) cyclohexane	11.372	84	241807	102.83	ug/L		96
47) 1,1-dichloropropene	11.440	75	226707	104.39	ug/L		99
48) isobutyl alcohol	11.440	74	14898	1121.17	ug/L		67
49) carbon tetrachloride	11.477	117	227904	103.99	ug/L		99
50) tert amyl alcohol	11.524	55	64475	516.77	ug/L		96
53) n-butyl alcohol	12.106	56	518199	5183.88	ug/L		98
54) 2,2,4-trimethylpentane	11.765	57	423567	102.41	ug/L		99
55) benzene	11.692	78	650772	104.45	ug/L		100
56) tert-amyl methyl ether	11.750	87	132663	104.09	ug/L		99
57) heptane	11.923	71	101558	104.40	ug/L		99
58) isopropyl acetate	11.613	87	53080	107.01	ug/L		94
59) 1,2-dichloroethane	11.660	62	243262	102.21	ug/L		99
60) trichloroethene	12.368	130	177836	104.73	ug/L		100
61) ethyl acrylate	12.358	55	305405	102.64	ug/L		99
62) 2-nitropropane	13.024	41	58999	103.22	ug/L		96
63) 2-chloroethyl vinyl ether	13.071	63	661133	501.79	ug/L		99
64) methyl methacrylate	12.604	100	61973	106.56	ug/L	#	90
65) 1,2-dichloropropane	12.594	63	176958	103.58	ug/L		99
66) dibromomethane	12.720	93	122750	103.56	ug/L		98
67) methylcyclohexane	12.620	83	238520	104.25	ug/L		98
68) bromodichloromethane	12.840	83	243906	104.13	ug/L		98
69) epichlorohydrin	13.160	57	108400	533.73	ug/L		98
70) cis-1,3-dichloropropene	13.275	75	291935	103.89	ug/L		98
71) 4-methyl-2-pentanone	13.364	58	384508	397.75	ug/L		98
72) 3-methyl-1-butanol	13.354	70	190147	2056.67	ug/L		99
75) toluene	13.637	92	400736	106.05	ug/L		99
76) trans-1,3-dichloropropene	13.768	75	265179	105.59	ug/L		99
77) ethyl methacrylate	13.794	69	261725	106.10	ug/L		99
78) 1,1,2-trichloroethane	13.962	83	144803	106.21	ug/L		99
79) tetrachloroethene	14.177	164	137695	104.53	ug/L		99
80) 1,3-dichloropropane	14.135	76	260215	102.98	ug/L		97
81) 2-hexanone	14.135	58	404407	413.96	ug/L		98
82) butyl acetate	14.214	56	156828	105.45	ug/L		98
83) dibromochloromethane	14.371	129	196997	107.54	ug/L		100
84) 1,2-dibromoethane	14.518	107	216095	106.18	ug/L		100
85) n-butyl ether	14.906	57	704726	103.79	ug/L		99
86) chlorobenzene	14.958	112	436952	105.77	ug/L		99
87) 1,1,1,2-tetrachloroethane	15.005	131	164119	106.56	ug/L		99
88) ethylbenzene	15.021	91	721067	104.03	ug/L		100
89) m,p-xylene	15.116	106	540660	207.15	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92112.D
Acq On : 29 Jan 2019 6:33 pm
Operator : roberts
Sample : ic4028-100
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 31 10:35:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

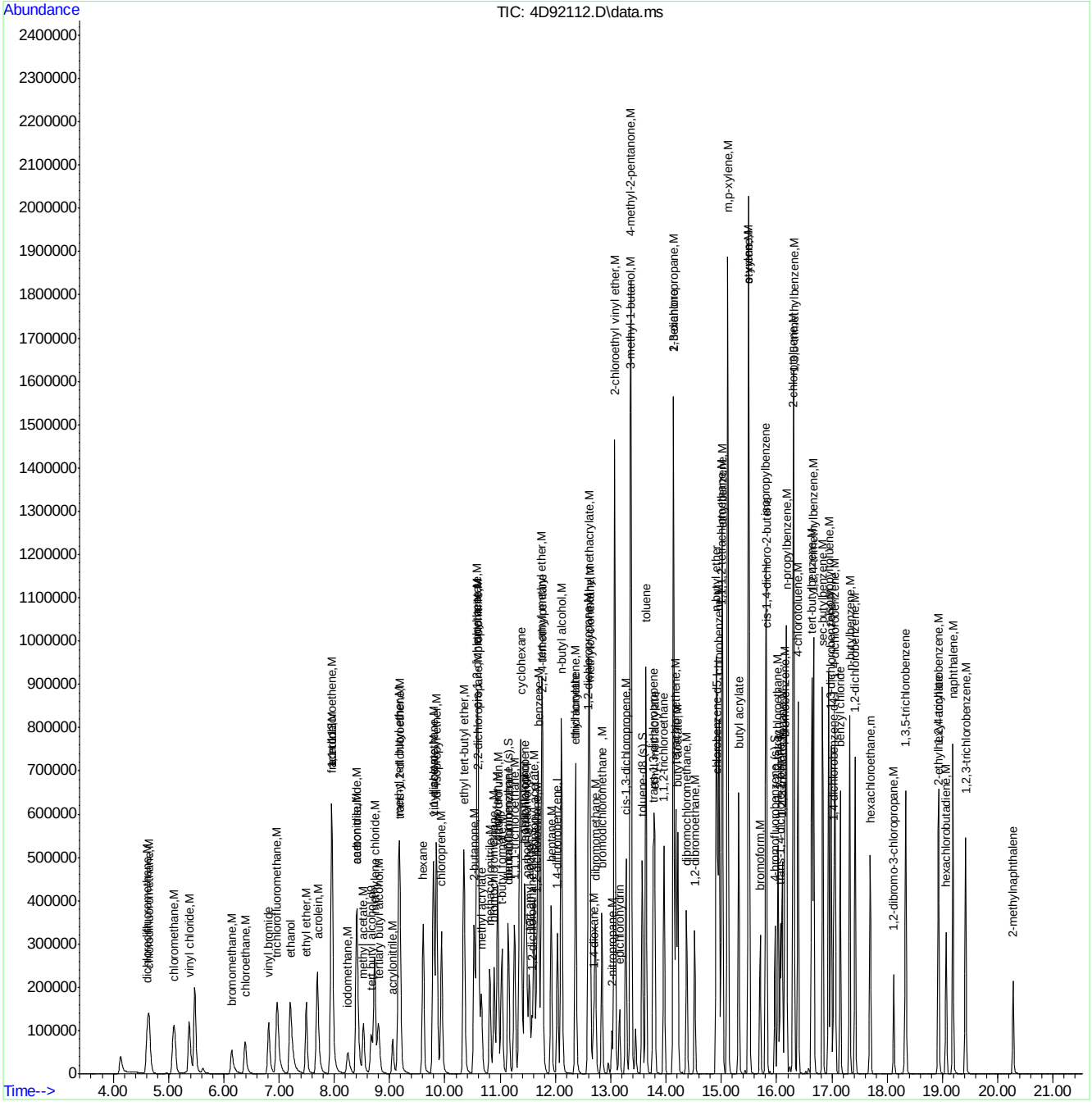
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) o-xylene	15.493	106	260202	102.70	ug/L	98
91) styrene	15.488	104	450998	103.52	ug/L	98
92) bromoform	15.703	173	145494	109.68	ug/L	99
93) butyl acrylate	15.315	55	380761	106.31	ug/L	100
94) isopropylbenzene	15.808	105	655177	104.22	ug/L	100
95) cis-1,4-dichloro-2-butene	15.818	88	90529	110.55	ug/L	99
98) bromobenzene	16.154	156	186287	108.71	ug/L	98
99) 1,1,2,2-tetrachloroethane	16.023	83	264303	109.11	ug/L	99
100) trans-1,4-dichloro-2-b...	16.065	53	59642	112.18	ug/L	98
101) 1,2,3-trichloropropane	16.101	110	68371	109.60	ug/L	100
102) n-propylbenzene	16.180	91	768998	104.92	ug/L	99
103) 2-chlorotoluene	16.301	126	162695	105.95	ug/L	99
104) 4-chlorotoluene	16.390	91	467221	105.88	ug/L	100
105) 1,3,5-trimethylbenzene	16.311	105	526868	104.55	ug/L	100
106) tert-butylbenzene	16.636	134	97313	104.80	ug/L	95
107) 1,2,4-trimethylbenzene	16.668	105	529254	104.16	ug/L	99
108) sec-butylbenzene	16.835	105	620188	105.10	ug/L	98
109) 1,3-dichlorobenzene	16.987	146	307414	106.82	ug/L	99
110) p-isopropyltoluene	16.940	119	516223	105.34	ug/L	100
111) 1,4-dichlorobenzene	17.055	146	312641	106.27	ug/L	100
112) benzyl chloride	17.150	91	450850	108.32	ug/L	99
113) 1,2-dichlorobenzene	17.417	146	298814	106.29	ug/L	100
114) n-butylbenzene	17.323	92	254323	104.87	ug/L	99
115) 1,2-dibromo-3-chloropr...	18.120	75	52635	108.77	ug/L	96
116) 1,3,5-trichlorobenzene	18.335	180	207894	106.94	ug/L	99
117) 2-ethylhexyl acrylate	18.922	70	17712	23.58	ug/L	93
118) 1,2,4-trichlorobenzene	18.927	180	187829	107.82	ug/L	99
119) hexachlorobutadiene	19.064	225	66514	103.88	ug/L	98
120) naphthalene	19.189	128	577010	105.40	ug/L	99
121) 1,2,3-trichlorobenzene	19.420	180	174183	106.48	ug/L	99
122) hexachloroethane	17.695	201	86305	110.56	ug/L	99
123) 2-methylnaphthalene	20.280	142	100154	47.90	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92112.D
Acq On : 29 Jan 2019 6:33 pm
Operator : roberts
Sample : ic4028-100
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 31 10:35:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92113.D
Acq On : 29 Jan 2019 7:02 pm
Operator : roberts
Sample : ic4028-200
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 31 10:35:42 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.682	65	161416	500.00	ug/L	0.02
5) pentafluorobenzene	11.147	168	166505	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.033	114	282065	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	246336	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.035	152	109773	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.152	113	94231	49.79	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.58%			
52) 1,2-dichloroethane-d4 (s)	11.577	65	91560	47.87	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 95.74%			
74) toluene-d8 (s)	13.569	98	317905	49.67	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.34%			
97) 4-bromofluorobenzene (s)	15.970	95	110763	50.52	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.04%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.813	59	376811	1042.19	ug/L	98
3) ethanol	7.225	45	768614	20961.33	ug/L	98
4) 1,4-dioxane	12.699	88	158678	4608.20	ug/L	97
6) chlorodifluoromethane	4.645	51	356112	207.26	ug/L	99
7) dichlorodifluoromethane	4.614	85	420262	218.17	ug/L	99
8) chloromethane	5.101	50	564052	209.37	ug/L	99
9) vinyl chloride	5.379	62	448341	209.74	ug/L	99
10) bromomethane	6.129	94	162215	228.04	ug/L	98
11) chloroethane	6.370	64	244747	217.91	ug/L	99
12) trichlorofluoromethane	6.957	101	553589	216.33	ug/L	100
13) vinyl bromide	6.800	106	293450	222.88	ug/L	98
14) ethyl ether	7.492	74	195893	216.33	ug/L	96
15) acrolein	7.707	56	93293	222.98	ug/L	99
16) freon 113	7.943	151	237065	214.70	ug/L	99
17) 1,1-dichloroethene	7.954	96	297750	214.63	ug/L	96
18) acetone	7.964	43	564457	782.94	ug/L	97
19) acetonitrile	8.410	41	650504	2044.38	ug/L	98
20) iodomethane	8.242	142	248132	263.18	ug/L	99
21) carbon disulfide	8.404	76	756843	212.98	ug/L	98
22) methylene chloride	8.730	84	340811	210.91	ug/L	98
23) methyl acetate	8.525	43	372735	205.71	ug/L	100
24) methyl tert butyl ether	9.165	73	1009532	206.34	ug/L	99
25) trans-1,2-dichloroethene	9.186	96	315025	209.30	ug/L	99
26) di-isopropyl ether	9.852	45	1061370	200.81	ug/L	96
27) 2-butanone	10.533	72	245854	813.18	ug/L	95
28) 1,1-dichloroethane	9.794	63	578782	204.47	ug/L	100
29) chloroprene	9.935	53	465650	204.89	ug/L	98
30) acrylonitrile	9.055	53	159718	214.74	ug/L	100
31) hexane	9.605	56	210728	214.52	ug/L	99
32) vinyl acetate	9.794	86	83688	213.41	ug/L #	85
33) ethyl tert-butyl ether	10.344	59	1069659	205.47	ug/L	99
34) ethyl acetate	10.586	70	57880	201.72	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92113.D
Acq On : 29 Jan 2019 7:02 pm
Operator : roberts
Sample : ic4028-200
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 31 10:35:42 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	10.607	77	448666	189.54	ug/L		95
36) cis-1,2-dichloroethene	10.575	96	361151	203.91	ug/L		96
37) methyl acrylate	10.664	85	74529	207.47	ug/L		97
38) propionitrile	10.596	54	728105	1906.53	ug/L		99
39) bromochloromethane	10.890	128	166209	198.00	ug/L		99
40) tetrahydrofuran	10.963	72	66722	199.71	ug/L		95
41) chloroform	10.953	85	373151	199.68	ug/L		97
42) t-butyl formate	11.031	59	350033	198.25	ug/L		97
44) methacrylonitrile	10.816	67	183724	203.52	ug/L		96
45) 1,1,1-trichloroethane	11.257	97	497216	201.98	ug/L		99
46) cyclohexane	11.372	84	471471	205.72	ug/L	#	84
47) 1,1-dichloropropene	11.440	75	425994	201.27	ug/L		100
48) isobutyl alcohol	11.440	74	27475	2121.58	ug/L		76
49) carbon tetrachloride	11.477	117	430380	201.49	ug/L		99
50) tert amyl alcohol	11.535	55	115854	952.79	ug/L		94
53) n-butyl alcohol	12.117	56	915706	9305.63	ug/L		96
54) 2,2,4-trimethylpentane	11.765	57	807535	198.34	ug/L		99
55) benzene	11.692	78	1221694	199.19	ug/L		99
56) tert-amyl methyl ether	11.755	87	246381	196.38	ug/L		96
57) heptane	11.923	71	199575	208.41	ug/L		99
58) isopropyl acetate	11.618	87	99013	202.78	ug/L	#	90
59) 1,2-dichloroethane	11.660	62	445790	190.27	ug/L		100
60) trichloroethene	12.368	130	335118	200.49	ug/L		99
61) ethyl acrylate	12.358	55	556195	189.88	ug/L		99
62) 2-nitropropane	13.024	41	105389	187.30	ug/L		97
63) 2-chloroethyl vinyl ether	13.071	63	1115641	860.18	ug/L		98
64) methyl methacrylate	12.609	100	114650	200.27	ug/L	#	81
65) 1,2-dichloropropane	12.594	63	325963	193.83	ug/L		100
66) dibromomethane	12.720	93	227803	195.23	ug/L		99
67) methylcyclohexane	12.620	83	450219	199.91	ug/L		98
68) bromodichloromethane	12.840	83	460662	199.80	ug/L		99
69) epichlorohydrin	13.160	57	201519	1007.94	ug/L		98
70) cis-1,3-dichloropropene	13.275	75	545528	197.22	ug/L		97
71) 4-methyl-2-pentanone	13.370	58	639358	671.86	ug/L		93
72) 3-methyl-1-butanol	13.359	70	321441	3531.90	ug/L		98
75) toluene	13.637	92	749261	198.72	ug/L		99
76) trans-1,3-dichloropropene	13.768	75	493945	197.12	ug/L		99
77) ethyl methacrylate	13.794	69	479792	194.94	ug/L		98
78) 1,1,2-trichloroethane	13.962	83	268637	197.47	ug/L		99
79) tetrachloroethene	14.177	164	257364	195.80	ug/L		100
80) 1,3-dichloropropane	14.135	76	461097	182.88	ug/L		92
81) 2-hexanone	14.135	58	684234	701.93	ug/L		94
82) butyl acetate	14.214	56	281542	189.73	ug/L		95
83) dibromochloromethane	14.376	129	374594	204.93	ug/L		99
84) 1,2-dibromoethane	14.518	107	406069	199.96	ug/L		99
85) n-butyl ether	14.906	57	1294473	191.06	ug/L		98
86) chlorobenzene	14.958	112	819672	198.86	ug/L		99
87) 1,1,1,2-tetrachloroethane	15.000	131	304840	198.36	ug/L		100
88) ethylbenzene	15.021	91	1319935	190.86	ug/L		99
89) m,p-xylene	15.116	106	972629	373.47	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92113.D
Acq On : 29 Jan 2019 7:02 pm
Operator : roberts
Sample : ic4028-200
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 31 10:35:42 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration

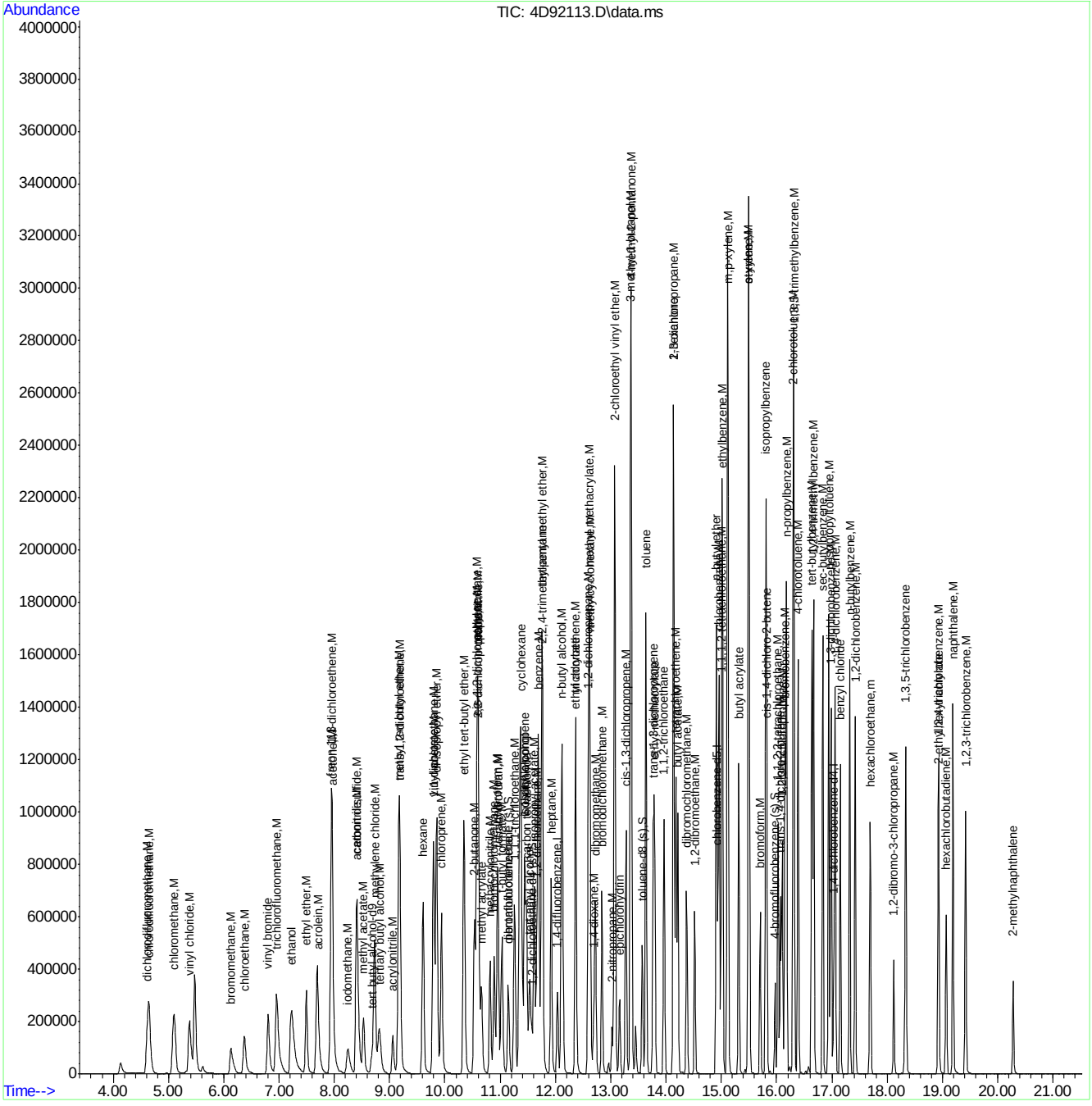
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) o-xylene	15.493	106	455410	180.15	ug/L	99
91) styrene	15.488	104	797430	183.44	ug/L	97
92) bromoform	15.703	173	277131	209.37	ug/L	100
93) butyl acrylate	15.315	55	690458	193.20	ug/L	99
94) isopropylbenzene	15.808	105	1226398	195.52	ug/L	100
95) cis-1,4-dichloro-2-butene	15.823	88	167799	205.36	ug/L	96
98) bromobenzene	16.154	156	351998	202.75	ug/L	98
99) 1,1,2,2-tetrachloroethane	16.023	83	486397	198.19	ug/L	99
100) trans-1,4-dichloro-2-b...	16.070	53	112558	208.96	ug/L	97
101) 1,2,3-trichloropropane	16.101	110	124958	197.71	ug/L	100
102) n-propylbenzene	16.180	91	1430271	192.61	ug/L	98
103) 2-chlorotoluene	16.301	126	294798	189.49	ug/L	98
104) 4-chlorotoluene	16.390	91	879610	196.74	ug/L	99
105) 1,3,5-trimethylbenzene	16.311	105	947721	185.62	ug/L	100
106) tert-butylbenzene	16.636	134	185326	196.99	ug/L	98
107) 1,2,4-trimethylbenzene	16.668	105	990733	192.45	ug/L	99
108) sec-butylbenzene	16.835	105	1172338	196.09	ug/L	99
109) 1,3-dichlorobenzene	16.987	146	583127	199.99	ug/L	100
110) p-isopropyltoluene	16.940	119	974908	196.35	ug/L	100
111) 1,4-dichlorobenzene	17.061	146	593765	199.21	ug/L	99
112) benzyl chloride	17.150	91	820911	194.67	ug/L	99
113) 1,2-dichlorobenzene	17.423	146	564894	198.32	ug/L	99
114) n-butylbenzene	17.323	92	485996	197.80	ug/L	99
115) 1,2-dibromo-3-chloropr...	18.120	75	99110	202.14	ug/L	95
116) 1,3,5-trichlorobenzene	18.335	180	399931	203.04	ug/L	99
117) 2-ethylhexyl acrylate	18.922	70	32431	42.61	ug/L	94
118) 1,2,4-trichlorobenzene	18.933	180	352055	199.47	ug/L	99
119) hexachlorobutadiene	19.064	225	129184	199.13	ug/L	98
120) naphthalene	19.189	128	1069466	192.82	ug/L	99
121) 1,2,3-trichlorobenzene	19.420	180	320155	193.17	ug/L	99
122) hexachloroethane	17.695	201	170539	215.64	ug/L	99
123) 2-methylnaphthalene	20.280	142	163228	77.05	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92113.D
Acq On : 29 Jan 2019 7:02 pm
Operator : roberts
Sample : ic4028-200
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 31 10:35:42 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:35:07 2019
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92116.D
Acq On : 29 Jan 2019 8:29 pm
Operator : roberts
Sample : icv4028-50
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 01 10:17:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.661	65	177631	500.00	ug/L	0.00
5) pentafluorobenzene	11.147	168	187614	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.038	114	312954	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	266375	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.035	152	118845	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.152	113	105077	50.78	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.56%			
52) 1,2-dichloroethane-d4 (s)	11.577	65	103625	49.06	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.12%			
74) toluene-d8 (s)	13.569	98	346399	50.21	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.42%			
97) 4-bromofluorobenzene (s)	15.970	95	119084	49.67	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.34%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.792	59	108102	280.84	ug/L	99
3) ethanol	7.193	45	212145	5649.93	ug/L	100
4) 1,4-dioxane	12.688	88	49027	1275.75	ug/L	100
6) chlorodifluoromethane	4.645	51	106729	55.93	ug/L	99
7) dichlorodifluoromethane	4.614	85	108502	52.23	ug/L	99
8) chloromethane	5.096	50	135268	42.74	ug/L	99
9) vinyl chloride	5.374	62	112394	47.06	ug/L	99
10) bromomethane	6.160	94	47272	64.15	ug/L	99
11) chloroethane	6.396	64	62275	51.31	ug/L	99
12) trichlorofluoromethane	6.968	101	139795	51.22	ug/L	99
13) vinyl bromide	6.816	106	71742	50.77	ug/L	99
14) ethyl ether	7.492	74	54318	56.59	ug/L	96
15) acrolein	7.707	56	26130	56.74	ug/L	97
16) freon 113	7.954	151	66258	56.02	ug/L	99
17) 1,1-dichloroethene	7.959	96	75514	50.24	ug/L	99
18) acetone	7.959	43	166897	221.40	ug/L	98
19) acetonitrile	8.405	41	176781	536.93	ug/L	100
20) iodomethane	8.247	142	64694	70.50	ug/L	98
21) carbon disulfide	8.410	76	229469	56.30	ug/L	98
22) methylene chloride	8.730	84	92354	50.86	ug/L	97
23) methyl acetate	8.525	43	96511	47.96	ug/L	99
24) methyl tert butyl ether	9.165	73	586614	113.82	ug/L	98
25) trans-1,2-dichloroethene	9.191	96	84640	51.89	ug/L	99
26) di-isopropyl ether	9.846	45	293323	54.14	ug/L	99
27) 2-butanone	10.528	72	68864	219.72	ug/L	100
28) 1,1-dichloroethane	9.794	63	158393	54.00	ug/L	99
29) chloroprene	9.941	53	133898	55.99	ug/L	99
30) acrylonitrile	9.055	53	44274	55.72	ug/L	100
31) hexane	9.605	56	54468	52.00	ug/L	99
32) vinyl acetate	9.794	86	22521	52.59	ug/L	100
33) ethyl tert-butyl ether	10.344	59	290624	53.61	ug/L	100
34) ethyl acetate	10.586	70	15538	52.39	ug/L	96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92116.D
Acq On : 29 Jan 2019 8:29 pm
Operator : roberts
Sample : icv4028-50
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 01 10:17:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	10.607	77	125426	48.47	ug/L		100
36) cis-1,2-dichloroethene	10.580	96	100851	54.05	ug/L		99
37) methyl acrylate	10.659	85	20741	55.58	ug/L		96
38) propionitrile	10.586	54	211814	548.97	ug/L		99
39) bromochloromethane	10.890	128	47386	53.49	ug/L		98
40) tetrahydrofuran	10.963	72	19021	53.71	ug/L		92
41) chloroform	10.953	85	104795	51.11	ug/L		97
42) t-butyl formate	11.031	59	84562	47.56	ug/L		99
44) methacrylonitrile	10.816	67	51096	51.58	ug/L		99
45) 1,1,1-trichloroethane	11.262	97	133018	50.11	ug/L		100
46) cyclohexane	11.372	84	111545	45.76	ug/L		95
47) 1,1-dichloropropene	11.445	75	118079	51.76	ug/L		99
48) isobutyl alcohol	11.445	74	7756	522.48	ug/L		90
49) carbon tetrachloride	11.477	117	117553	51.25	ug/L		98
50) tert amyl alcohol	11.524	55	34505	275.28	ug/L		94
53) n-butyl alcohol	12.101	56	270440	2837.20	ug/L		100
54) 2,2,4-trimethylpentane	11.765	57	206870	49.67	ug/L		98
55) benzene	11.692	78	342158	50.58	ug/L		99
56) tert-amyl methyl ether	11.750	87	67089	52.16	ug/L		99
57) heptane	11.923	71	54234	55.27	ug/L		99
58) isopropyl acetate	11.613	87	26587	52.96	ug/L		99
59) 1,2-dichloroethane	11.666	62	128927	47.77	ug/L		100
60) trichloroethene	12.368	130	93902	52.17	ug/L		99
61) ethyl acrylate	12.358	55	156408	53.21	ug/L		100
62) 2-nitropropane	13.024	41	31958	54.36	ug/L		99
63) 2-chloroethyl vinyl ether	13.071	63	357062	284.62	ug/L		99
64) methyl methacrylate	12.609	100	32931	56.32	ug/L	#	83
65) 1,2-dichloropropane	12.594	63	90982	51.77	ug/L		100
66) dibromomethane	12.720	93	65455	52.16	ug/L		98
67) methylcyclohexane	12.620	83	117674	50.37	ug/L		99
68) bromodichloromethane	12.840	83	123944	50.63	ug/L		98
69) epichlorohydrin	13.160	57	54326	260.77	ug/L		100
70) cis-1,3-dichloropropene	13.275	75	150795	50.66	ug/L		99
71) 4-methyl-2-pentanone	13.364	58	204005	209.66	ug/L		99
72) 3-methyl-1-butanol	13.354	70	98694	1134.88	ug/L		98
75) toluene	13.637	92	209088	50.20	ug/L		100
76) trans-1,3-dichloropropene	13.768	75	130450	51.46	ug/L		99
77) ethyl methacrylate	13.794	69	129770	53.01	ug/L		99
78) 1,1,2-trichloroethane	13.962	83	74706	54.32	ug/L		99
79) tetrachloroethene	14.177	164	73552	51.59	ug/L		98
80) 1,3-dichloropropane	14.135	76	139405	51.97	ug/L		98
81) 2-hexanone	14.135	58	206399	215.15	ug/L		99
82) butyl acetate	14.214	56	80697	54.51	ug/L		98
83) dibromochloromethane	14.371	129	103434	56.46	ug/L		99
84) 1,2-dibromoethane	14.518	107	111463	52.85	ug/L		100
85) n-butyl ether	14.906	57	353169	50.12	ug/L		100
86) chlorobenzene	14.958	112	226358	49.86	ug/L		99
87) 1,1,1,2-tetrachloroethane	15.005	131	86145	54.32	ug/L		99
88) ethylbenzene	15.021	91	380684	50.68	ug/L		100
89) m,p-xylene	15.116	106	290266	103.67	ug/L		99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92116.D
Acq On : 29 Jan 2019 8:29 pm
Operator : roberts
Sample : icv4028-50
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 01 10:17:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

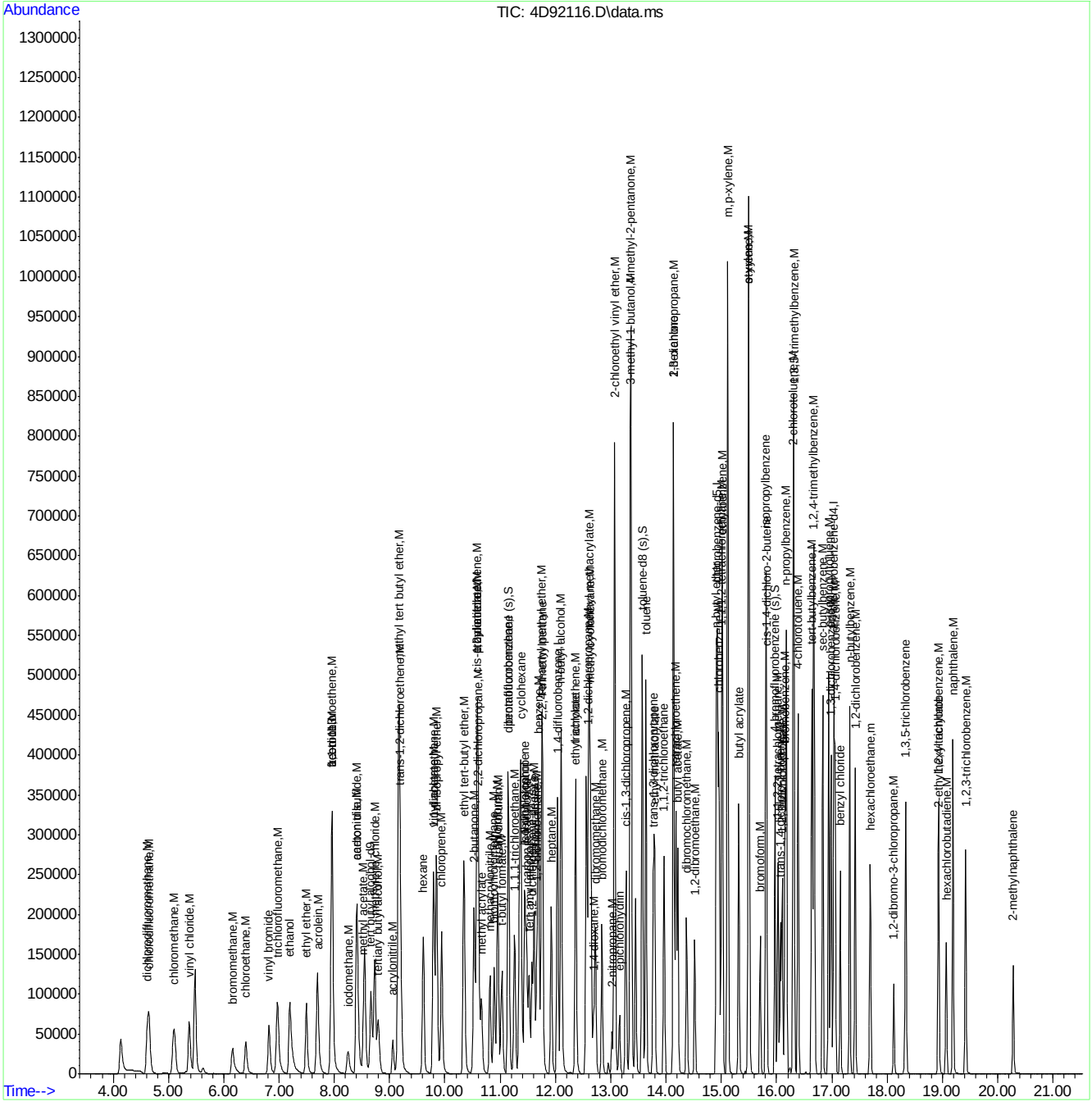
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) o-xylene	15.493	106	139085	52.16	ug/L	99
91) styrene	15.493	104	242052	55.75	ug/L	96
92) bromoform	15.703	173	76488	58.13	ug/L	100
93) butyl acrylate	15.315	55	197432	56.90	ug/L	99
94) isopropylbenzene	15.808	105	345218	50.48	ug/L	100
95) cis-1,4-dichloro-2-butene	15.818	88	41799	49.81	ug/L	99
98) bromobenzene	16.154	156	97129	52.01	ug/L	100
99) 1,1,2,2-tetrachloroethane	16.023	83	132788	51.24	ug/L	99
100) trans-1,4-dichloro-2-b...	16.070	53	32990	58.46	ug/L	98
101) 1,2,3-trichloropropane	16.101	110	34531	51.09	ug/L	100
102) n-propylbenzene	16.175	91	406372	50.27	ug/L	100
103) 2-chlorotoluene	16.301	126	84675	51.61	ug/L	97
104) 4-chlorotoluene	16.390	91	251560	51.00	ug/L	100
105) 1,3,5-trimethylbenzene	16.311	105	278666	51.29	ug/L	100
106) tert-butylbenzene	16.636	134	51706	52.13	ug/L	99
107) 1,2,4-trimethylbenzene	16.668	105	287209	52.39	ug/L	100
108) sec-butylbenzene	16.835	105	329221	50.87	ug/L	99
109) 1,3-dichlorobenzene	16.987	146	163458	51.21	ug/L	100
110) p-isopropyltoluene	16.940	119	276677	52.91	ug/L	100
111) 1,4-dichlorobenzene	17.061	146	164831	50.19	ug/L	99
112) benzyl chloride	17.150	91	174567	41.33	ug/L	100
113) 1,2-dichlorobenzene	17.423	146	157689	52.32	ug/L	98
114) n-butylbenzene	17.323	92	135090	53.85	ug/L	99
115) 1,2-dibromo-3-chloropr...	18.120	75	26142	53.26	ug/L	97
116) 1,3,5-trichlorobenzene	18.335	180	108823	54.32	ug/L	99
117) 2-ethylhexyl acrylate	18.922	70	9447	10.77	ug/L	95
118) 1,2,4-trichlorobenzene	18.933	180	97956	53.92	ug/L	98
119) hexachlorobutadiene	19.069	225	34783	51.23	ug/L	99
120) naphthalene	19.189	128	308882	54.41	ug/L	99
121) 1,2,3-trichlorobenzene	19.420	180	90688	52.98	ug/L	99
122) hexachloroethane	17.695	201	45238	55.46	ug/L	99
123) 2-methylnaphthalene	20.280	142	63983	30.64	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92116.D
Acq On : 29 Jan 2019 8:29 pm
Operator : roberts
Sample : icv4028-50
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 01 10:17:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92117.D
Acq On : 29 Jan 2019 8:58 pm
Operator : roberts
Sample : icv4028-50
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 31 11:30:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:54:24 2019
Response via : Initial Calibration

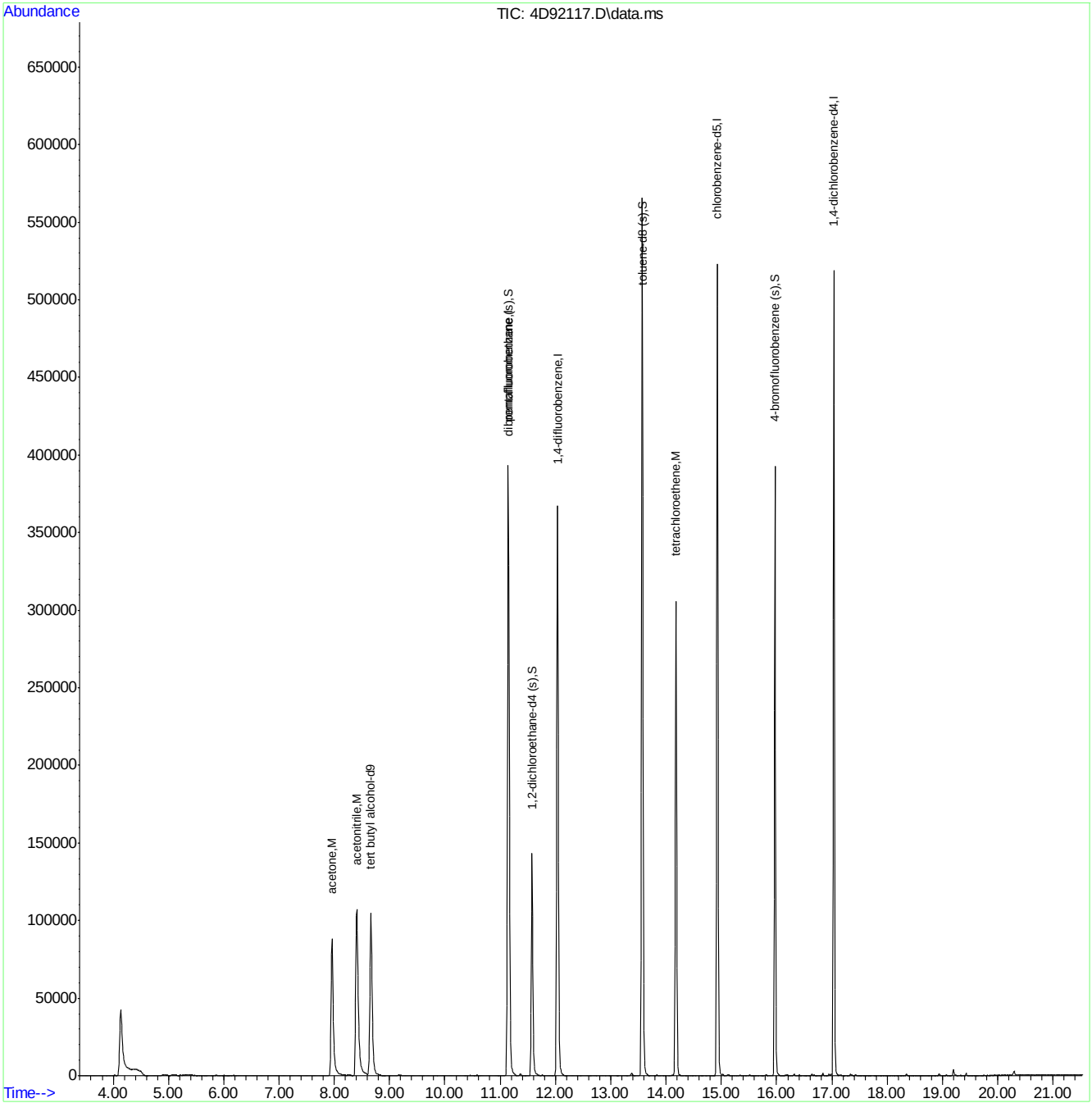
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.661	65	182852	500.00	ug/L	0.00
5) pentafluorobenzene	11.147	168	195328	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.038	114	329995	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	288182	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.035	152	127753	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.152	113	108182	50.21	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.42%			
52) 1,2-dichloroethane-d4 (s)	11.577	65	110886	49.79	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.58%			
74) toluene-d8 (s)	13.569	98	375854	50.36	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.72%			
97) 4-bromofluorobenzene (s)	15.970	95	127631	49.53	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.06%			
Target Compounds						Qvalue
18) acetone	7.959	43	172300	219.54	ug/L	99
19) acetonitrile	8.404	41	180565	526.77	ug/L	100
79) tetrachloroethene	14.177	164	70691	45.83	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D4028\
Data File : 4D92117.D
Acq On : 29 Jan 2019 8:58 pm
Operator : roberts
Sample : icv4028-50
Misc : MS31310,V4D4028,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jan 31 11:30:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Thu Jan 31 10:54:24 2019
Response via : Initial Calibration



M4D4028.M Fri Feb 01 10:23:53 2019 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93371.d
Acq On : 10 Apr 2019 4:49 pm
Operator : juntaep
Sample : cc4028-50 Inst : MS4D
Misc : MS33802,V4D4101,5,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 11 18:02:18 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.656	65	159510	500.00	ug/L	0.00
5) pentafluorobenzene	11.141	168	185939	50.00	ug/L	0.00
51) 1,4-difluorobenzene	12.033	114	278233	50.00	ug/L	0.00
73) chlorobenzene-d5	14.927	117	236094	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.035	152	102989	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.147	113	92667	45.19	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 90.38%			
52) 1,2-dichloroethane-d4 (s)	11.571	65	95326	50.76	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.52%			
74) toluene-d8 (s)	13.564	98	319683	52.28	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.56%			
97) 4-bromofluorobenzene (s)	15.965	95	111440	53.64	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 107.28%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.787	59	95054	274.99	ug/L	99
3) ethanol	7.188	45	206109	6112.77	ug/L	99
4) 1,4-dioxane	12.688	88	38923	1127.89	ug/L	96
6) chlorodifluoromethane	4.635	51	115246	60.93	ug/L	97
7) dichlorodifluoromethane	4.614	85	122646	59.57	ug/L	99
8) chloromethane	5.091	50	156001	49.73	ug/L	99
9) vinyl chloride	5.379	62	130571	55.17	ug/L	99
10) bromomethane	6.160	94	52771	72.25	ug/L	99
11) chloroethane	6.396	64	70244	58.39	ug/L	99
12) trichlorofluoromethane	6.968	101	136688	50.53	ug/L	99
13) vinyl bromide	6.816	106	65290	46.62	ug/L	96
14) ethyl ether	7.487	74	53120	55.84	ug/L	89
15) acrolein	7.702	56	22943	50.27	ug/L	97
16) freon 113	7.948	151	57848	49.35	ug/L	93
17) 1,1-dichloroethene	7.954	96	81090	54.43	ug/L	97
18) acetone	7.948	43	158889	212.68	ug/L	99
19) acetonitrile	8.399	41	184059	564.07	ug/L	100
20) iodomethane	8.242	142	40254	44.26	ug/L	98
21) carbon disulfide	8.404	76	227308	56.27	ug/L	98
22) methylene chloride	8.724	84	94047	52.26	ug/L	96
23) methyl acetate	8.520	43	99919	50.10	ug/L	97
24) methyl tert butyl ether	9.159	73	271234	53.10	ug/L	96
25) trans-1,2-dichloroethene	9.186	96	86697	53.63	ug/L	96
26) di-isopropyl ether	9.841	45	316426	58.93	ug/L	96
27) 2-butanone	10.523	72	64064	206.25	ug/L	92
28) 1,1-dichloroethane	9.789	63	169794	58.41	ug/L	98
29) chloroprene	9.935	53	135924	57.35	ug/L	97
30) acrylonitrile	9.049	53	44565	56.59	ug/L	100
31) hexane	9.600	56	63690	61.35	ug/L	97
32) vinyl acetate	9.789	86	21630	50.96	ug/L #	78
33) ethyl tert-butyl ether	10.339	59	294277	54.78	ug/L	97
34) ethyl acetate	10.580	70	14349	48.81	ug/L #	81
35) 2,2-dichloropropane	10.601	77	132653	51.73	ug/L	97
36) cis-1,2-dichloroethene	10.575	96	98077	53.04	ug/L	96
37) methyl acrylate	10.654	85	18532	50.10	ug/L #	83
38) propionitrile	10.580	54	206880	541.01	ug/L	99
39) bromochloromethane	10.884	128	45120	51.39	ug/L	91
40) tetrahydrofuran	10.958	72	17470	49.78	ug/L	96
41) chloroform	10.947	85	100909	49.65	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93371.d
Acq On : 10 Apr 2019 4:49 pm
Operator : juntaep
Sample : cc4028-50 Inst : MS4D
Misc : MS33802,V4D4101,5,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 11 18:02:18 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) t-butyl formate	11.026	59	75889	43.07	ug/L		95
44) methacrylonitrile	10.806	67	49202	50.11	ug/L		95
45) 1,1,1-trichloroethane	11.251	97	127727	48.55	ug/L		99
46) cyclohexane	11.367	84	112542	46.59	ug/L		92
47) 1,1-dichloropropene	11.440	75	117766	52.09	ug/L		99
48) isobutyl alcohol	11.440	74	7478	508.29	ug/L		95
49) carbon tetrachloride	11.472	117	104354	45.91	ug/L		99
50) tert amyl alcohol	11.519	55	29539	237.78	ug/L		98
53) n-butyl alcohol	12.101	56	245558	2897.65	ug/L		99
54) 2,2,4-trimethylpentane	11.760	57	239488	64.68	ug/L		98
55) benzene	11.687	78	340369	56.59	ug/L		99
56) tert-amyl methyl ether	11.750	87	61045	53.39	ug/L		94
57) heptane	11.917	71	55460	63.57	ug/L		96
58) isopropyl acetate	11.608	87	24551	55.01	ug/L	#	83
59) 1,2-dichloroethane	11.660	62	119524	49.81	ug/L		96
60) trichloroethene	12.363	130	83876	52.41	ug/L		98
61) ethyl acrylate	12.352	55	148268	56.73	ug/L		97
62) 2-nitropropane	13.018	41	27498	52.61	ug/L		97
63) 2-chloroethyl vinyl ether	13.066	63	97662	87.56	ug/L		97
64) methyl methacrylate	12.604	100	27855	53.58	ug/L	#	90
65) 1,2-dichloropropane	12.594	63	94748	60.64	ug/L		99
66) dibromomethane	12.714	93	57751	51.77	ug/L		97
67) methylcyclohexane	12.620	83	120375	57.95	ug/L		98
68) bromodichloromethane	12.835	83	117663	54.06	ug/L		100
69) epichlorohydrin	13.155	57	54707	295.37	ug/L		96
70) cis-1,3-dichloropropene	13.270	75	146193	55.25	ug/L		99
71) 4-methyl-2-pentanone	13.364	58	194317	224.62	ug/L		97
72) 3-methyl-1-butanol	13.349	70	81535	1054.57	ug/L		94
75) toluene	13.632	92	195019	52.83	ug/L		100
76) trans-1,3-dichloropropene	13.768	75	127148	56.59	ug/L		99
77) ethyl methacrylate	13.789	69	124872	57.55	ug/L		95
78) 1,1,2-trichloroethane	13.962	83	69063	56.66	ug/L		99
79) tetrachloroethene	14.177	164	62004	49.07	ug/L		100
80) 1,3-dichloropropane	14.130	76	127227	53.51	ug/L		98
81) 2-hexanone	14.130	58	195797	230.27	ug/L		94
82) butyl acetate	14.209	56	75296	57.39	ug/L		95
83) dibromochloromethane	14.371	129	85161	52.45	ug/L		98
84) 1,2-dibromoethane	14.518	107	107677	57.60	ug/L		100
85) n-butyl ether	14.906	57	346370	55.46	ug/L		98
86) chlorobenzene	14.953	112	202463	50.32	ug/L		97
87) 1,1,1,2-tetrachloroethane	15.000	131	72474	51.56	ug/L		99
88) ethylbenzene	15.016	91	349909	52.56	ug/L		98
89) m,p-xylene	15.116	106	259051	104.39	ug/L		99
90) o-xylene	15.488	106	123936	52.44	ug/L		97
91) styrene	15.488	104	215354	55.96	ug/L		98
92) bromoform	15.698	173	59214	50.78	ug/L		98
93) butyl acrylate	15.315	55	191582	62.29	ug/L		99
94) isopropylbenzene	15.802	105	305421	50.39	ug/L		98
95) cis-1,4-dichloro-2-butene	15.818	88	34209	46.00	ug/L		95
98) bromobenzene	16.148	156	81690	50.47	ug/L		91
99) 1,1,2,2-tetrachloroethane	16.023	83	119069	53.02	ug/L		98
100) trans-1,4-dichloro-2-b...	16.065	53	25425	51.99	ug/L		95
101) 1,2,3-trichloropropane	16.096	110	28732	49.06	ug/L		98
102) n-propylbenzene	16.175	91	371545	53.04	ug/L		99
103) 2-chlorotoluene	16.300	126	73966	52.03	ug/L		94
104) 4-chlorotoluene	16.384	91	221435	51.81	ug/L		96
105) 1,3,5-trimethylbenzene	16.311	105	249190	52.92	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93371.d
Acq On : 10 Apr 2019 4:49 pm
Operator : juntaep
Sample : cc4028-50 Inst : MS4D
Misc : MS33802,V4D4101,5,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 11 18:02:18 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration

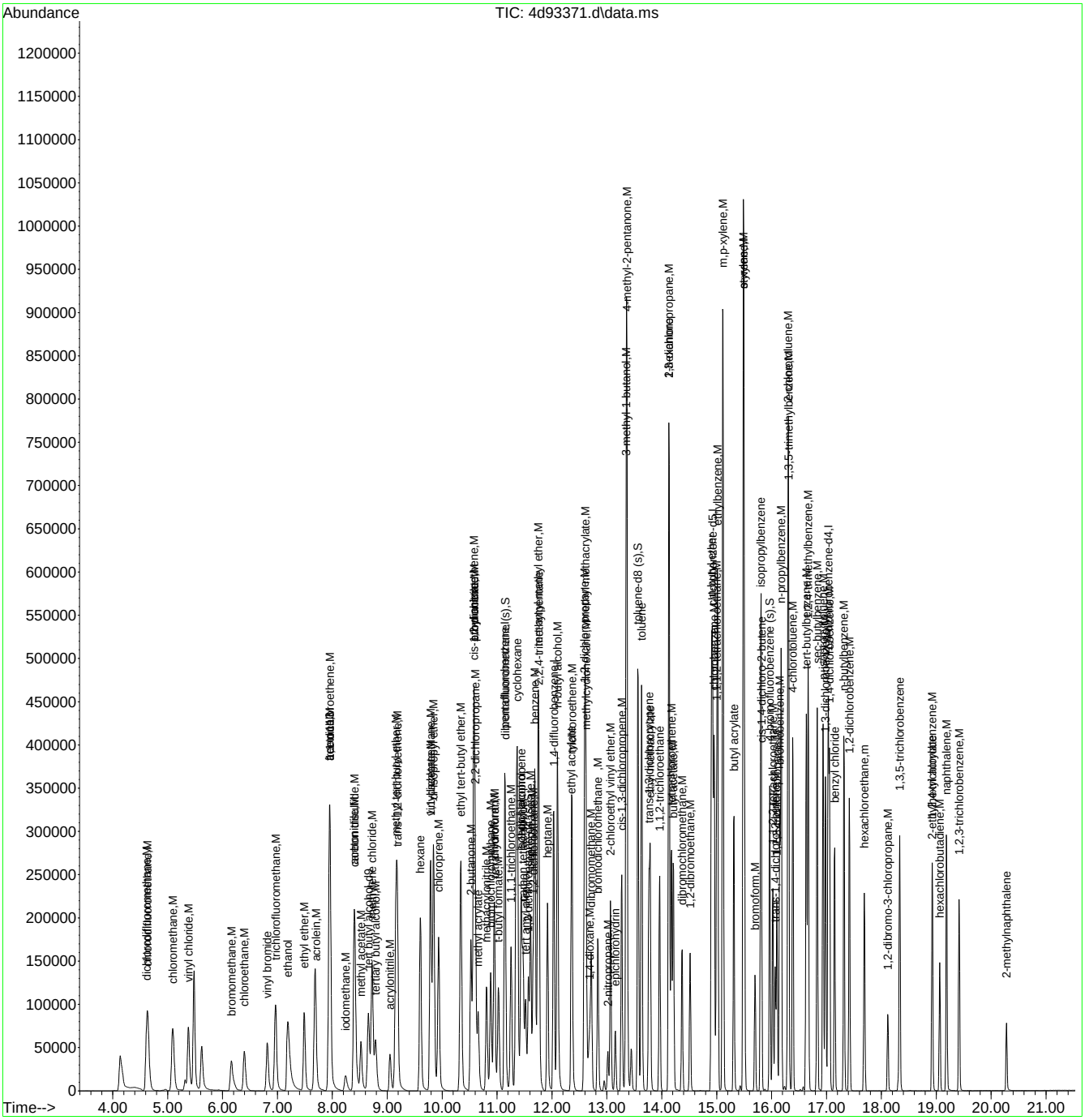
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106) tert-butylbenzene	16.631	134	43540	50.65	ug/L		90
107) 1,2,4-trimethylbenzene	16.668	105	246849	51.96	ug/L		100
108) sec-butylbenzene	16.830	105	294587	52.53	ug/L		99
109) 1,3-dichlorobenzene	16.982	146	135706	49.06	ug/L		99
110) p-isopropyltoluene	16.940	119	237797	52.47	ug/L		99
111) 1,4-dichlorobenzene	17.055	146	139446	49.00	ug/L		99
112) benzyl chloride	17.150	91	192662	52.64	ug/L		99
113) 1,2-dichlorobenzene	17.417	146	129538	49.60	ug/L		99
114) n-butylbenzene	17.318	92	122152	56.19	ug/L		98
115) 1,2-dibromo-3-chloropr...	18.115	75	21525	50.60	ug/L		90
116) 1,3,5-trichlorobenzene	18.335	180	88054	50.72	ug/L		100
117) 2-ethylhexyl acrylate	18.922	70	2812	3.89	ug/L	#	69
118) 1,2,4-trichlorobenzene	18.927	180	75301	47.84	ug/L		98
119) hexachlorobutadiene	19.064	225	29785	50.62	ug/L		100
120) naphthalene	19.189	128	221424	45.01	ug/L		100
121) 1,2,3-trichlorobenzene	19.415	180	66560	44.87	ug/L		99
122) hexachloroethane	17.690	201	36365	51.44	ug/L		98
123) 2-methylnaphthalene	20.280	142	37402	20.67	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\janellac\04-12-19\v4d4101\
Data File : 4d93371.d
Acq On : 10 Apr 2019 4:49 pm
Operator : juntaep
Sample : cc4028-50 Inst : MS4D
Misc : MS33802,V4D4101,5,,,,1
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D4028.M
Quant Results File: M4D4028.RES
Quant Time: Apr 11 18:02:18 2019
Quant Title : SW846 8260C/ EPA 624, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Fri Feb 01 10:17:00 2019
Response via : Initial Calibration



GCMS Volatile Run Log

Standard / Reagents	Lot #				Column	DB624(60mx0.25mmx1.4um)
Standards	ABK V018-2645-111.1	EC V018-2645-108.9	Acrolein V018-2645-85.4 8	Acetone 3rd Source V018-2645-55.3	Method	V8260C
Standard Concentration	100-10,000ppm	100ppm	100ppm	400 ppm	Init Calib Date	1/29/2019
Internal Surrogate	V018-2645-91					
Internal Surrogate Concentration	250/2500ppm					
Ext. Standards	ABK V018-2645-109.2	EC V018-2645-102.3	Acrolein V018-2645-98.1	Ext. PA V018-2645-8 2.2	Analysis Date	1/29/2019
Ext. Standard Concentration	100-10,000ppm	100ppm	100ppm	1000ppm	Sequence loaded by	Gaby Alvarez
					Data processed by	Bridget Kelly
					Batch ID	V4D4028
Calibration Prepared by	Robert Szot				Matrix	AQ
Initial Calibration Method	M4D4028				Approved By:	MEI
pH Paper Lot#	204518				Approved Date:	1/31/2019 11:43:52 AM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
4D	92100	IB		NA			5			1	ok	
4D	92101	IB		NA			5			2	ok	
4D	92102	BFB		NA			5			3	ok	2:06pm 01/29/2019
4D	92103	IC4028-0.2		NA		V8260 Initial Cal	5			4	ok	2uL A/B/K, EC, Acrolein/1000mL
4D	92104	IC4028-0.5		NA		V8260 Initial Cal	5			5	ok	5uL A/B/K, EC, Acrolein/1000mL
4D	92105	IC4028-1		NA		V8260 Initial Cal	5			6	ok	5uL A/B/K, EC, Acrolein/500mL
4D	92106	IC4028-2		NA		V8260 Initial Cal	5			7	ok	10uL A/B/K, EC, Acrolein/500mL
4D	92107	IC4028-4		NA		V8260 Initial Cal	5			8	ok	4uL A/B/K, EC, Acrolein/100mL
4D	92108	IC4028-8		NA		V8260 Initial Cal	5			9	ok	8uL A/B/K, EC, Acrolein/100mL
4D	92109	IC4028-20		NA		V8260 Initial Cal	5			10	ok	20uL A/B/K, EC, Acrolein/100mL
4D	92110	IC4028-50		NA		V8260 Initial Cal	5			11	ok	50uL A/B/K, EC, Acrolein/100mL

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
4D	92111	IC4028-100		NA		V8260 Initial Cal	5			12	ok	100uL A/B/K, EC, Acrolein/100mL
4D	92112	IC4028-200		NA		V8260 Initial Cal	5			13	ok	200uL A/B/K, EC, Acrolein/100mL
4D	92113	IB		NA			5			14	ok	
4D	92114	IB		NA			5			15	ok	
4D	92115	ICV4028-50		NA		V8260 Initial Cal	5			16	ok	50uL A/B/K, EC, Acrolein/100mL
4D	92116	ICV4028-50		NA		V8260 Initial Cal	5			17	ok	50uL A/B/K, EC, Acrolein/100mL

GCMS Volatile Run Log

Standard / Reagents	Lot #				Column	Rxi-624(60mx0.25mmx1.4um)
Standard	ABK: V018-2648-40.17	EC: V018-2648-58.8	Acrolein: V018-2648-54.1		Method	V8260C
Standard Concentration	100-10,000ppm	100ppm	100ppm		Init Calib Date	1/29/2019
Internal Surrogate	V018-2648-30					
Internal Surrogate Concentration	50/500ppm					
					Analysis Date	4/10/2019
					Sequence loaded by	Payal Rana
MS Spiked by	Payal Rana				Data processed by	janellec
					Batch ID	V4D4101
					Matrix	AQ
Initial Calibration Method	M4D4028				Approved By:	KANYAV
pH Paper Lot#	204518				Approved Date:	4/16/2019 2:19:59 AM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
4D	93371	BFB/CC4028-50		NA			5			1	ok/ok	4:49PM (# 10,65 high) 50uL ABK,EC,ACROLEIN/100mL DI H2O
4D	93372	BS		NA			5			2	ok	(# 10,18,65 high) 50uL ABK,EC,ACROLEIN/100mL DI H2O
4D	93373	IB		NA			5			3	ok	
4D	93374	MB		NA			5			4	ok	
4D	93375	JC86113-3	2	NA	MS33871	V8260BENZ	5		1	5	ok	
4D	93376	JC86113-4	1	NA	MS33871	V8260BENZ	5		1	6	ok	
4D	93377	JC86113-2	2	NA	MS33871	V8260BENZ	5		1	7	ok	
4D	93378	JC86113-1	1	NA	MS33871	V8260BENZ	5		1	8	ok	
4D	93379	JC86113-1DUP	2	NA	MS33871	V8260BENZ	5		1	9	ok	
4D	93380	JC86113-2MS	1	NA	MS33871	V8260BENZ	5		1	10	ok	20uL ABK,EC,ACROLEIN/40mL Sample
4D	93381	IB		NA			5			11	ok	

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
4D	93382	JC86038-5	1	NA	MS33852	V8260TCL20+	5		1	12	ok	
4D	93383	JC86038-6	1	NA	MS33852	V8260TCL20+	5		1	13	ok	
4D	93384	JC86048-8	4	NA	MS33865	V8260TCL20+	5		1	14	ok	
4D	93385	JC86048-9	4	NA	MS33865	V8260TCL20+	5		4	15	ok	
4D	93386	JC86048-10	5	NA	MS33865	V8260TCL20+	5		1	16	ok	
4D	93387	JC86038-1	1	NA	MS33852	V8260TCL20+	5		1	17	ok	
4D	93388	JC86038-2	1	NA	MS33852	V8260TCL20+	5		1	18	ok	
4D	93389	JC86038-3	1	NA	MS33852	V8260TCL20+	5		1	19	ok	
4D	93390	JC86038-4	1	NA	MS33852	V8260TCL20+	5		1	20	ok	
4D	93391	JC86089-1	12	NA	MS33875	V8260STD	5		1	21	ok	
4D	93392	JC86089-2	12	NA	MS33875	V8260STD	5		1	22	ok	3:13 AM (04/11/19)

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19680-MB1	M153377.D	1	04/12/19	CS	04/11/19	OP19680	EM6555

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC86089-1, JC86089-2

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	20	2.0	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
62-53-3	Aniline	ND	2.0	0.32	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
100-51-6	Benzyl Alcohol	ND	2.0	0.27	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	

Method Blank Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19680-MB1	M153377.D	1	04/12/19	CS	04/11/19	OP19680	EM6555

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC86089-1, JC86089-2

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
110-86-1	Pyridine	ND	2.0	0.39	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

Method Blank Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19680-MB1	M153377.D	1	04/12/19	CS	04/11/19	OP19680	EM6555

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC86089-1, JC86089-2

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	38%	10-110%
4165-62-2	Phenol-d5	26%	10-110%
118-79-6	2,4,6-Tribromophenol	85%	36-151%
4165-60-0	Nitrobenzene-d5	79%	34-128%
321-60-8	2-Fluorobiphenyl	82%	38-119%
1718-51-0	Terphenyl-d14	87%	26-129%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM te	4.71	4.4	ug/l	J
	Internal standard added for SIM te	6.59	5.2	ug/l	J
	Internal standard added for SIM te	8.85	5.1	ug/l	J
	Internal standard added for SIM te	12.86	6.2	ug/l	J
	Internal standard added for SIM te	18.17	5.7	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19680-BS1	M153378.D	1	04/12/19	CS	04/11/19	OP19680	EM6555
OP19680-BSD	M153379.D	1	04/12/19	CS	04/11/19	OP19680	EM6555

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC86089-1, JC86089-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	50	8.4	17	12.0	24	35	10-110/39
95-57-8	2-Chlorophenol	50	34.8	70	37.4	75	7	39-106/27
59-50-7	4-Chloro-3-methyl phenol	50	45.1	90	45.7	91	1	45-118/23
120-83-2	2,4-Dichlorophenol	50	41.5	83	43.9	88	6	43-115/26
105-67-9	2,4-Dimethylphenol	50	47.6	95	48.1	96	1	38-125/23
51-28-5	2,4-Dinitrophenol	100	55.5	56	67.8	68	20	35-137/22
534-52-1	4,6-Dinitro-o-cresol	50	28.8	58	33.6	67	15	45-134/23
95-48-7	2-Methylphenol	50	32.3	65	33.8	68	5	34-106/24
	3&4-Methylphenol	50	30.4	61	31.0	62	2	31-110/25
88-75-5	2-Nitrophenol	50	32.8	66	37.7	75	14	41-118/28
100-02-7	4-Nitrophenol	50	24.6	49	26.1	52	6	10-113/31
87-86-5	Pentachlorophenol	50	45.9	92	48.9	98	6	21-134/25
108-95-2	Phenol	50	18.4	37	19.0	38	3	10-110/27
95-95-4	2,4,5-Trichlorophenol	50	40.1	80	42.0	84	5	45-117/26
88-06-2	2,4,6-Trichlorophenol	50	40.9	82	42.4	85	4	47-125/35
83-32-9	Acenaphthene	50	40.7	81	42.3	85	4	40-114/22
208-96-8	Acenaphthylene	50	40.5	81	42.7	85	5	40-109/22
62-53-3	Aniline	50	21.0	42	20.0	40	5	13-91/37
120-12-7	Anthracene	50	41.8	84	43.7	87	4	50-113/20
92-87-5	Benzidine	100	13.5	14	12.6	13	7	10-110/71
56-55-3	Benzo(a)anthracene	50	42.8	86	45.4	91	6	55-110/22
50-32-8	Benzo(a)pyrene	50	42.2	84	44.7	89	6	52-112/24
205-99-2	Benzo(b)fluoranthene	50	42.6	85	44.6	89	5	53-114/22
191-24-2	Benzo(g,h,i)perylene	50	45.3	91	47.2	94	4	46-115/28
207-08-9	Benzo(k)fluoranthene	50	41.7	83	44.0	88	5	55-115/23
101-55-3	4-Bromophenyl phenyl ether	50	44.8	90	46.9	94	5	47-122/25
85-68-7	Butyl benzyl phthalate	50	40.8	82	43.9	88	7	50-124/22
100-51-6	Benzyl Alcohol	50	35.5	71	38.3	77	8	36-104/22
91-58-7	2-Chloronaphthalene	50	36.2	72	37.9	76	5	33-112/26
106-47-8	4-Chloroaniline	50	15.4	31	15.5	31	1	17-87/39
86-74-8	Carbazole	50	42.9	86	44.9	90	5	54-118/21
218-01-9	Chrysene	50	42.6	85	44.5	89	4	52-107/21
111-91-1	bis(2-Chloroethoxy)methane	50	41.3	83	44.0	88	6	38-116/24
111-44-4	bis(2-Chloroethyl)ether	50	39.0	78	42.3	85	8	38-118/23
108-60-1	2,2'-Oxybis(1-chloropropane)	50	42.6	85	45.7	91	7	29-108/23
7005-72-3	4-Chlorophenyl phenyl ether	50	40.2	80	42.4	85	5	40-122/21

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19680-BS1	M153378.D	1	04/12/19	CS	04/11/19	OP19680	EM6555
OP19680-BSD	M153379.D	1	04/12/19	CS	04/11/19	OP19680	EM6555

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC86089-1, JC86089-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	50	33.5	67	35.2	70	5	24-110/31
122-66-7	1,2-Diphenylhydrazine	50	38.9	78	41.4	83	6	40-131/21
541-73-1	1,3-Dichlorobenzene	50	32.0	64	33.4	67	4	20-110/33
106-46-7	1,4-Dichlorobenzene	50	33.8	68	35.5	71	5	21-110/32
121-14-2	2,4-Dinitrotoluene	50	35.8	72	40.0	80	11	54-129/21
606-20-2	2,6-Dinitrotoluene	50	32.6	65	38.2	76	16	53-131/21
91-94-1	3,3'-Dichlorobenzidine	100	41.9	42	43.0	43	3	28-91/44
53-70-3	Dibenzo(a,h)anthracene	50	41.9	84	44.3	89	6	51-117/25
132-64-9	Dibenzofuran	50	40.7	81	42.6	85	5	46-118/16
84-74-2	Di-n-butyl phthalate	50	43.9	88	46.4	93	6	54-124/23
117-84-0	Di-n-octyl phthalate	50	40.2	80	42.8	86	6	41-137/22
84-66-2	Diethyl phthalate	50	43.2	86	45.8	92	6	49-122/20
131-11-3	Dimethyl phthalate	50	41.3	83	44.3	89	7	51-118/20
117-81-7	bis(2-Ethylhexyl)phthalate	50	39.6	79	42.2	84	6	47-128/36
206-44-0	Fluoranthene	50	45.9	92	47.6	95	4	54-118/23
86-73-7	Fluorene	50	42.9	86	44.7	89	4	45-116/20
118-74-1	Hexachlorobenzene	50	41.4	83	44.1	88	6	45-124/23
87-68-3	Hexachlorobutadiene	50	36.3	73	37.4	75	3	10-120/35
77-47-4	Hexachlorocyclopentadiene	100	46.3	46	54.6	55	16	10-110/43
67-72-1	Hexachloroethane	50	29.9	60	31.5	63	5	11-110/38
193-39-5	Indeno(1,2,3-cd)pyrene	50	42.5	85	44.9	90	5	45-123/30
78-59-1	Isophorone	50	40.8	82	43.5	87	6	43-115/20
90-12-0	1-Methylnaphthalene	50	39.6	79	41.3	83	4	35-106/21
91-57-6	2-Methylnaphthalene	50	40.1	80	40.9	82	2	37-111/21
88-74-4	2-Nitroaniline	50	33.5	67	37.6	75	12	40-144/18
99-09-2	3-Nitroaniline	50	16.3	33	18.7	37	14	31-104/42
100-01-6	4-Nitroaniline	50	37.5	75	41.4	83	10	48-119/20
91-20-3	Naphthalene	50	39.6	79	40.9	82	3	29-110/23
98-95-3	Nitrobenzene	50	37.0	74	40.4	81	9	35-118/21
62-75-9	n-Nitrosodimethylamine	50	19.8	40	21.5	43	8	10-110/26
621-64-7	N-Nitroso-di-n-propylamine	50	34.2	68	36.1	72	5	38-116/22
86-30-6	N-Nitrosodiphenylamine	50	40.7	81	42.9	86	5	49-114/22
85-01-8	Phenanthrene	50	42.6	85	44.2	88	4	49-116/21
129-00-0	Pyrene	50	41.7	83	44.1	88	6	51-116/21
110-86-1	Pyridine	50	16.2	32	17.1	34	5	10-110/49
120-82-1	1,2,4-Trichlorobenzene	50	35.1	70	36.9	74	5	19-110/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19680-BS1	M153378.D	1	04/12/19	CS	04/11/19	OP19680	EM6555
OP19680-BSD	M153379.D	1	04/12/19	CS	04/11/19	OP19680	EM6555

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC86089-1, JC86089-2

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	48%	51%	10-110%
4165-62-2	Phenol-d5	33%	35%	10-110%
118-79-6	2,4,6-Tribromophenol	96%	105%	36-151%
4165-60-0	Nitrobenzene-d5	79%	87%	34-128%
321-60-8	2-Fluorobiphenyl	83%	85%	38-119%
1718-51-0	Terphenyl-d14	98%	104%	26-129%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	EM6551-DFTPP	**Injection Date:**	04/10/19
Lab File ID:	M153314.D	**Injection Time:**	03:48
Instrument ID:	GCMSM		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	81317	30.7		Pass
68	Less than 2.0% of mass 69	961	0.36	(1.00) [a]	Pass
69	Mass 69 relative abundance	96167	36.3		Pass
70	Less than 2.0% of mass 69	180	0.07	(0.19) [a]	Pass
127	40.0 - 60.0% of mass 198	133065	50.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	265066	100.0		Pass
199	5.0 - 9.0% of mass 198	19137	7.22		Pass
275	10.0 - 30.0% of mass 198	71877	27.1		Pass
365	1.0 - 100.0% of mass 198	8575	3.24		Pass
441	Present, but less than mass 443	28434	10.7	(76.5) [b]	Pass
442	40.0 - 100.0% of mass 198	189464	71.5		Pass
443	17.0 - 23.0% of mass 442	37187	14.0	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM6551-IC6551	M153315.D	04/10/19	04:17	00:29	Initial cal 100
EM6551-IC6551	M153316.D	04/10/19	04:45	00:57	Initial cal 80
EM6551-ICC6551	M153317.D	04/10/19	05:13	01:25	Initial cal 50
EM6551-IC6551	M153318.D	04/10/19	05:42	01:54	Initial cal 25
EM6551-IC6551	M153319.D	04/10/19	06:10	02:22	Initial cal 10
EM6551-IC6551	M153320.D	04/10/19	06:38	02:50	Initial cal 5
EM6551-IC6551	M153321.D	04/10/19	07:06	03:18	Initial cal 2
EM6551-IC6551	M153322.D	04/10/19	07:34	03:46	Initial cal 1
EM6551-ICV6551	M153323.D	04/10/19	08:02	04:14	Initial cal verification 50
EM6551-ICV6551	M153325.D	04/10/19	08:58	05:10	Initial cal verification 50
EM6551-ICV6551	M153326.D	04/10/19	09:27	05:39	Initial cal verification 50
EM6551-ICV6551	M153327.D	04/10/19	09:55	06:07	Initial cal verification 50
EM6551-ICV6551	M153328.D	04/10/19	10:23	06:35	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EM6552-DFTPP
Lab File ID: M153331.D
Instrument ID: GCMSM
Injection Date: 04/10/19
Injection Time: 12:16

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	72490	34.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	88744	42.2		Pass
70	Less than 2.0% of mass 69	351	0.17	(0.40) [a]	Pass
127	40.0 - 60.0% of mass 198	106933	50.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	210202	100.0		Pass
199	5.0 - 9.0% of mass 198	14767	7.03		Pass
275	10.0 - 30.0% of mass 198	59397	28.3		Pass
365	1.0 - 100.0% of mass 198	9514	4.53		Pass
441	Present, but less than mass 443	28112	13.4	(76.2) [b]	Pass
442	40.0 - 100.0% of mass 198	195221	92.9		Pass
443	17.0 - 23.0% of mass 442	36888	17.5	(18.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM6552-IC6552	M153332.D	04/10/19	12:27	00:11	Initial cal 100
EM6552-IC6552	M153333.D	04/10/19	13:34	01:18	Initial cal 80
EM6552-ICC6552	M153334.D	04/10/19	14:02	01:46	Initial cal 50
EM6552-IC6552	M153335.D	04/10/19	14:30	02:14	Initial cal 25
EM6552-IC6552	M153336.D	04/10/19	14:59	02:43	Initial cal 10
EM6552-IC6552	M153337.D	04/10/19	15:27	03:11	Initial cal 5
EM6552-IC6552	M153338.D	04/10/19	15:56	03:40	Initial cal 2
EM6552-IC6552	M153339.D	04/10/19	16:24	04:08	Initial cal 1
EM6552-ICV6552	M153340.D	04/10/19	16:52	04:36	Initial cal verification 50
EM6552-ICV6552	M153341.D	04/10/19	17:21	05:05	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	EM6553-DFTPP	**Injection Date:**	04/10/19
Lab File ID:	M153342A.D	**Injection Time:**	23:38
Instrument ID:	GCMSM		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	81241	36.5		Pass
68	Less than 2.0% of mass 69	1265	0.57	(1.27) [a]	Pass
69	Mass 69 relative abundance	99999	44.9		Pass
70	Less than 2.0% of mass 69	970	0.44	(0.97) [a]	Pass
127	40.0 - 60.0% of mass 198	118298	53.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	222869	100.0		Pass
199	5.0 - 9.0% of mass 198	15506	6.96		Pass
275	10.0 - 30.0% of mass 198	60336	27.1		Pass
365	1.0 - 100.0% of mass 198	9070	4.07		Pass
441	Present, but less than mass 443	29922	13.4	(76.5) [b]	Pass
442	40.0 - 100.0% of mass 198	207616	93.2		Pass
443	17.0 - 23.0% of mass 442	39122	17.6	(18.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM6553-IC6553	M153343.D	04/10/19	23:52	00:14	Initial cal 100
EM6553-IC6553	M153344.D	04/11/19	00:20	00:42	Initial cal 80
EM6553-ICC6553	M153345.D	04/11/19	00:48	01:10	Initial cal 50
EM6553-IC6553	M153346.D	04/11/19	01:16	01:38	Initial cal 25
EM6553-IC6553	M153347.D	04/11/19	01:44	02:06	Initial cal 10
EM6553-IC6553	M153348.D	04/11/19	02:12	02:34	Initial cal 5
EM6553-IC6553	M153349.D	04/11/19	02:40	03:02	Initial cal 2
EM6553-IC6553	M153350.D	04/11/19	03:08	03:30	Initial cal 1
EM6553-ICV6553	M153351.D	04/11/19	03:37	03:59	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	EM6554-DFTPP	**Injection Date:**	04/11/19
Lab File ID:	M153352.D	**Injection Time:**	09:01
Instrument ID:	GCMSM		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	55850	37.0		Pass
68	Less than 2.0% of mass 69	1195	0.79	(1.74) [a]	Pass
69	Mass 69 relative abundance	68843	45.6		Pass
70	Less than 2.0% of mass 69	405	0.27	(0.59) [a]	Pass
127	40.0 - 60.0% of mass 198	81144	53.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	150829	100.0		Pass
199	5.0 - 9.0% of mass 198	10041	6.66		Pass
275	10.0 - 30.0% of mass 198	38250	25.4		Pass
365	1.0 - 100.0% of mass 198	5931	3.93		Pass
441	Present, but less than mass 443	18100	12.0	(73.4) [b]	Pass
442	40.0 - 100.0% of mass 198	126888	84.1		Pass
443	17.0 - 23.0% of mass 442	24648	16.3	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM6554-ICV6551	M153353.D	04/11/19	09:12	00:11	Initial cal verification 50
EM6554-CC6551	M153354.D	04/11/19	09:40	00:39	Continuing cal 50
EM6554-CC6552	M153355.D	04/11/19	10:08	01:07	Continuing cal 50
OP19548-MB1	M153358.D	04/11/19	11:39	02:38	Method Blank
ZZZZZZ	M153359.D	04/11/19	12:10	03:09	(unrelated sample)
ZZZZZZ	M153361.D	04/11/19	13:07	04:06	(unrelated sample)
ZZZZZZ	M153362.D	04/11/19	13:35	04:34	(unrelated sample)
ZZZZZZ	M153363.D	04/11/19	14:03	05:02	(unrelated sample)
OP19671-MB1	M153364.D	04/11/19	14:50	05:49	Method Blank
ZZZZZZ	M153365.D	04/11/19	15:19	06:18	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	EM6555-DFTPP	**Injection Date:**	04/12/19
Lab File ID:	M153370.D	**Injection Time:**	03:22
Instrument ID:	GCMSM		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	55710	31.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	68583	39.0		Pass
70	Less than 2.0% of mass 69	388	0.22	(0.57) [a]	Pass
127	40.0 - 60.0% of mass 198	98837	56.2		Pass
197	Less than 1.0% of mass 198	471	0.27		Pass
198	Base peak, 100% relative abundance	175771	100.0		Pass
199	5.0 - 9.0% of mass 198	12077	6.87		Pass
275	10.0 - 30.0% of mass 198	50315	28.6		Pass
365	1.0 - 100.0% of mass 198	8239	4.69		Pass
441	Present, but less than mass 443	22774	13.0	(76.6) [b]	Pass
442	40.0 - 100.0% of mass 198	151117	86.0		Pass
443	17.0 - 23.0% of mass 442	29720	16.9	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM6555-CC6551	M153371.D	04/12/19	03:37	00:15	Continuing cal 25
EM6555-CC6552	M153372.D	04/12/19	04:05	00:43	Continuing cal 25
EM6555-CC6553	M153373.D	04/12/19	04:34	01:12	Continuing cal 25
OP19581-MB1	M153376.D	04/12/19	05:58	02:36	Method Blank
OP19680-MB1	M153377.D	04/12/19	06:45	03:23	Method Blank
OP19680-BS1	M153378.D	04/12/19	07:13	03:51	Blank Spike
OP19680-BSD	M153379.D	04/12/19	07:41	04:19	Blank Spike Duplicate
ZZZZZZ	M153380.D	04/12/19	08:09	04:47	(unrelated sample)
ZZZZZZ	M153381.D	04/12/19	08:38	05:16	(unrelated sample)
ZZZZZZ	M153382.D	04/12/19	09:06	05:44	(unrelated sample)
ZZZZZZ	M153383.D	04/12/19	09:34	06:12	(unrelated sample)
ZZZZZZ	M153384.D	04/12/19	10:02	06:40	(unrelated sample)
ZZZZZZ	M153385.D	04/12/19	10:39	07:17	(unrelated sample)
ZZZZZZ	M153386.D	04/12/19	11:36	08:14	(unrelated sample)
JC86089-1	M153387.D	04/12/19	12:04	08:42	SILO 3
JC86089-2	M153388.D	04/12/19	12:33	09:11	SILO 5
ZZZZZZ	M153389.D	04/12/19	13:01	09:39	(unrelated sample)
ZZZZZZ	M153390.D	04/12/19	13:30	10:08	(unrelated sample)
ZZZZZZ	M153391.D	04/12/19	13:59	10:37	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample:	EM6555-DFTPP	**Injection Date:**	04/12/19
Lab File ID:	M153370.D	**Injection Time:**	03:22
Instrument ID:	GCMSM		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	M153392.D	04/12/19	14:27	11:05	(unrelated sample)
ZZZZZZ	M153393.D	04/12/19	14:56	11:34	(unrelated sample)

Internal Standard Area Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Check Std:	EM6555-CC6551	**Injection Date:**	04/12/19
Lab File ID:	M153371.D	**Injection Time:**	03:37
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	224271	4.59	783931	5.70	475821	8.00	882844	10.58	808801	15.72	955440	18.32
Upper Limit [a]	448542	5.09	1567862	6.20	951642	8.50	1765688	11.08	1617602	16.22	1910880	18.82
Lower Limit [b]	112136	4.09	391966	5.20	237911	7.50	441422	10.08	404401	15.22	477720	17.82

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP19581-MB1	244390	4.59	879133	5.70	497988	7.99	880063	10.58	769386	15.71	874446	18.31
OP19680-MB1	257787	4.59	882405	5.70	507823	8.00	924069	10.58	851723	15.71	1010599	18.32
OP19680-BS1	196310	4.59	693690	5.70	429788	8.00	791916	10.59	679372	15.71	827097	18.31
OP19680-BSD	206734	4.59	731188	5.70	452202	8.00	830916	10.59	711062	15.72	856642	18.31
ZZZZZZ	264296	4.59	927652	5.70	534560	7.99	929973	10.58	791201	15.71	910960	18.31
ZZZZZZ	257577	4.59	932066	5.70	530144	8.00	919157	10.58	779390	15.71	853395	18.31
ZZZZZZ	264863	4.59	937063	5.70	534838	7.99	939707	10.58	789798	15.71	858225	18.31
ZZZZZZ	259485	4.59	930020	5.70	537848	8.00	936595	10.58	795632	15.71	852884	18.31
ZZZZZZ	265963	4.59	951539	5.70	537980	8.00	935430	10.58	795917	15.71	867314	18.31
ZZZZZZ	269898	4.60	926488	5.70	541432	8.00	983704	10.58	885958	15.71	1025825	18.32
ZZZZZZ	248700	4.59	848799	5.70	520705	8.00	940425	10.58	858943	15.71	1011699	18.32
JC86089-1	237131	4.59	839890	5.70	478609	8.00	852391	10.58	790088	15.71	916042	18.31
JC86089-2	248206	4.59	855094	5.70	428638	8.00	783073	10.58	771749	15.71	933566	18.31
ZZZZZZ	266201	4.59	874597	5.70	427741	8.00	800256	10.58	850998	15.71	1003988	18.32
ZZZZZZ	264653	4.59	894376	5.70	511538	8.00	922506	10.58	829414	15.71	958146	18.31
ZZZZZZ	245415	4.59	730980	5.71	436274	8.00	774665	10.59	768628	15.72	931049	18.32
ZZZZZZ	261968	4.59	923297	5.70	539905	8.00	970979	10.59	881345	15.71	1005305	18.31
ZZZZZZ	245958	4.60	755046	5.70	435203	8.00	768850	10.59	758726	15.72	917639	18.32

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JC86089-1	M153387.D	42	28	112	85	87	86
JC86089-2	M153388.D	39	27	103	84	92	79
OP19680-BS1	M153378.D	48	33	96	79	83	98
OP19680-BSD	M153379.D	51	35	105	87	85	104
OP19680-MB1	M153377.D	38	26	85	79	82	87

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-110%
S2 = Phenol-d5	10-110%
S3 = 2,4,6-Tribromophenol	36-151%
S4 = Nitrobenzene-d5	34-128%
S5 = 2-Fluorobiphenyl	38-119%
S6 = Terphenyl-d14	26-129%

Initial Calibration Summary

Job Number: JC86089 **Sample:** EM6551-ICC6551
Account: TCMAW Tantara Corporation **Lab FileID:** M153317.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Response Factor Report MSM

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Wed Apr 10 11:54:14 2019
Response via : Initial Calibration

Calibration Files
2 =m153321.D 5 =m153320.D 100 =m153315.D 50 =m153317.D
1 =m153322.D 10 =m153319.D 80 =m153316.D 25 =m153318.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.544	0.545	0.612	0.610	0.485	0.589	0.607	0.587	0.572	7.77
3) Pyridine	1.280	1.426	1.435	1.452	1.097	1.397	1.407	1.403	1.362	8.73
4) N-Nitrosodim	0.449	0.457	0.493	0.521	0.438	0.505	0.491	0.493	0.481	6.07
5) 2-Fluorophen	1.227	1.325	1.337	1.456	1.076	1.373	1.393	1.428	1.327	9.30
6) Indene	1.936	2.036	1.522	1.781	1.889	2.011	1.607	1.877	1.832	10.08
7) Cumene	2.876	3.159	2.531	2.991	2.777	3.224	2.722	3.085	2.921	8.13
8) Phenol-d5	1.444	1.564	1.533	1.659	1.295	1.692	1.584	1.671	1.555	8.57
9) Phenol	1.637	1.705	1.398	1.649	1.563	1.775	1.492	1.702	1.615	7.69
10) Aniline	1.779	1.802	1.217	1.428	1.689	1.753	1.300	1.536	1.563	14.58
11) bis(2-Chloro	1.115	1.168	0.985	1.054	1.096	1.148	1.008	1.108	1.085	5.97
12) 2-Chlorophen	1.403	1.500	1.310	1.437	1.356	1.523	1.349	1.460	1.417	5.36
13) Decane	0.889	0.890	0.643	0.759	0.882	0.870	0.685	0.819	0.805	12.18
14) 1,3-Dichloro	1.687	1.760	1.394	1.594	1.630	1.716	1.474	1.652	1.613	7.65
15) 1,4-Dichloro	1.569	1.553	1.316	1.485	1.444	1.557	1.374	1.505	1.475	6.22
16) Benzyl alcoh	0.636	0.763	0.758	0.797	0.651	0.781	0.765	0.775	0.741	8.30
17) 1,2-Dichloro	1.504	1.586	1.276	1.471	1.449	1.582	1.356	1.515	1.468	7.29
18) Acetophenone	1.541	1.675	1.224	1.415	1.599	1.617	1.291	1.500	1.483	10.83
19) 2-Methylphen	1.060	1.104	0.867	1.013	0.984	1.121	0.925	1.071	1.018	8.73
20) 2,2'-oxybis(	0.351	0.353	0.310	0.329	0.372	0.344	0.315	0.334	0.339	6.10
21) 3&4-Methylph	1.080	1.100	0.870	1.024	1.073	1.146	0.932	1.075	1.038	8.87
22) n-Nitroso-di	0.711	0.788	0.537	0.624	0.779	0.732	0.561	0.666	0.675	14.07
23) Hexachloroet	0.518	0.566	0.513	0.548	0.533	0.569	0.523	0.548	0.540	3.93
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.277	0.298	0.276	0.299	0.276	0.313	0.284	0.301	0.290	4.78
26) Nitrobenzene	0.261	0.300	0.252	0.281	0.254	0.304	0.265	0.290	0.276	7.49
27) Quinoline	0.731	0.779	0.734	0.774	0.705	0.803	0.741	0.782	0.756	4.37
28) Isophorone	0.555	0.588	0.494	0.564	0.541	0.608	0.526	0.584	0.557	6.67
29) 2-Nitropheno	0.127	0.173	0.196	0.212		0.200	0.202	0.210	0.188	15.90
30) 2,4-Dimethyl	0.314	0.249	0.272	0.290	0.301	0.282	0.282	0.290	0.285	6.76
31) Benzoic acid			0.225	0.225		0.167	0.231	0.201	0.210	12.66
32) bis(2-Chloro	0.367	0.373	0.319	0.348	0.351	0.386	0.328	0.356	0.353	6.34
33) 2,4-Dichloro	0.313	0.346	0.299	0.335	0.279	0.360	0.312	0.335	0.322	8.26
34) 2,6-Dichloro	0.298	0.311	0.265	0.297	0.274	0.322	0.280	0.305	0.294	6.60
35) 1,3,5-Trichl	0.375	0.415	0.299	0.354	0.402	0.410	0.323	0.379	0.370	11.31
36) 1,2,4-Trichl	0.360	0.399	0.310	0.354	0.366	0.389	0.328	0.371	0.360	8.19
37) 1,2,3-Trichl	0.349	0.366	0.283	0.319	0.321	0.368	0.296	0.341	0.330	9.35
38) Naphthalene	0.998	1.035	0.828	0.950	0.971	1.020	0.873	0.983	0.957	7.52
39) 4-Chloroanil	0.428	0.457	0.363	0.418	0.398	0.463	0.389	0.440	0.420	8.24
40) 2,3-Dichloro	0.404	0.437	0.369	0.410	0.424	0.446	0.382	0.423	0.412	6.46
41) Caprolactam	0.104	0.114	0.123	0.124	0.114	0.123	0.123	0.123	0.118	6.08
42) Hexachlorobu	0.193	0.195	0.161	0.181	0.172	0.197	0.168	0.188	0.182	7.45
43) 4-Chloro-3-m	0.247	0.292	0.277	0.303	0.236	0.304	0.285	0.299	0.280	9.17
44) 2-Methylnaph	0.581	0.646	0.517	0.589	0.572	0.647	0.544	0.617	0.589	7.87
45) 1-Methylnaph	0.771	0.821	0.662	0.751	0.797	0.826	0.693	0.782	0.763	7.68

Initial Calibration Summary

Job Number: JC86089 **Sample:** EM6551-ICC6551
Account: TCMAW Tantara Corporation **Lab FileID:** M153317.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

```
46) Dimethylnaph 0.710 0.744 0.589 0.663 0.678 0.744 0.613 0.701 0.680   8.35

47) I   Acenaphthene-d10      ----------------ISTD--------------------
48) Hexachlorocy 0.271 0.314 0.294 0.325 0.240 0.333 0.306 0.324 0.301  10.54
49) 2,4,6-Trichl 0.360 0.420 0.339 0.378 0.342 0.423 0.356 0.396 0.377   8.80
50) 2,4,5-Trichl 0.378 0.440 0.391 0.416 0.389 0.449 0.396 0.425 0.410   6.29
51) 2-Fluorobiph 1.504 1.545 1.188 1.330 1.489 1.512 1.250 1.393 1.401   9.52
52) 2-Chloronaph 1.233 1.303 0.951 1.077 1.283 1.257 1.001 1.140 1.156  11.64
53) Biphenyl     1.607 1.705 1.304 1.491 1.661 1.687 1.387 1.562 1.550   9.41
54) 2-Nitroanili 0.155 0.212 0.245 0.252       0.228 0.253 0.243 0.227  15.36
55) Dimethylphth 1.359 1.520 1.288 1.411 1.383 1.523 1.339 1.439 1.408   5.94
56) Acenaphthyle 1.923 2.069 1.620 1.826 1.821 2.072 1.711 1.918 1.870   8.52
57) 2,6-Dinitrot 0.152 0.209 0.284 0.296 0.130 0.252 0.291 0.279 0.237  27.67
         ----- Quadratic regression -----              Coefficient =  0.9997
              Response Ratio = -0.01059 + 0.31360 *A + -0.00968 *A^2

58) 3-Nitroanili       0.276 0.352 0.357       0.323 0.359 0.340 0.334   9.41
59) Acenaphthene 1.150 1.195 1.014 1.114 1.165 1.216 1.057 1.149 1.132   6.02
60) 2,4-Dinitrop 0.021 0.036       0.114       0.057 0.126 0.089 0.074  57.74
         ----- Quadratic regression -----              Coefficient =  0.9989
              Response Ratio = -0.01511 + 0.09543 *A + 0.00864 *A^2

61) 4-Nitropheno 0.091 0.116 0.153 0.153       0.133 0.155 0.148 0.136  17.79
62) Dibenzofuran 1.710 1.817 1.401 1.591 1.665 1.799 1.471 1.679 1.642   8.97
63) 2,4-Dinitrot 0.135 0.234 0.333 0.352 0.126 0.307 0.339 0.337 0.270  34.70
         ----- Quadratic regression -----              Coefficient =  0.9998
              Response Ratio = -0.01333 + 0.37706 *A + -0.01559 *A^2

64) 2,3,4,6-Tetr 0.277 0.358 0.347 0.370 0.243 0.373 0.358 0.373 0.337  14.64
65) Diethylphtha 1.323 1.478 1.252 1.387 1.281 1.510 1.304 1.423 1.370   6.92
66) Fluorene     1.419 1.490 1.214 1.350 1.334 1.515 1.260 1.421 1.375   7.69
67) 4-Chlorophen 0.658 0.706 0.538 0.601 0.692 0.684 0.560 0.626 0.633   9.90
68) 4-Nitroanili 0.204 0.289 0.316 0.323       0.317 0.322 0.307 0.297  14.28

69) I   Phenanthrene-d10      ----------------ISTD--------------------
70) 4,6-Dinitro-       0.038 0.104 0.096       0.054 0.102 0.081 0.079  34.79
         ----- Quadratic regression -----              Coefficient =  0.9997
              Response Ratio = -0.00993 + 0.09790 *A + 0.00435 *A^2

71) n-Nitrosodip 0.566 0.624 0.494 0.549 0.555 0.617 0.515 0.582 0.563   8.05
72) 1,2-Diphenyl 0.604 0.651 0.502 0.554 0.593 0.623 0.523 0.585 0.579   8.67
73) 2,4,6-Tribro 0.118 0.134 0.129 0.139 0.103 0.142 0.133 0.142 0.130  10.29
74) 4-Bromopheny 0.239 0.261 0.214 0.237 0.225 0.257 0.223 0.248 0.238   6.95
75) Hexachlorobe 0.300 0.327 0.242 0.269 0.292 0.308 0.252 0.287 0.285  10.08
76) Pentachlorop 0.115 0.161 0.163 0.176       0.185 0.167 0.180 0.164  14.16
77) Phenanthrene 1.067 1.085 0.826 0.932 1.046 1.069 0.872 0.995 0.986  10.02
78) Anthracene   1.104 1.172 0.912 1.019 1.044 1.162 0.953 1.076 1.055   8.81
79) Carbazole    1.075 1.210 0.943 1.063 1.009 1.209 0.990 1.136 1.079   9.17
80) Di-n-butylph 1.207 1.433 1.180 1.345 1.088 1.473 1.251 1.422 1.300  10.69
81) Fluoranthene 1.219 1.339 1.061 1.214 1.139 1.364 1.121 1.286 1.218   8.84
82) Octadecane   0.288 0.301 0.242 0.273 0.275 0.291 0.253 0.283 0.276   7.16

83) I   Chrysene-d12          ----------------ISTD--------------------
84) Pyrene       1.429 1.587 1.459 1.540 1.415 1.607 1.469 1.573 1.510   5.00
85) Terphenyl-d1 0.938 1.085 1.055 1.100 0.945 1.104 1.063 1.098 1.048   6.52
86) Butylbenzylp 0.544 0.699 0.757 0.789       0.756 0.770 0.775 0.727  11.78
87) Benzo[a]anth 1.229 1.381 1.376 1.445 1.240 1.424 1.402 1.436 1.367   6.23
88) 3,3'-Dichlor 0.365 0.466 0.519 0.528       0.496 0.525 0.508 0.487  11.84
89) Chrysene     1.114 1.239 1.185 1.225 1.105 1.233 1.182 1.218 1.188   4.42
90) bis(2-Ethylh 0.648 0.871 0.986 1.021       0.955 1.001 0.997 0.926  14.27
```

Initial Calibration Summary

Job Number: JC86089 **Sample:** EM6551-ICC6551
Account: TCMAW Tantara Corporation **Lab FileID:** M153317.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

```
 91) I   Perylene-d12          ----------------ISTD--------------------
 92) Di-n-octylph 0.875 1.286 1.361 1.474       1.441 1.417 1.495 1.336  16.12
 93) Benzo[b]fluo 1.176 1.302 1.153 1.237 1.044 1.343 1.172 1.299 1.216   8.11
 94) Benzo[k]fluo 1.104 1.232 0.938 1.062 1.095 1.197 1.025 1.115 1.096   8.46
 95) Benzo[a]pyre 0.983 1.140 1.020 1.118 0.867 1.184 1.069 1.163 1.068  10.01
 96) Indeno[1,2,3 0.919 1.115 1.058 1.150 0.800 1.179 1.110 1.185 1.065  12.82
 97) Dibenz(a,h)a 0.881 1.090 1.010 1.127 0.744 1.149 1.069 1.162 1.029  14.24
 98) Dibenz[a,h]a 0.984 1.174 1.039 1.142 0.867 1.210 1.092 1.161 1.084  10.61
 99) 7,12-Dimethy 0.512 0.407 0.483 0.509 0.505 0.476 0.497 0.515 0.488   7.29
100) Benzo[g,h,i] 0.971 1.141 1.025 1.140 0.852 1.197 1.081 1.179 1.073  11.01

 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MM6551.M          Wed Apr 10 12:05:47 2019
```

8.6.1

8

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EM6551-ICV6551
Lab FileID: M153323.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM6551\m153323.D Vial: 10
Acq On : 10 Apr 2019 8:02 am Operator: chriss2
Sample : icv6551-50 Inst : MSM
Misc : op17006,em6551,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Wed Apr 10 11:54:14 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	0.00	4.61
4	t	N-Nitrosodimethylamine	0.481	0.419	12.9	76	0.01	2.44
11	t	bis(2-Chloroethyl)ether	1.085	1.154	-6.4	104	0.00	4.41
14	t	1,3-Dichlorobenzene	1.613	1.563	3.1	93	0.00	4.57
15	t	1,4-Dichlorobenzene	1.475	1.409	4.5	90	0.00	4.63
17	t	1,2-Dichlorobenzene	1.468	1.402	4.5	91	0.00	4.74
20	t	2,2'-oxybis(1-Chloropropa	0.339	0.389	-14.7	112	0.00	4.82
22	t	n-Nitroso-di-n-propylamin	0.675	0.718	-6.4	109	0.00	4.93
23	t	Hexachloroethane	0.540	0.497	8.0	86	0.00	5.02
24	I	Naphthalene-d8	1.000	1.000	0.0	92	0.00	5.73
26	t	Nitrobenzene	0.276	0.256	7.2	84	0.00	5.07
28	t	Isophorone	0.557	0.528	5.2	86	0.00	5.28
32	t	bis(2-Chloroethoxy)methan	0.353	0.362	-2.5	96	0.00	5.48
36	t	1,2,4-Trichlorobenzene	0.360	0.344	4.4	89	0.00	5.67
38	t	Naphthalene	0.957	0.922	3.7	89	0.00	5.75
42	t	Hexachlorobutadiene	0.182	0.180	1.1	91	0.00	5.89
47	I	Acenaphthene-d10	1.000	1.000	0.0	92	0.00	8.03
48	t	Hexachlorocyclopentadiene	0.301	0.286	5.0	73	0.00	6.76
52	t	2-Chloronaphthalene	1.156	1.157	-0.1	99	0.00	7.18
55	t	Dimethylphthalate	1.408	1.324	6.0	87	0.00	7.65
56	t	Acenaphthylene	1.870	1.667	10.9	84	0.00	7.80
		----------	True	Calc.	% Drift	----------		
57	t	2,6-Dinitrotoluene	50.000	37.085	25.8	68	0.00	7.72
		----------	AvgRF	CCRF	% Dev	----------		
59	t	Acenaphthene	1.132	1.000	11.7	83	0.00	8.08
		----------	True	Calc.	% Drift	----------		
63	t	2,4-Dinitrotoluene	50.000	35.759	28.5	65	0.00	8.36
		----------	AvgRF	CCRF	% Dev	----------		
65	t	Diethylphthalate	1.370	1.280	6.6	85	0.00	8.83

Initial Calibration Verification

Job Number: JC86089 **Sample:** EM6551-ICV6551
Account: TCMAW Tantara Corporation **Lab FileID:** M153323.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

66	t	Fluorene	1.375	1.246	9.4	85	0.00	8.94
67	t	4-Chlorophenyl-phenylethe	0.633	0.555	12.3	85	0.00	8.98
69	I	Phenanthrene-d10	1.000	1.000	0.0	90	0.00	10.62
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.563	0.479	14.9	79	0.00	9.19
72	t	1,2-Diphenylhydrazine	0.579	0.516	10.9	84	0.00	9.25
74	t	4-Bromophenyl-phenylether	0.238	0.226	5.0	86	0.00	9.84
75	t	Hexachlorobenzene	0.285	0.246	13.7	83	0.00	9.93
77	t	Phenanthrene	0.986	0.935	5.2	91	0.00	10.66
78	t	Anthracene	1.055	0.950	10.0	84	0.00	10.76
80	t	Di-n-butylphthalate	1.300	1.208	7.1	81	0.00	11.92
81	t	Fluoranthene	1.218	1.110	8.9	83	0.00	12.94
83	I	Chrysene-d12	1.000	1.000	0.0	86	0.00	15.75
84	t	Pyrene	1.510	1.421	5.9	79	0.00	13.35
86	t	Butylbenzylphthalate	0.727	0.720	1.0	78	0.00	14.84
87	t	Benzo[a]anthracene	1.367	1.314	3.9	78	0.00	15.73
89	t	Chrysene	1.188	1.112	6.4	78	0.00	15.80
90	t	bis(2-Ethylhexyl)phthalat	0.926	0.900	2.8	76	0.00	16.07
91	I	Perylene-d12	1.000	1.000	0.0	83	0.00	18.35
92	t	Di-n-octylphthalate	1.336	1.314	1.6	74	0.00	17.29
93	t	Benzo[b]fluoranthene	1.216	1.109	8.8	75	0.00	17.72
94	t	Benzo[k]fluoranthene	1.096	1.023	6.7	80	-0.01	17.76
95	t	Benzo[a]pyrene	1.068	1.061	0.7	79	0.00	18.25
96	t	Indeno[1,2,3-cd]pyrene	1.065	1.122	-5.4	81	0.00	20.02
98	t	Dibenz[a,h]anthracene	1.084	1.019	6.0	74	-0.01	20.07
100	t	Benzo[g,h,i]perylene	1.073	1.105	-3.0	81	0.00	20.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m153317.D MM6551.M Wed Apr 10 12:06:19 2019

8.6.2

8

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EM6551-ICV6551
Lab FileID: M153325.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM6551\m153325.D Vial: 12
Acq On : 10 Apr 2019 8:58 am Operator: chriss2
Sample : icv6551-50 Inst : MSM
Misc : op17006,em6551,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Wed Apr 10 11:54:14 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	0.00	4.61
3	t	Pyridine	1.362	1.199	12.0	77	0.07	2.55
10	t	Aniline	1.563	1.838	-17.6	120	0.00	4.37
16	t	Benzyl alcohol	0.741	0.804	-8.5	94	0.00	4.72
24	I	Naphthalene-d8	1.000	1.000	0.0	100	0.00	5.73
39	t	4-Chloroaniline	0.420	0.364	13.3	87	0.00	5.80
44	t	2-Methylnaphthalene	0.589	0.511	13.2	86	0.00	6.54
47	I	Acenaphthene-d10	1.000	1.000	0.0	88	0.00	8.03
54	t	2-Nitroaniline	0.227	0.230	-1.3	81	0.00	7.34
58	t	3-Nitroaniline	0.334	0.292	12.6	72	0.00	7.97
62	t	Dibenzofuran	1.642	1.650	-0.5	92	0.00	8.36
68	t	4-Nitroaniline	0.297	0.296	0.3	81	-0.02	8.99
69	I	Phenanthrene-d10	1.000	1.000	0.0	88	0.00	10.61
79	t	Carbazole	1.079	1.057	2.0	88	0.00	11.09

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m153317.D MM6551.M Wed Apr 10 12:06:23 2019

8.6.3

8

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Sample: EM6551-ICV6551
Lab FileID: M153326.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM6551\m153326.D Vial: 13
Acq On : 10 Apr 2019 9:27 am Operator: chriss2
Sample : icv6551-50 Inst : MSM
Misc : op17006,em6551,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Wed Apr 10 11:54:14 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	94	0.00	4.61
9	t	Phenol	1.615	1.598	1.1	92	0.00	4.35
12	t	2-Chlorophenol	1.417	1.445	-2.0	95	0.00	4.46
19	t	2-Methylphenol	1.018	1.110	-9.0	103	0.00	4.80
21	t	3&4-Methylphenol	1.038	1.135	-9.3	105	0.00	4.93
24	I	Naphthalene-d8	1.000	1.000	0.0	85	0.00	5.72
29	t	2-Nitrophenol	0.188	0.197	-4.8	79	0.00	5.35
30	t	2,4-Dimethylphenol	0.285	0.322	-13.0	94	0.00	5.39
31	t	Benzoic acid	0.210	0.189	10.0	71	-0.01	5.50
33	t	2,4-Dichlorophenol	0.322	0.328	-1.9	83	0.00	5.58
34	t	2,6-Dichlorophenol	0.294	0.330	-12.2	94	0.00	5.81
43	t	4-Chloro-3-methylphenol	0.280	0.300	-7.1	84	-0.01	6.35
47	I	Acenaphthene-d10	1.000	1.000	0.0	87	0.00	8.02
49	t	2,4,6-Trichlorophenol	0.377	0.419	-11.1	97	0.00	6.91
50	t	2,4,5-Trichlorophenol	0.410	0.414	-1.0	87	-0.01	6.96
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	35.311	29.4	54	0.00	8.14
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.136	0.135	0.7	77	-0.01	8.28
		----------	AvgRF	CCRF	% Dev	----------		
64	t	2,3,4,6-Tetrachlorophenol	0.337	0.333	1.2	79	0.00	8.58
69	I	Phenanthrene-d10	1.000	1.000	0.0	79	0.00	10.61
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	40.492	19.0	62	0.00	9.05
76	t	Pentachlorophenol	0.164	0.206	-25.6	84	0.00	10.30

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m153317.D MM6551.M Wed Apr 10 12:06:25 2019

Initial Calibration Verification

Job Number: JC86089 **Sample:** EM6551-ICV6551
Account: TCMAW Tantara Corporation **Lab FileID:** M153327.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM6551\m153327.D Vial: 14
Acq On : 10 Apr 2019 9:55 am Operator: chriss2
Sample : icv6551-50 Inst : MSM
Misc : op17006,em6551,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Wed Apr 10 11:54:14 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	4.61
5	S	2-Fluorophenol	1.327	1.221	8.0	85	0.00	3.63
8	S	Phenol-d5	1.555	1.373	11.7	84	0.00	4.34
24	I	Naphthalene-d8	1.000	1.000	0.0	98	0.00	5.72
25	S	Nitrobenzene-d5	0.290	0.273	5.9	89	0.00	5.05
47	I	Acenaphthene-d10	1.000	1.000	0.0	92	0.00	8.03
51	S	2-Fluorobiphenyl	1.401	1.314	6.2	91	0.00	7.03
69	I	Phenanthrene-d10	1.000	1.000	0.0	86	0.00	10.61
73	S	2,4,6-Tribromophenol	0.130	0.127	2.3	79	0.00	9.36
83	I	Chrysene-d12	1.000	1.000	0.0	89	-0.01	15.75
85	S	Terphenyl-d14	1.048	1.003	4.3	82	0.00	13.78
91	I	Perylene-d12	1.000	1.000	0.0	80	0.00	18.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m153317.D MM6551.M Wed Apr 10 12:06:27 2019

8.6.5

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EM6551-ICV6551
Lab FileID: M153328.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM6551\m153328.D Vial: 15
Acq On : 10 Apr 2019 10:23 am Operator: chriss2
Sample : icv6551-50 Inst : MSM
Misc : op17006,em6551,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Wed Apr 10 11:54:14 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	141	-0.01	15.75
88 t	3,3'-Dichlorobenzidine	0.487	0.436	10.5	117	0.00	15.77

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m153317.D MM6551.M Wed Apr 10 12:06:29 2019

8.9.8

Initial Calibration Summary

Job Number: JC86089 **Sample:** EM6552-ICC6552
Account: TCMAW Tantara Corporation **Lab FileID:** M153334.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Response Factor Report MSM

Method : C:\MSDCHEM\1\METHODS\MM6552.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Wed Apr 10 16:55:05 2019
Response via : Initial Calibration

Calibration Files
2 =m153338.D 5 =m153337.D 100 =m153332.D 50 =m153334.D
1 =m153339.D 10 =m153336.D 80 =m153333.D 25 =m153335.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
101) I 1,4-Dichlorobenzene-d	ISTD									
102) Benzaldehyde	1.195	1.220	0.968	1.116	1.326	1.220	1.062	1.186	1.162	9.48
103) I Acenaphthene-d10a	ISTD									
104) 1,2,4,5-Tetr	0.606	0.607	0.472	0.535	0.681	0.592	0.496	0.576	0.571	11.79
105) Atrazine	0.151	0.176	0.177	0.190	0.171	0.185	0.176	0.199	0.178	8.00
108) Chrysene-d12b	ISTD									
109) 1-chloroocta	0.239	0.290	0.250	0.287	0.250	0.320	0.267	0.320	0.278	11.37
110) I Phenanthrene-d10a	ISTD									
111) o-terphenyl	0.557	0.594	0.507	0.568	0.655	0.622	0.529	0.603	0.580	8.45
112) Pentachloron			0.026	0.044	0.045		0.034	0.045	0.046	0.040# 20.60
----- Quadratic regression ----- Coefficient = 0.9998										
Response Ratio = -0.00338 + 0.05114 *A + -0.00226 *A^2										
113) I Naphthalene-d8a	ISTD									
114) Hydroquinone			0.325	0.319		0.223	0.326	0.319	0.302	14.65

(#) = Out of Range ### Number of calibration levels exceeded format ###

MM6551.M Wed Apr 10 17:27:35 2019

8.6.7

8

Initial Calibration Verification

Job Number: JC86089 **Sample:** EM6552-ICV6552
Account: TCMAW Tantara Corporation **Lab FileID:** M153340.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM6552\m153340.D Vial: 24
Acq On : 10 Apr 2019 4:52 pm Operator: chriss2
Sample : icv6552-50 Inst : MSM
Misc : op17006,em6552,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Wed Apr 10 16:55:05 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
101 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	68	0.00	4.61
102 t	Benzaldehyde	1.162	1.132	2.6	69	0.00	4.28
103 I	Acenaphthene-d10a	1.000	1.000	0.0	68	0.00	8.03
104 I	1,2,4,5-Tetrachlorobenzen	0.571	0.537	6.0	68	0.00	6.76
105 t	Atrazine	0.178	0.184	-3.4	65	0.00	10.23
		True	Calc.	% Drift			
112	Pentachloronitrobenzene	50.000	45.239	9.5	61	0.00	10.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m153334a.D MM6551.M Wed Apr 10 17:27:51 2019

8.6.8

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EM6552-ICV6552
Lab FileID: M153341.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM6552\m153341.D Vial: 25
Acq On : 10 Apr 2019 5:21 pm Operator: chriss2
Sample : icv6552-50 Inst : MSM
Misc : op17006,em6552,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Wed Apr 10 16:55:05 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
	----------	AvgRF	CCRF	% Dev	----------		
113 I	Naphthalene-d8a	1.000	1.000	0.0	79	0.00	5.72
114	Hydroquinone	0.302	0.307	-1.7	76	-0.01	6.17

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m153334a.D MM6551.M Wed Apr 10 17:45:15 2019

8.6.9

Initial Calibration Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EM6553-ICC6553
Lab FileID: M153345.D

Response Factor Report MSM

Method : C:\MSDCHEM\1\METHODS\MM6553.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

Calibration Files
2 =m153349.D 5 =m153348.D 100 =m153343.D 50 =m153345.D
1 =m153350.D 10 =m153347.D 80 =m153344.D 25 =m153346.D

Compound	2	5	100	50	1	10	80	25	Avg %RSD
106) I Chrysene-d12a	ISTD								
107) Benzidine	0.919	0.898			0.585	0.928	0.819	0.830	17.29

(#) = Out of Range ### Number of calibration levels exceeded format ###

MM6551.M Thu Apr 11 08:19:58 2019

8.6.10

8

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EM6553-ICV6553
Lab FileID: M153351.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM6552\m153351.D Vial: 34
Acq On : 11 Apr 2019 3:37 am Operator: chriss2
Sample : icv6553-50 Inst : MSM
Misc : op17006,em6553,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Thu Apr 11 08:18:08 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
106	I	Chrysene-d12a	1.000	1.000	0.0	134	0.00	15.75
107	t	Benzidine	0.830	0.722	13.0	107	0.01	13.28

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m153345a.D MM6551.M Thu Apr 11 08:20:17 2019

8.6.11

8

Initial Calibration Verification

Job Number: JC86089 **Sample:** EM6554-ICV6551
Account: TCMAW Tantara Corporation **Lab FileID:** M153353.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM6554\m153353.D Vial: 2
Acq On : 11 Apr 2019 9:12 am Operator: angelar
Sample : icv6551-50 Inst : MSM
Misc : op17006,em6554,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Thu Apr 11 08:18:08 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	67	0.00	4.60
2	t	1,4-Dioxane	0.572	0.626	-9.4	69	0.00	2.15
6	t	Indene	1.832	2.264	-23.6	85	-0.01	4.80
7	t	Cumene	2.921	3.138	-7.4	71	0.00	4.01
13	t	Decane	0.805	0.920	-14.3	81	0.00	4.49
18	t	Acetophenone	1.483	1.728	-16.5	82	-0.02	4.91
24	I	Naphthalene-d8	1.000	1.000	0.0	68	-0.02	5.71
27	t	Quinoline	0.756	0.671	11.2	59	-0.03	6.09
40	t	2,3-Dichloroaniline	0.412	0.308	25.2	51	-0.01	6.90
41	t	Caprolactam	0.118	0.109	7.6	60	-0.05	6.15
45	t	1-Methylnaphthalene	0.763	0.653	14.4	59	-0.02	6.65
46	t	Dimethylnaphthalene	0.680	0.559	17.8	57	-0.02	7.38
47	I	Acenaphthene-d10	1.000	1.000	0.0	62	-0.02	8.01
53	t	Biphenyl	1.550	1.450	6.5	60	-0.02	7.16
69	I	Phenanthrene-d10	1.000	1.000	0.0	56	-0.02	10.60
82	t	Octadecane	0.276	0.381	-38.0#	78	-0.01	10.63
83	I	Chrysene-d12	1.000	1.000	0.0	61	-0.03	15.72
91	I	Perylene-d12	1.000	1.000	0.0	53	-0.02	18.33
99	t	7,12-Dimethylbenz(a)anthr	0.488	0.465	4.7	48#	-0.03	17.71

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m153345a.D MM6551.M Thu Apr 11 12:29:49 2019

Continuing Calibration Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EM6555-CC6551
Lab FileID: M153371.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM6555\m153371.D Vial: 2
Acq On : 12 Apr 2019 3:37 am Operator: chriss2
Sample : cc6551-25 Inst : MSM
Misc : op17006,em6555,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Thu Apr 11 08:18:08 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	67	-0.02	4.59
2	t	1,4-Dioxane	0.572	0.549	4.0	63	-0.02	2.13
3	t	Pyridine	1.362	1.280	6.0	61	-0.02	2.45
4	t	N-Nitrosodimethylamine	0.481	0.432	10.2	59	-0.02	2.41
5	S	2-Fluorophenol	1.327	1.389	-4.7	65	-0.02	3.60
6	t	Indene	1.832	1.925	-5.1	69	-0.02	4.79
7	t	Cumene	2.921	3.326	-13.9	72	-0.02	4.00
8	S	Phenol-d5	1.555	1.604	-3.2	64	-0.02	4.32
9	t	Phenol	1.615	1.683	-4.2	66	-0.02	4.33
10	t	Aniline	1.563	1.856	-18.7	81	-0.02	4.35
11	t	bis(2-Chloroethyl)ether	1.085	1.087	-0.2	66	-0.02	4.39
12	t	2-Chlorophenol	1.417	1.405	0.8	65	-0.02	4.44
13	t	Decane	0.805	0.652	19.0	53	-0.01	4.48
14	t	1,3-Dichlorobenzene	1.613	1.609	0.2	65	-0.02	4.55
15	t	1,4-Dichlorobenzene	1.475	1.496	-1.4	67	-0.02	4.61
16	t	Benzyl alcohol	0.741	0.759	-2.4	66	-0.02	4.70
17	t	1,2-Dichlorobenzene	1.468	1.460	0.5	65	-0.02	4.72
18	t	Acetophenone	1.483	1.581	-6.6	71	-0.02	4.91
19	t	2-Methylphenol	1.018	1.088	-6.9	68	-0.02	4.79
20	t	2,2'-oxybis(1-Chloropropa	0.339	0.336	0.9	67	-0.01	4.81
21	t	3&4-Methylphenol	1.038	1.080	-4.0	67	-0.02	4.91
22	t	n-Nitroso-di-n-propylamin	0.675	0.623	7.7	63	-0.02	4.91
23	t	Hexachloroethane	0.540	0.516	4.4	63	-0.02	5.00
24	I	Naphthalene-d8	1.000	1.000	0.0	66	-0.02	5.70
25	S	Nitrobenzene-d5	0.290	0.274	5.5	60	-0.02	5.03
26	t	Nitrobenzene	0.276	0.278	-0.7	63	-0.02	5.05
27	t	Quinoline	0.756	0.781	-3.3	66	-0.03	6.08
28	t	Isophorone	0.557	0.589	-5.7	66	-0.02	5.26
29	t	2-Nitrophenol	0.188	0.147	21.8#	46#	-0.02	5.33
30	t	2,4-Dimethylphenol	0.285	0.354	-24.2#	80	-0.02	5.37
31	t	Benzoic acid	0.210	0.115	45.2#	38#	-0.05	5.46
32	t	bis(2-Chloroethoxy)methan	0.353	0.365	-3.4	68	-0.02	5.46
33	t	2,4-Dichlorophenol	0.322	0.336	-4.3	66	-0.02	5.56
34	t	2,6-Dichlorophenol	0.294	0.306	-4.1	66	-0.02	5.79
35	t	1,3,5-Trichlorobenzene	0.370	0.390	-5.4	68	-0.02	5.34
36	t	1,2,4-Trichlorobenzene	0.360	0.376	-4.4	67	-0.02	5.65
37	t	1,2,3-Trichlorobenzene	0.330	0.344	-4.2	66	-0.02	5.88
38	t	Naphthalene	0.957	1.010	-5.5	68	-0.02	5.72
39	t	4-Chloroaniline	0.420	0.455	-8.3	68	-0.02	5.78
40	t	2,3-Dichloroaniline	0.412	0.426	-3.4	66	-0.03	6.88
41	t	Caprolactam	0.118	0.100	15.3	54	-0.05	6.15

Continuing Calibration Summary

Job Number: JC86089 **Sample:** EM6555-CC6551
Account: TCMAW Tantara Corporation **Lab FileID:** M153371.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

42	t	Hexachlorobutadiene	0.182	0.202	-11.0	71	-0.02	5.87
43	t	4-Chloro-3-methylphenol	0.280	0.326	-16.4	72	-0.03	6.33
44	t	2-Methylnaphthalene	0.589	0.638	-8.3	68	-0.02	6.51
45	t	1-Methylnaphthalene	0.763	0.808	-5.9	68	-0.03	6.64
46	t	Dimethylnaphthalene	0.680	0.671	1.3	63	-0.03	7.37
47	I	Acenaphthene-d10	1.000	1.000	0.0	66	-0.03	8.00
48	t	Hexachlorocyclopentadiene	0.301	0.319	-6.0	65	-0.02	6.73
49	t	2,4,6-Trichlorophenol	0.377	0.369	2.1	62	-0.03	6.89
50	t	2,4,5-Trichlorophenol	0.410	0.396	3.4	62	-0.03	6.93
51	S	2-Fluorobiphenyl	1.401	1.386	1.1	66	-0.03	7.01
52	t	2-Chloronaphthalene	1.156	1.172	-1.4	68	-0.03	7.16
53	t	Biphenyl	1.550	1.580	-1.9	67	-0.03	7.14
54	t	2-Nitroaniline	0.227	0.232	-2.2	63	-0.03	7.31
55	t	Dimethylphthalate	1.408	1.470	-4.4	67	-0.03	7.62
56	t	Acenaphthylene	1.870	1.983	-6.0	68	-0.03	7.77
			True	Calc.	% Drift			
57	t	2,6-Dinitrotoluene	25.000	20.211	19.2	55	-0.03	7.69
			AvgRF	CCRF	% Dev			
58	t	3-Nitroaniline	0.334	0.298	10.8	58	-0.04	7.94
59	t	Acenaphthene	1.132	1.201	-6.1	69	-0.03	8.05
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	50.000	30.158	39.7#	37	-0.03	8.11
			AvgRF	CCRF	% Dev			
61	t	4-Nitrophenol	0.136	0.156	-14.7	70	-0.04	8.25
62	t	Dibenzofuran	1.642	1.765	-7.5	69	-0.03	8.33
			True	Calc.	% Drift			
63	t	2,4-Dinitrotoluene	25.000	21.748	13.0	59	-0.03	8.34
			AvgRF	CCRF	% Dev			
64	t	2,3,4,6-Tetrachlorophenol	0.337	0.347	-3.0	61	-0.03	8.55
65	t	Diethylphthalate	1.370	1.492	-8.9	69	-0.03	8.80
66	t	Fluorene	1.375	1.468	-6.8	68	-0.03	8.91
67	t	4-Chlorophenyl-phenylethe	0.633	0.656	-3.6	69	-0.03	8.94
68	t	4-Nitroaniline	0.297	0.284	4.4	61	-0.04	8.96
69	I	Phenanthrene-d10	1.000	1.000	0.0	68	-0.03	10.58
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylpheno	25.000	16.025	35.9#	40	-0.04	9.02
			AvgRF	CCRF	% Dev			
71	t	n-Nitrosodiphenylamine	0.563	0.567	-0.7	66	-0.03	9.16
72	t	1,2-Diphenylhydrazine	0.579	0.581	-0.3	67	-0.03	9.22
73	S	2,4,6-Tribromophenol	0.130	0.153	-17.7	73	-0.03	9.33
74	t	4-Bromophenyl-phenylether	0.238	0.256	-7.6	70	-0.03	9.81
75	t	Hexachlorobenzene	0.285	0.304	-6.7	72	-0.04	9.89
76	t	Pentachlorophenol	0.164	0.167	-1.8	63	-0.03	10.27
77	t	Phenanthrene	0.986	1.064	-7.9	72	-0.04	10.63
78	t	Anthracene	1.055	1.130	-7.1	71	-0.04	10.72
79	t	Carbazole	1.079	1.158	-7.3	69	-0.04	11.06
80	t	Di-n-butylphthalate	1.300	1.430	-10.0	68	-0.03	11.89
81	t	Fluoranthene	1.218	1.349	-10.8	71	-0.04	12.90
82	t	Octadecane	0.276	0.257	6.9	61	-0.03	10.62

8.6.13

8

Continuing Calibration Summary

Job Number: JC86089 **Sample:** EM6555-CC6551
Account: TCMAW Tantara Corporation **Lab FileID:** M153371.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

83	I	Chrysene-d12	1.000	1.000	0.0	75	-0.04	15.72
84	t	Pyrene	1.510	1.486	1.6	70	-0.04	13.32
85	S	Terphenyl-d14	1.048	1.068	-1.9	73	-0.04	13.75
86	t	Butylbenzylphthalate	0.727	0.677	6.9	65	-0.04	14.81
87	t	Benzo[a]anthracene	1.367	1.379	-0.9	72	-0.04	15.70
88	t	3,3'-Dichlorobenzidine	0.487	0.422	13.3	62	-0.04	15.73
89	t	Chrysene	1.188	1.210	-1.9	74	-0.04	15.76
90	t	bis(2-Ethylhexyl)phthalat	0.926	0.845	8.7	63	-0.03	16.04
91	I	Perylene-d12	1.000	1.000	0.0	73	-0.03	18.32
92	t	Di-n-octylphthalate	1.336	1.194	10.6	58	-0.03	17.26
93	t	Benzo[b]fluoranthene	1.216	1.320	-8.6	74	-0.04	17.68
94	t	Benzo[k]fluoranthene	1.096	1.140	-4.0	74	-0.05	17.73
95	t	Benzo[a]pyrene	1.068	1.159	-8.5	73	-0.05	18.21
96	t	Indeno[1,2,3-cd]pyrene	1.065	1.071	-0.6	66	-0.05	19.97
97	t	Dibenz(a,h)acridine	1.029	1.109	-7.8	70	-0.04	19.64
98	t	Dibenz[a,h]anthracene	1.084	1.146	-5.7	72	-0.05	20.03
99	t	7,12-Dimethylbenz(a)anthr	0.488	0.571	-17.0	81	-0.05	17.70
100	t	Benzo[g,h,i]perylene	1.073	1.160	-8.1	72	-0.06	20.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m153346a.D MM6551.M Fri Apr 12 10:59:44 2019 MANAGER

8.9.13

8

Continuing Calibration Summary

Job Number: JC86089 **Sample:** EM6555-CC6552
Account: TCMAW Tantara Corporation **Lab FileID:** M153372.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM6555\m153372.D Vial: 3
Acq On : 12 Apr 2019 4:05 am Operator: chriss2
Sample : cc6552-25 Inst : MSM
Misc : op17006,em6555,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Thu Apr 11 08:18:08 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
101	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	65	-0.02	4.59
102	t	Benzaldehyde	1.162	1.036	10.8	57	-0.02	4.26
103	I	Acenaphthene-d10a	1.000	1.000	0.0	63	-0.03	8.00
104	I	1,2,4,5-Tetrachlorobenzen	0.571	0.620	-8.6	68	-0.03	6.73
105	t	Atrazine	0.178	0.198	-11.2	63	-0.04	10.19
108		Chrysene-d12b	1.000	1.000	0.0	64	-0.04	15.71
109	s	1-chlorooctadecane	0.278	0.219	21.2#	44#	-0.03	12.94
110	I	Phenanthrene-d10a	1.000	1.000	0.0	65	-0.03	10.58
111	s	o-terphenyl	0.580	0.634	-9.3	69	-0.04	11.40
			True	Calc.	% Drift			
112		Pentachloronitrobenzene	25.000	20.971	16.1	52	-0.03	10.29
			AvgRF	CCRF	% Dev			
113	I	Naphthalene-d8a	1.000	1.000	0.0	64	-0.02	5.70
114		Hydroquinone	0.302	0.190	37.1#	38#	-0.04	6.13

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m153346a.D MM6551.M Fri Apr 12 11:03:52 2019 MANAGER

8.6.14

8

Continuing Calibration Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: EM6555-CC6553
Lab FileID: M153373.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM6555\m153373.D Vial: 4
Acq On : 12 Apr 2019 4:34 am Operator: chriss2
Sample : cc6553-25 Inst : MSM
Misc : op17006,em6555,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM6551.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Thu Apr 11 08:18:08 2019
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
106	I	Chrysene-d12a	1.000	1.000	0.0	108	-0.03	15.71
107	t	Benzidine	0.830	0.613	26.1#	81	-0.02	13.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m153346a.D MM6551.M Fri Apr 12 11:09:02 2019 MANAGER

8.6.15

8

MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\data_aimeel\em6555\
Data File : m153387.d
Acq On : 12 Apr 2019 12:04 pm
Operator : chriss2
Sample : jc86089-1 Inst : MSM
Misc : op19680,em6555,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Results File: MM6551.RES
Quant Time: Apr 16 11:16:08 2019
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 16 10:49:08 2019
Response via : Initial Calibration

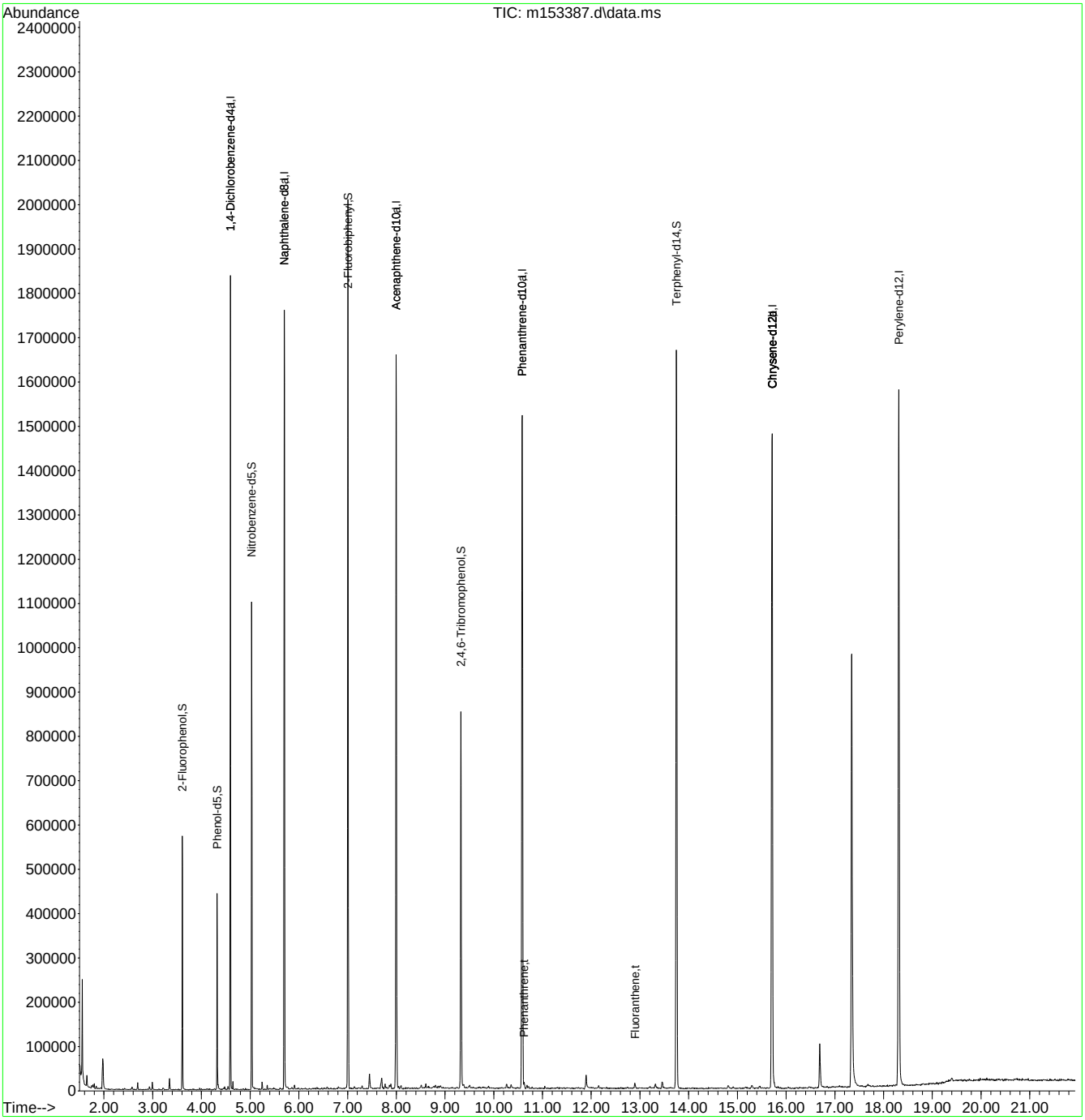
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.593	152	237131	40.00	ppm	0.00
24) Naphthalene-d8	5.699	136	839890	40.00	ppm	0.00
47) Acenaphthene-d10	7.996	164	478609	40.00	ppm	0.00
69) Phenanthrene-d10	10.581	188	852391	40.00	ppm	0.00
83) Chrysene-d12	15.714	240	790088	40.00	ppm	0.00
91) Perylene-d12	18.315	264	916042	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.593	152	237131	40.00	ppm	0.00
103) Acenaphthene-d10a	7.996	164	478609	40.00	ppm	0.00
106) Chrysene-d12a	15.714	240	790088	40.00	ppm	0.00
108) Chrysene-d12b	15.714	240	790088	40.00	ppm	0.00
110) Phenanthrene-d10a	10.581	188	852391	40.00	ppm	0.00
113) Naphthalene-d8a	5.699	136	839890	40.00	ppm	0.00
115) Chrysene-d12c	15.714	240	790088	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.605	112	165515	21.04	ppm	0.00
Spiked Amount 50.000			Recovery = 42.08%			
8) Phenol-d5	4.321	99	130844	14.19	ppm	0.00
Spiked Amount 50.000			Recovery = 28.38%			
25) Nitrobenzene-d5	5.031	82	260614	42.73	ppm	0.00
Spiked Amount 50.000			Recovery = 85.46%			
51) 2-Fluorobiphenyl	7.008	172	731663	43.64	ppm	0.00
Spiked Amount 50.000			Recovery = 87.28%			
73) 2,4,6-Tribromophenol	9.326	330	154608	55.87	ppm	0.00
Spiked Amount 50.000			Recovery = 111.74%			
85) Terphenyl-d14	13.748	244	893266	43.14	ppm	0.00
Spiked Amount 50.000			Recovery = 86.28%			
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
77) Phenanthrene	10.623	178	6526	0.31	ppm	98
81) Fluoranthene	12.899	202	6480	0.25	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

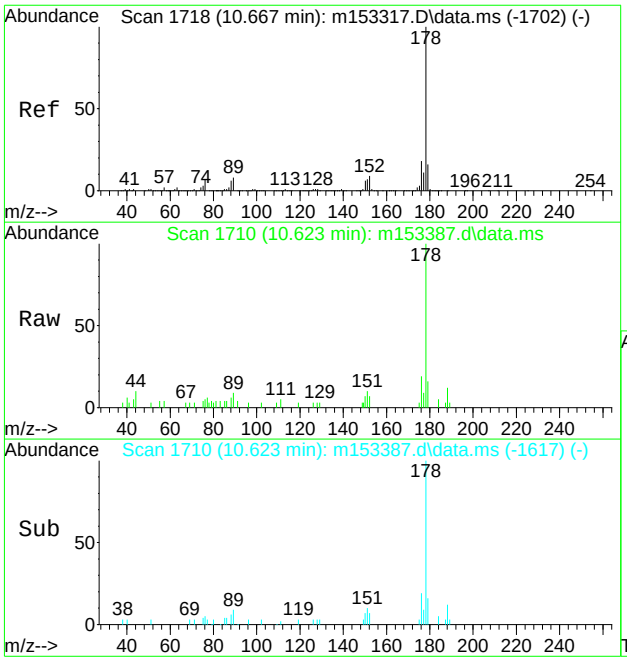
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\data_aimeel\em6555\
Data File : m153387.d
Acq On : 12 Apr 2019 12:04 pm
Operator : chriss2
Sample : jc86089-1 Inst : MSM
Misc : op19680,em6555,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Results File: MM6551.RES
Quant Time: Apr 16 11:16:08 2019
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 16 10:49:08 2019
Response via : Initial Calibration



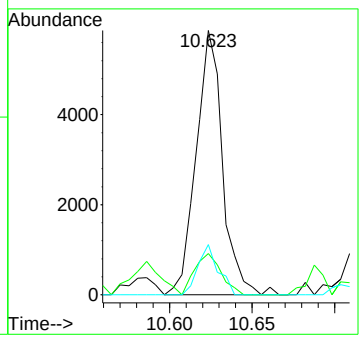
MM6551.M Tue Apr 16 12:29:36 2019 Page: 2

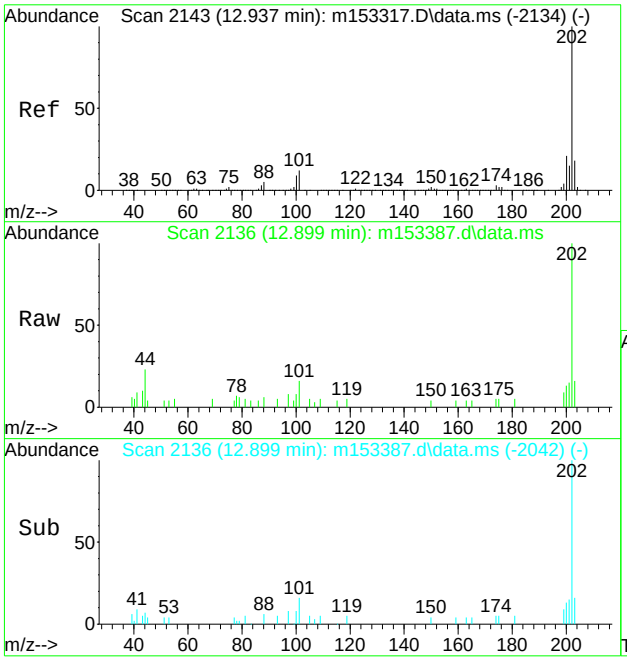


#77
Phenanthrene
Concen: 0.31 ppm
RT: 10.623 min Scan# 1710
Delta R.T. -0.003 min
Lab File: m153387.d
Acq: 12 Apr 2019 12:04 pm

Tgt Ion:178 Resp: 6526

Ion	Ratio	Lower	Upper
178	100		
179	13.0	0.0	45.1
176	19.0	0.0	48.9

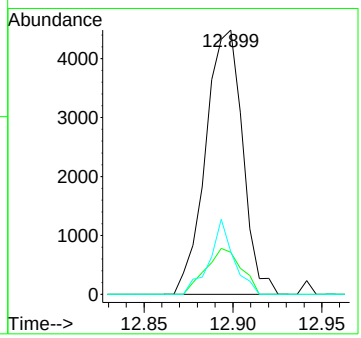




#81
Fluoranthene
Concen: 0.25 ppm
RT: 12.899 min Scan# 2136
Delta R.T. 0.002 min
Lab File: m153387.d
Acq: 12 Apr 2019 12:04 pm

Tgt Ion:202 Resp: 6480

Ion	Ratio	Lower	Upper
202	100		
101	15.9	0.0	41.7
203	16.2	0.0	47.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\data_aimeel\em6555\
Data File : m153388.d
Acq On : 12 Apr 2019 12:33 pm
Operator : chriss2
Sample : jc86089-2 Inst : MSM
Misc : op19680,em6555,1020,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Results File: MM6551.RES
Quant Time: Apr 16 11:25:00 2019
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 16 10:49:08 2019
Response via : Initial Calibration

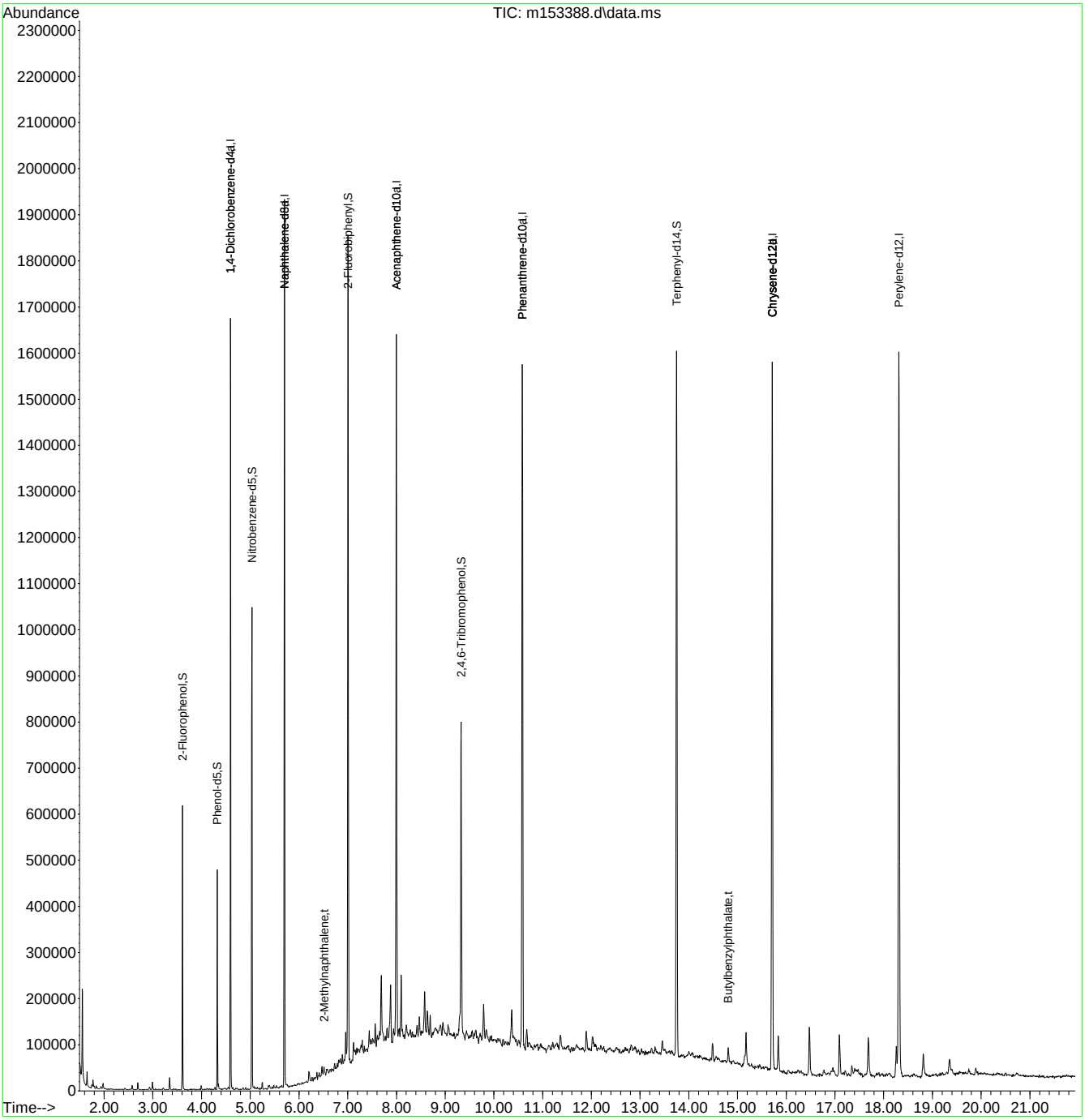
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.591	152	248206	40.00	ppm	0.00
24) Naphthalene-d8	5.702	136	855094	40.00	ppm	0.00
47) Acenaphthene-d10	7.999	164	428638	40.00	ppm	0.00
69) Phenanthrene-d10	10.584	188	783073	40.00	ppm	0.00
83) Chrysene-d12	15.711	240	771749	40.00	ppm	0.00
91) Perylene-d12	18.312	264	933566	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.591	152	248206	40.00	ppm	0.00
103) Acenaphthene-d10a	7.999	164	428638	40.00	ppm	0.00
106) Chrysene-d12a	15.711	240	771749	40.00	ppm	0.00
108) Chrysene-d12b	15.711	240	771749	40.00	ppm	0.00
110) Phenanthrene-d10a	10.584	188	783073	40.00	ppm	0.00
113) Naphthalene-d8a	5.702	136	855094	40.00	ppm	0.00
115) Chrysene-d12c	15.711	240	771749	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.608	112	159790	19.41	ppm	0.00
Spiked Amount 50.000			Recovery =	38.82%		
8) Phenol-d5	4.324	99	129076	13.38	ppm	0.00
Spiked Amount 50.000			Recovery =	26.76%		
25) Nitrobenzene-d5	5.034	82	261081	42.05	ppm	0.00
Spiked Amount 50.000			Recovery =	84.10%		
51) 2-Fluorobiphenyl	7.005	172	691398	46.05	ppm	0.00
Spiked Amount 50.000			Recovery =	92.10%		
73) 2,4,6-Tribromophenol	9.329	330	131130	51.58	ppm	0.00
Spiked Amount 50.000			Recovery =	103.16%		
85) Terphenyl-d14	13.751	244	798568	39.48	ppm	0.00
Spiked Amount 50.000			Recovery =	78.96%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
44) 2-Methylnaphthalene	6.514	141	3314	0.26	ppm	88
86) Butylbenzylphthalate	14.808	149	13596	0.97	ppm	90

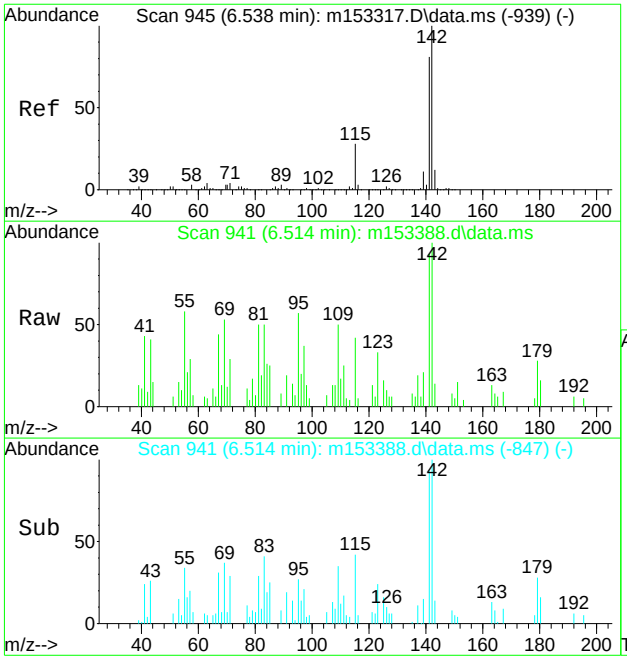
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\data_aimeel\em6555\
Data File : m153388.d
Acq On : 12 Apr 2019 12:33 pm
Operator : chriss2
Sample : jc86089-2 Inst : MSM
Misc : op19680,em6555,1020,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Results File: MM6551.RES
Quant Time: Apr 16 11:25:00 2019
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 16 10:49:08 2019
Response via : Initial Calibration

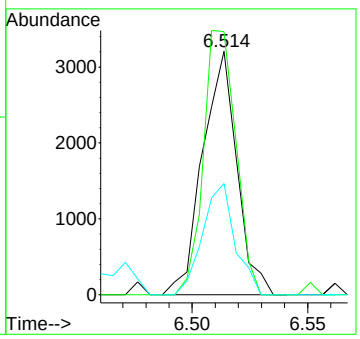


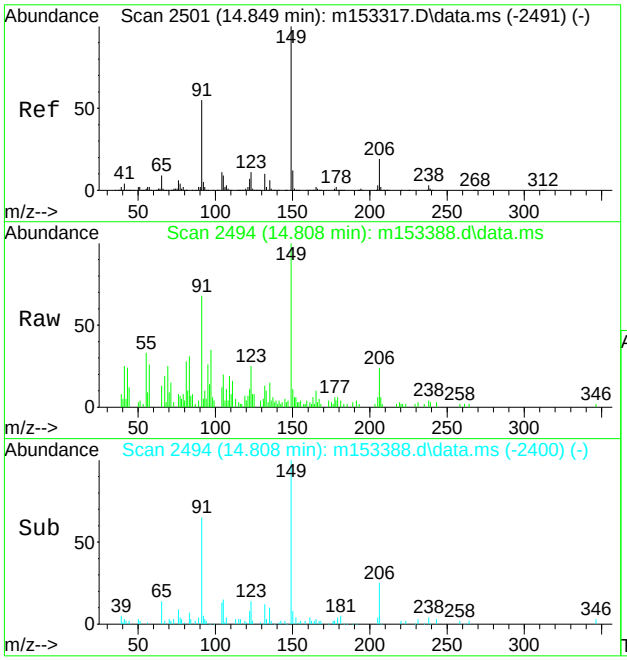


#44
2-Methylnaphthalene
Concen: 0.26 ppm
RT: 6.514 min Scan# 941
Delta R.T. -0.000 min
Lab File: m153388.d
Acq: 12 Apr 2019 12:33 pm

Tgt Ion:141 Resp: 3314

Ion	Ratio	Lower	Upper
141	100		
142	108.1	91.0	151.0
115	45.7	7.8	67.8

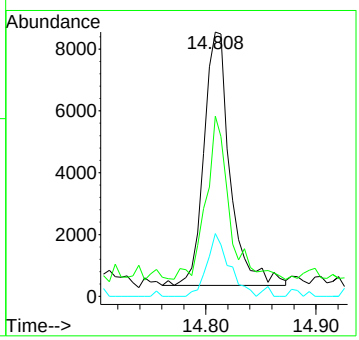




#86
Butylbenzylphthalate
Concen: 0.97 ppm
RT: 14.808 min Scan# 2494
Delta R.T. -0.000 min
Lab File: m153388.d
Acq: 12 Apr 2019 12:33 pm

Tgt Ion:149 Resp: 13596

Ion	Ratio	Lower	Upper
149	100		
91	64.6	29.2	89.2
206	25.1	0.0	46.3



Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153377.D
Acq On : 12 Apr 2019 6:45 am
Operator : chriss2
Sample : op19680-mb1
Misc : op19680,em6555,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 12 11:39:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

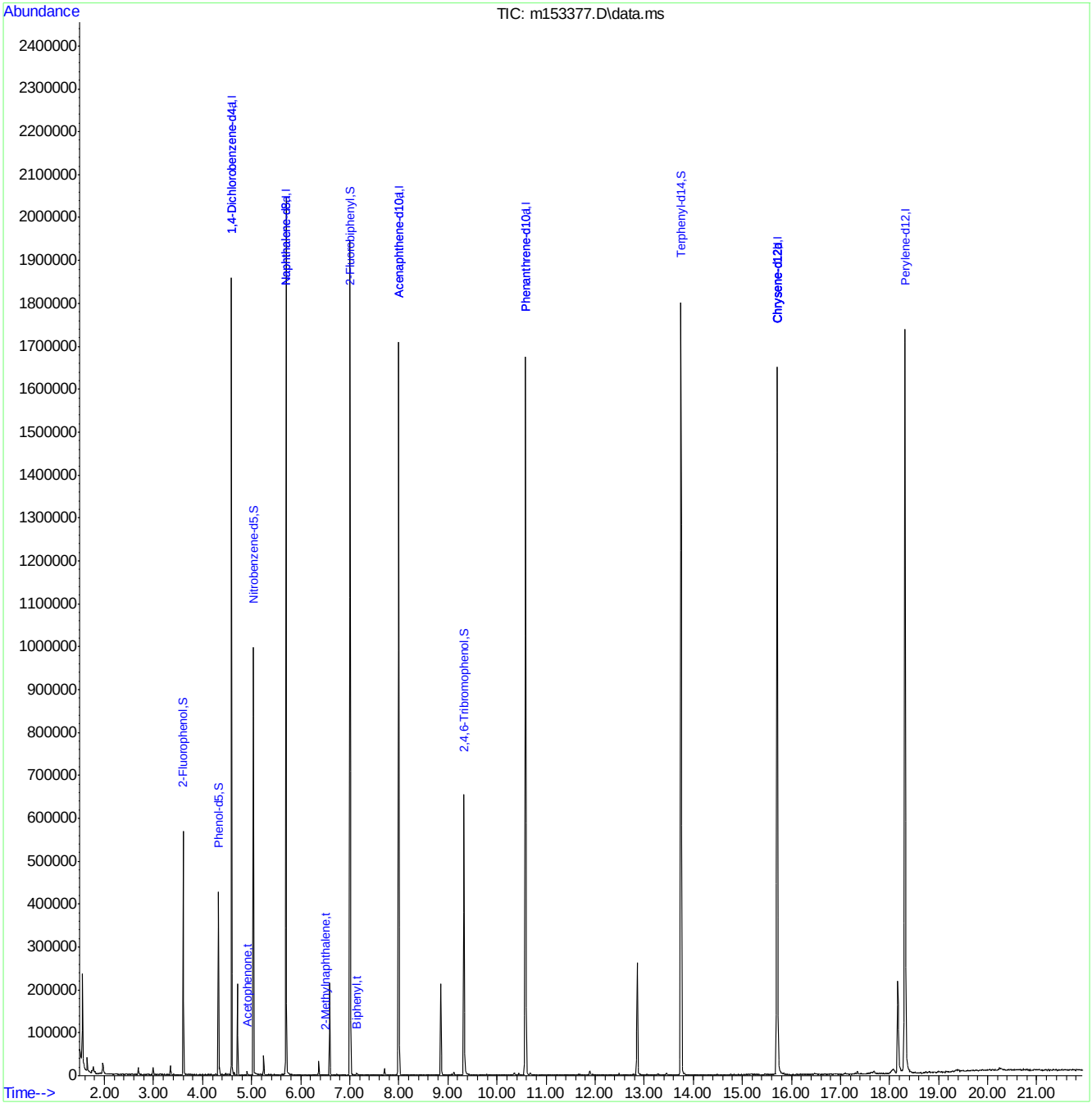
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.591	152	257787	40.00	ppm	-0.02
24) Naphthalene-d8	5.702	136	882405	40.00	ppm	-0.02
47) Acenaphthene-d10	7.998	164	507823	40.00	ppm	-0.03
69) Phenanthrene-d10	10.583	188	924069	40.00	ppm	-0.04
83) Chrysene-d12	15.711	240	851723	40.00	ppm	-0.05
91) Perylene-d12	18.317	264	1010599	40.00	ppm	-0.04
101) 1,4-Dichlorobenzene-d4a	4.591	152	257787	40.00	ppm	-0.02
103) Acenaphthene-d10a	7.998	164	507823	40.00	ppm	-0.03
106) Chrysene-d12a	15.711	240	851723	40.00	ppm	-0.03
108) Chrysene-d12b	15.711	240	851723	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.583	188	924069	40.00	ppm	-0.03
113) Naphthalene-d8a	5.702	136	882405	40.00	ppm	-0.02
115) Chrysene-d12c	15.711	240	851723	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.608	112	163855	19.16	ppm	-0.01
Spiked Amount 50.000			Recovery = 38.32%			
8) Phenol-d5	4.324	99	129258	12.90	ppm	-0.02
Spiked Amount 50.000			Recovery = 25.80%			
25) Nitrobenzene-d5	5.034	82	252478	39.40	ppm	-0.02
Spiked Amount 50.000			Recovery = 78.80%			
51) 2-Fluorobiphenyl	7.005	172	726715	40.85	ppm	-0.03
Spiked Amount 50.000			Recovery = 81.70%			
73) 2,4,6-Tribromophenol	9.328	330	127707	42.57	ppm	-0.04
Spiked Amount 50.000			Recovery = 85.14%			
85) Terphenyl-d14	13.751	244	973747	43.62	ppm	-0.04
Spiked Amount 50.000			Recovery = 87.24%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
18) Acetophenone	4.906	105	2223	0.23	ppm	75
44) 2-Methylnaphthalene	6.508	141	494	0.04	ppm #	76
53) Biphenyl	7.138	154	2052	0.10	ppm	96

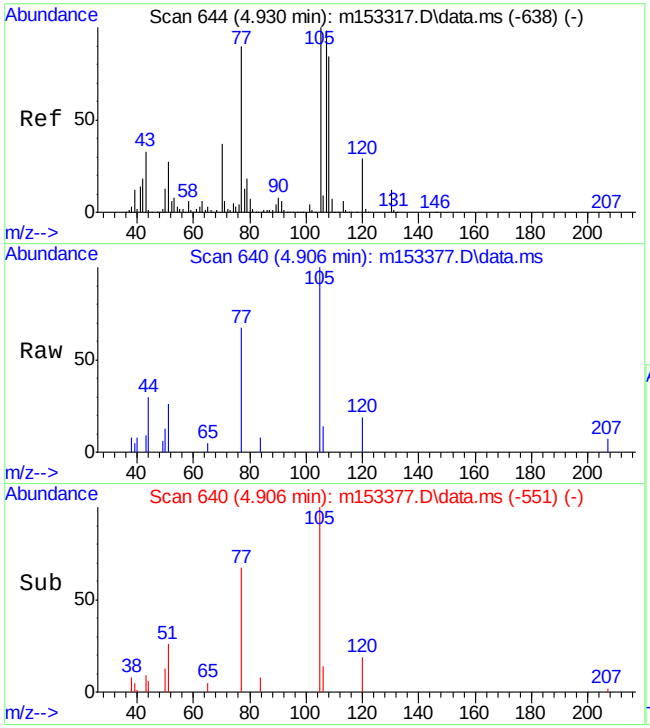
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153377.D
Acq On : 12 Apr 2019 6:45 am
Operator : chriss2
Sample : op19680-mb1
Misc : op19680,em6555,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 12 11:39:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

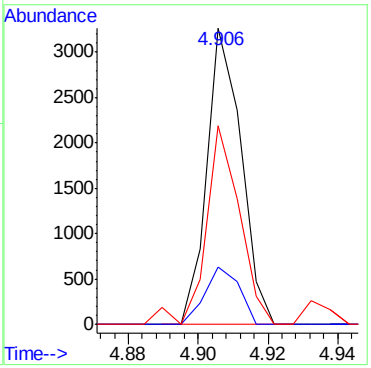


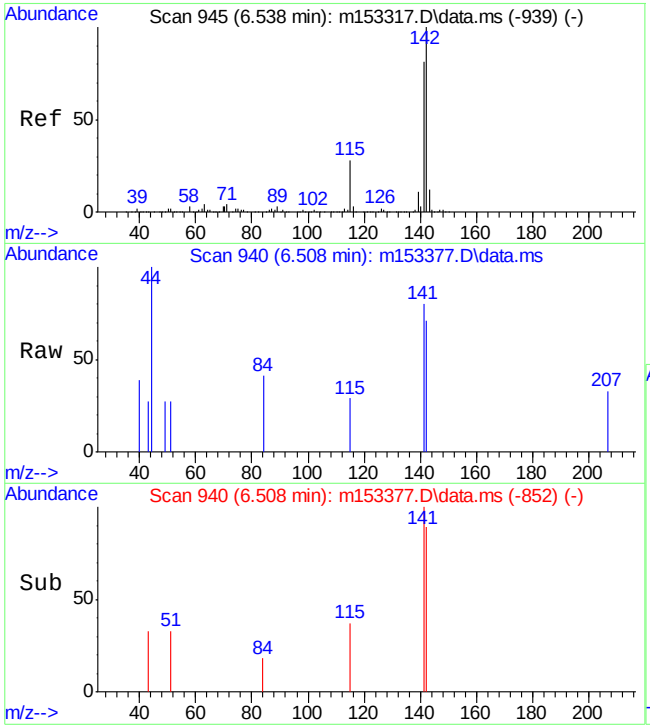


#18
Acetophenone
Concen: 0.23 ppm
RT: 4.906 min Scan# 640
Delta R.T. -0.025 min
Lab File: m153377.D
Acq: 12 Apr 2019 6:45 am

Tgt Ion:105 Resp: 2223

Ion	Ratio	Lower	Upper
105	100		
120	19.2	0.0	59.0
77	64.4	60.5	120.5

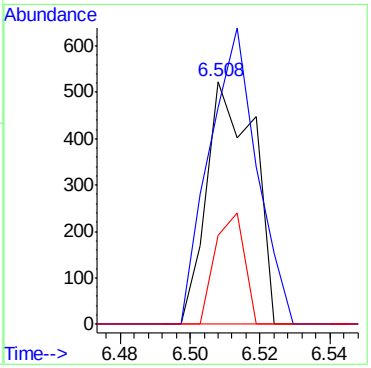


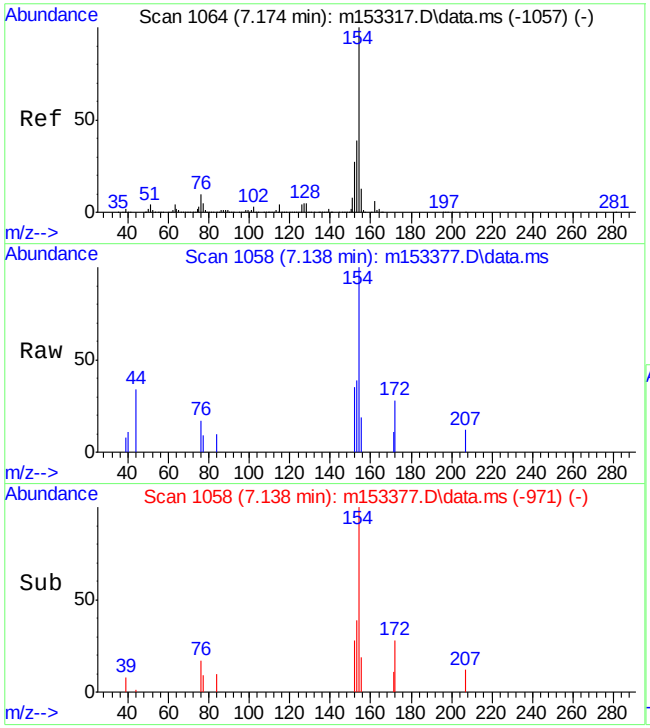


#44
2-Methylnaphthalene
Concen: 0.04 ppm
RT: 6.508 min Scan# 940
Delta R.T. -0.030 min
Lab File: m153377.D
Acq: 12 Apr 2019 6:45 am

Tgt Ion:141 Resp: 494

Ion	Ratio	Lower	Upper
141	100		
142	89.5	93.4	153.4#
115	36.7	4.3	64.3

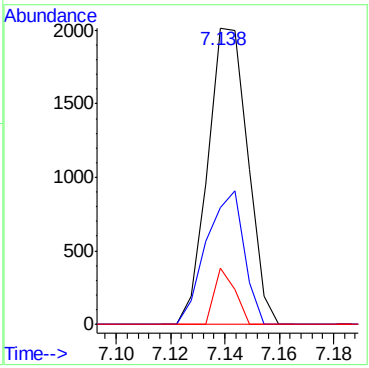




#53
Biphenyl
Concen: 0.10 ppm
RT: 7.138 min Scan# 1058
Delta R.T. -0.035 min
Lab File: m153377.D
Acq: 12 Apr 2019 6:45 am

Tgt Ion:154 Resp: 2052

Ion	Ratio	Lower	Upper
154	100		
153	39.5	9.0	69.0
155	19.0	0.0	43.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153378.D
Acq On : 12 Apr 2019 7:13 am
Operator : chriss2
Sample : op19680-bs1
Misc : op19680,em6555,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 12 11:41:51 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.594	152	196310	40.00	ppm	-0.02
24) Naphthalene-d8	5.705	136	693690	40.00	ppm	-0.02
47) Acenaphthene-d10	7.996	164	429788	40.00	ppm	-0.03
69) Phenanthrene-d10	10.586	188	791916	40.00	ppm	-0.03
83) Chrysene-d12	15.714	240	679372	40.00	ppm	-0.04
91) Perylene-d12	18.315	264	827097	40.00	ppm	-0.04
101) 1,4-Dichlorobenzene-d4a	4.594	152	196310	40.00	ppm	-0.01
103) Acenaphthene-d10a	7.996	164	429788	40.00	ppm	-0.03
106) Chrysene-d12a	15.714	240	679372	40.00	ppm	-0.03
108) Chrysene-d12b	15.714	240	679372	40.00	ppm	-0.03
110) Phenanthrene-d10a	10.586	188	791916	40.00	ppm	-0.03
113) Naphthalene-d8a	5.705	136	693690	40.00	ppm	-0.02
115) Chrysene-d12c	15.714	240	679372	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.611	112	157506	24.19	ppm	-0.01
Spiked Amount 50.000			Recovery = 48.38%			
8) Phenol-d5	4.327	99	126903	16.63	ppm	-0.02
Spiked Amount 50.000			Recovery = 33.26%			
25) Nitrobenzene-d5	5.032	82	200047	39.71	ppm	-0.02
Spiked Amount 50.000			Recovery = 79.42%			
51) 2-Fluorobiphenyl	7.008	172	621563	41.28	ppm	-0.03
Spiked Amount 50.000			Recovery = 82.56%			
73) 2,4,6-Tribromophenol	9.331	330	122813	47.77	ppm	-0.03
Spiked Amount 50.000			Recovery = 95.54%			
85) Terphenyl-d14	13.748	244	873419	49.05	ppm	-0.04
Spiked Amount 50.000			Recovery = 98.10%			
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.131	88	45421	16.17	ppm	90
3) Pyridine	2.452	79	108337	16.20	ppm	97
4) N-Nitrosodimethylamine	2.409	42	46791	19.82	ppm	92
6) Indene	4.797	116	377876	42.02	ppm	98
7) Cumene	4.001	105	524085	36.56	ppm	97
9) Phenol	4.332	94	145966	18.42	ppm	99
10) Aniline	4.348	93	160863	20.97	ppm	96
11) bis(2-Chloroethyl)ether	4.396	93	207426	38.95	ppm	91
12) 2-Chlorophenol	4.439	128	242354	34.84	ppm	95
13) Decane	4.481	43	92715	23.47	ppm	95
14) 1,3-Dichlorobenzene	4.551	146	253353	32.00	ppm	97
15) 1,4-Dichlorobenzene	4.604	146	245051	33.84	ppm	94
16) Benzyl alcohol	4.700	108	129212	35.54	ppm	95
17) 1,2-Dichlorobenzene	4.727	146	241503	33.53	ppm	97
18) Acetophenone	4.909	105	298463	41.01	ppm	90
19) 2-Methylphenol	4.791	108	161566	32.33	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153378.D
Acq On : 12 Apr 2019 7:13 am
Operator : chriss2
Sample : op19680-bs1
Misc : op19680,em6555,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 12 11:41:51 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
20) 2,2'-oxybis(1-Chloropr...	4.807	121	70759	42.58	ppm	#	61
21) 3&4-Methylphenol	4.909	108	154682	30.38	ppm	#	75
22) n-Nitroso-di-n-propyla...	4.914	70	113188	34.18	ppm		97
23) Hexachloroethane	4.999	201	79105	29.86	ppm		93
26) Nitrobenzene	5.048	77	176977	36.99	ppm		98
27) Quinoline	6.084	129	525715	40.10	ppm		97
28) Isophorone	5.256	82	394707	40.83	ppm		97
29) 2-Nitrophenol	5.331	139	107046	32.75	ppm		96
30) 2,4-Dimethylphenol	5.373	107	235077	47.56	ppm		93
31) Benzoic acid	5.443	105	30740	8.45	ppm		89
32) bis(2-Chloroethoxy)met...	5.459	93	253298	41.34	ppm		99
33) 2,4-Dichlorophenol	5.560	162	231855	41.48	ppm		99
34) 2,6-Dichlorophenol	5.790	162	214252	41.99	ppm		98
36) 1,2,4-Trichlorobenzene	5.646	180	218678	35.06	ppm		95
38) Naphthalene	5.726	128	658076	39.64	ppm		99
39) 4-Chloroaniline	5.779	127	112031	15.40	ppm		98
40) 2,3-Dichloroaniline	6.880	161	254273	35.60	ppm		98
41) Caprolactam	6.142	55	18749	9.13	ppm		95
42) Hexachlorobutadiene	5.865	225	114485	36.33	ppm		100
43) 4-Chloro-3-methylphenol	6.329	107	219052	45.07	ppm		90
44) 2-Methylnaphthalene	6.511	141	409952	40.13	ppm		97
45) 1-Methylnaphthalene	6.639	142	523906	39.59	ppm		98
46) Dimethylnaphthalene	7.371	156	466597	39.56	ppm		93
48) Hexachlorocyclopentadiene	6.735	237	149599	46.28	ppm		98
49) 2,4,6-Trichlorophenol	6.890	196	165672	40.91	ppm		96
50) 2,4,5-Trichlorophenol	6.933	196	177057	40.15	ppm		98
52) 2-Chloronaphthalene	7.163	162	449965	36.24	ppm		98
53) Biphenyl	7.141	154	651081	39.08	ppm		99
54) 2-Nitroaniline	7.312	65	81617	33.49	ppm		97
55) Dimethylphthalate	7.617	163	624242	41.27	ppm		99
56) Acenaphthylene	7.771	152	813503	40.48	ppm		99
57) 2,6-Dinitrotoluene	7.691	165	102525	32.60	ppm		90
58) 3-Nitroaniline	7.942	138	58725	16.34	ppm		89
59) Acenaphthene	8.049	153	495125	40.69	ppm		94
60) 2,4-Dinitrophenol	8.113	184	57559	55.50	ppm		89
61) 4-Nitrophenol	8.252	109	35898	24.64	ppm	#	71
62) Dibenzofuran	8.332	168	718026	40.71	ppm		98
63) 2,4-Dinitrotoluene	8.338	165	134052	35.83	ppm		98
64) 2,3,4,6-Tetrachlorophenol	8.551	232	152648	42.11	ppm		97
65) Diethylphthalate	8.802	149	635994	43.21	ppm		98
66) Fluorene	8.909	166	633990	42.90	ppm		99
67) 4-Chlorophenyl-phenyle...	8.947	204	273530	40.20	ppm		95
68) 4-Nitroaniline	8.963	138	119522	37.49	ppm		85
70) 4,6-Dinitro-2-methylph...	9.027	198	49784	28.82	ppm		87
71) n-Nitrosodiphenylamine	9.155	169	452931	40.65	ppm		96
72) 1,2-Diphenylhydrazine	9.219	77	445684	38.85	ppm		98
74) 4-Bromophenyl-phenylether	9.812	248	211167	44.83	ppm		94
75) Hexachlorobenzene	9.892	284	233591	41.43	ppm		97
76) Pentachlorophenol	10.266	266	148786	45.86	ppm		97
77) Phenanthrene	10.629	178	831064	42.56	ppm		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153378.D
Acq On : 12 Apr 2019 7:13 am
Operator : chriss2
Sample : op19680-bs1
Misc : op19680,em6555,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 12 11:41:51 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

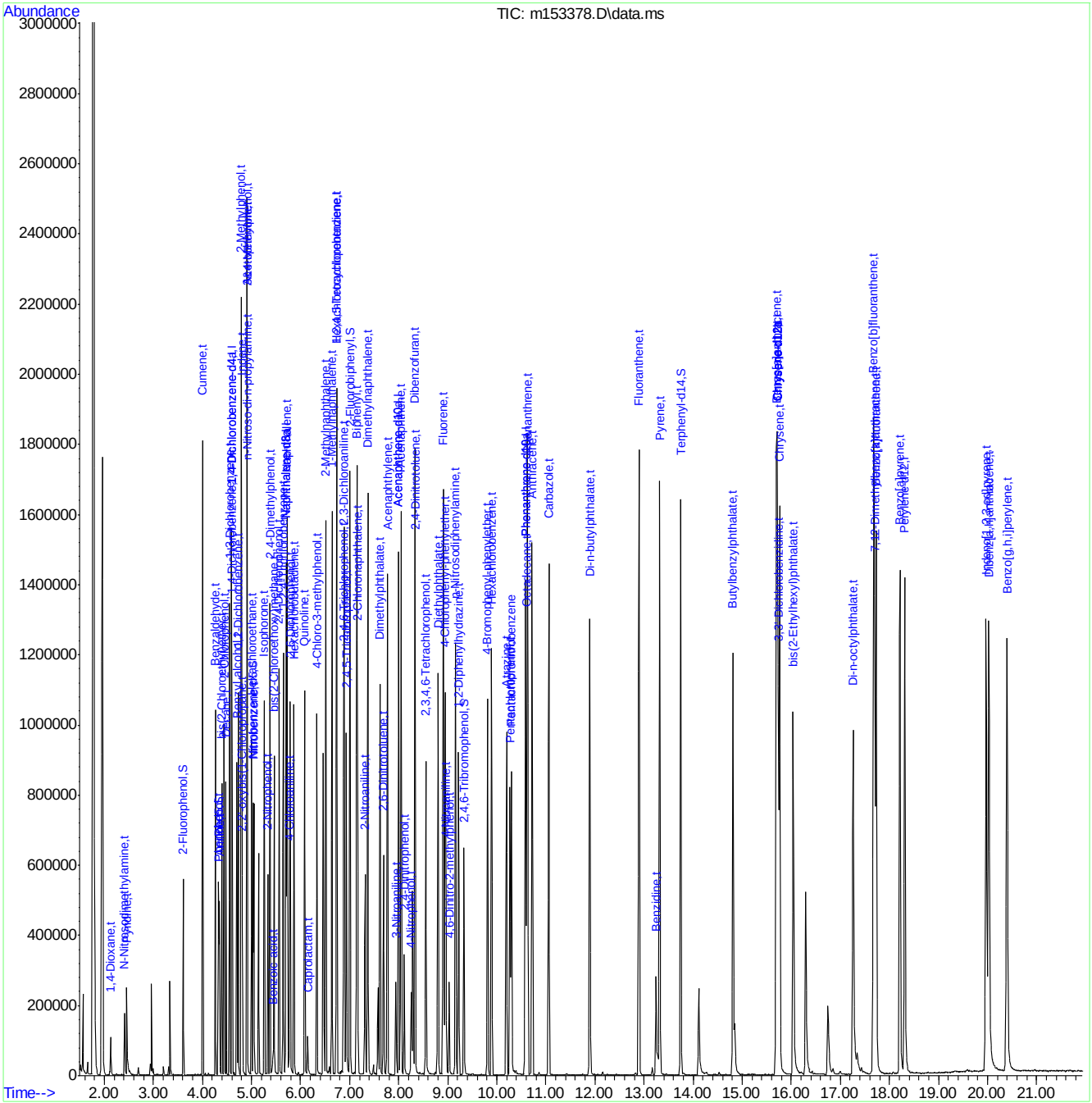
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Anthracene	10.720	178	873176	41.79	ppm		99
79) Carbazole	11.062	167	915988	42.87	ppm		100
80) Di-n-butylphthalate	11.895	149	1130136	43.92	ppm		99
81) Fluoranthene	12.899	202	1106404	45.88	ppm		99
82) Octadecane	10.613	57	187472	34.31	ppm		94
84) Pyrene	13.321	202	1069606	41.71	ppm		99
86) Butylbenzylphthalate	14.811	149	503335	40.76	ppm		98
87) Benzo[a]anthracene	15.698	228	994597	42.85	ppm		100
88) 3,3'-Dichlorobenzidine	15.735	252	346123	41.87	ppm		99
89) Chrysene	15.762	228	858490	42.56	ppm		99
90) bis(2-Ethylhexyl)phtha...	16.039	149	623016	39.63	ppm		100
92) Di-n-octylphthalate	17.263	149	1108927	40.15	ppm		98
93) Benzo[b]fluoranthene	17.679	252	1071156	42.62	ppm		99
94) Benzo[k]fluoranthene	17.733	252	944194	41.67	ppm		97
95) Benzo[a]pyrene	18.213	252	931507	42.18	ppm		98
96) Indeno[1,2,3-cd]pyrene	19.976	276	935321	42.49	ppm		92
98) Dibenz[a,h]anthracene	20.029	278	939027	41.91	ppm		97
99) 7,12-Dimethylbenz(a)an...	17.701	256	399873	39.64	ppm		96
100) Benzo[g,h,i]perylene	20.398	276	1005034	45.29	ppm		95
102) Benzaldehyde	4.262	105	162496	28.50	ppm		95
104) 1,2,4,5-Tetrachloroben...	6.735	216	205662	33.55	ppm		99
105) Atrazine	10.196	215	94561	49.41	ppm	#	85
107) Benzidine	13.246	184	190486	13.52	ppm		98
112) Pentachloronitrobenzene	10.298	295	38301	42.46	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153378.D
Acq On : 12 Apr 2019 7:13 am
Operator : chriss2
Sample : op19680-bs1
Misc : op19680,em6555,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 12 11:41:51 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153379.D
Acq On : 12 Apr 2019 7:41 am
Operator : chriss2
Sample : op19680-bsd
Misc : op19680,em6555,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 12 11:43:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.593	152	206734	40.00	ppm	-0.02
24) Naphthalene-d8	5.704	136	731188	40.00	ppm	-0.02
47) Acenaphthene-d10	7.995	164	452202	40.00	ppm	-0.03
69) Phenanthrene-d10	10.586	188	830916	40.00	ppm	-0.03
83) Chrysene-d12	15.719	240	711062	40.00	ppm	-0.04
91) Perylene-d12	18.314	264	856642	40.00	ppm	-0.04
101) 1,4-Dichlorobenzene-d4a	4.593	152	206734	40.00	ppm	-0.01
103) Acenaphthene-d10a	7.995	164	452202	40.00	ppm	-0.03
106) Chrysene-d12a	15.719	240	711062	40.00	ppm	-0.02
108) Chrysene-d12b	15.719	240	711062	40.00	ppm	-0.03
110) Phenanthrene-d10a	10.586	188	830916	40.00	ppm	-0.03
113) Naphthalene-d8a	5.704	136	731188	40.00	ppm	-0.02
115) Chrysene-d12c	15.719	240	711062	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.610	112	174248	25.41	ppm	-0.01
Spiked Amount 50.000			Recovery = 50.82%			
8) Phenol-d5	4.326	99	142316	17.71	ppm	-0.02
Spiked Amount 50.000			Recovery = 35.42%			
25) Nitrobenzene-d5	5.031	82	230543	43.42	ppm	-0.02
Spiked Amount 50.000			Recovery = 86.84%			
51) 2-Fluorobiphenyl	7.007	172	674554	42.58	ppm	-0.03
Spiked Amount 50.000			Recovery = 85.16%			
73) 2,4,6-Tribromophenol	9.331	330	141183	52.34	ppm	-0.03
Spiked Amount 50.000			Recovery = 104.68%			
85) Terphenyl-d14	13.748	244	973040	52.21	ppm	-0.04
Spiked Amount 50.000			Recovery = 104.42%			
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.131	88	51234	17.32	ppm	92
3) Pyridine	2.451	79	120666	17.14	ppm	98
4) N-Nitrosodimethylamine	2.414	42	53575	21.55	ppm	99
6) Indene	4.796	116	419081	44.25	ppm	100
7) Cumene	4.000	105	576450	38.19	ppm	97
9) Phenol	4.337	94	158275	18.96	ppm	98
10) Aniline	4.347	93	161767	20.03	ppm	96
11) bis(2-Chloroethyl)ether	4.396	93	237044	42.27	ppm	91
12) 2-Chlorophenol	4.438	128	274250	37.44	ppm	97
13) Decane	4.481	43	101271	24.35	ppm	97
14) 1,3-Dichlorobenzene	4.550	146	278317	33.38	ppm	98
15) 1,4-Dichlorobenzene	4.609	146	270380	35.46	ppm	97
16) Benzyl alcohol	4.700	108	146596	38.29	ppm	98
17) 1,2-Dichlorobenzene	4.727	146	267299	35.24	ppm	97
18) Acetophenone	4.908	105	323297	42.19	ppm	90
19) 2-Methylphenol	4.791	108	177998	33.83	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153379.D
Acq On : 12 Apr 2019 7:41 am
Operator : chriss2
Sample : op19680-bsd
Misc : op19680,em6555,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 12 11:43:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
20) 2,2'-oxybis(1-Chloropr...	4.807	121	80011	45.72	ppm	#	63
21) 3&4-Methylphenol	4.914	108	166479	31.04	ppm		91
22) n-Nitroso-di-n-propyla...	4.914	70	125780	36.07	ppm		97
23) Hexachloroethane	4.999	201	87971	31.53	ppm		88
26) Nitrobenzene	5.052	77	203632	40.38	ppm		87
27) Quinoline	6.083	129	580553	42.01	ppm		97
28) Isophorone	5.255	82	443192	43.49	ppm		96
29) 2-Nitrophenol	5.330	139	129716	37.66	ppm		93
30) 2,4-Dimethylphenol	5.373	107	250423	48.07	ppm		94
31) Benzoic acid	5.453	105	46155	12.04	ppm		99
32) bis(2-Chloroethoxy)met...	5.458	93	284001	43.97	ppm		99
33) 2,4-Dichlorophenol	5.560	162	258600	43.90	ppm		98
34) 2,6-Dichlorophenol	5.790	162	236131	43.90	ppm		99
36) 1,2,4-Trichlorobenzene	5.645	180	242395	36.87	ppm		96
38) Naphthalene	5.725	128	716495	40.94	ppm		99
39) 4-Chloroaniline	5.779	127	119076	15.52	ppm		98
40) 2,3-Dichloroaniline	6.879	161	294294	39.09	ppm		98
41) Caprolactam	6.142	55	20853	9.63	ppm		93
42) Hexachlorobutadiene	5.864	225	124120	37.37	ppm		98
43) 4-Chloro-3-methylphenol	6.334	107	234037	45.69	ppm		94
44) 2-Methylnaphthalene	6.511	141	440527	40.91	ppm		95
45) 1-Methylnaphthalene	6.639	142	575562	41.27	ppm		95
46) Dimethylnaphthalene	7.370	156	514265	41.36	ppm		95
48) Hexachlorocyclopentadiene	6.735	237	185587	54.56	ppm		100
49) 2,4,6-Trichlorophenol	6.890	196	180478	42.36	ppm		97
50) 2,4,5-Trichlorophenol	6.933	196	194999	42.02	ppm		97
52) 2-Chloronaphthalene	7.162	162	495021	37.89	ppm		99
53) Biphenyl	7.146	154	718833	41.01	ppm		100
54) 2-Nitroaniline	7.312	65	96532	37.64	ppm		94
55) Dimethylphthalate	7.622	163	704999	44.30	ppm		98
56) Acenaphthylene	7.771	152	903698	42.74	ppm		99
57) 2,6-Dinitrotoluene	7.691	165	126781	38.24	ppm		93
58) 3-Nitroaniline	7.942	138	70840	18.73	ppm		98
59) Acenaphthene	8.049	153	541461	42.29	ppm		95
60) 2,4-Dinitrophenol	8.113	184	77557	67.81	ppm		91
61) 4-Nitrophenol	8.252	109	40065	26.14	ppm	#	70
62) Dibenzofuran	8.332	168	791155	42.63	ppm		98
63) 2,4-Dinitrotoluene	8.337	165	157595	40.04	ppm		97
64) 2,3,4,6-Tetrachlorophenol	8.551	232	168730	44.24	ppm		96
65) Diethylphthalate	8.802	149	710010	45.85	ppm		98
66) Fluorene	8.909	166	694980	44.70	ppm		99
67) 4-Chlorophenyl-phenyle...	8.946	204	303612	42.41	ppm		95
68) 4-Nitroaniline	8.967	138	139002	41.44	ppm		88
70) 4,6-Dinitro-2-methylph...	9.032	198	62592	33.58	ppm		91
71) n-Nitrosodiphenylamine	9.160	169	501980	42.94	ppm		96
72) 1,2-Diphenylhydrazine	9.219	77	498349	41.40	ppm		97
74) 4-Bromophenyl-phenylether	9.811	248	231743	46.89	ppm		96
75) Hexachlorobenzene	9.891	284	261052	44.13	ppm		95
76) Pentachlorophenol	10.271	266	166577	48.93	ppm		98
77) Phenanthrene	10.629	178	904963	44.17	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153379.D
Acq On : 12 Apr 2019 7:41 am
Operator : chriss2
Sample : op19680-bsd
Misc : op19680,em6555,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 12 11:43:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

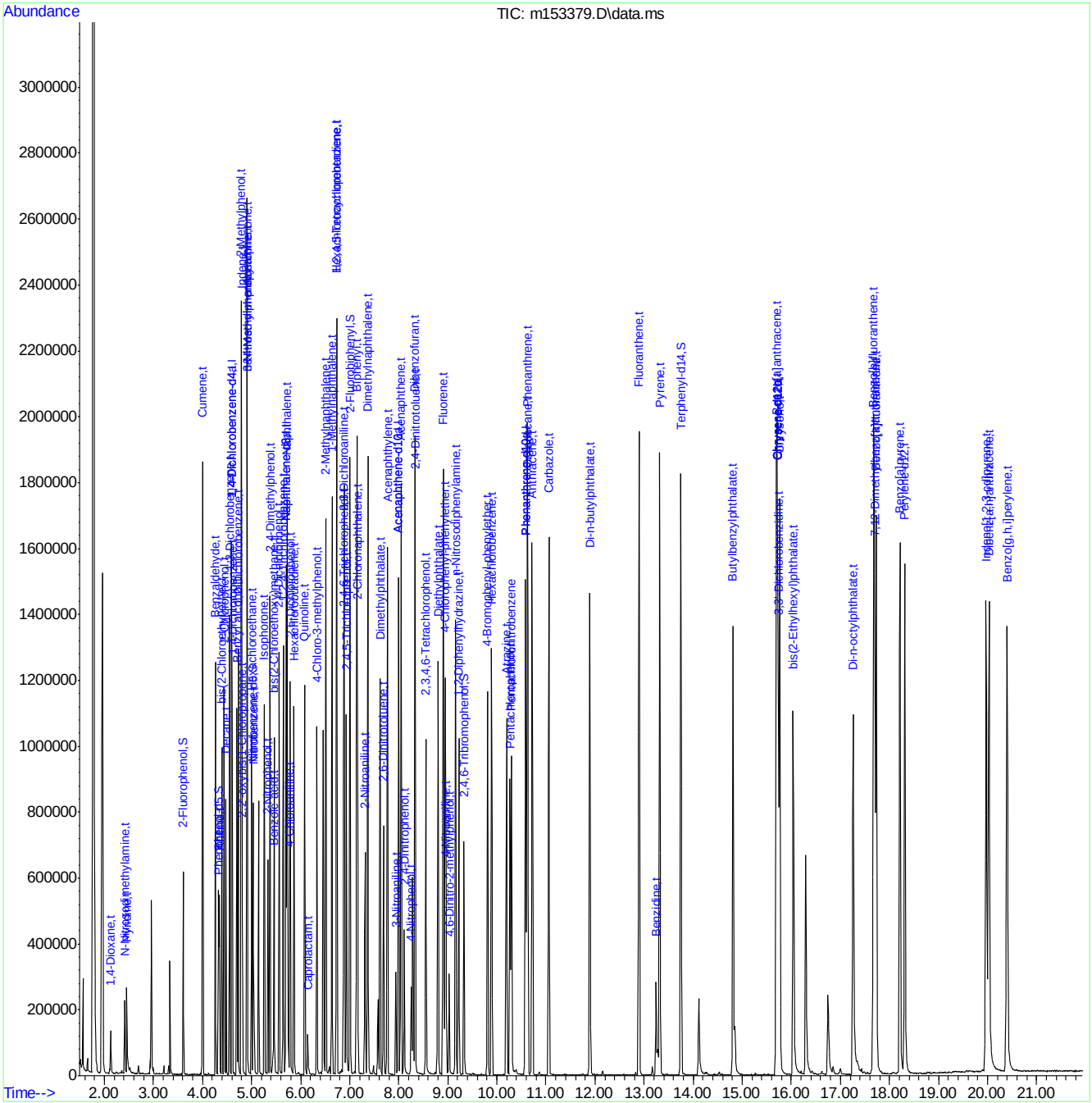
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Anthracene	10.719	178	958723	43.74	ppm		100
79) Carbazole	11.061	167	1006230	44.88	ppm		99
80) Di-n-butylphthalate	11.894	149	1253060	46.41	ppm		99
81) Fluoranthene	12.899	202	1204931	47.62	ppm		98
82) Octadecane	10.618	57	207788	36.25	ppm		92
84) Pyrene	13.320	202	1182352	44.05	ppm		99
86) Butylbenzylphthalate	14.811	149	567011	43.87	ppm		98
87) Benzo[a]anthracene	15.697	228	1102905	45.40	ppm		99
88) 3,3'-Dichlorobenzidine	15.735	252	371746	42.97	ppm		98
89) Chrysene	15.767	228	940420	44.55	ppm		99
90) bis(2-Ethylhexyl)phtha...	16.044	149	694075	42.19	ppm		100
92) Di-n-octylphthalate	17.262	149	1223691	42.78	ppm		99
93) Benzo[b]fluoranthene	17.679	252	1160900	44.60	ppm		98
94) Benzo[k]fluoranthene	17.732	252	1033483	44.04	ppm		98
95) Benzo[a]pyrene	18.218	252	1023028	44.73	ppm		97
96) Indeno[1,2,3-cd]pyrene	19.975	276	1024184	44.92	ppm		92
98) Dibenz[a,h]anthracene	20.029	278	1027938	44.29	ppm		97
99) 7,12-Dimethylbenz(a)an...	17.700	256	426812	40.85	ppm		97
100) Benzo[g,h,i]perylene	20.397	276	1083893	47.15	ppm		96
102) Benzaldehyde	4.262	105	208638	34.75	ppm		94
104) 1,2,4,5-Tetrachloroben...	6.735	216	226506	35.12	ppm		99
105) Atrazine	10.196	215	104275	51.79	ppm	#	87
107) Benzidine	13.246	184	186136	12.62	ppm		95
112) Pentachloronitrobenzene	10.297	295	44154	46.61	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153379.D
Acq On : 12 Apr 2019 7:41 am
Operator : chriss2
Sample : op19680-bsd
Misc : op19680,em6555,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

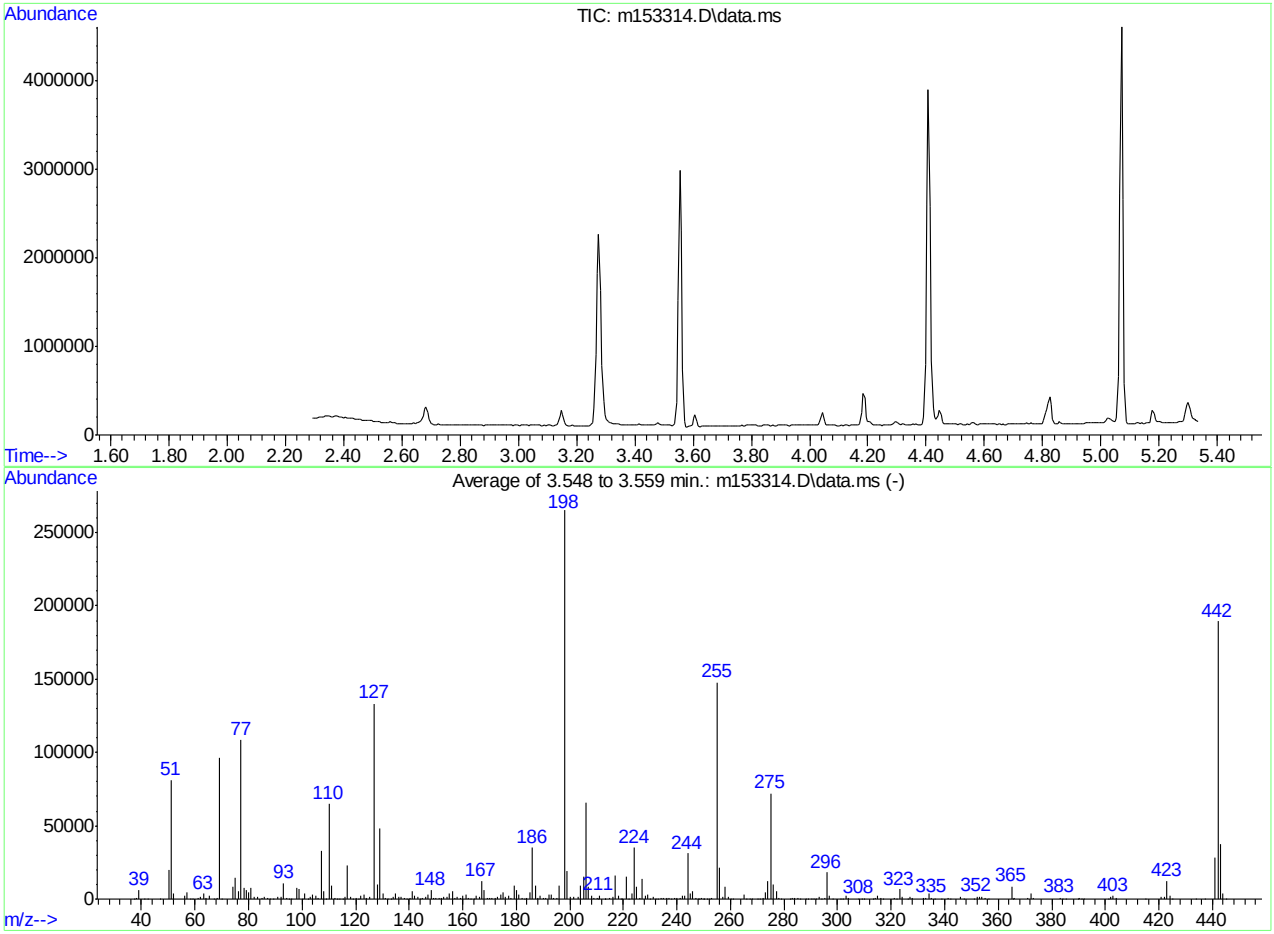
Quant Time: Apr 12 11:43:05 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration



DFTPPR

Data File : C:\msdchem\1\DATA\EM6551\m153314.D Vial: 1
Acq On : 10 Apr 2019 3:48 am Operator: chriss2
Sample : DFTPP Inst : MSM
Misc : op17006,em6551,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018



AutoFind: Scans 236, 237, 238; Background Corrected with Scan 231

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.7	81317	PASS
68	69	0.00	2	1.0	961	PASS
69	198	0.00	100	36.3	96167	PASS
70	69	0.00	2	0.2	180	PASS
127	198	40	60	50.2	133065	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	265066	PASS
199	198	5	9	7.2	19137	PASS
275	198	10	30	27.1	71877	PASS
365	198	1	100	3.2	8575	PASS
441	443	0.10	100	76.5	28434	PASS
442	198	40	100	71.5	189464	PASS
443	442	17	23	19.6	37187	PASS

m153314.D DFTPPM.M Wed Apr 10 10:31:36 2019

Average of 3.548 to 3.559 min.: m153314.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.10	285	58.15	335	74.15	8623	86.05	1409
38.10	693	59.15	117	75.05	14194	87.05	930
39.15	6146	61.10	989	76.15	5201	88.05	303
41.15	65	62.10	1321	77.15	108367	89.10	236
42.15	60	63.15	3555	78.15	7574	91.10	1485
47.05	90	64.10	543	79.05	6187	92.10	1839
50.15	19830	65.15	2039	80.05	4799	93.05	10747
51.10	81317	67.10	302	81.05	7424	94.05	702
52.15	4150	68.15	961	82.10	1413	95.10	183
56.15	2042	69.05	96167	83.15	1578	96.05	216
57.15	4317	70.05	180	85.15	701	98.05	7712

Average of 3.548 to 3.559 min.: m153314.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
99.05	7125	110.05	64646	121.05	2	133.00	216
100.05	383	111.05	9570	122.05	2175	134.05	1387
101.05	4189	112.05	1129	123.05	3207	135.05	3598
102.05	415	113.05	338	124.00	1152	136.05	1449
103.05	1409	114.00	158	125.05	1498	137.00	1746
104.05	2713	115.05	25	127.05	133065	138.05	501
105.05	2499	116.10	1800	128.05	9735	139.05	375
106.10	832	117.05	23157	129.05	48400	140.10	631
107.05	32777	118.05	1820	130.05	4087	141.05	5564
108.05	5363	119.00	106	131.05	926	142.05	2179
109.05	159	120.05	660	132.05	339	143.05	1511

Average of 3.548 to 3.559 min.: m153314.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
144.10	395	155.05	3624	166.05	1792	177.05	2284
145.10	458	156.05	5382	167.00	12563	178.05	843
146.10	1189	157.05	1044	168.05	6193	179.05	8874
147.00	3125	158.05	1241	169.10	1097	180.05	6396
148.05	6140	159.00	936	170.00	467	181.05	2990
149.05	1129	160.00	2018	171.00	604	182.05	531
150.00	508	161.05	2716	172.00	1003	183.05	278
151.10	913	162.00	1064	173.05	1559	184.00	772
152.05	643	163.00	147	174.05	2816	185.05	4361
153.05	1884	164.10	373	175.05	4942	186.05	34906
154.05	1546	165.00	1972	176.00	1545	187.05	9559

Average of 3.548 to 3.559 min.: m153314.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
188.00	957	200.00	1237	211.05	2522	223.05	3547
189.05	2154	201.50	1533	212.95	154	224.05	34834
190.00	460	203.00	1573	213.15	103	225.05	8628
191.05	810	204.05	8835	215.00	712	226.05	1008
192.05	2875	205.05	15602	216.05	1407	227.05	14104
193.05	3401	206.05	65589	217.00	16221	228.05	2030
194.00	703	207.00	8788	218.05	1975	229.05	2956
194.95	522	208.05	1982	219.05	71	230.00	300
196.05	8973	209.05	619	219.35	93	231.05	1233
198.05	265066	210.10	1057	221.05	15658	231.90	185
199.00	19137	210.55	296	222.05	382	233.00	295

Average of 3.548 to 3.559 min.: m153314.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
234.00	946	245.05	4187	255.05	147944	269.90	148
235.00	924	246.00	5034	256.05	21820	271.05	380
236.00	727	246.95	1098	257.05	1578	272.00	498
237.00	1115	247.85	129	258.05	8102	273.00	4930

238.05	186	248.15	82	259.00	1396	274.05	12618
239.00	632	249.00	1061	259.95	143	275.05	71877
240.00	435	249.95	200	261.00	201	276.05	9733
241.05	799	250.15	114	265.05	3170	277.00	5292
242.05	2117	251.10	223	265.90	71	278.05	1167
243.05	2344	252.10	282	267.05	100	279.00	232
244.05	31010	253.05	673	267.80	35	282.05	233

Average of 3.548 to 3.559 min.: m153314.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
283.00	792	295.00	538	313.05	76	327.95	605
284.00	499	296.05	18139	314.00	1054	331.95	440
285.05	1085	297.00	2386	315.05	2088	333.00	691
286.00	201	298.05	203	316.00	1163	334.05	4003
287.95	81	300.95	184	317.05	112	335.05	1093
288.95	70	302.00	234	321.05	680	336.15	70
290.00	217	303.05	2309	322.05	384	338.95	98
290.95	66	304.05	603	323.05	6630	341.05	617
292.00	243	307.95	299	324.05	1503	342.05	236
293.00	1370	309.05	178	326.05	82	345.95	1617
293.95	273	309.95	177	327.00	1251	346.95	178

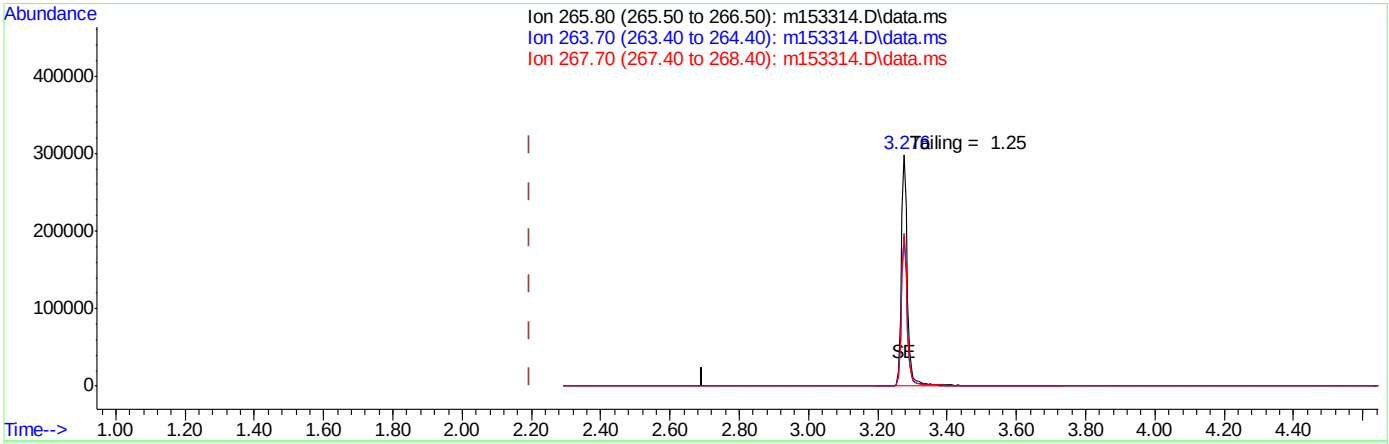
Average of 3.548 to 3.559 min.: m153314.D\data.ms
DFTPP
Modified:subtracted

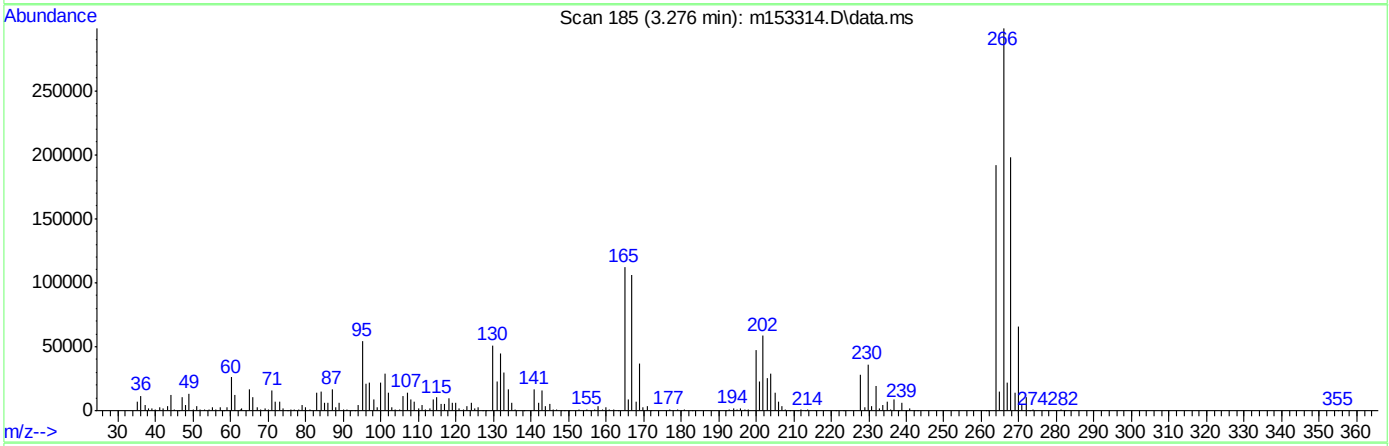
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
351.05	73	373.05	872	403.95	559	443.05	37187
352.00	1743	382.95	1004	414.95	73	444.00	3588
353.00	1485	384.05	317	421.00	1576	444.95	188
354.00	1835	385.05	78	422.05	1617		
355.05	435	389.85	70	423.05	12281		
356.15	87	390.05	475	424.05	2514		
364.95	8575	390.95	325	425.05	201		
365.75	144	391.95	163	433.85	67		
365.95	1052	400.95	183	437.05	72		
370.90	558	402.00	1445	441.05	28434		
372.05	3522	403.00	1989	442.05	189464		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153314.D
Acq On : 10 Apr 2019 3:48 am
Operator : chriss2
Sample : DFTPP
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 10:13:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153314.D\data.ms

(1) Pentachlorophenol (MC)

3.276min (+1.080) 0.00ppm m

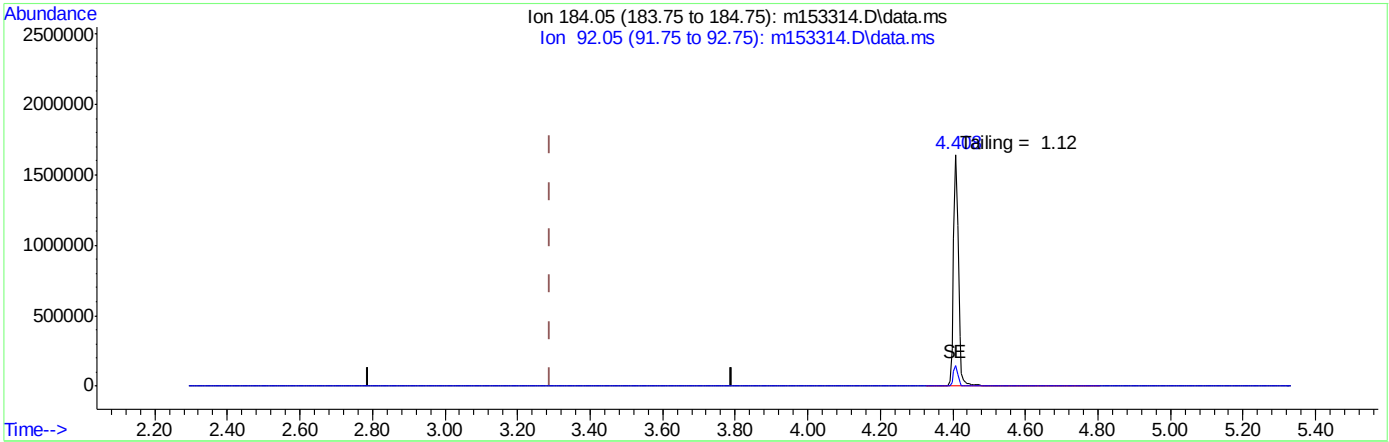
response 367367

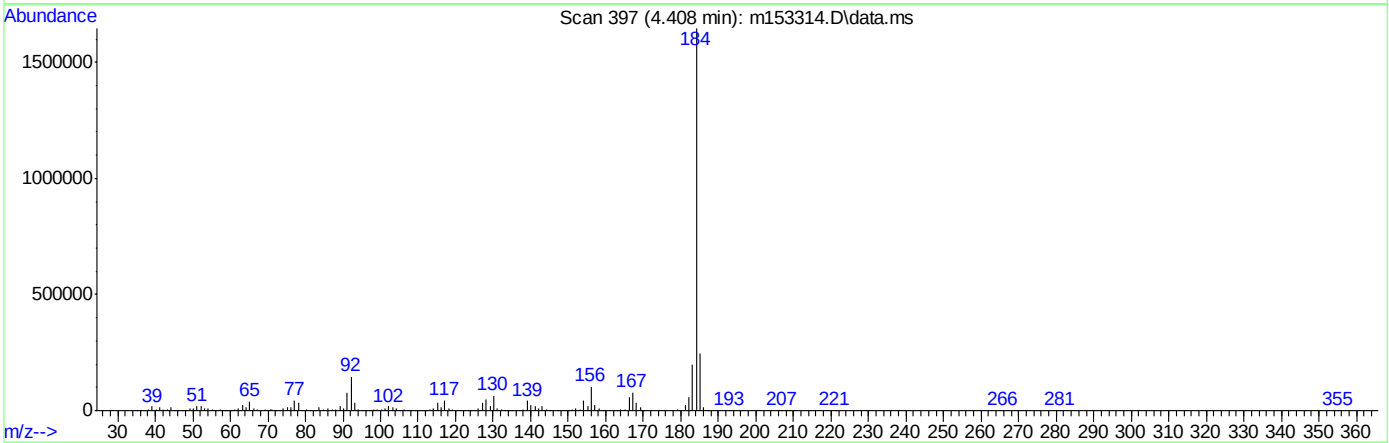
Ion	Exp%	Act%
265.80	100	100
263.70	68.00	64.30
267.70	67.90	66.17
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153314.D
Acq On : 10 Apr 2019 3:48 am
Operator : chriss2
Sample : DFTPP
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 10:13:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153314.D\data.ms

(2) Benzidine (M)

4.408min (+1.117) 0.00ppm m

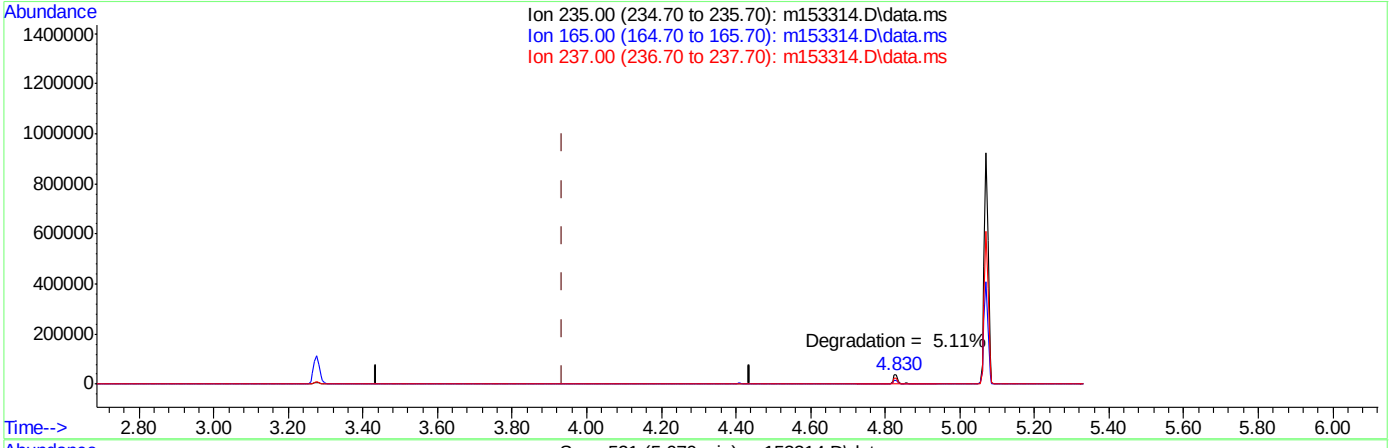
response 1538111

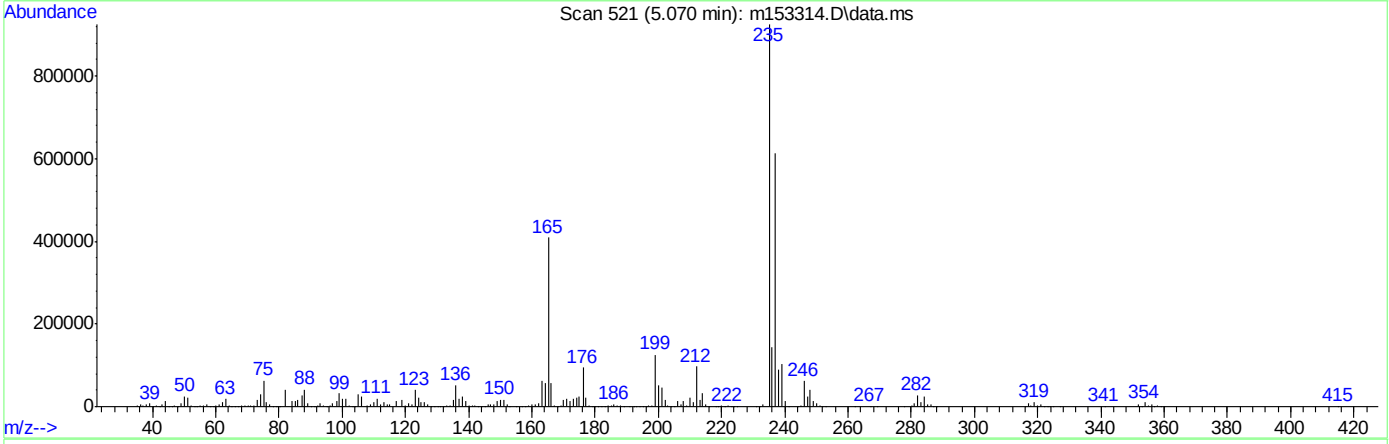
Ion	Exp%	Act%
184.05	100	100
92.05	7.00	8.83
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153314.D
Acq On : 10 Apr 2019 3:48 am
Operator : chriss2
Sample : DFTPP
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 10:13:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153314.D\data.ms

(3) PP-DDT (MC)

5.070min (+1.133) 0.00ppm m

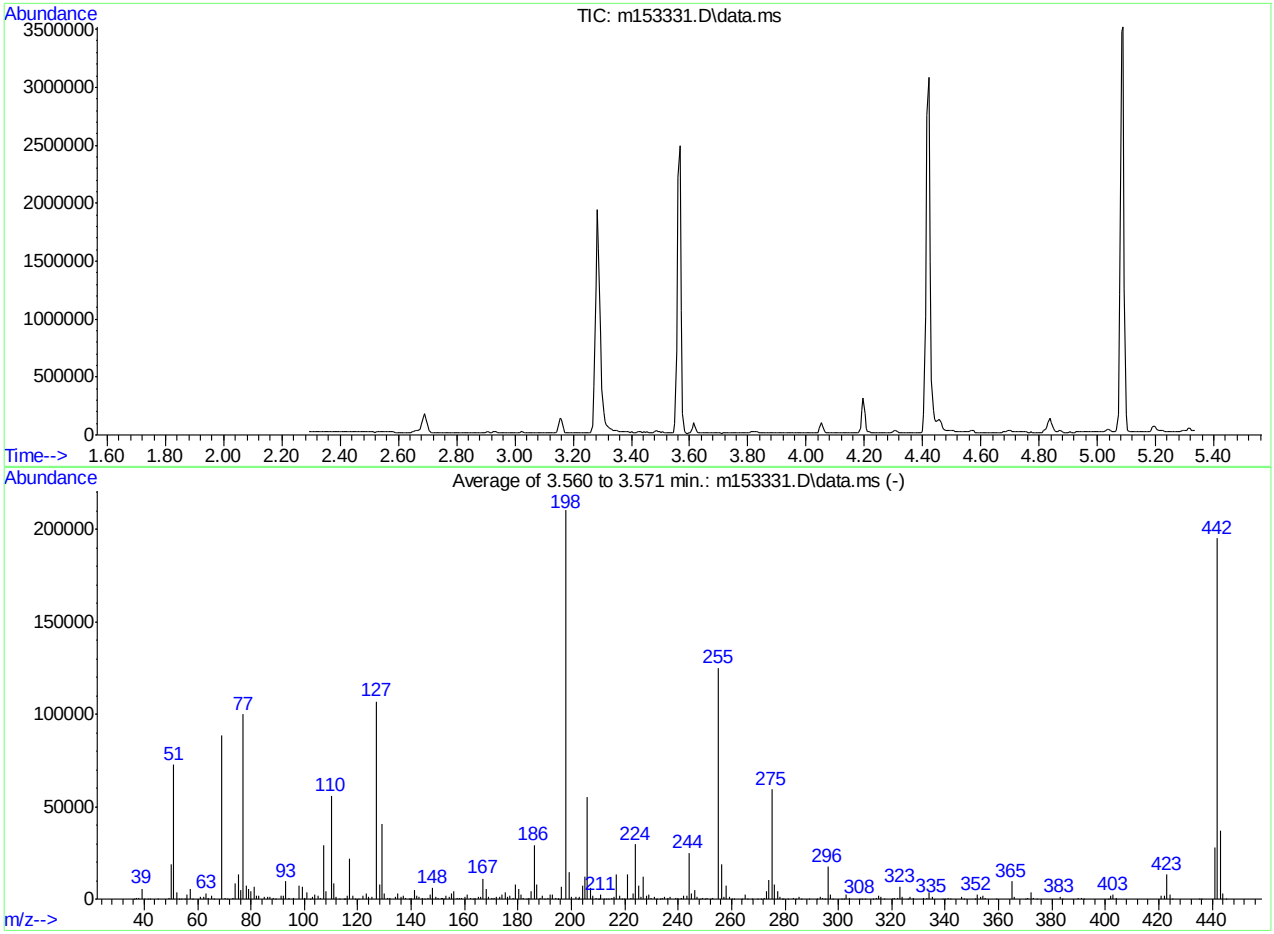
response 696485

Ion	Exp%	Act%
235.00	100	100
165.00	61.30	44.26
237.00	66.90	66.22
0.00	0.00	0.00

DFTPPR

Data File : C:\msdchem\1\DATA\EM6552\m153331.D Vial: 1
Acq On : 10 Apr 2019 12:16 pm Operator: chriss2
Sample : DFTPP Inst : MSM
Misc : op17006,em6552,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018



AutoFind: Scans 238, 239, 240; Background Corrected with Scan 232

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.5	72490	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.2	88744	PASS
70	69	0.00	2	0.4	351	PASS
127	198	40	60	50.9	106933	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	210202	PASS
199	198	5	9	7.0	14767	PASS
275	198	10	30	28.3	59397	PASS
365	198	1	100	4.5	9514	PASS
441	443	0.10	100	76.2	28112	PASS
442	198	40	100	92.9	195221	PASS
443	442	17	23	18.9	36888	PASS

m153331.D DFTPPM.M Wed Apr 10 12:44:28 2019

Average of 3.560 to 3.571 min.: m153331.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	169	52.15	3598	65.15	1802	79.05	5345
37.10	382	53.10	278	66.10	159	80.05	4358
38.10	742	54.05	79	69.05	88744	81.05	6645
39.15	5631	55.15	166	70.10	351	82.15	1688
40.05	324	56.05	2335	71.10	172	83.05	1544
41.15	18	57.10	5199	73.10	463	85.05	1383
42.15	72	58.10	266	74.15	8603	86.00	1374
45.05	90	61.10	942	75.10	13367	87.05	965
49.05	545	62.15	1084	76.15	4655	88.10	522
50.15	18654	63.15	3153	77.15	100047	89.00	193
51.10	72490	64.05	487	78.15	7027	91.05	1560

Average of 3.560 to 3.571 min.: m153331.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.05	1760	105.05	1865	117.05	21675	130.05	3145
93.05	9611	106.10	548	118.05	1962	131.05	459
94.05	675	107.05	29259	119.10	286	132.05	396
96.05	516	108.05	4441	120.05	278	134.05	1068
98.05	7275	110.05	55770	122.05	1833	135.05	2998
99.05	6670	111.05	8629	123.05	3108	136.05	1222
100.10	699	112.00	1104	124.05	1187	137.05	1633
101.05	3896	113.10	302	125.05	1293	138.00	371
102.05	303	114.85	144	127.05	106933	139.00	222
103.05	1361	115.15	71	128.05	8049	140.05	578
104.05	2250	116.10	1630	129.05	40365	141.05	5003

Average of 3.560 to 3.571 min.: m153331.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
142.05	1697	152.15	231	163.05	245	174.05	2259
143.05	1339	153.05	1678	164.05	390	175.05	3829
144.05	330	154.05	1262	165.00	1488	176.05	1194
145.05	247	155.05	2942	166.05	1484	177.05	1937
146.10	753	156.05	4394	167.00	11017	178.10	712
147.05	2367	157.05	836	168.05	5341	179.00	7708
148.05	5799	158.00	751	169.05	1008	180.05	5271
149.05	1373	159.00	625	170.00	358	181.05	2601
150.00	336	160.05	1295	171.00	547	182.00	434
151.10	634	161.05	2588	172.05	1010	183.05	182
151.60	352	162.05	647	173.05	1195	183.95	666

Average of 3.560 to 3.571 min.: m153331.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.05	4024	195.15	278	207.05	6056	216.95	13501
186.05	29307	196.05	6624	208.00	1698	217.95	1778
187.05	8097	198.05	210202	209.05	725	218.95	95
188.05	899	199.05	14767	209.95	248	219.85	164
189.05	1747	200.05	1331	210.65	324	221.05	13281
190.05	232	201.50	1131	211.05	2190	222.05	403
191.05	839	202.35	90	212.05	164	223.05	3166
192.05	2290	203.05	1329	213.05	80	224.05	29669
193.05	2730	204.05	7298	214.05	142	225.05	7123
194.05	681	205.05	12404	215.00	563	226.05	1039
194.95	203	206.05	54933	216.05	1256	227.05	12143

Average of 3.560 to 3.571 min.: m153331.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
228.05	1839	240.05	450	250.95	332	265.05	2723
229.00	2437	241.05	661	252.05	296	265.90	207
229.90	548	242.05	1898	253.05	564	267.75	92
231.05	1121	243.05	1821	255.05	125141	269.90	171

232.05	178	244.05	25036	256.05	19024	271.10	229
233.10	220	245.05	3219	257.05	1307	272.05	431
234.05	829	246.05	4777	258.05	7257	273.05	4010
235.00	983	247.00	990	259.00	997	274.05	10360
236.00	717	248.10	207	260.05	102	275.05	59397
237.05	998	249.00	849	261.00	186	276.05	8180
239.00	484	249.95	88	263.85	71	277.05	4490

Average of 3.560 to 3.571 min.: m153331.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
278.00	948	294.10	380	309.95	132	325.95	79
278.95	132	295.00	253	313.05	86	326.95	1149
279.15	140	296.05	17494	314.00	927	328.00	502
280.95	83	297.05	2376	315.00	2127	331.95	417
283.00	517	298.00	190	316.00	1248	333.00	632
284.00	323	301.00	177	317.00	142	334.00	3822
285.05	1103	301.95	251	319.95	68	335.00	1003
285.95	67	303.05	2155	321.05	631	339.15	69
288.95	193	304.00	531	322.10	383	339.95	74
292.00	198	308.00	218	323.05	6529	340.95	716
293.00	1257	308.95	107	324.05	1115	342.10	254

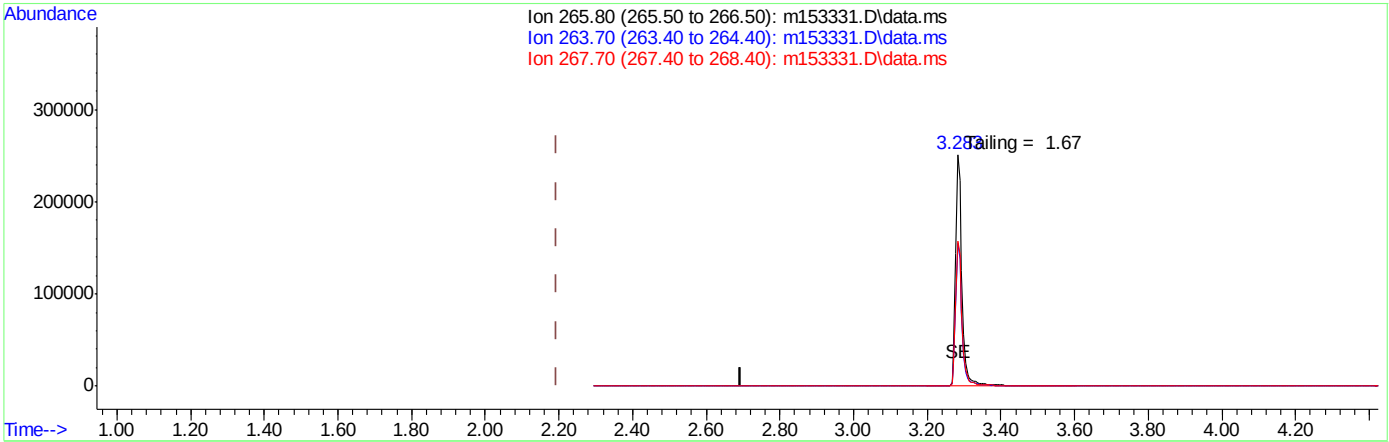
Average of 3.560 to 3.571 min.: m153331.D\data.ms
DFTPP
Modified:subtracted

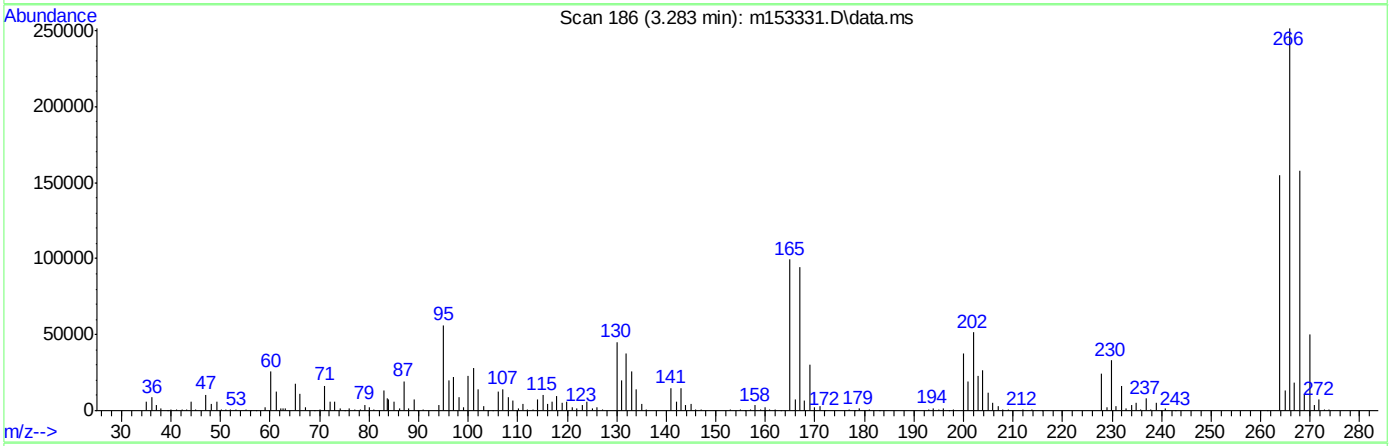
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
345.95	1398	371.00	599	403.00	2304	443.05	36888
346.95	298	372.05	3888	403.95	638	444.00	3334
350.95	83	373.00	826	421.00	2026	445.05	201
352.00	2291	374.05	82	422.00	1603		
353.05	1415	383.00	1193	423.05	13230		
354.05	2025	384.05	200	424.00	2551		
355.00	415	389.95	636	425.00	203		
359.00	150	391.05	386	435.15	70		
364.95	9514	392.00	287	436.05	71		
365.95	1418	401.00	211	441.05	28112		
370.05	192	402.00	1659	442.05	195221		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153331.D
Acq On : 10 Apr 2019 12:16 pm
Operator : chriss2
Sample : DFTPP
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 12:21:44 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153331.D\data.ms

(1) Pentachlorophenol (MC)

3.283min (+1.087) 0.00ppm m

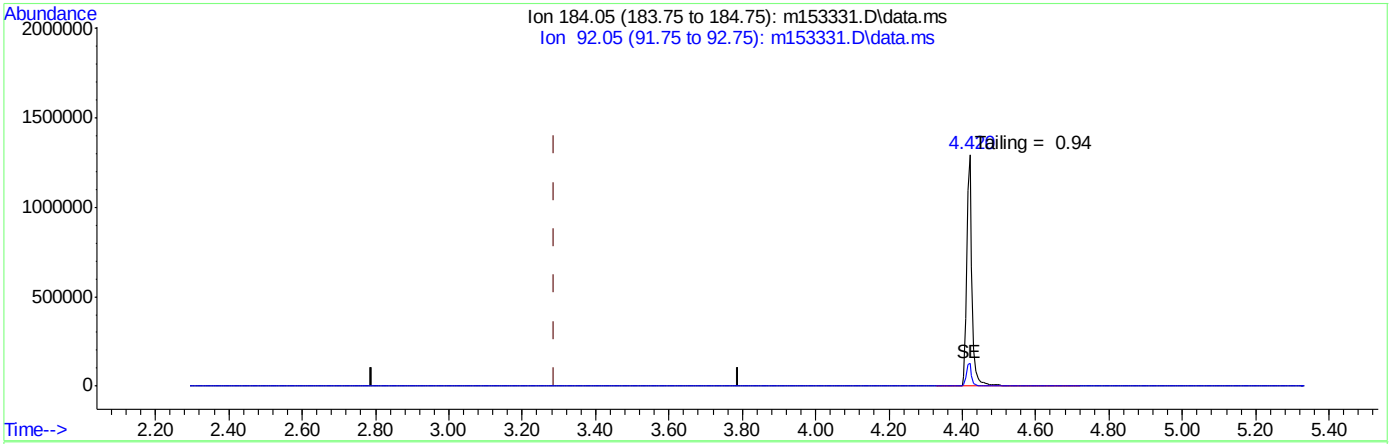
response 300730

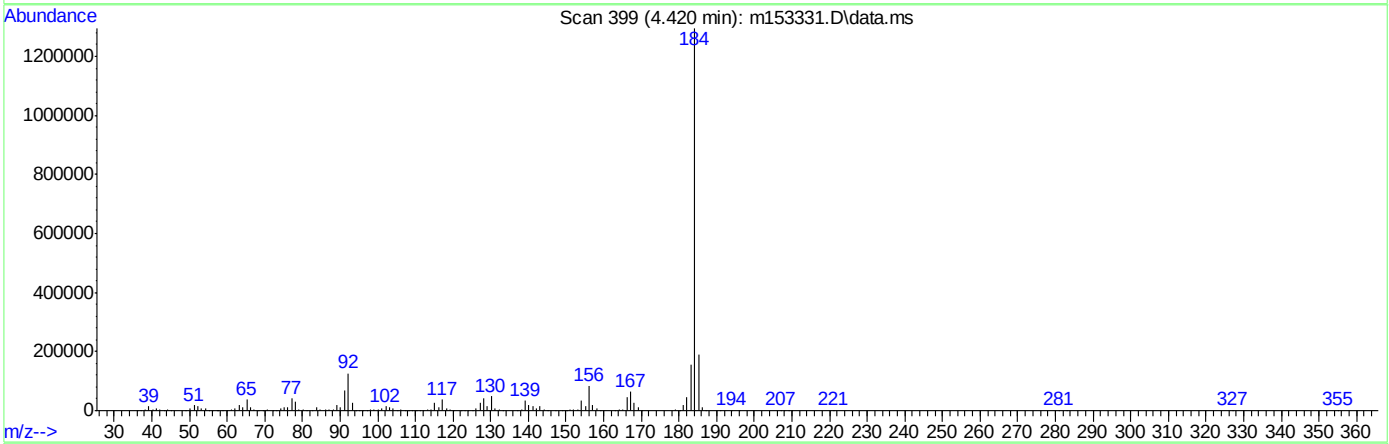
Ion	Exp%	Act%
265.80	100	100
263.70	68.00	61.72
267.70	67.90	62.69
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153331.D
Acq On : 10 Apr 2019 12:16 pm
Operator : chriss2
Sample : DFTPP
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 12:21:44 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153331.D\data.ms

(2) Benzidine (M)

4.420min (+1.130) 0.00ppm m

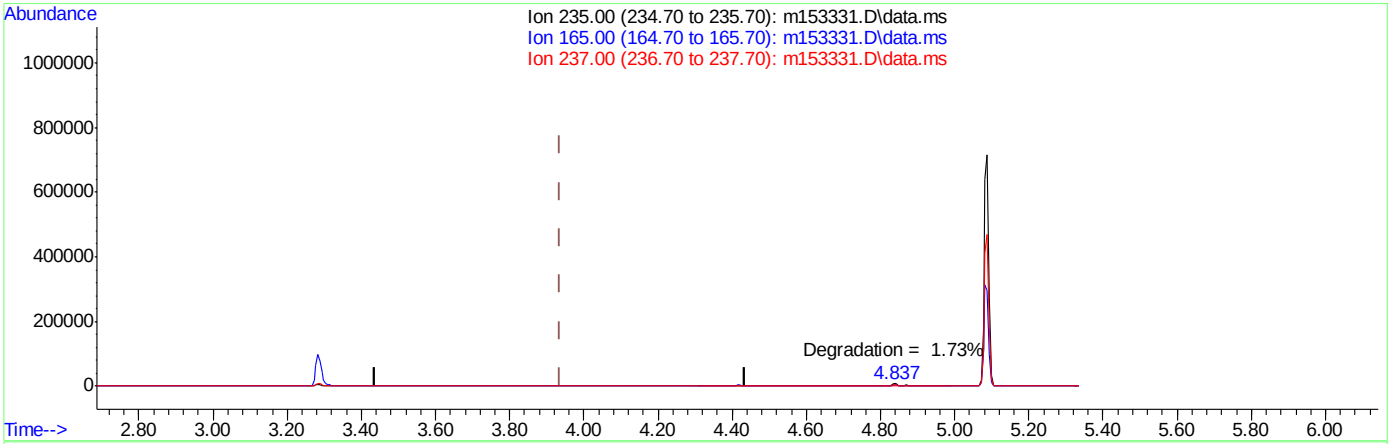
response 1281086

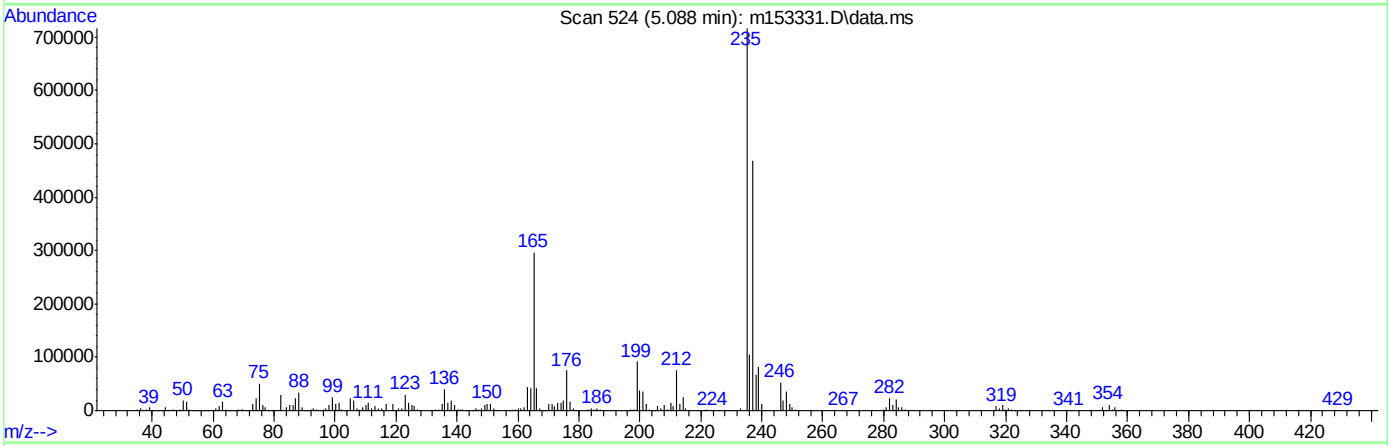
Ion	Exp%	Act%
184.05	100	100
92.05	7.00	9.74#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153331.D
Acq On : 10 Apr 2019 12:16 pm
Operator : chriss2
Sample : DFTPP
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 12:21:44 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153331.D\data.ms

(3) PP-DDT (MC)

5.088min (+1.151) 0.00ppm m

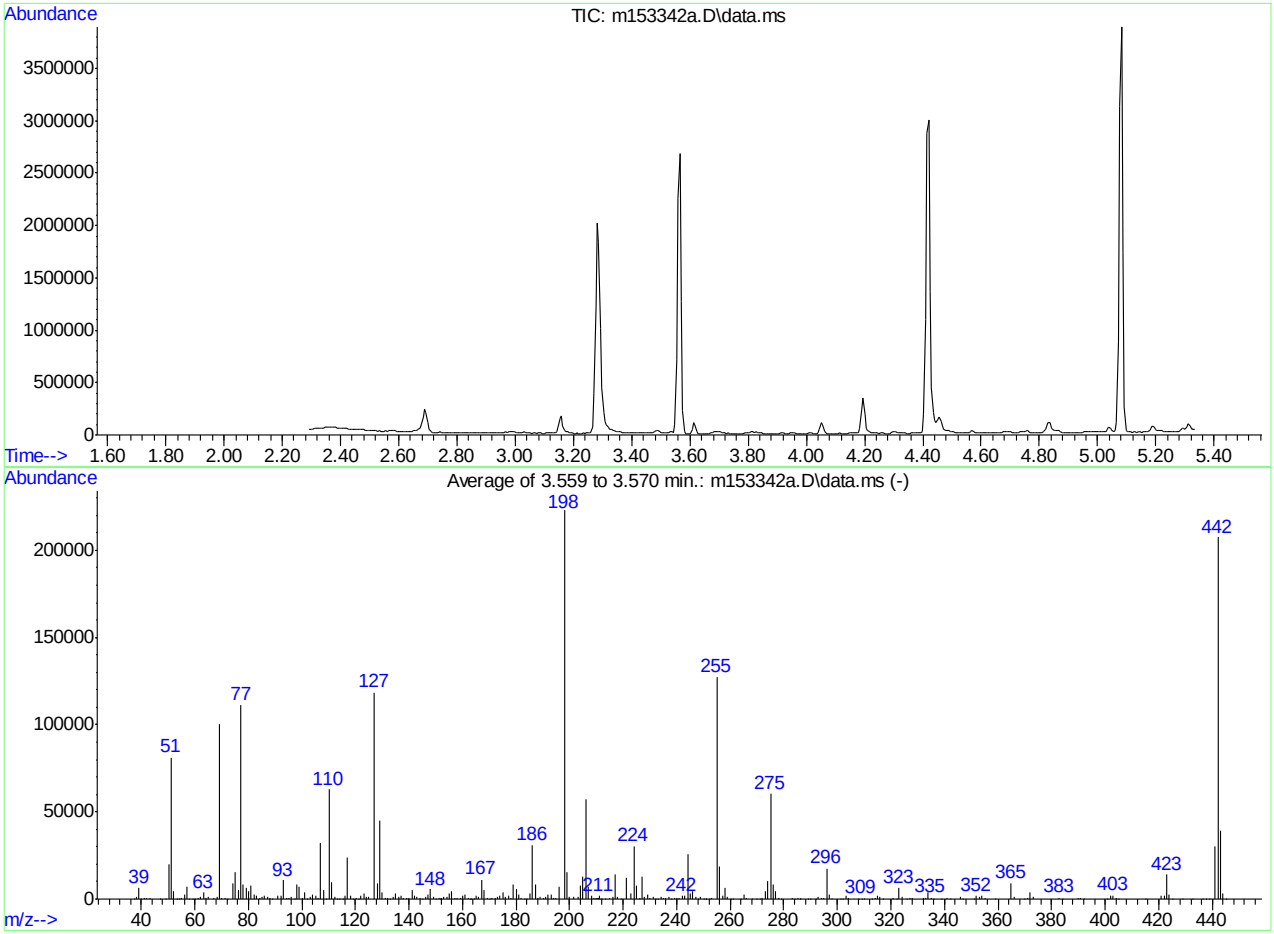
response 601289

Ion	Exp%	Act%
235.00	100	100
165.00	61.30	41.50#
237.00	66.90	65.30
0.00	0.00	0.00

DFTPPR

Data File : C:\msdchem\1\DATA\EM6552\m153342a.D Vial: 1
Acq On : 10 Apr 2019 11:38 pm Operator: chriss2
Sample : DFTPP Inst : MSM
Misc : op17006,em6553,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018



AutoFind: Scans 238, 239, 240; Background Corrected with Scan 232

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.5	81241	PASS
68	69	0.00	2	1.3	1265	PASS
69	198	0.00	100	44.9	99999	PASS
70	69	0.00	2	1.0	970	PASS
127	198	40	60	53.1	118298	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	222869	PASS
199	198	5	9	7.0	15506	PASS
275	198	10	30	27.1	60336	PASS
365	198	1	100	4.1	9070	PASS
441	443	0.10	100	76.5	29922	PASS
442	198	40	100	93.2	207616	PASS
443	442	17	23	18.8	39122	PASS

m153342a.D DFTPPM.M Thu Apr 11 07:54:02 2019

Average of 3.559 to 3.570 min.: m153342a.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.15	297	52.15	4241	63.15	3580	76.15	5088
38.15	1046	53.15	302	64.15	496	77.15	111446
39.15	6154	54.25	70	65.10	1145	78.15	8218
40.05	81	55.10	860	67.15	641	79.05	6520
41.15	833	56.10	2450	68.15	1265	80.05	4834
42.15	405	57.10	7015	69.05	99999	81.05	7703
43.15	650	58.05	121	70.10	970	82.10	2824
47.15	68	59.15	110	71.10	451	83.10	2075
49.10	169	60.15	68	72.10	203	84.05	360
50.15	19846	61.15	883	74.10	9289	85.05	1247
51.15	81241	62.15	1190	75.10	15295	86.05	2069

Average of 3.559 to 3.570 min.: m153342a.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.05	1039	99.05	7238	110.05	62917	121.10	235
88.05	419	100.00	559	111.05	9733	122.05	1824
89.05	255	101.05	4059	112.15	1189	123.05	3311
91.05	1767	102.00	185	113.10	329	124.05	1502
92.05	1639	103.05	1611	113.95	69	125.05	1525
93.05	10735	104.05	2557	115.05	164	127.05	118298
94.10	907	105.05	2172	116.05	1685	128.05	9117
95.10	769	106.05	442	117.05	23896	129.05	45301
96.15	1072	107.05	32152	118.05	1861	130.00	3569
97.15	301	108.05	5039	119.00	272	131.05	757
98.05	8221	109.10	140	120.10	416	132.05	519

Average of 3.559 to 3.570 min.: m153342a.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.00	268	144.10	365	154.05	1031	164.05	272
134.05	1082	145.05	313	155.05	3228	165.00	2041
135.05	3526	146.05	1013	156.05	4803	166.05	1484
136.05	1543	147.05	2750	157.05	797	167.00	11063
137.05	2044	148.05	5548	158.05	920	168.05	5479
138.05	560	149.05	1413	159.00	810	169.05	895
139.05	386	150.00	301	160.05	1796	170.10	343
140.05	489	151.10	826	161.05	2468	171.00	489
141.05	5186	151.75	104	162.05	723	172.00	957
142.05	1983	152.00	434	162.85	104	173.05	1315
143.05	1455	153.05	1604	163.00	219	174.05	2221

Average of 3.559 to 3.570 min.: m153342a.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.05	4024	186.05	31028	198.05	222869	210.05	454
176.05	1441	187.05	8401	198.95	15506	210.45	408
177.05	2010	188.05	957	200.00	1308	210.65	369
177.95	782	189.05	1487	201.50	1139	211.05	1638
179.05	8217	190.05	453	203.05	1462	211.75	249
180.05	5698	191.05	996	204.05	7721	212.05	235
181.05	2852	192.05	2616	205.05	12995	213.05	97
182.00	437	193.00	2873	206.05	57048	214.95	605
183.00	213	194.05	671	207.05	7068	216.05	1355
184.00	193	195.00	553	208.00	1929	217.05	13997
185.05	3258	196.05	6950	209.05	572	218.00	1618

Average of 3.559 to 3.570 min.: m153342a.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
219.00	164	232.05	176	243.05	1679	253.00	717
221.05	12519	233.00	187	244.05	25661	255.05	127592
223.05	3484	234.05	1007	245.05	3416	256.05	18435
224.05	30397	235.00	867	246.05	4202	257.05	1640

225.05	7782	236.00	715	246.95	1118	258.05	6676
226.15	788	237.05	1039	248.00	244	259.00	1167
227.05	12873	238.00	227	248.95	1033	259.95	206
227.95	1490	239.05	566	249.95	218	261.00	263
229.05	2562	240.00	355	250.75	87	263.90	160
230.05	395	241.05	829	251.00	236	265.05	2852
231.05	1241	242.05	1856	251.95	335	265.90	361

Average of 3.559 to 3.570 min.: m153342a.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
267.90	27	283.00	629	296.05	17386	314.05	833
269.85	192	284.00	276	297.00	2692	315.00	1878
270.95	325	285.05	899	298.00	163	316.00	1123
272.00	531	285.95	79	301.00	193	317.05	161
273.05	4230	286.15	97	302.05	302	321.00	675
274.05	10550	289.05	80	303.05	1951	322.15	321
275.05	60336	290.00	161	304.05	611	323.05	6134
276.05	8148	292.00	296	307.85	95	324.05	1307
277.05	4477	292.95	1210	309.00	156	326.05	92
277.95	838	294.05	369	309.95	116	326.95	833
278.95	109	294.95	356	313.05	112	328.00	606

Average of 3.559 to 3.570 min.: m153342a.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
332.05	458	352.00	1790	383.00	982	421.00	1896
332.95	615	353.05	1570	384.05	145	422.00	1904
334.00	3988	354.05	2116	390.05	519	423.05	14036
335.05	835	355.00	513	390.95	424	424.00	2515
336.05	70	358.85	71	391.95	205	425.05	207
338.95	67	364.95	9070	400.95	185	429.05	79
341.00	729	366.00	1321	402.00	1843	432.55	82
342.05	84	370.00	274	403.00	2066	436.25	77
345.95	1434	371.00	677	404.00	691	437.55	83
346.95	281	372.05	3828	405.05	81	438.85	73
351.05	134	373.00	1012	414.95	84	441.05	29922

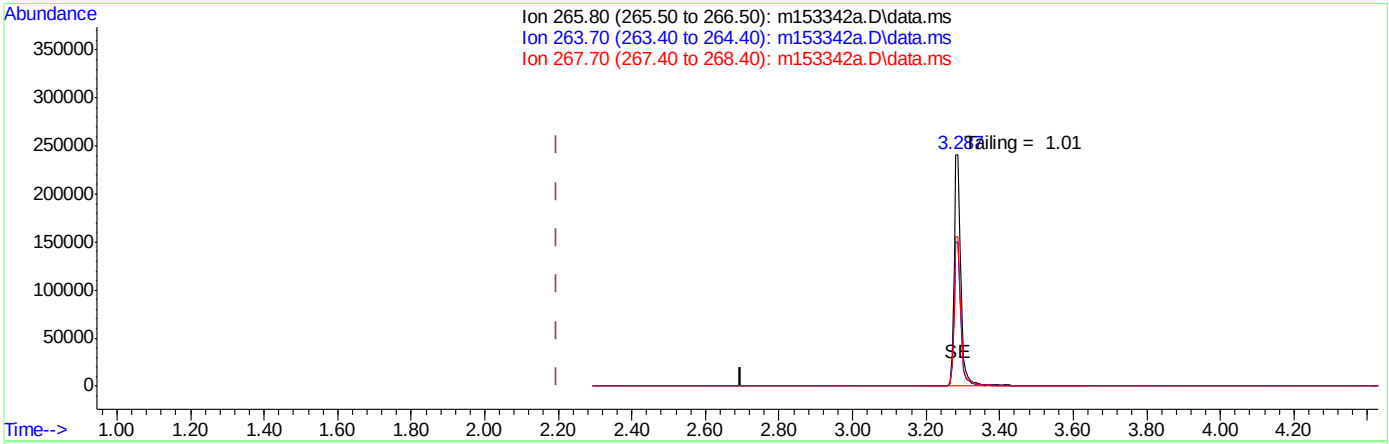
Average of 3.559 to 3.570 min.: m153342a.D\data.ms
DFTPP
Modified:subtracted

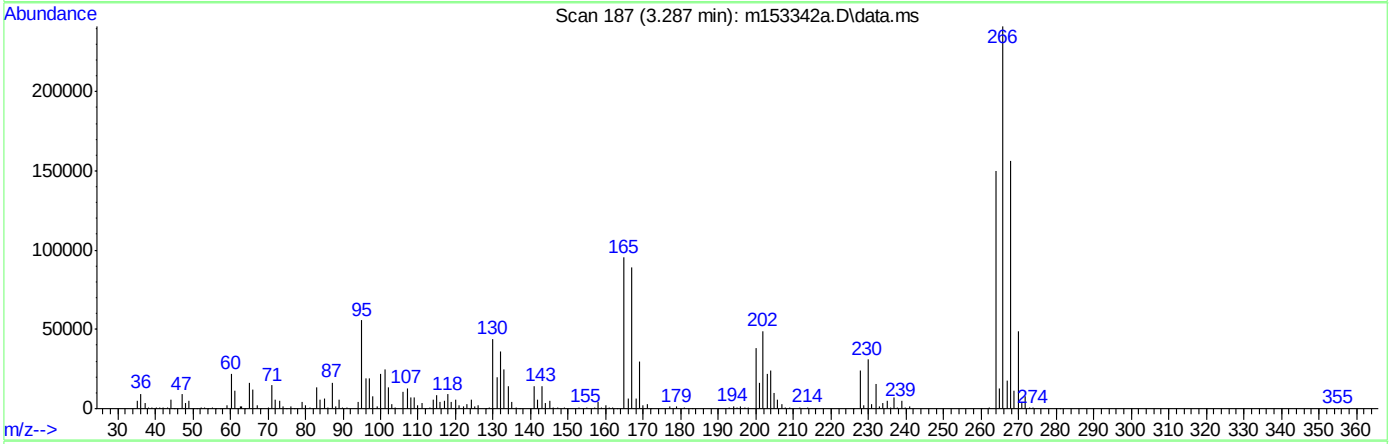
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
442.05	207616						
443.05	39122						
444.00	3524						
445.05	240						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153342a.D
Acq On : 10 Apr 2019 11:38 pm
Operator : chriss2
Sample : DFTPP
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 23:44:03 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153342a.D\data.ms

(1) Pentachlorophenol (MC)

3.287min (+1.091) 0.00ppm m

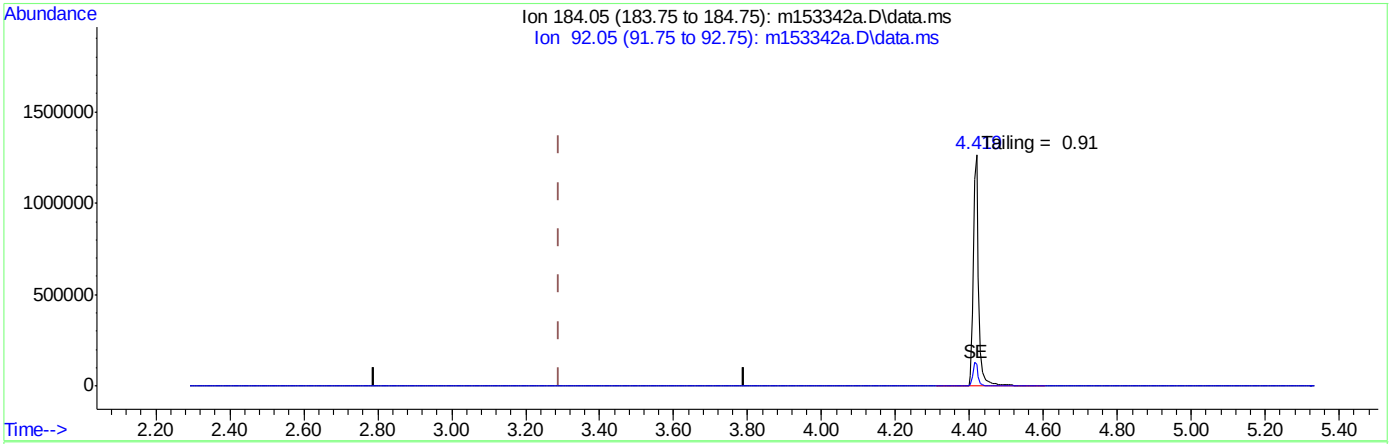
response 306716

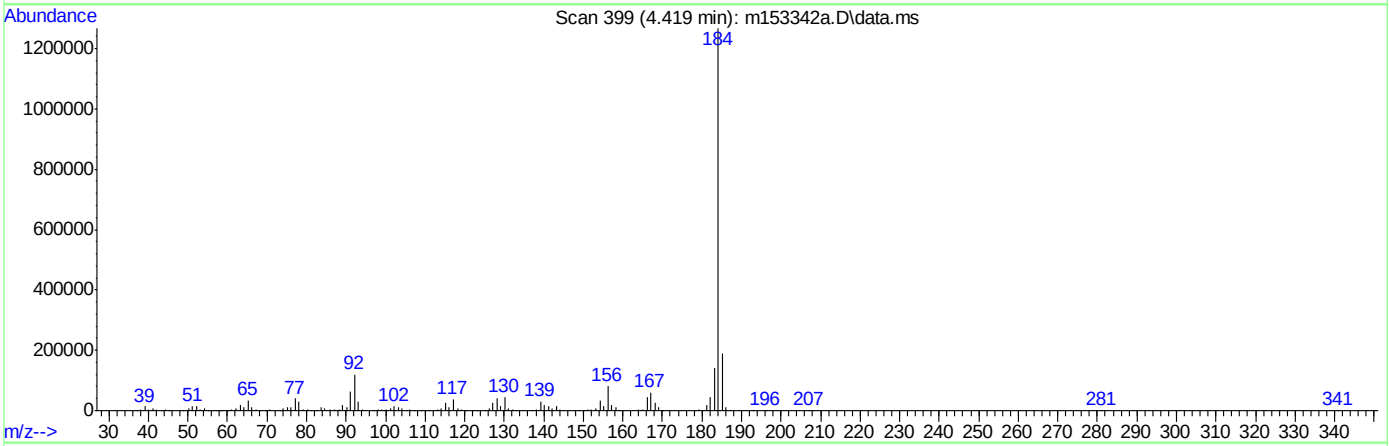
Ion	Exp%	Act%
265.80	100	100
263.70	68.00	62.10
267.70	67.90	64.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153342a.D
Acq On : 10 Apr 2019 11:38 pm
Operator : chriss2
Sample : DFTPP
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 23:44:03 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153342a.D\data.ms

(2) Benzidine (M)

4.419min (+1.129) 0.00ppm m

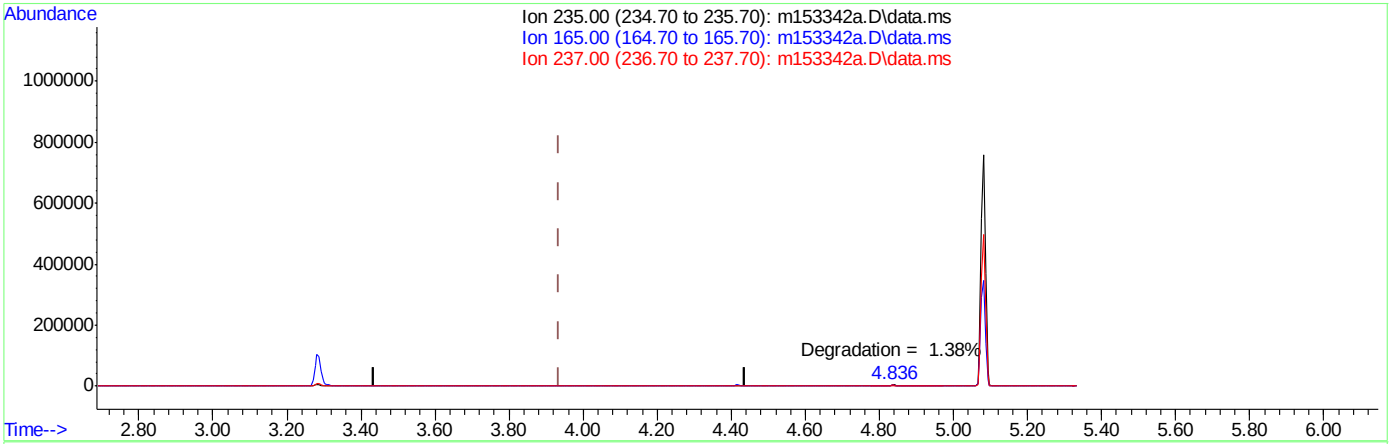
response 1262490

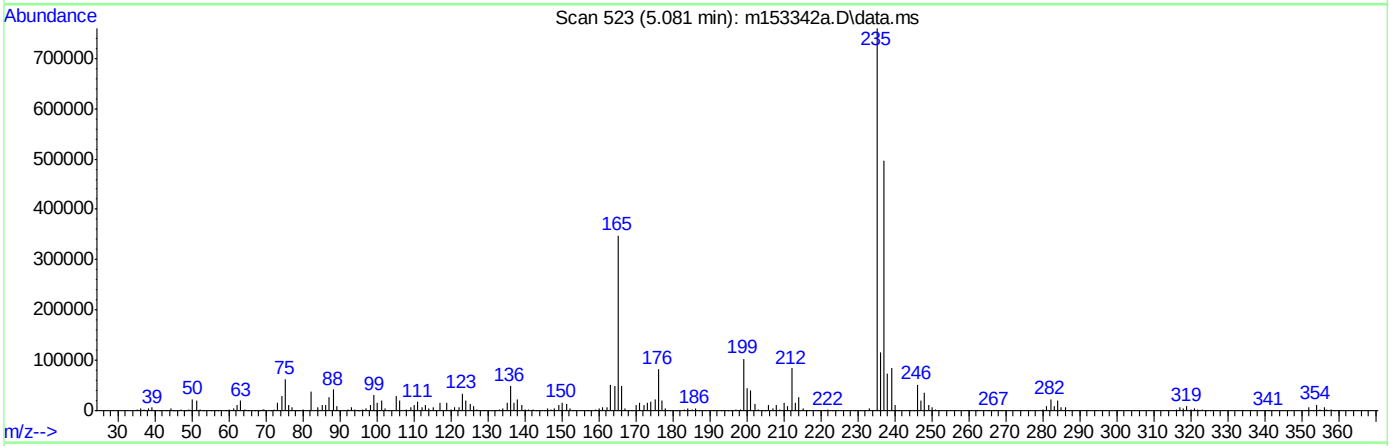
Ion	Exp%	Act%
184.05	100	100
92.05	7.00	9.42#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153342a.D
Acq On : 10 Apr 2019 11:38 pm
Operator : chriss2
Sample : DFTPP
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 23:44:03 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153342a.D\data.ms

(3) PP-DDT (MC)

5.081min (+1.145) 0.00ppm m

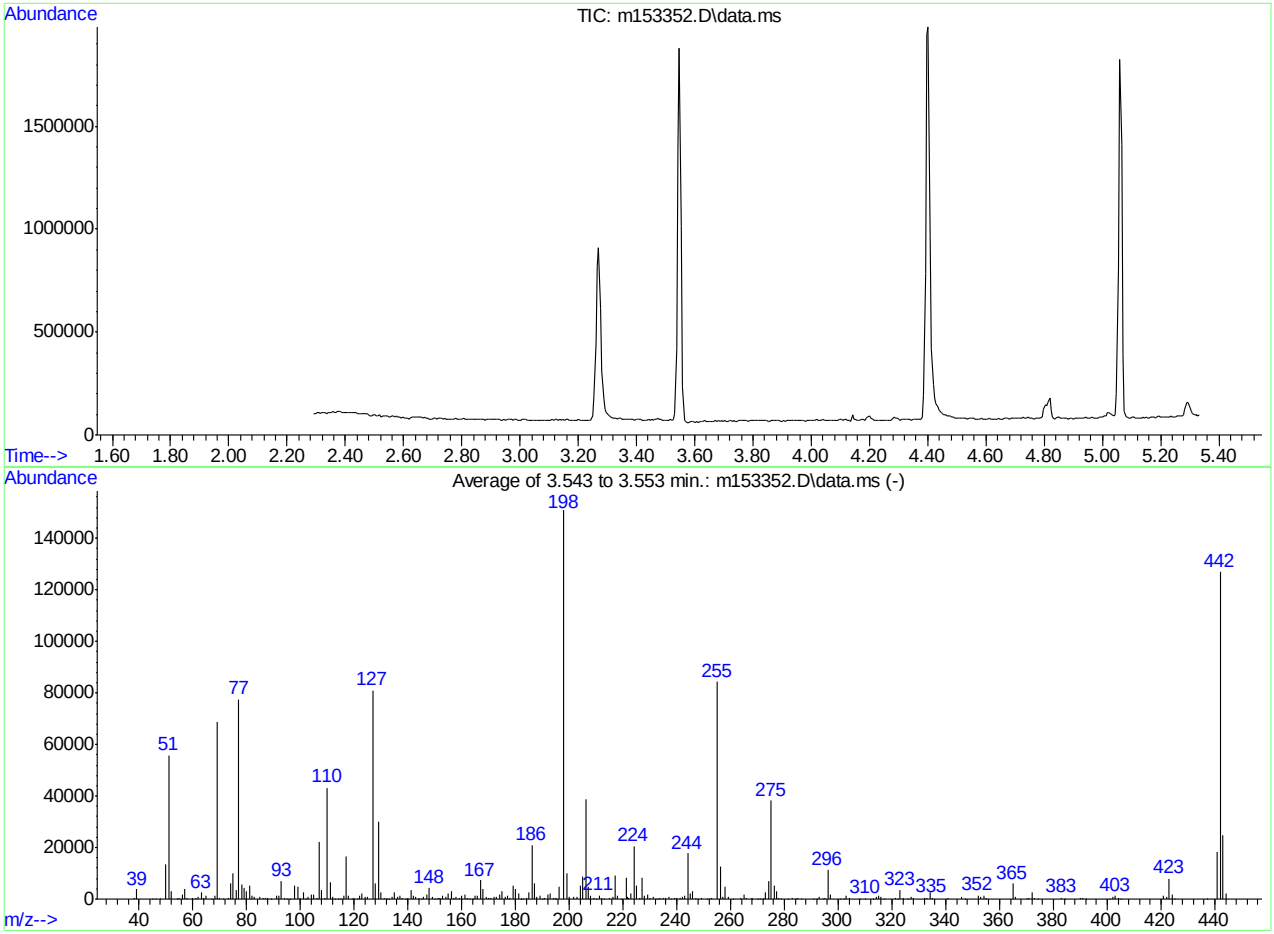
response 602227

Ion	Exp%	Act%
235.00	100	100
165.00	61.30	45.87
237.00	66.90	65.53
0.00	0.00	0.00

DFTPPR

Data File : C:\msdchem\1\DATA\EM6554\m153352.D Vial: 1
Acq On : 11 Apr 2019 9:01 am Operator: angelar
Sample : DFTPP Inst : MSM
Misc : op17006,em6554,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018



AutoFind: Scans 235, 236, 237; Background Corrected with Scan 230

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.0	55850	PASS
68	69	0.00	2	1.7	1195	PASS
69	198	0.00	100	45.6	68843	PASS
70	69	0.00	2	0.6	405	PASS
127	198	40	60	53.8	81144	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	150829	PASS
199	198	5	9	6.7	10041	PASS
275	198	10	30	25.4	38250	PASS
365	198	1	100	3.9	5931	PASS
441	443	0.10	100	73.4	18100	PASS
442	198	40	100	84.1	126888	PASS
443	442	17	23	19.4	24648	PASS

m153352.D DFTPPM.M Thu Apr 11 12:25:41 2019

Average of 3.543 to 3.553 min.: m153352.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.10	261	57.10	3981	70.10	405	82.00	1434
39.15	3782	58.05	379	71.15	153	83.05	975
45.10	78	60.10	293	73.10	395	85.05	779
46.05	91	61.15	653	74.15	6188	86.05	280
48.05	162	62.05	780	75.05	10224	87.00	506
50.10	13614	63.15	2451	76.15	3681	88.05	243
51.10	55850	64.15	447	77.10	77507	89.05	95
52.15	3009	65.15	1470	78.15	5573	91.05	1299
54.10	74	67.05	179	79.05	4461	92.05	1163
55.15	412	68.10	1195	80.05	3265	93.05	7133
56.05	1665	69.05	68843	81.05	5264	94.10	608

Average of 3.543 to 3.553 min.: m153352.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.05	18	107.05	22352	118.05	1353	130.05	2760
96.05	166	108.05	3523	119.05	174	131.05	568
98.05	5315	109.10	453	120.10	324	131.95	185
99.05	4895	110.05	43186	121.05	166	132.15	150
100.05	575	111.05	6454	122.00	1222	132.95	92
101.05	2840	112.05	932	123.05	2088	134.05	941
102.05	97	113.05	178	124.05	1076	135.05	2495
103.05	874	114.05	117	125.05	1081	136.05	942
104.00	1829	114.95	90	127.05	81144	137.05	1174
105.05	1719	116.05	1121	128.05	5991	138.00	265
106.10	544	117.05	16493	129.05	30205	139.05	73

Average of 3.543 to 3.553 min.: m153352.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
140.05	348	151.10	487	161.05	1721	172.00	731
141.05	3710	151.60	240	162.00	392	173.05	913
142.05	1173	152.05	125	163.05	99	174.05	1713
143.05	885	153.05	1123	163.95	152	175.05	3027
144.05	328	154.00	920	165.00	1276	176.10	968
145.05	155	155.05	2088	166.00	1295	177.05	1309
146.00	724	156.05	3062	167.05	7312	178.05	523
147.05	1953	157.10	635	168.05	3726	178.95	5274
148.05	4264	158.05	719	169.05	777	180.05	3757
149.00	882	158.95	505	170.00	272	181.05	2002
150.00	231	160.00	1174	171.00	293	181.90	166

Average of 3.543 to 3.553 min.: m153352.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
182.15	193	193.05	2112	205.05	8882	217.00	8961
183.00	146	194.10	406	206.05	38680	217.95	1282
184.10	555	194.85	75	207.05	4585	219.15	93
185.05	2561	195.10	252	208.05	1278	221.05	8291
186.05	21087	196.05	4909	209.00	407	221.65	679
187.05	5894	197.95	150829	209.95	155	222.05	254
188.10	690	199.05	10041	211.05	1432	223.00	2049
189.00	1112	200.05	870	212.00	234	224.05	20626
190.15	130	201.60	759	213.05	69	225.05	5297
191.00	649	203.00	974	214.95	367	226.05	616
192.05	1739	204.05	5164	216.05	726	227.05	8381

Average of 3.543 to 3.553 min.: m153352.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
227.95	1148	239.00	337	251.05	85	265.95	350
229.00	1927	239.95	233	252.15	78	267.75	95
229.95	314	241.05	501	253.00	513	267.90	232
231.05	816	242.05	1035	255.05	84314	269.90	183

231.95	114	243.05	1147	256.05	12647	270.95	191
232.95	77	244.05	17836	257.00	923	271.95	112
233.95	536	245.05	2382	258.05	4604	272.20	159
235.00	645	246.00	3122	259.00	771	273.00	2762
236.00	415	247.00	657	261.00	160	274.05	6906
237.00	854	248.05	74	263.80	284	275.05	38250
237.95	72	249.00	574	265.00	1929	276.05	5407

Average of 3.543 to 3.553 min.: m153352.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
277.00	3179	294.15	218	314.00	712	331.95	312
278.00	534	295.05	257	315.00	1488	333.00	390
278.95	79	296.05	11159	316.05	705	334.05	2766
281.05	83	297.05	1845	316.95	68	335.00	628
283.00	421	300.95	80	321.10	416	341.00	364
284.00	229	302.05	140	322.05	157	346.00	854
285.00	640	303.00	1434	323.05	3698	346.95	87
286.05	94	304.00	391	324.00	640	352.00	1432
290.95	67	308.05	141	325.95	68	353.05	998
292.00	137	310.05	148	326.95	680	354.05	1436
293.00	827	313.05	76	327.95	358	355.05	318

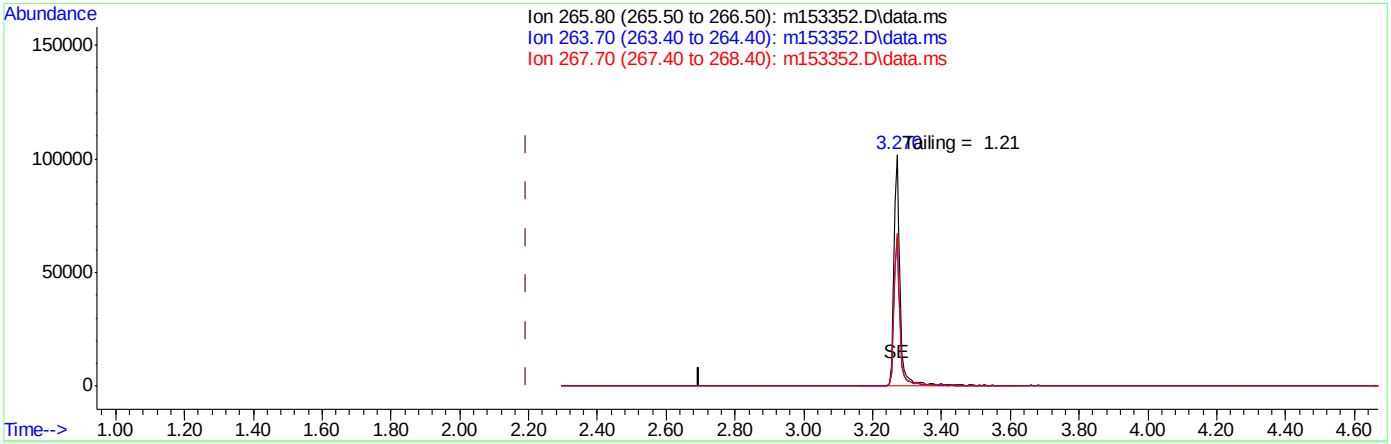
Average of 3.543 to 3.553 min.: m153352.D\data.ms
DFTPP
Modified:subtracted

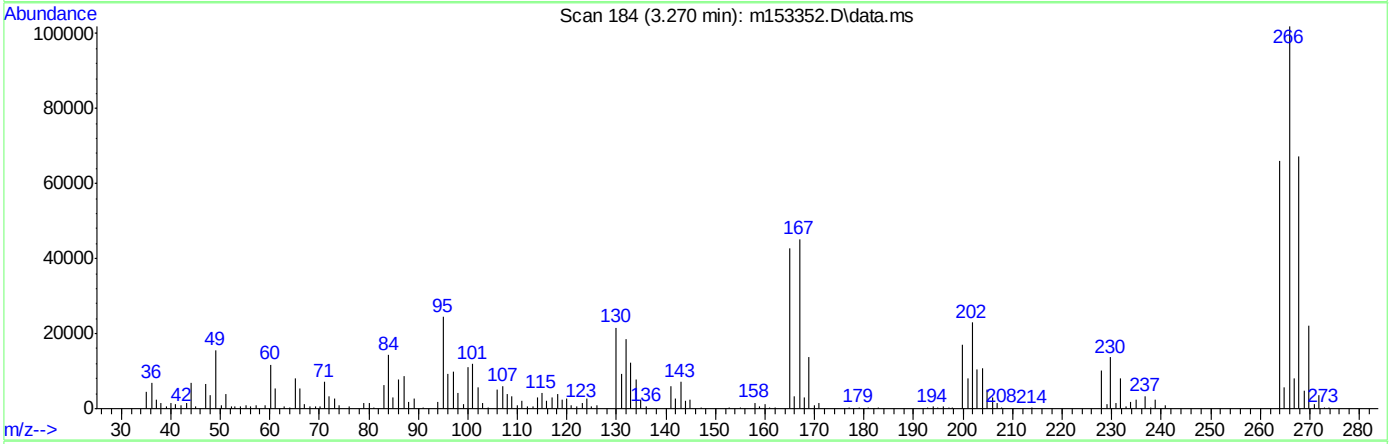
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
364.95	5931	392.05	162	436.95	67		
365.95	783	400.95	145	441.00	18100		
370.05	95	401.95	992	442.05	126888		
371.00	263	403.00	1303	443.00	24648		
372.00	2416	404.00	516	444.05	2212		
373.00	596	405.15	85				
374.05	71	420.95	1167				
383.00	610	422.00	979				
384.05	178	423.05	8013				
390.00	335	424.00	1851				
390.95	269	424.95	75				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6554\
Data File : m153352.D
Acq On : 11 Apr 2019 9:01 am
Operator : angelar
Sample : DFTPP
Misc : op17006,em6554,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 09:06:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153352.D\data.ms

(1) Pentachlorophenol (MC)

3.270min (+1.075) 0.00ppm m

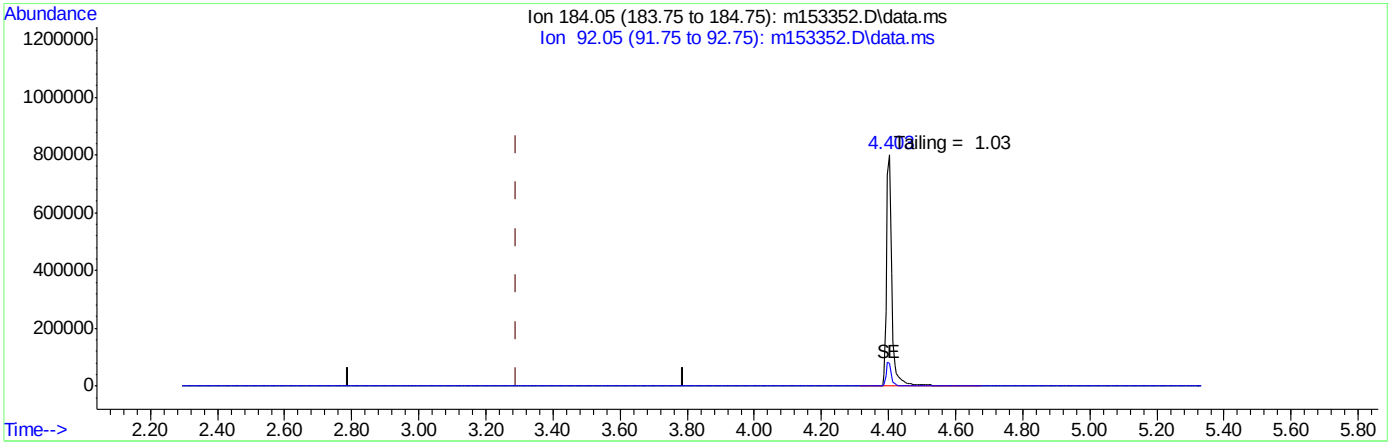
response 131810

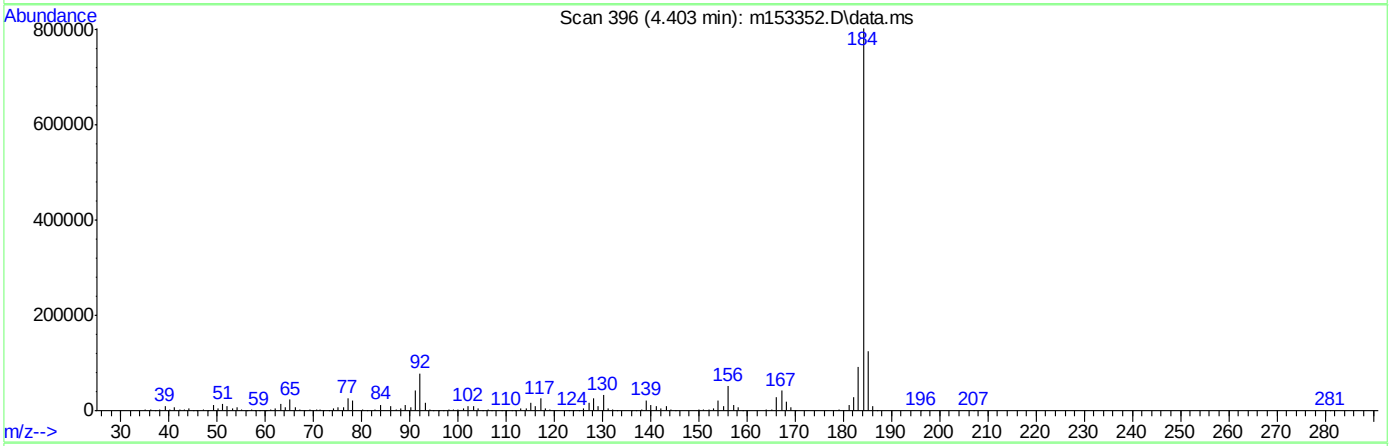
Ion	Exp%	Act%
265.80	100	100
263.70	68.00	64.78
267.70	67.90	65.94
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6554\
Data File : m153352.D
Acq On : 11 Apr 2019 9:01 am
Operator : angelar
Sample : DFTPP
Misc : op17006,em6554,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 09:06:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153352.D\data.ms

(2) Benzidine (M)

4.403min (+1.112) 0.00ppm m

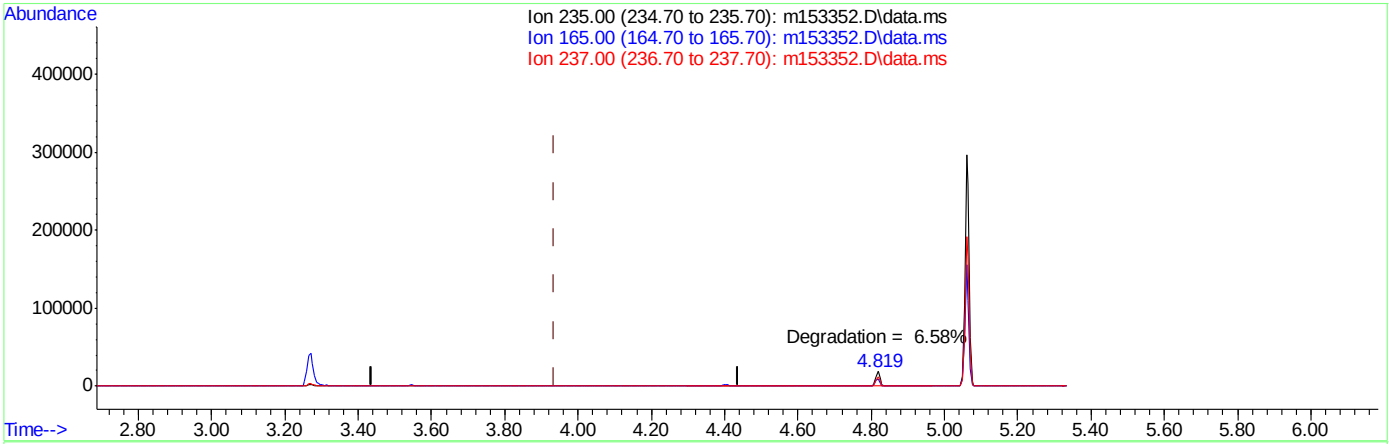
response 885083

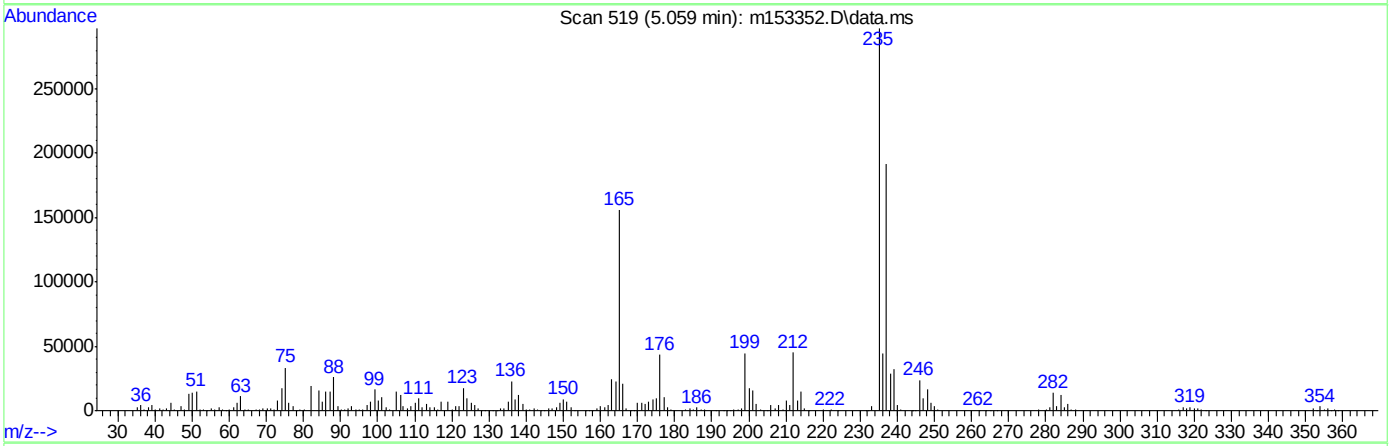
Ion	Exp%	Act%
184.05	100	100
92.05	7.00	9.69#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6554\
Data File : m153352.D
Acq On : 11 Apr 2019 9:01 am
Operator : angelar
Sample : DFTPP
Misc : op17006,em6554,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 09:06:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153352.D\data.ms

(3) PP-DDT (MC)

5.059min (+1.123) 0.00ppm m

response 238820

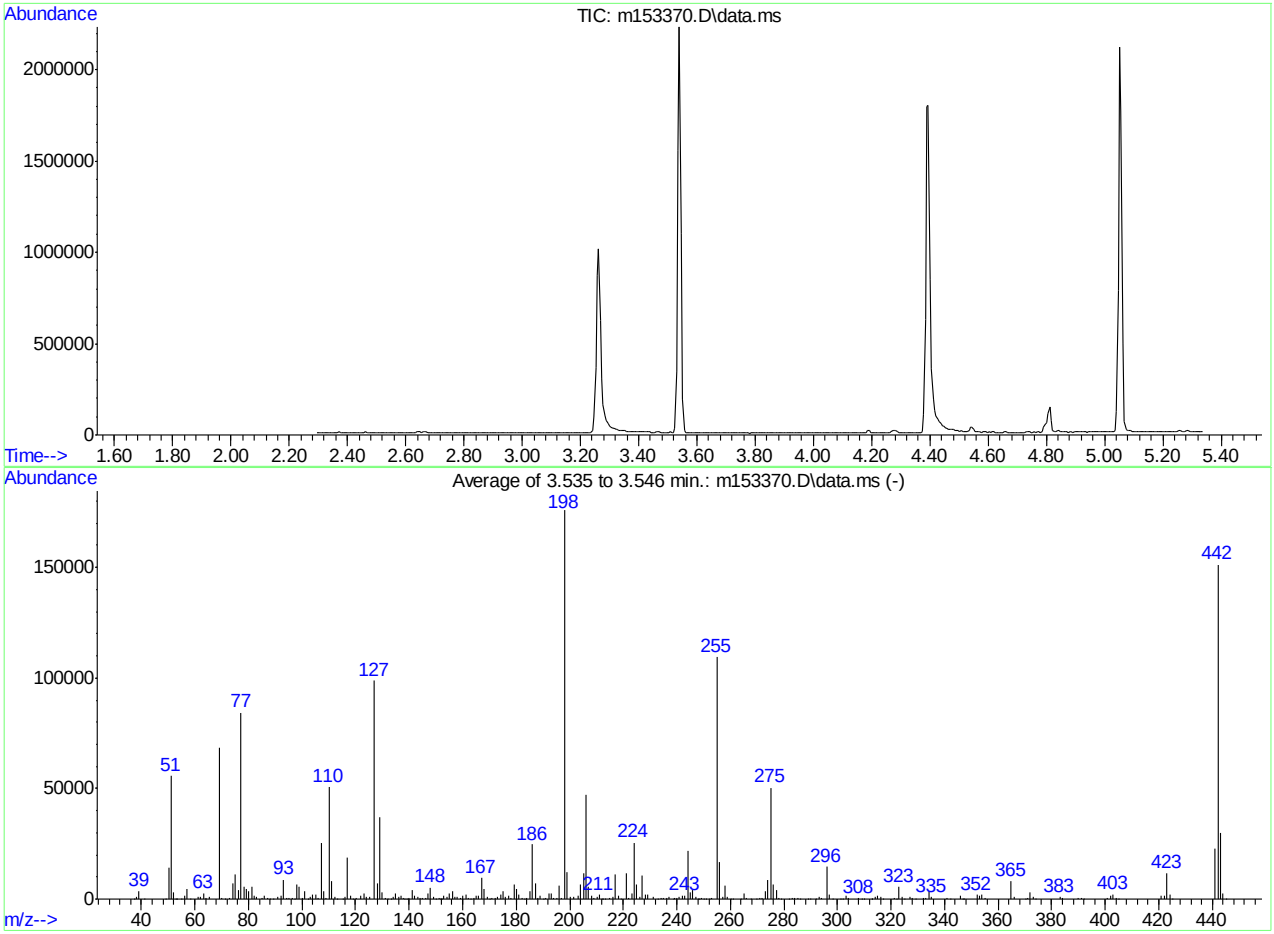
Ion	Exp%	Act%
235.00	100	100
165.00	61.30	52.44
237.00	66.90	64.48
0.00	0.00	0.00

SGS JC86089

DFTPPR

Data File : C:\msdchem\1\DATA\EM6555\m153370.D Vial: 1
Acq On : 12 Apr 2019 3:22 am Operator: chriss2
Sample : DFTPP Inst : MSM
Misc : op17006,em6555,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : Z:\svoa-gcms\cur...methods\dftppm.m (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Feb 18 15:20:41 2018



AutoFind: Scans 233, 234, 235; Background Corrected with Scan 228

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	31.7	55710	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.0	68583	PASS
70	69	0.00	2	0.6	388	PASS
127	198	40	60	56.2	98837	PASS
197	198	0.00	1	0.3	471	PASS
198	198	100	100	100.0	175771	PASS
199	198	5	9	6.9	12077	PASS
275	198	10	30	28.6	50315	PASS
365	198	1	100	4.7	8239	PASS
441	443	0.10	100	76.6	22774	PASS
442	198	40	100	86.0	151117	PASS
443	442	17	23	19.7	29720	PASS

m153370.D dftppm.m Fri Apr 12 10:56:59 2019 MANAGER

Average of 3.535 to 3.546 min.: m153370.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.10	214	56.05	1764	73.10	705	85.05	729
38.15	841	57.15	4648	74.15	6871	86.05	1381
39.10	3730	58.15	170	75.15	11119	87.10	737
41.10	248	61.05	788	76.15	4001	88.00	129
49.10	69	62.15	868	77.15	84195	89.05	86
50.15	14124	63.15	2719	78.15	5733	91.10	1222
51.10	55710	64.10	376	79.10	4473	92.10	1328
52.15	3021	65.15	1123	80.05	3704	93.05	8855
52.95	77	69.05	68583	81.10	5678	94.10	615
53.15	89	70.05	388	82.10	1532	95.05	292
55.10	261	71.15	74	83.10	1235	96.15	541

Average of 3.535 to 3.546 min.: m153370.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.10	216	108.10	3719	120.05	377	133.05	185
98.05	6361	109.05	354	122.05	1603	134.05	951
99.05	5455	110.05	50533	123.05	2359	135.05	2639
100.05	333	111.05	7888	124.05	1079	136.05	1130
101.05	3351	112.05	990	125.05	1098	137.05	1451
102.00	180	113.05	244	127.05	98837	137.80	274
103.05	940	115.05	106	128.05	7348	138.05	233
104.05	1893	116.05	1280	129.05	36931	139.10	177
105.05	1797	117.05	18823	130.05	3146	140.00	390
106.10	389	118.05	1514	131.00	726	141.05	4105
107.05	25385	119.05	225	132.05	271	142.10	1412

Average of 3.535 to 3.546 min.: m153370.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
143.05	1031	152.15	118	162.95	76	174.05	1909
144.00	340	153.05	1429	164.10	383	175.05	3573
145.05	368	154.05	1068	165.00	1505	176.05	1193
146.05	656	155.05	2353	166.00	1426	177.05	1641
147.05	2329	156.05	3588	167.00	9427	178.00	485
148.05	5230	157.05	892	168.05	4632	179.05	6789
149.10	983	158.05	884	169.05	853	180.05	4647
150.05	262	159.05	702	170.05	268	181.05	2171
151.10	599	160.05	1368	171.05	498	182.15	357
151.65	106	161.05	2017	172.00	779	183.05	124
151.90	227	162.05	499	173.05	1284	184.05	539

Average of 3.535 to 3.546 min.: m153370.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.05	3632	196.05	6092	208.05	1385	219.15	80
186.05	24699	196.75	471	209.05	524	221.05	11634
187.05	6886	198.05	175771	210.15	784	222.05	526
188.10	667	199.05	12077	211.05	1837	223.05	2758
189.05	1384	200.05	1084	211.85	239	224.05	25429
189.95	235	201.55	932	212.15	74	225.05	6666
191.05	624	203.05	1291	213.00	173	226.05	803
192.05	2389	204.05	6567	215.00	525	227.05	10432
193.05	2747	205.05	11574	216.05	912	228.05	1806
194.05	431	206.05	47059	217.00	11163	229.05	2186
195.05	364	207.05	5349	218.00	1451	231.05	992

Average of 3.535 to 3.546 min.: m153370.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
233.00	159	244.05	21893	255.05	109504	269.75	87
233.95	545	245.05	3005	256.05	16713	271.00	304
235.00	705	246.00	4148	257.05	1217	271.95	366
236.00	553	246.95	882	258.00	6287	273.05	3576

M4M3868SIM.M Fri Apr 12 10:40:32 2019 MANAGER Page: 0

237.05	989	247.85	160	259.00	962	274.05	8517
238.85	104	248.15	125	260.10	176	275.05	50315
239.00	367	249.05	707	260.95	110	276.05	6793
240.05	447	250.05	98	263.85	106	277.05	4231
241.00	841	251.00	155	265.05	2455	278.00	628
242.05	1538	252.05	221	266.00	696	278.95	77
243.10	1614	253.05	644	267.80	17	281.95	85

Average of 3.535 to 3.546 min.: m153370.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
283.00	584	298.05	86	315.00	1678	332.00	394
283.95	346	301.00	230	316.00	913	333.05	665
285.05	762	302.05	256	317.05	102	334.05	3691
286.05	113	303.05	1577	321.00	552	335.05	933
289.00	180	304.00	544	321.95	185	341.05	642
289.95	76	308.00	288	323.05	5565	342.15	74
292.05	188	309.05	107	324.05	1053	346.00	1368
293.00	1142	310.10	267	325.05	73	346.85	75
294.00	293	312.85	80	327.00	1160	347.10	164
296.05	14688	313.00	244	328.05	546	352.00	2014
297.00	2237	314.05	993	329.05	73	353.05	1440

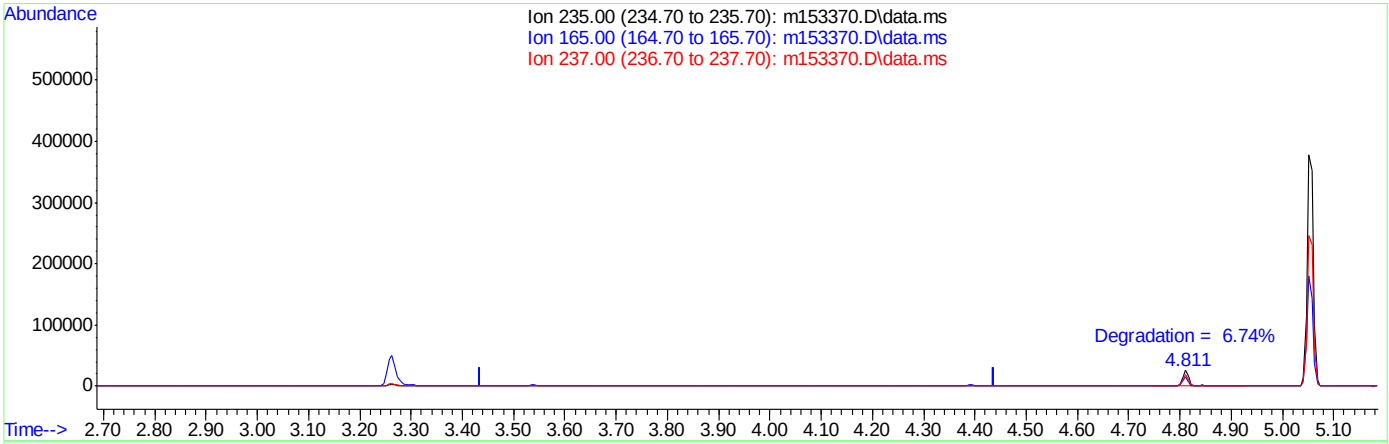
Average of 3.535 to 3.546 min.: m153370.D\data.ms
DFTPP
Modified:subtracted

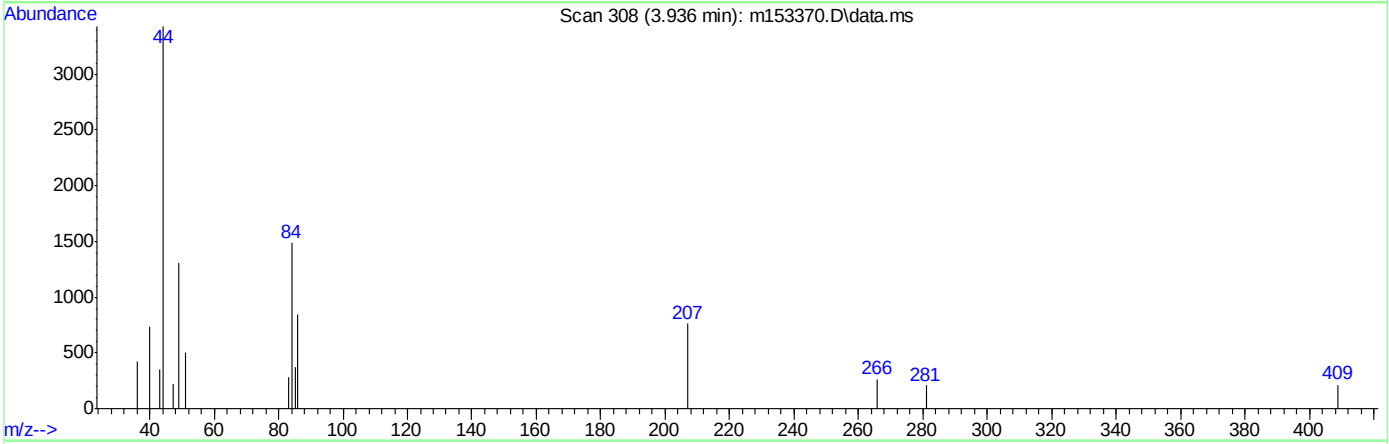
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.05	2227	390.00	468	424.05	2170		
355.10	410	391.00	408	425.05	107		
364.95	8239	391.95	194	441.05	22774		
365.95	1189	400.95	287	442.05	151117		
370.00	195	402.05	1695	443.05	29720		
371.05	490	403.05	2079	444.00	2378		
372.05	3241	404.00	743	444.95	133		
373.05	887	405.05	69				
374.15	71	421.00	1547				
383.00	974	422.05	1547				
384.00	282	423.05	11793				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153370.D
Acq On : 12 Apr 2019 3:22 am
Operator : chriss2
Sample : DFTPP
Misc : op17006,em6555,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 03:27:42 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153370.D\data.ms

(3) PP-DDT (MC)

3.937min (-3.937) 0.00ppm

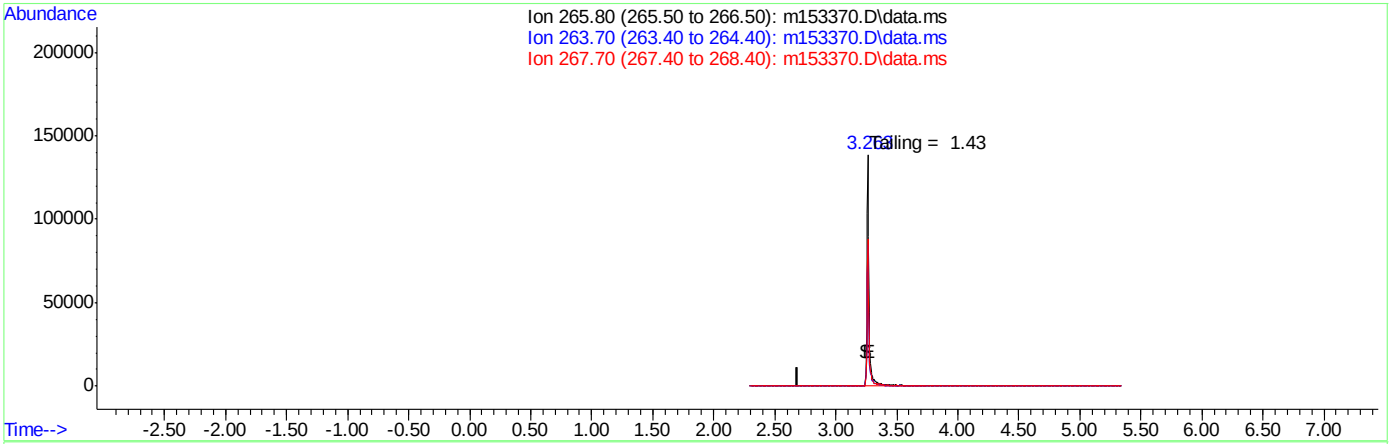
response 0

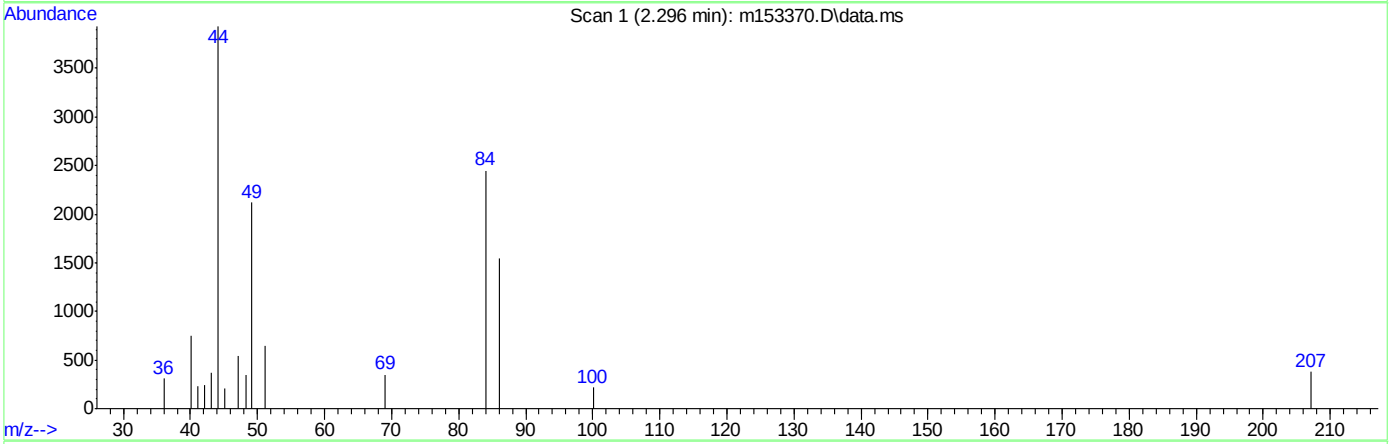
Ion	Exp%	Act%
235.00	100	0.00
165.00	61.30	0.00#
237.00	66.90	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153370.D
Acq On : 12 Apr 2019 3:22 am
Operator : chriss2
Sample : DFTPP
Misc : op17006,em6555,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 03:27:42 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153370.D\data.ms

(1) Pentachlorophenol (MC)

2.195min (-2.195) 0.00ppm

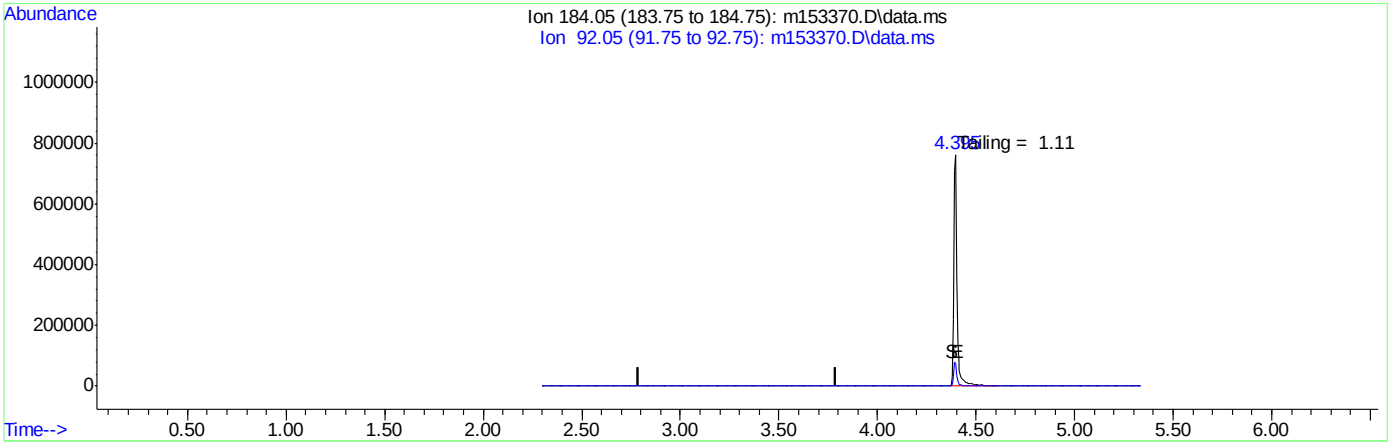
response 0

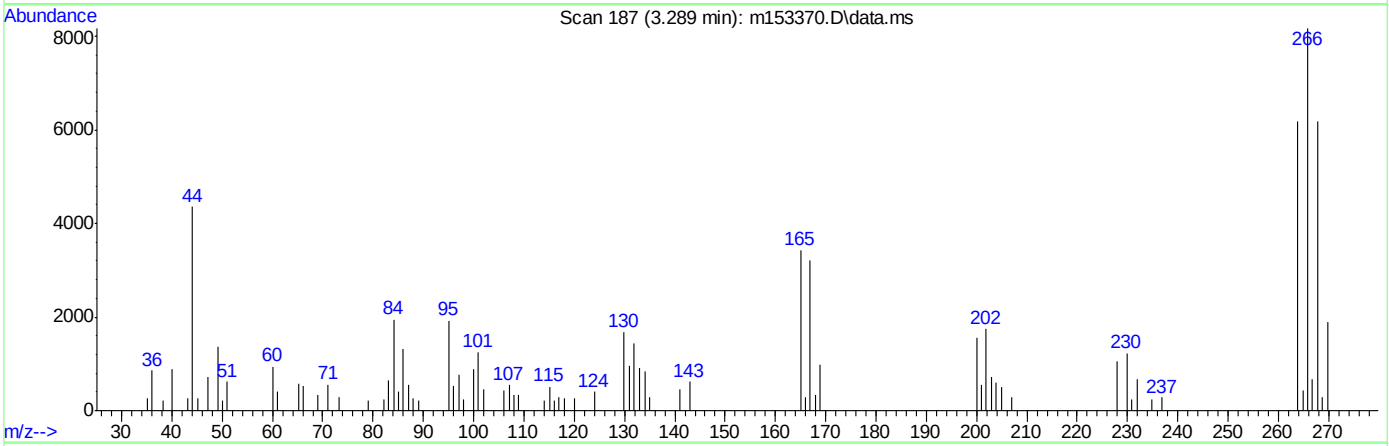
Ion	Exp%	Act%
265.80	100	0.00
263.70	68.00	0.00#
267.70	67.90	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153370.D
Acq On : 12 Apr 2019 3:22 am
Operator : chriss2
Sample : DFTPP
Misc : op17006,em6555,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 03:27:42 2019
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSat Nov 03 03:21:13 2018
QLast Update : Sat Nov 03 03:21:13 2018
Response via : Continuing Cal File:





TIC: m153370.D\data.ms

(2) Benzidine (M)

3.291min (-3.291) 0.00ppm

response 0

Ion	Exp%	Act%
184.05	100	0.00
92.05	7.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/11/19 10:41

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153315.D
Acq On : 10 Apr 2019 4:17 am
Operator : chriss2
Sample : ic6551-100
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 10 12:02:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.613	152	276002	40.00	ppm	0.00
24) Naphthalene-d8	5.729	136	1054338	40.00	ppm	0.00
47) Acenaphthene-d10	8.031	164	634035	40.00	ppm	0.00
69) Phenanthrene-d10	10.622	188	1185490	40.00	ppm	0.00
83) Chrysene-d12	15.760	240	860462	40.00	ppm	0.00
91) Perylene-d12	18.361	264	1113521	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.613	152	276002	40.00	ppm	0.00
103) Acenaphthene-d10a	8.031	164	634035	40.00	ppm	0.00
106) Chrysene-d12a	15.760	240	860462	40.00	ppm	0.00
108) Chrysene-d12b	15.760	240	860462	40.00	ppm	0.00
110) Phenanthrene-d10a	10.622	188	1185490	40.00	ppm	0.00
113) Naphthalene-d8a	5.729	136	1054338	40.00	ppm	0.00
115) Chrysene-d12c	15.760	240	860462	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.625	112	922579	91.82	ppm	0.00
Spiked Amount 50.000			Recovery =	183.64%		
8) Phenol-d5	4.346	99	1058117	92.46	ppm	0.00
Spiked Amount 50.000			Recovery =	184.92%		
25) Nitrobenzene-d5	5.056	82	726968	92.34	ppm	0.00
Spiked Amount 50.000			Recovery =	184.68%		
51) 2-Fluorobiphenyl	7.038	172	1883107	89.35	ppm	0.00
Spiked Amount 50.000			Recovery =	178.70%		
73) 2,4,6-Tribromophenol	9.372	330	383541	93.37	ppm	0.00
Spiked Amount 50.000			Recovery =	186.74%		
85) Terphenyl-d14	13.789	244	2269605	96.06	ppm	0.00
Spiked Amount 50.000			Recovery =	192.12%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.146	88	422295	100.29	ppm	98
3) Pyridine	2.471	79	989893	98.81	ppm	99
4) N-Nitrosodimethylamine	2.434	42	339981	94.49	ppm	98
6) Indene	4.816	116	1050418	85.46	ppm	99
7) Cumene	4.015	105	1746288	84.61	ppm	99
9) Phenol	4.357	94	964526	84.76	ppm	91
10) Aniline	4.367	93	839699	85.22	ppm	99
11) bis(2-Chloroethyl)ether	4.416	93	679428	93.40	ppm	98
12) 2-Chlorophenol	4.458	128	903753	91.16	ppm	99
13) Decane	4.501	43	443881	84.71	ppm	97
14) 1,3-Dichlorobenzene	4.570	146	961869	87.47	ppm	100
15) 1,4-Dichlorobenzene	4.624	146	908081	88.59	ppm	97
16) Benzyl alcohol	4.725	108	523261	95.11	ppm	94
17) 1,2-Dichlorobenzene	4.741	146	880632	86.76	ppm	98
18) Acetophenone	4.934	105	844743	86.52	ppm	97
19) 2-Methylphenol	4.811	108	597930	85.09	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153315.D
Acq On : 10 Apr 2019 4:17 am
Operator : chriss2
Sample : ic6551-100
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 10 12:02:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
20) 2,2'-oxybis(1-Chloropr...	4.827	121	213875	94.09	ppm		91
21) 3&4-Methylphenol	4.939	108	600618	84.36	ppm	#	83
22) n-Nitroso-di-n-propyla...	4.939	70	370317	86.04	ppm		96
23) Hexachloroethane	5.019	201	354055	93.72	ppm		94
26) Nitrobenzene	5.072	77	663521	89.62	ppm		97
27) Quinoline	6.135	129	1933908	94.84	ppm		99
28) Isophorone	5.291	82	1300975	87.49	ppm		98
29) 2-Nitrophenol	5.356	139	517442	92.58	ppm		99
30) 2,4-Dimethylphenol	5.398	107	716372	93.75	ppm		98
31) Benzoic acid	5.542	105	592529m	99.75	ppm		
32) bis(2-Chloroethoxy)met...	5.484	93	841260	91.84	ppm		100
33) 2,4-Dichlorophenol	5.591	162	786938	89.20	ppm		96
34) 2,6-Dichlorophenol	5.820	162	699166	89.26	ppm		97
35) 1,3,5-Trichlorobenzene	5.372	180	788132	84.42	ppm		99
36) 1,2,4-Trichlorobenzene	5.671	180	817819	87.70	ppm		99
37) 1,2,3-Trichlorobenzene	5.906	180	746688	88.73	ppm		99
38) Naphthalene	5.751	128	2183578	87.22	ppm		98
39) 4-Chloroaniline	5.810	127	957202	86.90	ppm		99
40) 2,3-Dichloroaniline	6.910	161	971773	89.96	ppm		99
41) Caprolactam	6.221	55	324745m	99.53	ppm		
42) Hexachlorobutadiene	5.890	225	423342	88.86	ppm		99
43) 4-Chloro-3-methylphenol	6.370	107	730544	91.60	ppm		99
44) 2-Methylnaphthalene	6.541	141	1361651	87.74	ppm		98
45) 1-Methylnaphthalene	6.669	142	1746054	88.19	ppm		99
46) Dimethylnaphthalene	7.407	156	1553426	88.88	ppm		98
48) Hexachlorocyclopentadiene	6.760	237	933410	181.43	ppm		98
49) 2,4,6-Trichlorophenol	6.926	196	537656	89.82	ppm		99
50) 2,4,5-Trichlorophenol	6.974	196	619668	93.98	ppm		99
52) 2-Chloronaphthalene	7.198	162	1507835	88.36	ppm		98
53) Biphenyl	7.177	154	2066953	87.46	ppm		99
54) 2-Nitroaniline	7.353	65	388629	97.38	ppm		97
55) Dimethylphthalate	7.658	163	2041058	91.26	ppm		99
56) Acenaphthylene	7.807	152	2568599	88.77	ppm		99
57) 2,6-Dinitrotoluene	7.732	165	449953	95.78	ppm		97
58) 3-Nitroaniline	7.989	138	558151	98.73	ppm		96
59) Acenaphthene	8.090	153	1607312	90.99	ppm		99
61) 4-Nitrophenol	8.309	109	242783	99.86	ppm		97
62) Dibenzofuran	8.373	168	2220198	88.05	ppm		99
63) 2,4-Dinitrotoluene	8.379	165	527085	94.40	ppm		99
64) 2,3,4,6-Tetrachlorophenol	8.592	232	550712	93.95	ppm		97
65) Diethylphthalate	8.843	149	1984180	90.27	ppm		100
66) Fluorene	8.950	166	1923910	89.89	ppm		100
67) 4-Chlorophenyl-phenyle...	8.987	204	852462	89.48	ppm		99
68) 4-Nitroaniline	9.025	138	501645	98.09	ppm		98
70) 4,6-Dinitro-2-methylph...	9.078	198	309555	108.56	ppm		99
71) n-Nitrosodiphenylamine	9.201	169	1465028	90.10	ppm		99
72) 1,2-Diphenylhydrazine	9.260	77	1487708	90.56	ppm		98
74) 4-Bromophenyl-phenylether	9.853	248	634939	90.54	ppm		97
75) Hexachlorobenzene	9.938	284	717034	89.95	ppm		98
76) Pentachlorophenol	10.312	266	966320	185.19	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153315.D
Acq On : 10 Apr 2019 4:17 am
Operator : chriss2
Sample : ic6551-100
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 10 12:02:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

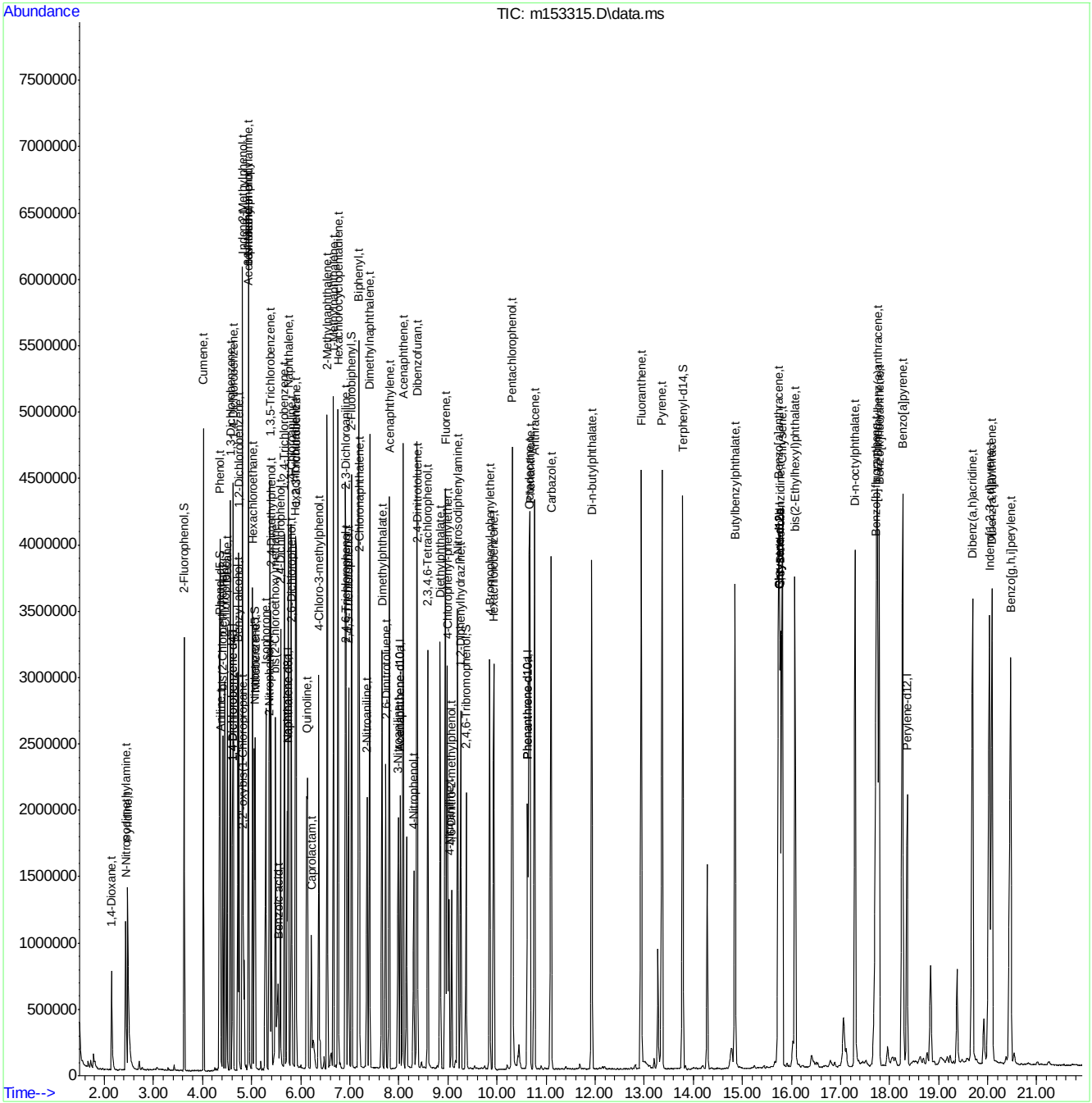
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.675	178	2448062	88.61	ppm	99
78) Anthracene	10.766	178	2703164	89.53	ppm	99
79) Carbazole	11.108	167	2795433	88.73	ppm	99
80) Di-n-butylphthalate	11.930	149	3497167	87.72	ppm	98
81) Fluoranthene	12.945	202	3143188	87.35	ppm	98
82) Octadecane	10.654	57	717294	88.50	ppm	96
84) Pyrene	13.367	202	3139086	94.94	ppm	98
86) Butylbenzylphthalate	14.852	149	1627767	96.08	ppm	100
87) Benzo[a]anthracene	15.744	228	2959422	95.35	ppm	99
88) 3,3'-Dichlorobenzidine	15.781	252	1115633	98.36	ppm	99
89) Chrysene	15.819	228	2548753	96.97	ppm	99
90) bis(2-Ethylhexyl)phtha...	16.075	149	2121268	96.58	ppm	99
92) Di-n-octylphthalate	17.298	149	3788509	91.63	ppm	99
93) Benzo[b]fluoranthene	17.731	252	3210399	93.55	ppm	99
94) Benzo[k]fluoranthene	17.795	252	2611353	88.66	ppm	98
95) Benzo[a]pyrene	18.270	252	2838579	91.35	ppm	99
96) Indeno[1,2,3-cd]pyrene	20.038	276	2944680	92.28	ppm	97
97) Dibenz(a,h)acridine	19.696	279	2810519	89.79	ppm	98
98) Dibenz[a,h]anthracene	20.092	278	2891327	90.87	ppm	97
99) 7,12-Dimethylbenz(a)an...	17.758	256	1345159	95.31	ppm	99
100) Benzo[g,h,i]perylene	20.471	276	2854369	89.65	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153315.D
Acq On : 10 Apr 2019 4:17 am
Operator : chriss2
Sample : ic6551-100
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 10 12:02:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration



Manual Integration Approval Summary

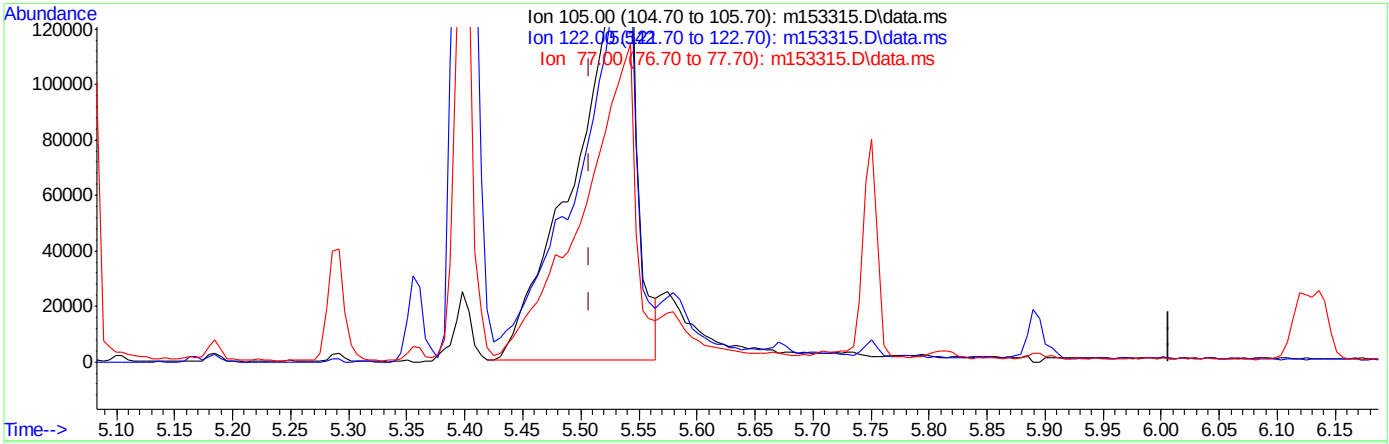
Sample Number:	EM6551-IC6551	**Method:**	SW846 8270D
Lab FileID:	M153315.D	**Analyst approved:**	04/10/19 12:36 Ying Li
Injection Time:	04/10/19 04:17	**Supervisor approved:**	04/11/19 10:41 Nina Pandya

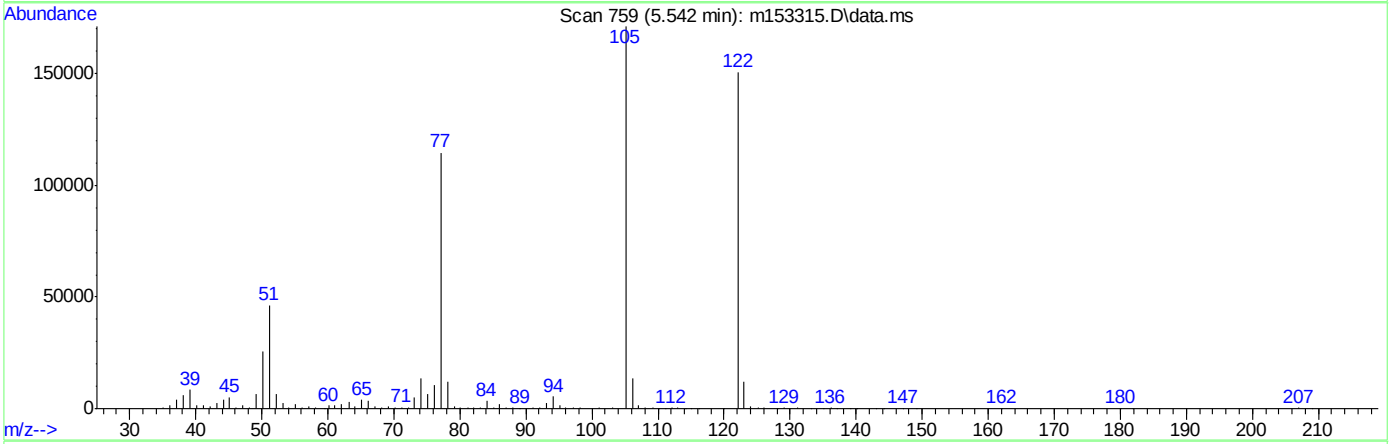
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		5.54	Split peak
Caprolactam	105-60-2		6.22	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153315.D
Acq On : 10 Apr 2019 4:17 am
Operator : chriss2
Sample : ic6551-100
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 10 10:45:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration





TIC: m153315.D\data.ms

(31) Benzoic acid (t)

5.542min (+0.035) 90.46ppm

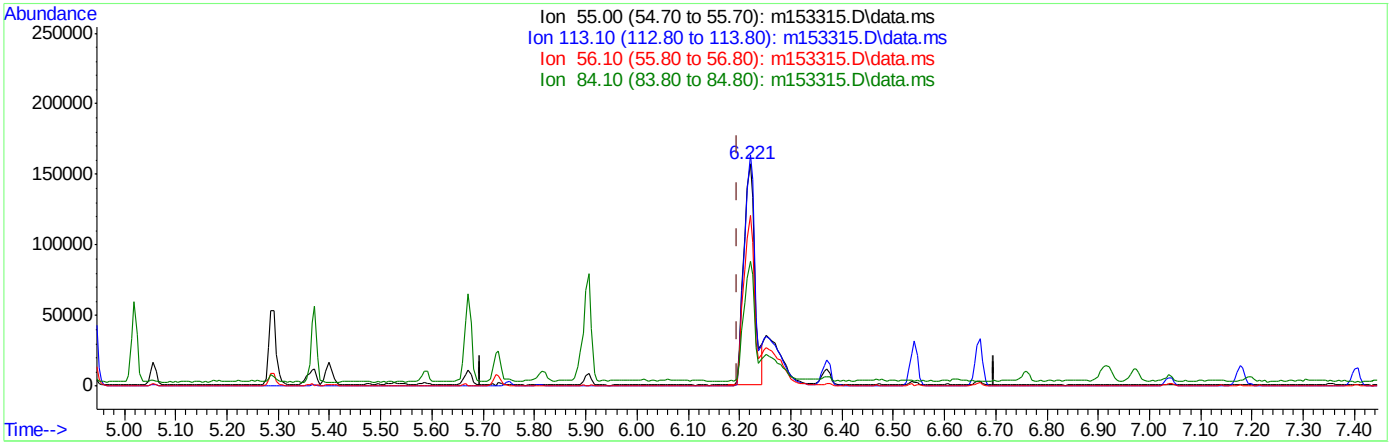
response 537328

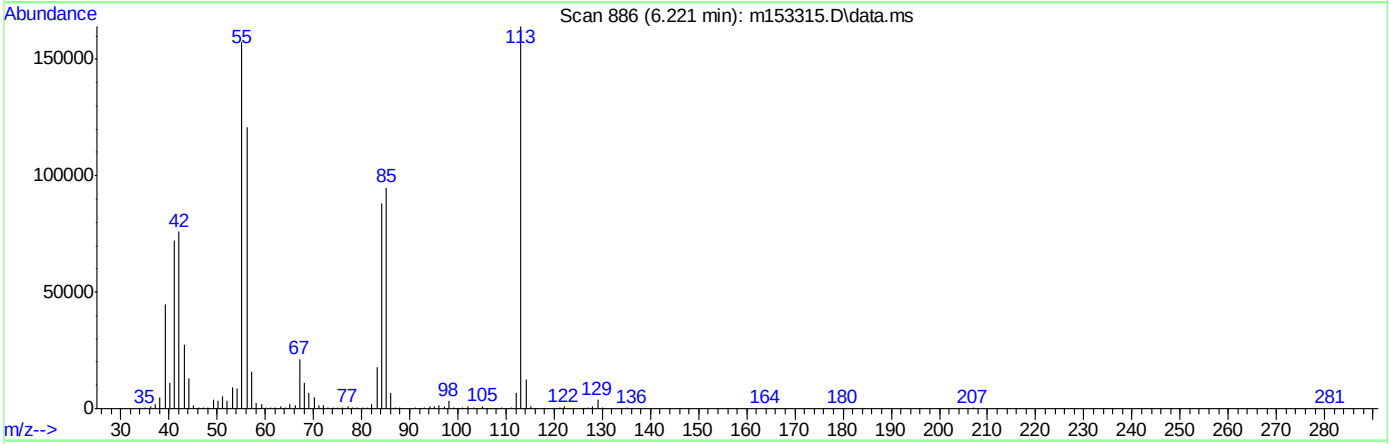
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	82.60
77.00	65.80	65.69
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153315.D
Acq On : 10 Apr 2019 4:17 am
Operator : chriss2
Sample : ic6551-100
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 10 10:45:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration





TIC: m153315.D\data.ms

(41) Caprolactam (t)

6.221min (+0.025) 71.41ppm

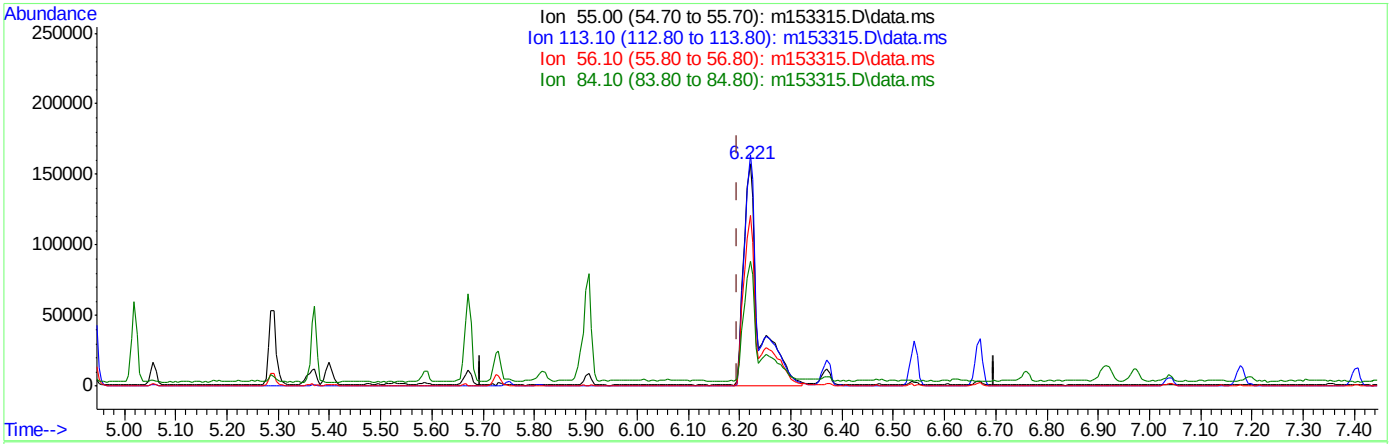
response 232979

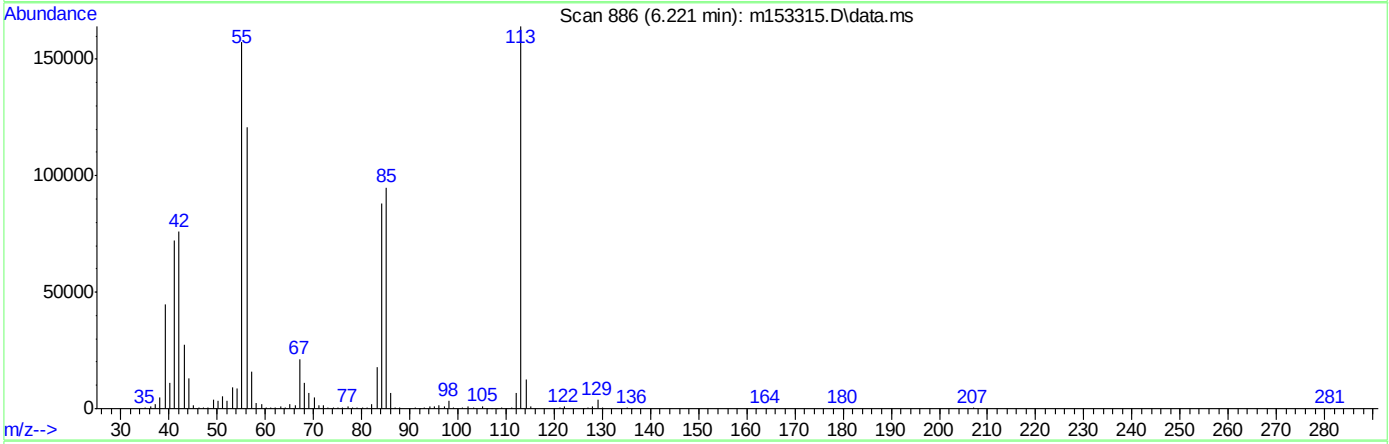
Ion	Exp%	Act%
55.00	100	100
113.10	103.20	105.30
56.10	75.70	76.97
84.10	54.60	54.18

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153315.D
Acq On : 10 Apr 2019 4:17 am
Operator : chriss2
Sample : ic6551-100
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 10 10:45:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration





TIC: m153315.D\data.ms

(41) Caprolactam (t)

6.221min (+0.025) 99.53ppm m

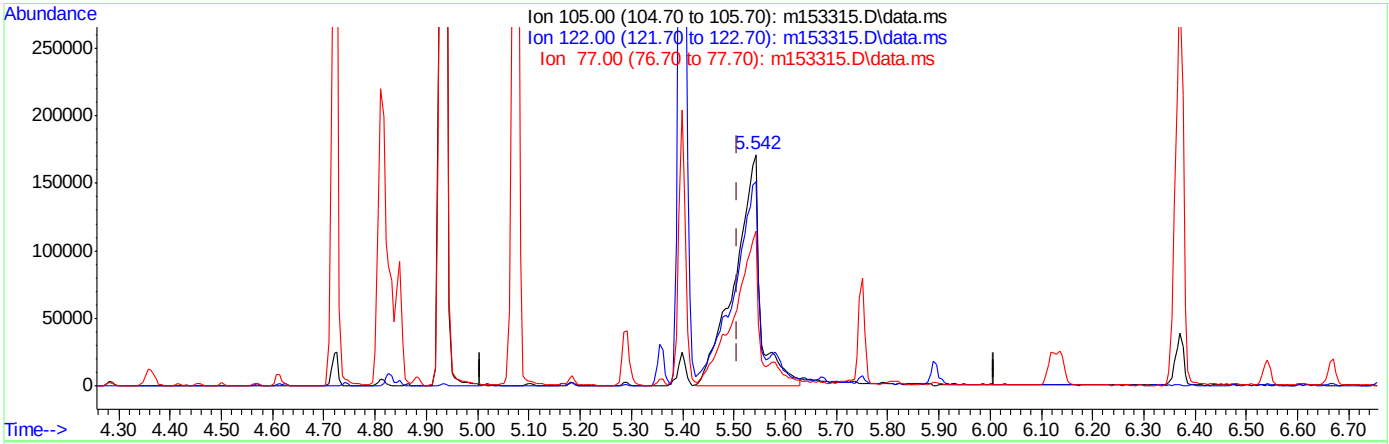
response 324745

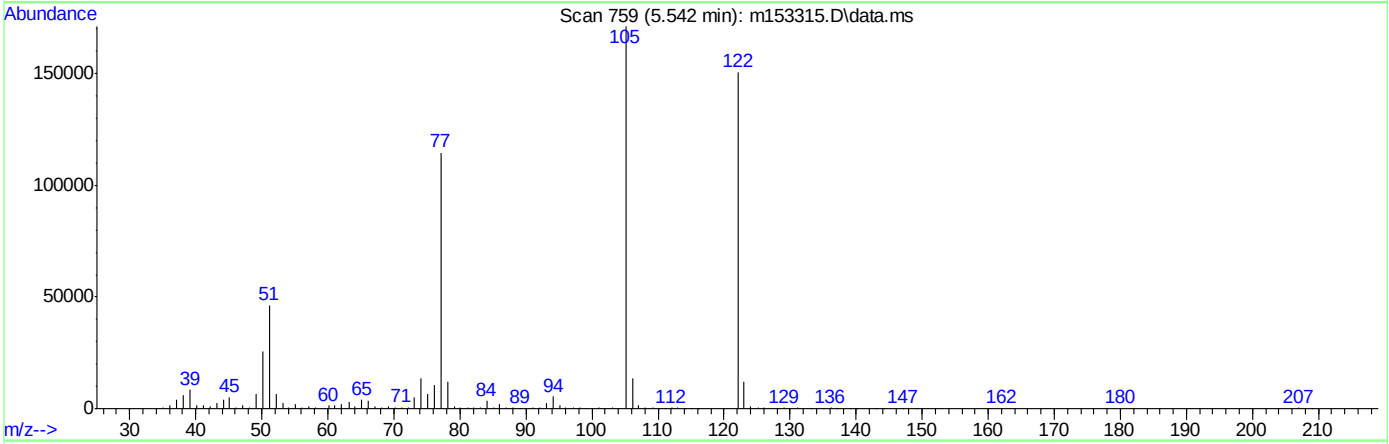
Ion	Exp%	Act%
55.00	100	100
113.10	103.20	104.31
56.10	75.70	76.88
84.10	54.60	56.03

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153315.D
Acq On : 10 Apr 2019 4:17 am
Operator : chriss2
Sample : ic6551-100
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 10 10:45:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration





TIC: m153315.D\data.ms

(31) Benzoic acid (t)

5.542min (+0.035) 99.75ppm m

response 592529

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	88.00
77.00	65.80	66.98
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/11/19 10:41

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153316.D
Acq On : 10 Apr 2019 4:45 am
Operator : chriss2
Sample : ic6551-80
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 10 11:11:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.612	152	278603	40.00	ppm	0.00
24) Naphthalene-d8	5.728	136	1034938	40.00	ppm	0.00
47) Acenaphthene-d10	8.030	164	616565	40.00	ppm	0.00
69) Phenanthrene-d10	10.620	188	1152014	40.00	ppm	0.00
83) Chrysene-d12	15.759	240	872203	40.00	ppm	0.00
91) Perylene-d12	18.354	264	1119943	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.612	152	278603	40.00	ppm	0.00
103) Acenaphthene-d10a	8.030	164	616565	40.00	ppm	0.00
106) Chrysene-d12a	15.759	240	872203	40.00	ppm	0.00
108) Chrysene-d12b	15.759	240	872203	40.00	ppm	0.00
110) Phenanthrene-d10a	10.620	188	1152014	40.00	ppm	0.00
113) Naphthalene-d8a	5.728	136	1034938	40.00	ppm	0.00
115) Chrysene-d12c	15.759	240	872203	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.624	112	775926	76.50	ppm	0.00
Spiked Amount 50.000			Recovery =	153.00%		
8) Phenol-d5	4.345	99	882618	76.41	ppm	0.00
Spiked Amount 50.000			Recovery =	152.82%		
25) Nitrobenzene-d5	5.055	82	588875	76.20	ppm	0.00
Spiked Amount 50.000			Recovery =	152.40%		
51) 2-Fluorobiphenyl	7.037	172	1541551	75.21	ppm	0.00
Spiked Amount 50.000			Recovery =	150.42%		
73) 2,4,6-Tribromophenol	9.365	330	305905	76.64	ppm	0.00
Spiked Amount 50.000			Recovery =	153.28%		
85) Terphenyl-d14	13.788	244	1854421	77.43	ppm	0.00
Spiked Amount 50.000			Recovery =	154.86%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.144	88	338446	79.62	ppm	98
3) Pyridine	2.470	79	784012	77.53	ppm	99
4) N-Nitrosodimethylamine	2.433	42	273826	75.39	ppm	98
6) Indene	4.815	116	895260	72.15	ppm	99
7) Cumene	4.019	105	1516476	72.79	ppm	99
9) Phenol	4.355	94	831158	72.36	ppm	95
10) Aniline	4.366	93	724642	72.86	ppm	100
11) bis(2-Chloroethyl)ether	4.414	93	561443	76.46	ppm	99
12) 2-Chlorophenol	4.457	128	751906	75.14	ppm	99
13) Decane	4.500	43	381835	72.19	ppm	98
14) 1,3-Dichlorobenzene	4.569	146	821576	74.01	ppm	99
15) 1,4-Dichlorobenzene	4.622	146	765605	74.00	ppm	97
16) Benzyl alcohol	4.719	108	426105	76.73	ppm	99
17) 1,2-Dichlorobenzene	4.745	146	755712	73.76	ppm	98
18) Acetophenone	4.932	105	719405	73.00	ppm	100
19) 2-Methylphenol	4.809	108	515542	72.68	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153316.D
Acq On : 10 Apr 2019 4:45 am
Operator : chriss2
Sample : ic6551-80
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 10 11:11:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
20) 2,2'-oxybis(1-Chloropr...	4.825	121	175603	76.53	ppm	97
21) 3&4-Methylphenol	4.932	108	519488	72.28	ppm	98
22) n-Nitroso-di-n-propyla...	4.938	70	312481	71.92	ppm	98
23) Hexachloroethane	5.018	201	291621	76.47	ppm	93
26) Nitrobenzene	5.071	77	548792	75.51	ppm	97
27) Quinoline	6.123	129	1533883	76.64	ppm	100
28) Isophorone	5.285	82	1087876	74.53	ppm	99
29) 2-Nitrophenol	5.354	139	417668	76.13	ppm	99
30) 2,4-Dimethylphenol	5.397	107	584140	77.88	ppm	100
31) Benzoic acid	5.525	105	477989	81.98	ppm	99
32) bis(2-Chloroethoxy)met...	5.482	93	678165	75.42	ppm	100
33) 2,4-Dichlorophenol	5.584	162	646168	74.62	ppm	98
34) 2,6-Dichlorophenol	5.814	162	580302	75.48	ppm	97
35) 1,3,5-Trichlorobenzene	5.370	180	669123	73.02	ppm	99
36) 1,2,4-Trichlorobenzene	5.669	180	678536	74.13	ppm	98
37) 1,2,3-Trichlorobenzene	5.904	180	613454	74.26	ppm	99
38) Naphthalene	5.749	128	1806990	73.53	ppm	98
39) 4-Chloroaniline	5.808	127	805224	74.47	ppm	98
40) 2,3-Dichloroaniline	6.908	161	789972	74.50	ppm	99
41) Caprolactam	6.214	55	254091m	79.34	ppm	
42) Hexachlorobutadiene	5.888	225	347960	74.40	ppm	99
43) 4-Chloro-3-methylphenol	6.364	107	590110	75.37	ppm	98
44) 2-Methylnaphthalene	6.540	141	1125844	73.90	ppm	98
45) 1-Methylnaphthalene	6.668	142	1435017	73.84	ppm	100
46) Dimethylnaphthalene	7.400	156	1268035	73.91	ppm	99
48) Hexachlorocyclopentadiene	6.759	237	753816	150.67	ppm	99
49) 2,4,6-Trichlorophenol	6.919	196	439432	75.49	ppm	98
50) 2,4,5-Trichlorophenol	6.967	196	488029	76.11	ppm	99
52) 2-Chloronaphthalene	7.192	162	1233831	74.35	ppm	100
53) Biphenyl	7.175	154	1710743	74.44	ppm	99
54) 2-Nitroaniline	7.352	65	312064	80.41	ppm	98
55) Dimethylphthalate	7.656	163	1650727	75.90	ppm	100
56) Acenaphthylene	7.806	152	2109982	74.98	ppm	100
57) 2,6-Dinitrotoluene	7.726	165	358956	78.57	ppm	96
58) 3-Nitroaniline	7.982	138	442677	80.53	ppm	98
59) Acenaphthene	8.083	153	1303005	75.85	ppm	96
60) 2,4-Dinitrophenol	8.153	184	309697	175.74	ppm	99
61) 4-Nitrophenol	8.297	109	190667	80.65	ppm	96
62) Dibenzofuran	8.367	168	1814375	73.99	ppm	99
63) 2,4-Dinitrotoluene	8.377	165	417576	76.91	ppm	92
64) 2,3,4,6-Tetrachlorophenol	8.591	232	442039	77.55	ppm	98
65) Diethylphthalate	8.842	149	1608192	75.24	ppm	99
66) Fluorene	8.949	166	1553756	74.65	ppm	99
67) 4-Chlorophenyl-phenyle...	8.981	204	690970	74.58	ppm	98
68) 4-Nitroaniline	9.018	138	396577	79.74	ppm	99
70) 4,6-Dinitro-2-methylph...	9.072	198	235595	85.02	ppm	98
71) n-Nitrosodiphenylamine	9.194	169	1185861	75.05	ppm	100
72) 1,2-Diphenylhydrazine	9.258	77	1204961	75.48	ppm	100
74) 4-Bromophenyl-phenylether	9.851	248	514523	75.50	ppm	98
75) Hexachlorobenzene	9.931	284	581393	75.05	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153316.D
Acq On : 10 Apr 2019 4:45 am
Operator : chriss2
Sample : ic6551-80
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 10 11:11:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

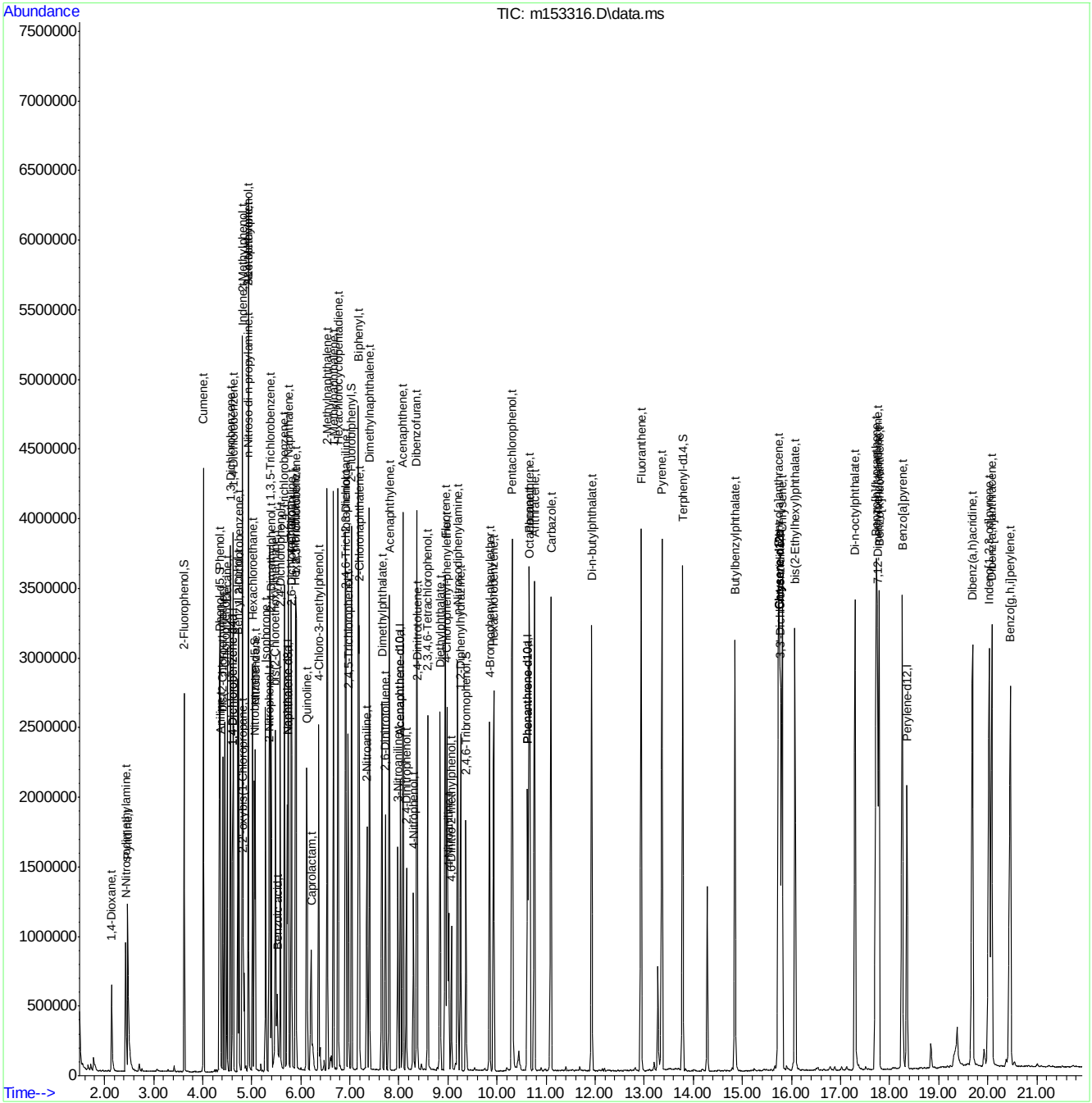
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) Pentachlorophenol	10.311	266	771659	152.18	ppm	98
77) Phenanthrene	10.669	178	2008282	74.81	ppm	98
78) Anthracene	10.765	178	2194870	74.81	ppm	99
79) Carbazole	11.101	167	2281602	74.52	ppm	99
80) Di-n-butylphthalate	11.929	149	2881935	74.39	ppm	99
81) Fluoranthene	12.938	202	2582132	73.84	ppm	98
82) Octadecane	10.653	57	583775	74.12	ppm	96
84) Pyrene	13.360	202	2561881	76.44	ppm	98
86) Butylbenzylphthalate	14.851	149	1343858	78.25	ppm	99
87) Benzo[a]anthracene	15.737	228	2445260	77.72	ppm	99
88) 3,3'-Dichlorobenzidine	15.780	252	915669	79.64	ppm	99
89) Chrysene	15.812	228	2061543	77.38	ppm	99
90) bis(2-Ethylhexyl)phtha...	16.074	149	1745924	78.42	ppm	99
92) Di-n-octylphthalate	17.297	149	3173164	76.30	ppm	99
93) Benzo[b]fluoranthene	17.724	252	2624336	76.03	ppm	99
94) Benzo[k]fluoranthene	17.788	252	2295054	77.47	ppm	97
95) Benzo[a]pyrene	18.264	252	2395198	76.64	ppm	99
96) Indeno[1,2,3-cd]pyrene	20.031	276	2486317	77.47	ppm	97
97) Dibenz(a,h)acridine	19.690	279	2394259	76.06	ppm	98
98) Dibenz[a,h]anthracene	20.085	278	2445877	76.43	ppm	98
99) 7,12-Dimethylbenz(a)an...	17.751	256	1112708	78.38	ppm	99
100) Benzo[g,h,i]perylene	20.464	276	2420486	75.58	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153316.D
Acq On : 10 Apr 2019 4:45 am
Operator : chriss2
Sample : ic6551-80
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 10 11:11:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration



Manual Integration Approval Summary

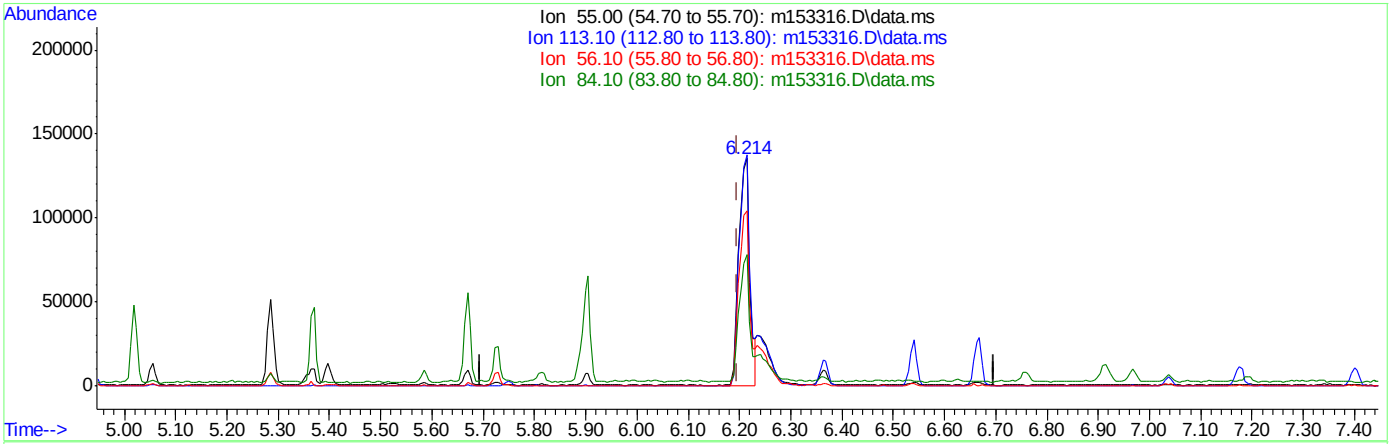
Sample Number:	EM6551-IC6551	**Method:**	SW846 8270D
Lab FileID:	M153316.D	**Analyst approved:**	04/10/19 12:36 Ying Li
Injection Time:	04/10/19 04:45	**Supervisor approved:**	04/11/19 10:41 Nina Pandya

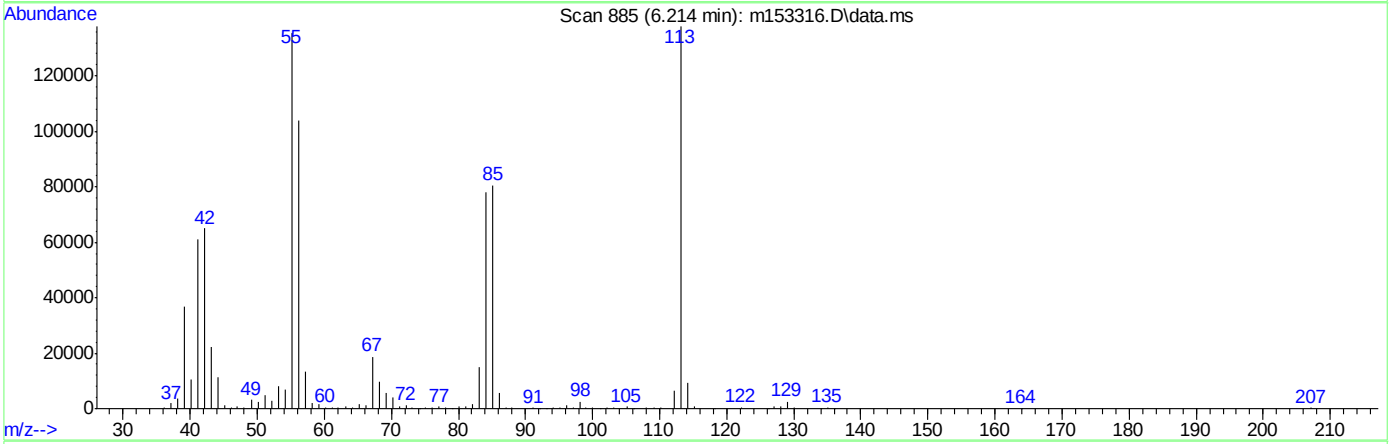
Parameter	CAS	Sig#	R.T. (min.)	Reason
Caprolactam	105-60-2		6.21	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153316.D
Acq On : 10 Apr 2019 4:45 am
Operator : chriss2
Sample : ic6551-80
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 10 10:47:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration





TIC: m153316.D\data.ms

(41) Caprolactam (t)

6.214min (+0.018) 61.95ppm

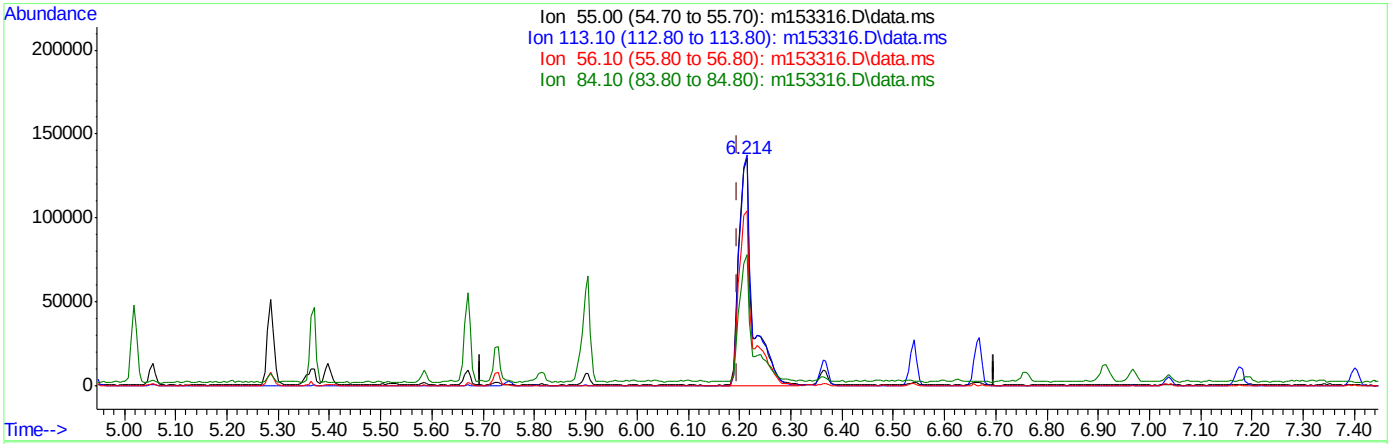
response 198387

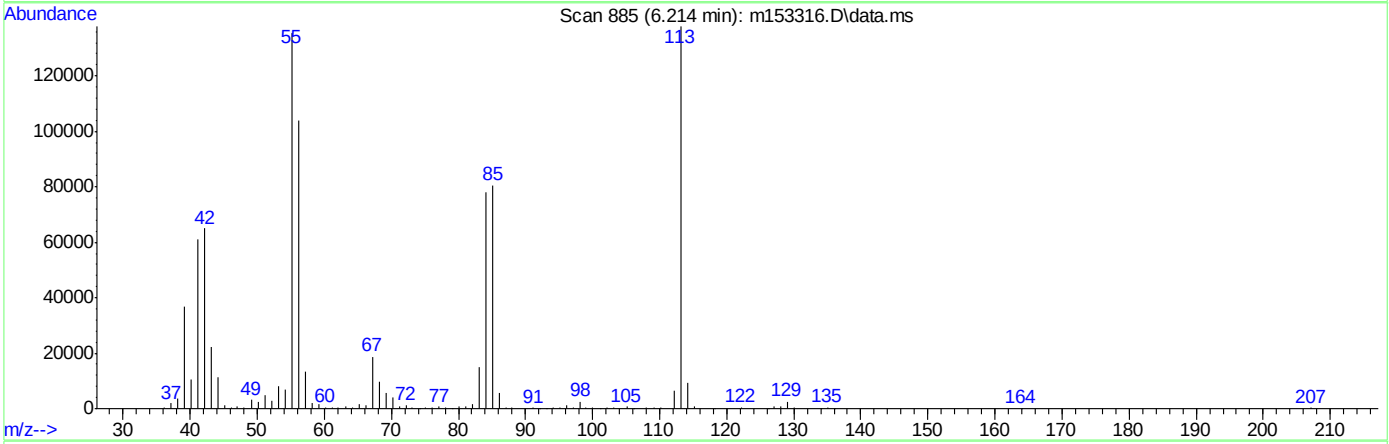
Ion	Exp%	Act%
55.00	100	100
113.10	103.20	102.20
56.10	75.70	76.75
84.10	54.60	56.04

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153316.D
Acq On : 10 Apr 2019 4:45 am
Operator : chriss2
Sample : ic6551-80
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 10 11:11:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration





TIC: m153316.D\data.ms

(41) Caprolactam (t)

6.214min (+0.018) 79.34ppm m

response 254091

Ion	Exp%	Act%
55.00	100	100
113.10	103.20	101.80
56.10	75.70	76.81
84.10	54.60	57.72

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153317.D
Acq On : 10 Apr 2019 5:13 am
Operator : chriss2
Sample : icc6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 10 10:44:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.610	152	293867	40.00	ppm	0.00
24) Naphthalene-d8	5.726	136	1079692	40.00	ppm	0.00
47) Acenaphthene-d10	8.028	164	649169	40.00	ppm	0.00
69) Phenanthrene-d10	10.619	188	1202228	40.00	ppm	0.00
83) Chrysene-d12	15.757	240	945169	40.00	ppm	0.00
91) Perylene-d12	18.352	264	1199564	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.610	152	293867	40.00	ppm	0.00
103) Acenaphthene-d10a	8.028	164	649169	40.00	ppm	0.00
106) Chrysene-d12a	15.757	240	945169	40.00	ppm	0.00
108) Chrysene-d12b	15.757	240	945169	40.00	ppm	0.00
110) Phenanthrene-d10a	10.619	188	1202228	40.00	ppm	0.00
113) Naphthalene-d8a	5.726	136	1079692	40.00	ppm	0.00
115) Chrysene-d12c	15.757	240	945169	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.622	112	534900	50.00	ppm	0.00
Spiked Amount 50.000			Recovery =	100.00%		
8) Phenol-d5	4.343	99	609232	50.00	ppm	0.00
Spiked Amount 50.000			Recovery =	100.00%		
25) Nitrobenzene-d5	5.053	82	403023	49.99	ppm	0.00
Spiked Amount 50.000			Recovery =	99.98%		
51) 2-Fluorobiphenyl	7.035	172	1078955	50.00	ppm	0.00
Spiked Amount 50.000			Recovery =	100.00%		
73) 2,4,6-Tribromophenol	9.363	330	208277	50.00	ppm	0.00
Spiked Amount 50.000			Recovery =	100.00%		
85) Terphenyl-d14	13.786	244	1299839	50.08	ppm	0.00
Spiked Amount 50.000			Recovery =	100.16%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.148	88	224174	50.00	ppm	100
3) Pyridine	2.473	79	533346	50.00	ppm	100
4) N-Nitrosodimethylamine	2.431	42	191551	50.00	ppm	100
6) Indene	4.813	116	654382	50.00	ppm	100
7) Cumene	4.017	105	1098786	50.00	ppm	100
9) Phenol	4.354	94	605794	50.00	ppm	100
10) Aniline	4.364	93	524536	50.00	ppm	100
11) bis(2-Chloroethyl)ether	4.412	93	387269	50.00	ppm	100
12) 2-Chlorophenol	4.455	128	527762	50.00	ppm	100
13) Decane	4.498	43	278951	50.00	ppm	100
14) 1,3-Dichlorobenzene	4.567	146	585434	50.00	ppm	100
15) 1,4-Dichlorobenzene	4.626	146	545668	50.00	ppm	100
16) Benzyl alcohol	4.717	108	292888	50.00	ppm	100
17) 1,2-Dichlorobenzene	4.743	146	540353	50.00	ppm	100
18) Acetophenone	4.930	105	519750	50.00	ppm	100
19) 2-Methylphenol	4.808	108	372022	49.72	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153317.D
Acq On : 10 Apr 2019 5:13 am
Operator : chriss2
Sample : icc6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 10 10:44:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
20) 2,2'-oxybis(1-Chloropr...	4.824	121	121010	50.00	ppm	100
21) 3&4-Methylphenol	4.930	108	376244	49.63	ppm	100
22) n-Nitroso-di-n-propyla...	4.936	70	229143	50.00	ppm	100
23) Hexachloroethane	5.021	201	201117	50.00	ppm	100
26) Nitrobenzene	5.069	77	379088	50.00	ppm	100
27) Quinoline	6.116	129	1044044	50.00	ppm	100
28) Isophorone	5.283	82	761378	50.00	ppm	100
29) 2-Nitrophenol	5.352	139	286179	50.00	ppm	100
30) 2,4-Dimethylphenol	5.395	107	391237	50.00	ppm	100
31) Benzoic acid	5.507	105	304265	50.02	ppm	100
32) bis(2-Chloroethoxy)met...	5.480	93	469014	50.00	ppm	100
33) 2,4-Dichlorophenol	5.582	162	451698	50.00	ppm	100
34) 2,6-Dichlorophenol	5.812	162	401051	50.00	ppm	100
35) 1,3,5-Trichlorobenzene	5.368	180	477990	50.00	ppm	100
36) 1,2,4-Trichlorobenzene	5.667	180	477487	50.00	ppm	100
37) 1,2,3-Trichlorobenzene	5.902	180	430889	50.00	ppm	100
38) Naphthalene	5.748	128	1281878	50.00	ppm	100
39) 4-Chloroaniline	5.801	127	564007	50.00	ppm	100
40) 2,3-Dichloroaniline	6.907	161	553095	50.00	ppm	100
41) Caprolactam	6.196	55	167056	50.00	ppm	100
42) Hexachlorobutadiene	5.892	225	243945	50.00	ppm	100
43) 4-Chloro-3-methylphenol	6.362	107	408380	50.00	ppm	100
44) 2-Methylnaphthalene	6.538	141	794641	50.00	ppm	100
45) 1-Methylnaphthalene	6.666	142	1013697	50.00	ppm	100
46) Dimethylnaphthalene	7.398	156	894870	50.00	ppm	100
48) Hexachlorocyclopentadiene	6.757	237	526749	100.00	ppm	100
49) 2,4,6-Trichlorophenol	6.917	196	306435	50.00	ppm	100
50) 2,4,5-Trichlorophenol	6.965	196	337540	50.00	ppm	100
52) 2-Chloronaphthalene	7.190	162	873585	50.00	ppm	100
53) Biphenyl	7.174	154	1209827	50.00	ppm	100
54) 2-Nitroaniline	7.345	65	204299	50.00	ppm	100
55) Dimethylphthalate	7.649	163	1144967	50.00	ppm	100
56) Acenaphthylene	7.799	152	1481413	50.00	ppm	100
57) 2,6-Dinitrotoluene	7.724	165	240506	50.00	ppm	100
58) 3-Nitroaniline	7.980	138	289403	50.00	ppm	100
59) Acenaphthene	8.082	153	904332	50.00	ppm	100
60) 2,4-Dinitrophenol	8.146	184	185547	100.00	ppm	100
61) 4-Nitrophenol	8.290	109	124458	50.00	ppm	100
62) Dibenzofuran	8.365	168	1290901	50.00	ppm	100
63) 2,4-Dinitrotoluene	8.370	165	285832	50.00	ppm	100
64) 2,3,4,6-Tetrachlorophenol	8.589	232	300074	50.00	ppm	100
65) Diethylphthalate	8.835	149	1125270	50.00	ppm	100
66) Fluorene	8.941	166	1095736	50.00	ppm	100
67) 4-Chlorophenyl-phenyle...	8.979	204	487724	50.00	ppm	100
68) 4-Nitroaniline	9.006	138	261821	50.00	ppm	100
70) 4,6-Dinitro-2-methylph...	9.064	198	144589	50.00	ppm	100
71) n-Nitrosodiphenylamine	9.193	169	824513	50.00	ppm	100
72) 1,2-Diphenylhydrazine	9.257	77	833223	50.02	ppm	100
74) 4-Bromophenyl-phenylether	9.849	248	355608	50.00	ppm	100
75) Hexachlorobenzene	9.930	284	404212	50.00	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153317.D
Acq On : 10 Apr 2019 5:13 am
Operator : chriss2
Sample : icc6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 10 10:44:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

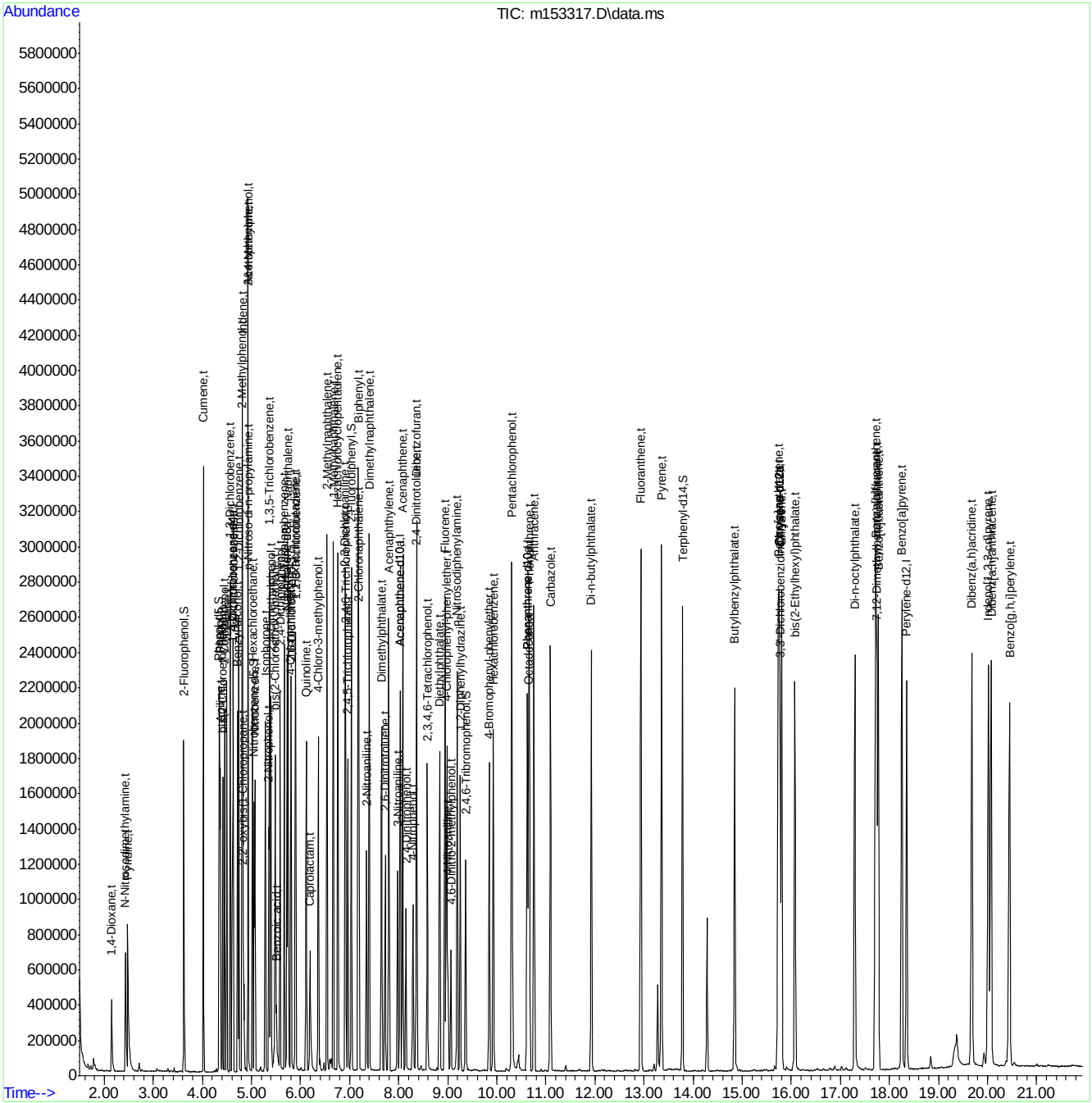
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) Pentachlorophenol	10.303	266	529164	100.00	ppm	100
77) Phenanthrene	10.667	178	1400825	50.00	ppm	100
78) Anthracene	10.757	178	1530896	50.00	ppm	100
79) Carbazole	11.099	167	1597486	50.00	ppm	100
80) Di-n-butylphthalate	11.927	149	2021422	50.00	ppm	100
81) Fluoranthene	12.937	202	1824575	50.00	ppm	100
82) Octadecane	10.645	57	410956	50.00	ppm	100
84) Pyrene	13.359	202	1819232	50.09	ppm	100
86) Butylbenzylphthalate	14.849	149	932171	50.09	ppm	100
87) Benzo[a]anthracene	15.735	228	1707688	50.09	ppm	100
88) 3,3'-Dichlorobenzidine	15.773	252	624081	50.09	ppm	100
89) Chrysene	15.805	228	1446924	50.11	ppm	100
90) bis(2-Ethylhexyl)phtha...	16.072	149	1206858	50.02	ppm	100
92) Di-n-octylphthalate	17.295	149	2209758	49.61	ppm	100
93) Benzo[b]fluoranthene	17.717	252	1854464	50.16	ppm	98
94) Benzo[k]fluoranthene	17.776	252	1591708	50.17	ppm	98
95) Benzo[a]pyrene	18.256	252	1675962	50.06	ppm	100
96) Indeno[1,2,3-cd]pyrene	20.019	276	1724227	50.16	ppm	99
97) Dibenz(a,h)acridine	19.682	279	1690589	50.14	ppm	100
98) Dibenz[a,h]anthracene	20.078	278	1713042	49.98	ppm	100
99) 7,12-Dimethylbenz(a)an...	17.744	256	762708	50.16	ppm	100
100) Benzo[g,h,i]perylene	20.451	276	1709983	49.85	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153317.D
Acq On : 10 Apr 2019 5:13 am
Operator : chriss2
Sample : icc6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 10 10:44:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153318.D
Acq On : 10 Apr 2019 5:42 am
Operator : chriss2
Sample : ic6551-25
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 10 11:13:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.607	152	334161	40.00	ppm	0.00
24) Naphthalene-d8	5.724	136	1190989	40.00	ppm	0.00
47) Acenaphthene-d10	8.031	164	720909	40.00	ppm	0.00
69) Phenanthrene-d10	10.616	188	1303089	40.00	ppm	0.00
83) Chrysene-d12	15.749	240	1084602	40.00	ppm	0.00
91) Perylene-d12	18.350	264	1312345	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.607	152	334161	40.00	ppm	0.00
103) Acenaphthene-d10a	8.031	164	720909	40.00	ppm	0.00
106) Chrysene-d12a	15.749	240	1084602	40.00	ppm	0.00
108) Chrysene-d12b	15.749	240	1084602	40.00	ppm	0.00
110) Phenanthrene-d10a	10.616	188	1303089	40.00	ppm	0.00
113) Naphthalene-d8a	5.724	136	1190989	40.00	ppm	0.00
115) Chrysene-d12c	15.749	240	1084602	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.619	112	298236	24.52	ppm	0.00
Spiked Amount 50.000			Recovery = 49.04%			
8) Phenol-d5	4.340	99	348960	25.19	ppm	0.00
Spiked Amount 50.000			Recovery = 50.38%			
25) Nitrobenzene-d5	5.051	82	223766	25.16	ppm	0.00
Spiked Amount 50.000			Recovery = 50.32%			
51) 2-Fluorobiphenyl	7.032	172	627617	26.19	ppm	0.00
Spiked Amount 50.000			Recovery = 52.38%			
73) 2,4,6-Tribromophenol	9.361	330	115662	25.62	ppm	0.00
Spiked Amount 50.000			Recovery = 51.24%			
85) Terphenyl-d14	13.778	244	744134	24.99	ppm	0.00
Spiked Amount 50.000			Recovery = 49.98%			
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.145	88	122592	24.05	ppm	97
3) Pyridine	2.476	79	293075	24.16	ppm	98
4) N-Nitrosodimethylamine	2.434	42	102964	23.64	ppm	99
6) Indene	4.810	116	392032	26.34	ppm	98
7) Cumene	4.014	105	644338	25.78	ppm	98
9) Phenol	4.346	94	355510	25.80	ppm	99
10) Aniline	4.362	93	320817	26.89	ppm	99
11) bis(2-Chloroethyl)ether	4.410	93	231420	26.28	ppm	98
12) 2-Chlorophenol	4.452	128	304951	25.41	ppm	98
13) Decane	4.495	43	171110	26.97	ppm	93
14) 1,3-Dichlorobenzene	4.565	146	345084	25.92	ppm	97
15) 1,4-Dichlorobenzene	4.623	146	314304	25.33	ppm	99
16) Benzyl alcohol	4.714	108	161819	24.29	ppm	98
17) 1,2-Dichlorobenzene	4.741	146	316469	25.75	ppm	99
18) Acetophenone	4.928	105	313243	26.50	ppm	99
19) 2-Methylphenol	4.805	108	223651	26.29	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153318.D
Acq On : 10 Apr 2019 5:42 am
Operator : chriss2
Sample : ic6551-25
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 10 11:13:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
20) 2,2'-oxybis(1-Chloropr...	4.826	121	69768	25.35	ppm	99
21) 3&4-Methylphenol	4.928	108	224599	26.06	ppm	97
22) n-Nitroso-di-n-propyla...	4.928	70	139071	26.69	ppm	96
23) Hexachloroethane	5.019	201	114480	25.03	ppm	95
26) Nitrobenzene	5.067	77	215822	25.81	ppm	99
27) Quinoline	6.108	129	582311	25.28	ppm	100
28) Isophorone	5.280	82	434767	25.88	ppm	99
29) 2-Nitrophenol	5.350	139	155998	24.71	ppm	97
30) 2,4-Dimethylphenol	5.392	107	215855	25.01	ppm	98
31) Benzoic acid	5.483	105	149286	22.25	ppm	99
32) bis(2-Chloroethoxy)met...	5.478	93	264653	25.58	ppm	98
33) 2,4-Dichlorophenol	5.579	162	249345	25.02	ppm	98
34) 2,6-Dichlorophenol	5.809	162	226787	25.63	ppm	99
35) 1,3,5-Trichlorobenzene	5.366	180	282410	26.78	ppm	99
36) 1,2,4-Trichlorobenzene	5.670	180	276092	26.21	ppm	98
37) 1,2,3-Trichlorobenzene	5.900	180	253728	26.69	ppm	99
38) Naphthalene	5.745	128	731366	25.86	ppm	99
39) 4-Chloroaniline	5.798	127	327657	26.33	ppm	99
40) 2,3-Dichloroaniline	6.904	161	314581	25.78	ppm	97
41) Caprolactam	6.178	55	91578	24.85	ppm	98
42) Hexachlorobutadiene	5.889	225	139847	25.99	ppm	100
43) 4-Chloro-3-methylphenol	6.354	107	222432	24.69	ppm	98
44) 2-Methylnaphthalene	6.535	141	459269	26.20	ppm	100
45) 1-Methylnaphthalene	6.664	142	582425	26.04	ppm	100
46) Dimethylnaphthalene	7.395	156	521810	26.43	ppm	99
48) Hexachlorocyclopentadiene	6.760	237	291973	49.91	ppm	100
49) 2,4,6-Trichlorophenol	6.915	196	178388	26.21	ppm	97
50) 2,4,5-Trichlorophenol	6.963	196	191381	25.53	ppm	98
52) 2-Chloronaphthalene	7.187	162	513642	26.47	ppm	98
53) Biphenyl	7.171	154	703626	26.19	ppm	99
54) 2-Nitroaniline	7.342	65	109614	24.16	ppm	95
55) Dimethylphthalate	7.646	163	648526	25.50	ppm	99
56) Acenaphthylene	7.796	152	864332	26.27	ppm	99
57) 2,6-Dinitrotoluene	7.716	165	125744	23.54	ppm	93
58) 3-Nitroaniline	7.972	138	153036	23.81	ppm	94
59) Acenaphthene	8.079	153	517574	25.77	ppm	95
60) 2,4-Dinitrophenol	8.143	184	80092	38.87	ppm	96
61) 4-Nitrophenol	8.282	109	66613	24.10	ppm	95
62) Dibenzofuran	8.362	168	756602	26.39	ppm	99
63) 2,4-Dinitrotoluene	8.362	165	151713	23.90	ppm	85
64) 2,3,4,6-Tetrachlorophenol	8.581	232	168069	25.22	ppm	98
65) Diethylphthalate	8.832	149	641158	25.65	ppm	98
66) Fluorene	8.939	166	640193	26.31	ppm	100
67) 4-Chlorophenyl-phenyle...	8.976	204	282120	26.04	ppm	99
68) 4-Nitroaniline	8.992	138	138115	23.75	ppm	96
70) 4,6-Dinitro-2-methylph...	9.056	198	65941	21.04	ppm	97
71) n-Nitrosodiphenylamine	9.190	169	473994	26.52	ppm	98
72) 1,2-Diphenylhydrazine	9.254	77	476425	26.38	ppm	99
74) 4-Bromophenyl-phenylether	9.847	248	201861	26.19	ppm	99
75) Hexachlorobenzene	9.927	284	233824	26.68	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153318.D
Acq On : 10 Apr 2019 5:42 am
Operator : chriss2
Sample : ic6551-25
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 10 11:13:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

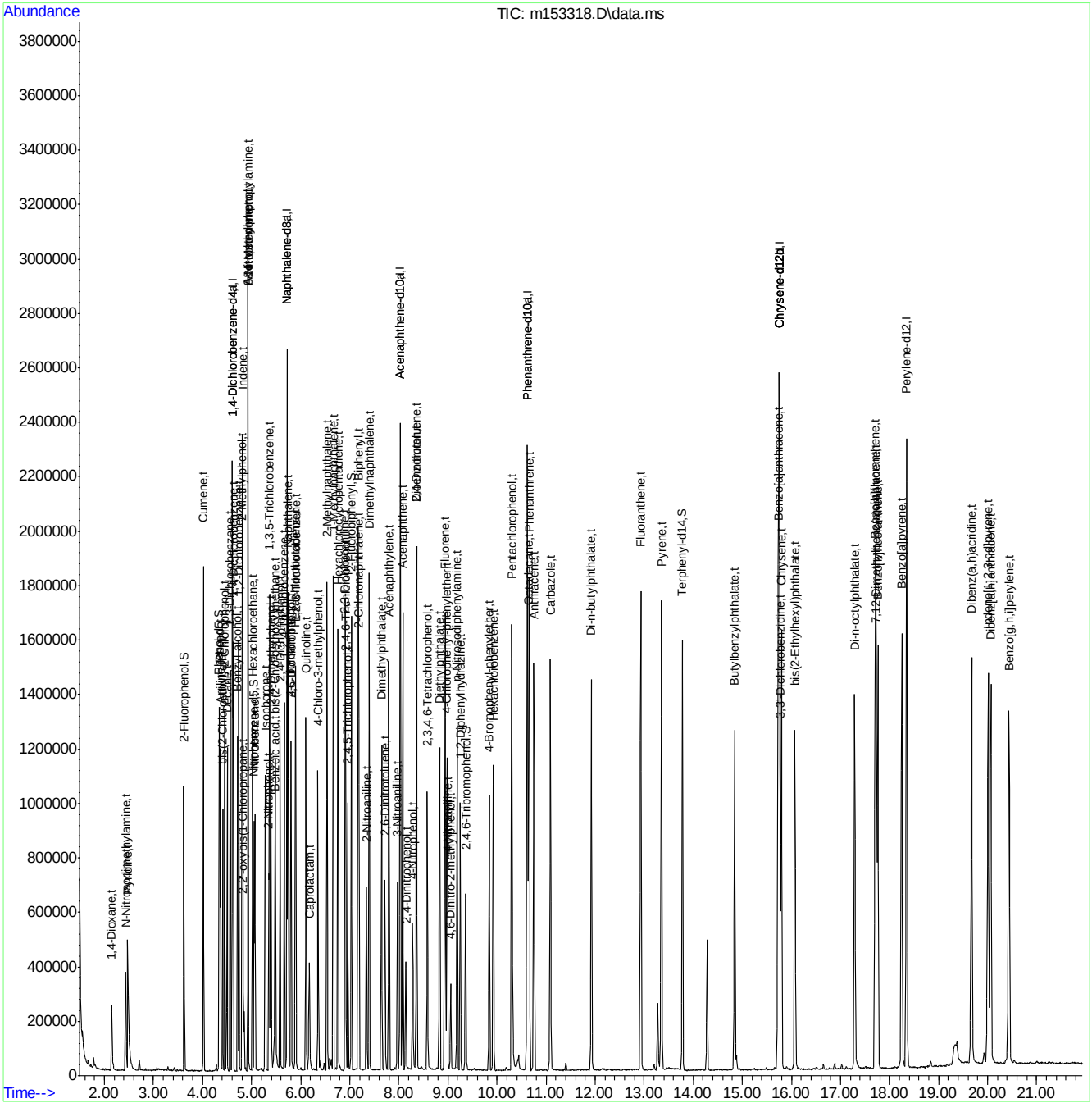
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) Pentachlorophenol	10.301	266	292828	51.05	ppm	98
77) Phenanthrene	10.659	178	810391	26.69	ppm	100
78) Anthracene	10.755	178	876543	26.41	ppm	99
79) Carbazole	11.091	167	924936	26.71	ppm	100
80) Di-n-butylphthalate	11.925	149	1157726	26.42	ppm	99
81) Fluoranthene	12.929	202	1047338	26.48	ppm	98
82) Octadecane	10.648	57	230459	25.87	ppm	97
84) Pyrene	13.356	202	1066089	25.58	ppm	99
86) Butylbenzylphthalate	14.841	149	525196	24.59	ppm	97
87) Benzo[a]anthracene	15.733	228	973480	24.88	ppm	99
88) 3,3'-Dichlorobenzidine	15.770	252	344500	24.10	ppm	98
89) Chrysene	15.797	228	825966	24.93	ppm	99
90) bis(2-Ethylhexyl)phtha...	16.069	149	675530	24.40	ppm	99
92) Di-n-octylphthalate	17.287	149	1226577	25.17	ppm	100
93) Benzo[b]fluoranthene	17.709	252	1065423	26.34	ppm	99
94) Benzo[k]fluoranthene	17.762	252	914295	26.34	ppm	97
95) Benzo[a]pyrene	18.248	252	953630	26.04	ppm	99
96) Indeno[1,2,3-cd]pyrene	20.011	276	972029	25.85	ppm	99
97) Dibenz(a,h)acridine	19.674	279	952872	25.83	ppm	98
98) Dibenz[a,h]anthracene	20.064	278	952537	25.40	ppm	99
99) 7,12-Dimethylbenz(a)an...	17.730	256	422121	25.38	ppm	100
100) Benzo[g,h,i]perylene	20.438	276	967321	25.78	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153318.D
Acq On : 10 Apr 2019 5:42 am
Operator : chriss2
Sample : ic6551-25
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 10 11:13:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153319.D
Acq On : 10 Apr 2019 6:10 am
Operator : chriss2
Sample : ic6551-10
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 10 11:14:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.607	152	368491	40.00	ppm	0.00
24) Naphthalene-d8	5.724	136	1292182	40.00	ppm	0.00
47) Acenaphthene-d10	8.026	164	767941	40.00	ppm	0.00
69) Phenanthrene-d10	10.616	188	1387327	40.00	ppm	0.00
83) Chrysene-d12	15.749	240	1218733	40.00	ppm	0.00
91) Perylene-d12	18.350	264	1439051	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.607	152	368491	40.00	ppm	0.00
103) Acenaphthene-d10a	8.026	164	767941	40.00	ppm	0.00
106) Chrysene-d12a	15.749	240	1218733	40.00	ppm	0.00
108) Chrysene-d12b	15.749	240	1218733	40.00	ppm	0.00
110) Phenanthrene-d10a	10.616	188	1387327	40.00	ppm	0.00
113) Naphthalene-d8a	5.724	136	1292182	40.00	ppm	0.00
115) Chrysene-d12c	15.749	240	1218733	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.619	112	126485	9.43	ppm	0.00
Spiked Amount 50.000			Recovery =	18.86%		
8) Phenol-d5	4.335	99	155871	10.20	ppm	0.00
Spiked Amount 50.000			Recovery =	20.40%		
25) Nitrobenzene-d5	5.051	82	100957	10.46	ppm	0.00
Spiked Amount 50.000			Recovery =	20.92%		
51) 2-Fluorobiphenyl	7.032	172	290189	11.37	ppm	0.00
Spiked Amount 50.000			Recovery =	22.74%		
73) 2,4,6-Tribromophenol	9.355	330	49131	10.22	ppm	0.00
Spiked Amount 50.000			Recovery =	20.44%		
85) Terphenyl-d14	13.778	244	336289	10.05	ppm	0.00
Spiked Amount 50.000			Recovery =	20.10%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.150	88	54253	9.65	ppm	95
3) Pyridine	2.487	79	128699	9.62	ppm	99
4) N-Nitrosodimethylamine	2.433	42	46501	9.68	ppm	96
6) Indene	4.810	116	185272	11.29	ppm	97
7) Cumene	4.014	105	296975	10.78	ppm	95
9) Phenol	4.346	94	163528	10.76	ppm	99
10) Aniline	4.362	93	161460	12.27	ppm	100
11) bis(2-Chloroethyl)ether	4.410	93	105718	10.89	ppm	99
12) 2-Chlorophenol	4.452	128	140329	10.60	ppm	98
13) Decane	4.495	43	80164	11.46	ppm	96
14) 1,3-Dichlorobenzene	4.565	146	158038	10.76	ppm	98
15) 1,4-Dichlorobenzene	4.623	146	143437	10.48	ppm	98
16) Benzyl alcohol	4.714	108	71989	9.80	ppm	98
17) 1,2-Dichlorobenzene	4.741	146	145773	10.76	ppm	99
18) Acetophenone	4.922	105	148950	11.43	ppm	100
19) 2-Methylphenol	4.805	108	103275	11.01	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153319.D
Acq On : 10 Apr 2019 6:10 am
Operator : chriss2
Sample : ic6551-10
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 10 11:14:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
20) 2,2'-oxybis(1-Chloropr...	4.826	121	31705	10.45	ppm	93
21) 3&4-Methylphenol	4.928	108	105540	11.10	ppm	98
22) n-Nitroso-di-n-propyla...	4.928	70	67476	11.74	ppm	96
23) Hexachloroethane	5.019	201	52435	10.40	ppm	96
26) Nitrobenzene	5.067	77	98205	10.82	ppm	96
27) Quinoline	6.103	129	259300	10.38	ppm	99
28) Isophorone	5.275	82	196544	10.78	ppm	96
29) 2-Nitrophenol	5.350	139	64531	9.42	ppm	96
30) 2,4-Dimethylphenol	5.387	107	91037	9.72	ppm	87
31) Benzoic acid	5.456	105	53989	7.42	ppm	98
32) bis(2-Chloroethoxy)met...	5.478	93	124709	11.11	ppm	99
33) 2,4-Dichlorophenol	5.579	162	116273	10.75	ppm	99
34) 2,6-Dichlorophenol	5.809	162	104144	10.85	ppm	97
35) 1,3,5-Trichlorobenzene	5.366	180	132542	11.58	ppm	98
36) 1,2,4-Trichlorobenzene	5.665	180	125733	11.00	ppm	94
37) 1,2,3-Trichlorobenzene	5.900	180	118720	11.51	ppm	99
38) Naphthalene	5.745	128	329503	10.74	ppm	99
39) 4-Chloroaniline	5.798	127	149516	11.08	ppm	98
40) 2,3-Dichloroaniline	6.904	161	144220	10.89	ppm	98
41) Caprolactam	6.162	55	39727	9.94	ppm	99
42) Hexachlorobutadiene	5.889	225	63523	10.88	ppm	98
43) 4-Chloro-3-methylphenol	6.354	107	98125	10.04	ppm	96
44) 2-Methylnaphthalene	6.535	141	209055	10.99	ppm	99
45) 1-Methylnaphthalene	6.658	142	266822	11.00	ppm	99
46) Dimethylnaphthalene	7.395	156	240375	11.22	ppm	98
48) Hexachlorocyclopentadiene	6.760	237	128009	20.54	ppm	97
49) 2,4,6-Trichlorophenol	6.909	196	81266	11.21	ppm	95
50) 2,4,5-Trichlorophenol	6.957	196	86176	10.79	ppm	97
52) 2-Chloronaphthalene	7.187	162	241391	11.68	ppm	97
53) Biphenyl	7.171	154	323895	11.32	ppm	99
54) 2-Nitroaniline	7.337	65	43687	9.04	ppm	92
55) Dimethylphthalate	7.641	163	292408	10.79	ppm	99
56) Acenaphthylene	7.796	152	397828	11.35	ppm	99
57) 2,6-Dinitrotoluene	7.716	165	48395	8.51	ppm	97
58) 3-Nitroaniline	7.967	138	62103	9.07	ppm	95
59) Acenaphthene	8.074	153	233409	10.91	ppm	98
60) 2,4-Dinitrophenol	8.138	184	21699	9.89	ppm	93
61) 4-Nitrophenol	8.277	109	25471	8.65	ppm	92
62) Dibenzofuran	8.357	168	345372	11.31	ppm	99
63) 2,4-Dinitrotoluene	8.362	165	58927	8.71	ppm	90
64) 2,3,4,6-Tetrachlorophenol	8.581	232	71520	10.07	ppm	96
65) Diethylphthalate	8.827	149	289986	10.89	ppm	97
66) Fluorene	8.939	166	290871	11.22	ppm	98
67) 4-Chlorophenyl-phenyle...	8.976	204	131323	11.38	ppm	98
68) 4-Nitroaniline	8.982	138	60782	9.81	ppm	94
70) 4,6-Dinitro-2-methylph...	9.051	198	18595	5.57	ppm	92
71) n-Nitrosodiphenylamine	9.185	169	214003	11.25	ppm	98
72) 1,2-Diphenylhydrazine	9.249	77	216154	11.24	ppm	99
74) 4-Bromophenyl-phenylether	9.841	248	89025	10.85	ppm	97
75) Hexachlorobenzene	9.922	284	106881	11.46	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153319.D
Acq On : 10 Apr 2019 6:10 am
Operator : chriss2
Sample : ic6551-10
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 10 11:14:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

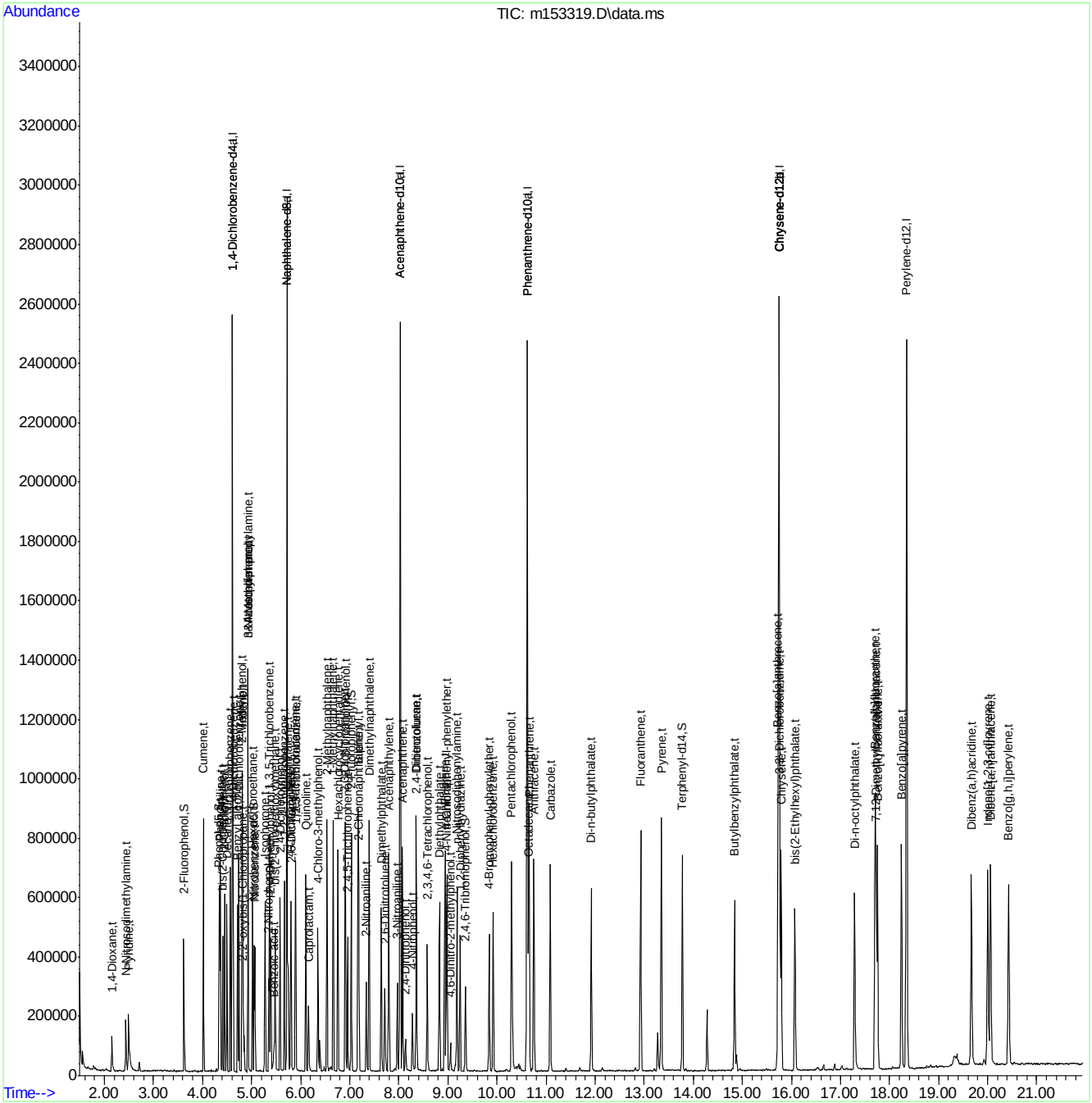
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) Pentachlorophenol	10.295	266	128016	20.96	ppm	98
77) Phenanthrene	10.659	178	370709	11.47	ppm	99
78) Anthracene	10.749	178	403132	11.41	ppm	99
79) Carbazole	11.086	167	419148	11.37	ppm	100
80) Di-n-butylphthalate	11.919	149	511056	10.95	ppm	99
81) Fluoranthene	12.929	202	473200	11.24	ppm	99
82) Octadecane	10.643	57	100878	10.64	ppm	97
84) Pyrene	13.351	202	489568	10.45	ppm	98
86) Butylbenzylphthalate	14.841	149	230265	9.60	ppm	98
87) Benzo[a]anthracene	15.727	228	433970	9.87	ppm	97
88) 3,3'-Dichlorobenzidine	15.765	252	151112	9.41	ppm	97
89) Chrysene	15.791	228	375660	10.09	ppm	98
90) bis(2-Ethylhexyl)phtha...	16.069	149	290968	9.35	ppm	97
92) Di-n-octylphthalate	17.287	149	518546	9.70	ppm	99
93) Benzo[b]fluoranthene	17.709	252	483088	10.89	ppm	97
94) Benzo[k]fluoranthene	17.757	252	430534	11.31	ppm	97
95) Benzo[a]pyrene	18.243	252	425963	10.61	ppm	99
96) Indeno[1,2,3-cd]pyrene	20.006	276	424132	10.28	ppm	98
97) Dibenz(a,h)acridine	19.669	279	413283	10.22	ppm	99
98) Dibenz[a,h]anthracene	20.059	278	435221	10.58	ppm	97
99) 7,12-Dimethylbenz(a)an...	17.725	256	171313	9.39	ppm	96
100) Benzo[g,h,i]perylene	20.427	276	430792	10.47	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153319.D
Acq On : 10 Apr 2019 6:10 am
Operator : chriss2
Sample : ic6551-10
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 10 11:14:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153320.D
Acq On : 10 Apr 2019 6:38 am
Operator : chriss2
Sample : ic6551-5
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 10 12:02:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.608	152	383516	40.00	ppm	0.00
24) Naphthalene-d8	5.725	136	1325023	40.00	ppm	0.00
47) Acenaphthene-d10	8.027	164	774955	40.00	ppm	0.00
69) Phenanthrene-d10	10.617	188	1376493	40.00	ppm	0.00
83) Chrysene-d12	15.744	240	1219276	40.00	ppm	-0.01
91) Perylene-d12	18.351	264	1435990	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.608	152	383516	40.00	ppm	0.00
103) Acenaphthene-d10a	8.027	164	774955	40.00	ppm	0.00
106) Chrysene-d12a	15.744	240	1219276	40.00	ppm	-0.01
108) Chrysene-d12b	15.744	240	1219276	40.00	ppm	-0.01
110) Phenanthrene-d10a	10.617	188	1376493	40.00	ppm	0.00
113) Naphthalene-d8a	5.725	136	1325023	40.00	ppm	0.00
115) Chrysene-d12c	15.744	240	1219276	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.620	112	63543	4.55	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.10%	
8) Phenol-d5	4.336	99	74970	4.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.42%	
25) Nitrobenzene-d5	5.052	82	49416	4.99	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.98%	
51) 2-Fluorobiphenyl	7.033	172	149673	5.81	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.62%	
73) 2,4,6-Tribromophenol	9.357	330	22973	4.82	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.64%	
85) Terphenyl-d14	13.779	244	165299	4.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.88%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.151	88	26116	4.46	ppm	98
3) Pyridine	2.499	79	68373	4.91	ppm	96
4) N-Nitrosodimethylamine	2.440	42	21921	4.38	ppm	98
6) Indene	4.811	116	97601	5.71	ppm	97
7) Cumene	4.015	105	151440	5.28	ppm	96
9) Phenol	4.347	94	81737	5.17	ppm	97
10) Aniline	4.363	93	86395	6.31	ppm	98
11) bis(2-Chloroethyl)ether	4.411	93	55994	5.54	ppm	92
12) 2-Chlorophenol	4.453	128	71905	5.22	ppm	96
13) Decane	4.496	43	42664	5.86	ppm	98
14) 1,3-Dichlorobenzene	4.566	146	84351	5.52	ppm	99
15) 1,4-Dichlorobenzene	4.624	146	74436	5.23	ppm	99
16) Benzyl alcohol	4.715	108	36570	4.78	ppm	98
17) 1,2-Dichlorobenzene	4.742	146	76038	5.39	ppm	100
18) Acetophenone	4.923	105	80317	5.92	ppm	97
19) 2-Methylphenol	4.806	108	52916	5.42	ppm	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153320.D
Acq On : 10 Apr 2019 6:38 am
Operator : chriss2
Sample : ic6551-5
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 10 12:02:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
20) 2,2'-oxybis(1-Chloropr...	4.827	121	16923	5.36	ppm	#	79
21) 3&4-Methylphenol	4.923	108	52745	5.33	ppm	#	79
22) n-Nitroso-di-n-propyla...	4.929	70	37769	6.31	ppm		95
23) Hexachloroethane	5.020	201	27117	5.17	ppm		97
26) Nitrobenzene	5.068	77	49714	5.34	ppm		95
27) Quinoline	6.104	129	129013	5.03	ppm		100
28) Isophorone	5.276	82	97416	5.21	ppm		97
29) 2-Nitrophenol	5.351	139	28586	4.07	ppm		91
30) 2,4-Dimethylphenol	5.388	107	41319	4.30	ppm		98
32) bis(2-Chloroethoxy)met...	5.479	93	61838	5.37	ppm		99
33) 2,4-Dichlorophenol	5.580	162	57378	5.18	ppm		96
34) 2,6-Dichlorophenol	5.810	162	51539	5.24	ppm		99
35) 1,3,5-Trichlorobenzene	5.367	180	68732	5.86	ppm		98
36) 1,2,4-Trichlorobenzene	5.666	180	66065	5.64	ppm		95
37) 1,2,3-Trichlorobenzene	5.901	180	60603	5.73	ppm		99
38) Naphthalene	5.746	128	171503	5.45	ppm		99
39) 4-Chloroaniline	5.799	127	75765	5.47	ppm		96
40) 2,3-Dichloroaniline	6.905	161	72437	5.34	ppm		100
41) Caprolactam	6.152	55	18896	4.61	ppm		98
42) Hexachlorobutadiene	5.890	225	32327	5.40	ppm		98
43) 4-Chloro-3-methylphenol	6.349	107	48286	4.82	ppm		97
44) 2-Methylnaphthalene	6.536	141	106972	5.48	ppm		98
45) 1-Methylnaphthalene	6.659	142	136015	5.47	ppm		97
46) Dimethylnaphthalene	7.396	156	123213	5.61	ppm		99
48) Hexachlorocyclopentadiene	6.755	237	60861	9.68	ppm		99
49) 2,4,6-Trichlorophenol	6.910	196	40694	5.56	ppm		99
50) 2,4,5-Trichlorophenol	6.953	196	42618	5.29	ppm		100
52) 2-Chloronaphthalene	7.183	162	126193	6.05	ppm		97
53) Biphenyl	7.167	154	165139	5.72	ppm		99
54) 2-Nitroaniline	7.332	65	20529	4.21	ppm		89
55) Dimethylphthalate	7.642	163	147195	5.38	ppm		98
56) Acenaphthylene	7.797	152	200413	5.67	ppm		99
57) 2,6-Dinitrotoluene	7.711	165	20260	3.53	ppm		88
58) 3-Nitroaniline	7.968	138	26746	3.87	ppm		97
59) Acenaphthene	8.075	153	115726	5.36	ppm		98
60) 2,4-Dinitrophenol	8.133	184	6930	3.13	ppm		90
61) 4-Nitrophenol	8.272	109	11266	3.79	ppm		90
62) Dibenzofuran	8.358	168	176033	5.71	ppm		99
63) 2,4-Dinitrotoluene	8.358	165	22667	3.32	ppm		60
64) 2,3,4,6-Tetrachlorophenol	8.582	232	34640	4.84	ppm		98
65) Diethylphthalate	8.828	149	143193	5.33	ppm		98
66) Fluorene	8.935	166	144307	5.52	ppm		96
67) 4-Chlorophenyl-phenyle...	8.977	204	68394	5.87	ppm		97
68) 4-Nitroaniline	8.983	138	27987	4.48	ppm		100
70) 4,6-Dinitro-2-methylph...	9.047	198	6562	1.98	ppm		92
71) n-Nitrosodiphenylamine	9.180	169	107428	5.69	ppm		99
72) 1,2-Diphenylhydrazine	9.244	77	111981	5.87	ppm		94
74) 4-Bromophenyl-phenylether	9.843	248	44863	5.51	ppm		98
75) Hexachlorobenzene	9.923	284	56252	6.08	ppm		96
76) Pentachlorophenol	10.297	266	55502	9.16	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153320.D
Acq On : 10 Apr 2019 6:38 am
Operator : chriss2
Sample : ic6551-5
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 10 12:02:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

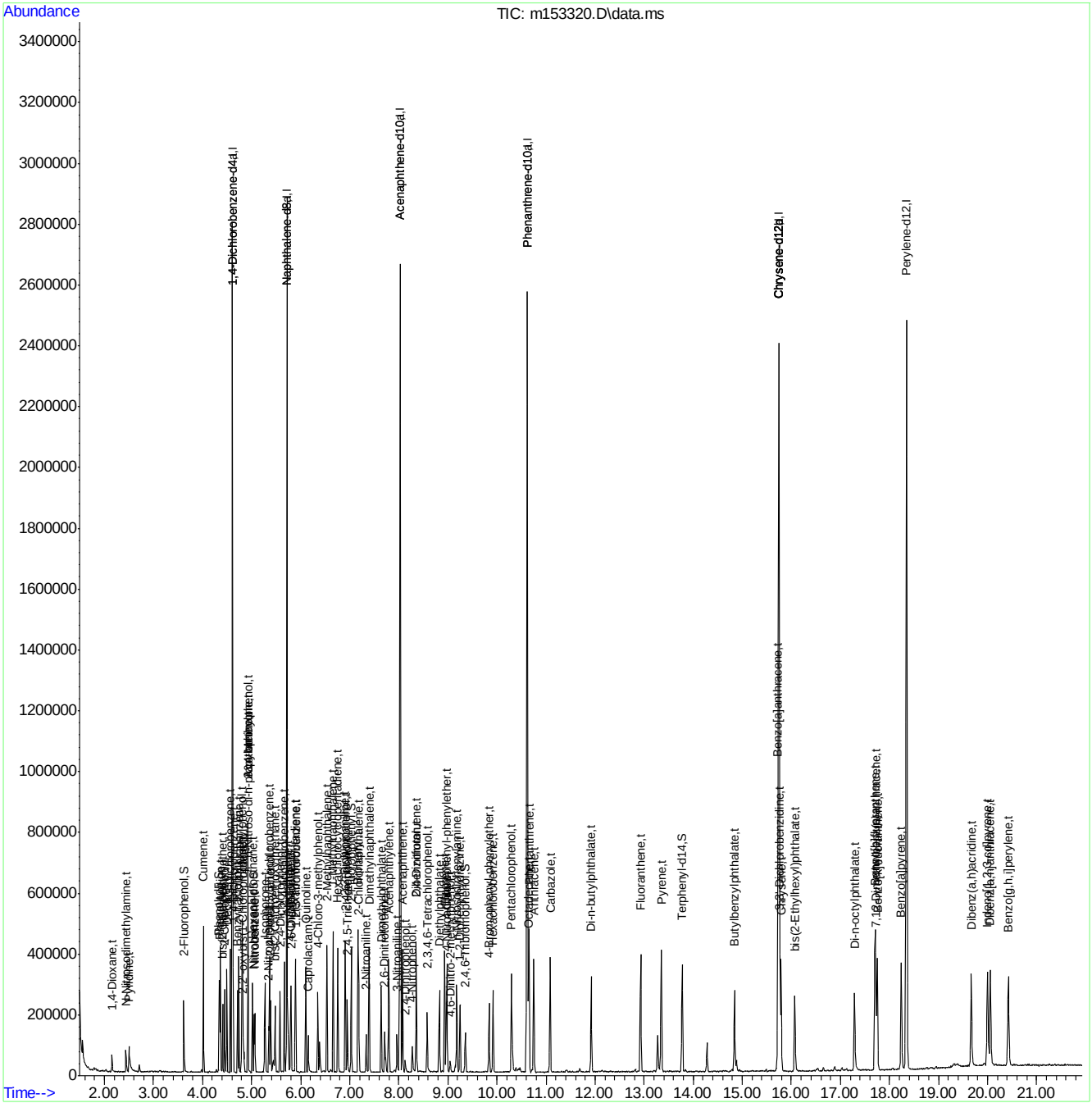
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.654	178	186643	5.82	ppm	99
78) Anthracene	10.751	178	201711	5.75	ppm	97
79) Carbazole	11.087	167	208179	5.69	ppm	99
80) Di-n-butylphthalate	11.920	149	246608	5.33	ppm	98
81) Fluoranthene	12.930	202	230408	5.51	ppm	99
82) Octadecane	10.644	57	51854	5.51	ppm	97
84) Pyrene	13.352	202	241893	5.16	ppm	99
86) Butylbenzylphthalate	14.842	149	106475	4.44	ppm	98
87) Benzo[a]anthracene	15.728	228	210403	4.78	ppm	98
88) 3,3'-Dichlorobenzidine	15.766	252	70982	4.42	ppm	98
89) Chrysene	15.793	228	188848	5.07	ppm	99
90) bis(2-Ethylhexyl)phtha...	16.070	149	132783	4.27	ppm	97
92) Di-n-octylphthalate	17.288	149	230915	4.33	ppm	99
93) Benzo[b]fluoranthene	17.705	252	233653	5.28	ppm	99
94) Benzo[k]fluoranthene	17.753	252	221075	5.82	ppm	97
95) Benzo[a]pyrene	18.239	252	204694	5.11	ppm	98
96) Indeno[1,2,3-cd]pyrene	19.996	276	200199	4.86	ppm	98
97) Dibenz(a,h)acridine	19.670	279	195682	4.85	ppm	95
98) Dibenz[a,h]anthracene	20.055	278	210768	5.14	ppm	99
99) 7,12-Dimethylbenz(a)an...	17.721	256	72994	4.01	ppm	96
100) Benzo[g,h,i]perylene	20.423	276	204818	4.99	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153320.D
Acq On : 10 Apr 2019 6:38 am
Operator : chriss2
Sample : ic6551-5
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 10 12:02:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153321.D
Acq On : 10 Apr 2019 7:06 am
Operator : chriss2
Sample : ic6551-2
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 10 12:03:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:17:51 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.608	152	293400	40.00	ppm	0.00
24) Naphthalene-d8	5.724	136	1022922	40.00	ppm	0.00
47) Acenaphthene-d10	8.026	164	596115	40.00	ppm	0.00
69) Phenanthrene-d10	10.617	188	1053037	40.00	ppm	0.00
83) Chrysene-d12	15.744	240	945177	40.00	ppm	-0.01
91) Perylene-d12	18.345	264	1111155	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.608	152	293400	40.00	ppm	0.00
103) Acenaphthene-d10a	8.026	164	596115	40.00	ppm	0.00
106) Chrysene-d12a	15.744	240	945177	40.00	ppm	-0.01
108) Chrysene-d12b	15.744	240	945177	40.00	ppm	-0.01
110) Phenanthrene-d10a	10.617	188	1053037	40.00	ppm	0.00
113) Naphthalene-d8a	5.724	136	1022922	40.00	ppm	0.00
115) Chrysene-d12c	15.744	240	945177	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.620	112	17999	1.69	ppm	0.00
Spiked Amount 50.000			Recovery =	3.38%		
8) Phenol-d5	4.336	99	21177	1.74	ppm	0.00
Spiked Amount 50.000			Recovery =	3.48%		
25) Nitrobenzene-d5	5.051	82	14176	1.86	ppm	0.00
Spiked Amount 50.000			Recovery =	3.72%		
51) 2-Fluorobiphenyl	7.033	172	44821	2.26	ppm	0.00
Spiked Amount 50.000			Recovery =	4.52%		
73) 2,4,6-Tribromophenol	9.356	330	6201	1.70	ppm	0.00
Spiked Amount 50.000			Recovery =	3.40%		
85) Terphenyl-d14	13.779	244	44326	1.71	ppm	0.00
Spiked Amount 50.000			Recovery =	3.42%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.157	88	7986	1.78	ppm	99
3) Pyridine	2.514	79	18784	1.76	ppm	94
4) N-Nitrosodimethylamine	2.440	42	6593	1.72	ppm	94
6) Indene	4.811	116	28402	2.17	ppm	97
7) Cumene	4.015	105	42198	1.92	ppm	95
9) Phenol	4.346	94	24014	1.99	ppm	95
10) Aniline	4.362	93	26099	2.49	ppm	97
11) bis(2-Chloroethyl)ether	4.410	93	16351	2.11	ppm	95
12) 2-Chlorophenol	4.453	128	20585	1.95	ppm	95
13) Decane	4.496	43	13037	2.34	ppm	97
14) 1,3-Dichlorobenzene	4.565	146	24741	2.12	ppm	92
15) 1,4-Dichlorobenzene	4.624	146	23018	2.11	ppm	95
16) Benzyl alcohol	4.715	108	9328	1.59	ppm	86
17) 1,2-Dichlorobenzene	4.742	146	22064	2.04	ppm	98
18) Acetophenone	4.923	105	22609	2.18	ppm	94
19) 2-Methylphenol	4.806	108	15556	2.08	ppm	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153321.D
Acq On : 10 Apr 2019 7:06 am
Operator : chriss2
Sample : ic6551-2
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 10 12:03:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:17:51 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
20) 2,2'-oxybis(1-Chloropr...	4.827	121	5150	2.13	ppm		87
21) 3&4-Methylphenol	4.923	108	15843	2.09	ppm	#	77
22) n-Nitroso-di-n-propyla...	4.929	70	10431	2.28	ppm		92
23) Hexachloroethane	5.019	201	7602	1.89	ppm		96
26) Nitrobenzene	5.067	77	13339	1.86	ppm		99
27) Quinoline	6.104	129	37371	1.89	ppm		96
28) Isophorone	5.276	82	28385	1.97	ppm		97
29) 2-Nitrophenol	5.350	139	6500	1.20	ppm		95
30) 2,4-Dimethylphenol	5.388	107	16059	2.17	ppm		99
32) bis(2-Chloroethoxy)met...	5.479	93	18746	2.11	ppm		98
33) 2,4-Dichlorophenol	5.580	162	15988	1.87	ppm		88
34) 2,6-Dichlorophenol	5.810	162	15267	2.01	ppm		99
35) 1,3,5-Trichlorobenzene	5.367	180	19193	2.12	ppm		99
36) 1,2,4-Trichlorobenzene	5.666	180	18425	2.04	ppm		93
37) 1,2,3-Trichlorobenzene	5.901	180	17847	2.19	ppm		92
38) Naphthalene	5.746	128	51064	2.10	ppm		98
39) 4-Chloroaniline	5.799	127	21891	2.05	ppm		96
40) 2,3-Dichloroaniline	6.905	161	20673	1.97	ppm		97
41) Caprolactam	6.146	55	5312	1.68	ppm		93
42) Hexachlorobutadiene	5.885	225	9847	2.13	ppm		94
43) 4-Chloro-3-methylphenol	6.349	107	12624	1.63	ppm		95
44) 2-Methylnaphthalene	6.536	141	29694	1.97	ppm		99
45) 1-Methylnaphthalene	6.659	142	39447	2.05	ppm		95
46) Dimethylnaphthalene	7.391	156	36289	2.14	ppm		98
48) Hexachlorocyclopentadiene	6.755	237	16172	3.34	ppm		100
49) 2,4,6-Trichlorophenol	6.910	196	10744	1.91	ppm		93
50) 2,4,5-Trichlorophenol	6.953	196	11272	1.82	ppm		92
52) 2-Chloronaphthalene	7.182	162	36750	2.29	ppm		99
53) Biphenyl	7.166	154	47897	2.16	ppm		99
54) 2-Nitroaniline	7.332	65	4624	1.23	ppm		93
55) Dimethylphthalate	7.642	163	40495	1.93	ppm		96
56) Acenaphthylene	7.797	152	57329	2.11	ppm		97
57) 2,6-Dinitrotoluene	7.711	165	4524	1.02	ppm		82
59) Acenaphthene	8.074	153	34287	2.06	ppm		91
60) 2,4-Dinitrophenol	8.139	184	1266	0.74	ppm		78
61) 4-Nitrophenol	8.277	109	2718	1.19	ppm	#	66
62) Dibenzofuran	8.357	168	50959	2.15	ppm		98
63) 2,4-Dinitrotoluene	8.357	165	4023	0.77	ppm	#	45
64) 2,3,4,6-Tetrachlorophenol	8.582	232	8248	1.50	ppm		93
65) Diethylphthalate	8.822	149	39441	1.91	ppm		100
66) Fluorene	8.934	166	42305	2.10	ppm		99
67) 4-Chlorophenyl-phenyle...	8.972	204	19616	2.19	ppm		95
68) 4-Nitroaniline	8.977	138	6090	1.27	ppm		79
70) 4,6-Dinitro-2-methylph...	9.047	198	1170	0.46	ppm		74
71) n-Nitrosodiphenylamine	9.185	169	29806	2.06	ppm		94
72) 1,2-Diphenylhydrazine	9.244	77	31808	2.18	ppm		97
74) 4-Bromophenyl-phenylether	9.842	248	12577	2.02	ppm		89
75) Hexachlorobenzene	9.922	284	15810	2.23	ppm		97
76) Pentachlorophenol	10.296	266	12117	2.61	ppm		92
77) Phenanthrene	10.654	178	56156	2.29	ppm		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153321.D
Acq On : 10 Apr 2019 7:06 am
Operator : chriss2
Sample : ic6551-2
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 10 12:03:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:17:51 2019
Response via : Initial Calibration

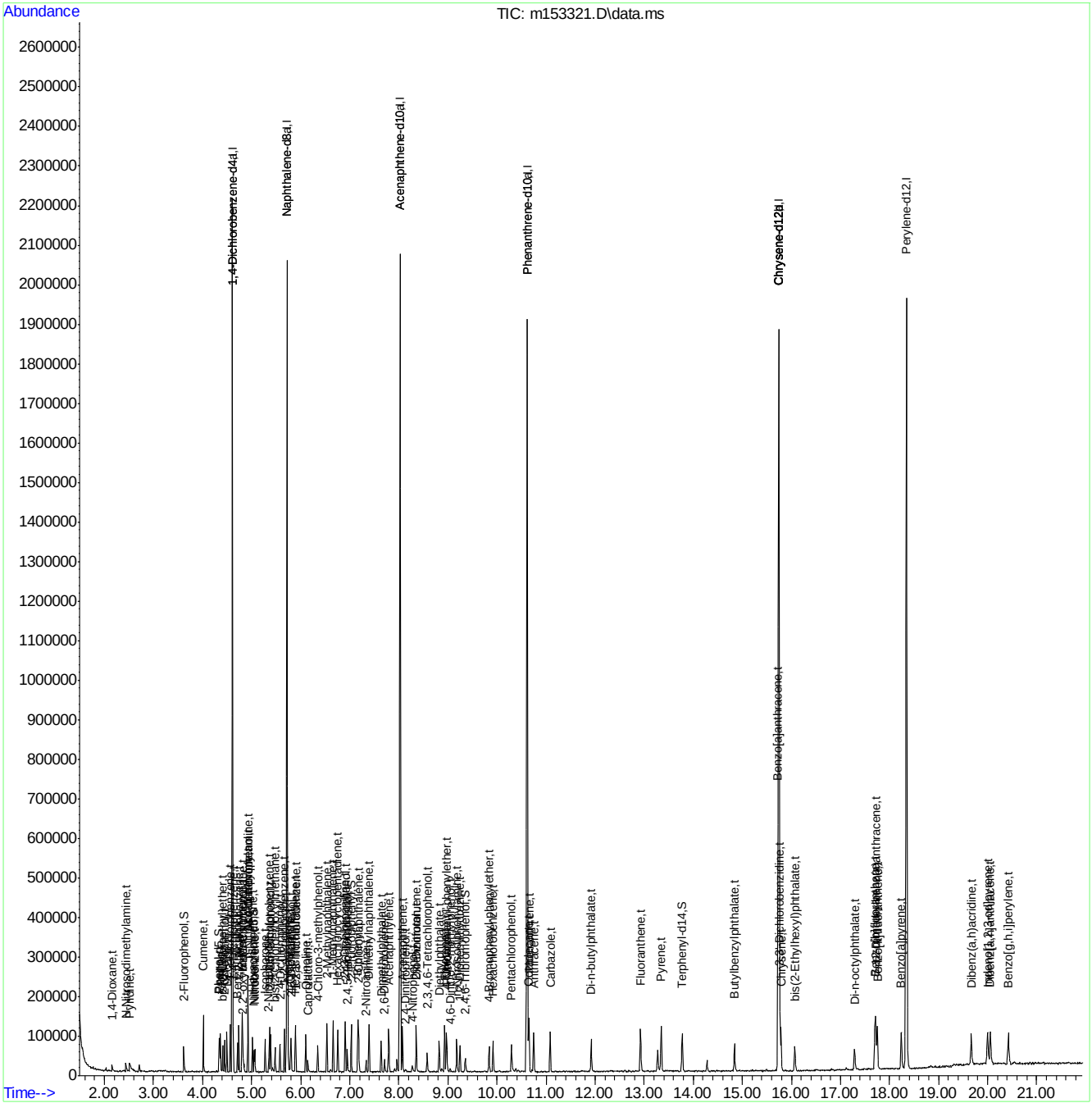
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Anthracene	10.750	178	58121	2.17	ppm	97
79) Carbazole	11.087	167	56615	2.02	ppm	99
80) Di-n-butylphthalate	11.920	149	63548	1.79	ppm	99
81) Fluoranthene	12.929	202	64206	2.01	ppm	94
82) Octadecane	10.643	57	15169	2.11	ppm	95
84) Pyrene	13.346	202	67539	1.86	ppm	99
86) Butylbenzylphthalate	14.842	149	25705	1.38	ppm	97
87) Benzo[a]anthracene	15.728	228	58080	1.70	ppm	97
88) 3,3'-Dichlorobenzidine	15.766	252	17264	1.39	ppm	99
89) Chrysene	15.792	228	52642	1.82	ppm	97
90) bis(2-Ethylhexyl)phtha...	16.070	149	30603	1.27	ppm	91
92) Di-n-octylphthalate	17.288	149	48587	1.18	ppm	97
93) Benzo[b]fluoranthene	17.704	252	65312	1.91	ppm	93
94) Benzo[k]fluoranthene	17.752	252	61314	2.09	ppm	94
95) Benzo[a]pyrene	18.238	252	54623	1.76	ppm	96
96) Indeno[1,2,3-cd]pyrene	20.001	276	51079	1.60	ppm	99
97) Dibenz(a,h)acridine	19.670	279	48938	1.57	ppm	85
98) Dibenz[a,h]anthracene	20.054	278	54684	1.72	ppm	97
99) 7,12-Dimethylbenz(a)an...	17.720	256	28439	2.02	ppm	94
100) Benzo[g,h,i]perylene	20.423	276	53929	1.70	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153321.D
Acq On : 10 Apr 2019 7:06 am
Operator : chriss2
Sample : ic6551-2
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 10 12:03:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:17:51 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153322.D
Acq On : 10 Apr 2019 7:34 am
Operator : chriss2
Sample : ic6551-1
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 10 12:04:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.610	152	290247	40.00	ppm	0.00
24) Naphthalene-d8	5.721	136	1021104	40.00	ppm	0.00
47) Acenaphthene-d10	8.023	164	590434	40.00	ppm	0.00
69) Phenanthrene-d10	10.613	188	1051309	40.00	ppm	0.00
83) Chrysene-d12	15.741	240	928311	40.00	ppm	-0.02
91) Perylene-d12	18.347	264	1095694	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.610	152	290247	40.00	ppm	0.00
103) Acenaphthene-d10a	8.023	164	590434	40.00	ppm	0.00
106) Chrysene-d12a	15.741	240	928311	40.00	ppm	-0.02
108) Chrysene-d12b	15.741	240	928311	40.00	ppm	-0.02
110) Phenanthrene-d10a	10.613	188	1051309	40.00	ppm	0.00
113) Naphthalene-d8a	5.721	136	1021104	40.00	ppm	0.00
115) Chrysene-d12c	15.741	240	928311	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.622	112	7806	0.74	ppm	0.00
Spiked Amount 50.000			Recovery =	1.48%		
8) Phenol-d5	4.338	99	9396	0.78	ppm	0.00
Spiked Amount 50.000			Recovery =	1.56%		
25) Nitrobenzene-d5	5.048	82	7048	0.92	ppm	0.00
Spiked Amount 50.000			Recovery =	1.84%		
51) 2-Fluorobiphenyl	7.030	172	21973	1.12	ppm	0.00
Spiked Amount 50.000			Recovery =	2.24%		
73) 2,4,6-Tribromophenol	9.358	330	2709	0.74	ppm	0.00
Spiked Amount 50.000			Recovery =	1.48%		
85) Terphenyl-d14	13.775	244	21927	0.86	ppm	-0.01
Spiked Amount 50.000			Recovery =	1.72%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.159	88	3521	0.80	ppm	87
3) Pyridine	2.538	79	7963	0.76	ppm	92
4) N-Nitrosodimethylamine	2.447	42	3181	0.84	ppm	88
6) Indene	4.813	116	13704	1.06	ppm	96
7) Cumene	4.017	105	20147	0.93	ppm	99
9) Phenol	4.348	94	11339	0.95	ppm	98
10) Aniline	4.364	93	12254	1.18	ppm	92
11) bis(2-Chloroethyl)ether	4.412	93	7951	1.04	ppm	91
12) 2-Chlorophenol	4.450	128	9840	0.94	ppm	92
13) Decane	4.498	43	6402	1.16	ppm	94
14) 1,3-Dichlorobenzene	4.567	146	11831	1.02	ppm	94
15) 1,4-Dichlorobenzene	4.621	146	10480	0.97	ppm	91
16) Benzyl alcohol	4.717	108	4723	0.82	ppm	97
17) 1,2-Dichlorobenzene	4.744	146	10512	0.98	ppm	98
18) Acetophenone	4.925	105	11601	1.13	ppm	91
19) 2-Methylphenol	4.802	108	7142	0.97	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153322.D
Acq On : 10 Apr 2019 7:34 am
Operator : chriss2
Sample : ic6551-1
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 10 12:04:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
20) 2,2'-oxybis(1-Chloropr...	4.829	121	2700	1.13	ppm	#	44
21) 3&4-Methylphenol	4.925	108	7783	1.04	ppm		90
22) n-Nitroso-di-n-propyla...	4.925	70	5655	1.25	ppm		86
23) Hexachloroethane	5.021	201	3868	0.97	ppm		88
26) Nitrobenzene	5.064	77	6494	0.91	ppm		90
27) Quinoline	6.100	129	18000	0.91	ppm		93
28) Isophorone	5.278	82	13809	0.96	ppm		98
29) 2-Nitrophenol	5.353	139	3054	0.56	ppm		83
30) 2,4-Dimethylphenol	5.390	107	7681	1.04	ppm		90
32) bis(2-Chloroethoxy)met...	5.475	93	8960	1.01	ppm		95
33) 2,4-Dichlorophenol	5.577	162	7120	0.83	ppm		94
34) 2,6-Dichlorophenol	5.806	162	7007	0.92	ppm		95
35) 1,3,5-Trichlorobenzene	5.363	180	10253	1.13	ppm		96
36) 1,2,4-Trichlorobenzene	5.668	180	9343	1.03	ppm		92
37) 1,2,3-Trichlorobenzene	5.897	180	8191	1.01	ppm		97
38) Naphthalene	5.742	128	24780	1.02	ppm		99
39) 4-Chloroaniline	5.796	127	10169	0.95	ppm		96
40) 2,3-Dichloroaniline	6.901	161	10833	1.04	ppm		96
41) Caprolactam	6.148	55	2910	0.92	ppm		95
42) Hexachlorobutadiene	5.887	225	4391	0.95	ppm		85
43) 4-Chloro-3-methylphenol	6.346	107	6028	0.78	ppm		95
44) 2-Methylnaphthalene	6.533	141	14608	0.97	ppm		91
45) 1-Methylnaphthalene	6.661	142	20334	1.06	ppm		99
46) Dimethylnaphthalene	7.393	156	17303	1.02	ppm		91
48) Hexachlorocyclopentadiene	6.757	237	7071	1.48	ppm		95
49) 2,4,6-Trichlorophenol	6.912	196	5049	0.91	ppm		87
50) 2,4,5-Trichlorophenol	6.949	196	5746	0.94	ppm		89
52) 2-Chloronaphthalene	7.184	162	18943	1.19	ppm		96
53) Biphenyl	7.168	154	24515	1.11	ppm		99
55) Dimethylphthalate	7.638	163	20418	0.98	ppm		99
56) Acenaphthylene	7.793	152	26880	1.00	ppm		98
57) 2,6-Dinitrotoluene	7.708	165	1925	0.44	ppm	#	53
59) Acenaphthene	8.076	153	17200	1.05	ppm		92
62) Dibenzofuran	8.354	168	24580	1.05	ppm		97
63) 2,4-Dinitrotoluene	8.354	165	1856	0.36	ppm		55
64) 2,3,4,6-Tetrachlorophenol	8.579	232	3589	0.66	ppm		97
65) Diethylphthalate	8.824	149	18913	0.92	ppm		99
66) Fluorene	8.931	166	19691	0.99	ppm		97
67) 4-Chlorophenyl-phenyle...	8.974	204	10220	1.15	ppm		96
71) n-Nitrosodiphenylamine	9.182	169	14581	1.01	ppm		90
72) 1,2-Diphenylhydrazine	9.246	77	15584	1.07	ppm		98
74) 4-Bromophenyl-phenylether	9.844	248	5917	0.95	ppm		95
75) Hexachlorobenzene	9.919	284	7685	1.09	ppm		96
77) Phenanthrene	10.656	178	27481	1.12	ppm		98
78) Anthracene	10.747	178	27439	1.02	ppm		96
79) Carbazole	11.089	167	26515	0.95	ppm		97
80) Di-n-butylphthalate	11.922	149	28584	0.81	ppm		100
81) Fluoranthene	12.926	202	29949	0.94	ppm		99
82) Octadecane	10.646	57	7240	1.01	ppm		96
84) Pyrene	13.348	202	32847	0.92	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153322.D
Acq On : 10 Apr 2019 7:34 am
Operator : chriss2
Sample : ic6551-1
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 10 12:04:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
87) Benzo[a]anthracene	15.725	228	28787	0.86	ppm	93
89) Chrysene	15.789	228	25646	0.90	ppm	97
93) Benzo[b]fluoranthene	17.701	252	28586	0.85	ppm	96
94) Benzo[k]fluoranthene	17.749	252	29998	1.04	ppm	96
95) Benzo[a]pyrene	18.241	252	23754	0.78	ppm	99
96) Indeno[1,2,3-cd]pyrene	19.998	276	21925	0.70	ppm	98
97) Dibenz(a,h)acridine	19.667	279	20390	0.66	ppm	83
98) Dibenz[a,h]anthracene	20.056	278	23745	0.76	ppm	92
99) 7,12-Dimethylbenz(a)an...	17.717	256	13836	1.00	ppm	92
100) Benzo[g,h,i]perylene	20.420	276	23326	0.74	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

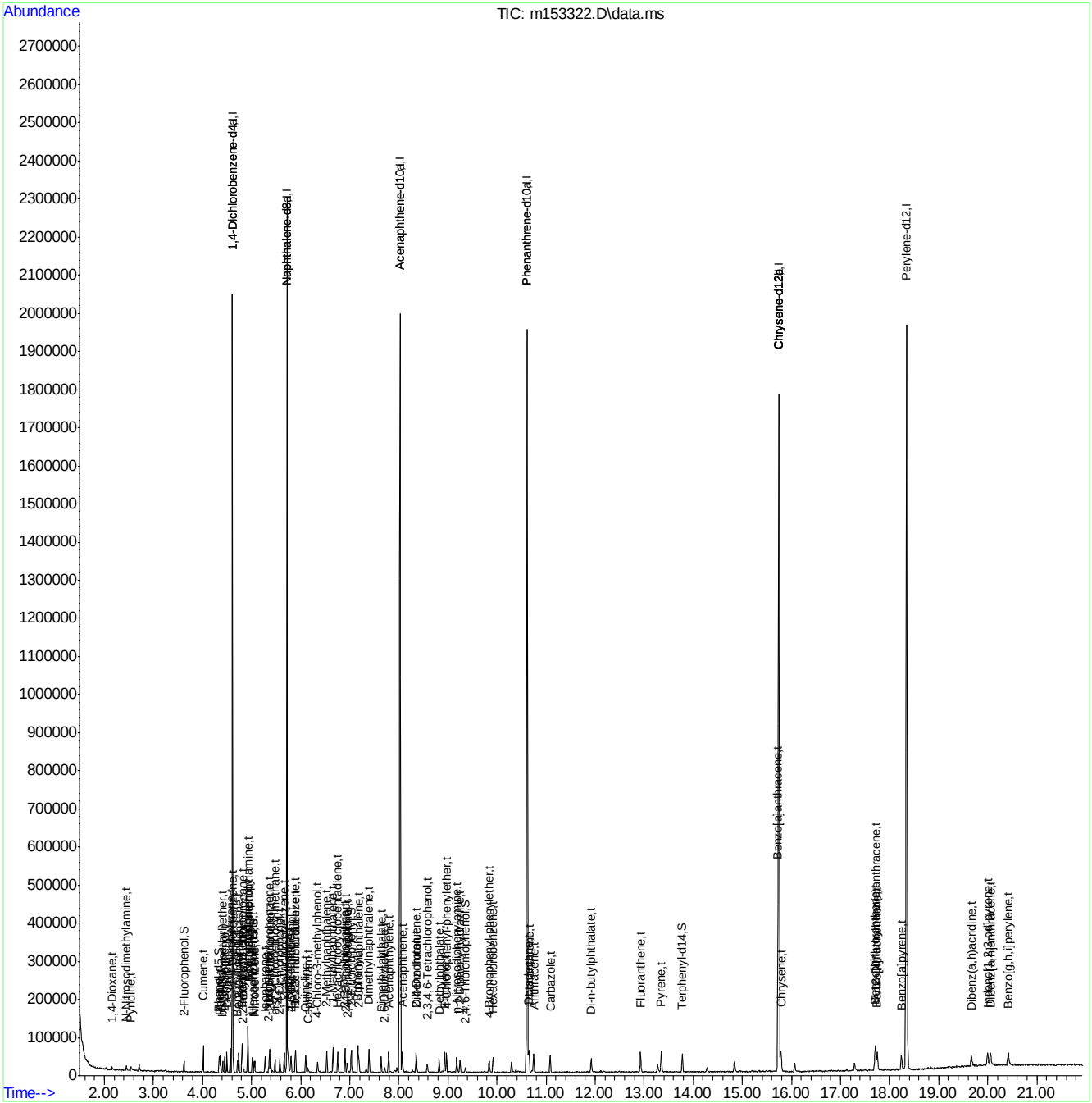
9.5.8

6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153322.D
Acq On : 10 Apr 2019 7:34 am
Operator : chriss2
Sample : ic6551-1
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 10 12:04:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 10:37:53 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153323.D
Acq On : 10 Apr 2019 8:02 am
Operator : chriss2
Sample : icv6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 10 11:39:57 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:35:20 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	279264	40.00	ppm	0.00
24) Naphthalene-d8	5.726	136	991922	40.00	ppm	0.00
47) Acenaphthene-d10	8.028	164	599082	40.00	ppm	0.00
69) Phenanthrene-d10	10.618	188	1087145	40.00	ppm	0.00
83) Chrysene-d12	15.751	240	810360	40.00	ppm	0.00
91) Perylene-d12	18.352	264	997646	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.609	152	279264	40.00	ppm	0.00
103) Acenaphthene-d10a	8.028	164	599082	40.00	ppm	0.00
106) Chrysene-d12a	15.751	240	810360	40.00	ppm	0.00
108) Chrysene-d12b	15.751	240	810360	40.00	ppm	0.00
110) Phenanthrene-d10a	10.618	188	1087145	40.00	ppm	0.00
113) Naphthalene-d8a	5.726	136	991922	40.00	ppm	0.00
115) Chrysene-d12c	15.751	240	810360	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.441	42	146320	43.57	ppm	98
11) bis(2-Chloroethyl)ether	4.412	93	402857	53.18	ppm	97
14) 1,3-Dichlorobenzene	4.567	146	545642	48.44	ppm	99
15) 1,4-Dichlorobenzene	4.626	146	491825	47.75	ppm	100
17) 1,2-Dichlorobenzene	4.743	146	489320	47.76	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.823	121	135812	57.45	ppm	88
22) n-Nitroso-di-n-propyla...	4.930	70	250651	53.21	ppm	97
23) Hexachloroethane	5.021	201	173408	46.01	ppm	96
26) Nitrobenzene	5.069	77	316962	46.33	ppm	94
28) Isophorone	5.277	82	654354	47.33	ppm	98
32) bis(2-Chloroethoxy)met...	5.480	93	449079	51.25	ppm	99
36) 1,2,4-Trichlorobenzene	5.667	180	426193	47.79	ppm	97
38) Naphthalene	5.747	128	1143293	48.16	ppm	99
42) Hexachlorobutadiene	5.886	225	223202	49.53	ppm	99
48) Hexachlorocyclopentadiene	6.757	237	214304	47.56	ppm	98
52) 2-Chloronaphthalene	7.184	162	866488	50.06	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153323.D
Acq On : 10 Apr 2019 8:02 am
Operator : chriss2
Sample : icv6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 10 11:39:57 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:35:20 2019
Response via : Initial Calibration

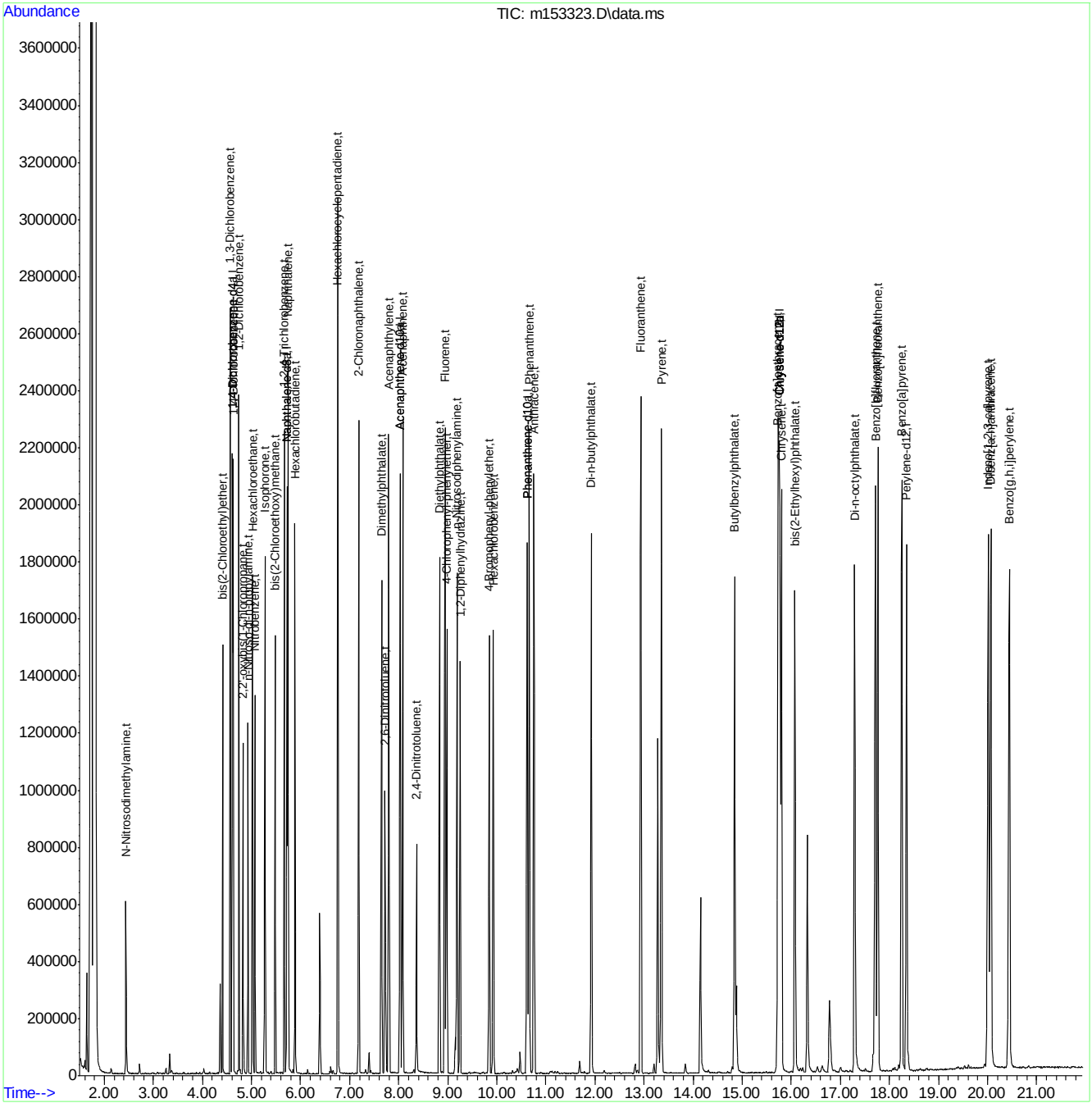
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
55) Dimethylphthalate	7.649	163	991120	47.01	ppm	100
56) Acenaphthylene	7.798	152	1248180	44.56	ppm	99
57) 2,6-Dinitrotoluene	7.718	165	162859	37.09	ppm	93
59) Acenaphthene	8.081	153	748626	44.14	ppm	99
63) 2,4-Dinitrotoluene	8.364	165	186489	35.76	ppm	88
65) Diethylphthalate	8.829	149	958768	46.73	ppm	98
66) Fluorene	8.941	166	933436	45.31	ppm	99
67) 4-Chlorophenyl-phenyle...	8.978	204	415389	43.80	ppm	99
71) n-Nitrosodiphenylamine	9.187	169	650758	42.55	ppm	99
72) 1,2-Diphenylhydrazine	9.251	77	701357	44.54	ppm	98
74) 4-Bromophenyl-phenylether	9.844	248	307368	47.53	ppm	97
75) Hexachlorobenzene	9.929	284	334384	43.20	ppm	99
77) Phenanthrene	10.661	178	1269941	47.37	ppm	100
78) Anthracene	10.757	178	1291647	45.04	ppm	100
80) Di-n-butylphthalate	11.921	149	1641538	46.47	ppm	99
81) Fluoranthene	12.936	202	1508003	45.56	ppm	99
84) Pyrene	13.353	202	1439164	47.05	ppm	100
86) Butylbenzylphthalate	14.843	149	729657	49.54	ppm	99
87) Benzo[a]anthracene	15.730	228	1331135	48.08	ppm	99
89) Chrysene	15.804	228	1126901	46.84	ppm	98
90) bis(2-Ethylhexyl)phtha...	16.071	149	912117	48.64	ppm	99
92) Di-n-octylphthalate	17.289	149	1639251	49.21	ppm	99
93) Benzo[b]fluoranthene	17.716	252	1382449	45.60	ppm	99
94) Benzo[k]fluoranthene	17.765	252	1275429	46.67	ppm	99
95) Benzo[a]pyrene	18.251	252	1323543	49.69	ppm	99
96) Indeno[1,2,3-cd]pyrene	20.018	276	1399361	52.70	ppm	96
98) Dibenz[a,h]anthracene	20.067	278	1271234	47.03	ppm	99
100) Benzo[g,h,i]perylene	20.446	276	1378364	51.49	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153323.D
Acq On : 10 Apr 2019 8:02 am
Operator : chriss2
Sample : icv6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 10 11:39:57 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:35:20 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153325.D
Acq On : 10 Apr 2019 8:58 am
Operator : chriss2
Sample : icv6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 10 11:48:29 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:35:20 2019
Response via : Initial Calibration

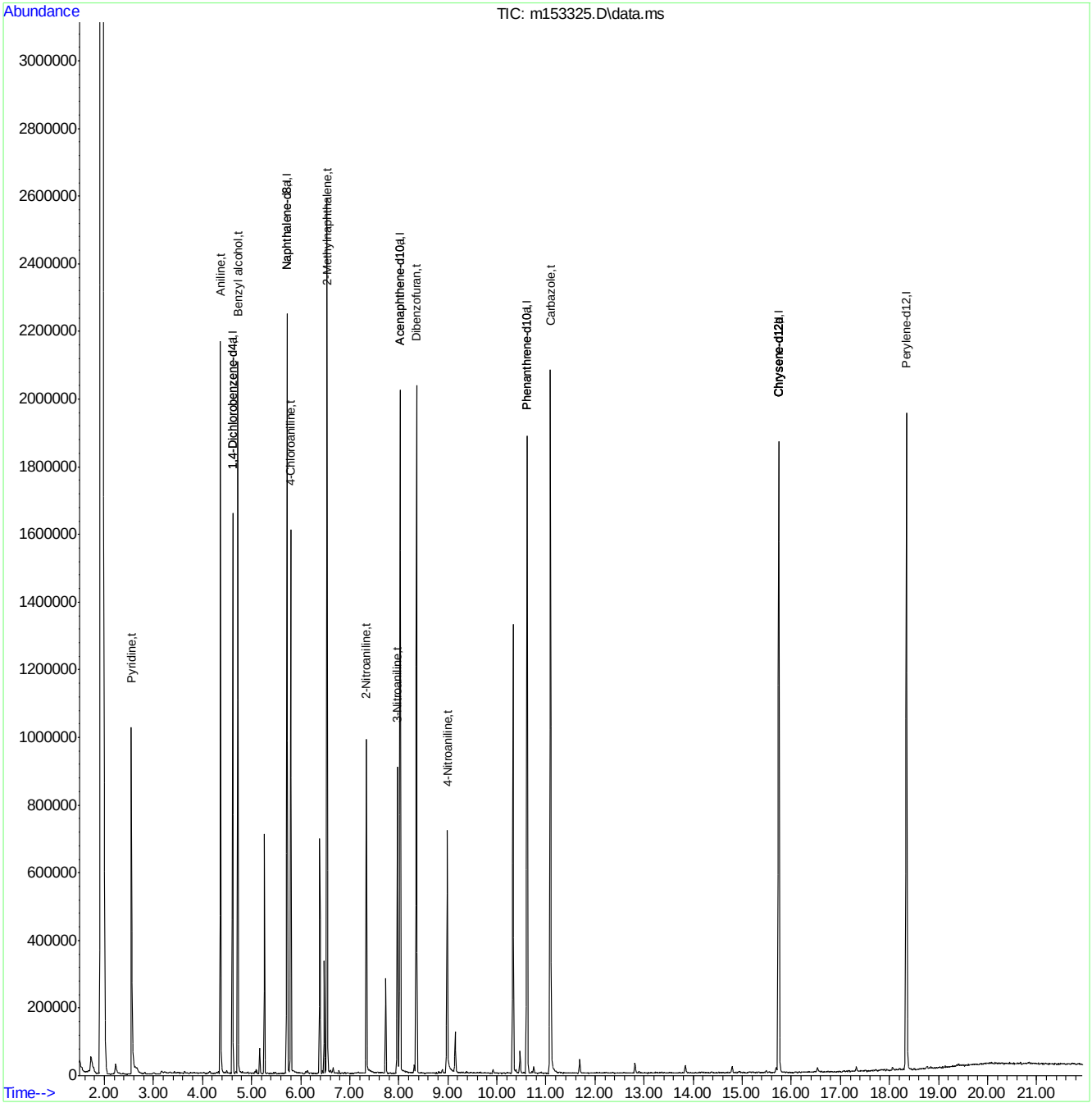
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.615	152	273165	40.00	ppm	0.00
24) Naphthalene-d8	5.726	136	1074578	40.00	ppm	0.00
47) Acenaphthene-d10	8.028	164	574023	40.00	ppm	0.00
69) Phenanthrene-d10	10.613	188	1060493	40.00	ppm	0.00
83) Chrysene-d12	15.745	240	961260	40.00	ppm	-0.01
91) Perylene-d12	18.346	264	1091320	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.615	152	273165	40.00	ppm	0.00
103) Acenaphthene-d10a	8.028	164	574023	40.00	ppm	0.00
106) Chrysene-d12a	15.745	240	961260	40.00	ppm	-0.01
108) Chrysene-d12b	15.745	240	961260	40.00	ppm	-0.01
110) Phenanthrene-d10a	10.613	188	1060493	40.00	ppm	0.00
113) Naphthalene-d8a	5.726	136	1074578	40.00	ppm	0.00
115) Chrysene-d12c	15.745	240	961260	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
3) Pyridine	2.548	79	409425	44.01	ppm	98
10) Aniline	4.369	93	627693	58.81	ppm	99
16) Benzyl alcohol	4.721	108	274459	54.25	ppm	98
39) 4-Chloroaniline	5.800	127	489391	43.41	ppm	99
44) 2-Methylnaphthalene	6.537	141	686389	43.38	ppm	99
54) 2-Nitroaniline	7.339	65	165118	50.72	ppm	98
58) 3-Nitroaniline	7.974	138	209639	43.67	ppm	95
62) Dibenzofuran	8.364	168	1184103	50.26	ppm	100
68) 4-Nitroaniline	8.989	138	212549	49.91	ppm	94
79) Carbazole	11.093	167	1401667	48.98	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153325.D
Acq On : 10 Apr 2019 8:58 am
Operator : chriss2
Sample : icv6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 10 11:48:29 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:35:20 2019
Response via : Initial Calibration



MM6551.M Wed Apr 10 12:05:05 2019 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153326.D
Acq On : 10 Apr 2019 9:27 am
Operator : chriss2
Sample : icv6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 10 11:57:29 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:53:04 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.610	152	277521	40.00	ppm	0.00
24) Naphthalene-d8	5.721	136	915420	40.00	ppm	0.00
47) Acenaphthene-d10	8.023	164	565244	40.00	ppm	0.00
69) Phenanthrene-d10	10.614	188	953773	40.00	ppm	0.00
83) Chrysene-d12	15.741	240	844452	40.00	ppm	-0.02
91) Perylene-d12	18.348	264	952099	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.610	152	277521	40.00	ppm	0.00
103) Acenaphthene-d10a	8.023	164	565244	40.00	ppm	0.00
106) Chrysene-d12a	15.741	240	844452	40.00	ppm	-0.02
108) Chrysene-d12b	15.741	240	844452	40.00	ppm	-0.02
110) Phenanthrene-d10a	10.614	188	953773	40.00	ppm	0.00
113) Naphthalene-d8a	5.721	136	915420	40.00	ppm	0.00
115) Chrysene-d12c	15.741	240	844452	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
9) Phenol	4.349	94	554480	49.48	ppm	100
12) 2-Chlorophenol	4.455	128	501309	50.98	ppm	97
19) 2-Methylphenol	4.803	108	385033	54.51	ppm	99
21) 3&4-Methylphenol	4.925	108	393877	54.71	ppm #	63
29) 2-Nitrophenol	5.353	139	225213	52.22	ppm	97
30) 2,4-Dimethylphenol	5.390	107	368724	56.53	ppm	98
31) Benzoic acid	5.497	105	216572	45.11	ppm	96
33) 2,4-Dichlorophenol	5.577	162	375233	50.88	ppm	98
34) 2,6-Dichlorophenol	5.812	162	377921	56.12	ppm	98
43) 4-Chloro-3-methylphenol	6.352	107	342876	53.46	ppm	98
49) 2,4,6-Trichlorophenol	6.912	196	295963	55.57	ppm	100
50) 2,4,5-Trichlorophenol	6.955	196	292846	50.49	ppm	97
60) 2,4-Dinitrophenol	8.141	184	42884	35.31	ppm	94
61) 4-Nitrophenol	8.280	109	95601	49.89	ppm	84
64) 2,3,4,6-Tetrachlorophenol	8.584	232	235604	49.42	ppm	98
70) 4,6-Dinitro-2-methylph...	9.054	198	89302	40.49	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153326.D
Acq On : 10 Apr 2019 9:27 am
Operator : chriss2
Sample : icv6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 10 11:57:29 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:53:04 2019
Response via : Initial Calibration

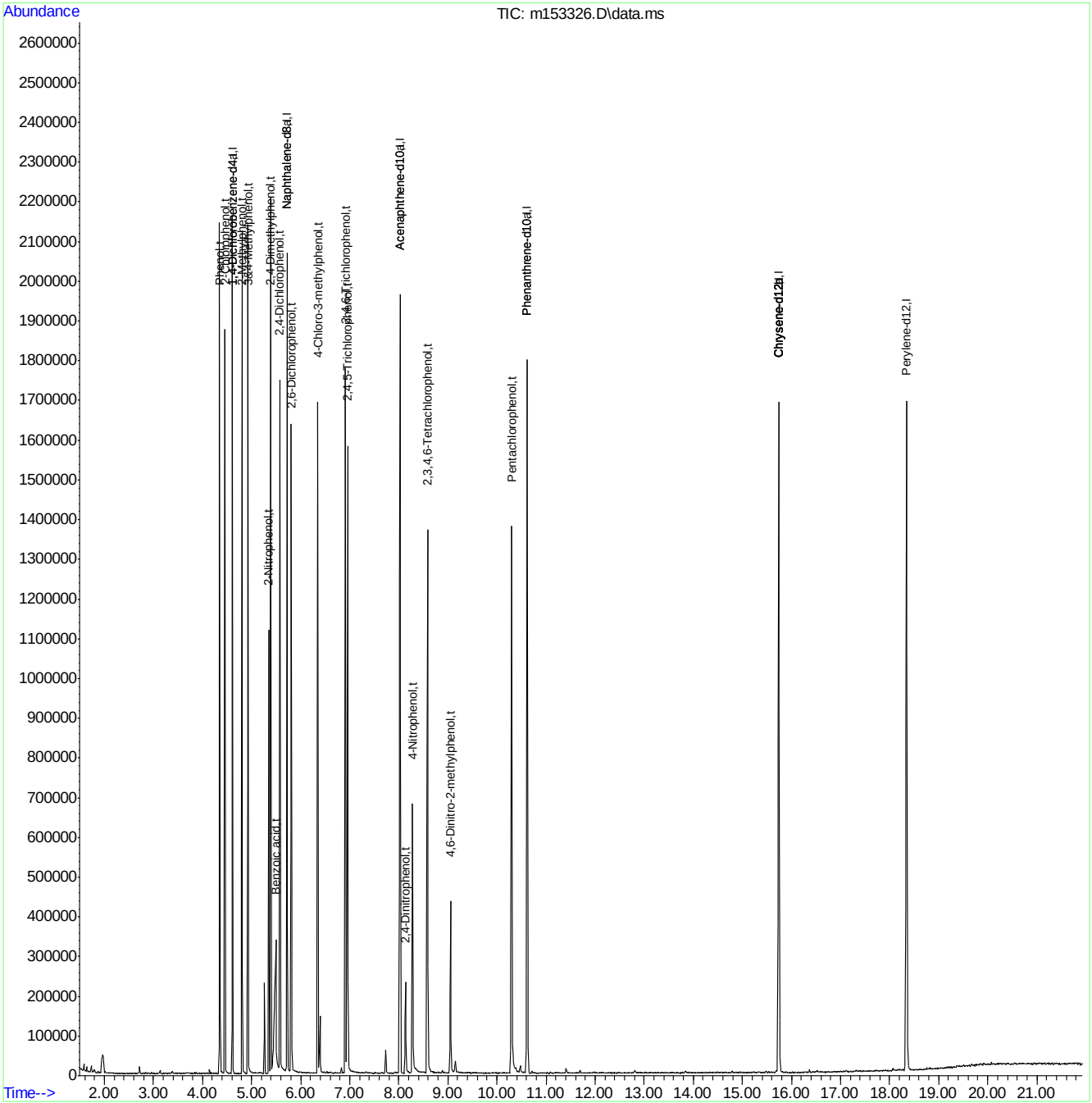
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) Pentachlorophenol	10.299	266	245916	62.93	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153326.D
Acq On : 10 Apr 2019 9:27 am
Operator : chriss2
Sample : icv6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 10 11:57:29 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:53:04 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153327.D
Acq On : 10 Apr 2019 9:55 am
Operator : chriss2
Sample : icv6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 10 12:00:10 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:54:14 2019
Response via : Initial Calibration

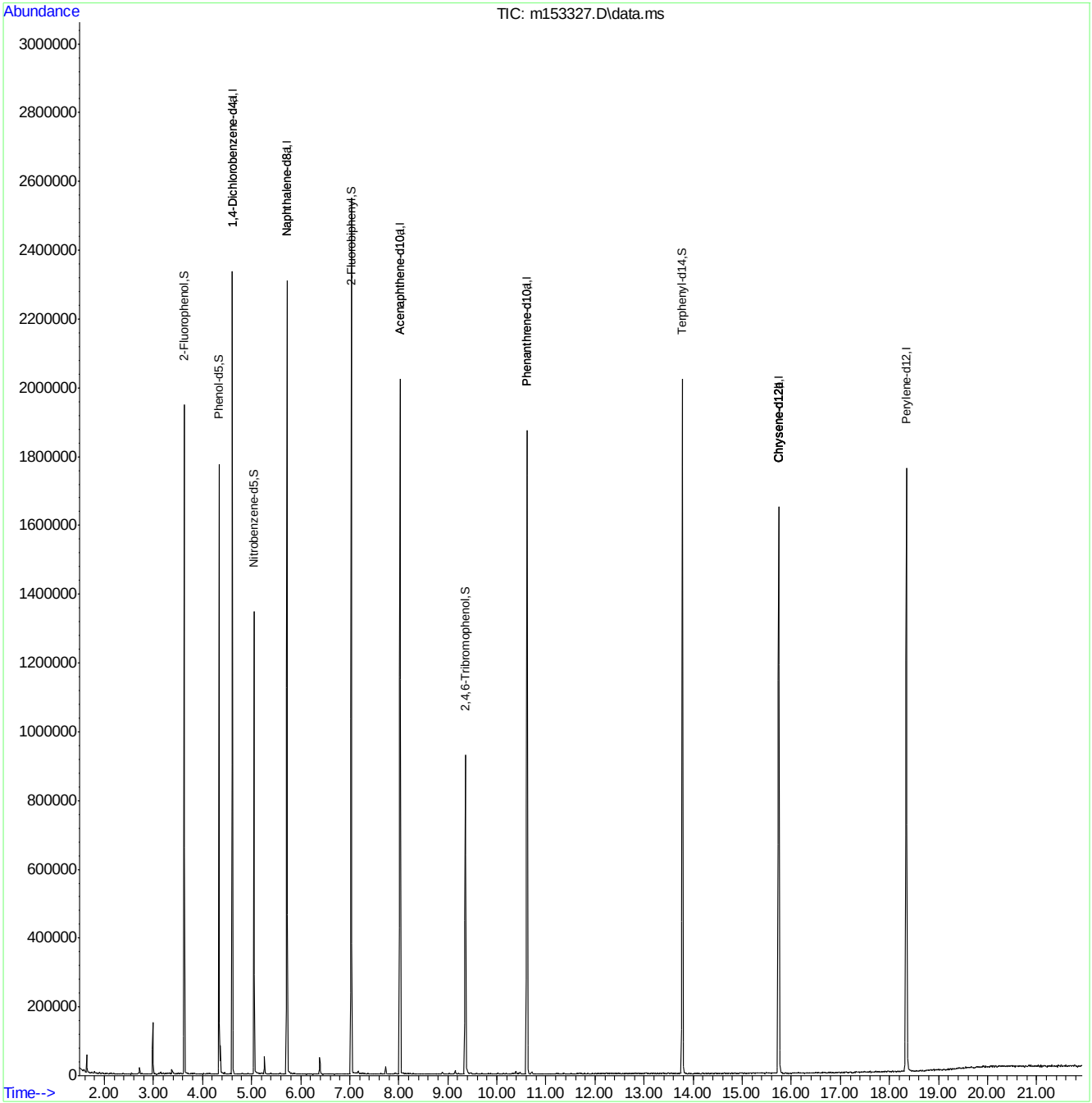
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	298781	40.00	ppm	0.00
24) Naphthalene-d8	5.720	136	1053995	40.00	ppm	0.00
47) Acenaphthene-d10	8.028	164	596029	40.00	ppm	0.00
69) Phenanthrene-d10	10.613	188	1034689	40.00	ppm	0.00
83) Chrysene-d12	15.745	240	845138	40.00	ppm	-0.01
91) Perylene-d12	18.347	264	964284	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.609	152	298781	40.00	ppm	0.00
103) Acenaphthene-d10a	8.028	164	596029	40.00	ppm	0.00
106) Chrysene-d12a	15.745	240	845138	40.00	ppm	-0.01
108) Chrysene-d12b	15.745	240	845138	40.00	ppm	-0.01
110) Phenanthrene-d10a	10.613	188	1034689	40.00	ppm	0.00
113) Naphthalene-d8a	5.720	136	1053995	40.00	ppm	0.00
115) Chrysene-d12c	15.745	240	845138	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.627	112	455915	46.00	ppm	0.00
Spiked Amount 50.000			Recovery = 92.00%			
8) Phenol-d5	4.337	99	512912	44.15	ppm	0.00
Spiked Amount 50.000			Recovery = 88.30%			
25) Nitrobenzene-d5	5.053	82	359990	47.04	ppm	0.00
Spiked Amount 50.000			Recovery = 94.08%			
51) 2-Fluorobiphenyl	7.034	172	978882	46.88	ppm	0.00
Spiked Amount 50.000			Recovery = 93.76%			
73) 2,4,6-Tribromophenol	9.357	330	164692	49.03	ppm	0.00
Spiked Amount 50.000			Recovery = 98.06%			
85) Terphenyl-d14	13.780	244	1059758	47.84	ppm	0.00
Spiked Amount 50.000			Recovery = 95.68%			
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153327.D
Acq On : 10 Apr 2019 9:55 am
Operator : chriss2
Sample : icv6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 10 12:00:10 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:54:14 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153328.D
Acq On : 10 Apr 2019 10:23 am
Operator : chriss2
Sample : icv6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 10 12:01:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:54:14 2019
Response via : Initial Calibration

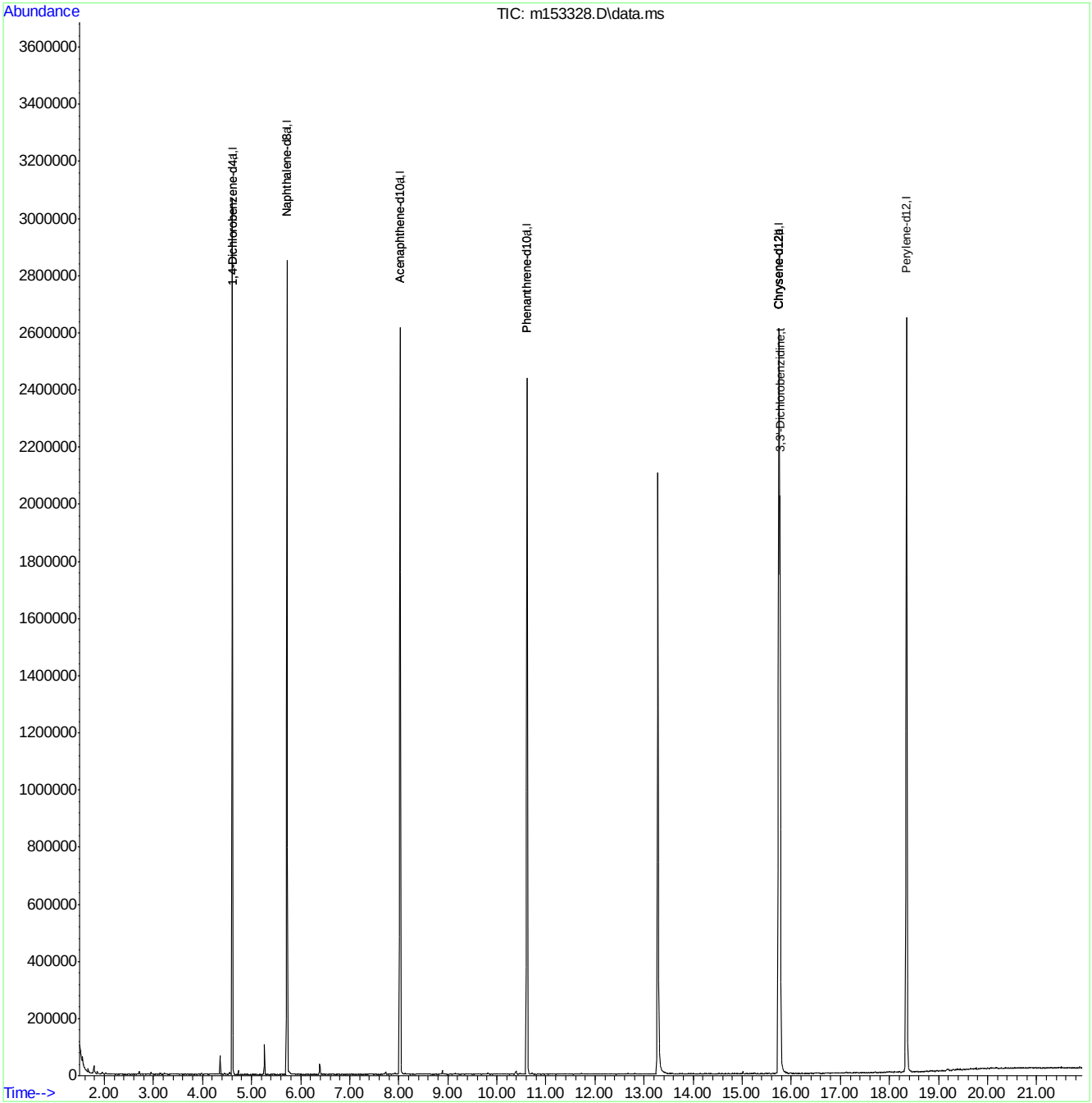
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	398528	40.00	ppm	0.00
24) Naphthalene-d8	5.720	136	1369237	40.00	ppm	0.00
47) Acenaphthene-d10	8.027	164	759056	40.00	ppm	0.00
69) Phenanthrene-d10	10.612	188	1416168	40.00	ppm	0.00
83) Chrysene-d12	15.745	240	1337045	40.00	ppm	-0.01
91) Perylene-d12	18.352	264	1488808	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.609	152	398528	40.00	ppm	0.00
103) Acenaphthene-d10a	8.027	164	759056	40.00	ppm	0.00
106) Chrysene-d12a	15.745	240	1337045	40.00	ppm	-0.01
108) Chrysene-d12b	15.745	240	1337045	40.00	ppm	-0.01
110) Phenanthrene-d10a	10.612	188	1416168	40.00	ppm	0.00
113) Naphthalene-d8a	5.720	136	1369237	40.00	ppm	0.00
115) Chrysene-d12c	15.745	240	1337045	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
88) 3,3'-Dichlorobenzidine	15.772	252	729387	44.83	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6551\
Data File : m153328.D
Acq On : 10 Apr 2019 10:23 am
Operator : chriss2
Sample : icv6551-50
Misc : op17006,em6551,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 10 12:01:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 11:54:14 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153332.D
Acq On : 10 Apr 2019 12:27 pm
Operator : chriss2
Sample : ic6552-100
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 10 13:40:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration

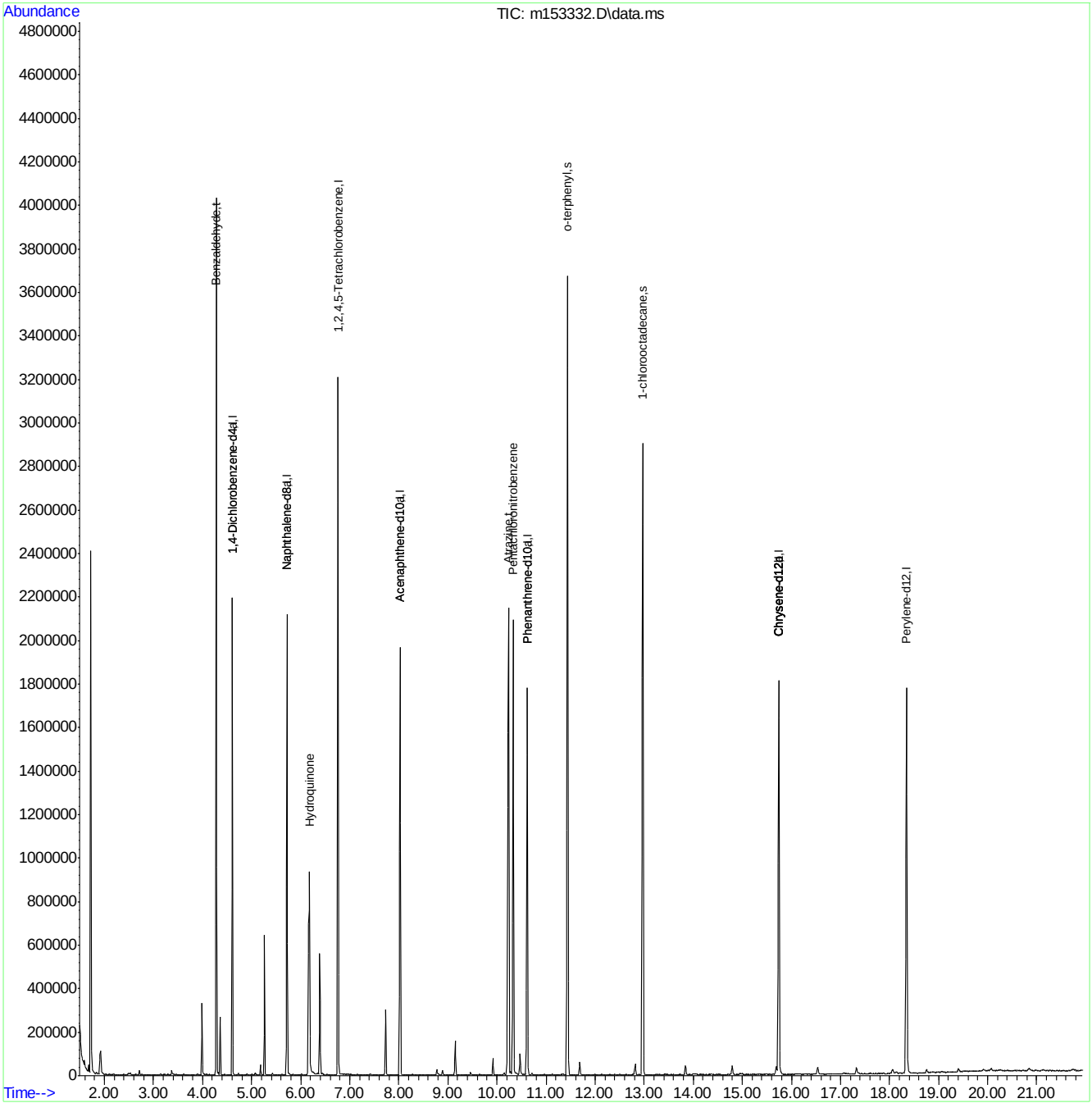
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.608	152	265432	40.00	ppm	0.00
24) Naphthalene-d8	5.719	136	961709	40.00	ppm	0.00
47) Acenaphthene-d10	8.026	164	533212	40.00	ppm	0.00
69) Phenanthrene-d10	10.617	188	888712	40.00	ppm	0.00
83) Chrysene-d12	15.744	240	878444	40.00	ppm	-0.01
91) Perylene-d12	18.345	264	1039425	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.608	152	265432	40.00	ppm	0.00
103) Acenaphthene-d10a	8.026	164	533212	40.00	ppm	0.00
106) Chrysene-d12a	15.744	240	878444	40.00	ppm	0.00
108) Chrysene-d12b	15.744	240	878444	40.00	ppm	0.00
110) Phenanthrene-d10a	10.617	188	888712	40.00	ppm	0.00
113) Naphthalene-d8a	5.719	136	961709	40.00	ppm	0.00
115) Chrysene-d12c	15.744	240	878444	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	12.972	57	548902	99.72	ppm	0.00
Spiked Amount 50.000			Recovery = 199.44%			
111) o-terphenyl	11.439	230	1127384	99.96	ppm	0.00
Spiked Amount 50.000			Recovery = 199.92%			
Target Compounds						Qvalue
102) Benzaldehyde	4.282	105	642503	100.00	ppm	98
104) 1,2,4,5-Tetrachloroben...	6.760	216	629674	98.83	ppm	99
105) Atrazine	10.238	215	235788	99.45	ppm	94
112) Pentachloronitrobenzene	10.334	295	97985	99.22	ppm	94
114) Hydroquinone	6.184	110	780754	97.46	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153332.D
Acq On : 10 Apr 2019 12:27 pm
Operator : chriss2
Sample : ic6552-100
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 10 13:40:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153333.D
Acq On : 10 Apr 2019 1:34 pm
Operator : chriss2
Sample : ic6552-80
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 10 15:37:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration

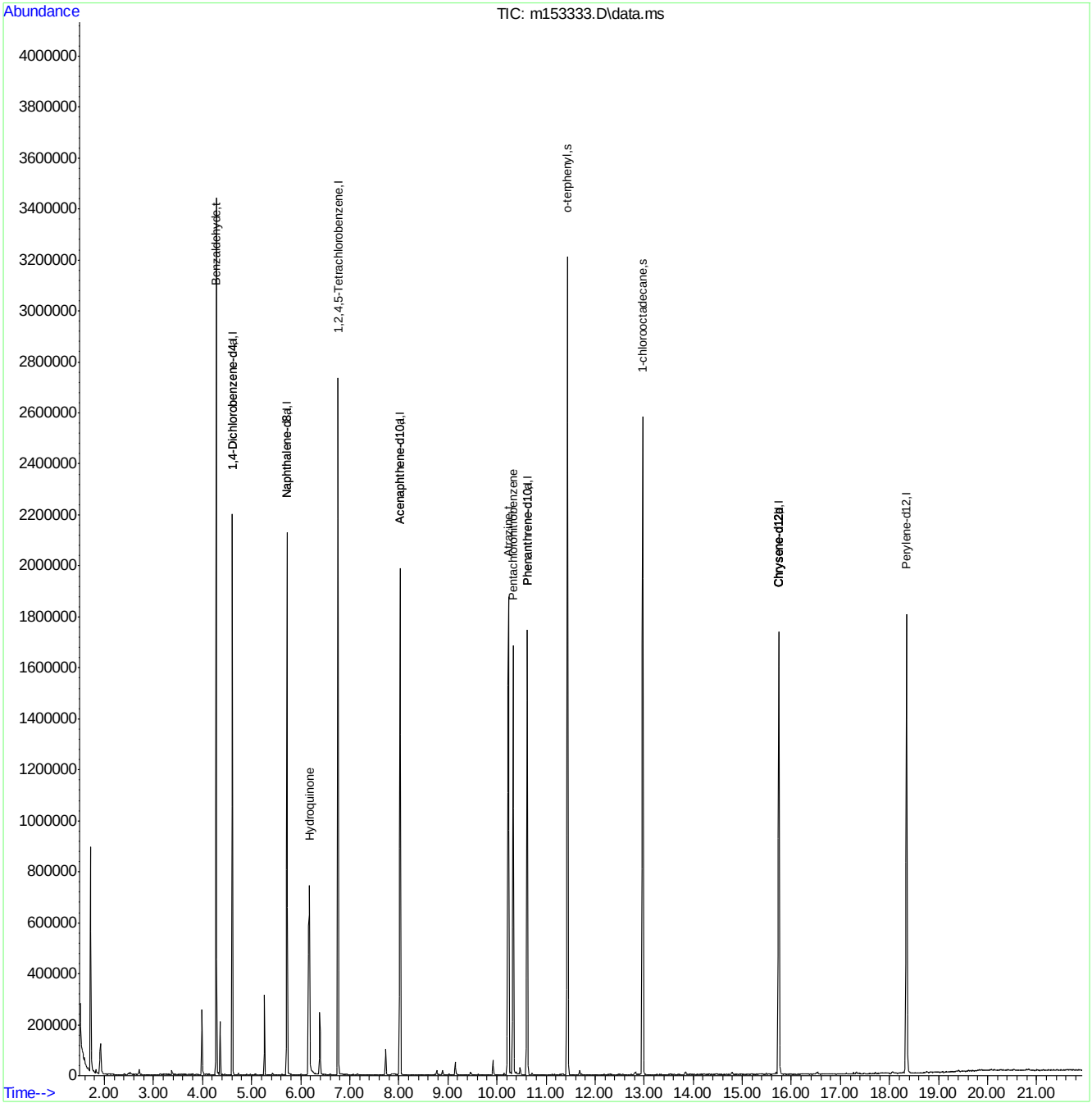
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.609	152	261369	40.00	ppm	0.00
24) Naphthalene-d8	5.725	136	974828	40.00	ppm	0.00
47) Acenaphthene-d10	8.027	164	533659	40.00	ppm	0.00
69) Phenanthrene-d10	10.617	188	883007	40.00	ppm	0.00
83) Chrysene-d12	15.745	240	857823	40.00	ppm	-0.01
91) Perylene-d12	18.351	264	1010952	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.609	152	261369	40.00	ppm	0.00
103) Acenaphthene-d10a	8.027	164	533659	40.00	ppm	0.00
106) Chrysene-d12a	15.745	240	857823	40.00	ppm	0.00
108) Chrysene-d12b	15.745	240	857823	40.00	ppm	0.00
110) Phenanthrene-d10a	10.617	188	883007	40.00	ppm	0.00
113) Naphthalene-d8a	5.725	136	974828	40.00	ppm	0.00
115) Chrysene-d12c	15.745	240	857823	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	12.973	57	457449	85.10	ppm	0.00
Spiked Amount 50.000			Recovery =	170.20%		
111) o-terphenyl	11.440	230	933583	83.31	ppm	0.00
Spiked Amount 50.000			Recovery =	166.62%		
Target Compounds						Qvalue
102) Benzaldehyde	4.278	105	555361	87.78	ppm	96
104) 1,2,4,5-Tetrachloroben...	6.761	216	529129	82.98	ppm	99
105) Atrazine	10.238	215	187403	78.98	ppm	91
112) Pentachloronitrobenzene	10.334	295	79670	81.19	ppm	95
114) Hydroquinone	6.184	110	635505	78.26	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153333.D
Acq On : 10 Apr 2019 1:34 pm
Operator : chriss2
Sample : ic6552-80
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 10 15:37:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153334.D
Acq On : 10 Apr 2019 2:02 pm
Operator : chriss2
Sample : icc6552-50
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 10 15:39:04 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration

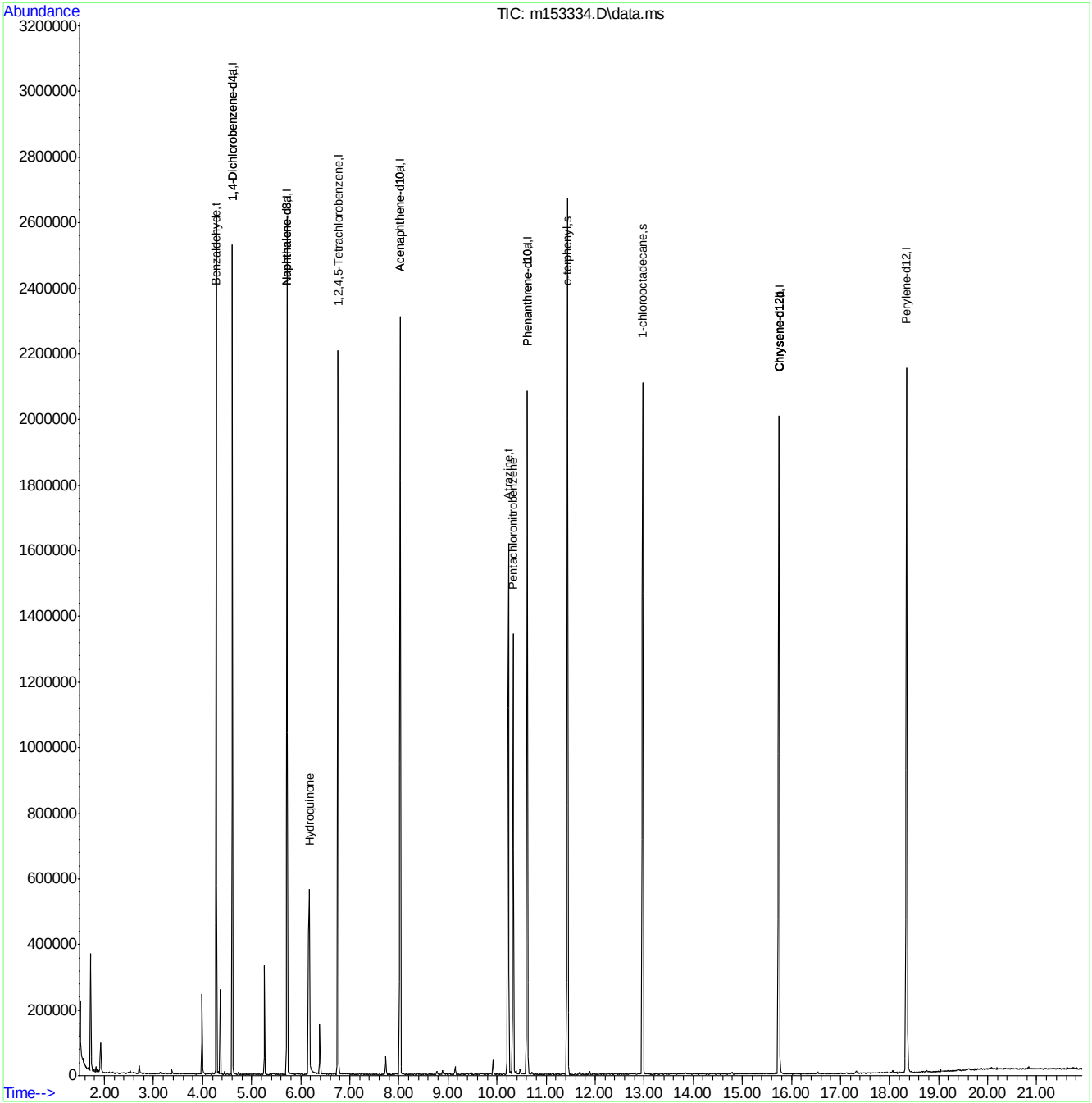
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.607	152	312584	40.00	ppm	0.00
24) Naphthalene-d8	5.723	136	1139621	40.00	ppm	0.00
47) Acenaphthene-d10	8.025	164	635329	40.00	ppm	0.00
69) Phenanthrene-d10	10.615	188	1063148	40.00	ppm	0.00
83) Chrysene-d12	15.748	240	1049232	40.00	ppm	0.00
91) Perylene-d12	18.349	264	1223384	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.607	152	312584	40.00	ppm	0.00
103) Acenaphthene-d10a	8.025	164	635329	40.00	ppm	0.00
106) Chrysene-d12a	15.748	240	1049232	40.00	ppm	0.00
108) Chrysene-d12b	15.748	240	1049232	40.00	ppm	0.00
110) Phenanthrene-d10a	10.615	188	1063148	40.00	ppm	0.00
113) Naphthalene-d8a	5.723	136	1139621	40.00	ppm	0.00
115) Chrysene-d12c	15.748	240	1049232	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	12.971	57	375762	57.15	ppm	0.00
Spiked Amount 50.000			Recovery =	114.30%		
111) o-terphenyl	11.438	230	754911	55.95	ppm	0.00
Spiked Amount 50.000			Recovery =	111.90%		
Target Compounds						Qvalue
102) Benzaldehyde	4.281	105	436128	57.64	ppm	97
104) 1,2,4,5-Tetrachloroben...	6.759	216	424808	55.96	ppm	98
105) Atrazine	10.231	215	151228	53.53	ppm	90
112) Pentachloronitrobenzene	10.327	295	59813	50.63	ppm	96
114) Hydroquinone	6.177	110	455003	47.93	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153334.D
Acq On : 10 Apr 2019 2:02 pm
Operator : chriss2
Sample : icc6552-50
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 10 15:39:04 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153335.D
Acq On : 10 Apr 2019 2:30 pm
Operator : chriss2
Sample : ic6552-25
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 10 15:40:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration

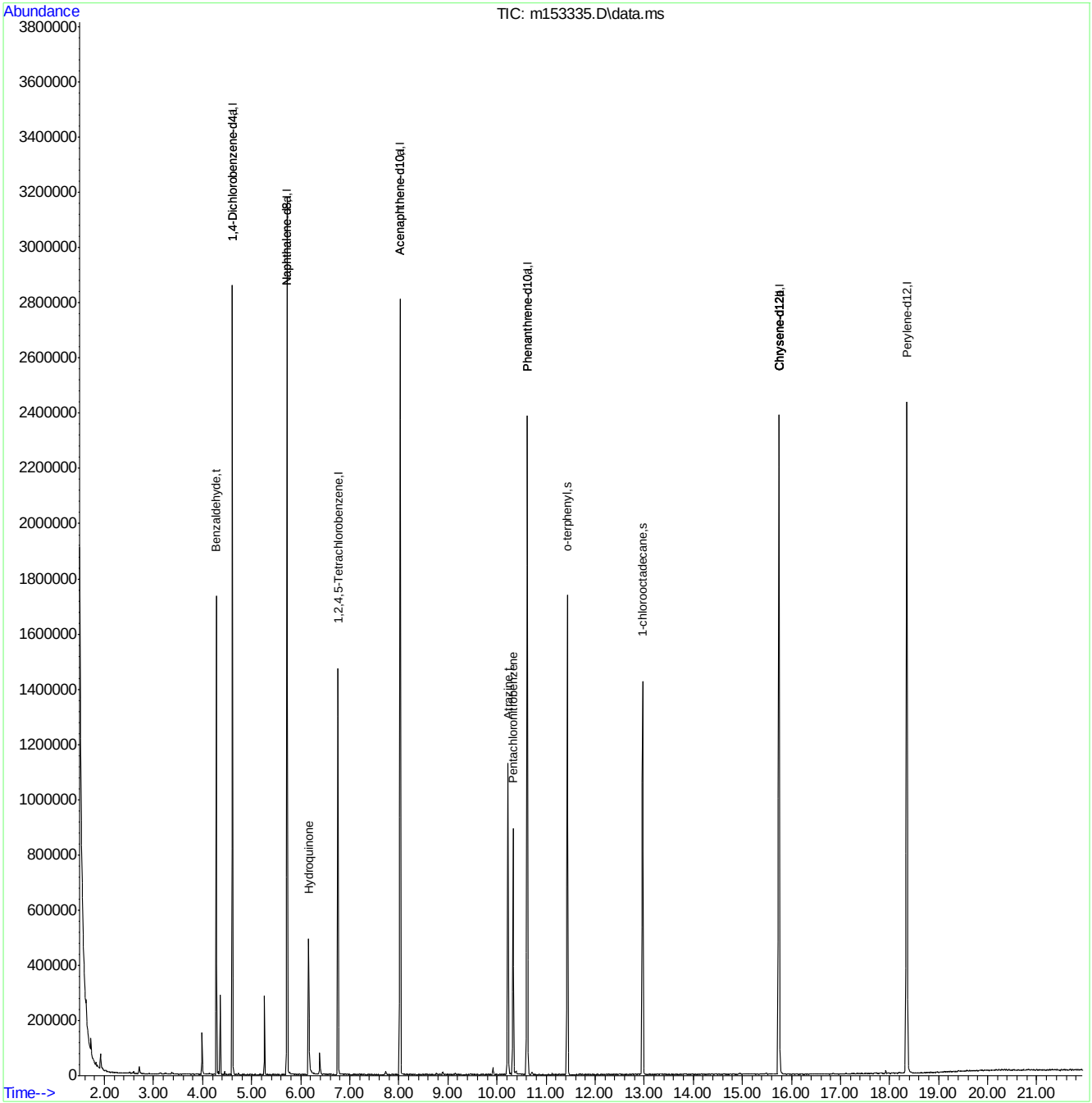
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.607	152	375962	40.00	ppm	0.00
24) Naphthalene-d8	5.723	136	1341578	40.00	ppm	0.00
47) Acenaphthene-d10	8.025	164	769939	40.00	ppm	0.00
69) Phenanthrene-d10	10.616	188	1282967	40.00	ppm	0.00
83) Chrysene-d12	15.748	240	1229590	40.00	ppm	0.00
91) Perylene-d12	18.355	264	1447839	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.607	152	375962	40.00	ppm	0.00
103) Acenaphthene-d10a	8.025	164	769939	40.00	ppm	0.00
106) Chrysene-d12a	15.748	240	1229590	40.00	ppm	0.00
108) Chrysene-d12b	15.748	240	1229590	40.00	ppm	0.00
110) Phenanthrene-d10a	10.616	188	1282967	40.00	ppm	0.00
113) Naphthalene-d8a	5.723	136	1341578	40.00	ppm	0.00
115) Chrysene-d12c	15.748	240	1229590	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	12.966	57	245769	31.90	ppm	0.00
Spiked Amount 50.000			Recovery =	63.80%		
111) o-terphenyl	11.433	230	483801	29.71	ppm	0.00
Spiked Amount 50.000			Recovery =	59.42%		
Target Compounds						Qvalue
102) Benzaldehyde	4.281	105	278606	30.61	ppm	97
104) 1,2,4,5-Tetrachloroben...	6.759	216	277055	30.11	ppm	99
105) Atrazine	10.226	215	95649	27.94	ppm	90
112) Pentachloronitrobenzene	10.327	295	36819	25.83	ppm	94
114) Hydroquinone	6.161	110	267138	23.90	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153335.D
Acq On : 10 Apr 2019 2:30 pm
Operator : chriss2
Sample : ic6552-25
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 10 15:40:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153336.D
Acq On : 10 Apr 2019 2:59 pm
Operator : chriss2
Sample : ic6552-10
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 10 15:41:51 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration

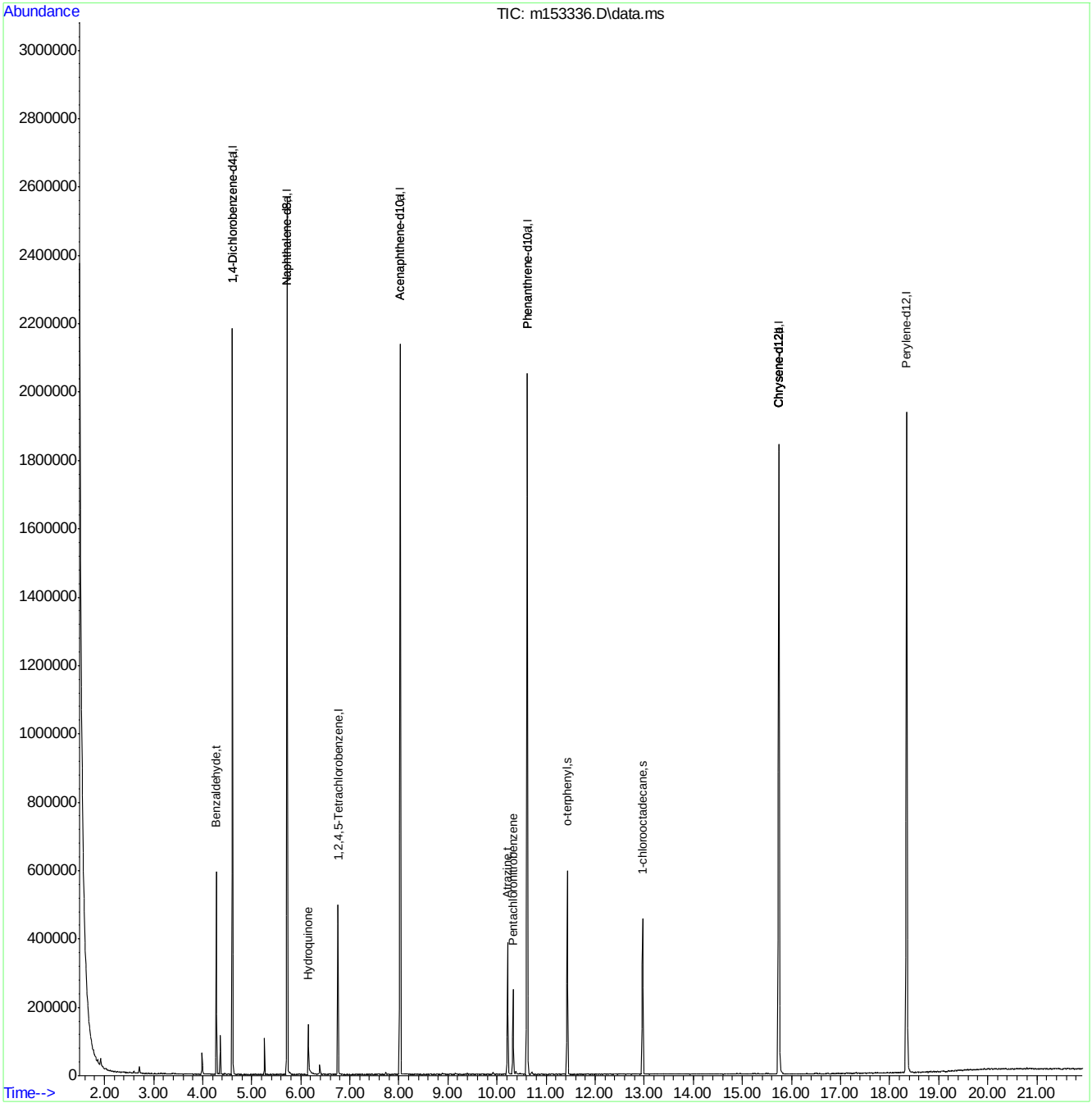
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.607	152	301251	40.00	ppm	0.00
24) Naphthalene-d8	5.723	136	1068530	40.00	ppm	0.00
47) Acenaphthene-d10	8.025	164	609432	40.00	ppm	0.00
69) Phenanthrene-d10	10.615	188	1036035	40.00	ppm	0.00
83) Chrysene-d12	15.743	240	952194	40.00	ppm	-0.01
91) Perylene-d12	18.349	264	1106436	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.607	152	301251	40.00	ppm	0.00
103) Acenaphthene-d10a	8.025	164	609432	40.00	ppm	0.00
106) Chrysene-d12a	15.743	240	952194	40.00	ppm	0.00
108) Chrysene-d12b	15.743	240	952194	40.00	ppm	0.00
110) Phenanthrene-d10a	10.615	188	1036035	40.00	ppm	0.00
113) Naphthalene-d8a	5.723	136	1068530	40.00	ppm	0.00
115) Chrysene-d12c	15.743	240	952194	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	12.965	57	76163	12.76	ppm	0.00
Spiked Amount 50.000			Recovery =	25.52%		
111) o-terphenyl	11.432	230	161129	12.26	ppm	0.00
Spiked Amount 50.000			Recovery =	24.52%		
Target Compounds						Qvalue
102) Benzaldehyde	4.281	105	91866	12.60	ppm	96
104) 1,2,4,5-Tetrachloroben...	6.759	216	90145	12.38	ppm	98
105) Atrazine	10.215	215	28236	10.42	ppm	94
112) Pentachloronitrobenzene	10.327	295	8811	7.65	ppm	99
114) Hydroquinone	6.155	110	59674	6.70	ppm	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153336.D
Acq On : 10 Apr 2019 2:59 pm
Operator : chriss2
Sample : ic6552-10
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 10 15:41:51 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153337.D
Acq On : 10 Apr 2019 3:27 pm
Operator : chriss2
Sample : ic6552-5
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 10 15:50:42 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration

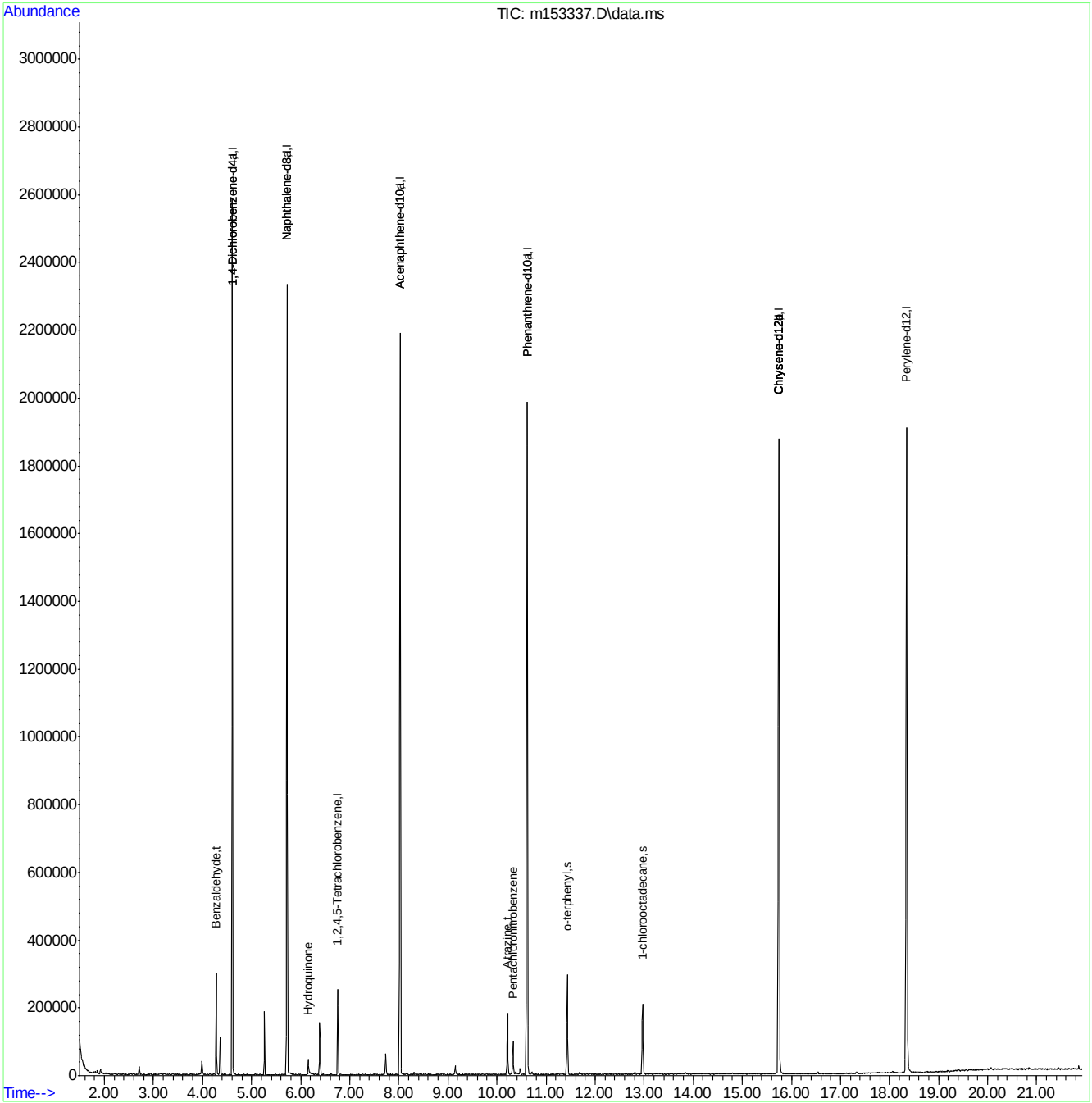
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.608	152	309565	40.00	ppm	0.00
24) Naphthalene-d8	5.724	136	1082136	40.00	ppm	0.00
47) Acenaphthene-d10	8.026	164	598263	40.00	ppm	0.00
69) Phenanthrene-d10	10.617	188	1039910	40.00	ppm	0.00
83) Chrysene-d12	15.744	240	943551	40.00	ppm	-0.01
91) Perylene-d12	18.351	264	1088045	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.608	152	309565	40.00	ppm	0.00
103) Acenaphthene-d10a	8.026	164	598263	40.00	ppm	0.00
106) Chrysene-d12a	15.744	240	943551	40.00	ppm	0.00
108) Chrysene-d12b	15.744	240	943551	40.00	ppm	0.00
110) Phenanthrene-d10a	10.617	188	1039910	40.00	ppm	0.00
113) Naphthalene-d8a	5.724	136	1082136	40.00	ppm	0.00
115) Chrysene-d12c	15.744	240	943551	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	12.967	57	34241	5.79	ppm	0.00
Spiked Amount 50.000			Recovery =	11.58%		
111) o-terphenyl	11.434	230	77275	5.86	ppm	0.00
Spiked Amount 50.000			Recovery =	11.72%		
Target Compounds						Qvalue
102) Benzaldehyde	4.277	105	47217	6.30	ppm	91
104) 1,2,4,5-Tetrachloroben...	6.755	216	45392	6.35	ppm	100
105) Atrazine	10.216	215	13133	4.94	ppm	86
112) Pentachloronitrobenzene	10.323	295	3358	2.91	ppm	94
114) Hydroquinone	6.157	110	22080	2.45	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153337.D
Acq On : 10 Apr 2019 3:27 pm
Operator : chriss2
Sample : ic6552-5
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 10 15:50:42 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153338.D
Acq On : 10 Apr 2019 3:56 pm
Operator : chriss2
Sample : ic6552-2
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 10 16:39:04 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration

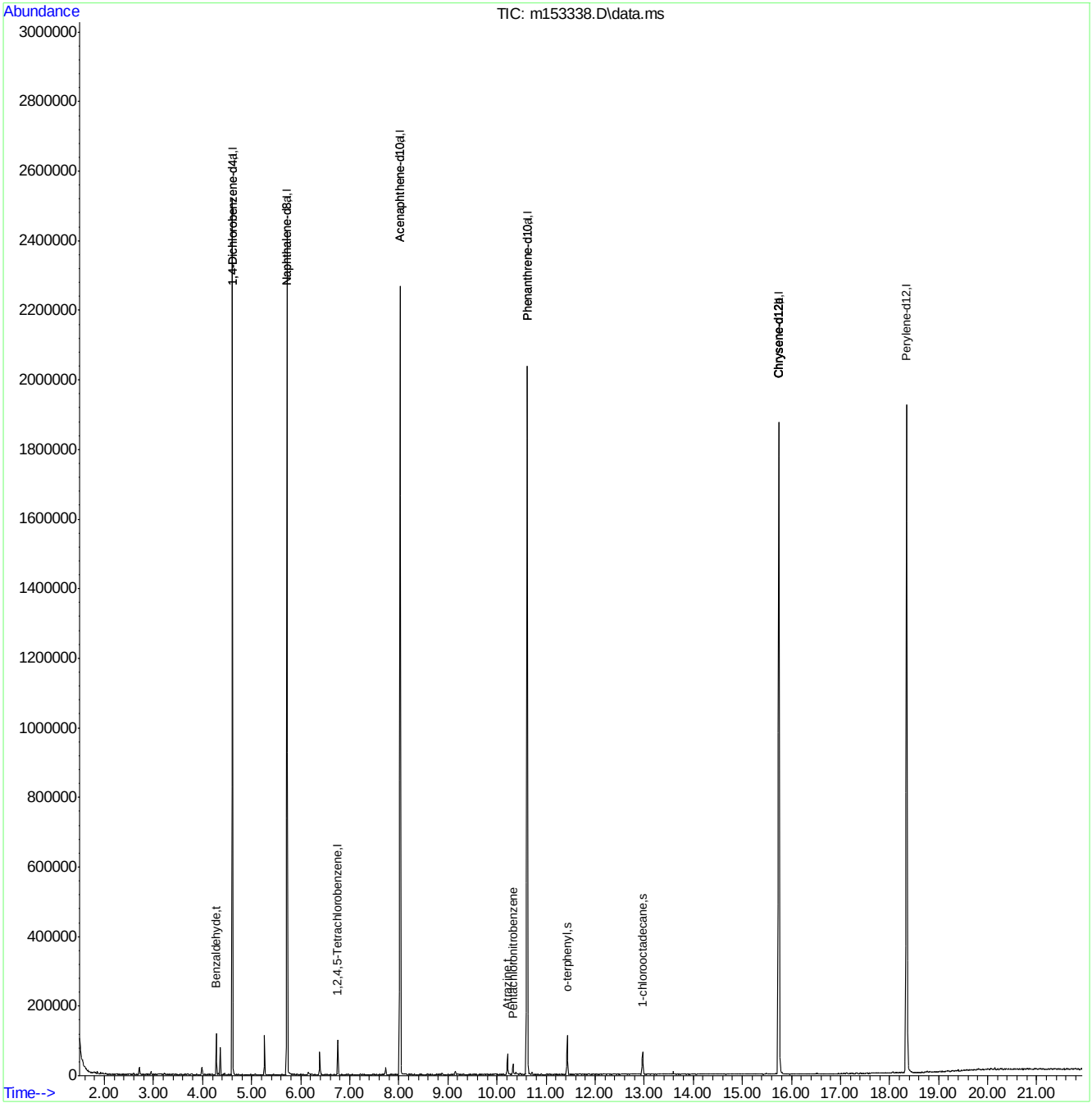
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.607	152	306757	40.00	ppm		0.00
24) Naphthalene-d8	5.724	136	1074936	40.00	ppm		0.00
47) Acenaphthene-d10	8.026	164	599962	40.00	ppm		0.00
69) Phenanthrene-d10	10.616	188	1045038	40.00	ppm		0.00
83) Chrysene-d12	15.743	240	930383	40.00	ppm		-0.01
91) Perylene-d12	18.350	264	1082153	40.00	ppm		0.00
101) 1,4-Dichlorobenzene-d4a	4.607	152	306757	40.00	ppm		0.00
103) Acenaphthene-d10a	8.026	164	599962	40.00	ppm		0.00
106) Chrysene-d12a	15.743	240	930383	40.00	ppm		0.00
108) Chrysene-d12b	15.743	240	930383	40.00	ppm		0.00
110) Phenanthrene-d10a	10.616	188	1045038	40.00	ppm		0.00
113) Naphthalene-d8a	5.724	136	1074936	40.00	ppm		0.00
115) Chrysene-d12c	15.743	240	930383	40.00	ppm		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	0.000	112	0	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
109) 1-chlorooctadecane	12.966	57	11112	1.91	ppm		0.00
Spiked Amount 50.000			Recovery =	3.82%			
111) o-terphenyl	11.433	230	29103	2.19	ppm		0.00
Spiked Amount 50.000			Recovery =	4.38%			
Target Compounds							Qvalue
102) Benzaldehyde	4.282	105	18325	2.47	ppm		94
104) 1,2,4,5-Tetrachloroben...	6.754	216	18181	2.54	ppm		93
105) Atrazine	10.215	215	4533	1.70	ppm		85
112) Pentachloronitrobenzene	10.328	295	1153	0.99	ppm	#	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153338.D
Acq On : 10 Apr 2019 3:56 pm
Operator : chriss2
Sample : ic6552-2
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 10 16:39:04 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 13:39:06 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153339.D
Acq On : 10 Apr 2019 4:24 pm
Operator : chriss2
Sample : ic6552-1
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 10 16:51:29 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 16:50:08 2019
Response via : Initial Calibration

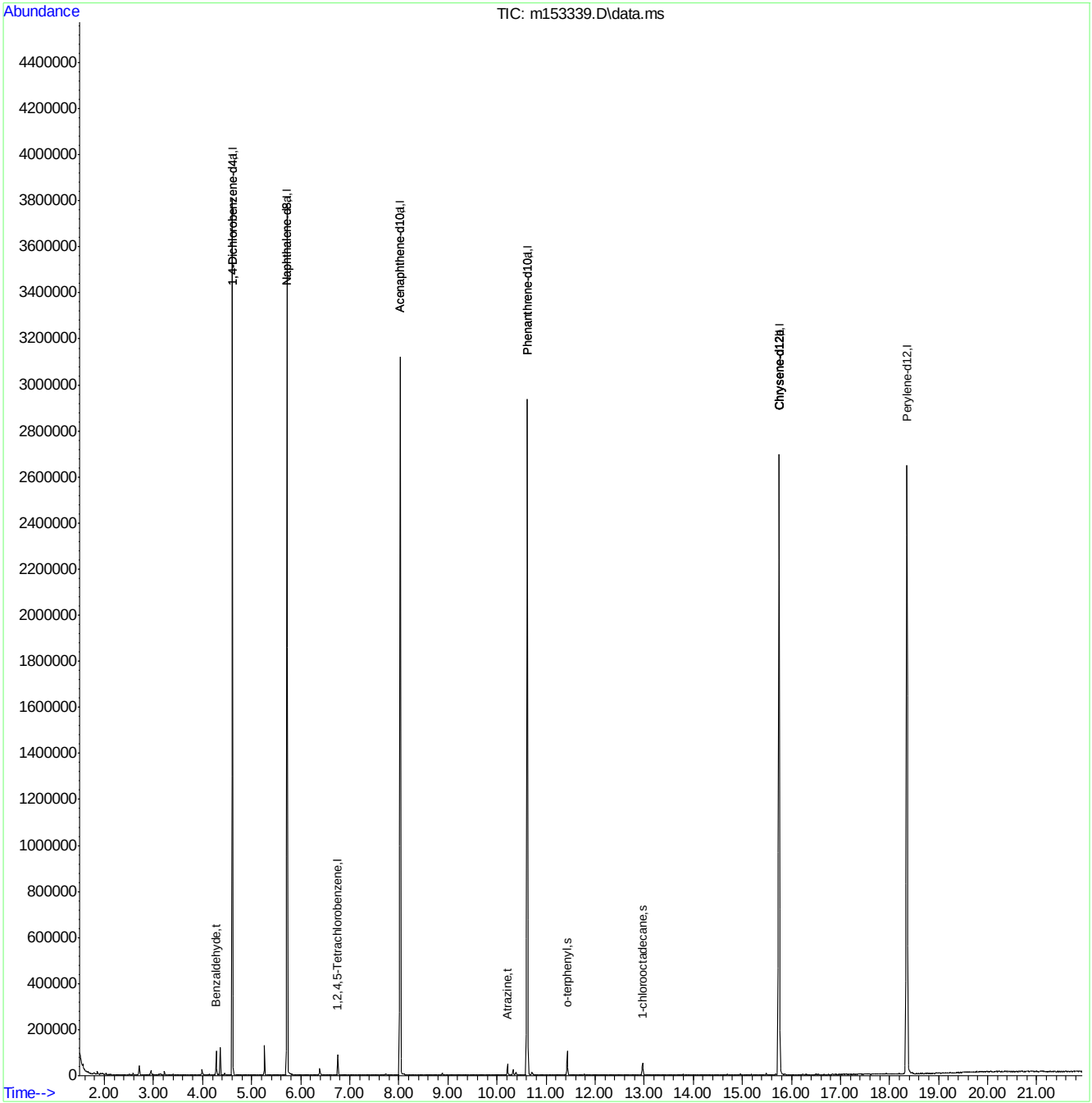
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.607	152	483887	40.00	ppm	0.00
24) Naphthalene-d8	5.724	136	1636771	40.00	ppm	0.00
47) Acenaphthene-d10	8.026	164	937365	40.00	ppm	0.00
69) Phenanthrene-d10	10.621	188	1640357	40.00	ppm	0.00
83) Chrysene-d12	15.754	240	1485765	40.00	ppm	0.00
91) Perylene-d12	18.355	264	1713215	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.607	152	483887	40.00	ppm	0.00
103) Acenaphthene-d10a	8.026	164	937365	40.00	ppm	0.00
106) Chrysene-d12a	15.754	240	1485765	40.00	ppm	0.00
108) Chrysene-d12b	15.754	240	1485765	40.00	ppm	0.00
110) Phenanthrene-d10a	10.621	188	1640357	40.00	ppm	0.00
113) Naphthalene-d8a	5.724	136	1636771	40.00	ppm	0.00
115) Chrysene-d12c	15.754	240	1485765	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	12.966	57	9276	0.89	ppm	0.00
Spiked Amount 50.000			Recovery =	1.78%		
111) o-terphenyl	11.433	230	26877	1.15	ppm	0.00
Spiked Amount 50.000			Recovery =	2.30%		
Target Compounds						Qvalue
102) Benzaldehyde	4.282	105	16045	1.17	ppm	97
104) 1,2,4,5-Tetrachloroben...	6.755	216	15947	1.23	ppm	97
105) Atrazine	10.216	215	4010	0.96	ppm	86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153339.D
Acq On : 10 Apr 2019 4:24 pm
Operator : chriss2
Sample : ic6552-1
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 10 16:51:29 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 16:50:08 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153340.D
Acq On : 10 Apr 2019 4:52 pm
Operator : chriss2
Sample : icv6552-50
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 10 17:27:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 16:55:05 2019
Response via : Initial Calibration

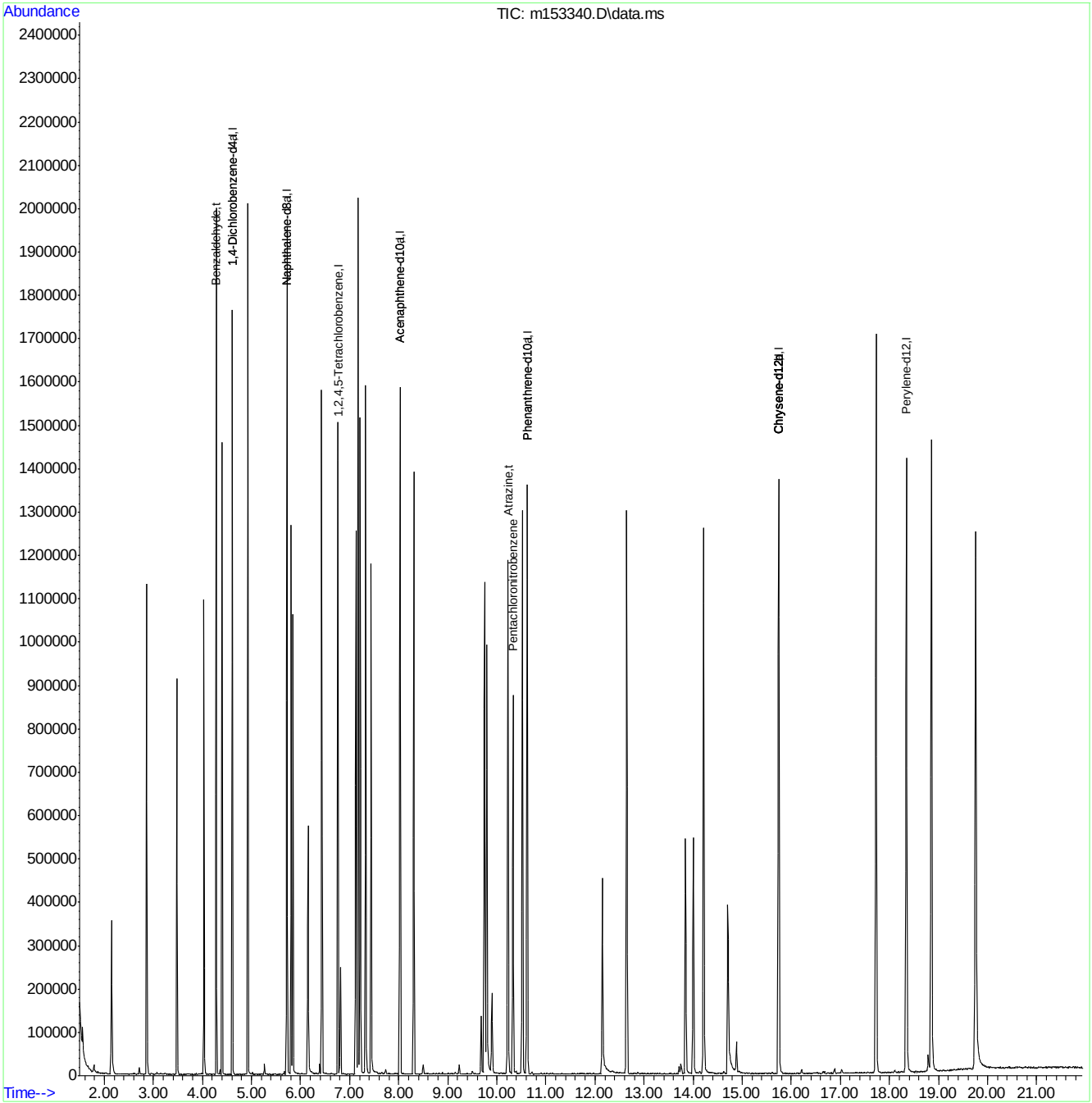
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.610	152	211899	40.00	ppm	0.00
24) Naphthalene-d8	5.721	136	801249	40.00	ppm	0.00
47) Acenaphthene-d10	8.028	164	429559	40.00	ppm	0.00
69) Phenanthrene-d10	10.618	188	703801	40.00	ppm	0.00
83) Chrysene-d12	15.746	240	683532	40.00	ppm	-0.01
91) Perylene-d12	18.347	264	778656	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.610	152	211899	40.00	ppm	0.00
103) Acenaphthene-d10a	8.028	164	429559	40.00	ppm	0.00
106) Chrysene-d12a	15.746	240	683532	40.00	ppm	0.00
108) Chrysene-d12b	15.746	240	683584	40.00	ppm	0.00
110) Phenanthrene-d10a	10.618	188	703801	40.00	ppm	0.00
113) Naphthalene-d8a	5.721	136	801249	40.00	ppm	0.00
115) Chrysene-d12c	15.746	240	683532	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
102) Benzaldehyde	4.279	105	299967	48.74	ppm	97
104) 1,2,4,5-Tetrachloroben...	6.762	216	288128	47.03	ppm	100
105) Atrazine	10.229	215	98840	51.68	ppm	97
112) Pentachloronitrobenzene	10.330	295	36294	45.24	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153340.D
Acq On : 10 Apr 2019 4:52 pm
Operator : chriss2
Sample : icv6552-50
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 10 17:27:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 16:55:05 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153341.D
Acq On : 10 Apr 2019 5:21 pm
Operator : chriss2
Sample : icv6552-50
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 10 17:44:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 16:55:05 2019
Response via : Initial Calibration

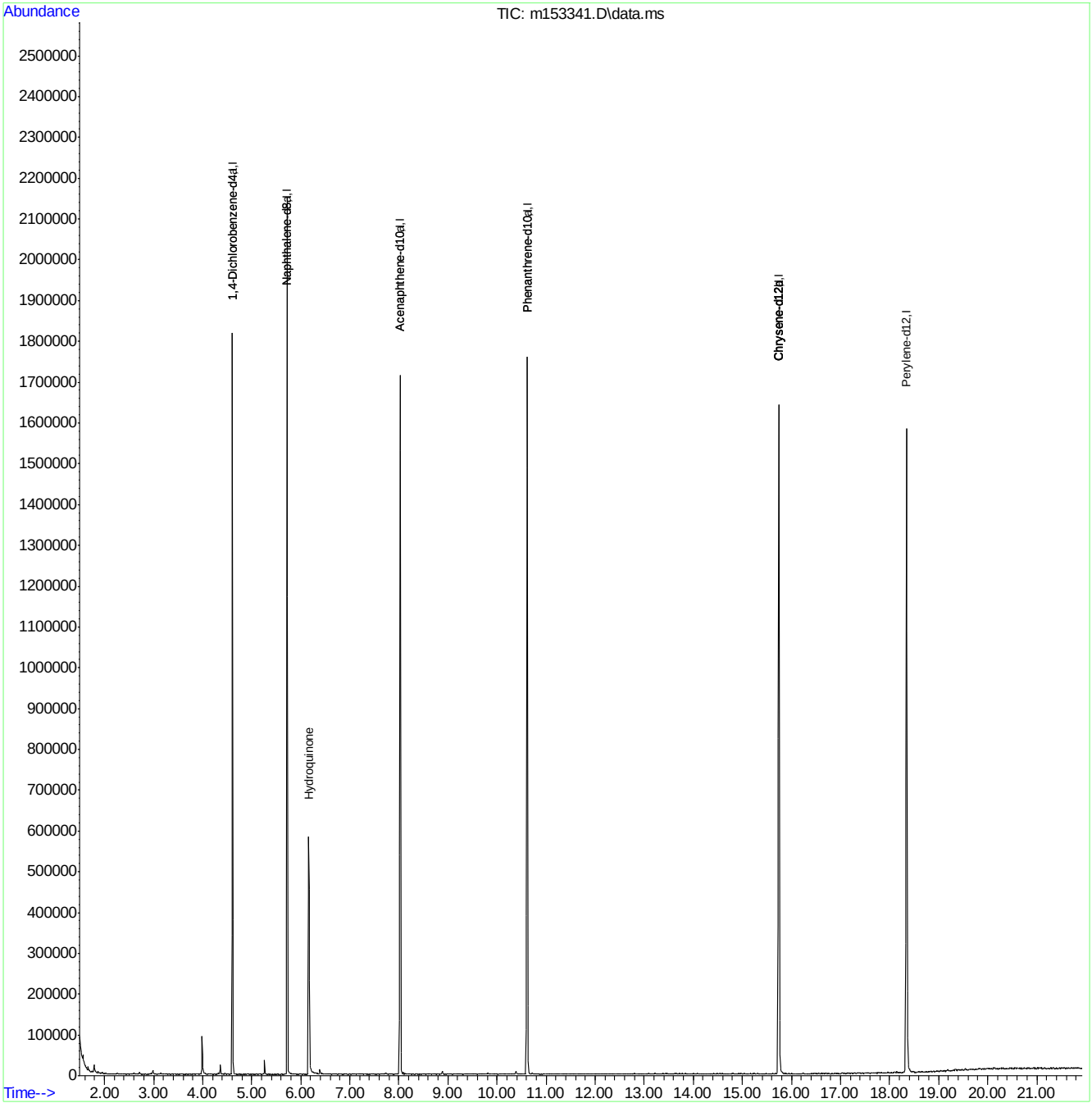
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.612	152	255059	40.00	ppm	0.00
24) Naphthalene-d8	5.723	136	897392	40.00	ppm	0.00
47) Acenaphthene-d10	8.025	164	461120	40.00	ppm	0.00
69) Phenanthrene-d10	10.615	188	882576	40.00	ppm	0.00
83) Chrysene-d12	15.743	240	826838	40.00	ppm	-0.01
91) Perylene-d12	18.349	264	865899	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.612	152	255059	40.00	ppm	0.00
103) Acenaphthene-d10a	8.025	164	461120	40.00	ppm	0.00
106) Chrysene-d12a	15.743	240	826838	40.00	ppm	0.00
108) Chrysene-d12b	15.743	240	826838	40.00	ppm	0.00
110) Phenanthrene-d10a	10.615	188	882576	40.00	ppm	0.00
113) Naphthalene-d8a	5.723	136	897392	40.00	ppm	0.00
115) Chrysene-d12c	15.743	240	826838	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
114) Hydroquinone	6.166	110	344432	50.77	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153341.D
Acq On : 10 Apr 2019 5:21 pm
Operator : chriss2
Sample : icv6552-50
Misc : op17006,em6552,1000,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 10 17:44:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 10 16:55:05 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153343.D
Acq On : 10 Apr 2019 11:52 pm
Operator : chriss2
Sample : ic6553-100
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 11 08:02:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration

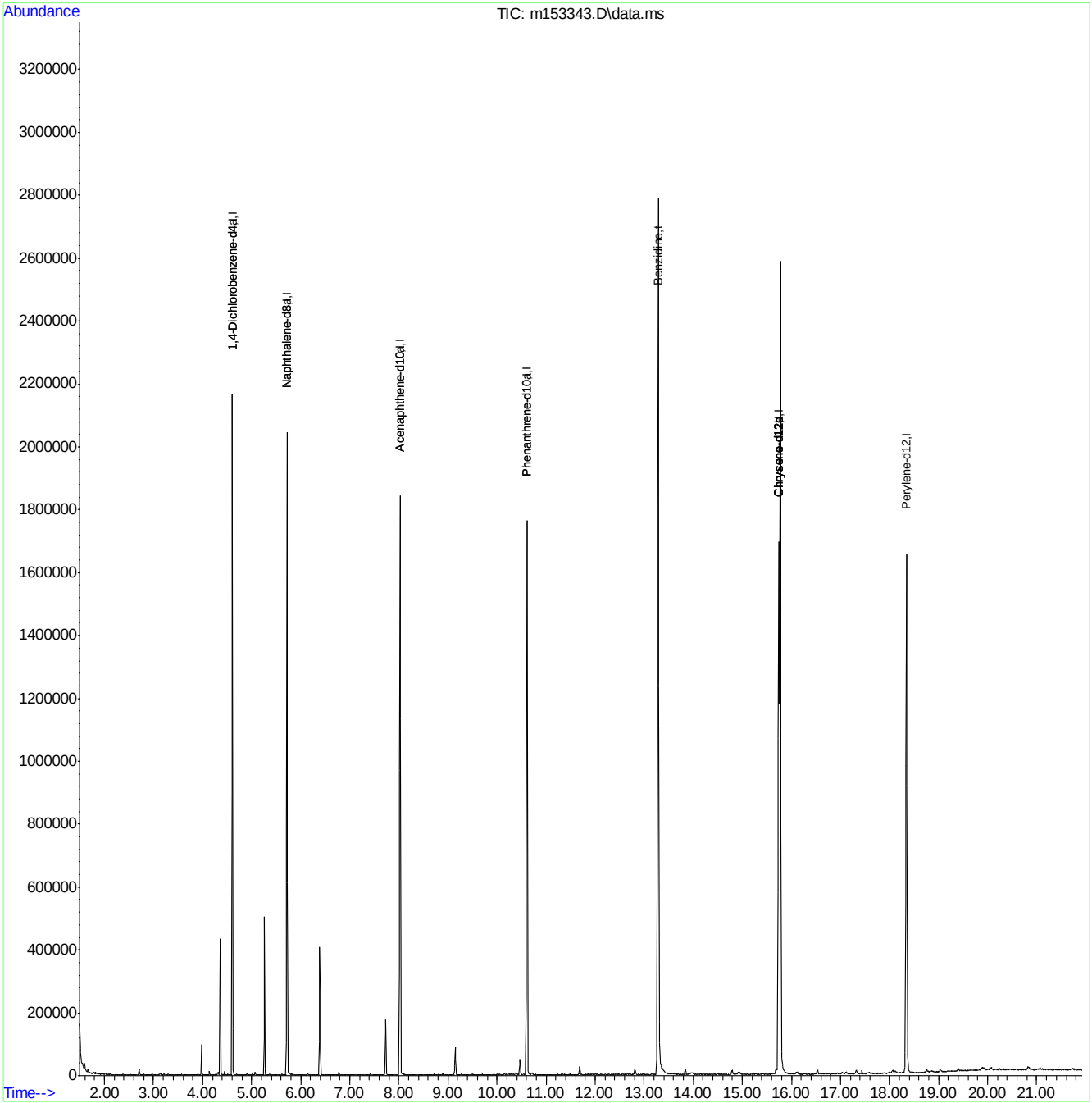
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.607	152	261130	40.00	ppm	0.00
24) Naphthalene-d8	5.718	136	918991	40.00	ppm	0.00
47) Acenaphthene-d10	8.025	164	501512	40.00	ppm	0.00
69) Phenanthrene-d10	10.610	188	886443	40.00	ppm	0.00
83) Chrysene-d12	15.743	240	775459	40.00	ppm	-0.01
91) Perylene-d12	18.344	264	916051	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.607	152	261130	40.00	ppm	0.00
103) Acenaphthene-d10a	8.025	164	501512	40.00	ppm	0.00
106) Chrysene-d12a	15.743	240	775459	40.00	ppm	0.00
108) Chrysene-d12b	15.743	240	775459	40.00	ppm	0.00
110) Phenanthrene-d10a	10.610	188	886443	40.00	ppm	0.00
113) Naphthalene-d8a	5.718	136	918991	40.00	ppm	0.00
115) Chrysene-d12c	15.743	240	775459	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
107) Benzidine	13.286	184	1781588	101.87	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153343.D
Acq On : 10 Apr 2019 11:52 pm
Operator : chriss2
Sample : ic6553-100
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 11 08:02:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153344.D
Acq On : 11 Apr 2019 12:20 am
Operator : chriss2
Sample : ic6553-80
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 11 08:03:41 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration

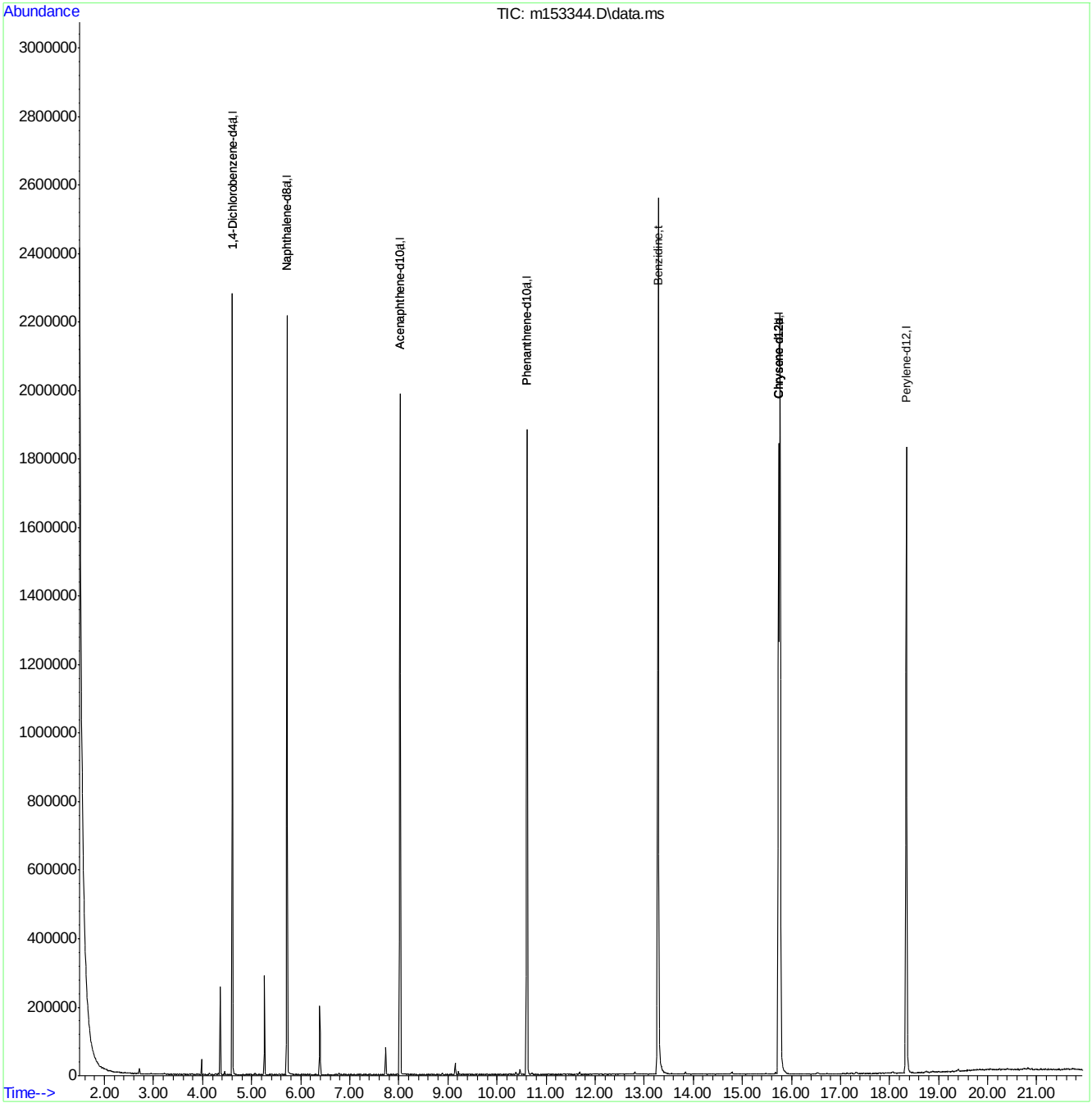
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.607	152	283236	40.00	ppm	0.00
24) Naphthalene-d8	5.723	136	1004208	40.00	ppm	0.00
47) Acenaphthene-d10	8.025	164	557464	40.00	ppm	0.00
69) Phenanthrene-d10	10.610	188	973422	40.00	ppm	0.00
83) Chrysene-d12	15.743	240	850543	40.00	ppm	-0.01
91) Perylene-d12	18.344	264	990148	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.607	152	283236	40.00	ppm	0.00
103) Acenaphthene-d10a	8.025	164	557464	40.00	ppm	0.00
106) Chrysene-d12a	15.743	240	850543	40.00	ppm	0.00
108) Chrysene-d12b	15.743	240	850543	40.00	ppm	0.00
110) Phenanthrene-d10a	10.610	188	973422	40.00	ppm	0.00
113) Naphthalene-d8a	5.723	136	1004208	40.00	ppm	0.00
115) Chrysene-d12c	15.743	240	850543	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
107) Benzidine	13.286	184	1579295	82.33	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153344.D
Acq On : 11 Apr 2019 12:20 am
Operator : chriss2
Sample : ic6553-80
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 11 08:03:41 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153345.D
Acq On : 11 Apr 2019 12:48 am
Operator : chriss2
Sample : icc6553-50
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Apr 11 08:00:01 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 07:55:43 2019
Response via : Initial Calibration

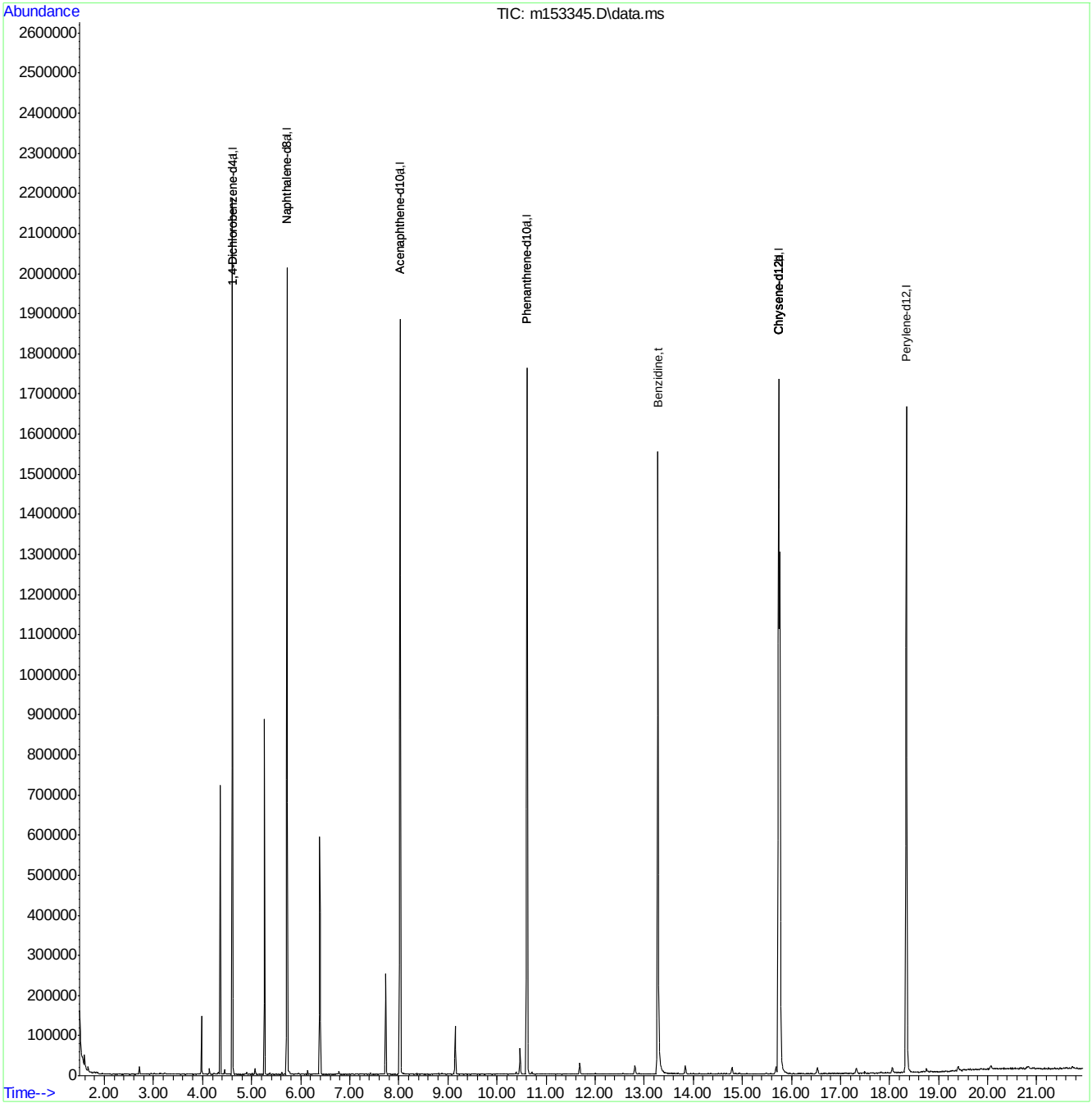
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.607	152	263695	40.00	ppm	0.00
24) Naphthalene-d8	5.724	136	926254	40.00	ppm	0.00
47) Acenaphthene-d10	8.026	164	515612	40.00	ppm	0.00
69) Phenanthrene-d10	10.611	188	899471	40.00	ppm	0.00
83) Chrysene-d12	15.743	240	792749	40.00	ppm	-0.01
91) Perylene-d12	18.344	264	910120	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.607	152	263695	40.00	ppm	0.00
103) Acenaphthene-d10a	8.026	164	515612	40.00	ppm	0.00
106) Chrysene-d12a	15.743	240	792749	40.00	ppm	0.00
108) Chrysene-d12b	15.743	240	792749	40.00	ppm	0.00
110) Phenanthrene-d10a	10.611	188	899471	40.00	ppm	0.00
113) Naphthalene-d8a	5.724	136	926254	40.00	ppm	0.00
115) Chrysene-d12c	15.743	240	792749	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
107) Benzidine	13.281	184	889727	49.76	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153345.D
Acq On : 11 Apr 2019 12:48 am
Operator : chriss2
Sample : icc6553-50
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Apr 11 08:00:01 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 07:55:43 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153346.D
Acq On : 11 Apr 2019 1:16 am
Operator : chriss2
Sample : ic6553-25
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 11 08:01:16 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration

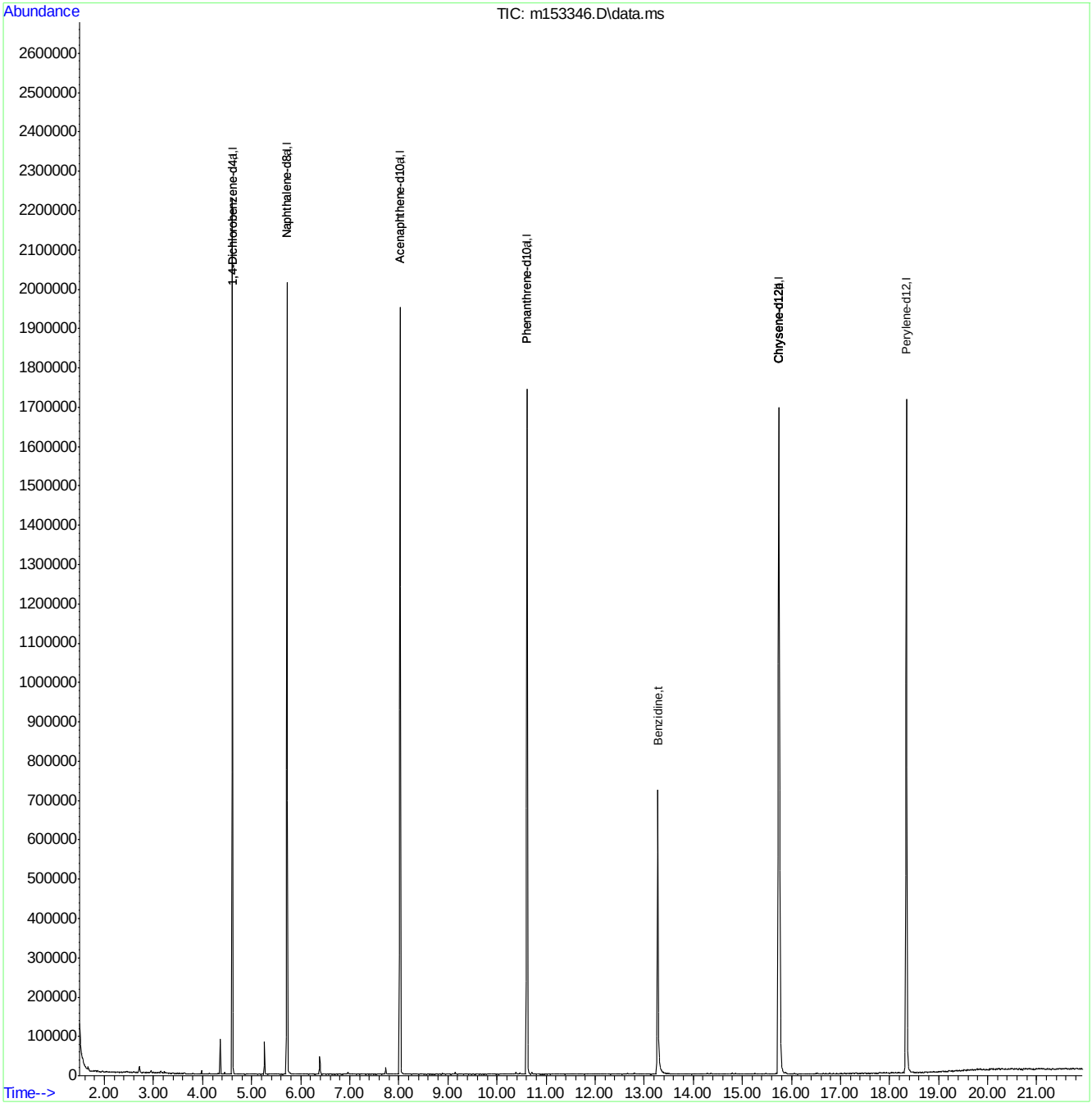
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.608	152	268092	40.00	ppm	0.00
24) Naphthalene-d8	5.719	136	935378	40.00	ppm	0.00
47) Acenaphthene-d10	8.026	164	517634	40.00	ppm	0.00
69) Phenanthrene-d10	10.611	188	890779	40.00	ppm	0.00
83) Chrysene-d12	15.744	240	786843	40.00	ppm	-0.01
91) Perylene-d12	18.345	264	891362	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.608	152	268092	40.00	ppm	0.00
103) Acenaphthene-d10a	8.026	164	517634	40.00	ppm	0.00
106) Chrysene-d12a	15.744	240	786843	40.00	ppm	0.00
108) Chrysene-d12b	15.744	240	786843	40.00	ppm	0.00
110) Phenanthrene-d10a	10.611	188	890779	40.00	ppm	0.00
113) Naphthalene-d8a	5.719	136	935378	40.00	ppm	0.00
115) Chrysene-d12c	15.744	240	786843	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
107) Benzidine	13.276	184	402630	22.69	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153346.D
Acq On : 11 Apr 2019 1:16 am
Operator : chriss2
Sample : ic6553-25
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 11 08:01:16 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153347.D
Acq On : 11 Apr 2019 1:44 am
Operator : chriss2
Sample : ic6553-10
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Apr 11 08:04:34 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration

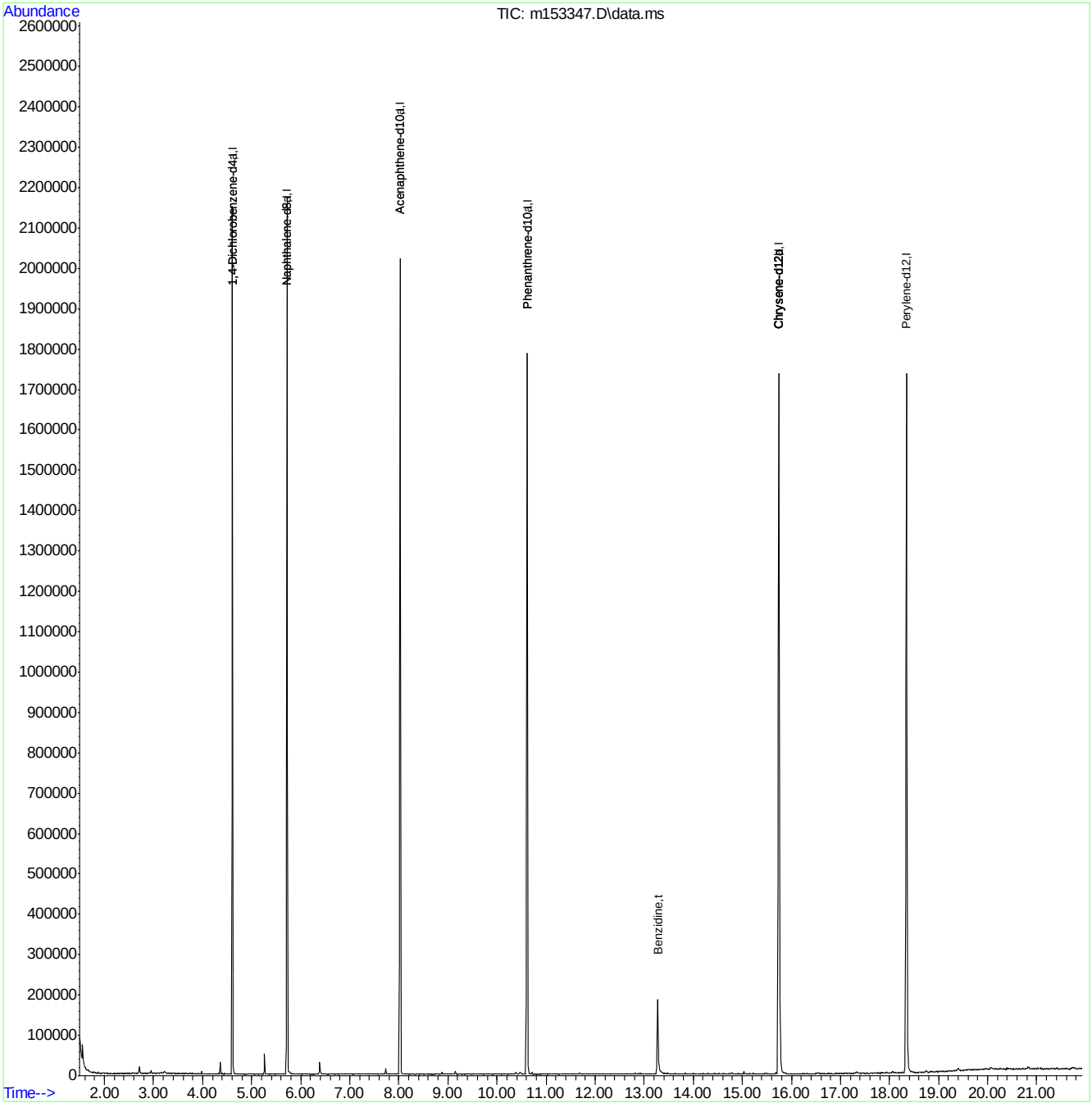
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.607	152	273365	40.00	ppm	0.00
24) Naphthalene-d8	5.723	136	968167	40.00	ppm	0.00
47) Acenaphthene-d10	8.025	164	534383	40.00	ppm	0.00
69) Phenanthrene-d10	10.616	188	929681	40.00	ppm	0.00
83) Chrysene-d12	15.743	240	816945	40.00	ppm	-0.01
91) Perylene-d12	18.344	264	940109	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.607	152	273365	40.00	ppm	0.00
103) Acenaphthene-d10a	8.025	164	534383	40.00	ppm	0.00
106) Chrysene-d12a	15.743	240	816945	40.00	ppm	0.00
108) Chrysene-d12b	15.743	240	816945	40.00	ppm	0.00
110) Phenanthrene-d10a	10.616	188	929681	40.00	ppm	0.00
113) Naphthalene-d8a	5.723	136	968167	40.00	ppm	0.00
115) Chrysene-d12c	15.743	240	816945	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
107) Benzidine	13.275	184	119505	6.49	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153347.D
Acq On : 11 Apr 2019 1:44 am
Operator : chriss2
Sample : ic6553-10
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Apr 11 08:04:34 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153348.D
Acq On : 11 Apr 2019 2:12 am
Operator : chriss2
Sample : ic6553-5
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 11 08:05:38 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration

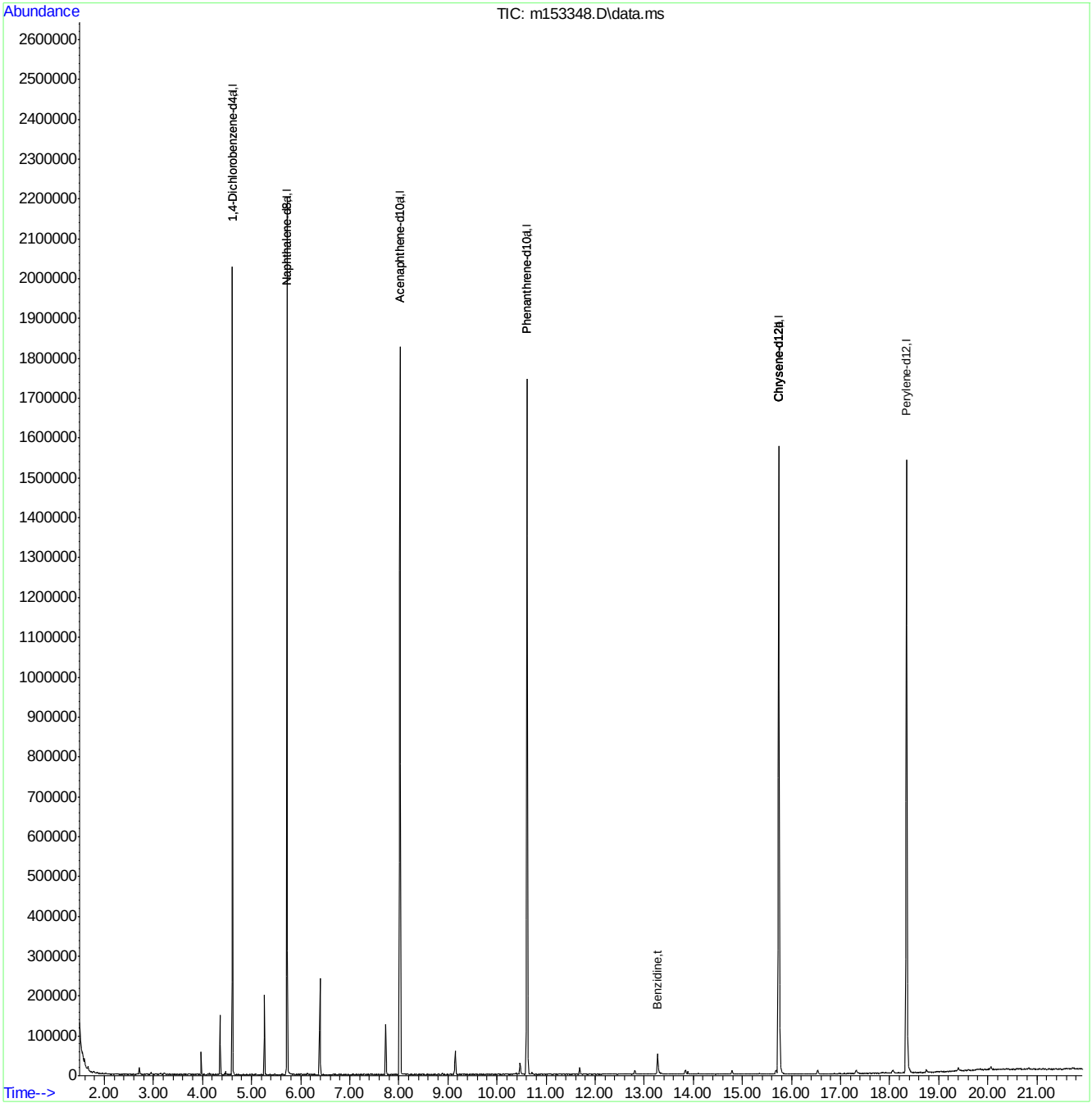
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.610	152	263432	40.00	ppm	0.00
24) Naphthalene-d8	5.721	136	899603	40.00	ppm	0.00
47) Acenaphthene-d10	8.023	164	493039	40.00	ppm	0.00
69) Phenanthrene-d10	10.614	188	868084	40.00	ppm	0.00
83) Chrysene-d12	15.741	240	760838	40.00	ppm	-0.02
91) Perylene-d12	18.347	264	848946	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.610	152	263432	40.00	ppm	0.00
103) Acenaphthene-d10a	8.023	164	493039	40.00	ppm	0.00
106) Chrysene-d12a	15.741	240	760838	40.00	ppm	0.00
108) Chrysene-d12b	15.741	240	760838	40.00	ppm	0.00
110) Phenanthrene-d10a	10.614	188	868084	40.00	ppm	0.00
113) Naphthalene-d8a	5.721	136	899603	40.00	ppm	0.00
115) Chrysene-d12c	15.741	240	760838	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
107) Benzidine	13.273	184	37663	2.19	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153348.D
Acq On : 11 Apr 2019 2:12 am
Operator : chriss2
Sample : ic6553-5
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 11 08:05:38 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153349.D
Acq On : 11 Apr 2019 2:40 am
Operator : chriss2
Sample : ic6553-2
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Apr 11 08:07:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration

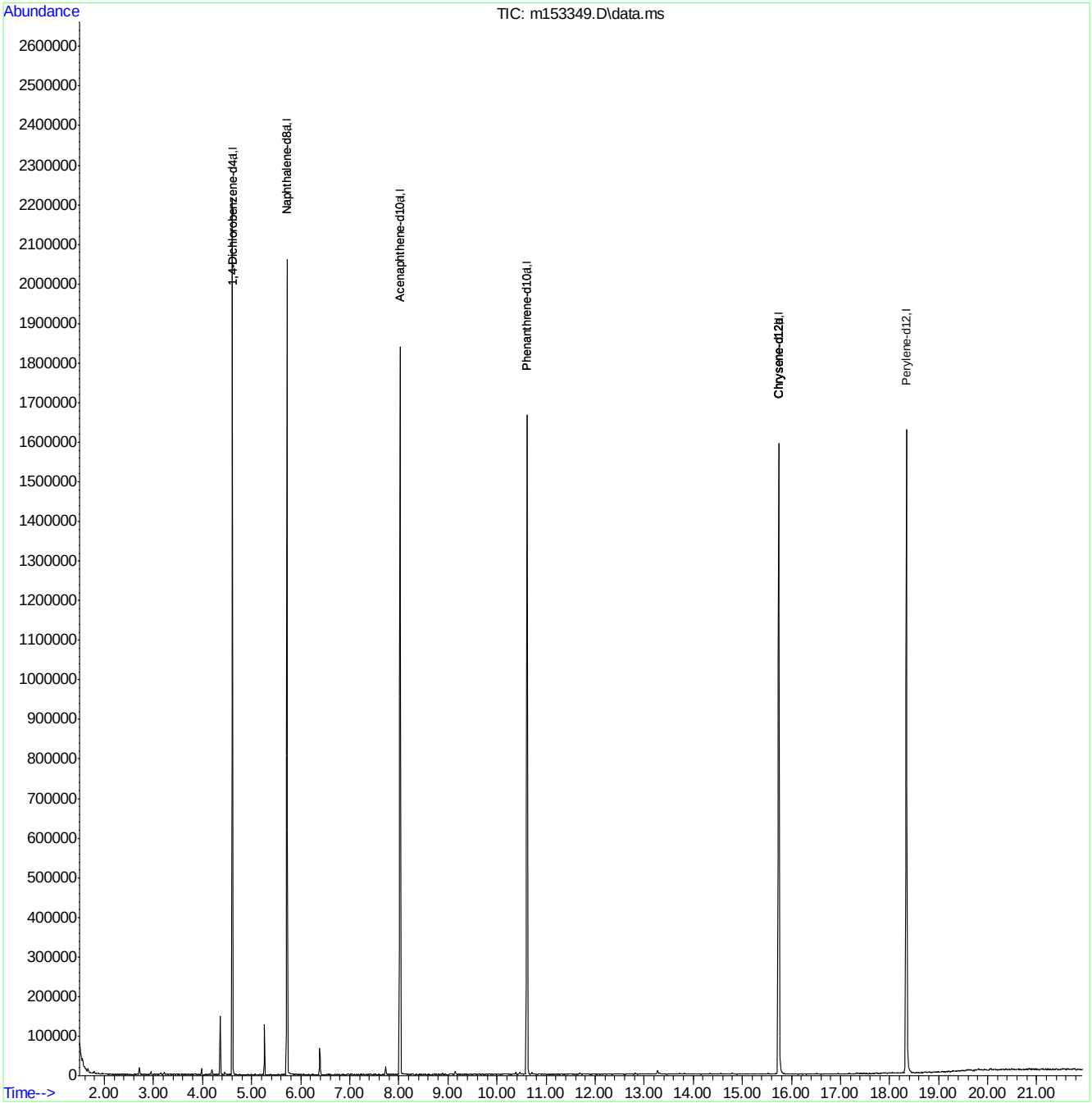
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.607	152	270801	40.00	ppm	0.00
24) Naphthalene-d8	5.718	136	923970	40.00	ppm	0.00
47) Acenaphthene-d10	8.026	164	510149	40.00	ppm	0.00
69) Phenanthrene-d10	10.611	188	862549	40.00	ppm	0.00
83) Chrysene-d12	15.744	240	758829	40.00	ppm	-0.01
91) Perylene-d12	18.345	264	850677	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.607	152	270801	40.00	ppm	0.00
103) Acenaphthene-d10a	8.026	164	510149	40.00	ppm	0.00
106) Chrysene-d12a	15.744	240	758829	40.00	ppm	0.00
108) Chrysene-d12b	15.744	240	758829	40.00	ppm	0.00
110) Phenanthrene-d10a	10.611	188	862549	40.00	ppm	0.00
113) Naphthalene-d8a	5.718	136	923970	40.00	ppm	0.00
115) Chrysene-d12c	15.744	240	758829	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153349.D
Acq On : 11 Apr 2019 2:40 am
Operator : chriss2
Sample : ic6553-2
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Apr 11 08:07:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153350.D
Acq On : 11 Apr 2019 3:08 am
Operator : chriss2
Sample : ic6553-1
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Apr 11 08:07:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration

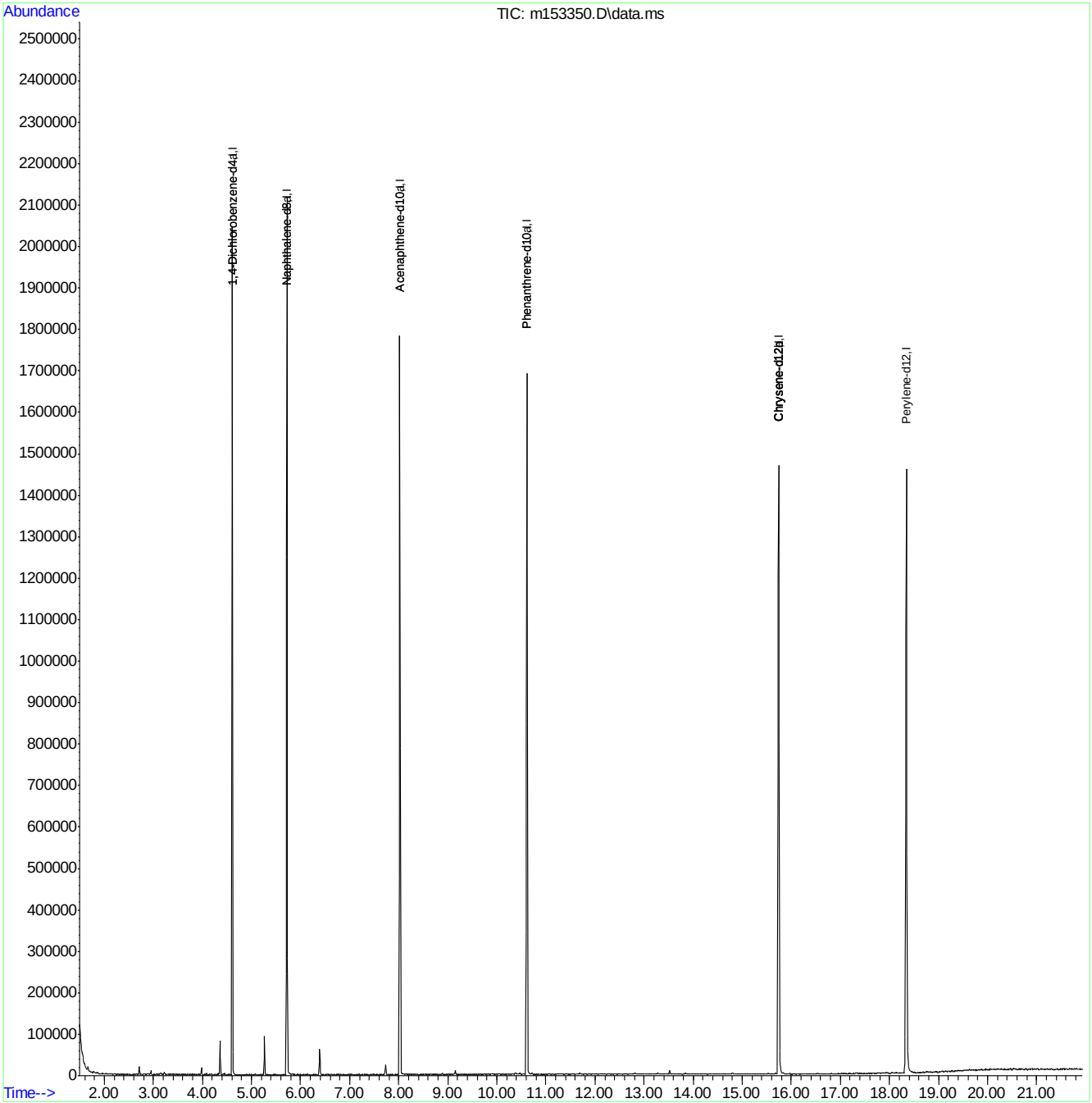
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.610	152	253719	40.00	ppm	0.00
24) Naphthalene-d8	5.721	136	875017	40.00	ppm	0.00
47) Acenaphthene-d10	8.023	164	476466	40.00	ppm	0.00
69) Phenanthrene-d10	10.613	188	823470	40.00	ppm	0.00
83) Chrysene-d12	15.740	240	715464	40.00	ppm	-0.02
91) Perylene-d12	18.347	264	807093	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.610	152	253719	40.00	ppm	0.00
103) Acenaphthene-d10a	8.023	164	476466	40.00	ppm	0.00
106) Chrysene-d12a	15.740	240	715464	40.00	ppm	0.00
108) Chrysene-d12b	15.740	240	715464	40.00	ppm	0.00
110) Phenanthrene-d10a	10.613	188	823470	40.00	ppm	0.00
113) Naphthalene-d8a	5.721	136	875017	40.00	ppm	0.00
115) Chrysene-d12c	15.740	240	715464	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153350.D
Acq On : 11 Apr 2019 3:08 am
Operator : chriss2
Sample : ic6553-1
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Apr 11 08:07:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:00:09 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153351.D
Acq On : 11 Apr 2019 3:37 am
Operator : chriss2
Sample : icv6553-50
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Apr 11 08:19:26 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

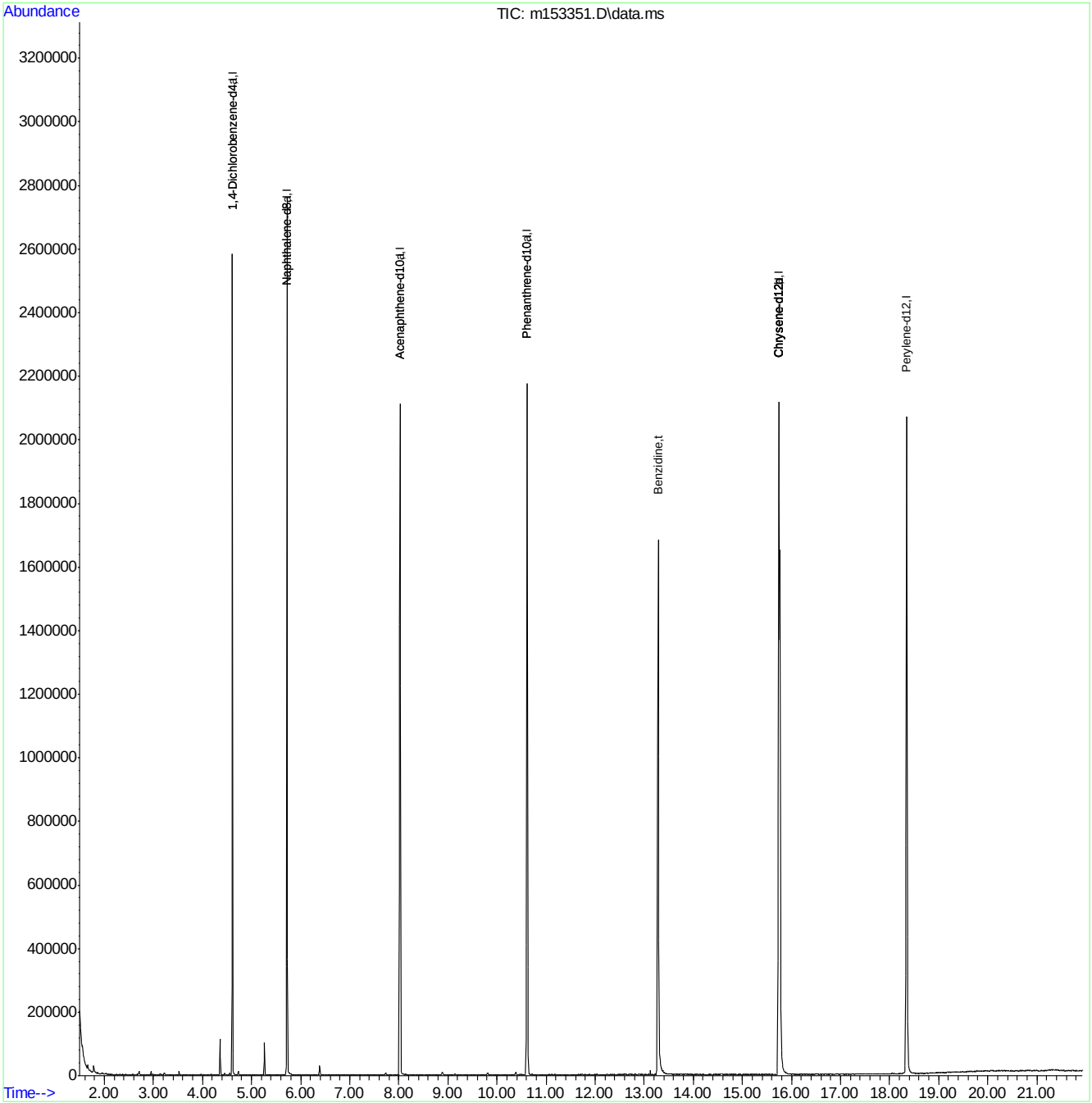
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.610	152	317011	40.00	ppm	0.00
24) Naphthalene-d8	5.721	136	1129913	40.00	ppm	0.00
47) Acenaphthene-d10	8.023	164	605802	40.00	ppm	0.00
69) Phenanthrene-d10	10.614	188	1127816	40.00	ppm	0.00
83) Chrysene-d12	15.746	240	1058829	40.00	ppm	-0.01
91) Perylene-d12	18.347	264	1152680	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.610	152	317011	40.00	ppm	0.00
103) Acenaphthene-d10a	8.023	164	605802	40.00	ppm	0.00
106) Chrysene-d12a	15.746	240	1058829	40.00	ppm	0.00
108) Chrysene-d12b	15.746	240	1058829	40.00	ppm	0.00
110) Phenanthrene-d10a	10.614	188	1127816	40.00	ppm	0.00
113) Naphthalene-d8a	5.721	136	1129913	40.00	ppm	0.00
115) Chrysene-d12c	15.746	240	1058829	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
107) Benzidine	13.284	184	955560	43.50	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6552\
Data File : m153351.D
Acq On : 11 Apr 2019 3:37 am
Operator : chriss2
Sample : icv6553-50
Misc : op17006,em6553,1000,,,1,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Apr 11 08:19:26 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6554\
Data File : m153353.D
Acq On : 11 Apr 2019 9:12 am
Operator : angelar
Sample : icv6551-50
Misc : op17006,em6554,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 11 12:29:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

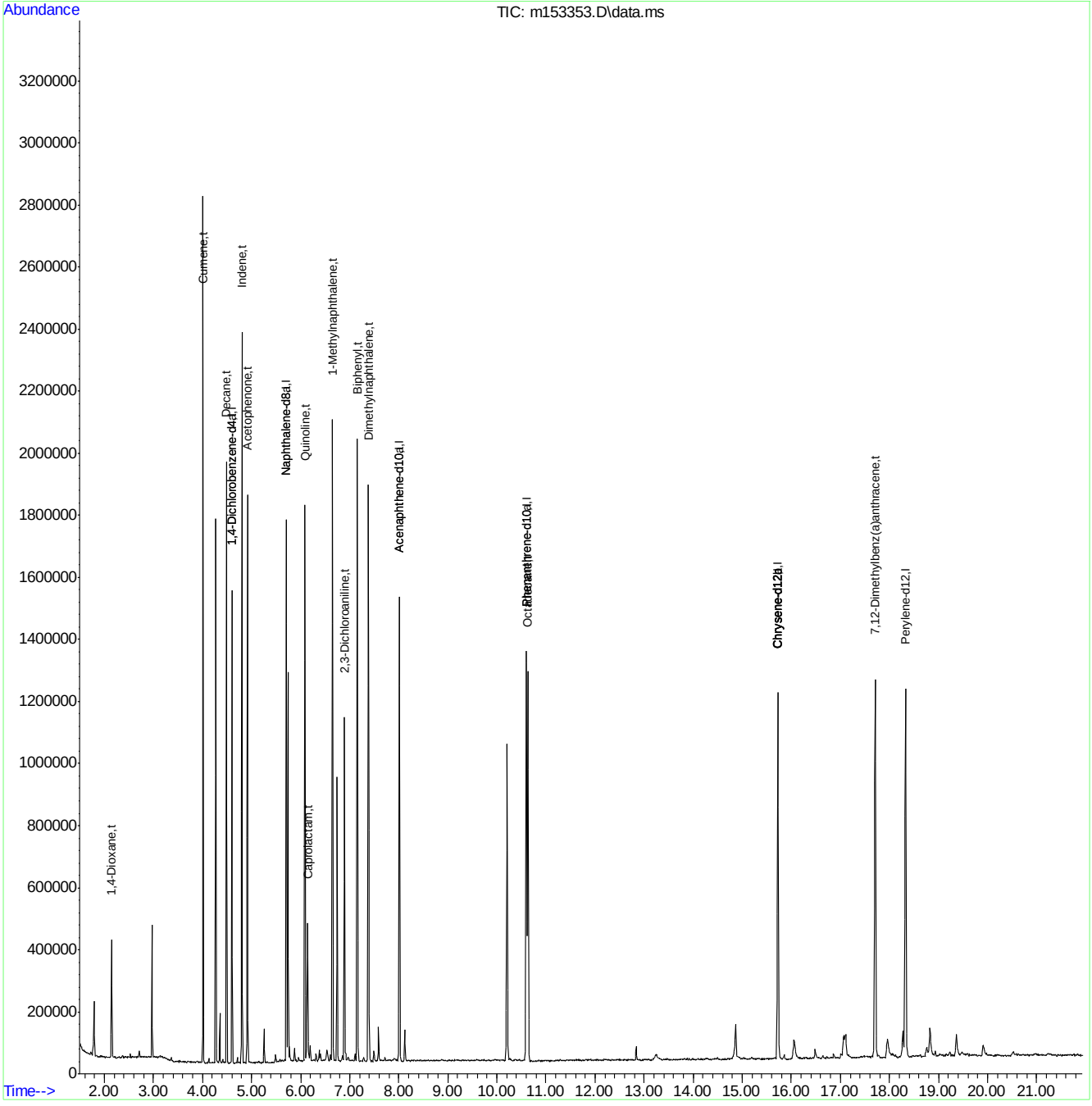
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.604	152	197476	40.00	ppm	0.00
24) Naphthalene-d8	5.710	136	735553	40.00	ppm	-0.02
47) Acenaphthene-d10	8.011	164	401166	40.00	ppm	-0.02
69) Phenanthrene-d10	10.602	188	675115	40.00	ppm	-0.02
83) Chrysene-d12	15.724	240	576254	40.00	ppm	-0.03
91) Perylene-d12	18.330	264	633649	40.00	ppm	-0.02
101) 1,4-Dichlorobenzene-d4a	4.604	152	197476	40.00	ppm	0.00
103) Acenaphthene-d10a	8.011	164	401166	40.00	ppm	-0.01
106) Chrysene-d12a	15.724	240	576254	40.00	ppm	-0.02
108) Chrysene-d12b	15.724	240	576254	40.00	ppm	-0.02
110) Phenanthrene-d10a	10.602	188	675115	40.00	ppm	-0.01
113) Naphthalene-d8a	5.710	136	735553	40.00	ppm	-0.01
115) Chrysene-d12c	15.724	240	576254	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.147	88	154486	54.66	ppm	96
6) Indene	4.802	116	558812	61.77	ppm	100
7) Cumene	4.011	105	774722	53.73	ppm	95
13) Decane	4.492	43	227083	57.15	ppm	98
18) Acetophenone	4.914	105	426649	58.28	ppm	89
27) Quinoline	6.089	129	617238	44.40	ppm	94
40) 2,3-Dichloroaniline	6.895	161	283336	37.41	ppm	96
41) Caprolactam	6.147	55	100147	45.97	ppm	93
45) 1-Methylnaphthalene	6.650	142	600344	42.79	ppm	97
46) Dimethylnaphthalene	7.381	156	513645	41.07	ppm	93
53) Biphenyl	7.157	154	726879	46.75	ppm	99
82) Octadecane	10.634	57	321779	69.09	ppm	98
99) 7,12-Dimethylbenz(a)an...	17.711	256	368410	47.67	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6554\
Data File : m153353.D
Acq On : 11 Apr 2019 9:12 am
Operator : angelar
Sample : icv6551-50
Misc : op17006,em6554,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 11 12:29:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153371.D
Acq On : 12 Apr 2019 3:37 am
Operator : chriss2
Sample : cc6551-25
Misc : op17006,em6555,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 12 10:59:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.591	152	224271	40.00	ppm	-0.02
24) Naphthalene-d8	5.702	136	783931	40.00	ppm	-0.02
47) Acenaphthene-d10	7.999	164	475821	40.00	ppm	-0.03
69) Phenanthrene-d10	10.584	188	882844	40.00	ppm	-0.03
83) Chrysene-d12	15.717	240	808801	40.00	ppm	-0.04
91) Perylene-d12	18.318	264	955440	40.00	ppm	-0.03
101) 1,4-Dichlorobenzene-d4a	4.591	152	224271	40.00	ppm	-0.02
103) Acenaphthene-d10a	7.999	164	475821	40.00	ppm	-0.03
106) Chrysene-d12a	15.717	240	808801	40.00	ppm	-0.02
108) Chrysene-d12b	15.717	240	808801	40.00	ppm	-0.03
110) Phenanthrene-d10a	10.584	188	882844	40.00	ppm	-0.03
113) Naphthalene-d8a	5.702	136	783931	40.00	ppm	-0.02
115) Chrysene-d12c	15.717	240	808801	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.603	112	194655	26.17	ppm	-0.02
Spiked Amount 50.000			Recovery = 52.34%			
8) Phenol-d5	4.324	99	224809	25.78	ppm	-0.02
Spiked Amount 50.000			Recovery = 51.56%			
25) Nitrobenzene-d5	5.034	82	134285	23.59	ppm	-0.02
Spiked Amount 50.000			Recovery = 47.18%			
51) 2-Fluorobiphenyl	7.005	172	412215	24.73	ppm	-0.03
Spiked Amount 50.000			Recovery = 49.46%			
73) 2,4,6-Tribromophenol	9.329	330	84209	29.38	ppm	-0.03
Spiked Amount 50.000			Recovery = 58.76%			
85) Terphenyl-d14	13.746	244	539927	25.47	ppm	-0.04
Spiked Amount 50.000			Recovery = 50.94%			
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.129	88	77004	23.99	ppm	95
3) Pyridine	2.449	79	179414	23.49	ppm	98
4) N-Nitrosodimethylamine	2.412	42	60604	22.47	ppm	95
6) Indene	4.794	116	269844	26.26	ppm	98
7) Cumene	3.998	105	466228	28.47	ppm	96
9) Phenol	4.335	94	235871	26.05	ppm	99
10) Aniline	4.345	93	260195	29.69	ppm	95
11) bis(2-Chloroethyl)ether	4.394	93	152348	25.04	ppm	94
12) 2-Chlorophenol	4.436	128	196909	24.78	ppm	99
13) Decane	4.484	43	91395	20.25	ppm	87
14) 1,3-Dichlorobenzene	4.548	146	225529	24.93	ppm	95
15) 1,4-Dichlorobenzene	4.607	146	209692	25.35	ppm	95
16) Benzyl alcohol	4.698	108	106458	25.63	ppm	99
17) 1,2-Dichlorobenzene	4.725	146	204701	24.88	ppm	97
18) Acetophenone	4.906	105	221607	26.66	ppm	94
19) 2-Methylphenol	4.789	108	152567	26.73	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153371.D
Acq On : 12 Apr 2019 3:37 am
Operator : chriss2
Sample : cc6551-25
Misc : op17006,em6555,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 12 10:59:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
20) 2,2'-oxybis(1-Chloropr...	4.810	121	47079	24.80	ppm	#	62
21) 3&4-Methylphenol	4.912	108	151339	26.01	ppm		91
22) n-Nitroso-di-n-propyla...	4.912	70	87265	23.07	ppm		97
23) Hexachloroethane	5.002	201	72293	23.89	ppm		98
26) Nitrobenzene	5.051	77	136212	25.19	ppm		95
27) Quinoline	6.081	129	382688	25.83	ppm		96
28) Isophorone	5.259	82	288592	26.41	ppm		98
29) 2-Nitrophenol	5.334	139	71920	19.47	ppm		90
30) 2,4-Dimethylphenol	5.371	107	173534	31.07	ppm		91
31) Benzoic acid	5.456	105	56170	13.66	ppm		90
32) bis(2-Chloroethoxy)met...	5.456	93	178675	25.80	ppm		99
33) 2,4-Dichlorophenol	5.558	162	164824	26.10	ppm		96
34) 2,6-Dichlorophenol	5.788	162	149682	25.96	ppm		98
35) 1,3,5-Trichlorobenzene	5.344	180	191209	26.39	ppm		96
36) 1,2,4-Trichlorobenzene	5.649	180	184253	26.14	ppm		92
37) 1,2,3-Trichlorobenzene	5.878	180	168480	26.02	ppm		99
38) Naphthalene	5.723	128	494862	26.38	ppm		100
39) 4-Chloroaniline	5.777	127	222953	27.11	ppm		99
40) 2,3-Dichloroaniline	6.877	161	208499	25.83	ppm		96
41) Caprolactam	6.145	55	49163	21.18	ppm		95
42) Hexachlorobutadiene	5.868	225	99195	27.85	ppm		99
43) 4-Chloro-3-methylphenol	6.332	107	159726	29.08	ppm		94
44) 2-Methylnaphthalene	6.514	141	312766	27.09	ppm		97
45) 1-Methylnaphthalene	6.637	142	395909	26.48	ppm		97
46) Dimethylnaphthalene	7.369	156	328744	24.66	ppm		93
48) Hexachlorocyclopentadiene	6.733	237	189709	53.01	ppm		99
49) 2,4,6-Trichlorophenol	6.888	196	109811	24.49	ppm		97
50) 2,4,5-Trichlorophenol	6.931	196	117820	24.13	ppm		98
52) 2-Chloronaphthalene	7.160	162	348455	25.35	ppm		99
53) Biphenyl	7.144	154	469877	25.48	ppm		100
54) 2-Nitroaniline	7.310	65	68975	25.56	ppm		87
55) Dimethylphthalate	7.620	163	437222	26.11	ppm		98
56) Acenaphthylene	7.769	152	589841	26.51	ppm		98
57) 2,6-Dinitrotoluene	7.689	165	69182	20.21	ppm		92
58) 3-Nitroaniline	7.940	138	88741	22.30	ppm		87
59) Acenaphthene	8.047	153	357022	26.50	ppm		97
60) 2,4-Dinitrophenol	8.111	184	29384	30.16	ppm		90
61) 4-Nitrophenol	8.250	109	46392	28.76	ppm	#	63
62) Dibenzofuran	8.330	168	524872	26.88	ppm		97
63) 2,4-Dinitrotoluene	8.335	165	89011	21.75	ppm		94
64) 2,3,4,6-Tetrachlorophenol	8.554	232	103202	25.72	ppm		98
65) Diethylphthalate	8.800	149	443705	27.23	ppm		98
66) Fluorene	8.907	166	436493	26.68	ppm		99
67) 4-Chlorophenyl-phenyle...	8.944	204	195190	25.91	ppm		95
68) 4-Nitroaniline	8.960	138	84343	23.89	ppm		86
70) 4,6-Dinitro-2-methylph...	9.024	198	26474	16.02	ppm		85
71) n-Nitrosodiphenylamine	9.158	169	312764	25.18	ppm		95
72) 1,2-Diphenylhydrazine	9.222	77	320389	25.05	ppm		98
74) 4-Bromophenyl-phenylether	9.815	248	141213	26.89	ppm		98
75) Hexachlorobenzene	9.890	284	167722	26.69	ppm		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153371.D
Acq On : 12 Apr 2019 3:37 am
Operator : chriss2
Sample : cc6551-25
Misc : op17006,em6555,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 12 10:59:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

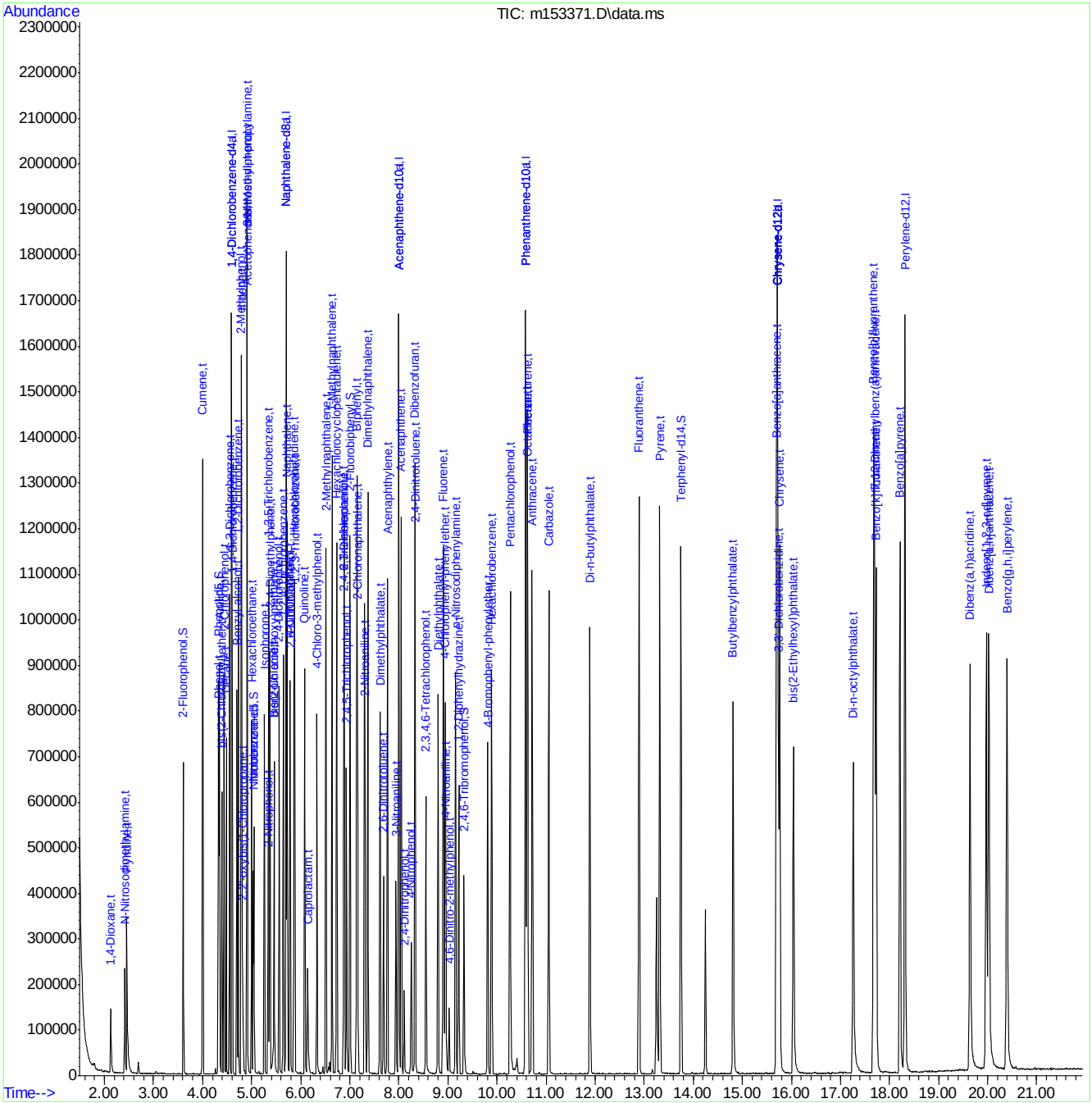
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) Pentachlorophenol	10.269	266	184483	51.00	ppm	99
77) Phenanthrene	10.627	178	586992	26.96	ppm	99
78) Anthracene	10.717	178	623674	26.78	ppm	99
79) Carbazole	11.059	167	638726	26.81	ppm	99
80) Di-n-butylphthalate	11.892	149	789038	27.50	ppm	99
81) Fluoranthene	12.897	202	744387	27.69	ppm	98
82) Octadecane	10.616	57	141605	23.25	ppm	92
84) Pyrene	13.318	202	751426	24.61	ppm	98
86) Butylbenzylphthalate	14.809	149	342413	23.29	ppm	94
87) Benzo[a]anthracene	15.695	228	697320	25.23	ppm	99
88) 3,3'-Dichlorobenzidine	15.733	252	213228	21.67	ppm	100
89) Chrysene	15.765	228	611471	25.46	ppm	100
90) bis(2-Ethylhexyl)phtha...	16.042	149	427221	22.83	ppm	98
92) Di-n-octylphthalate	17.260	149	713195	22.36	ppm	98
93) Benzo[b]fluoranthene	17.677	252	787991	27.14	ppm	98
94) Benzo[k]fluoranthene	17.730	252	680789	26.01	ppm	97
95) Benzo[a]pyrene	18.211	252	691847	27.12	ppm	99
96) Indeno[1,2,3-cd]pyrene	19.973	276	639398	25.14	ppm	95
97) Dibenz(a,h)acridine	19.642	279	662460	26.95	ppm	94
98) Dibenz[a,h]anthracene	20.027	278	684340	26.44	ppm	98
99) 7,12-Dimethylbenz(a)an...	17.698	256	340827	29.25	ppm	98
100) Benzo[g,h,i]perylene	20.395	276	692917	27.03	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153371.D
Acq On : 12 Apr 2019 3:37 am
Operator : chriss2
Sample : cc6551-25
Misc : op17006,em6555,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 12 10:59:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153372.D
Acq On : 12 Apr 2019 4:05 am
Operator : chriss2
Sample : cc6552-25
Misc : op17006,em6555,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 12 11:03:25 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

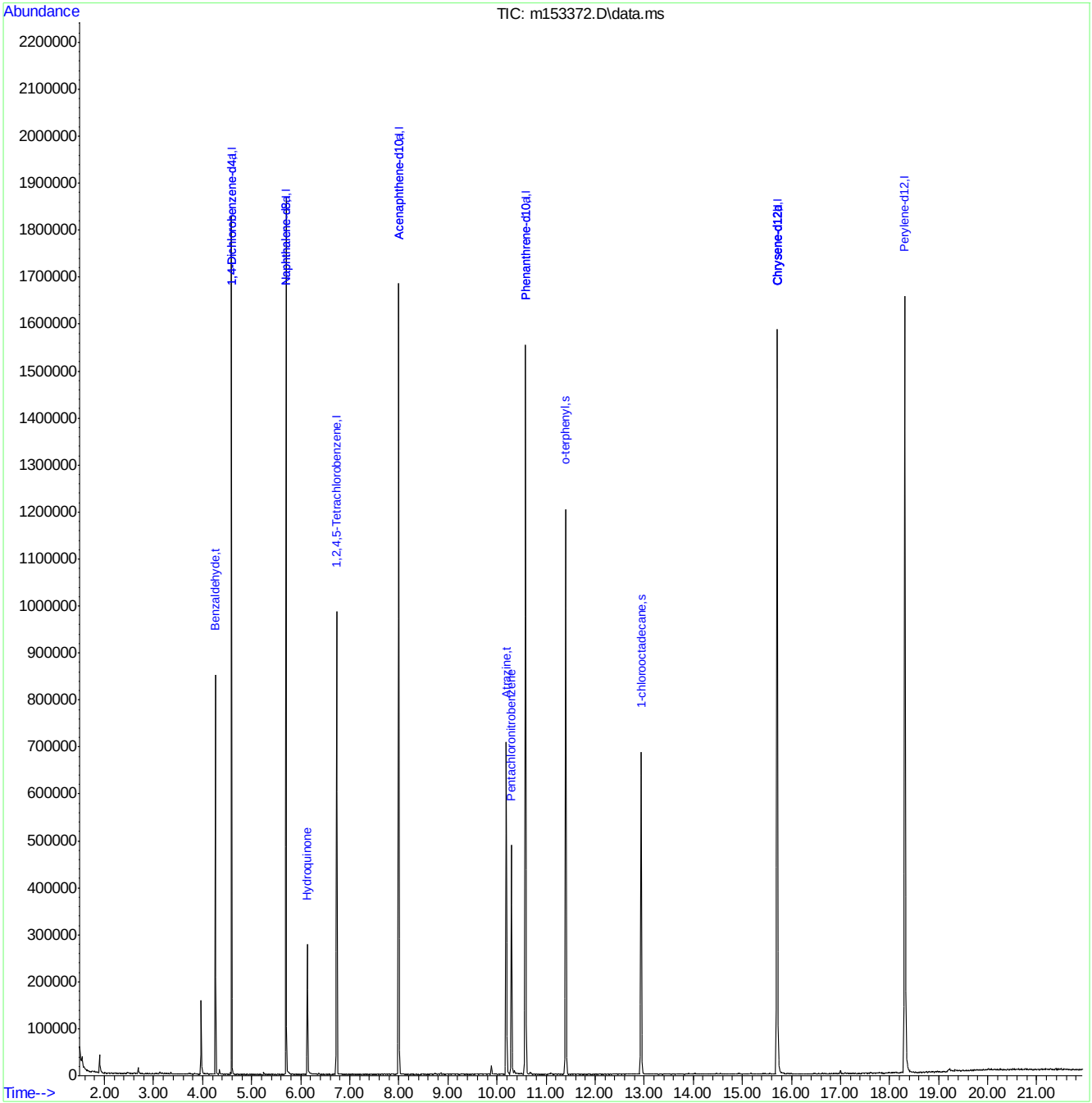
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.591	152	243633	40.00	ppm	-0.02
24) Naphthalene-d8	5.702	136	857586	40.00	ppm	-0.02
47) Acenaphthene-d10	7.998	164	487366	40.00	ppm	-0.03
69) Phenanthrene-d10	10.583	188	837377	40.00	ppm	-0.04
83) Chrysene-d12	15.711	240	787495	40.00	ppm	-0.05
91) Perylene-d12	18.312	264	904360	40.00	ppm	-0.04
101) 1,4-Dichlorobenzene-d4a	4.591	152	243633	40.00	ppm	-0.02
103) Acenaphthene-d10a	7.998	164	487366	40.00	ppm	-0.03
106) Chrysene-d12a	15.711	240	787495	40.00	ppm	-0.03
108) Chrysene-d12b	15.711	240	787495	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.583	188	837377	40.00	ppm	-0.03
113) Naphthalene-d8a	5.702	136	857586	40.00	ppm	-0.02
115) Chrysene-d12c	15.711	240	787495	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	12.939	57	107876	19.73	ppm	-0.03
Spiked Amount 50.000			Recovery =	39.46%		
111) o-terphenyl	11.401	230	331916	27.36	ppm	-0.04
Spiked Amount 50.000			Recovery =	54.72%		
Target Compounds						Qvalue
102) Benzaldehyde	4.265	105	157702	22.29	ppm	92
104) 1,2,4,5-Tetrachloroben...	6.732	216	188726	27.15	ppm	99
105) Atrazine	10.188	215	60366	27.82	ppm	89
112) Pentachloronitrobenzene	10.295	295	19101	20.97	ppm	99
114) Hydroquinone	6.134	110	101986	15.73	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153372.D
Acq On : 12 Apr 2019 4:05 am
Operator : chriss2
Sample : cc6552-25
Misc : op17006,em6555,1000,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 12 11:03:25 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153373.D
Acq On : 12 Apr 2019 4:34 am
Operator : chriss2
Sample : cc6553-25
Misc : op17006,em6555,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 12 11:08:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration

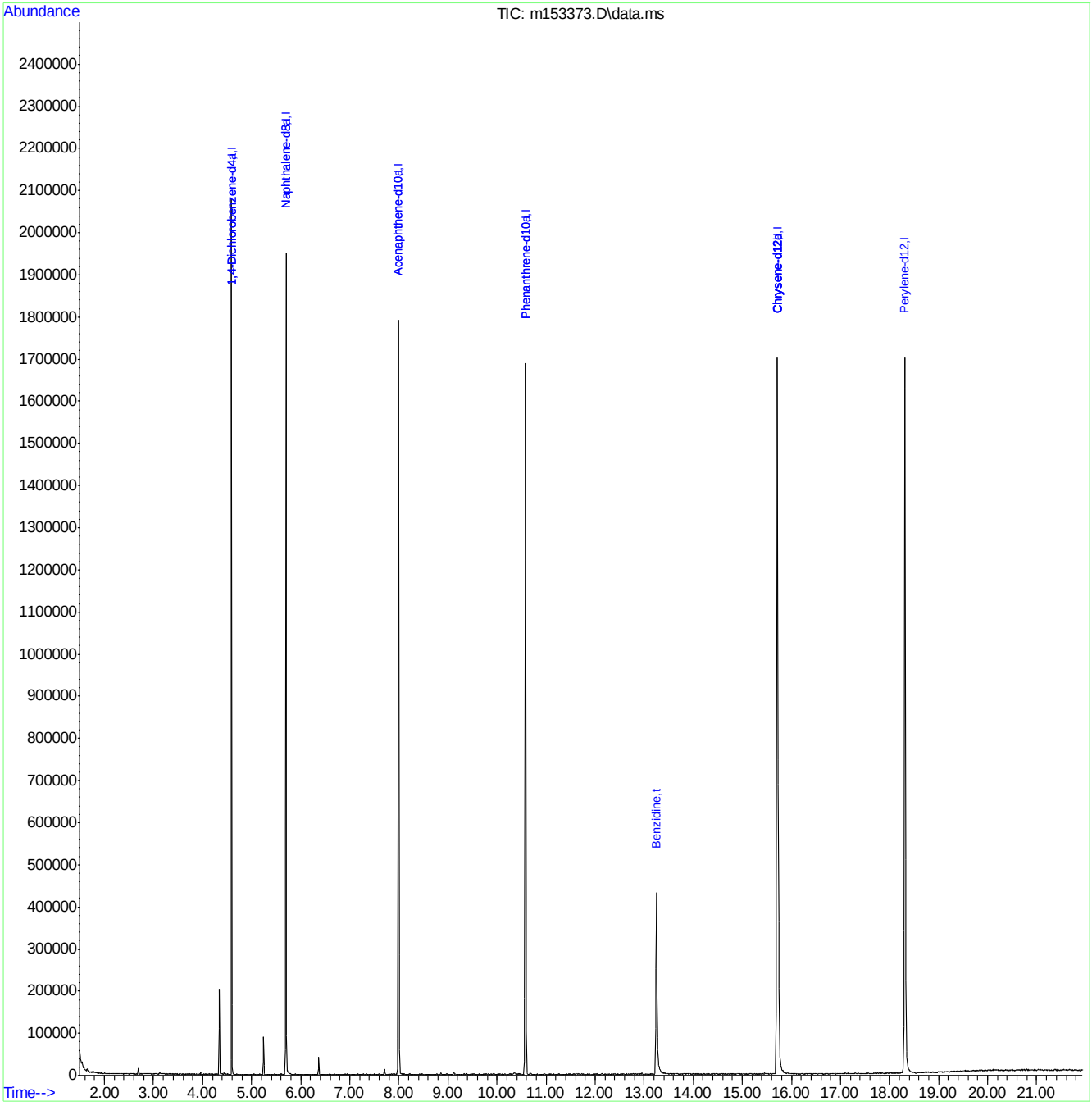
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.591	152	269048	40.00	ppm	-0.02
24) Naphthalene-d8	5.702	136	917198	40.00	ppm	-0.02
47) Acenaphthene-d10	7.993	164	522960	40.00	ppm	-0.04
69) Phenanthrene-d10	10.578	188	931117	40.00	ppm	-0.04
83) Chrysene-d12	15.711	240	846414	40.00	ppm	-0.05
91) Perylene-d12	18.312	264	968002	40.00	ppm	-0.04
101) 1,4-Dichlorobenzene-d4a	4.591	152	269048	40.00	ppm	-0.02
103) Acenaphthene-d10a	7.993	164	522960	40.00	ppm	-0.03
106) Chrysene-d12a	15.711	240	846414	40.00	ppm	-0.03
108) Chrysene-d12b	15.711	240	846414	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.578	188	931117	40.00	ppm	-0.04
113) Naphthalene-d8a	5.702	136	917198	40.00	ppm	-0.02
115) Chrysene-d12c	15.711	240	846414	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
107) Benzidine	13.249	184	324357	18.47	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM6555\
Data File : m153373.D
Acq On : 12 Apr 2019 4:34 am
Operator : chriss2
Sample : cc6553-25
Misc : op17006,em6555,1000,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 12 11:08:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\MM6551.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 11 08:18:08 2019
Response via : Initial Calibration



GCMS Semi Volatile Run Log

Instrument ID: GCMSM

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
DFTPP	sv182535-77	50ppm	ISTD	A0144955	4000ppm
			DCM/fisher	190729	

Column xi5silms30mx.25mmx.25 Initial Calib Date 4/10/2019 Sequence Loaded By: chriss2 Quant Method/s MM6551 ☑ SW846 8270 D

Batch ID ~~MM6551~~ EM6551 4/12/19 Analysis Date 4/10/2019 Data Processed By: Injection Volume 1uL ☑ EPA 625

Approved By: Approved Date

Data File	Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
M 153314	DFTPP				1					OK	3:48am
M 153315	IC6551-100		BNA		2					OK	sv182535-96a
M 153316	IC6551-80				3					OK	sv182535-96b
M 153317	ICC6551-50				4					OK	sv182535-96c
M 153318	IC6551-25				5					OK	sv182535-96d
M 153319	IC6551-10				6					OK	sv182535-96e
M 153320	IC6551-5				7					OK	sv182535-96g
M 153321	IC6551-2				8					OK	sv192573-3c
M 153322	IC6551-1				9					OK	sv192573-3d
M 153323	ICV6551-50		BN1		10					OK	op192336-51

GCMS Semi Volatile Run Log

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
M	153324	ICV6551-50		BN2		11					MG	op192336-72 RR. ~~1 plot~~ 6 @ /99 # high.
M	153325	ICV6551-50		Aniline		12					ok	op192336-39
M	153326	ICV6551-50		Acid		13					ok	op192336-47
M	153327	ICV6551-50		ABN Surr		14					ok	op192336-76
M	153328	ICV6551-50		Bzd 3rd		15					ok	sv182490-113 10:23 a.

GCMS Semi Volatile Run Log

Instrument ID: GCMSM

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
DFTPP	sv182535-77	50ppm	ISTD	A0144955	4000ppm
			DCM/fisher	190729	

Column	i5silms30mx.25mmx.25u	Initial Calib Date	4/10/2019	Sequence Loaded By:	chriss2	Quant Method/s	MM6551
Batch ID	EM6552	Analysis Date	4/10/2019	Data Processed By:	ying li	Injection Volume	1uL
Approved By:	NINAP	Approved Date	12/2019 8:49:56 A				

☑ SW846 8270 D
☑ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
M	153329	DFTPP				1					not using	51 failed; rr
M	153330	DFTPP				1					not using	
M	153331	DFTPP				1					ok	12:16pm
M	153332	IC6552-100		TCL42		16					ok	sv182535-50a
M	153333	IC6552-80				17					ok	sv182535-50b
M	153334	ICC6552-50				18					ok	sv182535-50c
M	153335	IC6552-25				19					ok	sv182535-50d
M	153336	IC6552-10				20					ok	sv182535-50e
M	153337	IC6552-5				21					ok	sv182535-50g
M	153338	IC6552-2				22					ok	sv182535-50h

GCMS Semi Volatile Run Log

Data File		Sample ID	OP Batch ID	Test	MTX	A L S	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
M	153339	IC6552-1				23					ok	sv182535-50i
M	153340	ICV6552-50		AP9 Mix#2		24					ok	sv182490-78
M	153341	ICV6552-50		HQ 2nd		25					ok	sv182490-103c 5:21pm

GCMS Semi Volatile Run Log

Instrument ID: GCMSM

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
DFTPP	sv182535-77	50ppm	ISTD	A0144955	4000ppm
			DCM/fisher	190729	

Column	i5silms30mx.25mmx.25u	Initial Calib Date	4/10/2019	Sequence Loaded By:	chriss2	Quant Method/s	MM6551
Batch ID	EM6553	Analysis Date	4/10/2019	Data Processed By:	ying li	Injection Volume	1uL
Approved By:	NINAP	Approved Date	12/2019 8:51:15 A				

☑ SW846 8270 D
☑ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
M	153342A	DFTPP				1					ok	Instrument idle too long, rerun as "A" file, 11:38pm
M	153343	IC6553-100		Bzd		26					ok	sv182535-70a
M	153344	IC6553-80				27					ok	sv182535-70b
M	153345	ICC6553-50				28					ok	sv182535-70c
M	153346	IC6553-25				29					ok	sv182535-70d
M	153347	IC6553-10				30					ok	sv182535-101
M	153348	IC6553-5				31					ok	sv182535-70g
M	153349	IC6553-2				32					ok	sv182535-70h
M	1533450	IC6553-1				33					ok	sv182535-70i
M	153351	ICV6553-50		Bzd 3rd		34					ok	sv182490-113 3:59am

GCMS Semi Volatile Run Log

Instrument ID: GCMSM

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
DFTPP	sv182535-77	50ppm	ISTD	A0144955	4000ppm
BNA 625.1	sv182535-21a	50ppm	DCM/fisher	190729	
TCL42 625.1	sv182573-2a	50ppm			
BNA ver	sv182535-10l	1ppm			
BNA ver	sv182535-10t	2ppm			

Column	i5silms30mx.25mmx.25u	Initial Calib Date	4/10/2019	Sequence Loaded By:	angelar	Quant Method/s	MM6551
Batch ID	EM6554	Analysis Date	4/11/2019	Data Processed By:	ying li	Injection Volume	1uL
Approved By:	NINAP	Approved Date	12/2019 8:51:29 A				

☐ SW846 8270 D

☐ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
M	153352	DFTPP				1					ok	9:01am
M	153353	ICV6551-50		BN2		2					ok	sv192336-72
M	153354	CC6551-50		bna 625.1		3					ok	
M	153355	CC6552-50		tcl42 625.1		4					ok	
M	153356	BNA 1PPM VER				5					ok	
M	153357	BNA 2PPM VER				6					ok	
	153358	OP19548-MB1	OP19548	AB8270SL1,B8270NJTCL20+	AQ	7		X	y	y	ok	
	153359	JC85515-5	OP19548	B8270NJTCL20+	AQ	8		X	y	y	ok	
	153360	JC85515-3	OP19548	B8270NJTCL20+	AQ	9		X	y	y	ok	
	153361	JC85515-18	OP19548	B8270NJTCL20+	AQ	10		X	y	y	ok	

GCMS Semi Volatile Run Log

	Data File	Sample ID	OP Batch ID	Test	MTX	A L S	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
	153362	JC85515-2	OP19548	B8270NJTCL20+	AQ	11		X	y	y	ok	
M	153363	JC85515-1	OP19548	B8270NJTCL20+	AQ	12		X	y	y	ok	
M	153364	OP19671-MB1	OP19671	B8270PAH	SO	13			y	y	ok	
M	153365	JC86070-14	OP19671	B8270PAH	SO	14	10		y	y	ok	3:19 pm

GCMS Semi Volatile Run Log

Instrument ID: GCMSM

Standard / Reagent	Lot #	Concentration	Standard / Reagent	Lot #	Concentration
DFTPP	sv182535-77	50ppm	ISTD	A0144955	4000ppm
BNA	sv182535-121e	25ppm	DCM/fisher	190729	
TCL42	sv182535-120e	25ppm			
Bzd	sv182535-71e	25ppm			
bna verif	sv182535-10m	2ppm			
bna verif	sv182490-81g	10ppm			

Column	i5silms30mx.25mmx.25u	Initial Calib Date	4/10/2019	Sequence Loaded By:	chriss2	Quant Method/s	MM6551
Batch ID	EM6555	Analysis Date	4/12/2019	Data Processed By:	DP/aimeel	Injection Volume	1uL
Approved By:	KRISTIS	Approved Date	8/2019 10:35:52 A				

☑ SW846 8270 D
☐ EPA 625

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
M	153366	DFTPP				1						12:57am
M	153367	CC6551-25				2						tune shifted, retune
M	153368	CC6552-25				3						
M	153369	CC6553-25				4						ion focus lowered/ repeller raised
M	153370	DFTPP				1					ok	3:22am
M	153371	CC6551-25				2					ok	#29,31,60,70 low
M	153372	CC6552-25				3					ok	#114 low
M	153373	CC6553-25				4					ok	Benzidine low
M	153374	BNAVERIF-2PPM				5					ok	
M	153375	BNA VERIF-10PPM				6					ok	

GCMS Semi Volatile Run Log

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
M	153376	OP19581-MB1	OP19581	AB8270TCL20	WIPE	7			x	x	ok	#90 is above MDL
M	153377	OP19680-MB1	OP19680	AB8270NJTCL20+,AB8270STD,B8270NJTCL20+	AQ	8		X	x	x	ok	Acetophenone is above MDL
M	153378	OP19680-BS1	OP19680	AB8270NJTCL20+,AB8270STD,B8270NJTCL20+	AQ	9		X	x	x	ok	
M	153379	OP19680-BSD	OP19680	AB8270NJTCL20+,AB8270STD,B8270NJTCL20+	AQ	10		X	x	x	ok	
M	153380	JC85417-1	OP19581	AB8270SL	WIPE	11			x	x	ok	#90=B
M	153381	JC85417-2	OP19581	AB8270SL	WIPE	12			x	x	ok	#90=B
M	153382	JC85417-4	OP19581	AB8270SL	WIPE	13			x	x	ok	#90=B
M	153383	JC85417-6	OP19581	AB8270SL	WIPE	14			x	x	ok	#90=B
M	153384	JC85417-8	OP19581	AB8270SL	WIPE	15			x	x	ok	#90=B
M	153385	JC86039-12	OP19680	AB8270NJTCL20+	AQ	16		X	x	x	ok	
M	153386	JC86039-13	OP19680	AB8270NJTCL20+	AQ	17		X	x	x	ok	
M	153387	JC86089-1	OP19680	AB8270STD	AQ	18			x	x	ok	
M	153388	JC86089-2	OP19680	AB8270STD	AQ	19			x	x	ok	
M	153389	JC86052-10	OP19680	AB8270NJTCL20+	AQ	20		X	x	x	ok	
M	153390	JC86052-12	OP19680	AB8270NJTCL20+	AQ	21		X	x	x	ok	
M	153391	JC86060-2	OP19680	B8270TICS+	AQ	22		X	x	x	ok	
M	153392	JC86060-10	OP19680	B8270NJTCL20+	AQ	23		X	x	x	ok	
M	153393	JC86060-2F	OP19680	B8270TICS+	AQ	24		X	x	x	ok	
M	153394	JC86060-8F	OP19680	B8270TICS+	AQ	25		X				

GCMS Semi Volatile Run Log

Data File		Sample ID	OP Batch ID	Test	MTX	ALS	Dil	L+	Surr OK?	IS OK?	Data OK?	Comment
M	153395	JC86060-8	OP19680	B8270TICS+	AQ	26		X				
M	153396	ABN SURR 50PPM				27						op192336-93; ran after 153385

[redacted]

SGS Dayton, NJ

DEPARTMENT WORKLIST PRODUCT SUMMARY (wk01p)

LOGBOOK ID:

ABN Aqueous Extraction Logbook

Date Started: 4/1/19 Time Started: 6:00
Date Finished: 4.11.19 Time Finished: 12:41

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other_____ 3510C SIM_____
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # MS 19680	RACK#
Set-up by:	BJ
Extracted by:	MT
Concentrated by:	MT
Final Vol. Top-up:	MT
Vialed by:	MT
Supervisor Review:	BJ 4.11.19

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	S,6	75,75	0,-2		OK
Waterbath Chiller (GPM)	F3		—	—	2
NEVAP (32-38°C, LPM)	4	35	-	-	6

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	19233C90	50	1.0
ABN DOD SIM			
WITNESS SIGN: MT		SPIKE SIGN: BJ	

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	19233635	50	Acid: 1.0
Acid (for SIM)			A(SIM): 0.1
Base #1	19233670	56	1.0
Base #2	19233683	50	1.0
Anilines	19233685	50	1.0
BSIM	19233674	1	1.0
WITNESS SIGN: MT		SPIKE SIGN: BJ	

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	191109	Fisher	60X6

REAGENT	LOT #	BATCH #	BRAND
NaOH	186398		Fisher
H2SO4	28106B2		Ricca
Sodium Sulfate	183473	4.4.19	Fisher
Glass Wool	11T08		Lab
Filter Paper			
pH strips	217518		Hydrion

Special Client Spike Instructions					
QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

SPECIAL PROCESSING INSTRUCTIONS
Rx Reason:
Spiking:
Weights/Volumes:
Required MS/MSD:
Final Volume: due 4/16 HT 4/15
Other:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) <2 H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
	MB1	abn		DIH2O	1000	1.0	4.0	Clear	1.0		
	BS1				1000	1.0	4.0	Yellow	1.0		
	BSD ~~MS~~				1000	1.0	4.0	Yellow	1.0		
	MSD										
	BS12	sim		DIH2O	1000	1.0	4.0	LT-Yellow	1.0		
	BSD12 ~~MS~~				1000	1.0	4.0	LT-Yellow	1.0		
	MSD										
	BS										
	MS										
	MSD										
1	JC86039-12	abn	1	Clear	1050	1.0	4.0	Clear	1.0		
2	-13		1	LtYellow	1050	1.0	4.0	LT-Yellow	1.0		
3	JC86089-1		3	Clear	1000	1.0	4.0	LT-Yellow	1.0		
4	-2		2	LtYellow	1020	1.0	4.0	LT-Yellow	1.0		
5	JC86052-10		1	YCllow	1000	1.0	4.0	Yellow	1.0		
6	-12		2	Yellow	900	1.0	4.0	Yellow	1.0		
7	JC86060-2		1	Yellow	1050	1.0	4.0	Yellow	1.0		
8	-8		2	DkYellow	1050	1.0	4.0	DK-Yellow	1.0		
9	-10		2	Clear	1050	1.0	4.0	Clear	1.0		
10	-2F		4	Yellow	1050	1.0	4.0	Yellow	1.0		•
11	-8F		4	Yellow	1050	1.0	4.0	Yellow	1.0		•
12											
13											
14											
15											
16											
17											
18											
19											
20											

Comments: • lab filter
QC Samples (MS, MSD, LINK and/or DUP, Link) Confirmed by:

SGS
Form: OP022A-12
Rev Date: 8/2/17

73

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19691-MB1	2G178321.D	1	04/11/19	TR	04/11/19	OP19691	G2G4629

The QC reported here applies to the following samples: **Method:** SW846 8082A

JC86089-1, JC86089-2

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.098	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.21	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.063	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.21	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.076	ug/l	
11100-14-4	Aroclor 1268	ND	0.25	0.087	ug/l	
37324-23-5	Aroclor 1262	ND	0.25	0.097	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	100%	11-166%
877-09-8	Tetrachloro-m-xylene	100%	11-166%
2051-24-3	Decachlorobiphenyl	66%	10-150%
2051-24-3	Decachlorobiphenyl	72%	10-150%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19691-BS1	2G178322.D	1	04/11/19	TR	04/11/19	OP19691	G2G4629
OP19691-BSD	2G178323.D	1	04/11/19	TR	04/11/19	OP19691	G2G4629

The QC reported here applies to the following samples: **Method:** SW846 8082A

JC86089-1, JC86089-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	2	2.1	105	2.0	100	5	37-164/43
11104-28-2	Aroclor 1221		ND		ND		nc	70-130/20
11141-16-5	Aroclor 1232		ND		ND		nc	70-130/20
53469-21-9	Aroclor 1242		ND		ND		nc	70-130/20
12672-29-6	Aroclor 1248		ND		ND		nc	70-130/20
11097-69-1	Aroclor 1254		ND		ND		nc	70-130/20
11096-82-5	Aroclor 1260	2	1.9	95 [a]	1.8	90 [a]	5 [a]	36-155/46
11100-14-4	Aroclor 1268		ND		ND		nc	-/20
37324-23-5	Aroclor 1262		ND		ND		nc	-/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	97%	90%	11-166%
877-09-8	Tetrachloro-m-xylene	96%	88%	11-166%
2051-24-3	Decachlorobiphenyl	60%	59%	10-150%
2051-24-3	Decachlorobiphenyl	64%	63%	10-150%

(a) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

* = Outside of Control Limits.

GC Identification Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Check Std:	G2G4629-CC4614	**Injection Date:**	04/11/19
Lab File ID:	2G178319.D	**Injection Time:**	22:40
Instrument ID:	GC2G	**Method:**	SW846 8082A

Sample ID:	OP19691-BS1	**Injection Date:**	04/11/19
Lab File ID:	2G178322.D	**Injection Time:**	23:31
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1			2.2		ug/l	4.7
Aroclor 1016	2 [a]			2.1		ug/l	
AR1016-A	1	3.46	3.46	2.6		ug/l	
AR1016-A	2	4.11	4.12	2.7		ug/l	
AR1016-B	1	3.87	3.87	2.1		ug/l	
AR1016-B	2	4.66	4.66	2.0		ug/l	
AR1016-C	1	4.44	4.44	1.9		ug/l	
AR1016-C	2	5.28	5.27	2.0		ug/l	
AR1016-D	1	4.61	4.61	2.5		ug/l	
AR1016-D	2	5.46	5.46	1.8		ug/l	
AR1016-E	1	5.13	5.13	2.0		ug/l	
AR1016-E	2	6.11	6.11	2.0		ug/l	
Aroclor 1260	1			1.5		ug/l	23.5
Aroclor 1260 [b]	2 [a]			1.9		ug/l	
AR1260-A	1	7.53	7.53	1.7		ug/l	
AR1260-A	2	8.69	8.69	1.8		ug/l	
AR1260-B	1	7.68	7.68	1.3		ug/l	
AR1260-B	2	8.81	8.81	1.9		ug/l	
AR1260-C	1	8.02	8.03	1.6		ug/l	
AR1260-C	2	9.24	9.24	1.9		ug/l	
AR1260-D	1	8.45	8.46	1.5		ug/l	
AR1260-D	2	9.59	9.59	1.9		ug/l	
AR1260-E	1	8.85	8.86	1.5		ug/l	
AR1260-E	2	10.13	10.13	1.8		ug/l	

(a) QC results reported from this column.
(b) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

GC Identification Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Check Std:	G2G4629-CC4614	**Injection Date:**	04/11/19
Lab File ID:	2G178319.D	**Injection Time:**	22:40
Instrument ID:	GC2G	**Method:**	SW846 8082A

Sample ID:	OP19691-BSD	**Injection Date:**	04/11/19
Lab File ID:	2G178323.D	**Injection Time:**	23:48
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1			2.1		ug/l	4.9
Aroclor 1016	2 [a]			2.0		ug/l	
AR1016-A	1	3.47	3.46	2.9		ug/l	
AR1016-A	2	4.11	4.12	3.0		ug/l	
AR1016-B	1	3.87	3.87	2.0		ug/l	
AR1016-B	2	4.66	4.66	1.8		ug/l	
AR1016-C	1	4.44	4.44	1.8		ug/l	
AR1016-C	2	5.27	5.27	1.9		ug/l	
AR1016-D	1	4.61	4.61	2.0		ug/l	
AR1016-D	2	5.46	5.46	1.7		ug/l	
AR1016-E	1	5.13	5.13	1.9		ug/l	
AR1016-E	2	6.11	6.11	1.9		ug/l	
Aroclor 1260	1			1.5		ug/l	18.2
Aroclor 1260 [b]	2 [a]			1.8		ug/l	
AR1260-A	1	7.53	7.53	1.6		ug/l	
AR1260-A	2	8.69	8.69	1.8		ug/l	
AR1260-B	1	7.68	7.68	1.3		ug/l	
AR1260-B	2	8.81	8.81	1.9		ug/l	
AR1260-C	1	8.02	8.03	1.6		ug/l	
AR1260-C	2	9.24	9.24	1.9		ug/l	
AR1260-D	1	8.46	8.46	1.4		ug/l	
AR1260-D	2	9.59	9.59	1.9		ug/l	
AR1260-E	1	8.85	8.86	1.5		ug/l	
AR1260-E	2	10.13	10.13	1.8		ug/l	

(a) QC results reported from this column.
(b) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

Surrogate Recovery Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Method: SW846 8082A **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JC86089-1	2G178324.D	135	87	63	68
JC86089-2	2G178325.D	117	81	51	54
OP19691-BS1	2G178322.D	97	96	60	64
OP19691-BSD	2G178323.D	90	88	59	63
OP19691-MB1	2G178321.D	100	100	66	72

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	11-166%
S2 = Decachlorobiphenyl	10-150%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Check Std:	G2G4629-CC4614	**Injection Date:**	04/11/19
Lab File ID:	2G178319.D	**Injection Time:**	22:40
Instrument ID:	GC2G	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	3.06	3.48	10.40	11.79

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP19691-MB1	2G178321.D	04/11/19	23:14	3.06	3.48	10.39	11.79
OP19691-BS1	2G178322.D	04/11/19	23:31	3.06	3.48	10.39	11.79
OP19691-BSD	2G178323.D	04/11/19	23:48	3.06	3.48	10.39	11.79
JC86089-1	2G178324.D	04/12/19	00:05	3.06	3.48	10.39	11.79
JC86089-2	2G178325.D	04/12/19	00:22	3.06	3.48	10.39	11.78
ZZZZZZ	2G178326.D	04/12/19	00:38	3.06	3.48	10.39	11.79
ZZZZZZ	2G178327.D	04/12/19	00:55	3.06	3.48	10.39	11.79
ZZZZZZ	2G178328.D	04/12/19	01:12	3.06	3.48	10.39	11.79

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICC4614
Lab FileID: 2G177657.D

Response Factor Report HP G1530A

Method Path : C:\MSDCHEM\1\METHODS\
Method File : 2PCB4614.M
Title :
Last Update : Thu Mar 28 08:51:31 2019
Response Via : Initial Calibration

Calibration Files
50 =2G177654a.D 250 =2G177655.D 500 =2G177656.D
1000 =2G177657.D 2000 =2G177658.D 3000 =2G177659.D

	Compound	50	250	500	1000	2000	3000	Avg		%RSD
1) S	Tetrachloro-m...	4.221	4.079	4.172	4.254	4.400	4.472	4.266	E6	3.42
2)	AR1221-A				2.536			2.536	E4	0.00
3)	AR1221-B				5.069			5.069	E4	0.00
4)	AR1221-C				1.603			1.603	E5	0.00
5)	AR1221-D				1.706			1.706	E4	0.00
6)	AR1221-E				1.572			1.572	E4	0.00
7)	AR1232-A				1.259			1.259	E5	0.00
8)	AR1232-B				8.568			8.568	E4	0.00
9)	AR1232-C				1.917			1.917	E5	0.00
10)	AR1232-D				7.077			7.077	E4	0.00
11)	AR1232-E				6.705			6.705	E4	0.00
12)	AR1242-A				1.351			1.351	E5	0.00
13)	AR1242-B				3.203			3.203	E5	0.00
14)	AR1242-C				1.184			1.184	E5	0.00
15)	AR1242-D				1.244			1.244	E5	0.00
16)	AR1242-E				1.153			1.153	E5	0.00
17)	AR1248-A				7.148			7.148	E4	0.00
18)	AR1248-B				2.197			2.197	E5	0.00
19)	AR1248-C				2.078			2.078	E5	0.00
20)	AR1248-D				1.998			1.998	E5	0.00
21)	AR1248-E				1.059			1.059	E5	0.00
22)	AR1248-F				1.967			1.967	E5	0.00
23)	AR1248-G				1.751			1.751	E5	0.00
24)	AR1254-A				1.621			1.621	E5	0.00
25)	AR1254-B				3.478			3.478	E5	0.00
26)	AR1254-C				1.777			1.777	E5	0.00
27)	AR1254-D				3.204			3.204	E5	0.00
28)	AR1254-E				2.940			2.940	E5	0.00
29)	AR1254-F				2.722			2.722	E5	0.00
30)	AR1254-G				3.682			3.682	E5	0.00
31)	AR1016-A	1.030	0.901	0.887	0.877	0.862	0.850	0.901	E5	7.28
32)	AR1016-B	1.844	1.693	1.683	1.646	1.615	1.600	1.680	E5	5.25
33)	AR1016-C	4.167	3.947	3.993	3.977	4.037	4.081	4.034	E5	1.99
34)	AR1016-D	1.591	1.480	1.484	1.463	1.460	1.469	1.491	E5	3.34
35)	AR1016-E	1.706	1.501	1.511	1.498	1.516	1.529	1.544	E5	5.19
36)	AR1260-A	4.097	4.116	4.268	4.407	4.606	4.737	4.372	E5	5.97
37)	AR1260-B	2.739	2.831	2.953	3.078	3.226	3.311	3.023	E5	7.39
38)	AR1260-C	2.452	2.497	2.580	2.668	2.768	2.851	2.636	E5	5.90
39)	AR1260-D	6.740	6.959	7.350	7.683	8.012	8.173	7.486	E5	7.65
40)	AR1260-E	6.181	6.135	6.376	6.582	6.927	7.171	6.562	E5	6.34
41)	AR1262-A				3.421			3.421	E5	0.00
42)	AR1262-B				5.018			5.018	E5	0.00
43)	AR1262-C				3.679			3.679	E5	0.00
44)	AR1262-D				9.652			9.652	E5	0.00
45)	AR1262-E				9.413			9.413	E5	0.00
46)	AR1268-A				1.070			1.070	E6	0.00

Initial Calibration Summary

Job Number: JC86089 **Sample:** G2G4614-ICC4614
Account: TCMAW Tantara Corporation **Lab FileID:** 2G177657.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

47)		AR1268-B				1.004			1.004 E6	0.00
48)		AR1268-C				8.259			8.259 E5	0.00
49)		AR1268-D				3.151			3.151 E5	0.00
50)		AR1268-E				2.462			2.462 E6	0.00
51)	S	Decachlorobip...	4.294	4.338	4.430	4.540	4.778	4.938	4.553 E6	5.62

Signal #2 Calibration Files

50	=2G177654a.D	250	=2G177655.D	500	=2G177656.D
1000	=2G177657.D	2000	=2G177658.D	3000	=2G177659.D

		Compound	50	250	500	1000	2000	3000	Avg	%RSD
1)	S	Tetrachloro-m...	3.067	2.995	3.051	3.069	3.129	3.171	3.080 E7	2.00
2)		AR1221-A				1.810			1.810 E5	0.00
3)		AR1221-B				3.567			3.567 E5	0.00
4)		AR1221-C				8.649			8.649 E5	0.00
5)		AR1221-D				1.778			1.778 E5	0.00
6)		AR1221-E				1.049			1.049 E5	0.00
7)		AR1232-A				7.126			7.126 E5	0.00
8)		AR1232-B				5.832			5.832 E5	0.00
9)		AR1232-C				1.242			1.242 E6	0.00
10)		AR1232-D				5.066			5.066 E5	0.00
11)		AR1232-E				3.478			3.478 E5	0.00
12)		AR1242-A				9.541			9.541 E5	0.00
13)		AR1242-B				2.051			2.051 E6	0.00
14)		AR1242-C				8.238			8.238 E5	0.00
15)		AR1242-D				6.367			6.367 E5	0.00
16)		AR1242-E				8.046			8.046 E5	0.00
17)		AR1248-A				5.115			5.115 E5	0.00
18)		AR1248-B				1.370			1.370 E6	0.00
19)		AR1248-C				7.834			7.834 E5	0.00
20)		AR1248-D				1.039			1.039 E6	0.00
21)		AR1248-E				1.158			1.158 E6	0.00
22)		AR1248-F				1.432			1.432 E6	0.00
23)		AR1248-G				1.332			1.332 E6	0.00
24)		AR1254-A				1.257			1.257 E6	0.00
25)		AR1254-B				1.376			1.376 E6	0.00
26)		AR1254-C				1.131			1.131 E6	0.00
27)		AR1254-D				2.407			2.407 E6	0.00
28)		AR1254-E				1.580			1.580 E6	0.00
29)		AR1254-F				1.794			1.794 E6	0.00
30)		AR1254-G				2.144			2.144 E6	0.00
31)		AR1016-A	6.058	5.575	5.376	5.225	4.961	4.823	5.337 E5	8.37
32)		AR1016-B	1.346	1.256	1.207	1.142	1.094	1.060	1.184 E6	9.03
33)		AR1016-C	2.902	2.639	2.616	2.549	2.508	2.460	2.612 E6	5.99
34)		AR1016-D	1.219	1.071	1.050	1.013	0.991	0.969	1.052 E6	8.53
35)		AR1016-E	8.292	7.853	7.801	7.621	7.658	7.602	7.804 E5	3.32
36)		AR1260-A	2.447	2.403	2.412	2.409	2.431	2.437	2.423 E6	0.73
37)		AR1260-B	1.370	1.328	1.327	1.311	1.314	1.314	1.327 E6	1.68
38)		AR1260-C	1.632	1.523	1.533	1.524	1.535	1.539	1.548 E6	2.69
39)		AR1260-D	3.396	3.257	3.313	3.327	3.368	3.377	3.339 E6	1.53
40)		AR1260-E	3.416	3.260	3.276	3.258	3.307	3.332	3.308 E6	1.82
41)		AR1262-A				1.462			1.462 E6	0.00
42)		AR1262-B				2.042			2.042 E6	0.00
43)		AR1262-C				1.960			1.960 E6	0.00
44)		AR1262-D				4.035			4.035 E6	0.00
45)		AR1262-E				4.490			4.490 E6	0.00
46)		AR1268-A				4.577			4.577 E6	0.00
47)		AR1268-B				4.541			4.541 E6	0.00
48)		AR1268-C				3.693			3.693 E6	0.00

Initial Calibration Summary

Job Number: JC86089 **Sample:** G2G4614-ICC4614
Account: TCMAW Tantara Corporation **Lab FileID:** 2G177657.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

49)		AR1268-D						1.570		1.570 E6	0.00
50)		AR1268-E						1.186		1.186 E7	0.00
51)	S	Decachlorobip...	2.843	2.588	2.560	2.503	2.503	2.497	2.582 E7	5.14

(#) = Out of Range

2PCB4614.M Thu Mar 28 09:41:55 2019 RPT1

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177664.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G4614\2G177664.D\ECD1A.CH Vial: 13
Signal #2 : C:\msdchem\1\DATA\2G4614\2G177664.D\ECD2B.CH
Acq On : 27 Mar 2019 7:02 pm Operator: tianweir
Sample : icv4614-1000 Inst : HP G1530A
Misc : op19329,G2G4614,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\2PCB4614.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 28 08:51:31 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	4.266	3.947 E6	7.5	93	0.02	3.05- 3.11
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A	90.118	88.358 E3	2.0	101	0.01	3.44- 3.50
32	AR1016-B	168.006	160.198 E3	4.6	97	0.01	3.86- 3.92
33	AR1016-C	403.365	380.689 E3	5.6	96	0.00	4.42- 4.48
34	AR1016-D	149.135	143.831 E3	3.6	98	0.00	4.59- 4.65
35	AR1016-E	154.359	146.885 E3	4.8	98	0.00	5.11- 5.17
36	AR1260-A	437.183	450.745 E3	-3.1	102	0.00	7.50- 7.56
37	AR1260-B	302.300	326.084 E3	-7.9	106	0.00	7.66- 7.72
38	AR1260-C	263.621	280.908 E3	-6.6	105	0.00	8.00- 8.06
39	AR1260-D	748.626	811.503 E3	-8.4	106	0.00	8.43- 8.49
40	AR1260-E	656.190	662.945 E3	-1.0	101	0.00	8.78- 8.94
41	AR1262-A		----------NA----------				

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177664.D

42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A			----------NA----------				
47		AR1268-B			----------NA----------				
48		AR1268-C			----------NA----------				
49		AR1268-D			----------NA----------				
50		AR1268-E			----------NA----------				
51	S	Decachlorobiphenyl	4.553	5.018 E6	-10.2	111	0.00	10.37-10.43	
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	30.803	27.100 E6	12.0	88	0.01	3.47- 3.53	
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A			----------NA----------				
13		AR1242-B			----------NA----------				
14		AR1242-C			----------NA----------				
15		AR1242-D			----------NA----------				
16		AR1242-E			----------NA----------				
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1016-A	533.651	535.712 E3	-0.4	103	0.01	4.10- 4.16	
32		AR1016-B	1.184	1.051 E6	11.2	92	0.00	4.64- 4.70	
33		AR1016-C	2.612	2.406 E6	7.9	94	0.00	5.26- 5.32	
34		AR1016-D	1.052	0.894 E6	15.0	88	0.00	5.44- 5.50	
35		AR1016-E	780.435	743.016 E3	4.8	97	0.00	6.09- 6.15	
36		AR1260-A	2.423	2.346 E6	3.2	97	0.00	8.67- 8.73	
37		AR1260-B	1.327	1.320 E6	0.5	101	0.00	8.79- 8.85	
38		AR1260-C	1.548	1.539 E6	0.6	101	0.00	9.22- 9.28	
39		AR1260-D	3.339	3.417 E6	-2.3	103	0.00	9.56- 9.62	
40		AR1260-E	3.308	3.196 E6	3.4	98	0.00	10.11-10.17	
41		AR1262-A			----------NA----------				
42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A			----------NA----------				
47		AR1268-B			----------NA----------				

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177664.D

48		AR1268-C				----------NA----------			
49		AR1268-D				----------NA----------			
50		AR1268-E				----------NA----------			
51	S	Decachlorobiphenyl	25.822	26.015	E6	-0.7	104	0.00	11.77-11.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2G177657.D 2PCB4614.M Thu Mar 28 09:41:16 2019 RPT1

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY
Sample: G2G4614-ICV4614
Lab FileID: 2G177665.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G4614\2G177665.D\ECD1A.CH Vial: 14
Signal #2 : C:\msdchem\1\DATA\2G4614\2G177665.D\ECD2B.CH
Acq On : 27 Mar 2019 7:19 pm Operator: tianweir
Sample : icv4614-1000 Inst : HP G1530A
Misc : op19329,G2G4614,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\2PCB4614.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 28 08:51:31 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	4.266	6.252 E6	-46.6#	147	0.00	3.03- 3.09
2	AR1221-A	25.362	28.035 E3	-10.5	111	0.00	2.43- 2.63
3	AR1221-B	50.690	48.351 E3	4.6	95	0.00	3.15- 3.35
4	AR1221-C	160.347	149.593 E3	6.7	93	0.00	3.35- 3.55
5	AR1221-D	17.061	13.768 E3	19.3	81	0.00	3.78- 3.98
6	AR1221-E	15.722	16.945 E3	-7.8	108	0.00	3.94- 4.14
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A	162.140	167.666 E3	-3.4	103	0.00	5.14- 6.14
25	AR1254-B	347.782	358.228 E3	-3.0	103	0.00	5.88- 6.08
26	AR1254-C	177.691	182.878 E3	-2.9	103	0.00	6.25- 6.45
27	AR1254-D	320.364	329.463 E3	-2.8	103	0.00	6.41- 6.61
28	AR1254-E	293.997	304.592 E3	-3.6	104	0.00	6.80- 7.00
29	AR1254-F	272.194	283.608 E3	-4.2	104	0.00	7.05- 7.25
30	AR1254-G	368.178	380.929 E3	-3.5	103	0.00	7.43- 7.63
31	AR1016-A		----------NA----------				
32	AR1016-B		----------NA----------				
33	AR1016-C		----------NA----------				
34	AR1016-D		----------NA----------				
35	AR1016-E		----------NA----------				
36	AR1260-A		----------NA----------				
37	AR1260-B		----------NA----------				
38	AR1260-C		----------NA----------				
39	AR1260-D		----------NA----------				
40	AR1260-E		----------NA----------				
41	AR1262-A		----------NA----------				

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177665.D

42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A			----------NA----------				
47		AR1268-B			----------NA----------				
48		AR1268-C			----------NA----------				
49		AR1268-D			----------NA----------				
50		AR1268-E			----------NA----------				
51	S	Decachlorobiphenyl	4.553	6.959 E6	-52.8#	153#	0.00	10.37-10.43	
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	30.803	42.555 E6	-38.2#	139	0.00	3.45- 3.51	
2		AR1221-A	180.996	182.914 E3	-1.1	101	0.00	2.84- 3.04	
3		AR1221-B	356.654	328.971 E3	7.8	92	0.00	3.75- 3.95	
4		AR1221-C	864.891	795.217 E3	8.1	92	0.00	4.02- 4.22	
5		AR1221-D	177.761	149.972 E3	15.6	84	0.00	4.56- 4.76	
6		AR1221-E	104.915	125.214 E3	-19.3	119	0.00	4.64- 4.84	
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A			----------NA----------				
13		AR1242-B			----------NA----------				
14		AR1242-C			----------NA----------				
15		AR1242-D			----------NA----------				
16		AR1242-E			----------NA----------				
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A	1.257	1.270 E6	-1.0	101	0.00	6.21- 7.21	
25		AR1254-B	1.376	1.397 E6	-1.5	102	0.00	6.86- 7.06	
26		AR1254-C	1.131	1.148 E6	-1.5	102	0.00	7.36- 7.56	
27		AR1254-D	2.407	2.442 E6	-1.5	101	0.00	7.52- 7.72	
28		AR1254-E	1.580	1.606 E6	-1.6	102	0.00	7.83- 8.03	
29		AR1254-F	1.794	1.812 E6	-1.0	101	0.00	8.34- 8.54	
30		AR1254-G	2.144	2.175 E6	-1.4	101	0.00	8.60- 8.80	
31		AR1016-A			----------NA----------				
32		AR1016-B			----------NA----------				
33		AR1016-C			----------NA----------				
34		AR1016-D			----------NA----------				
35		AR1016-E			----------NA----------				
36		AR1260-A			----------NA----------				
37		AR1260-B			----------NA----------				
38		AR1260-C			----------NA----------				
39		AR1260-D			----------NA----------				
40		AR1260-E			----------NA----------				
41		AR1262-A			----------NA----------				
42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A			----------NA----------				
47		AR1268-B			----------NA----------				

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177665.D

48		AR1268-C			----------NA----------			
49		AR1268-D			----------NA----------			
50		AR1268-E			----------NA----------			
51	S	Decachlorobiphenyl	25.822	36.677 E6	-42.0#	147	0.00	11.77-11.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2G177657.D 2PCB4614.M Thu Mar 28 09:41:24 2019 RPT1

10.6.3 10

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177666.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G4614\2G177666.D\ECD1A.CH Vial: 15
Signal #2 : C:\msdchem\1\DATA\2G4614\2G177666.D\ECD2B.CH
Acq On : 27 Mar 2019 7:36 pm Operator: tianweir
Sample : icv4614-1000 Inst : HP G1530A
Misc : op19329,G2G4614,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\2PCB4614.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 28 08:51:31 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	4.266	6.369 E6	-49.3#	150	0.00	3.03- 3.09
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A	125.925	120.679 E3	4.2	96	0.00	3.35- 3.55
8	AR1232-B	85.676	83.341 E3	2.7	97	0.00	3.78- 3.98
9	AR1232-C	191.746	185.239 E3	3.4	97	0.00	4.35- 4.55
10	AR1232-D	70.767	69.089 E3	2.4	98	0.00	4.51- 4.71
11	AR1232-E	67.045	65.202 E3	2.7	97	0.00	5.04- 5.24
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A		----------NA----------				
32	AR1016-B		----------NA----------				
33	AR1016-C		----------NA----------				
34	AR1016-D		----------NA----------				
35	AR1016-E		----------NA----------				
36	AR1260-A		----------NA----------				
37	AR1260-B		----------NA----------				
38	AR1260-C		----------NA----------				
39	AR1260-D		----------NA----------				
40	AR1260-E		----------NA----------				
41	AR1262-A	342.050	359.746 E3	-5.2	105	0.00	7.04- 7.24

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177666.D

42		AR1262-B	501.758	528.575	E3	-5.3	105	0.00	7.59- 7.79
43		AR1262-C	367.918	386.946	E3	-5.2	105	0.00	7.93- 8.13
44		AR1262-D	965.208	1015.620	E3	-5.2	105	0.00	8.36- 8.56
45		AR1262-E	941.327	999.856	E3	-6.2	106	0.00	8.81- 9.01
46		AR1268-A	----------NA----------						
47		AR1268-B	----------NA----------						
48		AR1268-C	----------NA----------						
49		AR1268-D	----------NA----------						
50		AR1268-E	----------NA----------						
51	S	Decachlorobiphenyl	4.553	7.317	E6	-60.7#	161#	0.00	10.37-10.43

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	30.803	43.878	E6	-42.4#	143	0.00	3.45- 3.51
2		AR1221-A	----------NA----------						
3		AR1221-B	----------NA----------						
4		AR1221-C	----------NA----------						
5		AR1221-D	----------NA----------						
6		AR1221-E	----------NA----------						
7		AR1232-A	712.613	679.432	E3	4.7	95	0.00	4.02- 4.22
8		AR1232-B	583.174	555.722	E3	4.7	95	0.00	4.57- 4.77
9		AR1232-C	1.242	1.179	E6	5.1	95	0.00	5.18- 5.38
10		AR1232-D	506.552	478.609	E3	5.5	94	0.00	5.37- 5.57
11		AR1232-E	347.789	332.549	E3	4.4	96	0.00	6.02- 6.22
12		AR1242-A	----------NA----------						
13		AR1242-B	----------NA----------						
14		AR1242-C	----------NA----------						
15		AR1242-D	----------NA----------						
16		AR1242-E	----------NA----------						
17		AR1248-A	----------NA----------						
18		AR1248-B	----------NA----------						
19		AR1248-C	----------NA----------						
20		AR1248-D	----------NA----------						
21		AR1248-E	----------NA----------						
22		AR1248-F	----------NA----------						
23		AR1248-G	----------NA----------						
24		AR1254-A	----------NA----------						
25		AR1254-B	----------NA----------						
26		AR1254-C	----------NA----------						
27		AR1254-D	----------NA----------						
28		AR1254-E	----------NA----------						
29		AR1254-F	----------NA----------						
30		AR1254-G	----------NA----------						
31		AR1016-A	----------NA----------						
32		AR1016-B	----------NA----------						
33		AR1016-C	----------NA----------						
34		AR1016-D	----------NA----------						
35		AR1016-E	----------NA----------						
36		AR1260-A	----------NA----------						
37		AR1260-B	----------NA----------						
38		AR1260-C	----------NA----------						
39		AR1260-D	----------NA----------						
40		AR1260-E	----------NA----------						
41		AR1262-A	1.462	1.499	E6	-2.5	103	0.00	8.08- 8.28
42		AR1262-B	2.042	2.098	E6	-2.7	103	0.00	8.72- 8.92
43		AR1262-C	1.960	2.007	E6	-2.4	102	0.00	9.15- 9.35
44		AR1262-D	4.035	4.147	E6	-2.8	103	0.00	9.50- 9.70
45		AR1262-E	4.490	4.643	E6	-3.4	103	0.00	10.01-10.21
46		AR1268-A	----------NA----------						
47		AR1268-B	----------NA----------						

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177666.D

48		AR1268-C			----------NA----------			
49		AR1268-D			----------NA----------			
50		AR1268-E			----------NA----------			
51	S	Decachlorobiphenyl	25.822	38.113 E6	-47.6#	152#	0.00	11.77-11.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2G177657.D 2PCB4614.M Thu Mar 28 09:41:30 2019 RPT1

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177667.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G4614\2G177667.D\ECD1A.CH Vial: 16
Signal #2 : C:\msdchem\1\DATA\2G4614\2G177667.D\ECD2B.CH
Acq On : 27 Mar 2019 7:58 pm Operator: tianweir
Sample : icv4614-1000 Inst : HP G1530A
Misc : op19329,G2G4614,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\2PCB4614.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 28 08:51:31 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	4.266	6.336 E6	-48.5#	149	0.00	3.03- 3.09
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A	135.117	146.537 E3	-8.5	108	0.00	3.78- 3.98
13	AR1242-B	320.275	346.361 E3	-8.1	108	0.00	4.35- 4.55
14	AR1242-C	118.380	128.517 E3	-8.6	109	0.00	4.52- 4.72
15	AR1242-D	124.448	131.976 E3	-6.0	106	0.00	5.04- 5.24
16	AR1242-E	115.257	121.169 E3	-5.1	105	0.00	5.64- 5.84
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A		----------NA----------				
32	AR1016-B		----------NA----------				
33	AR1016-C		----------NA----------				
34	AR1016-D		----------NA----------				
35	AR1016-E		----------NA----------				
36	AR1260-A		----------NA----------				
37	AR1260-B		----------NA----------				
38	AR1260-C		----------NA----------				
39	AR1260-D		----------NA----------				
40	AR1260-E		----------NA----------				
41	AR1262-A		----------NA----------				

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177667.D

42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A	1.070	1.092 E6	-2.1	102	0.00	8.81- 9.01	
47		AR1268-B	1.004	1.022 E6	-1.8	102	0.00	8.87- 9.07	
48		AR1268-C	825.889	845.016 E3	-2.3	102	0.00	9.14- 9.34	
49		AR1268-D	315.115	318.691 E3	-1.1	101	0.00	9.63- 9.83	
50		AR1268-E	2.462	2.517 E6	-2.2	102	0.00	10.04-10.24	
51	S	Decachlorobiphenyl	4.553	19.323 E6	-324.4#	426#	0.00	10.37-10.43	

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	30.803	44.732 E6	-45.2#	146	0.00	3.45- 3.51	
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A	954.126	1017.621 E3	-6.7	107	0.00	4.56- 4.76	
13		AR1242-B	2.051	2.187 E6	-6.6	107	0.00	5.18- 5.38	
14		AR1242-C	823.761	884.437 E3	-7.4	107	0.00	5.37- 5.57	
15		AR1242-D	636.679	669.668 E3	-5.2	105	0.00	6.02- 6.22	
16		AR1242-E	804.570	833.518 E3	-3.6	104	0.00	6.61- 6.81	
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1016-A			----------NA----------				
32		AR1016-B			----------NA----------				
33		AR1016-C			----------NA----------				
34		AR1016-D			----------NA----------				
35		AR1016-E			----------NA----------				
36		AR1260-A			----------NA----------				
37		AR1260-B			----------NA----------				
38		AR1260-C			----------NA----------				
39		AR1260-D			----------NA----------				
40		AR1260-E			----------NA----------				
41		AR1262-A			----------NA----------				
42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A	4.577	4.594 E6	-0.4	100	0.00	10.01-10.21	
47		AR1268-B	4.541	4.541 E6	0.0	100	0.00	10.08-10.28	

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177667.D

48		AR1268-C	3.693	3.702	E6	-0.2	100	0.00	10.45-10.65
49		AR1268-D	1.570	1.571	E6	-0.1	100	0.00	10.85-11.05
50		AR1268-E	11.860	11.892	E6	-0.3	100	0.00	11.32-11.52
51	S	Decachlorobiphenyl	25.822	94.420	E6	-265.7#	377#	0.00	11.77-11.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2G177657.D 2PCB4614.M Thu Mar 28 09:41:40 2019 RPT1

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177668.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G4614\2G177668.D\ECD1A.CH Vial: 17
Signal #2 : C:\msdchem\1\DATA\2G4614\2G177668.D\ECD2B.CH
Acq On : 27 Mar 2019 8:17 pm Operator: tianweir
Sample : icv4614-1000 Inst : HP G1530A
Misc : op19329,G2G4614,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\2PCB4614.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 28 08:51:31 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	4.266	6.440 E6	-51.0#	151#	0.00	3.03- 3.09
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A	71.482	69.601 E3	2.6	97	0.00	3.78- 3.98
18	AR1248-B	219.684	228.468 E3	-4.0	104	0.00	4.35- 4.55
19	AR1248-C	207.771	217.362 E3	-4.6	105	0.00	4.78- 4.98
20	AR1248-D	199.826	215.785 E3	-8.0	108	0.00	5.04- 5.24
21	AR1248-E	105.917	121.548 E3	-14.8	115	0.00	5.15- 5.35
22	AR1248-F	196.742	224.153 E3	-13.9	114	0.00	5.63- 5.83
23	AR1248-G	175.052	185.498 E3	-6.0	106	0.00	5.49- 6.49
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A		----------NA----------				
32	AR1016-B		----------NA----------				
33	AR1016-C		----------NA----------				
34	AR1016-D		----------NA----------				
35	AR1016-E		----------NA----------				
36	AR1260-A		----------NA----------				
37	AR1260-B		----------NA----------				
38	AR1260-C		----------NA----------				
39	AR1260-D		----------NA----------				
40	AR1260-E		----------NA----------				
41	AR1262-A		----------NA----------				

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177668.D

42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A			----------NA----------				
47		AR1268-B			----------NA----------				
48		AR1268-C			----------NA----------				
49		AR1268-D			----------NA----------				
50		AR1268-E			----------NA----------				
51	S	Decachlorobiphenyl	4.553	7.626 E6	-67.5#	168#	0.00	10.37-10.43	
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	30.803	45.716 E6	-48.4#	149	0.00	3.45- 3.51	
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A			----------NA----------				
13		AR1242-B			----------NA----------				
14		AR1242-C			----------NA----------				
15		AR1242-D			----------NA----------				
16		AR1242-E			----------NA----------				
17		AR1248-A	511.508	478.700 E3	6.4	94	0.00	4.56- 4.76	
18		AR1248-B	1.370	1.383 E6	-0.9	101	0.00	5.18- 5.38	
19		AR1248-C	783.401	811.701 E3	-3.6	104	0.00	5.63- 5.83	
20		AR1248-D	1.039	1.086 E6	-4.5	104	0.00	6.02- 6.22	
21		AR1248-E	1.158	1.246 E6	-7.6	108	0.00	6.19- 6.39	
22		AR1248-F	1.432	1.562 E6	-9.1	109	0.00	6.61- 6.81	
23		AR1248-G	1.332	1.480 E6	-11.1	111	0.00	6.54- 7.54	
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1016-A			----------NA----------				
32		AR1016-B			----------NA----------				
33		AR1016-C			----------NA----------				
34		AR1016-D			----------NA----------				
35		AR1016-E			----------NA----------				
36		AR1260-A			----------NA----------				
37		AR1260-B			----------NA----------				
38		AR1260-C			----------NA----------				
39		AR1260-D			----------NA----------				
40		AR1260-E			----------NA----------				
41		AR1262-A			----------NA----------				
42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A			----------NA----------				
47		AR1268-B			----------NA----------				

Initial Calibration Verification

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4614-ICV4614
Lab FileID: 2G177668.D

48		AR1268-C			----------NA----------			
49		AR1268-D			----------NA----------			
50		AR1268-E			----------NA----------			
51	S	Decachlorobiphenyl	25.822	39.610 E6	-53.4#	158#	0.00	11.77-11.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2G177657.D 2PCB4614.M Thu Mar 28 09:41:44 2019 RPT1

10.6.6 10

Continuing Calibration Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4629-CC4614
Lab FileID: 2G178319.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G4629\2G178319.D\ECD1A.CH Vial: 33
Signal #2 : C:\msdchem\1\DATA\2G4629\2G178319.D\ECD2B.CH
Acq On : 11 Apr 2019 10:40 pm Operator: tianweir
Sample : cc4614-500 Inst : HP G1530A
Misc : op19676,G2G4629,1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\2PCB4614.M (Chemstation Integrator)
Title :
Last Update : Thu Mar 28 08:51:31 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	4.266	4.226 E6	0.9	101	0.00	3.03- 3.09
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A	90.118	97.532 E3	-8.2	110	0.00	3.43- 3.49
32	AR1016-B	168.006	184.774 E3	-10.0	110	0.00	3.84- 3.90
33	AR1016-C	403.365	401.778 E3	0.4	101	0.00	4.41- 4.47
34	AR1016-D	149.135	155.463 E3	-4.2	105	0.00	4.58- 4.64
35	AR1016-E	154.359	164.076 E3	-6.3	109	0.00	5.10- 5.16
36	AR1260-A	437.183	389.305 E3	11.0	91	0.00	7.50- 7.56
37	AR1260-B	302.300	215.513 E3	28.7#	73	0.00	7.65- 7.71
38	AR1260-C	263.621	226.910 E3	13.9	88	0.00	8.00- 8.05
39	AR1260-D	748.626	615.665 E3	17.8	84	0.00	8.43- 8.49
40	AR1260-E	656.190	582.357 E3	11.3	91	0.00	8.78- 8.94
41	AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: JC86089 **Sample:** G2G4629-CC4614
Account: TCMAW Tantara Corporation **Lab FileID:** 2G178319.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A			----------NA----------				
47		AR1268-B			----------NA----------				
48		AR1268-C			----------NA----------				
49		AR1268-D			----------NA----------				
50		AR1268-E			----------NA----------				
51	S	Decachlorobiphenyl	4.553	4.660	E6	-2.4	105	0.00	10.37-10.43
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	30.803	30.346	E6	1.5	99	0.00	3.45- 3.51
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A			----------NA----------				
13		AR1242-B			----------NA----------				
14		AR1242-C			----------NA----------				
15		AR1242-D			----------NA----------				
16		AR1242-E			----------NA----------				
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1016-A	533.651	574.594	E3	-7.7	107	0.00	4.09- 4.15
32		AR1016-B	1.184	1.191	E6	-0.6	99	0.00	4.63- 4.69
33		AR1016-C	2.612	2.635	E6	-0.9	101	0.00	5.24- 5.30
34		AR1016-D	1.052	1.078	E6	-2.5	103	0.00	5.43- 5.49
35		AR1016-E	780.435	800.654	E3	-2.6	103	0.00	6.08- 6.14
36		AR1260-A	2.423	2.576	E6	-6.3	107	0.00	8.66- 8.72
37		AR1260-B	1.327	1.393	E6	-5.0	105	0.00	8.78- 8.84
38		AR1260-C	1.548	1.607	E6	-3.8	105	0.00	9.21- 9.27
39		AR1260-D	3.339	3.456	E6	-3.5	104	0.00	9.56- 9.62
40		AR1260-E	3.308	3.462	E6	-4.7	106	0.00	10.10-10.16
41		AR1262-A			----------NA----------				
42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A			----------NA----------				
47		AR1268-B			----------NA----------				

Continuing Calibration Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4629-CC4614
Lab FileID: 2G178319.D

48		AR1268-C			----------NA----------				
49		AR1268-D			----------NA----------				
50		AR1268-E			----------NA----------				
51	S	Decachlorobiphenyl	25.822	29.997 E6	-16.2	117	0.00	11.76-11.82	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2G177656.D 2PCB4614.M Fri Apr 12 10:02:53 2019 RPT1

Continuing Calibration Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4629-CC4614
Lab FileID: 2G178330.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G4629\2G178330.D\ECD1A.CH Vial: 42
Signal #2 : C:\msdchem\1\DATA\2G4629\2G178330.D\ECD2B.CH
Acq On    : 12 Apr 2019   2:26 am                    Operator: tianweir
Sample    : cc4614-1000                              Inst    : HP G1530A
Misc      : op19691,G2G4629,100,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB4614.M (Chemstation Integrator)
Title        :
Last Update  : Thu Mar 28 08:51:31 2019
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	4.266	4.298 E6	-0.8	101	0.00	3.02- 3.08
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1016-A	90.118	94.055 E3	-4.4	107	0.00	3.42- 3.48
32		AR1016-B	168.006	178.485 E3	-6.2	108	0.00	3.84- 3.90
33		AR1016-C	403.365	404.431 E3	-0.3	102	0.00	4.41- 4.47
34		AR1016-D	149.135	152.146 E3	-2.0	104	0.00	4.58- 4.64
35		AR1016-E	154.359	159.937 E3	-3.6	107	0.00	5.10- 5.16
36		AR1260-A	437.183	383.528 E3	12.3	87	0.00	7.49- 7.55
37		AR1260-B	302.300	210.770 E3	30.3#	68	0.00	7.65- 7.71
38		AR1260-C	263.621	216.177 E3	18.0	81	0.00	7.99- 8.05
39		AR1260-D	748.626	622.841 E3	16.8	81	0.00	8.43- 8.49
40		AR1260-E	656.190	587.243 E3	10.5	89	0.00	8.78- 8.94
41		AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: JC86089 **Sample:** G2G4629-CC4614
Account: TCMAW Tantara Corporation **Lab FileID:** 2G178330.D
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

42		AR1262-B		----------NA----------				
43		AR1262-C		----------NA----------				
44		AR1262-D		----------NA----------				
45		AR1262-E		----------NA----------				
46		AR1268-A		----------NA----------				
47		AR1268-B		----------NA----------				
48		AR1268-C		----------NA----------				
49		AR1268-D		----------NA----------				
50		AR1268-E		----------NA----------				
51	S	Decachlorobiphenyl	4.553	4.776 E6	-4.9	105	0.00	10.37-10.43
*****		Signal #2 *****						
1	S	Tetrachloro-m-xylene	30.803	29.958 E6	2.7	98	0.00	3.45- 3.51
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1016-A	533.651	538.175 E3	-0.8	103	0.00	4.09- 4.15
32		AR1016-B	1.184	1.094 E6	7.6	96	0.00	4.63- 4.69
33		AR1016-C	2.612	2.499 E6	4.3	98	0.00	5.24- 5.30
34		AR1016-D	1.052	1.012 E6	3.8	100	0.00	5.43- 5.49
35		AR1016-E	780.435	740.074 E3	5.2	97	0.00	6.08- 6.14
36		AR1260-A	2.423	2.365 E6	2.4	98	0.00	8.66- 8.72
37		AR1260-B	1.327	1.277 E6	3.8	97	0.00	8.78- 8.84
38		AR1260-C	1.548	1.466 E6	5.3	96	0.00	9.21- 9.27
39		AR1260-D	3.339	3.213 E6	3.8	97	0.00	9.56- 9.62
40		AR1260-E	3.308	3.267 E6	1.2	100	0.00	10.10-10.16
41		AR1262-A		----------NA----------				
42		AR1262-B		----------NA----------				
43		AR1262-C		----------NA----------				
44		AR1262-D		----------NA----------				
45		AR1262-E		----------NA----------				
46		AR1268-A		----------NA----------				
47		AR1268-B		----------NA----------				

Continuing Calibration Summary

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Sample: G2G4629-CC4614
Lab FileID: 2G178330.D

48		AR1268-C				----------NA----------			
49		AR1268-D				----------NA----------			
50		AR1268-E				----------NA----------			
51	S	Decachlorobiphenyl	25.822	27.099	E6	-4.9	108	0.00	11.76-11.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2G177657.D 2PCB4614.M Fri Apr 12 10:04:58 2019 RPT1

10.6.8 10

GC/LC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178324.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12 Apr 2019 12:05 am
Operator : tianweir
Sample : jc86089-1
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:56:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.057	3.478	462.4E6	2155.8E6	108.382	69.987 #
	Spiked Amount 40.000			Recovery	=	270.96%	174.97%
51) S	Decachlor...	10.391	11.786	230.3E6	1403.5E6	50.594	54.352
	Spiked Amount 40.000			Recovery	=	126.49%	135.88%
	Target Compounds						

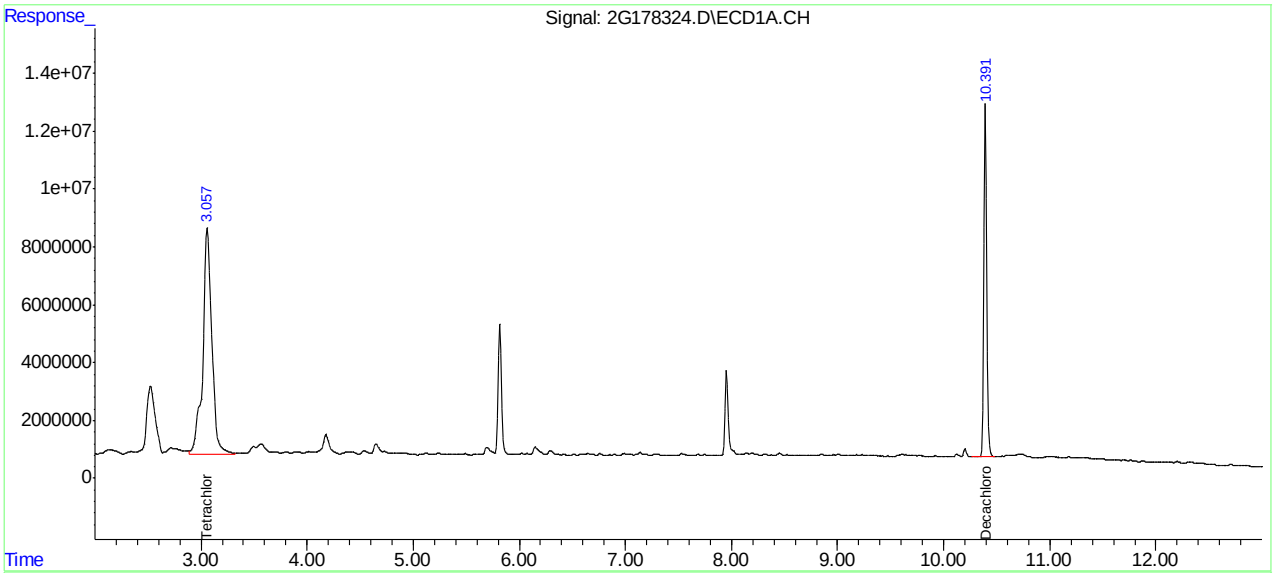
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

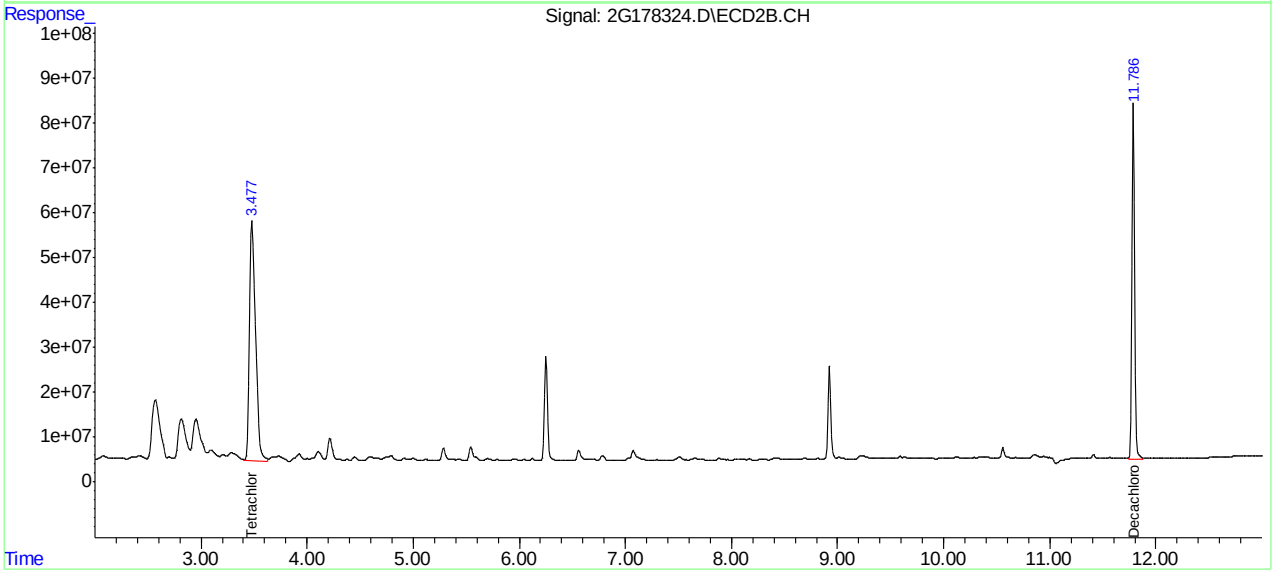
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178324.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12 Apr 2019 12:05 am
Operator : tianweir
Sample : jc86089-1
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:56:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178325.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12 Apr 2019 12:22 am
Operator : tianweir
Sample : jc86089-2
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:57:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.059	3.479	398.7E6	1985.6E6	93.456	64.461 #
	Spiked Amount 40.000			Recovery	= 233.64%	161.15%	
51) S	Decachlor...	10.388	11.784	186.3E6	1117.3E6	40.926	43.270
	Spiked Amount 40.000			Recovery	= 102.32%	108.18%	
	Target Compounds						

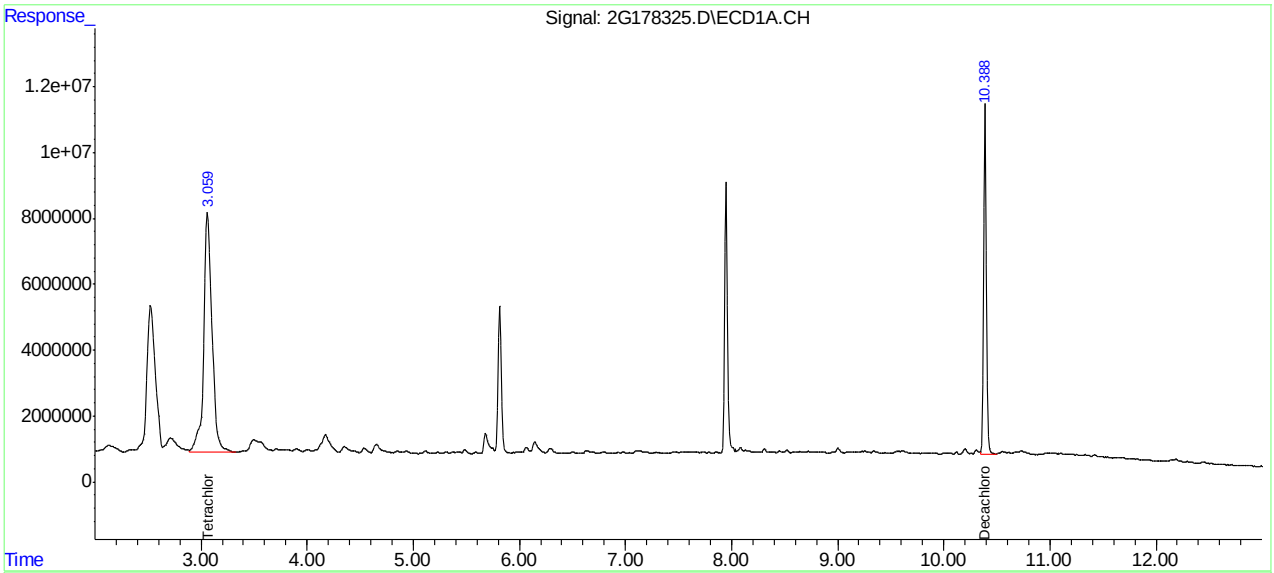
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

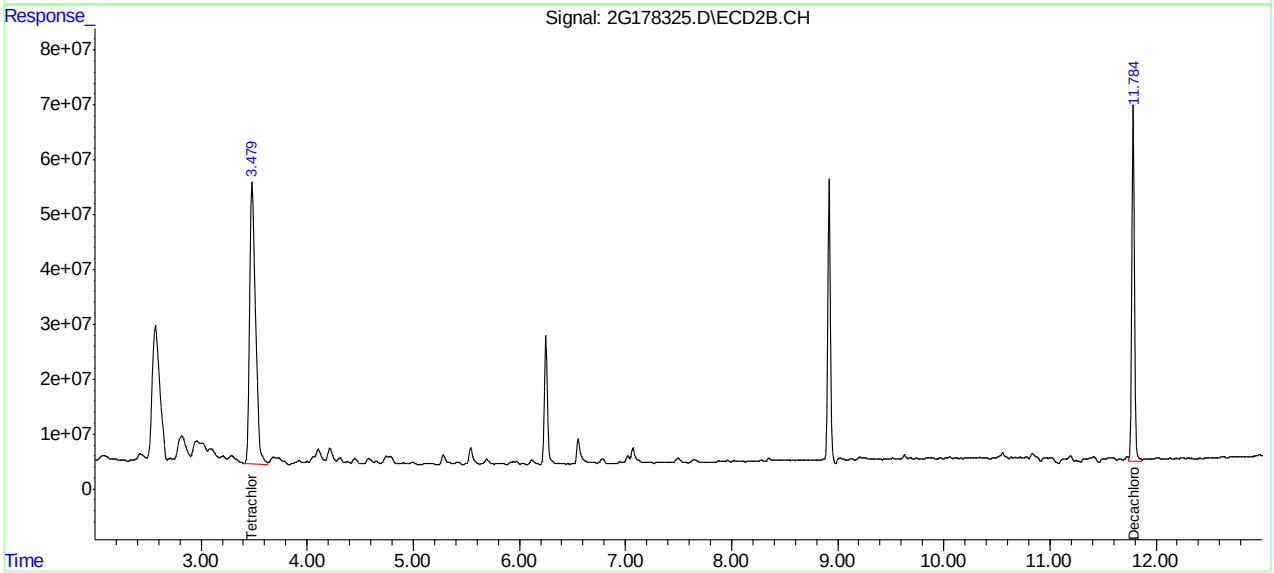
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178325.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12 Apr 2019 12:22 am
Operator : tianweir
Sample : jc86089-2
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:57:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178321.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:14 pm
Operator : tianweir
Sample : op19691-mb1
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:53:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.058	3.479	342.6E6	2455.5E6	80.300	79.716
	Spiked Amount 40.000			Recovery	=	200.75%	199.29%
51) S	Decachlor...	10.395	11.788	240.7E6	1493.9E6	52.875	57.855
	Spiked Amount 40.000			Recovery	=	132.19%	144.64%
	Target Compounds						

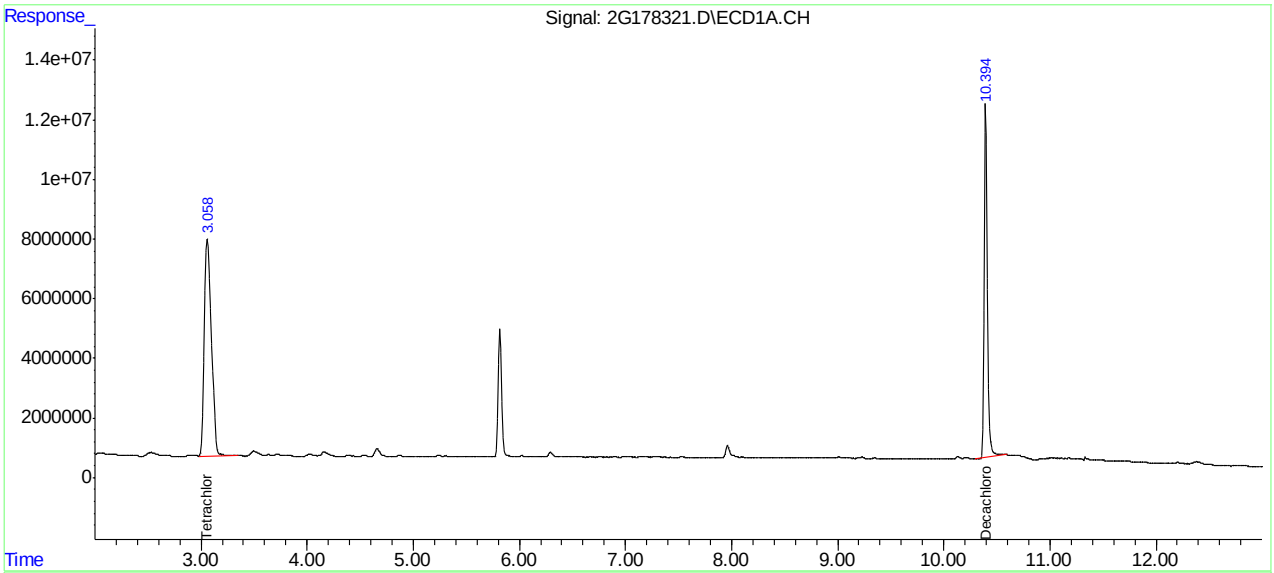
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

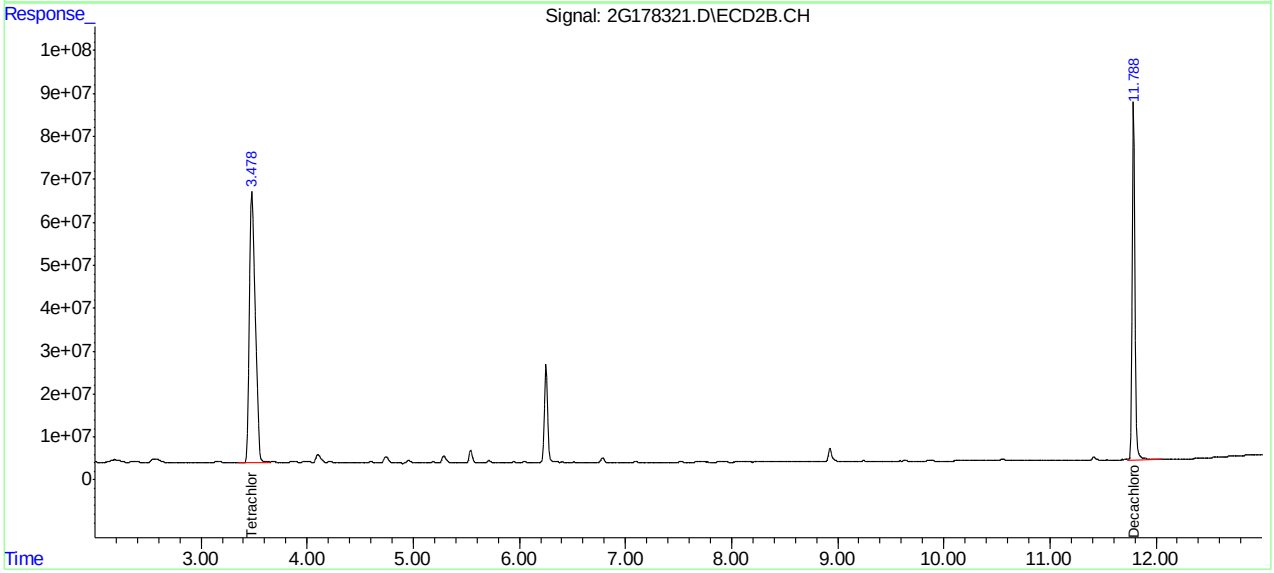
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178321.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:14 pm
Operator : tianweir
Sample : op19691-mb1
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:53:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/12/19 12:15

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178322.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:31 pm
Operator : tianweir
Sample : op19691-bs1
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:54:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.057	3.478	332.5E6	2367.1E6	77.935	76.846
	Spiked Amount 40.000			Recovery	= 194.84%	192.12%	
51) S	Decachlor...	10.393	11.786	219.2E6	1330.2E6	48.137	51.513
	Spiked Amount 40.000			Recovery	= 120.34%	128.78%	
	Target Compounds						
31)	AR1016-A	3.458	4.112	46576885	292.3E6	516.845	547.801
32)	AR1016-B	3.872	4.657	72161571	462.6E6	429.519	390.651
33)	AR1016-C	4.441	5.276	149.3E6	1041.5E6	370.155	398.662
34)	AR1016-D	4.612	5.461	73676510	376.8E6	494.025	358.172 #
35)	AR1016-E	5.131	6.110	60673723	306.8E6	393.070	393.064
36)	AR1260-A	7.525	8.691	144.5E6	858.4E6	330.441	354.242m
37)	AR1260-B	7.684	8.811	78919716	503.6E6	261.064	379.412 #
38)	AR1260-C	8.024	9.241	86636043	595.5E6	328.639	384.773
39)	AR1260-D	8.454	9.586	219.1E6	1264.1E6	292.715m	378.542 #
40)	AR1260-E	8.850	10.126	192.7E6	1181.7E6	293.721m	357.220m

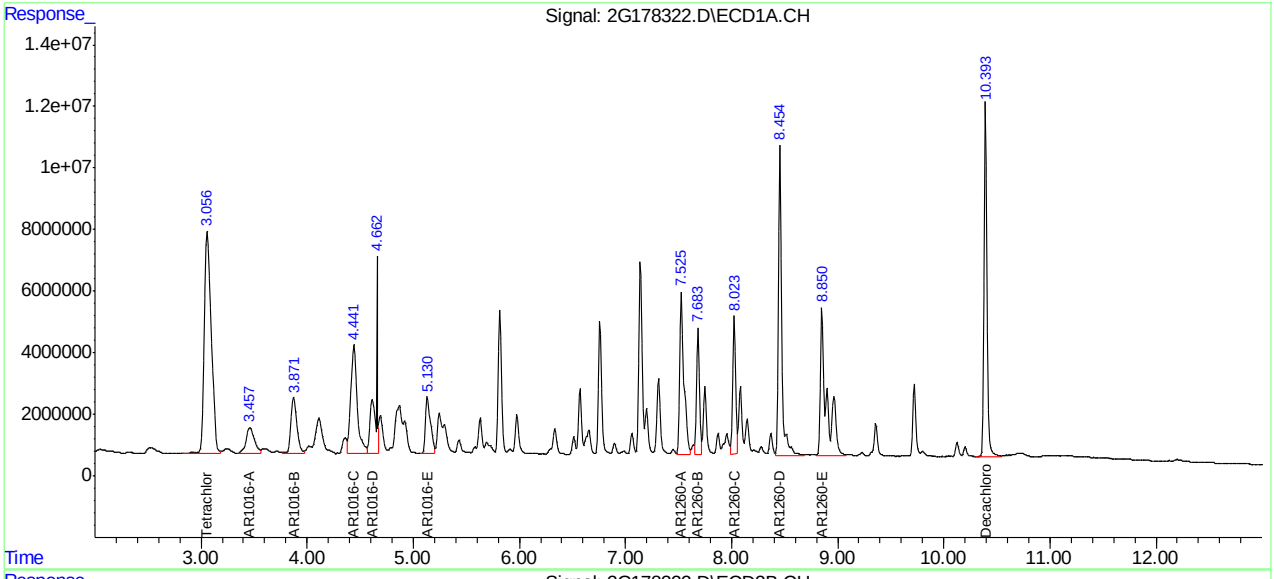
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

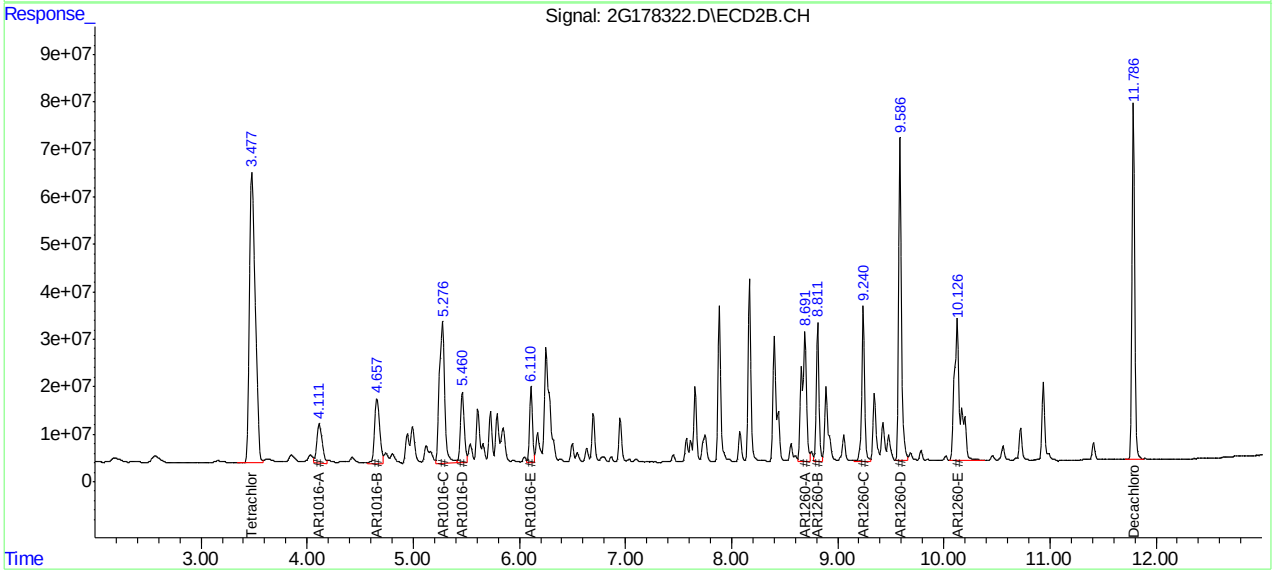
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178322.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:31 pm
Operator : tianweir
Sample : op19691-bs1
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:54:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	OP19691-BS1	**Method:**	SW846 8082A
Lab FileID:	2G178322.D	**Analyst approved:**	04/12/19 10:09 Tianwei Ruan
Injection Time:	04/11/19 23:31	**Supervisor approved:**	04/12/19 12:15 Gwendolyn Burns

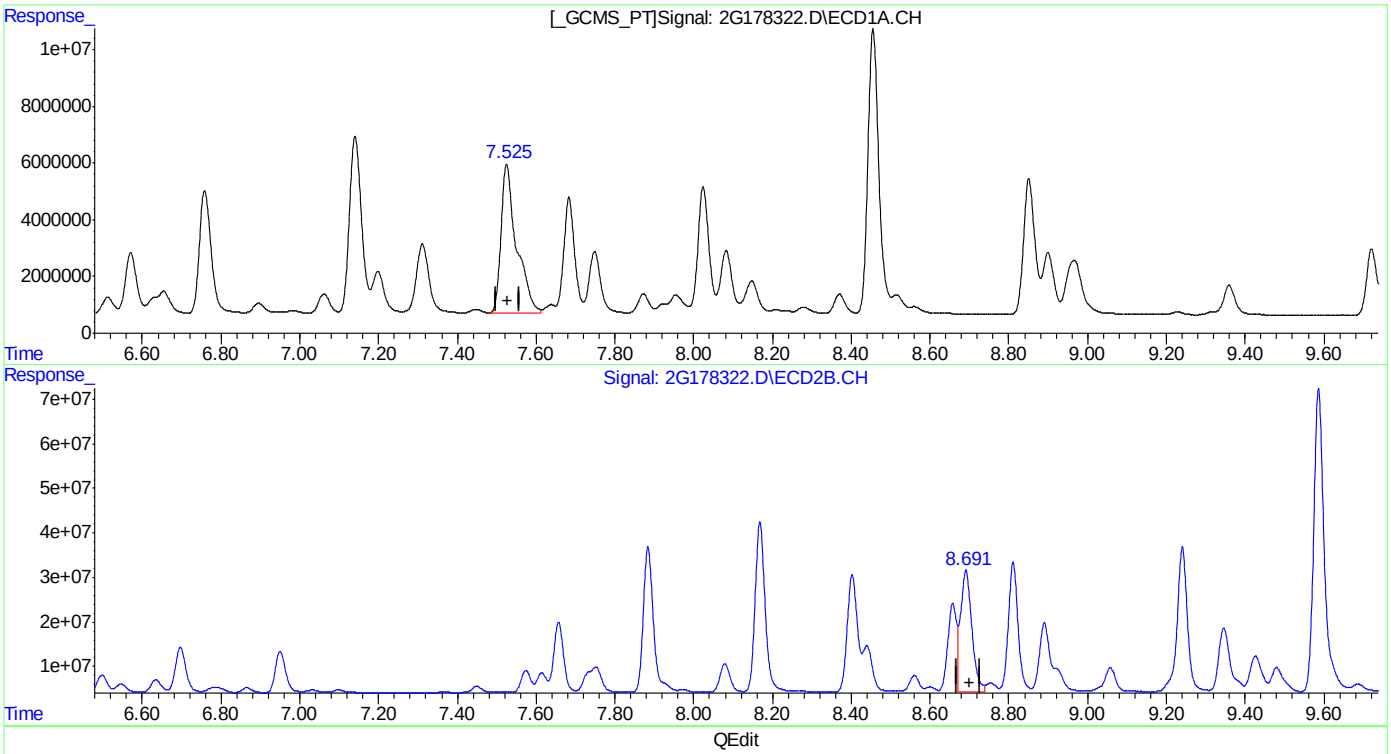
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-D		1	8.45	Split peak
AR1260-A		2	8.69	Split peak
AR1260-E		1	8.85	Split peak
AR1260-E		2	10.13	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178322.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:31 pm
Operator : tianweir
Sample : op19691-bs1
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:53:41 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(36) AR1260-A
7.525min 330.441PPB
response 144463171

(36) AR1260-A #2
8.691min 226.022PPB
response 547674097

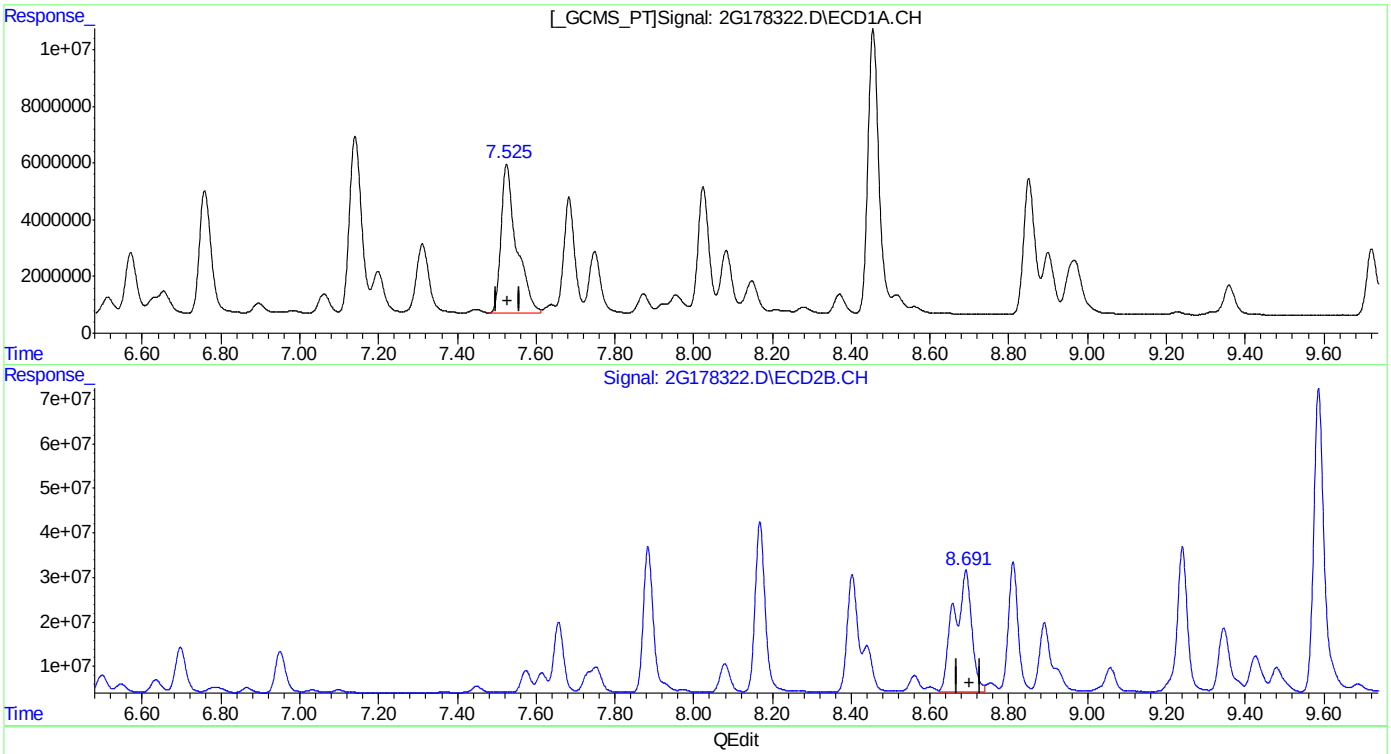
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178322.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:31 pm
Operator : tianweir
Sample : op19691-bs1
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:53:41 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(36) AR1260-A
7.525min 330.441PPB
response 144463171

(36) AR1260-A #2
8.691min 354.242PPB m
response 858362324

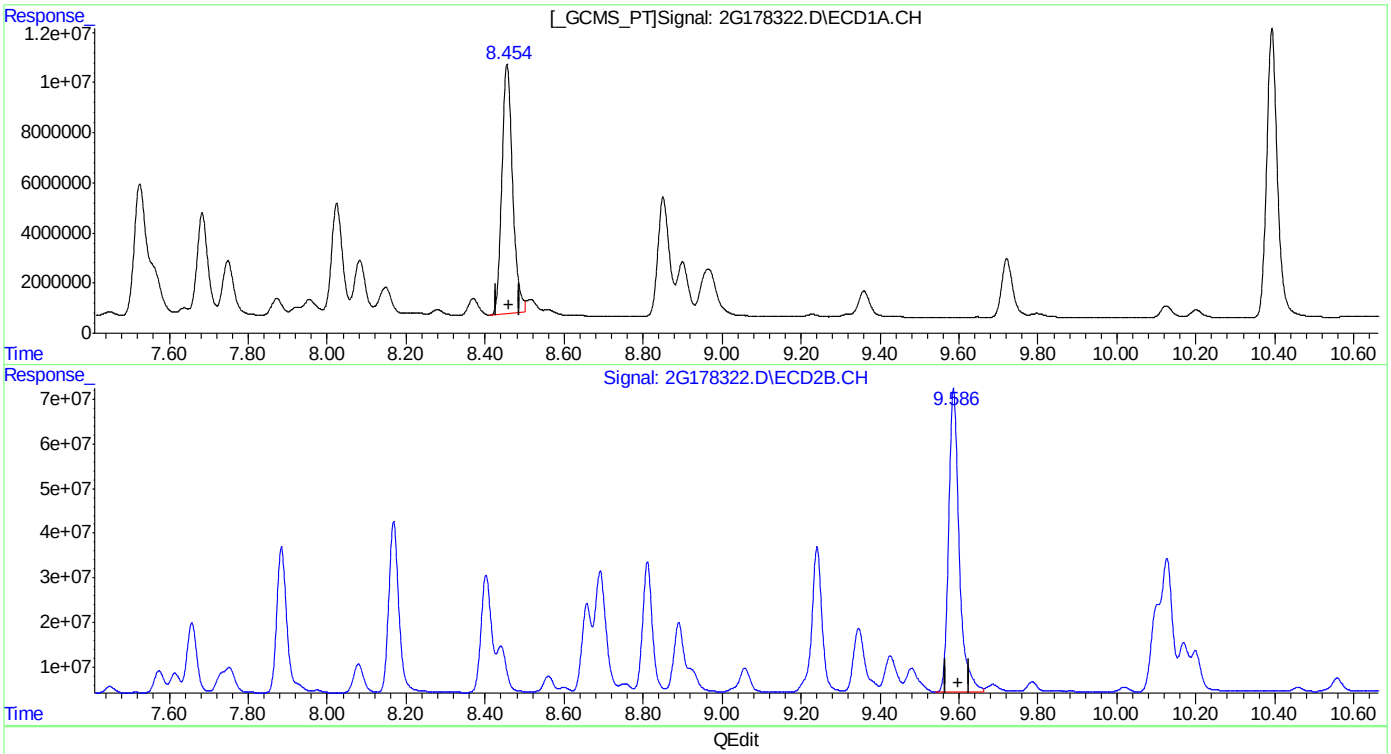
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178322.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:31 pm
Operator : tianweir
Sample : op19691-bs1
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:53:41 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(39) AR1260-D
8.455min 253.072PPB
response 189456231

(39) AR1260-D #2
9.586min 378.542PPB
response 1264126441

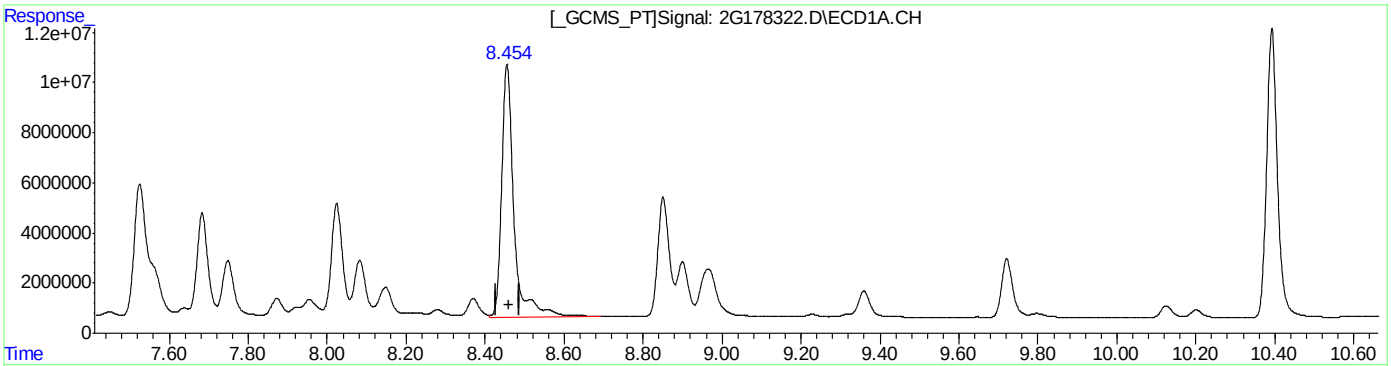
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:54:35 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178322.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:31 pm
Operator : tianweir
Sample : op19691-bs1
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:53:41 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.454min 292.715PPB m
response 219133918

(39) AR1260-D #2
9.586min 378.542PPB
response 1264126441

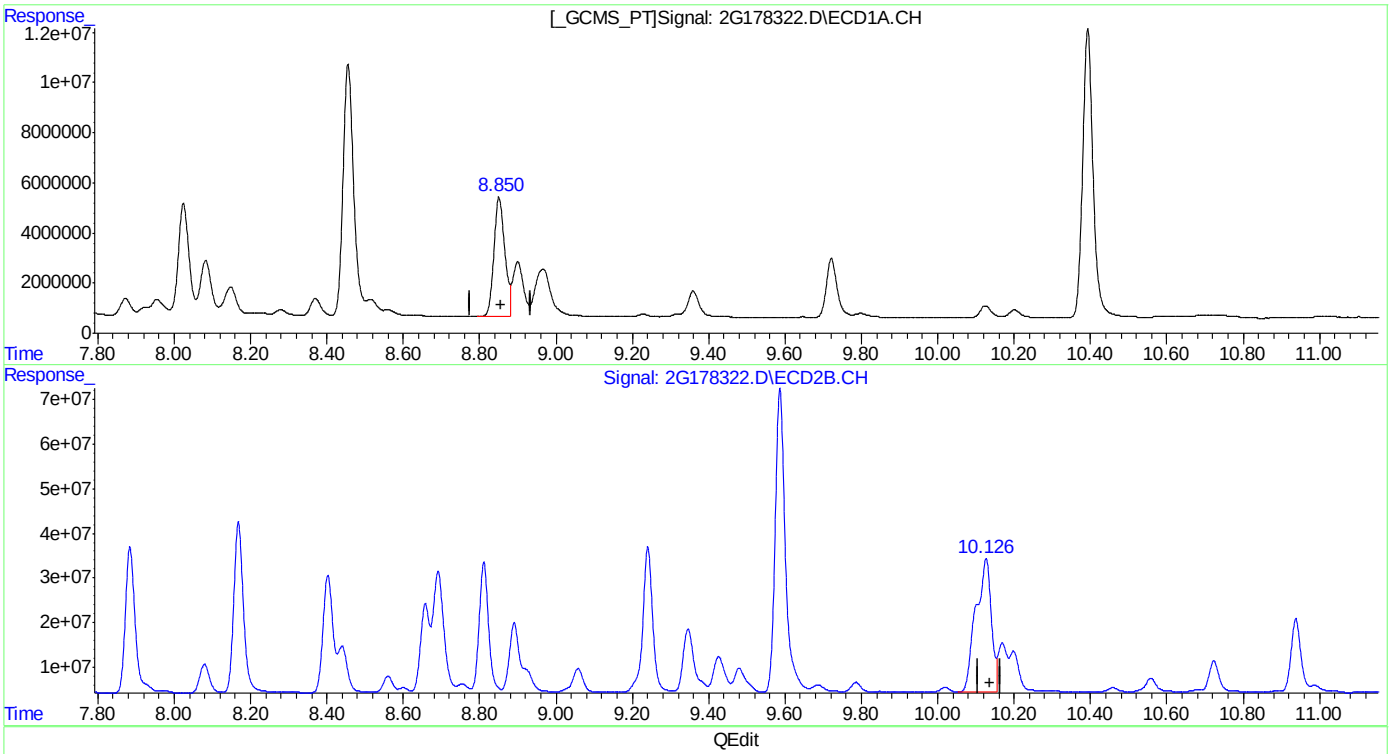
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:54:39 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178322.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:31 pm
Operator : tianweir
Sample : op19691-bs1
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:53:41 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.851min 144.391PPB
response 94747970

(40) AR1260-E #2
10.127min 252.951PPB
response 836747242

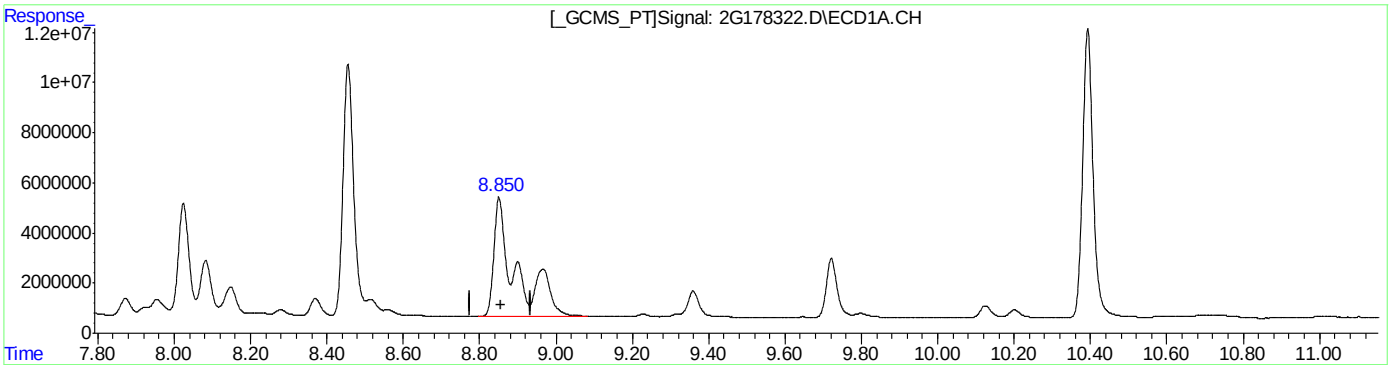
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:54:43 2019 RPT1

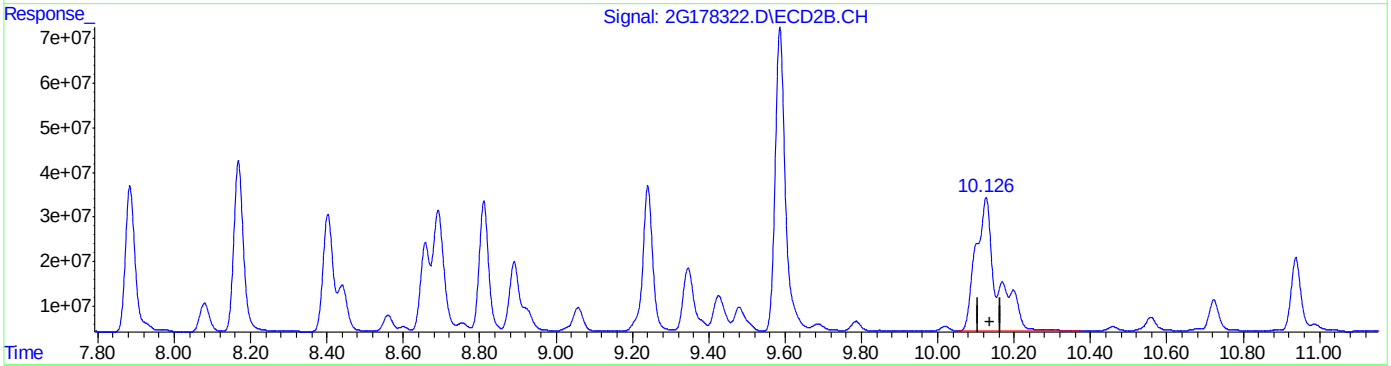
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178322.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:31 pm
Operator : tianweir
Sample : op19691-bs1
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:53:41 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(40) AR1260-E
8.850min 293.721PPB m
response 192736677

(40) AR1260-E #2
10.126min 357.220PPB m
response 1181662981

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/12/19 12:15

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178323.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:48 pm
Operator : tianweir
Sample : op19691-bsd
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:55:51 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.057	3.478	308.1E6	2175.8E6	72.206	70.637
	Spiked Amount 40.000			Recovery	=	180.52%	176.59%
51)	S Decachlor...	10.393	11.788	215.4E6	1307.4E6	47.313	50.631
	Spiked Amount 40.000			Recovery	=	118.28%	126.58%
	Target Compounds						
31)	AR1016-A	3.465	4.110	51877339	318.7E6	575.662	597.283
32)	AR1016-B	3.870	4.656	68823936	430.2E6	409.653	363.250
33)	AR1016-C	4.441	5.274	142.0E6	985.4E6	352.071	377.215
34)	AR1016-D	4.612	5.460	60099316	353.7E6	402.986	336.189
35)	AR1016-E	5.132	6.109	58334066	293.2E6	377.913	375.647
36)	AR1260-A	7.526	8.691	143.2E6	862.1E6	327.571	355.799m
37)	AR1260-B	7.683	8.812	79189925	493.8E6	261.958	372.055 #
38)	AR1260-C	8.025	9.242	86699840	584.0E6	328.881	377.333
39)	AR1260-D	8.455	9.588	212.5E6	1253.1E6	283.831m	375.249 #
40)	AR1260-E	8.852	10.127	193.9E6	1182.6E6	295.421m	357.490m

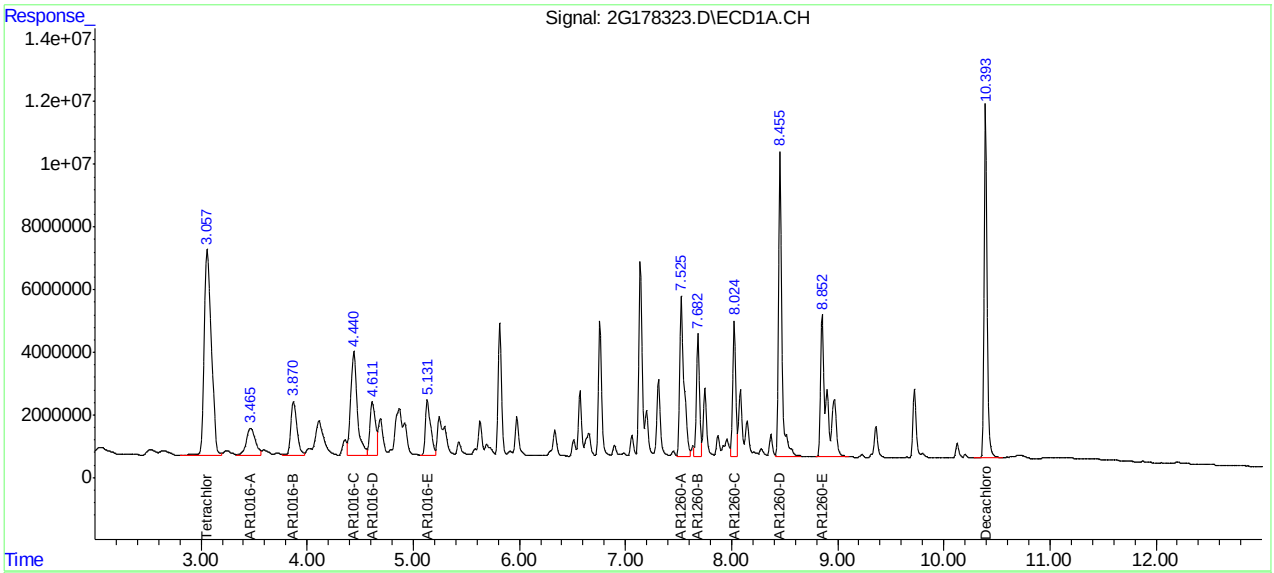
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

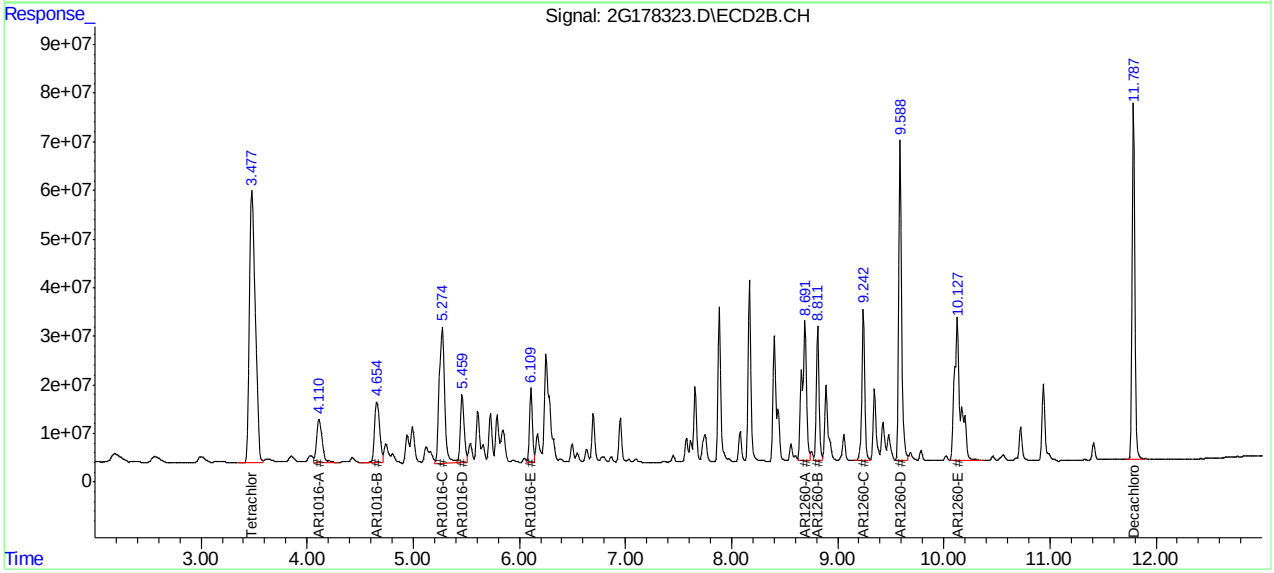
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178323.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:48 pm
Operator : tianweir
Sample : op19691-bsd
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:55:51 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	OP19691-BSD	**Method:**	SW846 8082A
Lab FileID:	2G178323.D	**Analyst approved:**	04/12/19 10:09 Tianwei Ruan
Injection Time:	04/11/19 23:48	**Supervisor approved:**	04/12/19 12:15 Gwendolyn Burns

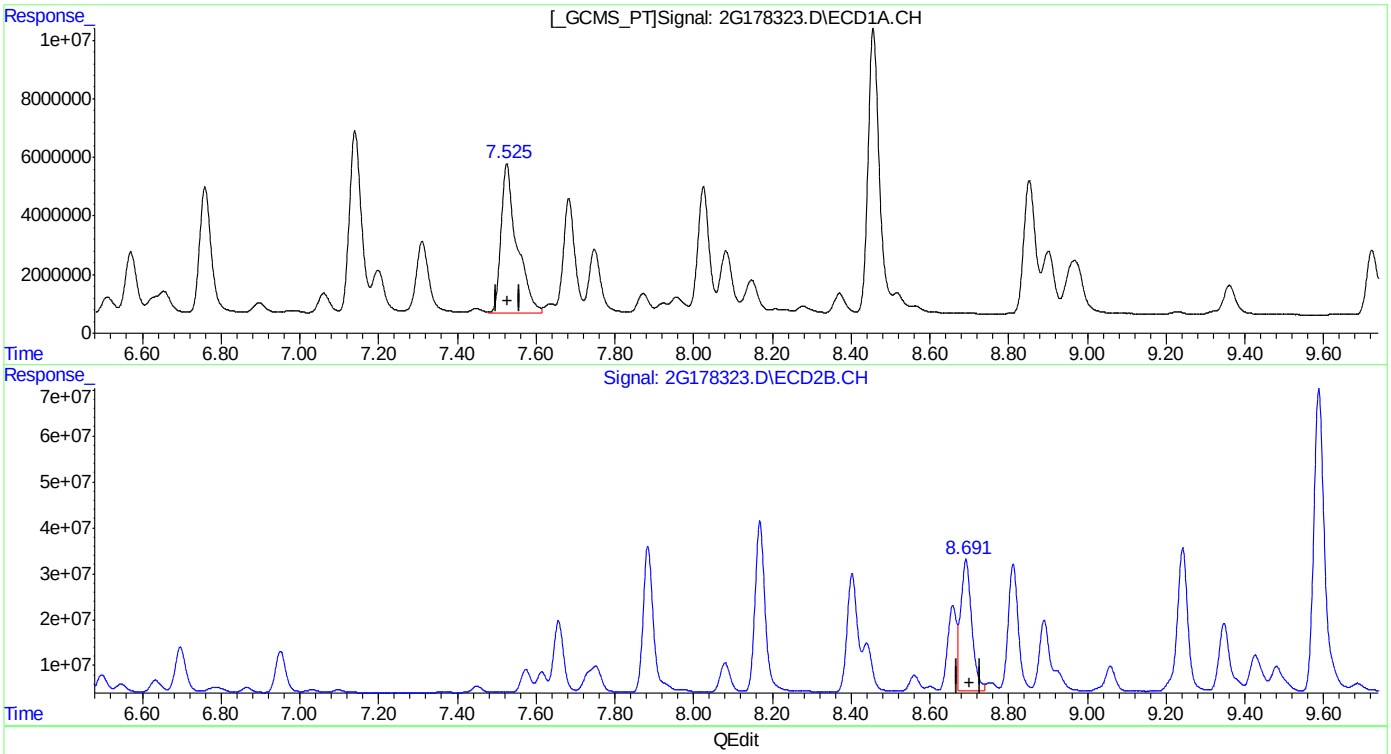
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-D		1	8.46	Split peak
AR1260-A		2	8.69	Split peak
AR1260-E		1	8.85	Split peak
AR1260-E		2	10.13	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178323.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:48 pm
Operator : tianweir
Sample : op19691-bsd
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 00:02:49 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(36) AR1260-A
7.526min 327.571PPB
response 143208423

(36) AR1260-A #2
8.692min 232.915PPB
response 564376277

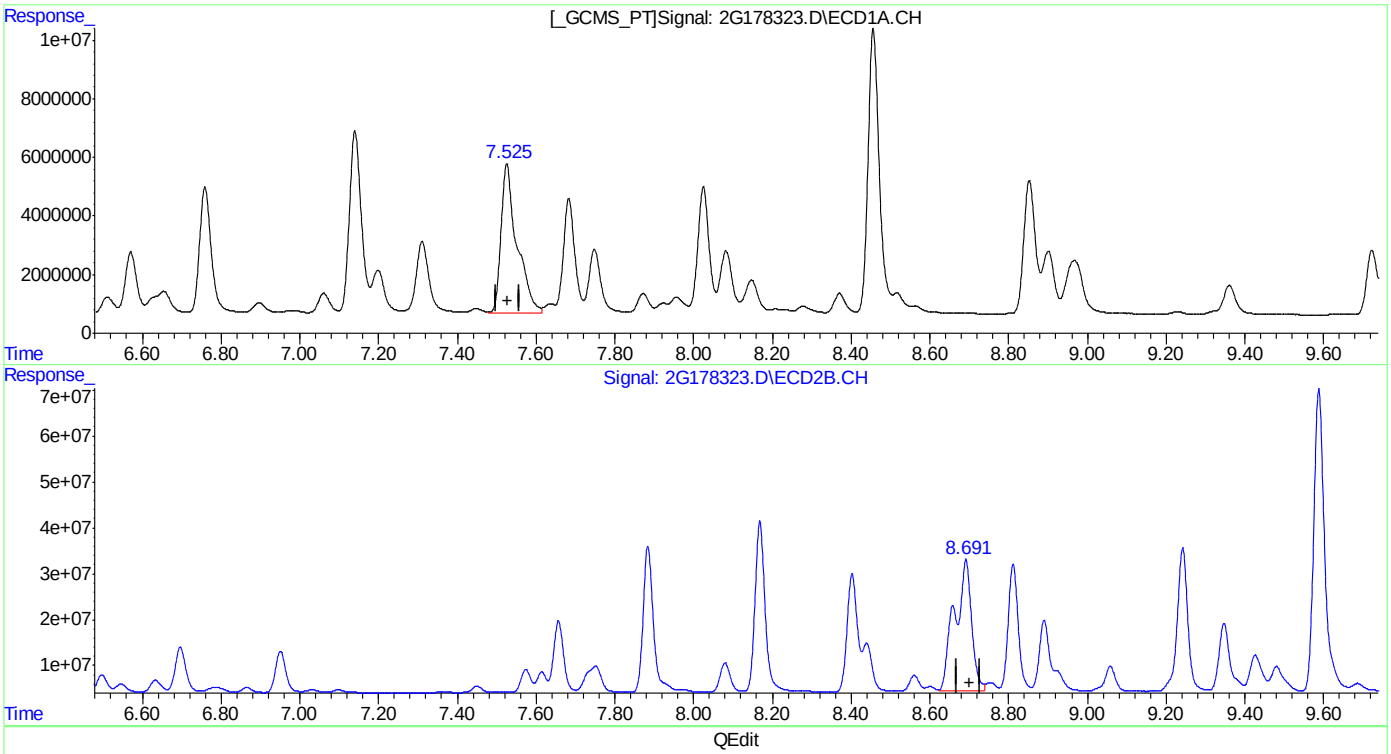
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:55:30 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178323.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:48 pm
Operator : tianweir
Sample : op19691-bsd
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 00:02:49 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(36) AR1260-A
7.526min 327.571PPB
response 143208423

(36) AR1260-A #2
8.691min 355.799PPB m
response 862136548

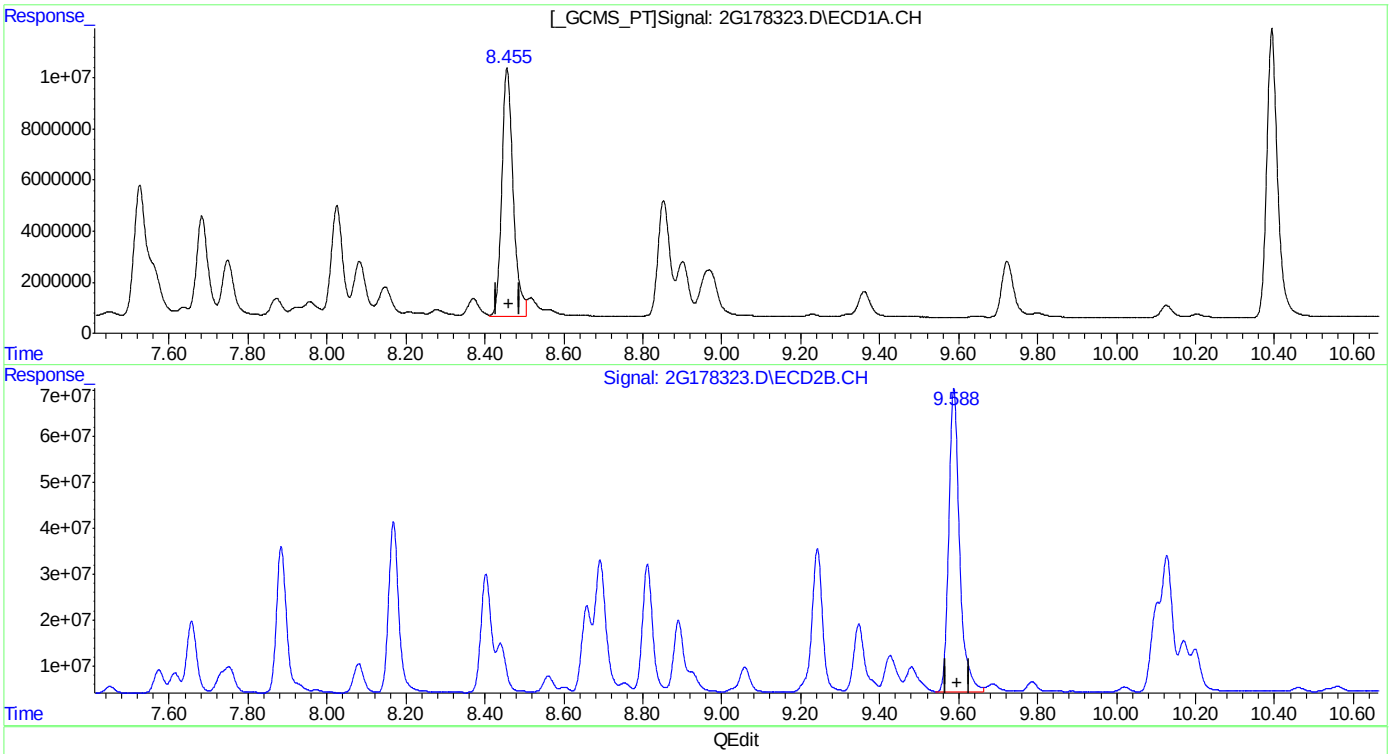
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:55:35 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178323.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:48 pm
Operator : tianweir
Sample : op19691-bsd
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 00:02:49 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.456min 259.141PPB
response 193999547

(39) AR1260-D #2
9.588min 375.249PPB
response 1253129919

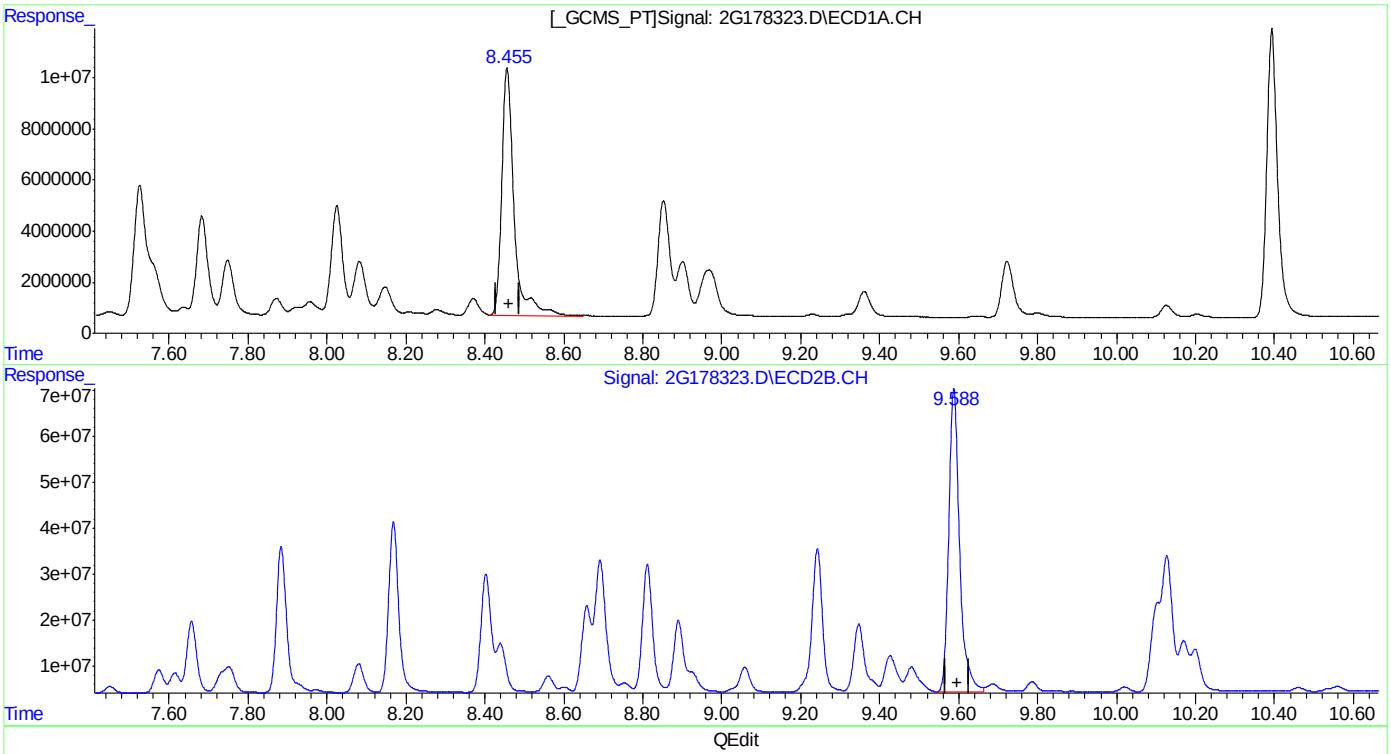
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:55:40 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178323.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:48 pm
Operator : tianweir
Sample : op19691-bsd
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 00:02:49 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.455min 283.831PPB m
response 212483346

(39) AR1260-D #2
9.588min 375.249PPB
response 1253129919

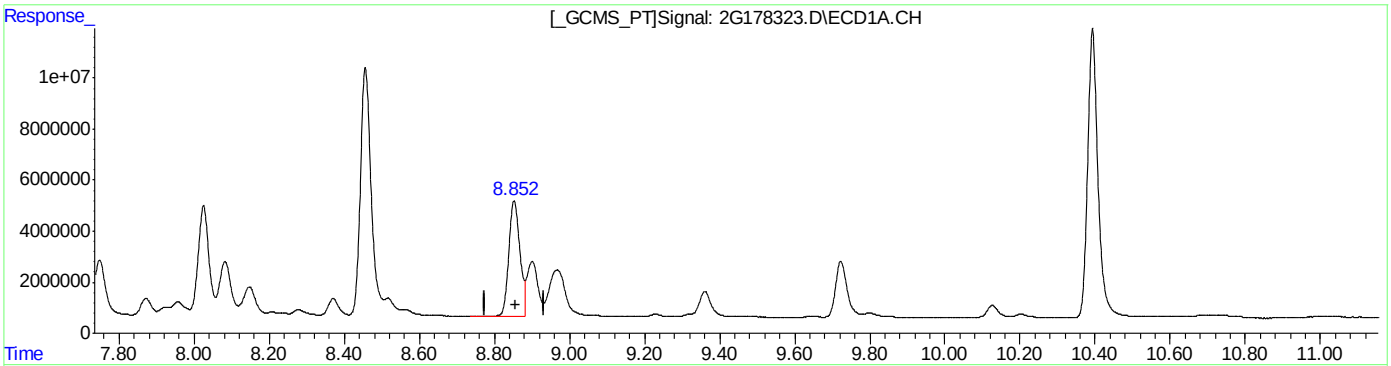
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:55:44 2019 RPT1

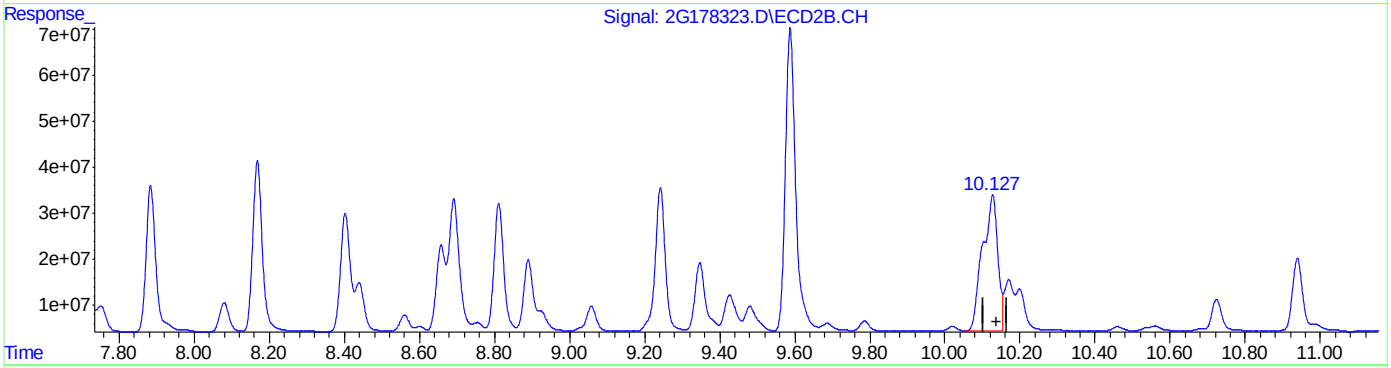
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178323.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:48 pm
Operator : tianweir
Sample : op19691-bsd
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 00:02:49 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(40) AR1260-E
8.853min 142.126PPB
response 93261419

(40) AR1260-E #2
10.127min 251.806PPB
response 832959249

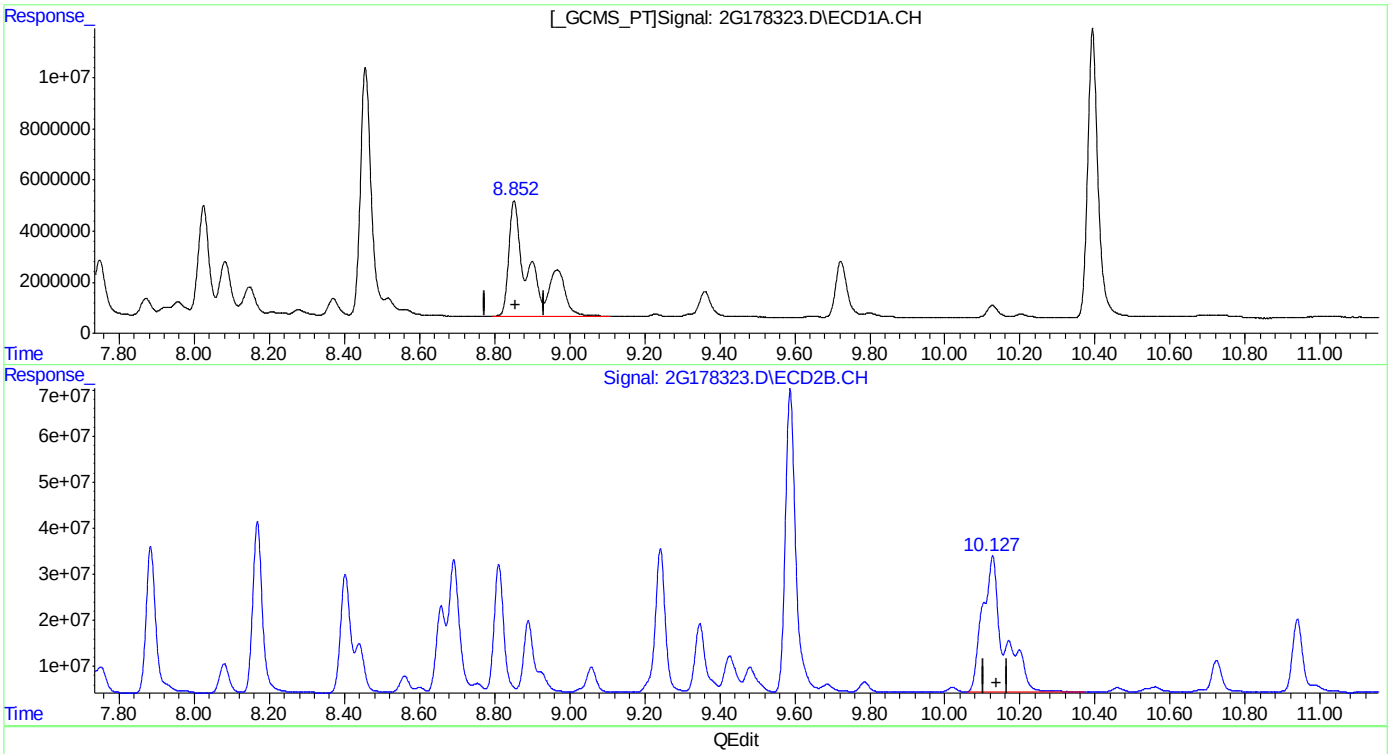
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178323.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 11:48 pm
Operator : tianweir
Sample : op19691-bsd
Misc : op19691,G2G4629,1000,,,5,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 00:02:49 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(40) AR1260-E
8.852min 295.421PPB m
response 193852212

(40) AR1260-E #2
10.127min 357.490PPB m
response 1182555025

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177654a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:13 pm
Operator : tianweir
Sample : ic4614-50
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:42:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.065f	3.483	8441399	61340439	3.933	1.922 #
	Spiked Amount 40.000			Recovery	=	9.83%	4.80%
51) S	Decachlor...	10.401f	11.798	8588096	56851335	2.659	2.267
	Spiked Amount 40.000			Recovery	=	6.65%	5.67%
	Target Compounds						
31)	AR1016-A	3.458f	4.123	5150150	30292029	89.149	54.409 #
32)	AR1016-B	3.878f	4.667	9219518	67291085	76.849	56.277m#
33)	AR1016-C	4.444f	5.283	20835294	145.1E6	86.283	54.751 #
34)	AR1016-D	4.617f	5.469	7956539	60933025	85.342	55.369 #
35)	AR1016-E	5.134f	6.119	8527776	41459890	85.516	51.957m#
36)	AR1260-A	7.529f	8.699	20487082	122.3E6	82.748	49.457m#
37)	AR1260-B	7.688f	8.820	13694537	68511880	90.620	50.957 #
38)	AR1260-C	8.030f	9.251	12262212	81594088	78.632	52.934 #
39)	AR1260-D	8.460f	9.598	33698382	169.8E6	90.621m	51.317 #
40)	AR1260-E	8.856f	10.137	30906471	170.8E6	86.311m	51.646m#

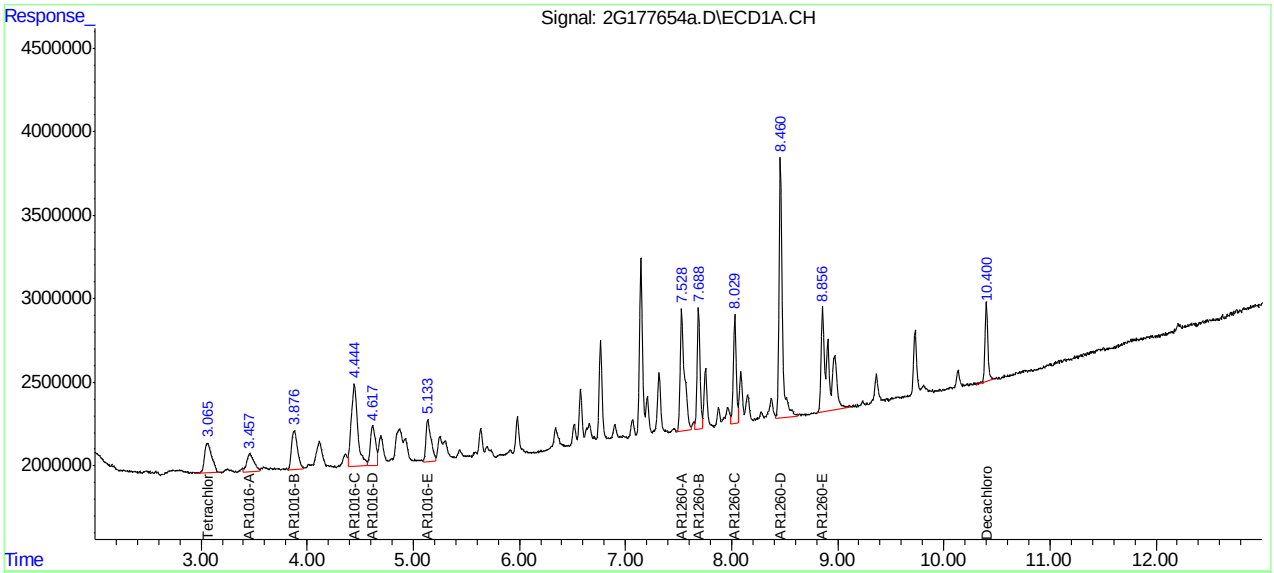
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

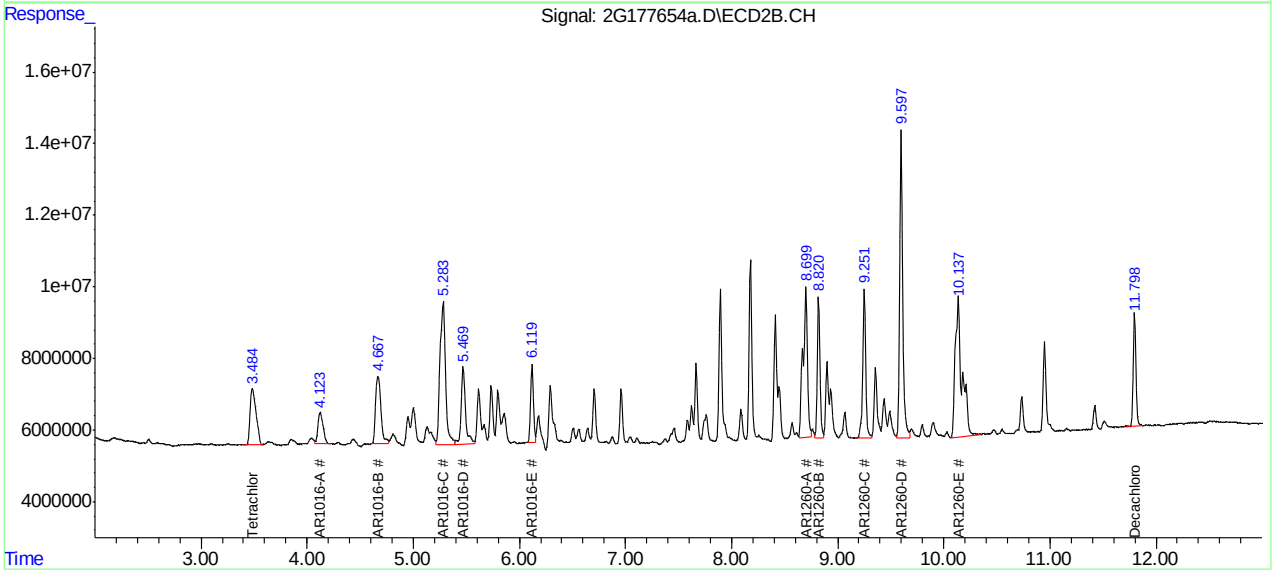
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177654a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:13 pm
Operator : tianweir
Sample : ic4614-50
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:42:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-IC4614	**Method:**	SW846 8082A
Lab FileID:	2G177654A.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 16:13	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

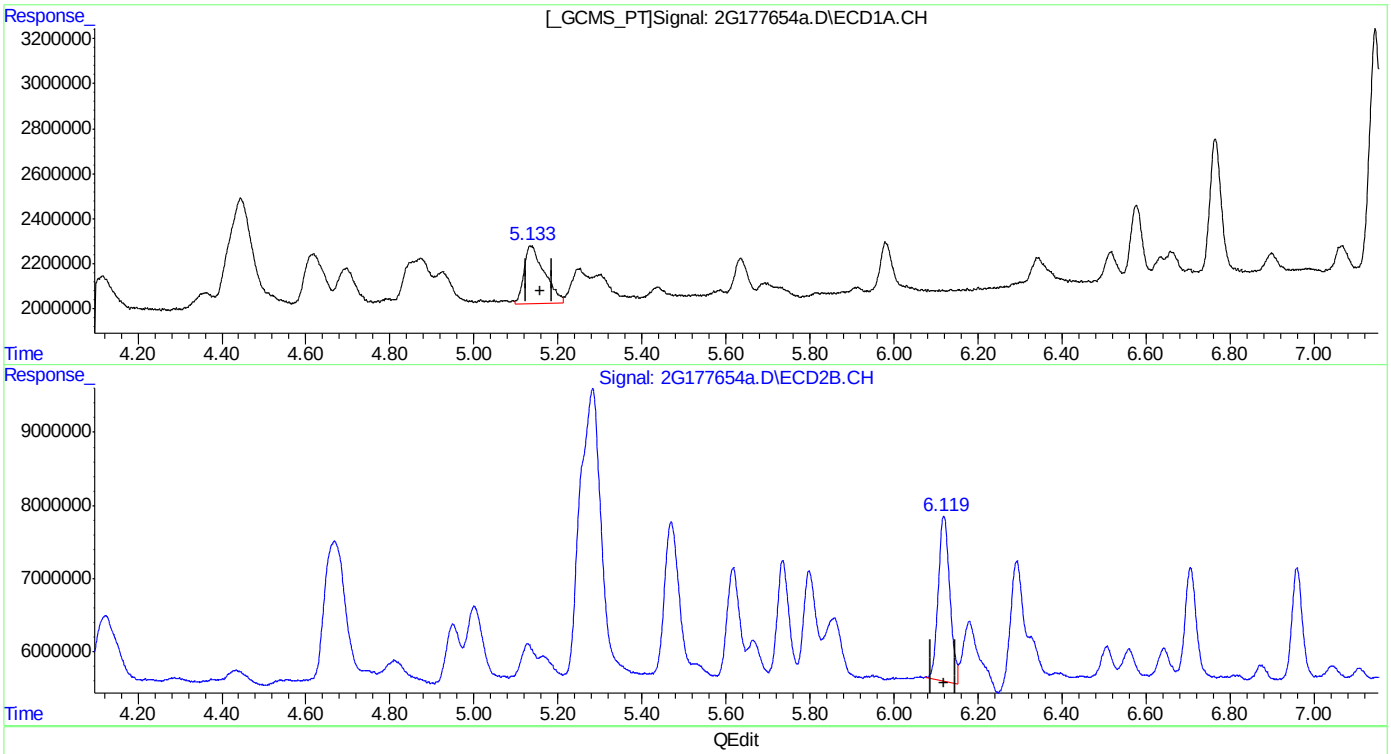
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1016-B		2	4.67	Split peak
AR1016-E		2	6.12	Split peak
AR1260-D		1	8.46	Split peak
AR1260-A		2	8.70	Split peak
AR1260-E		1	8.86	Split peak
AR1260-E		2	10.14	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177654a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:13 pm
Operator : tianweir
Sample : ic4614-50
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:34:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(35) AR1016-E
5.134min 85.516PPB
response 8527776

(35) AR1016-E #2
6.119min 54.521PPB
response 43505169

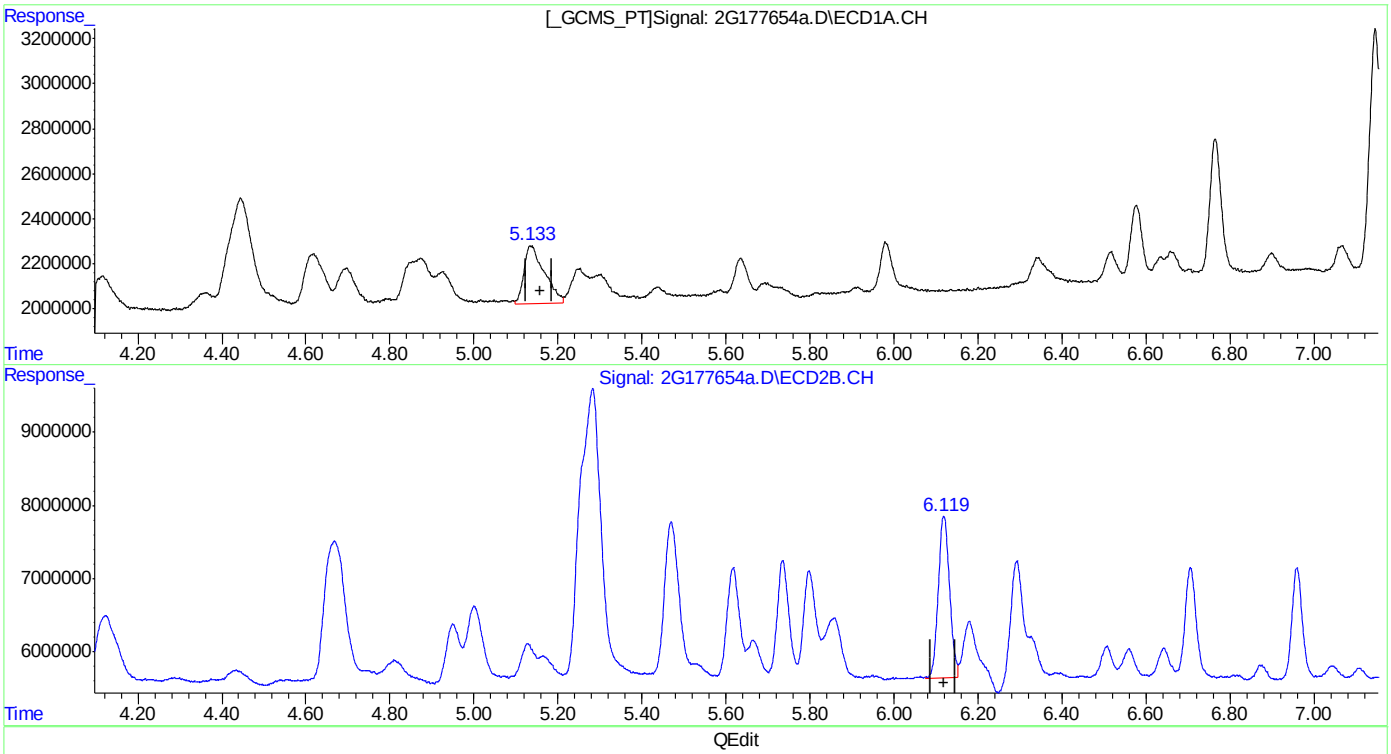
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177654a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:13 pm
Operator : tianweir
Sample : ic4614-50
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:34:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(35) AR1016-E
5.134min 85.516PPB
response 8527776

(35) AR1016-E #2
6.119min 51.957PPB m
response 41459890

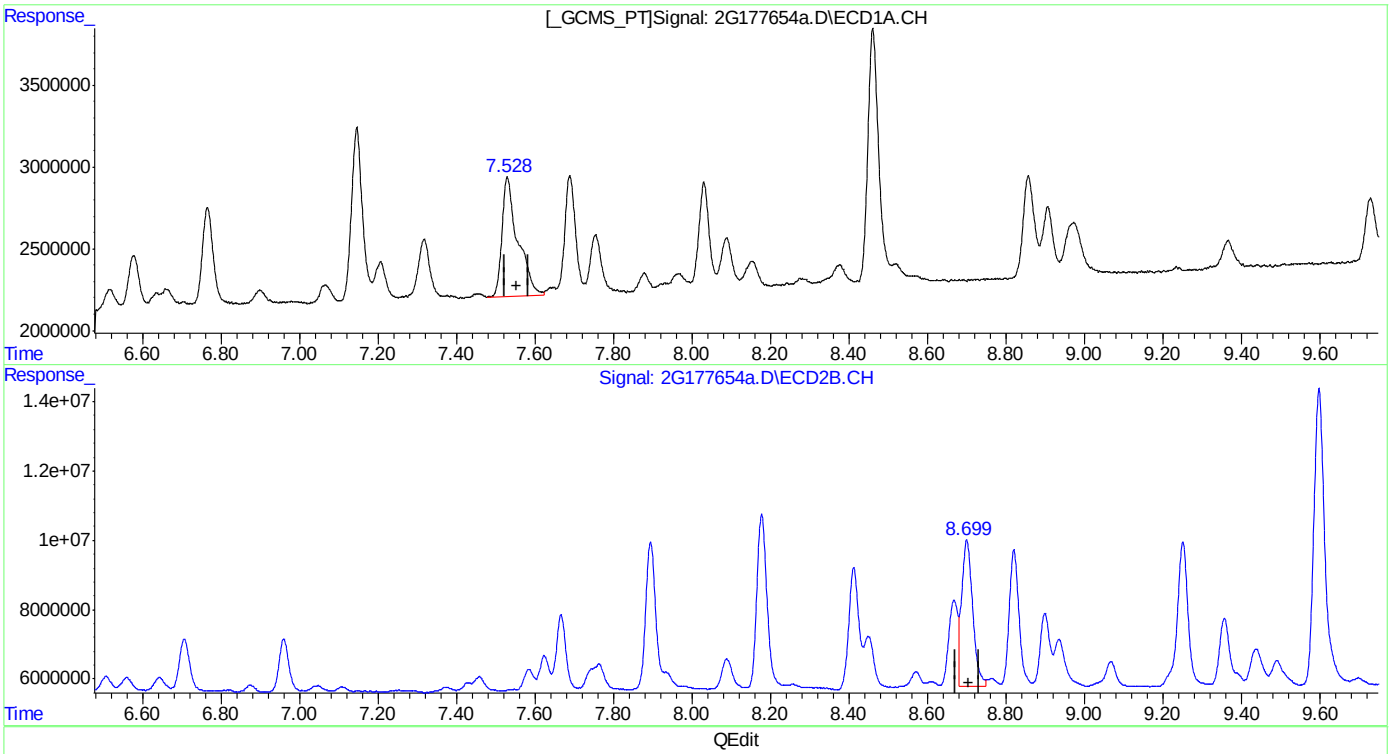
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:35:26 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177654a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:13 pm
Operator : tianweir
Sample : ic4614-50
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:34:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(36) AR1260-A
7.529min 82.748PPB
response 20487082

(36) AR1260-A #2
8.700min 33.557PPB
response 83004479

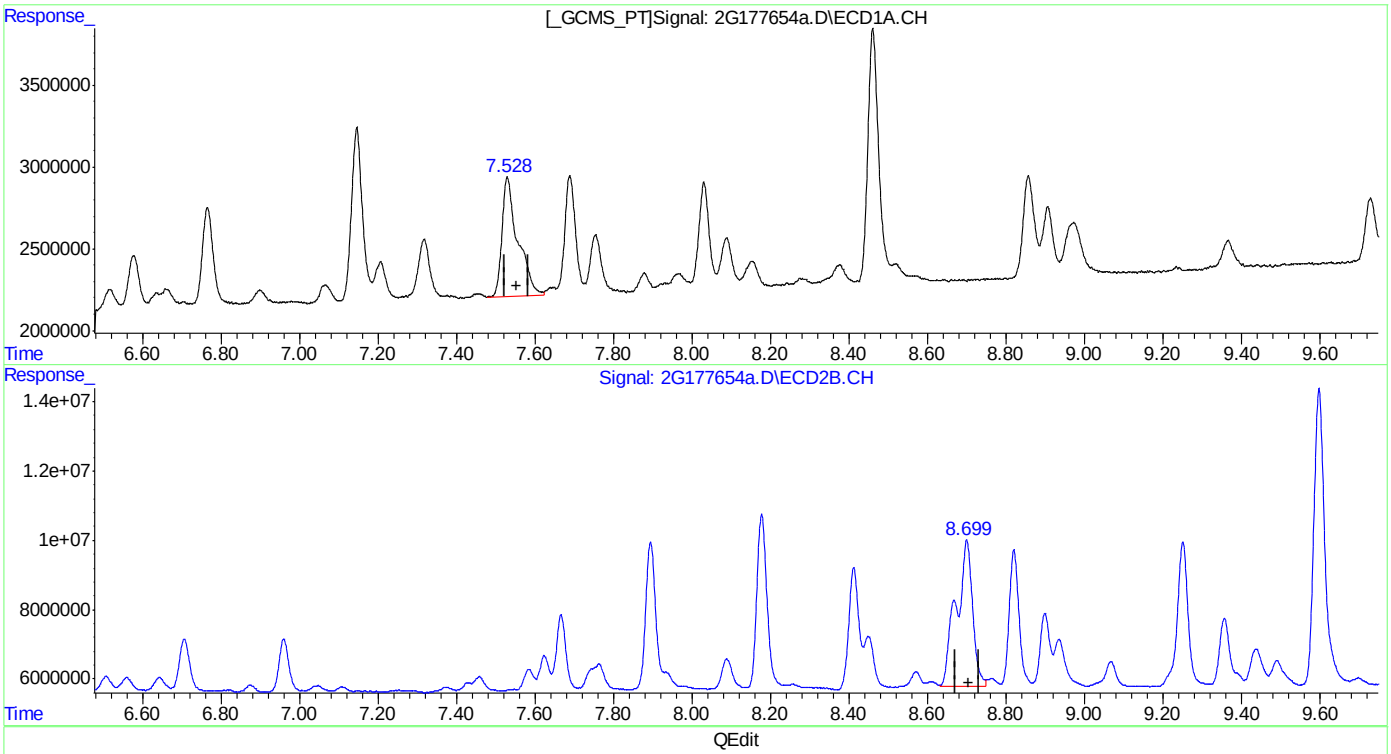
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177654a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:13 pm
Operator : tianweir
Sample : ic4614-50
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:34:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(36) AR1260-A
7.529min 82.748PPB
response 20487082

(36) AR1260-A #2
8.699min 49.457PPB m
response 122335354

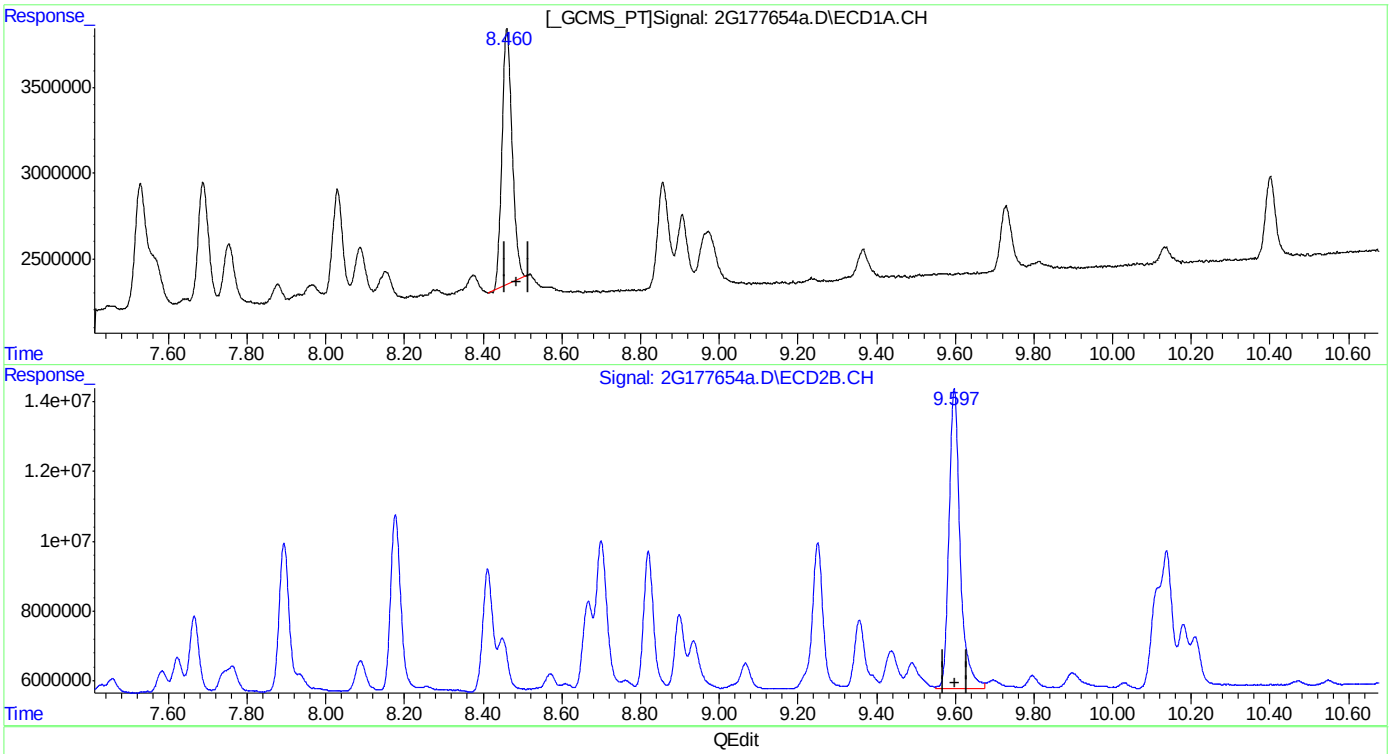
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177654a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:13 pm
Operator : tianweir
Sample : ic4614-50
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:34:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.460min 72.287PPB
response 26880596

(39) AR1260-D #2
9.598min 51.317PPB
response 169784859

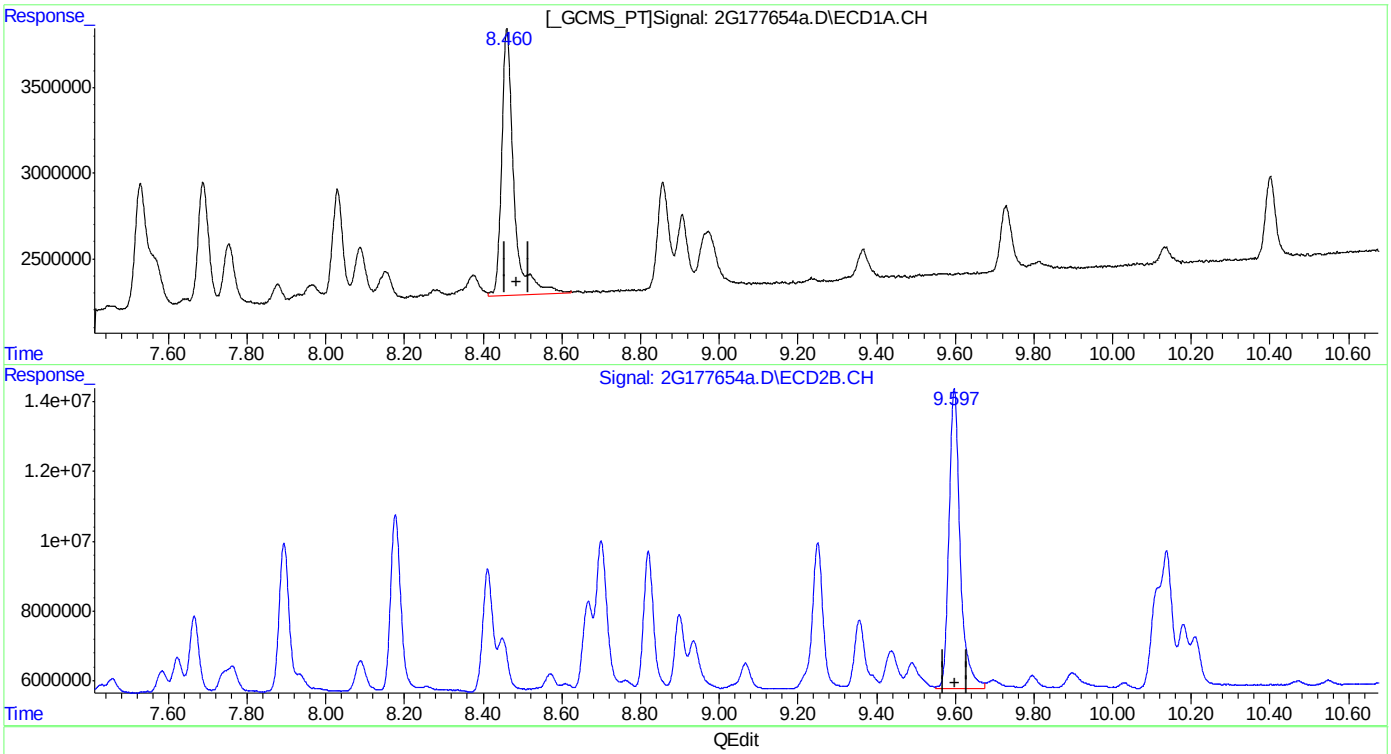
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:35:39 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177654a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:13 pm
Operator : tianweir
Sample : ic4614-50
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:34:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.460min 90.621PPB m
response 33698382

(39) AR1260-D #2
9.598min 51.317PPB
response 169784859

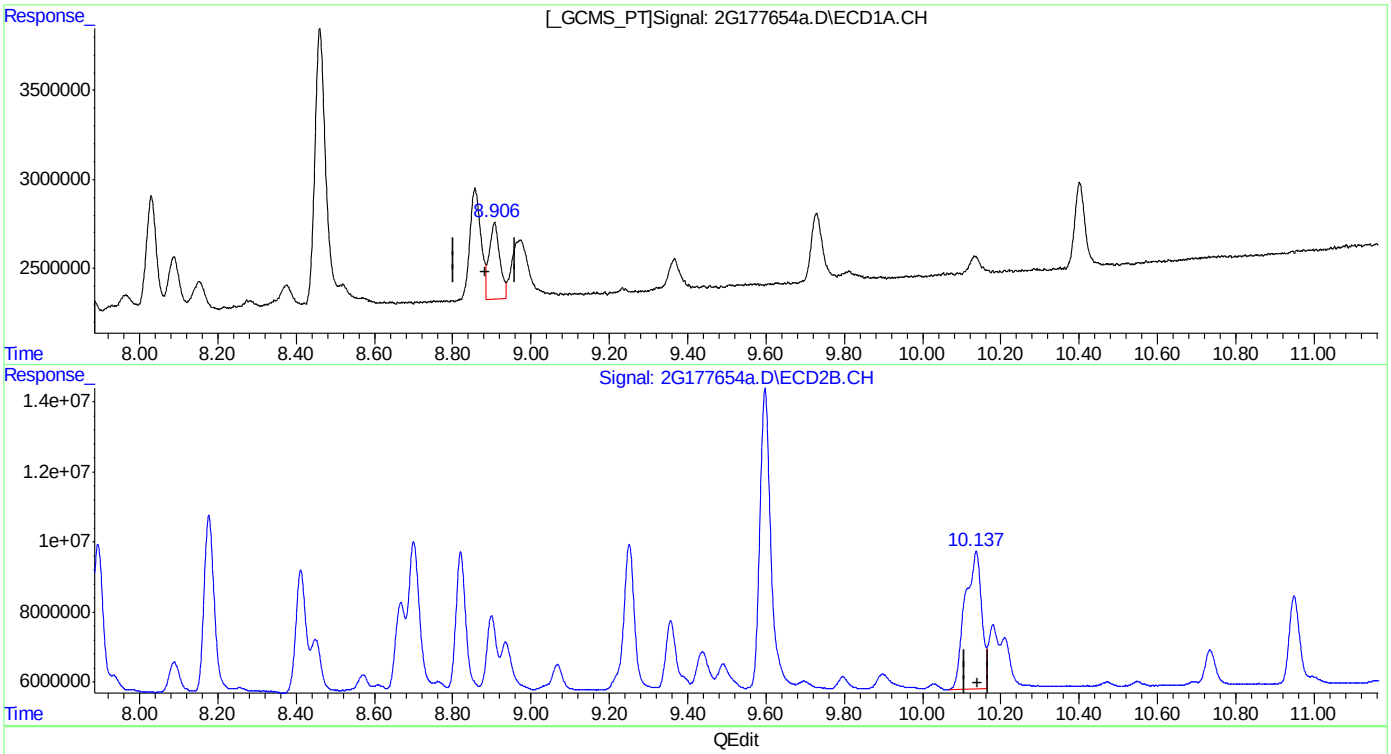
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:35:46 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177654a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:13 pm
Operator : tianweir
Sample : ic4614-50
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:34:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.906min 22.365PPB
response 8008623

(40) AR1260-E #2
10.137min 34.542PPB
response 114223294

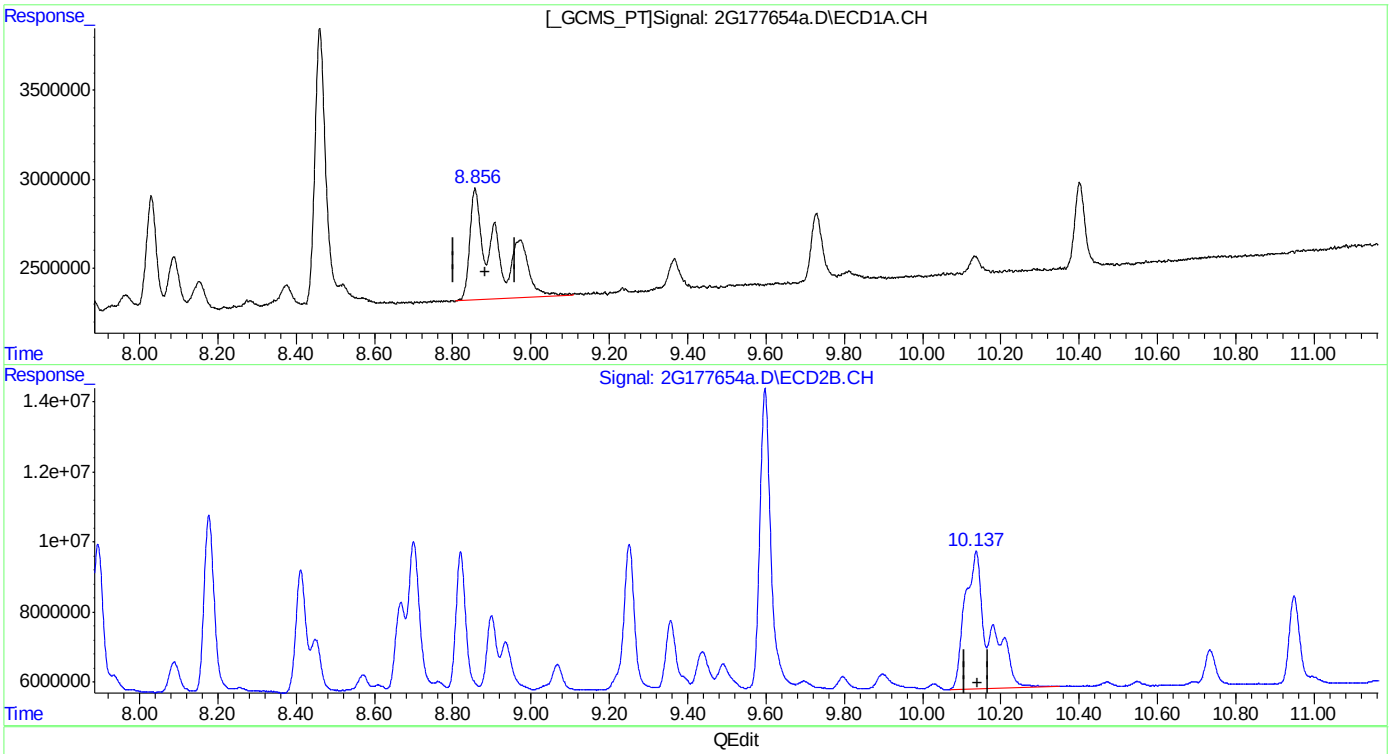
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:35:48 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177654a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:13 pm
Operator : tianweir
Sample : ic4614-50
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:34:48 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.856min 86.311PPB m
response 30906471

(40) AR1260-E #2
10.137min 51.646PPB m
response 170781480

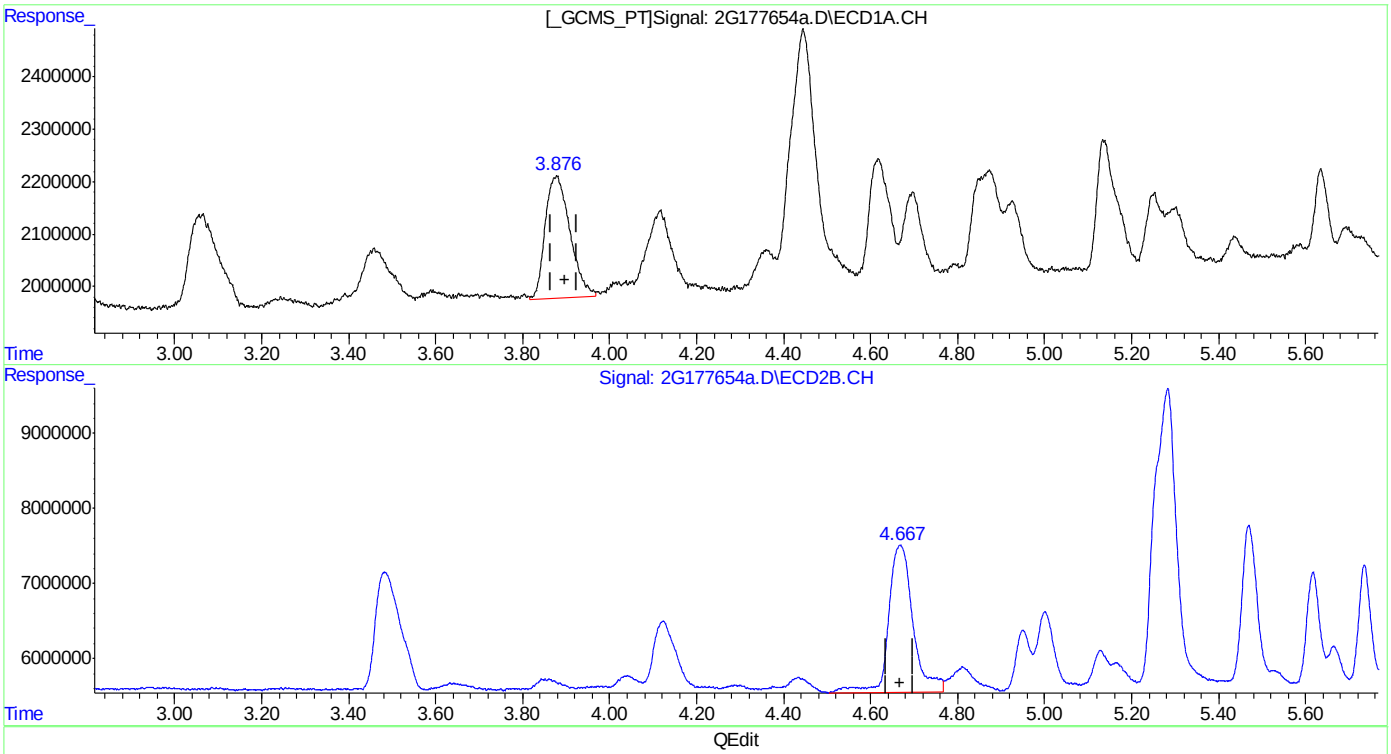
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:35:56 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177654a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:13 pm
Operator : tianweir
Sample : ic4614-50
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:35:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(32) AR1016-B
3.878min 76.849PPB
response 9219518

(32) AR1016-B #2
4.668min 64.076PPB
response 76616657

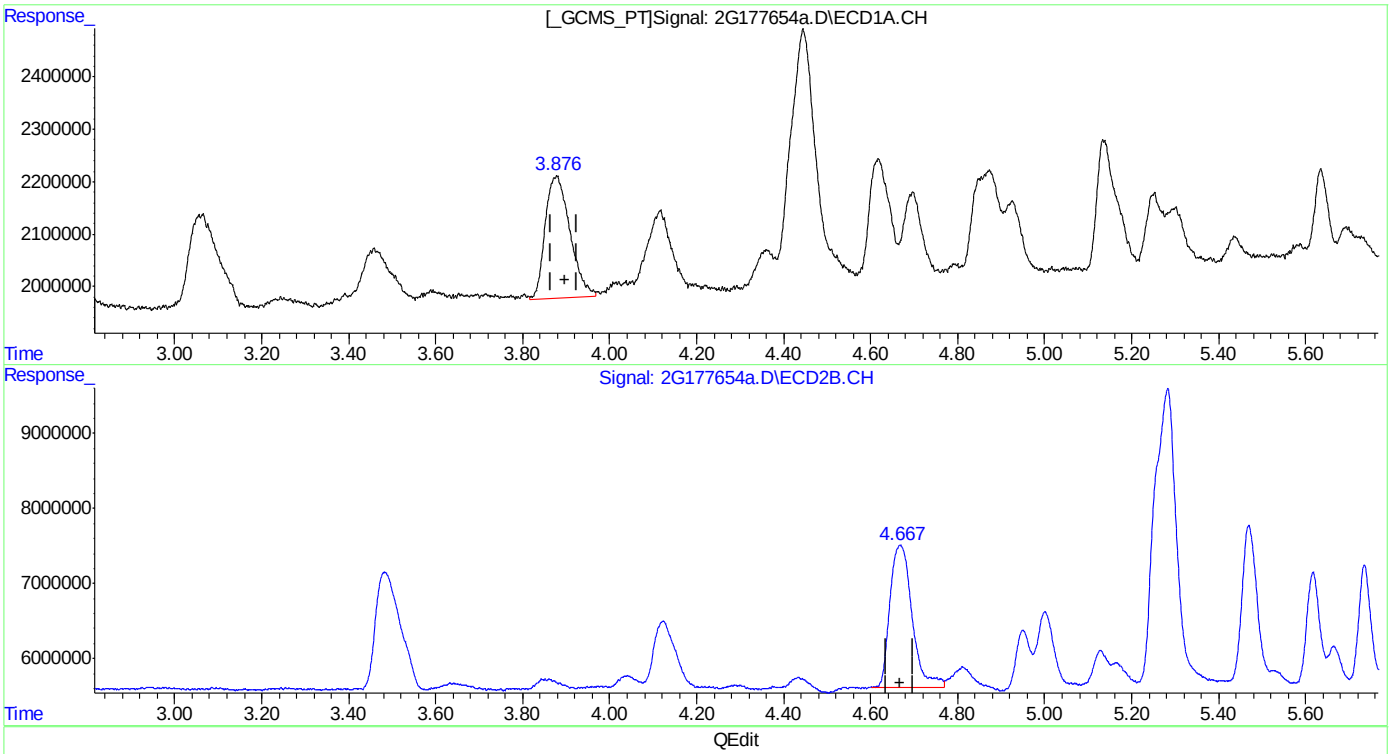
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177654a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:13 pm
Operator : tianweir
Sample : ic4614-50
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:35:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(32) AR1016-B
3.878min 76.849PPB
response 9219518

(32) AR1016-B #2
4.667min 56.277PPB m
response 67291085

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177655.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:30 pm
Operator : tianweir
Sample : ic4614-250
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:36:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachlo...	3.059f	3.482	40794850	299.5E6	19.005	9.387	#
	Spiked Amount 40.000			Recovery	=	47.51%	23.47%	
51)	S Decachlor...	10.400f	11.798	43377513	258.8E6	13.428	10.319	
	Spiked Amount 40.000			Recovery	=	33.57%	25.80%	
	Target Compounds							
31)	AR1016-A	3.455f	4.120	22526051	139.4E6	389.925	250.351	#
32)	AR1016-B	3.875f	4.664	42327112	314.1E6	352.817	262.678	#
33)	AR1016-C	4.445f	5.280	98682568	659.8E6	408.662	248.965	#
34)	AR1016-D	4.614f	5.468	37012225	267.7E6	396.992	243.282	#
35)	AR1016-E	5.135f	6.118	37525588	196.3E6	376.306	246.028	#
36)	AR1260-A	7.529f	8.701	102.9E6	600.6E6	415.619	242.820m	#
37)	AR1260-B	7.688f	8.820	70768323	332.0E6	468.293	246.948	#
38)	AR1260-C	8.030f	9.250	62420313	380.8E6	400.275	247.073	#
39)	AR1260-D	8.461f	9.596	174.0E6	814.2E6	467.849m	246.089	#
40)	AR1260-E	8.855f	10.137	153.4E6	814.9E6	428.328m	246.427m	#

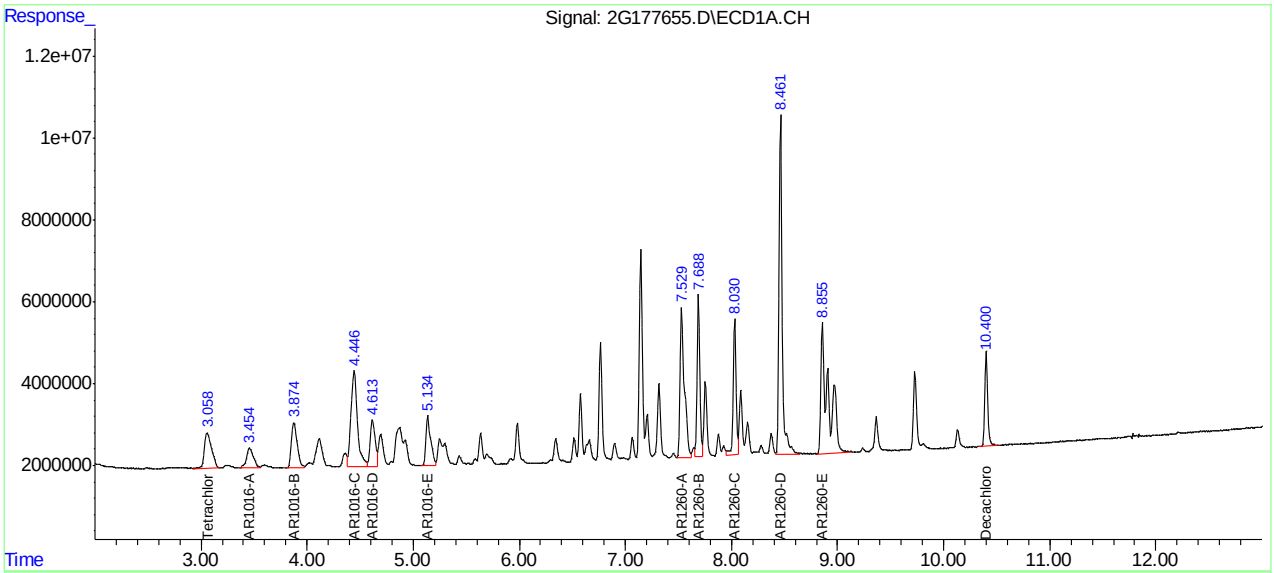
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

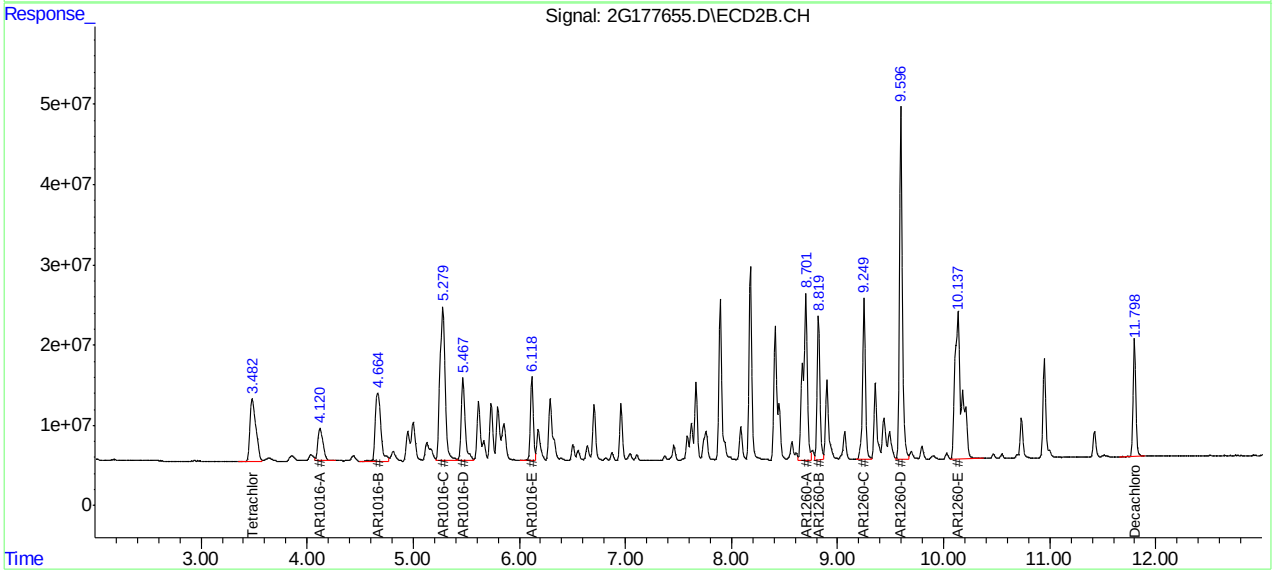
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177655.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:30 pm
Operator : tianweir
Sample : ic4614-250
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:36:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-IC4614	**Method:**	SW846 8082A
Lab FileID:	2G177655.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 16:30	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

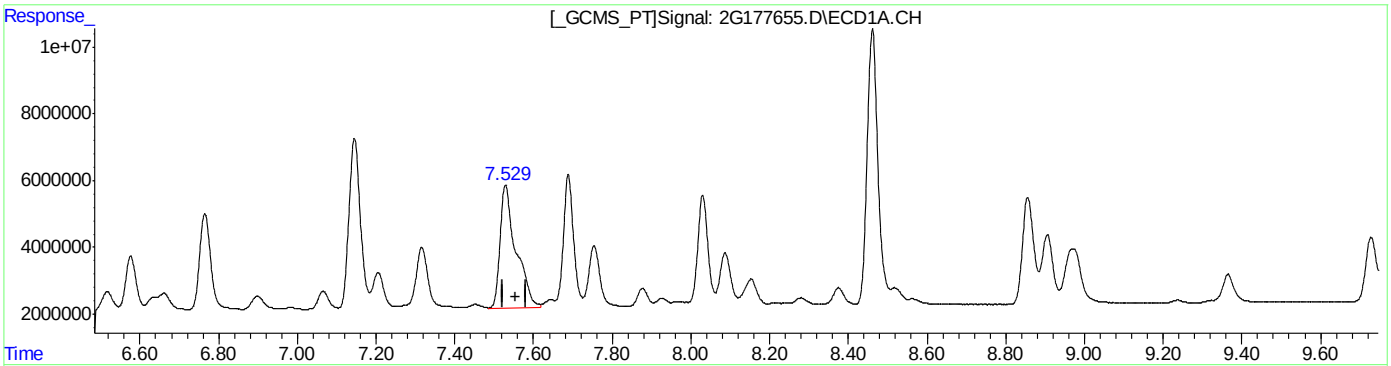
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-D		1	8.46	Split peak
AR1260-A		2	8.70	Split peak
AR1260-E		1	8.85	Split peak
AR1260-E		2	10.14	Split peak

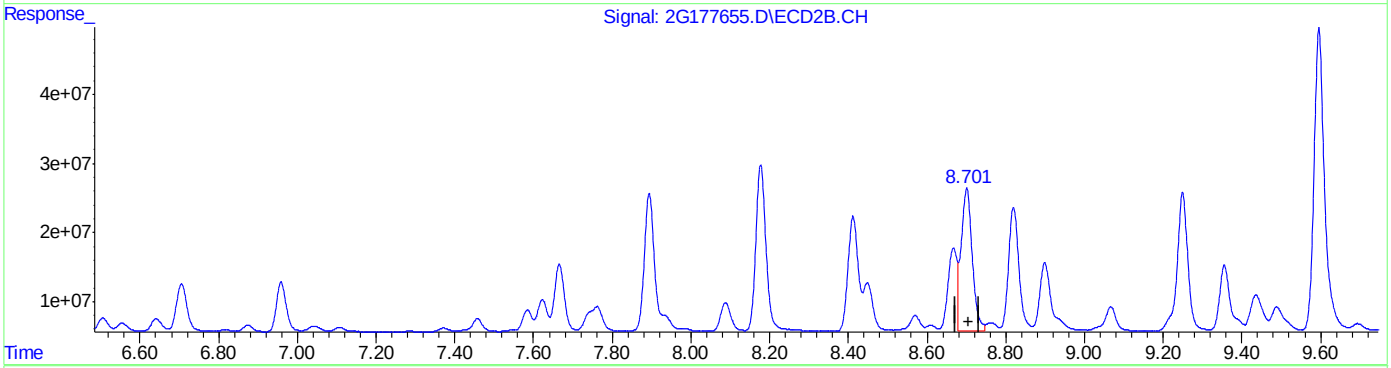
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177655.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:30 pm
Operator : tianweir
Sample : ic4614-250
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:36:16 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(36) AR1260-A
7.529min 415.619PPB
response 102900555

(36) AR1260-A #2
8.701min 164.151PPB
response 406035470

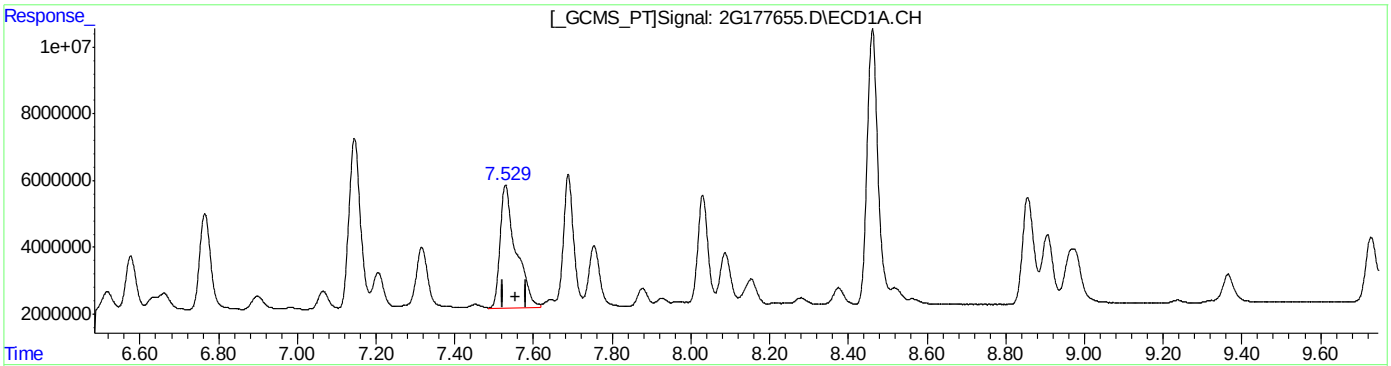
(+) = Expected Retention Time

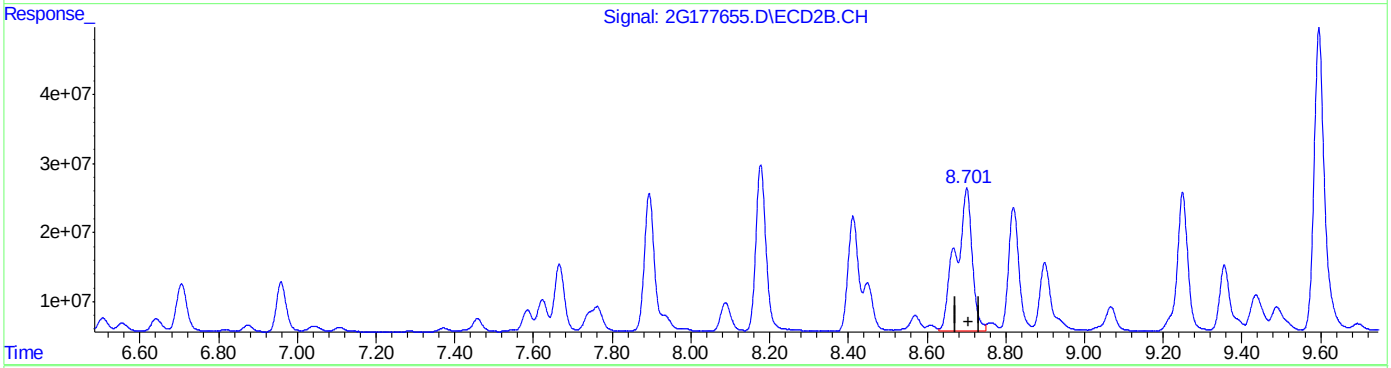
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177655.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:30 pm
Operator : tianweir
Sample : ic4614-250
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:36:16 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(36) AR1260-A
7.529min 415.619PPB
response 102900555

(36) AR1260-A #2
8.701min 242.820PPB m
response 600627104

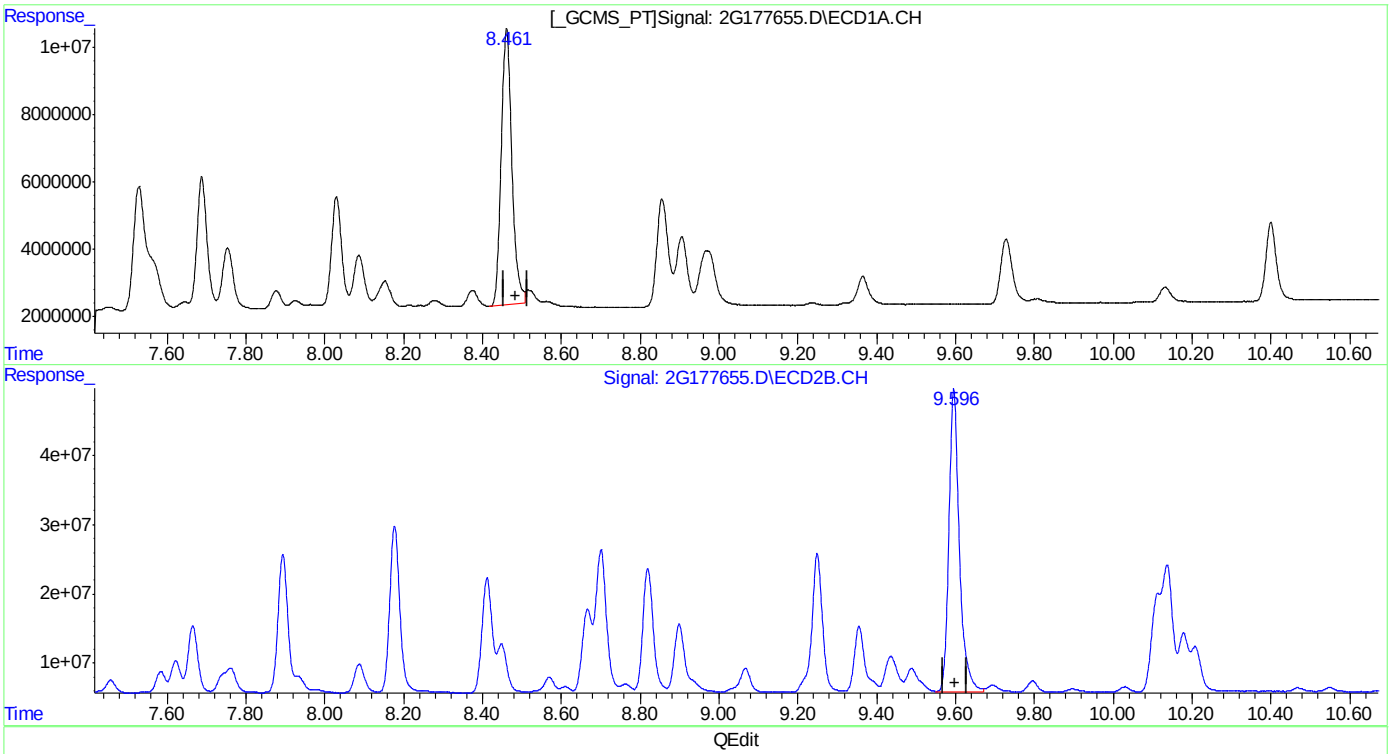
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177655.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:30 pm
Operator : tianweir
Sample : ic4614-250
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:36:16 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.461min 416.170PPB
response 154757856

(39) AR1260-D #2
9.596min 246.089PPB
response 814199874

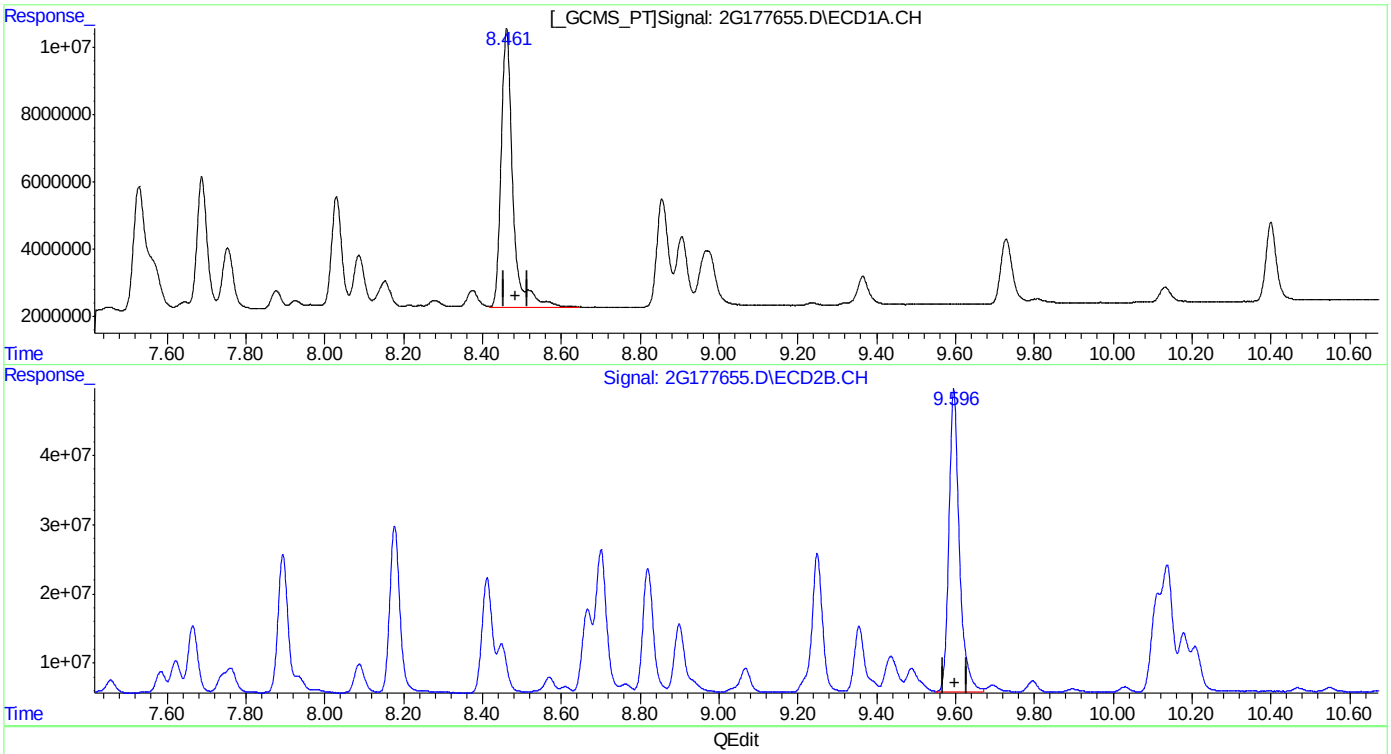
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177655.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:30 pm
Operator : tianweir
Sample : ic4614-250
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:36:16 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.461min 467.849PPB m
response 173975347

(39) AR1260-D #2
9.596min 246.089PPB
response 814199874

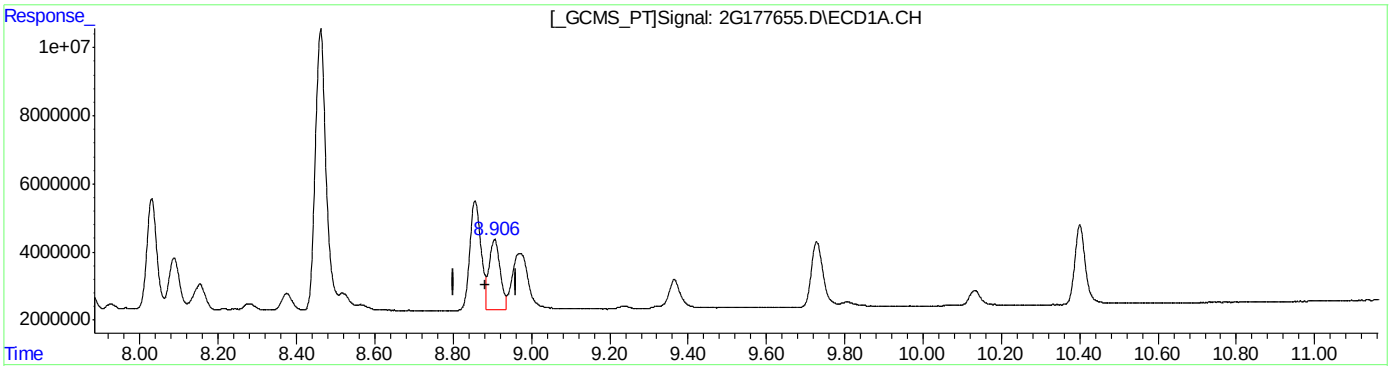
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:36:51 2019 RPT1

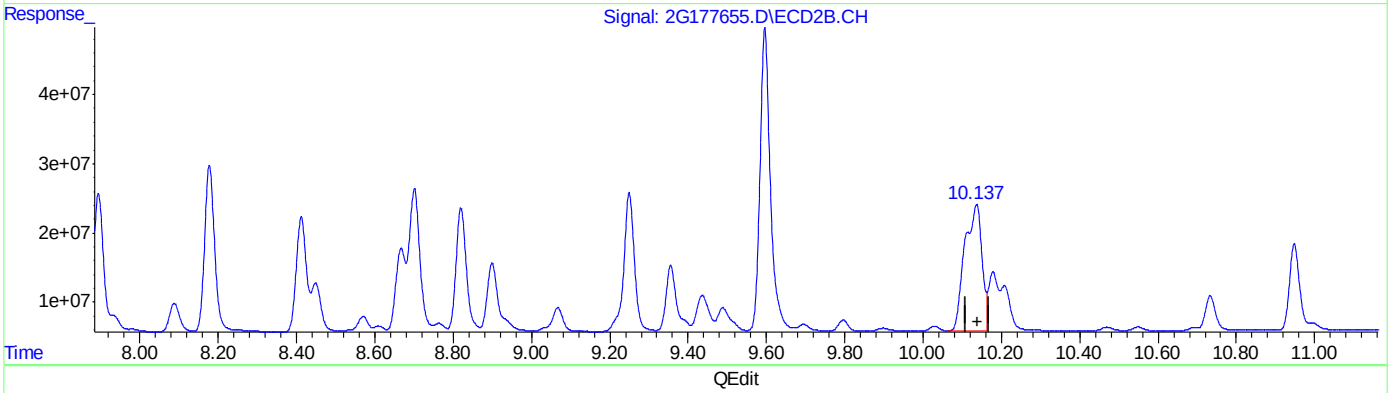
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177655.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:30 pm
Operator : tianweir
Sample : ic4614-250
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:36:16 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(40) AR1260-E
8.906min 113.847PPB
response 40766901

(40) AR1260-E #2
10.137min 167.615PPB
response 554264451

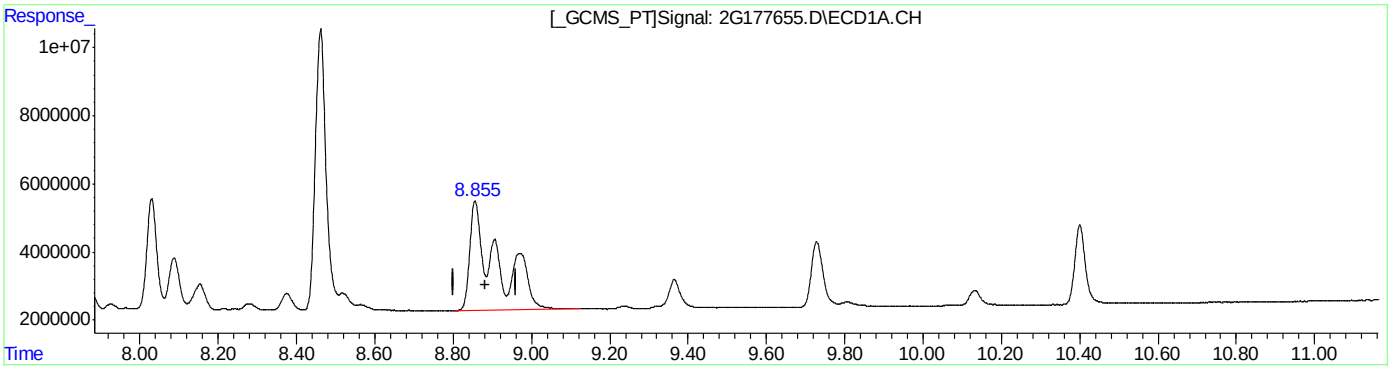
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:36:53 2019 RPT1

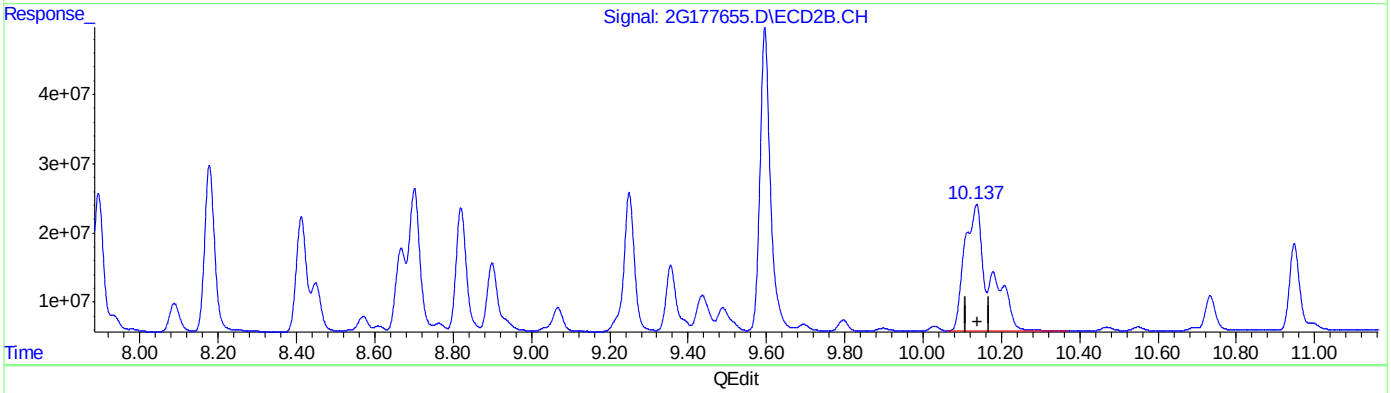
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177655.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:30 pm
Operator : tianweir
Sample : ic4614-250
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:36:16 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(40) AR1260-E
8.855min 428.328PPB m
response 153377366

(40) AR1260-E #2
10.137min 246.427PPB m
response 814878813

(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:37:01 2019 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177656.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:47 pm
Operator : tianweir
Sample : ic4614-500
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:38:08 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachlo...	3.058f	3.484	83433807	610.2E6	38.869	19.124	#
	Spiked Amount 40.000			Recovery	=	97.17%	47.81%	
51)	S Decachlor...	10.400f	11.798	88596888	511.9E6	27.427	20.415	#
	Spiked Amount 40.000			Recovery	=	68.57%	51.04%	
	Target Compounds							
31)	AR1016-A	3.455f	4.120	44346054	268.8E6	767.628	482.813	#
32)	AR1016-B	3.874f	4.666	84142564	603.5E6	701.368	504.725	#
33)	AR1016-C	4.444f	5.281	199.6E6	1307.9E6	826.727	493.565	#
34)	AR1016-D	4.614f	5.469	74175314	524.8E6	795.601	476.850	#
35)	AR1016-E	5.134f	6.118	75553148	390.0E6	757.646	488.791	#
36)	AR1260-A	7.528f	8.700	213.4E6	1206.2E6	861.862	487.650m	#
37)	AR1260-B	7.689f	8.820	147.7E6	663.4E6	977.175	493.426	#
38)	AR1260-C	8.029f	9.250	129.0E6	766.5E6	827.336	497.278	#
39)	AR1260-D	8.460f	9.596	367.5E6	1656.5E6	988.322m	500.670	#
40)	AR1260-E	8.855f	10.137	318.8E6	1637.8E6	890.234m	495.292m	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

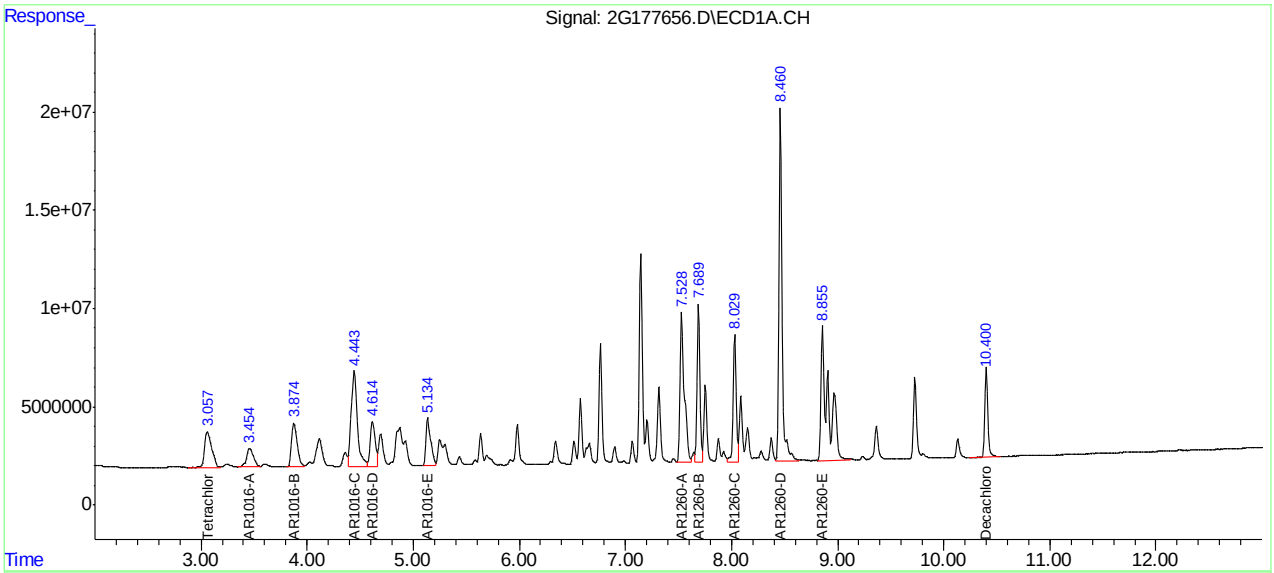
11.4.3 11

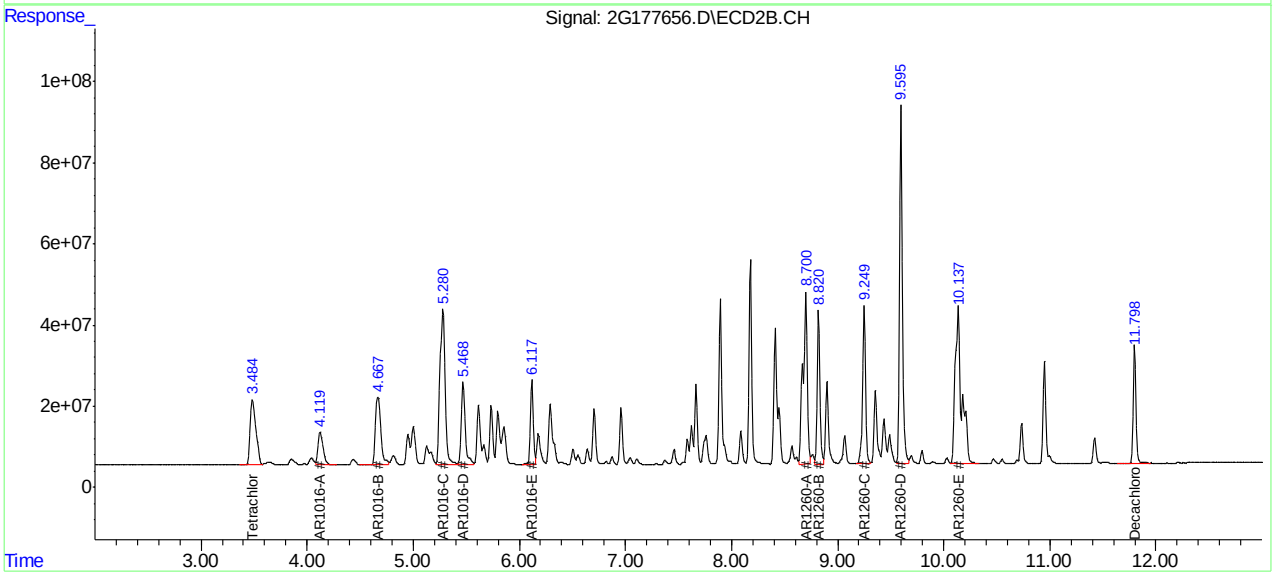
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177656.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:47 pm
Operator : tianweir
Sample : ic4614-500
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:38:08 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-IC4614	**Method:**	SW846 8082A
Lab FileID:	2G177656.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 16:47	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

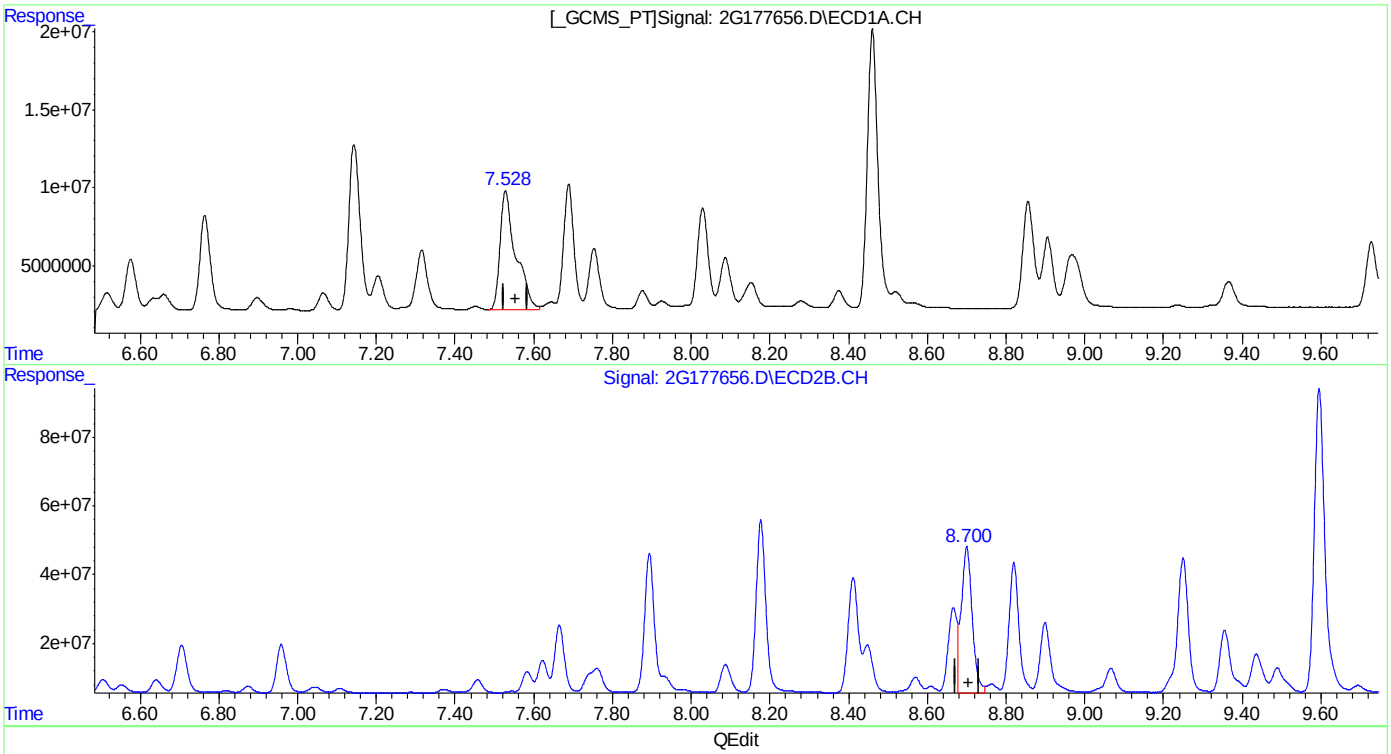
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-D		1	8.46	Split peak
AR1260-A		2	8.70	Split peak
AR1260-E		1	8.86	Split peak
AR1260-E		2	10.14	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177656.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:47 pm
Operator : tianweir
Sample : ic4614-500
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:37:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(36) AR1260-A
7.528min 861.862PPB
response 213383157

(36) AR1260-A #2
8.700min 328.878PPB
response 813495516

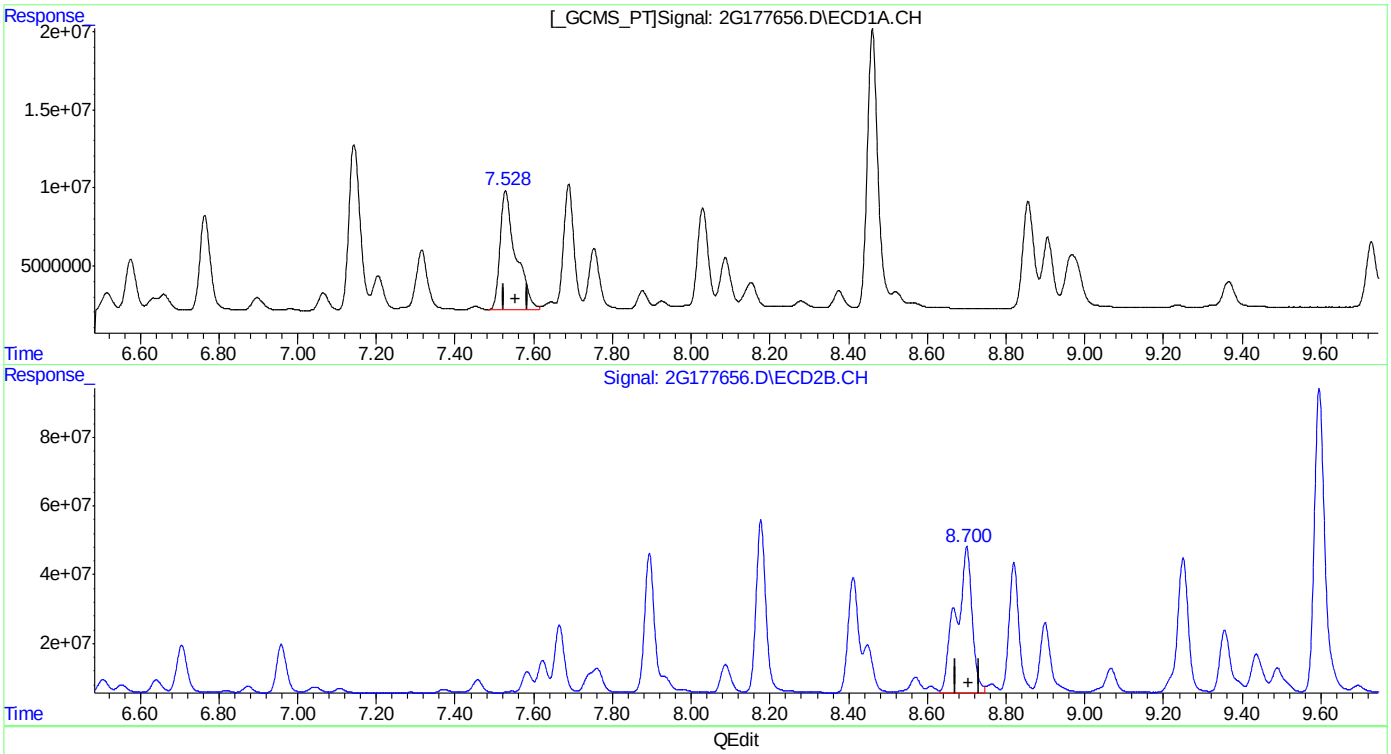
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177656.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:47 pm
Operator : tianweir
Sample : ic4614-500
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:37:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(36) AR1260-A
7.528min 861.862PPB
response 213383157

(36) AR1260-A #2
8.700min 487.650PPB m
response 1206225830

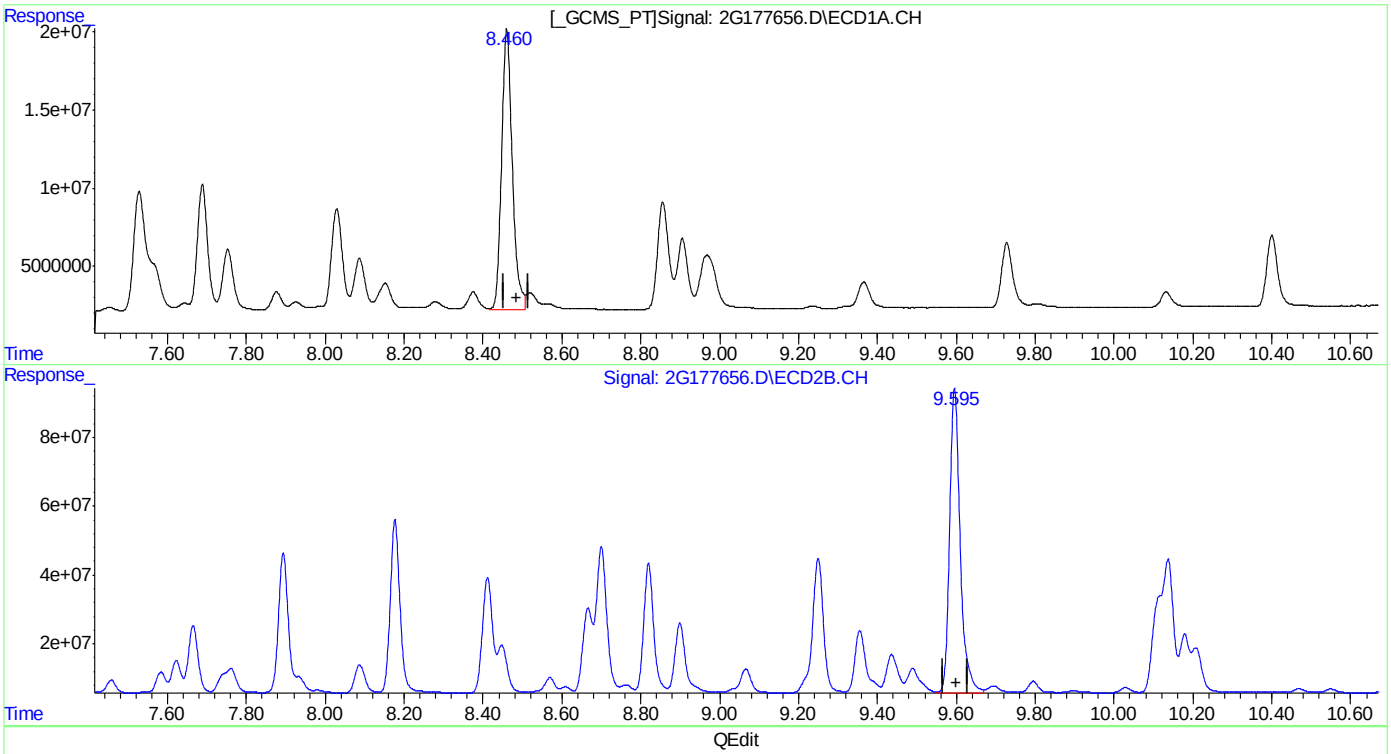
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177656.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:47 pm
Operator : tianweir
Sample : ic4614-500
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:37:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.460min 908.683PPB
response 337904621

(39) AR1260-D #2
9.596min 500.670PPB
response 1656493620

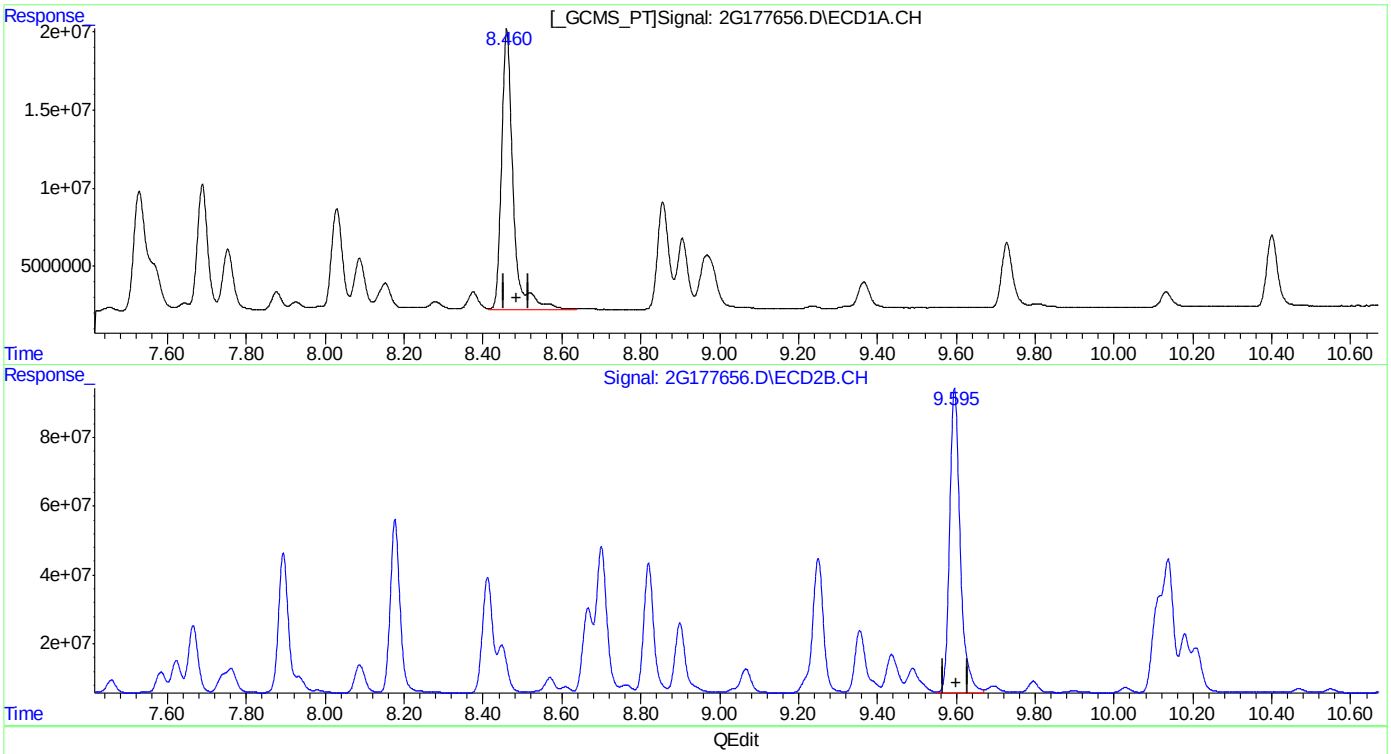
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:37:54 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177656.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:47 pm
Operator : tianweir
Sample : ic4614-500
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:37:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.460min 988.322PPB m
response 367519410

(39) AR1260-D #2
9.596min 500.670PPB
response 1656493620

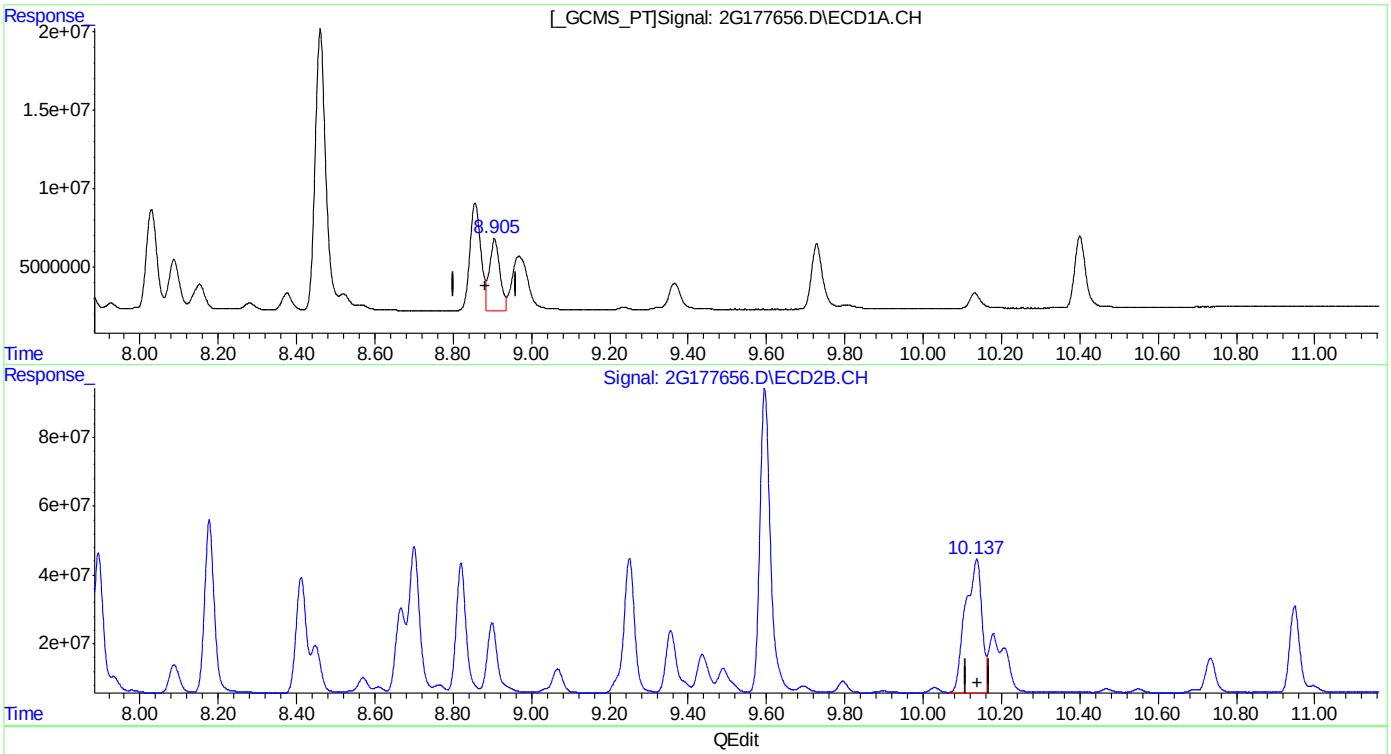
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:37:59 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177656.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:47 pm
Operator : tianweir
Sample : ic4614-500
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:37:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.906min 236.398PPB
response 84650147

(40) AR1260-E #2
10.137min 339.131PPB
response 1121430169

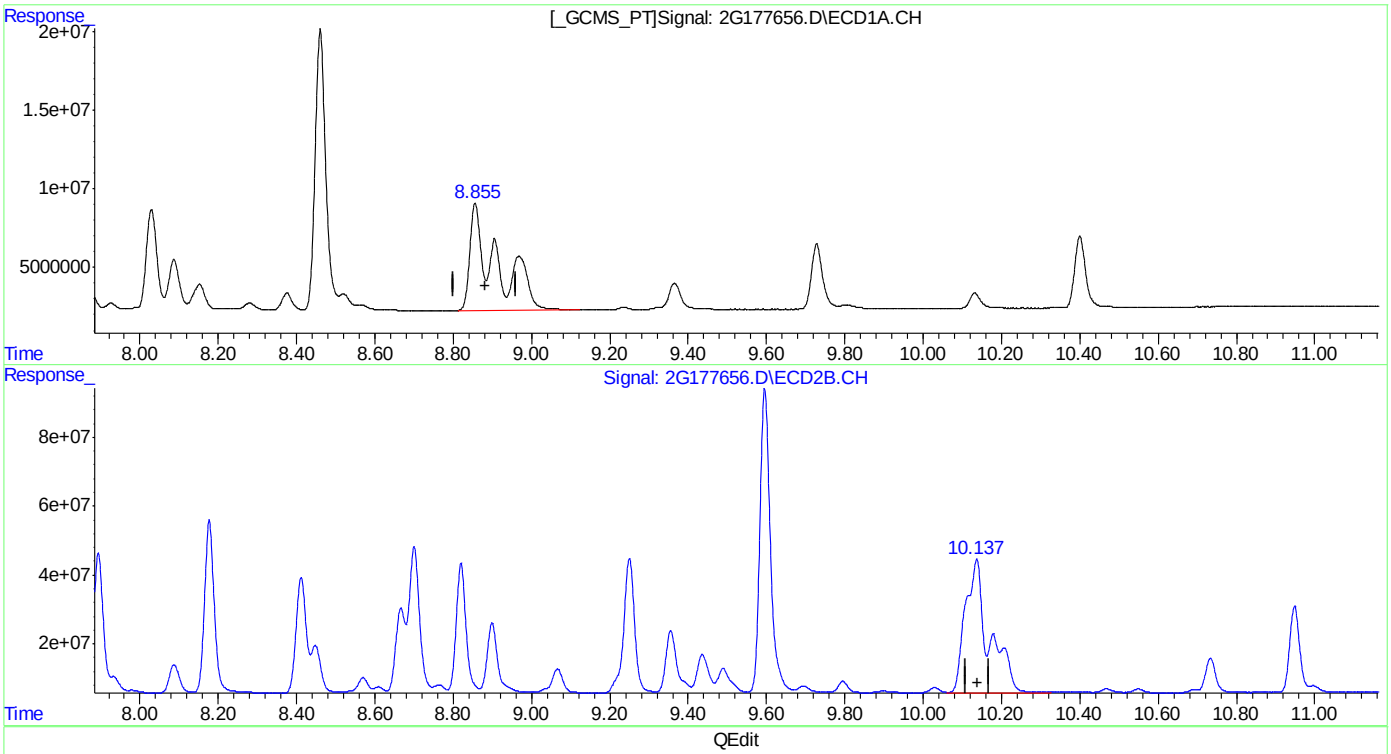
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:38:01 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177656.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 4:47 pm
Operator : tianweir
Sample : ic4614-500
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:37:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.855min 890.234PPB m
response 318778156

(40) AR1260-E #2
10.137min 495.292PPB m
response 1637818025

(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:38:10 2019 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177657.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:04 pm
Operator : tianweir
Sample : icc4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:39:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachlo...	3.058f	3.483	170.2E6	1227.4E6	79.270	38.465	#
	Spiked Amount 40.000			Recovery	= 198.17%		96.16%	
51)	S Decachlor...	10.401f	11.798	181.6E6	1001.1E6	56.213	39.922	#
	Spiked Amount 40.000			Recovery	= 140.53%		99.80%	
	Target Compounds							
31)	AR1016-A	3.457f	4.120	87726952	522.5E6	1518.549	938.484	#
32)	AR1016-B	3.874f	4.668	164.6E6	1142.3E6	1371.848	955.300	#
33)	AR1016-C	4.442f	5.280	397.7E6	2549.3E6	1646.936	962.016	#
34)	AR1016-D	4.612f	5.469	146.3E6	1012.9E6	1569.653	920.429	#
35)	AR1016-E	5.136f	6.118	149.8E6	762.1E6	1502.689	955.080	#
36)	AR1260-A	7.529f	8.700	440.7E6	2408.6E6	1779.908	973.724m	#
37)	AR1260-B	7.689f	8.821	307.8E6	1310.5E6	2036.895	974.722	#
38)	AR1260-C	8.030f	9.251	266.8E6	1524.0E6	1711.173	988.719	#
39)	AR1260-D	8.460f	9.597	768.3E6	3326.6E6	2066.053m	1005.443	#
40)	AR1260-E	8.855f	10.136	658.2E6	3257.8E6	1838.024m	985.201m	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

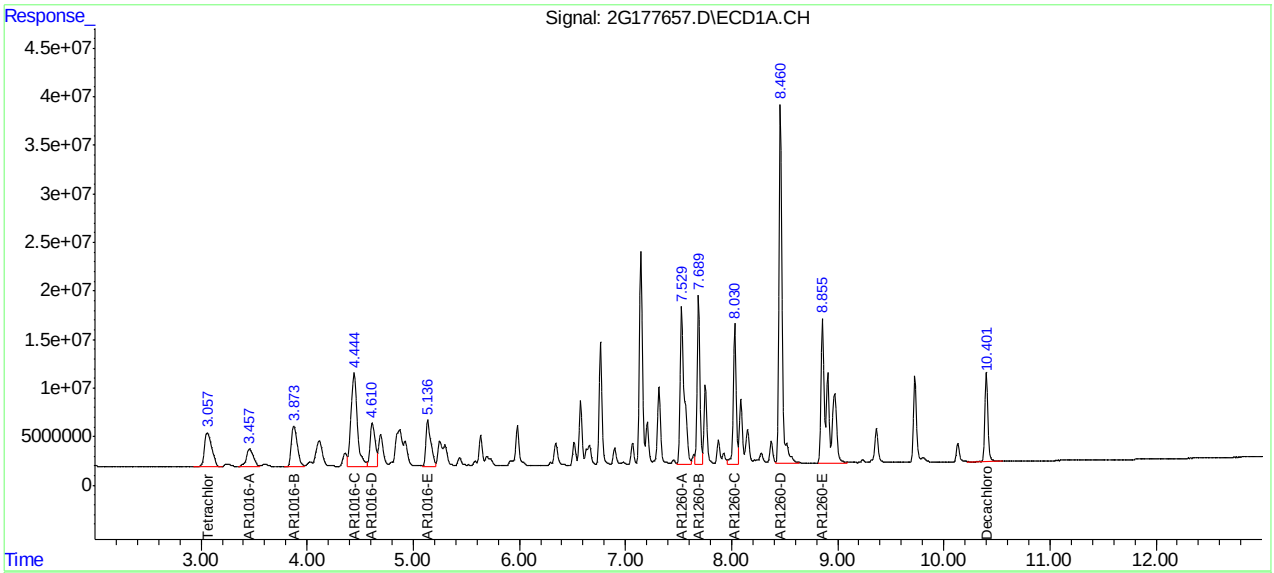
11.4.4 11

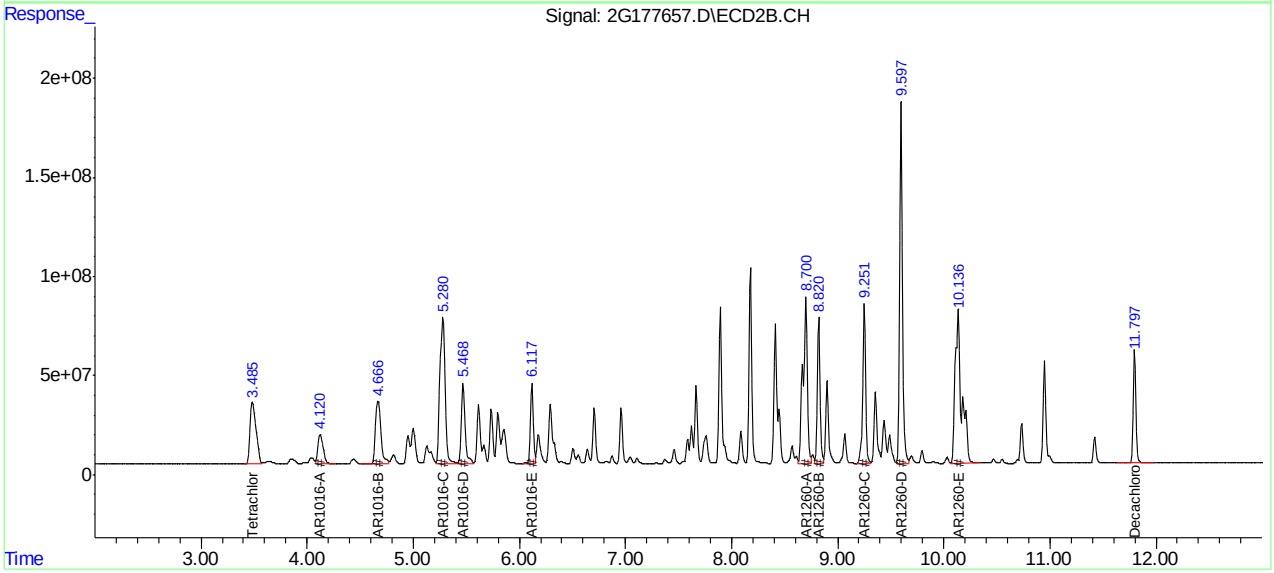
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177657.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:04 pm
Operator : tianweir
Sample : icc4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:39:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-ICC4614	**Method:**	SW846 8082A
Lab FileID:	2G177657.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 17:04	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

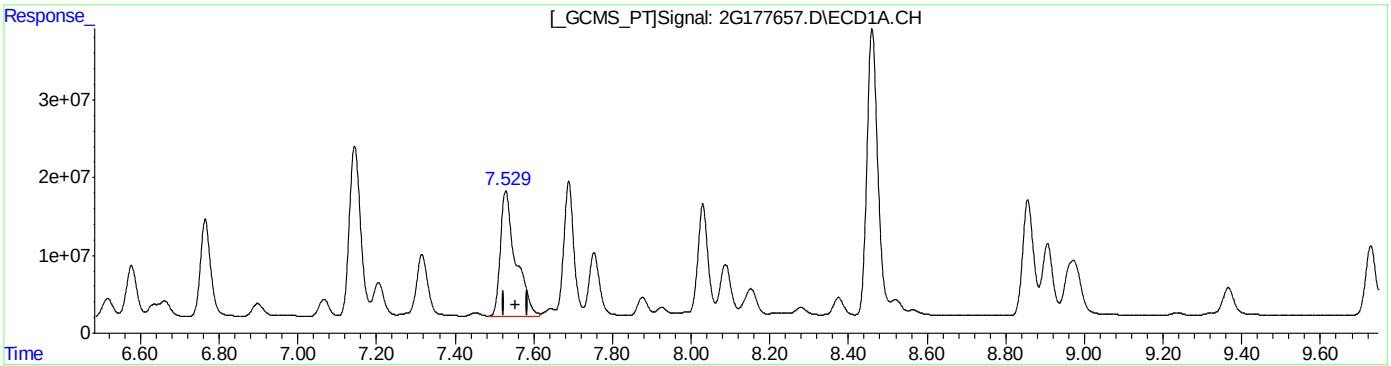
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-D		1	8.46	Split peak
AR1260-A		2	8.70	Split peak
AR1260-E		1	8.86	Split peak
AR1260-E		2	10.14	Split peak

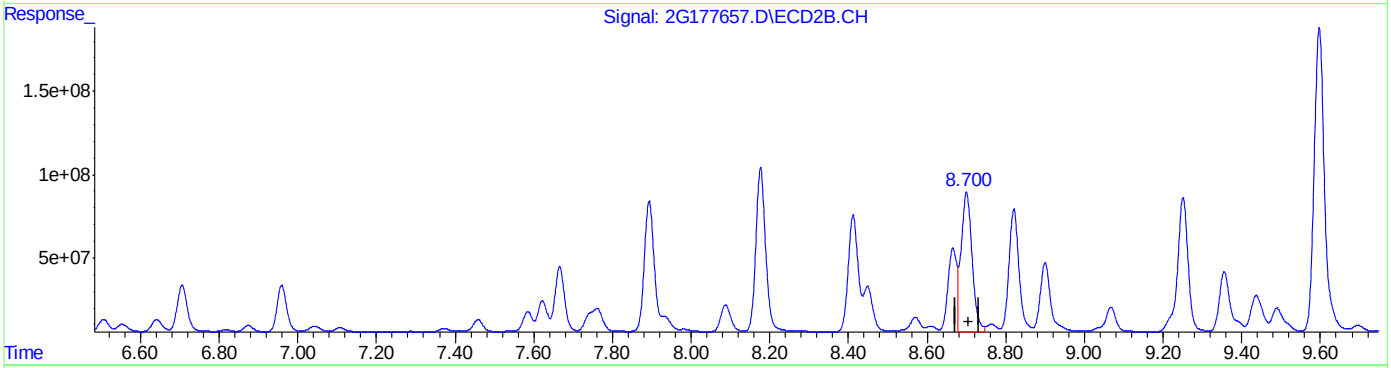
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177657.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:04 pm
Operator : tianweir
Sample : icc4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:38:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(36) AR1260-A
7.529min 1779.908PPB
response 440676541

(36) AR1260-A #2
8.700min 656.224PPB
response 1623202434

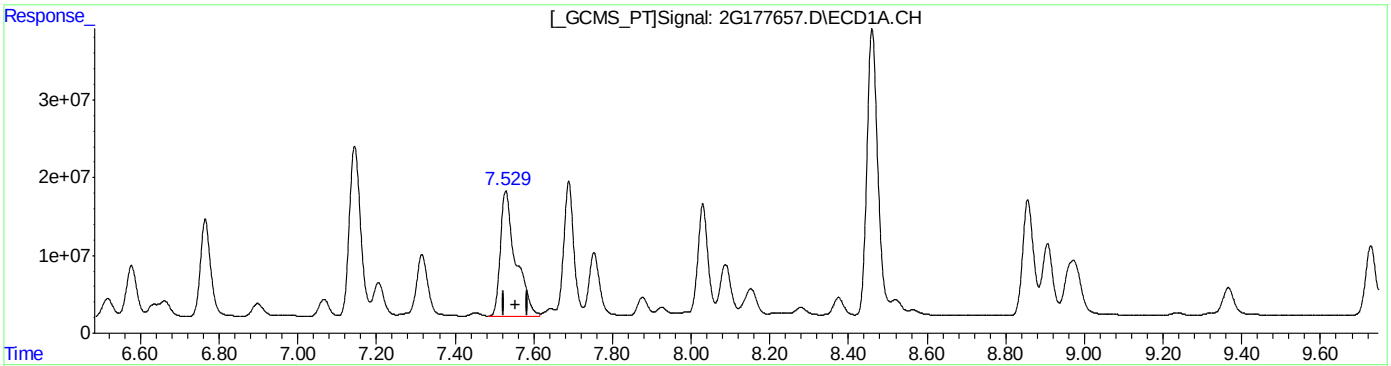
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:38:44 2019 RPT1

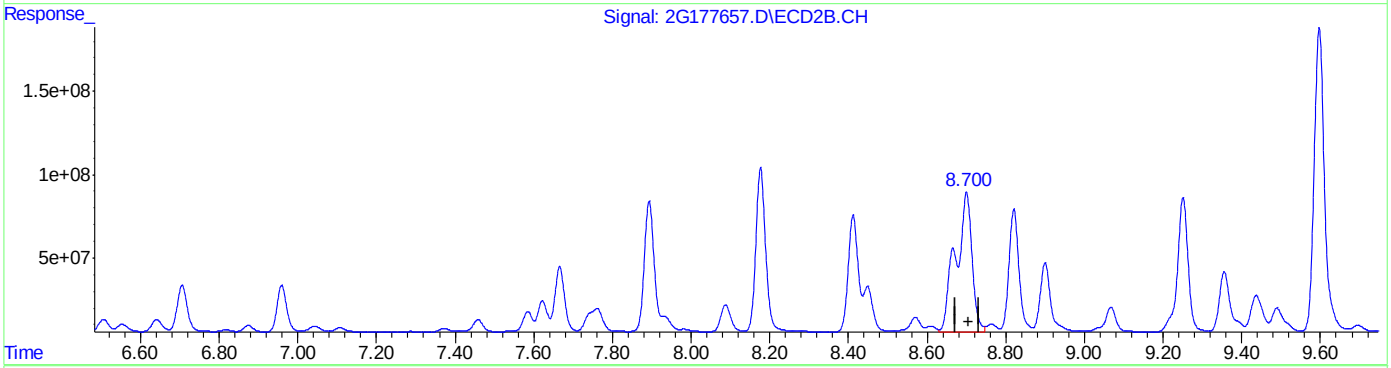
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177657.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:04 pm
Operator : tianweir
Sample : icc4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:38:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(36) AR1260-A
7.529min 1779.908PPB
response 440676541

(36) AR1260-A #2
8.700min 973.724PPB m
response 2408553941

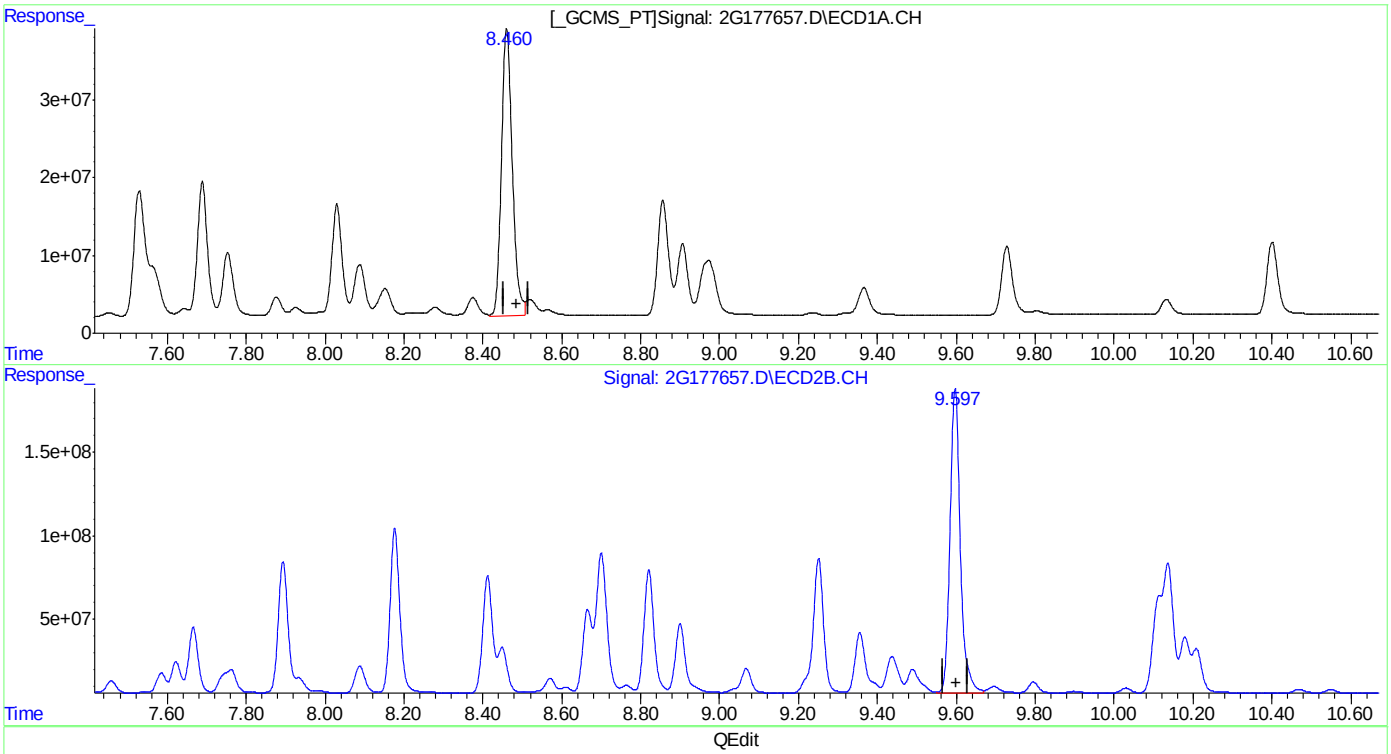
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:38:50 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177657.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:04 pm
Operator : tianweir
Sample : icc4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:38:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.460min 1909.447PPB
response 710050437

(39) AR1260-D #2
9.597min 1005.443PPB
response 3326562498

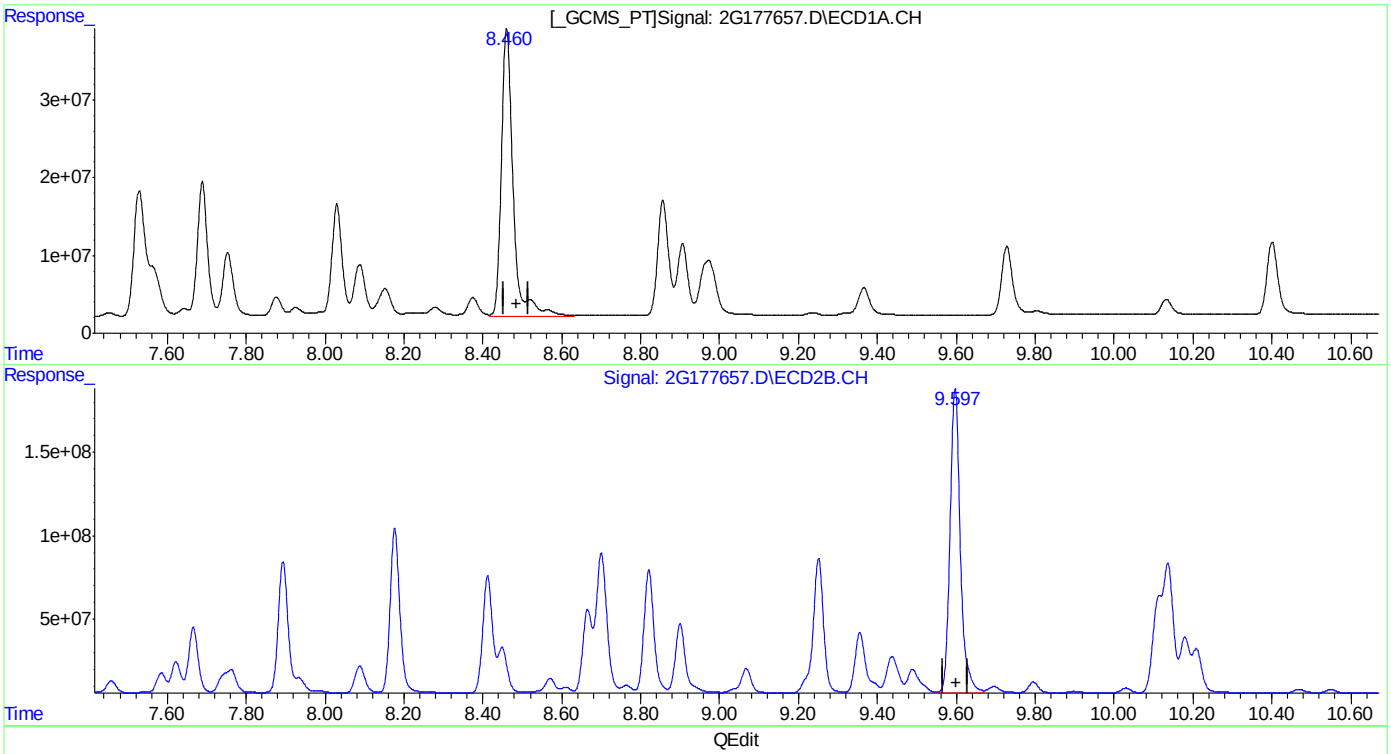
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:38:54 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177657.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:04 pm
Operator : tianweir
Sample : icc4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:38:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.460min 2066.053PPB m
response 768286509

(39) AR1260-D #2
9.597min 1005.443PPB
response 3326562498

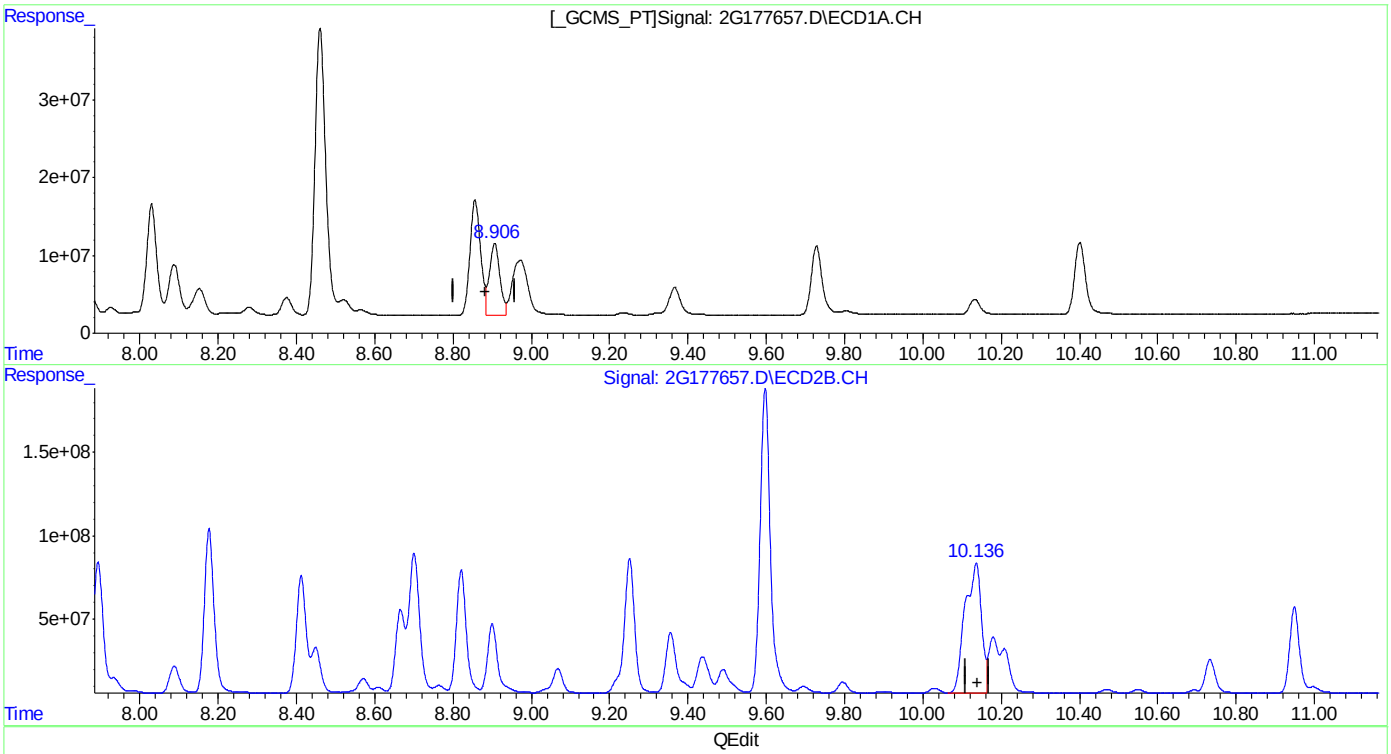
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:39:00 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177657.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:04 pm
Operator : tianweir
Sample : icc4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:38:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.906min 481.956PPB
response 172580508

(40) AR1260-E #2
10.136min 681.552PPB
response 2253737575

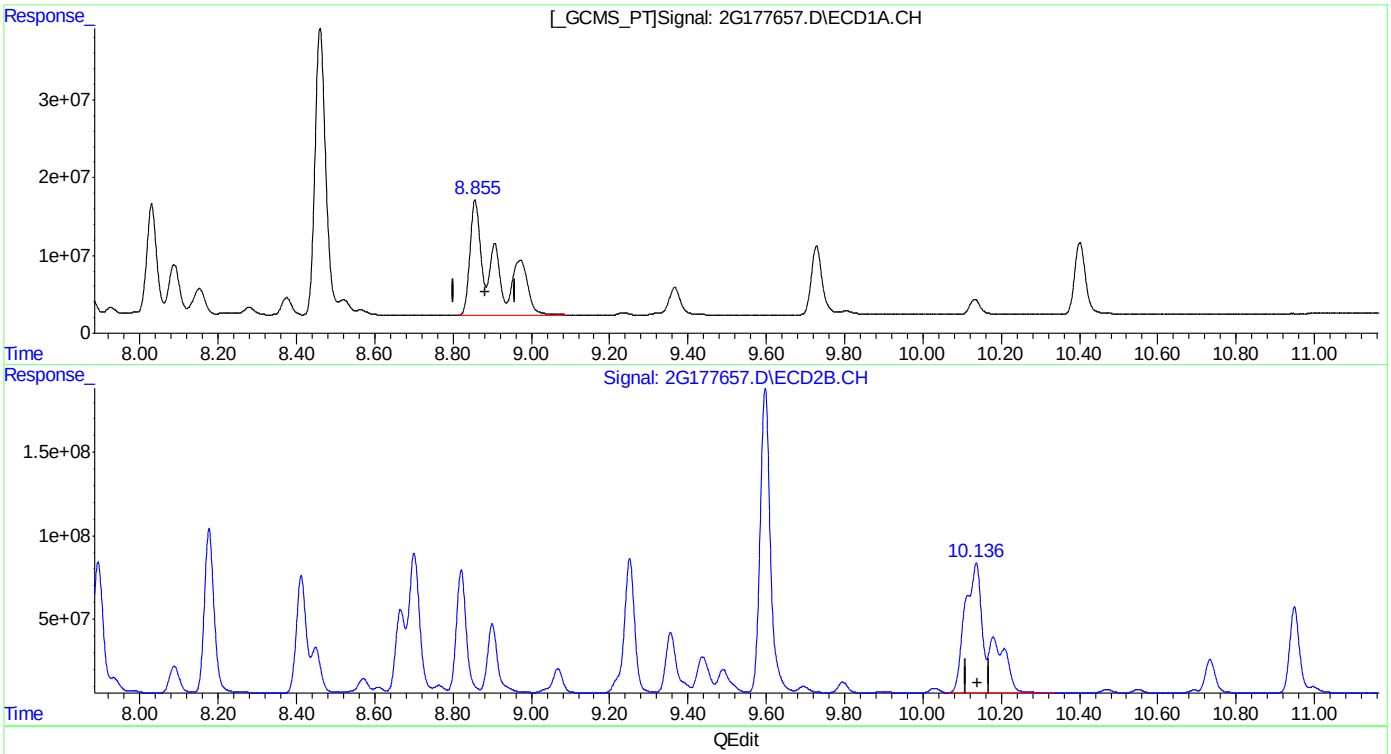
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:39:01 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177657.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:04 pm
Operator : tianweir
Sample : icc4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:38:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.855min 1838.024PPB m
response 658166143

(40) AR1260-E #2
10.136min 985.201PPB m
response 3257835799

(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:39:08 2019 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177658.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:21 pm
Operator : tianweir
Sample : ic4614-2000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:40:10 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachlo...	3.059f	3.484	352.0E6	2503.0E6	163.981	78.439	#
	Spiked Amount 40.000			Recovery	= 409.95%	196.10%		
51)	S Decachlor...	10.399f	11.797	382.3E6	2002.2E6	118.333	79.840	#
	Spiked Amount 40.000			Recovery	= 295.83%	199.60%		
	Target Compounds							
31)	AR1016-A	3.455f	4.120	172.3E6	992.2E6	2982.620	1782.175	#
32)	AR1016-B	3.875f	4.668	323.0E6	2187.9E6	2692.423	1829.772	#
33)	AR1016-C	4.442f	5.280	807.4E6	5015.6E6	3343.711	1892.694	#
34)	AR1016-D	4.613f	5.468	292.0E6	1982.1E6	3132.265	1801.076m	#
35)	AR1016-E	5.135f	6.117	303.2E6	1531.6E6	3040.327	1919.385	#
36)	AR1260-A	7.529f	8.699	921.3E6	4862.0E6	3720.980	1965.592m	#
37)	AR1260-B	7.689f	8.818	645.2E6	2627.7E6	4269.159	1954.364	#
38)	AR1260-C	8.029f	9.249	553.6E6	3070.0E6	3550.278	1991.651	#
39)	AR1260-D	8.458f	9.596	1602.5E6	6736.4E6	4309.348m	2036.045	#
40)	AR1260-E	8.855f	10.136	1385.4E6	6613.7E6	3868.992m	2000.061m	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

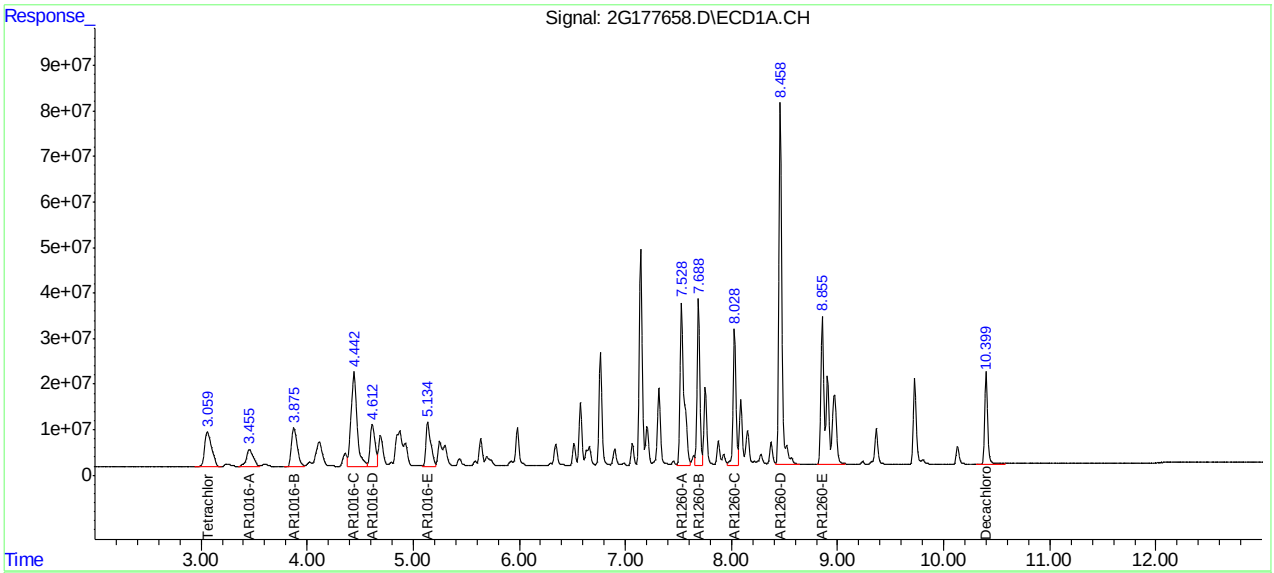
11.4.5 11

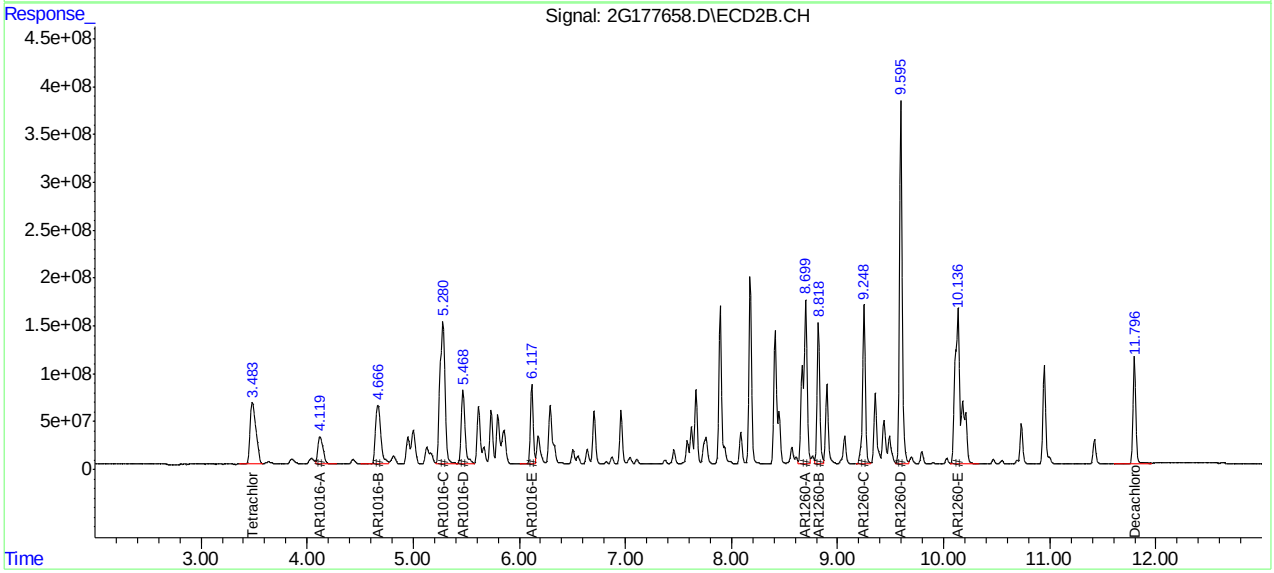
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177658.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:21 pm
Operator : tianweir
Sample : ic4614-2000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:40:10 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-IC4614	**Method:**	SW846 8082A
Lab FileID:	2G177658.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 17:21	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

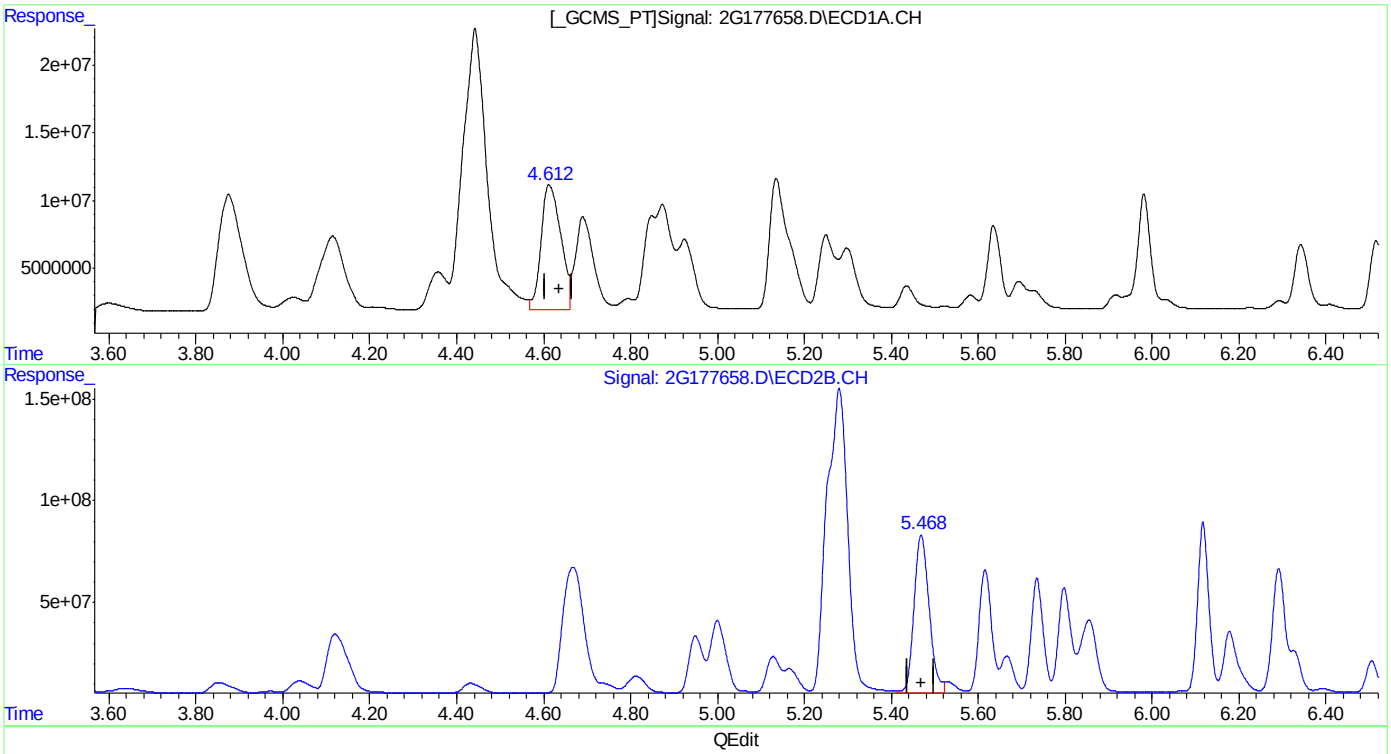
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1016-D		2	5.47	Split peak
AR1260-D		1	8.46	Split peak
AR1260-A		2	8.70	Split peak
AR1260-E		1	8.86	Split peak
AR1260-E		2	10.14	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177658.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:21 pm
Operator : tianweir
Sample : ic4614-2000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:39:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(34) AR1016-D
4.613min 3132.265PPB
response 292026544

(34) AR1016-D #2
5.469min 1707.356PPB
response 1878937337

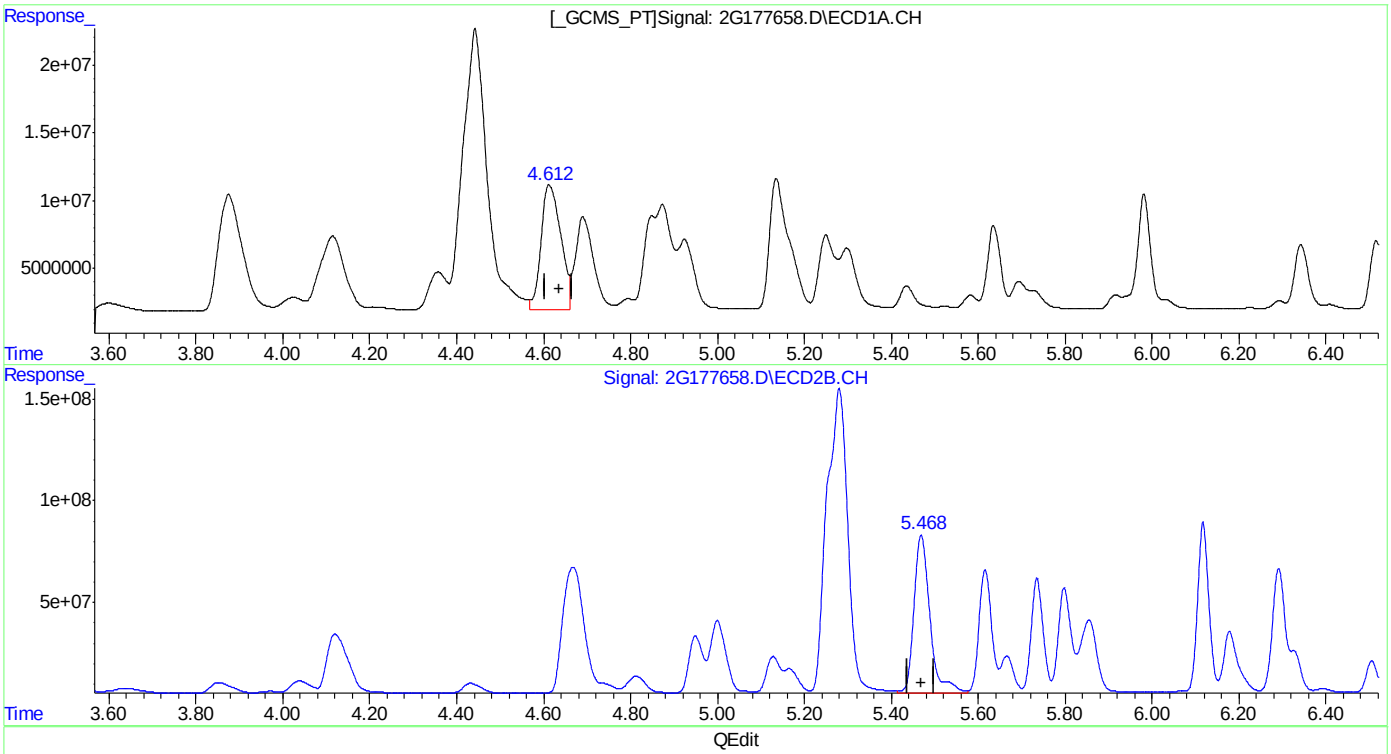
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177658.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:21 pm
Operator : tianweir
Sample : ic4614-2000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:39:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(34) AR1016-D
4.613min 3132.265PPB
response 292026544

(34) AR1016-D #2
5.468min 1801.076PPB m
response 1982076331

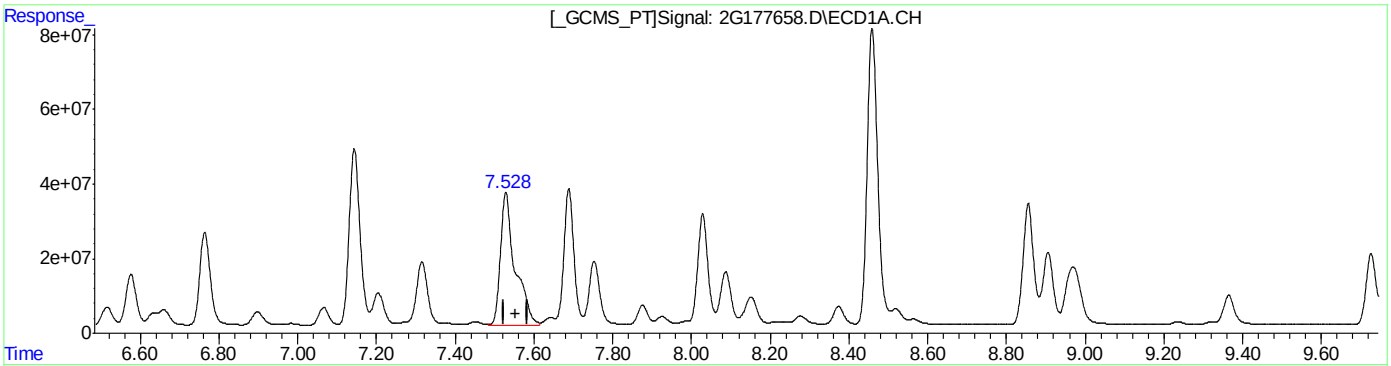
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:39:44 2019 RPT1

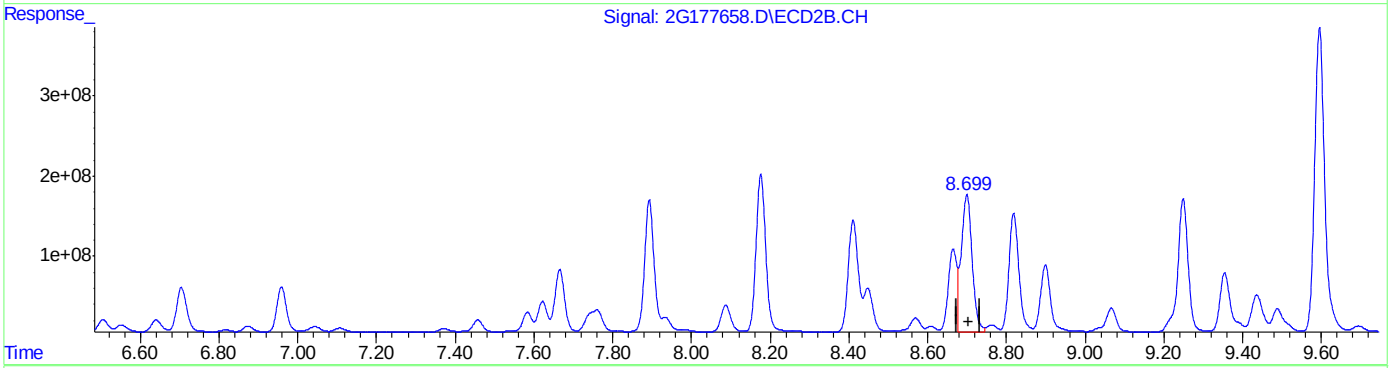
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177658.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:21 pm
Operator : tianweir
Sample : ic4614-2000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:39:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(36) AR1260-A
7.529min 3720.980PPB
response 921254556

(36) AR1260-A #2
8.700min 1317.831PPB
response 3259719597

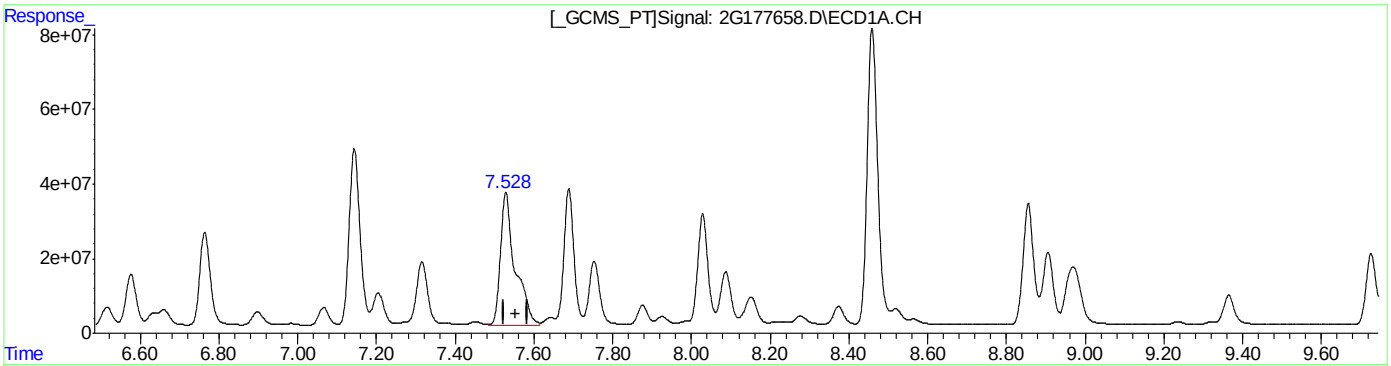
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:39:47 2019 RPT1

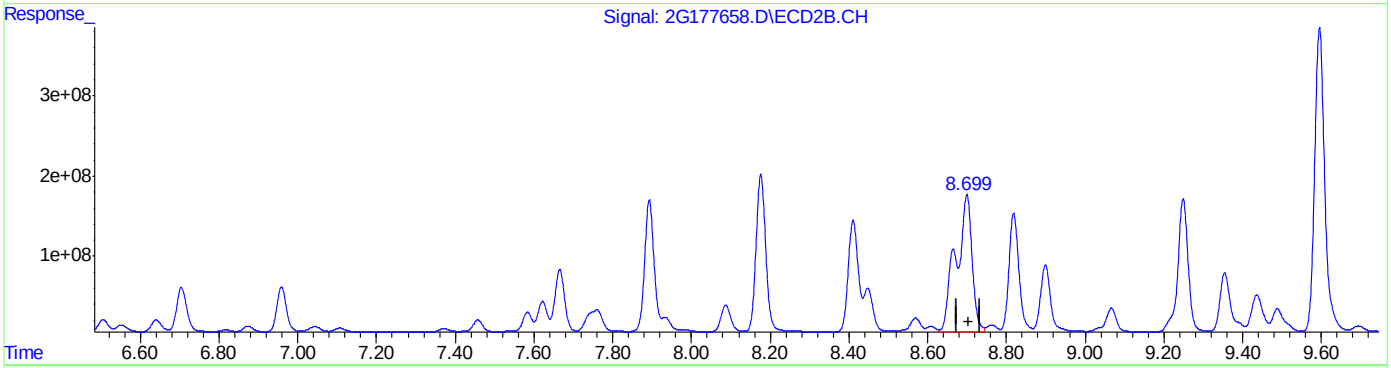
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177658.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:21 pm
Operator : tianweir
Sample : ic4614-2000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:39:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(36) AR1260-A
7.529min 3720.980PPB
response 921254556

(36) AR1260-A #2
8.699min 1965.592PPB m
response 4861985360

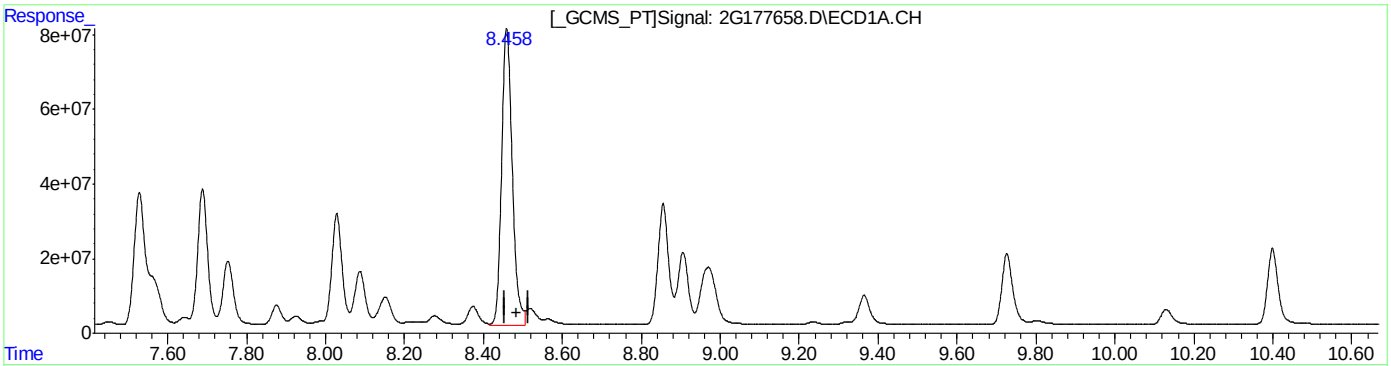
(+) = Expected Retention Time

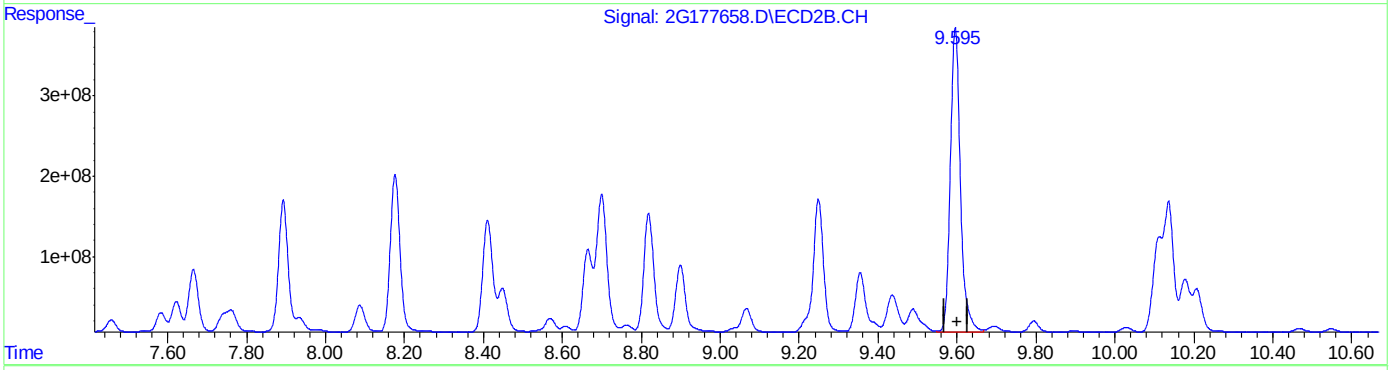
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177658.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:21 pm
Operator : tianweir
Sample : ic4614-2000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:39:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(39) AR1260-D
8.459min 4003.923PPB
response 1488906533

(39) AR1260-D #2
9.596min 2036.045PPB
response 6736368496

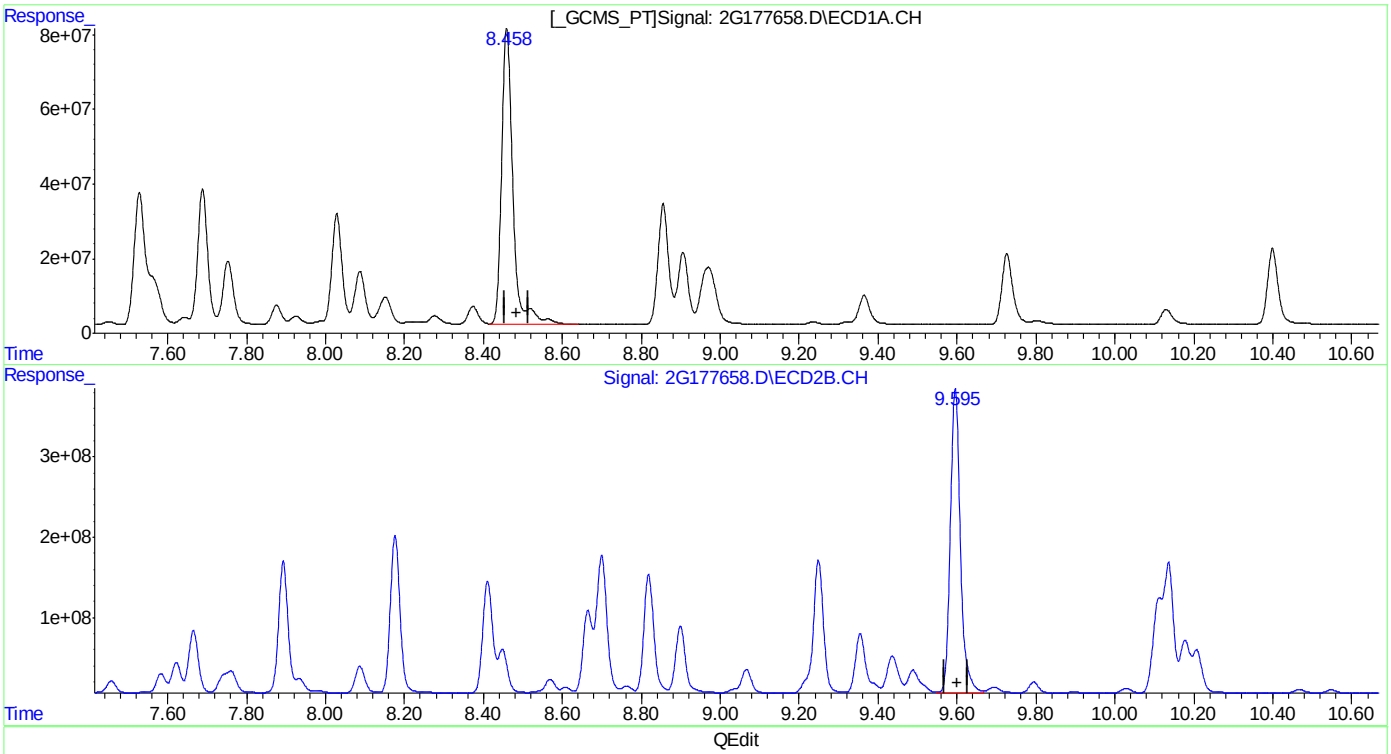
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:39:55 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177658.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:21 pm
Operator : tianweir
Sample : ic4614-2000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:39:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.458min 4309.348PPB m
response 1602482129

(39) AR1260-D #2
9.596min 2036.045PPB
response 6736368496

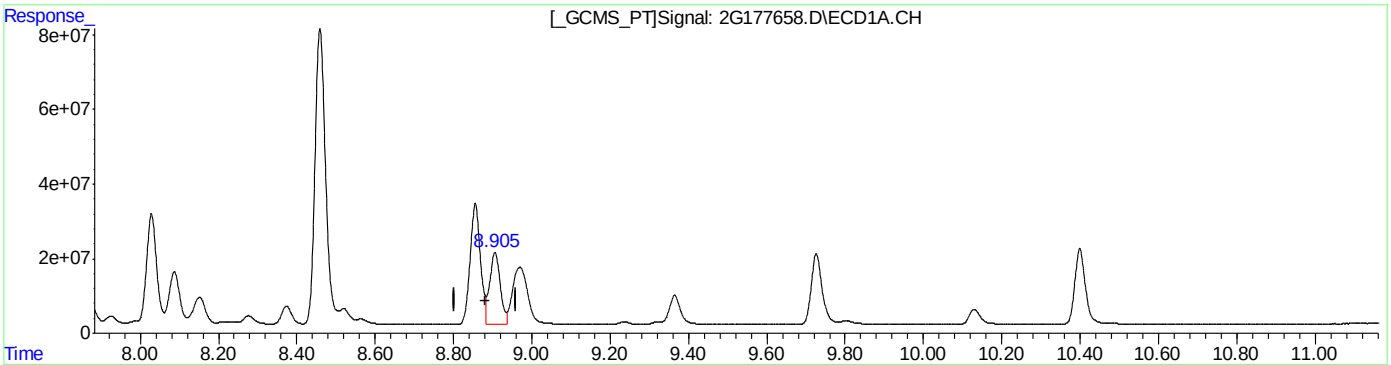
(+) = Expected Retention Time

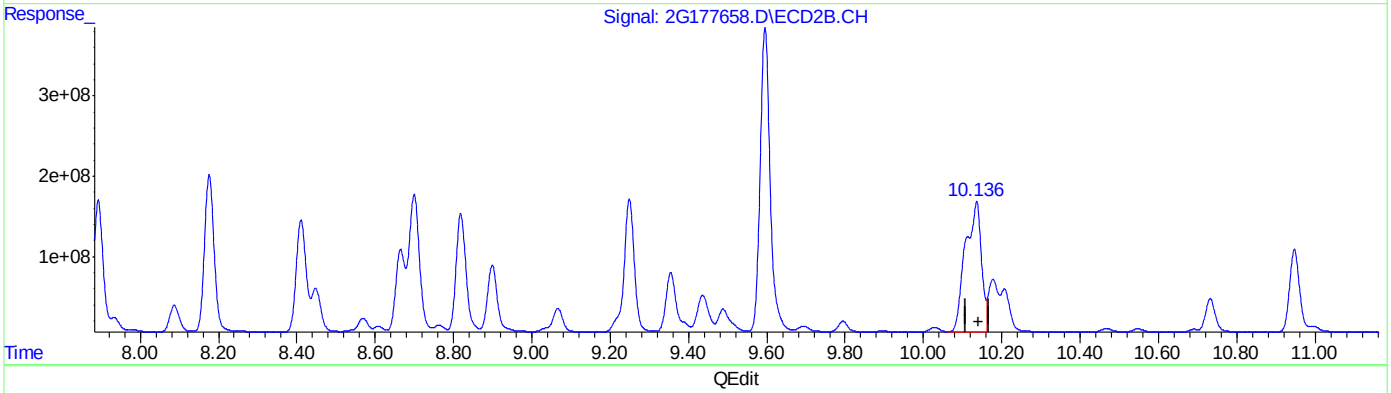
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177658.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:21 pm
Operator : tianweir
Sample : ic4614-2000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:39:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(40) AR1260-E
8.906min 1012.121PPB
response 362424104

(40) AR1260-E #2
10.136min 1389.408PPB
response 4594456114

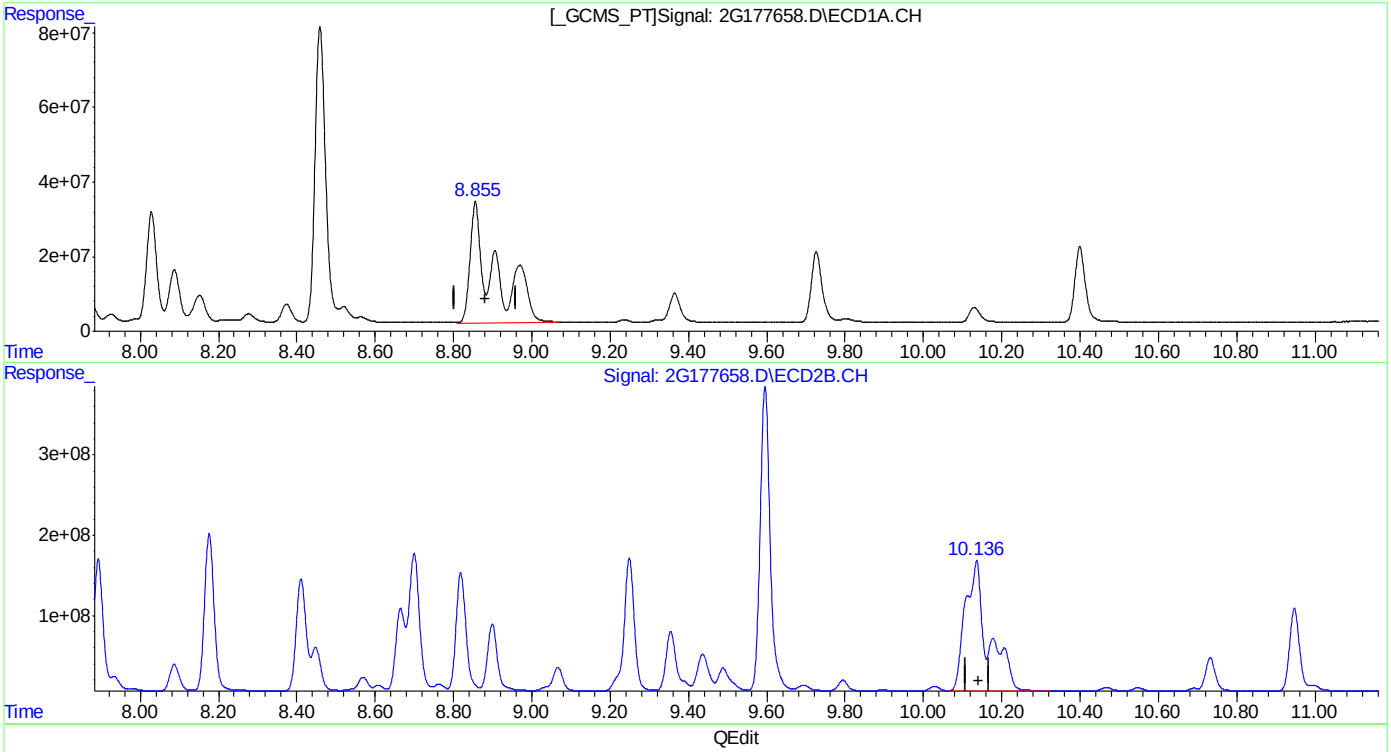
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:40:03 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177658.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:21 pm
Operator : tianweir
Sample : ic4614-2000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:39:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.855min 3868.992PPB m
response 1385422520

(40) AR1260-E #2
10.136min 2000.061PPB m
response 6613745933

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177659.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:38 pm
Operator : tianweir
Sample : ic4614-3000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:41:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.063f	3.483	536.7E6	3805.0E6	250.023	119.242 #
	Spiked Amount 40.000			Recovery	= 625.06%	298.11%	
51) S	Decachlor...	10.398f	11.796	592.6E6	2996.9E6	183.442	119.504 #
	Spiked Amount 40.000			Recovery	= 458.61%	298.76%	
	Target Compounds						
31)	AR1016-A	3.456f	4.122	255.1E6	1447.0E6	4415.423	2599.076 #
32)	AR1016-B	3.874f	4.668	479.9E6	3180.5E6	4000.194	2659.915 #
33)	AR1016-C	4.441f	5.280	1224.2E6	7381.1E6	5069.683	2785.308 #
34)	AR1016-D	4.612f	5.467	440.8E6	2907.7E6	4727.766	2642.204m#
35)	AR1016-E	5.134f	6.117	458.8E6	2280.5E6	4601.211	2857.872 #
36)	AR1260-A	7.527f	8.698	1421.1E6	7312.1E6	5739.694	2956.126m#
37)	AR1260-B	7.687f	8.818	993.3E6	3941.2E6	6572.989	2931.315 #
38)	AR1260-C	8.029f	9.249	855.3E6	4617.2E6	5484.627	2995.368 #
39)	AR1260-D	8.457f	9.593	2452.0E6	10129.6E6	6593.752m	3061.641 #
40)	AR1260-E	8.853f	10.134	2151.2E6	9996.5E6	6007.553m	3023.032m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

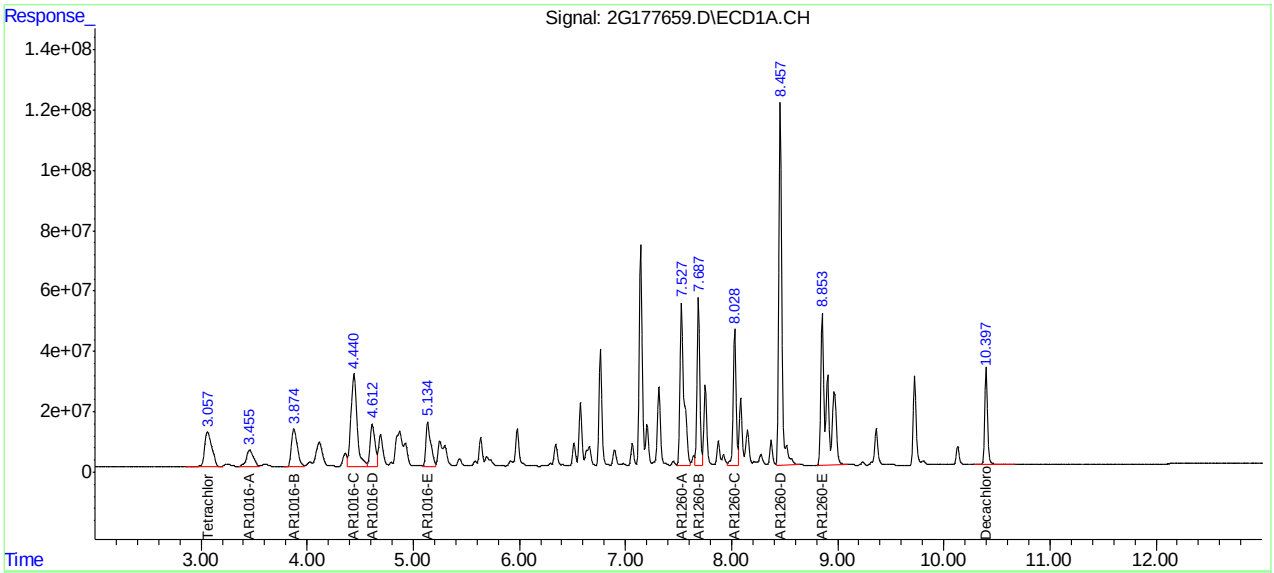
11.4.6 11

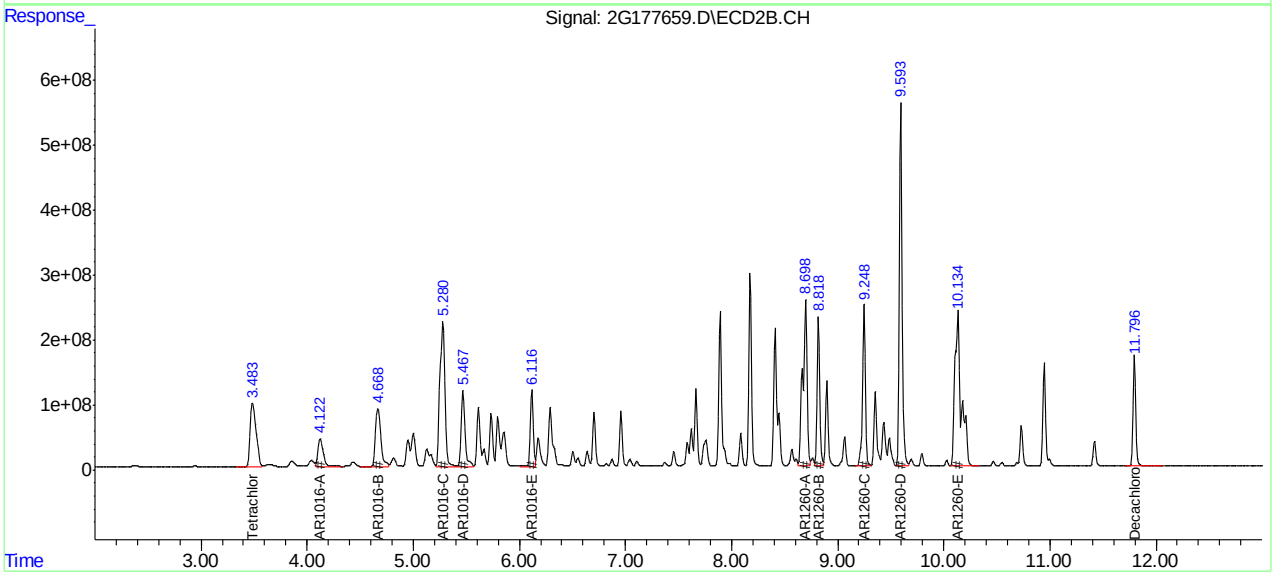
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177659.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:38 pm
Operator : tianweir
Sample : ic4614-3000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:41:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-IC4614	**Method:**	SW846 8082A
Lab FileID:	2G177659.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 17:38	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

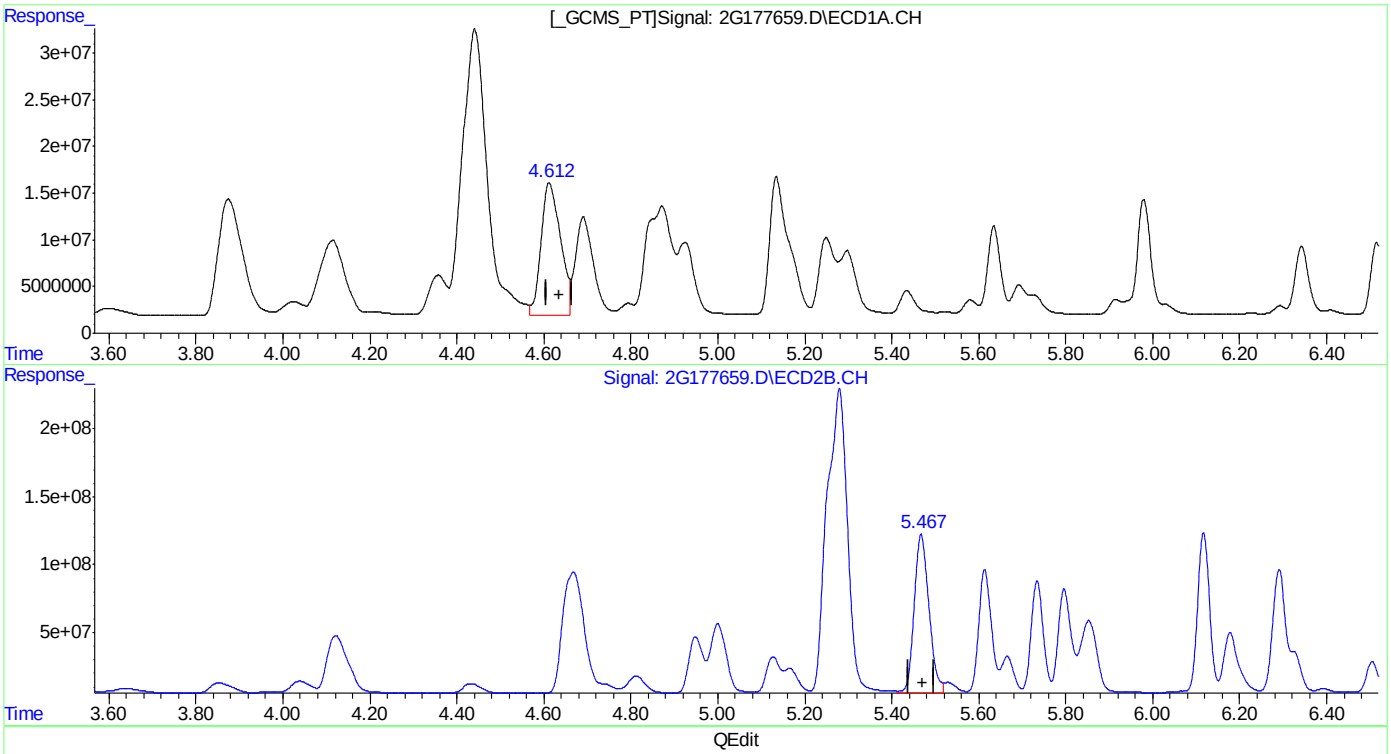
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1016-D		2	5.47	Split peak
AR1260-D		1	8.46	Split peak
AR1260-A		2	8.70	Split peak
AR1260-E		1	8.85	Split peak
AR1260-E		2	10.13	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177659.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:38 pm
Operator : tianweir
Sample : ic4614-3000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:40:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(34) AR1016-D
4.612min 4727.766PPB
response 440777883

(34) AR1016-D #2
5.467min 2505.348PPB
response 2757125084

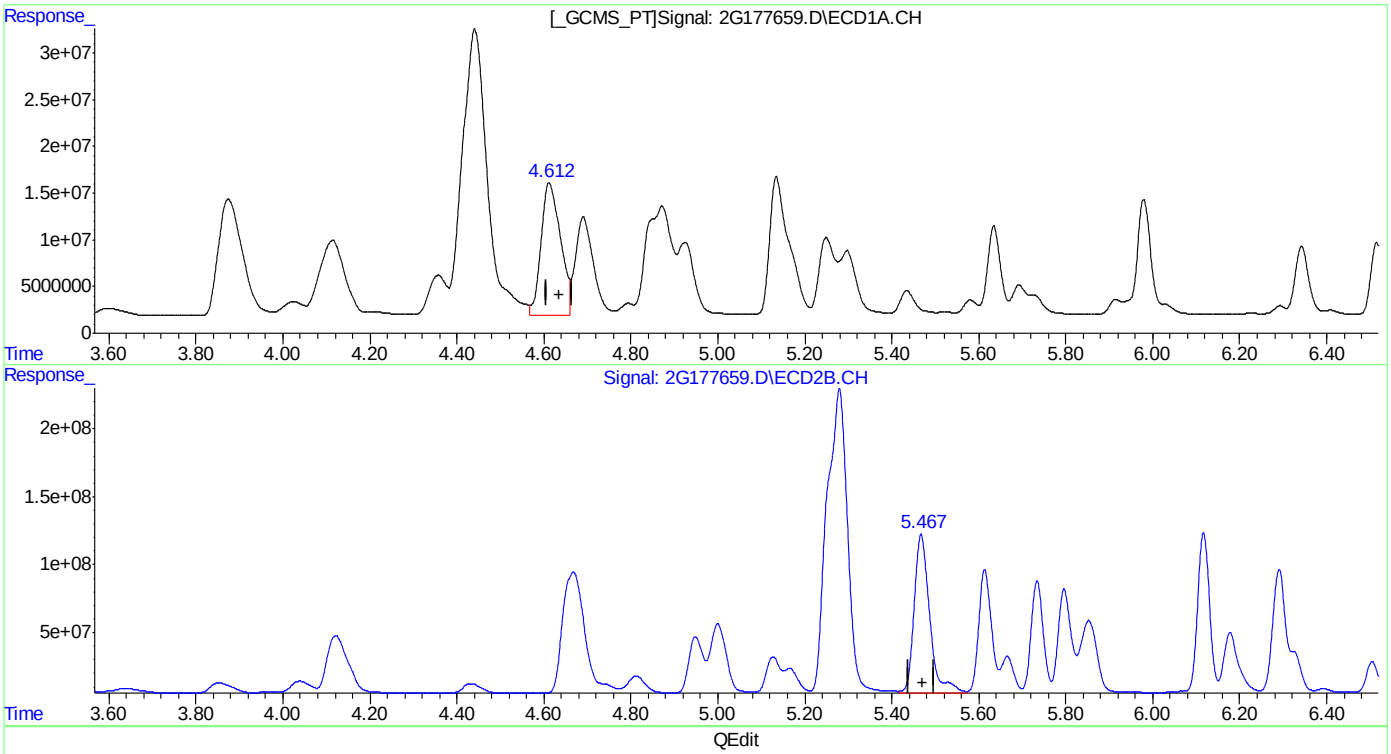
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:40:40 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177659.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:38 pm
Operator : tianweir
Sample : ic4614-3000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:40:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(34) AR1016-D
4.612min 4727.766PPB
response 440777883

(34) AR1016-D #2
5.467min 2642.204PPB m
response 2907733760

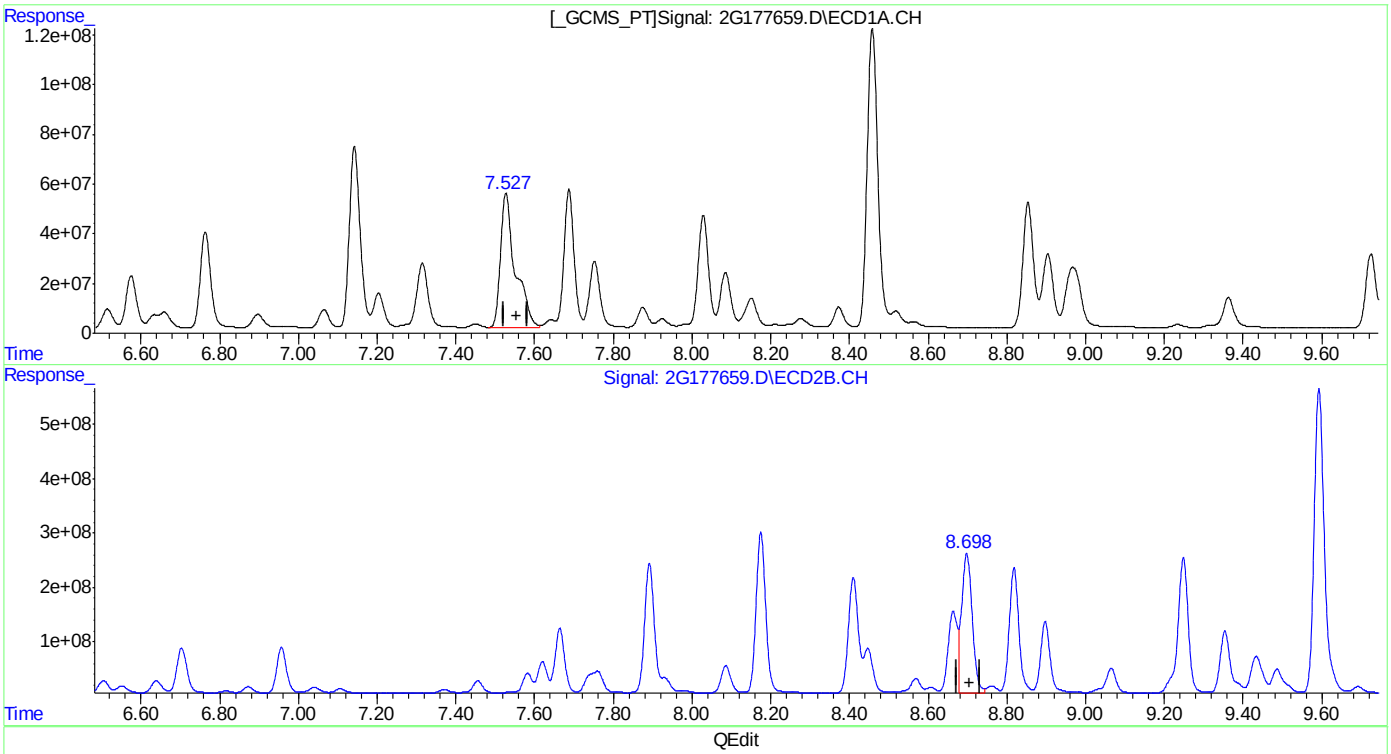
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177659.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:38 pm
Operator : tianweir
Sample : ic4614-3000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:40:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(36) AR1260-A
7.527min 5739.694PPB
response 1421055398

(36) AR1260-A #2
8.698min 1990.951PPB
response 4924714099

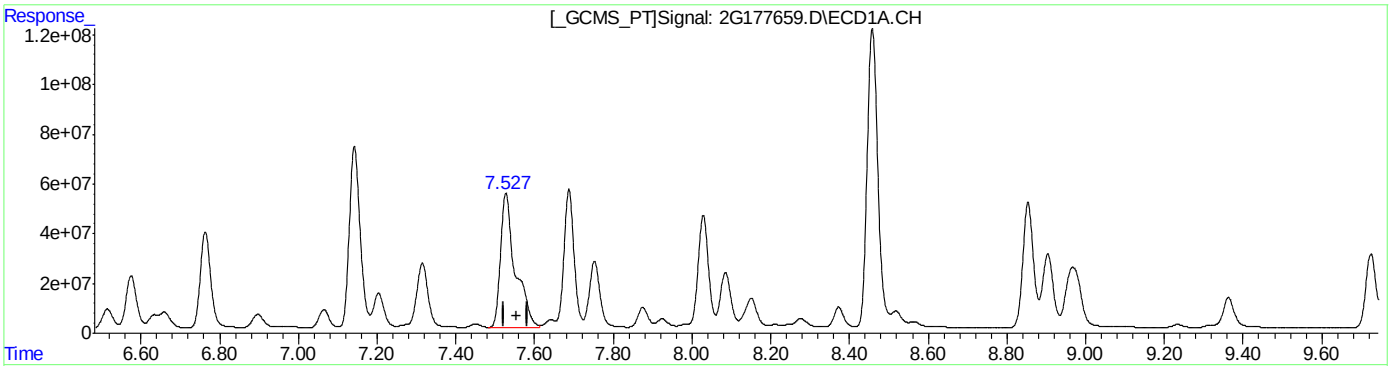
(+) = Expected Retention Time

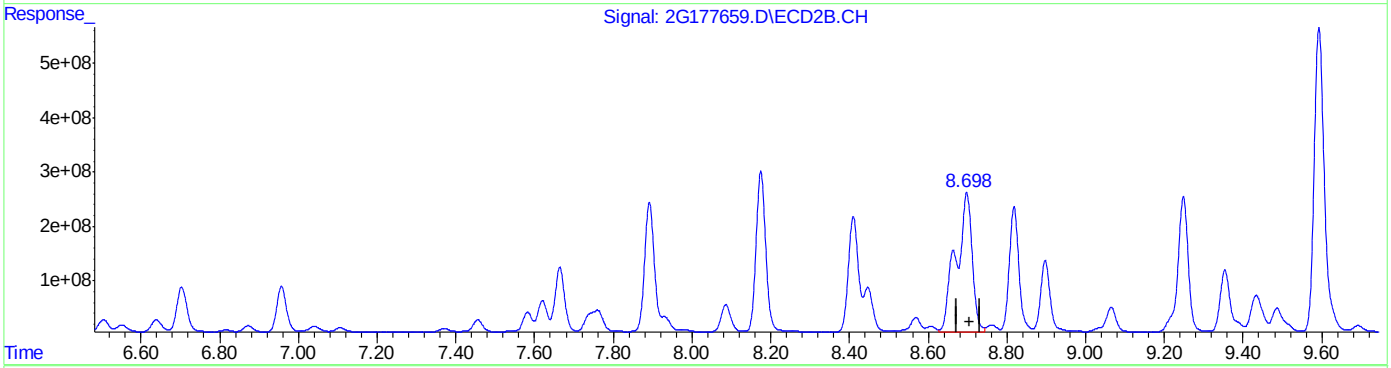
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177659.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:38 pm
Operator : tianweir
Sample : ic4614-3000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:40:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(36) AR1260-A
7.527min 5739.694PPB
response 1421055398

(36) AR1260-A #2
8.698min 2956.126PPB m
response 7312120634

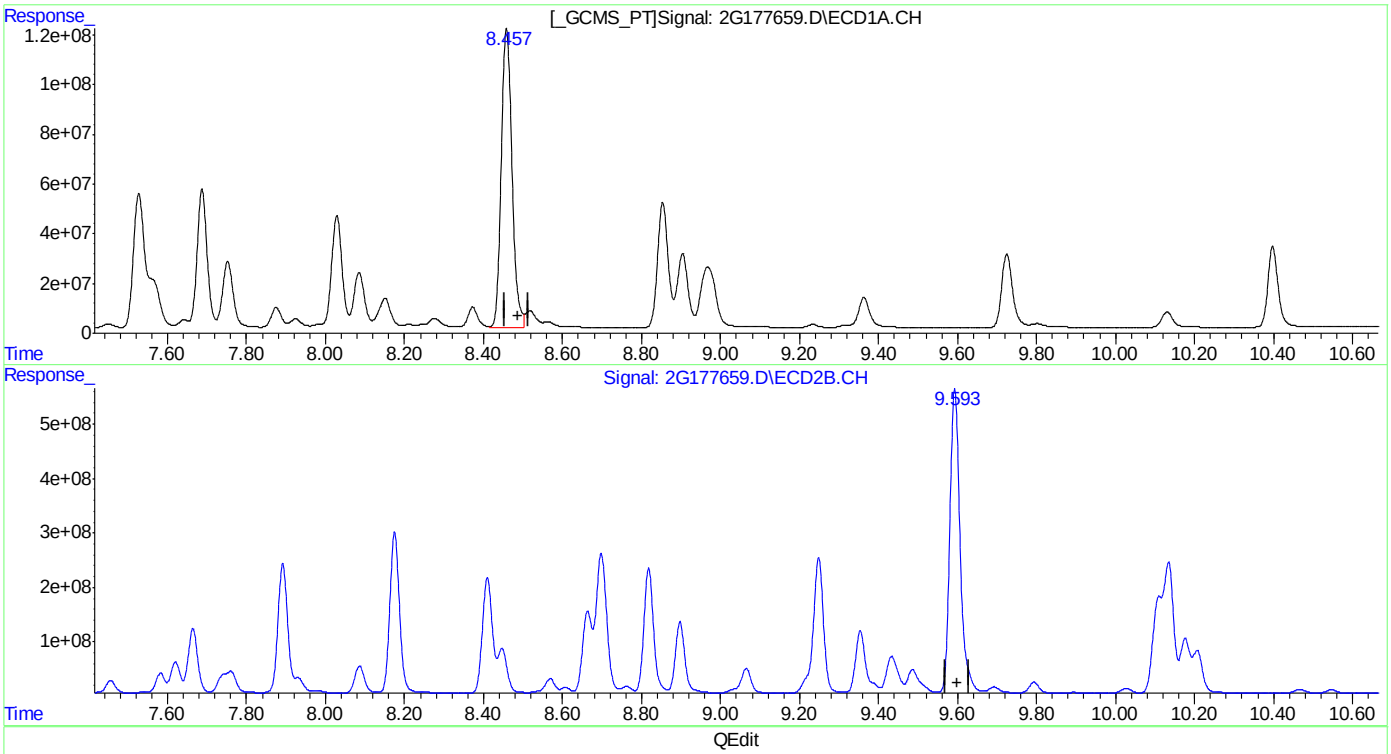
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:40:54 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177659.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:38 pm
Operator : tianweir
Sample : ic4614-3000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:40:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.458min 6134.873PPB
response 2281325594

(39) AR1260-D #2
9.593min 3061.641PPB
response 10129609248

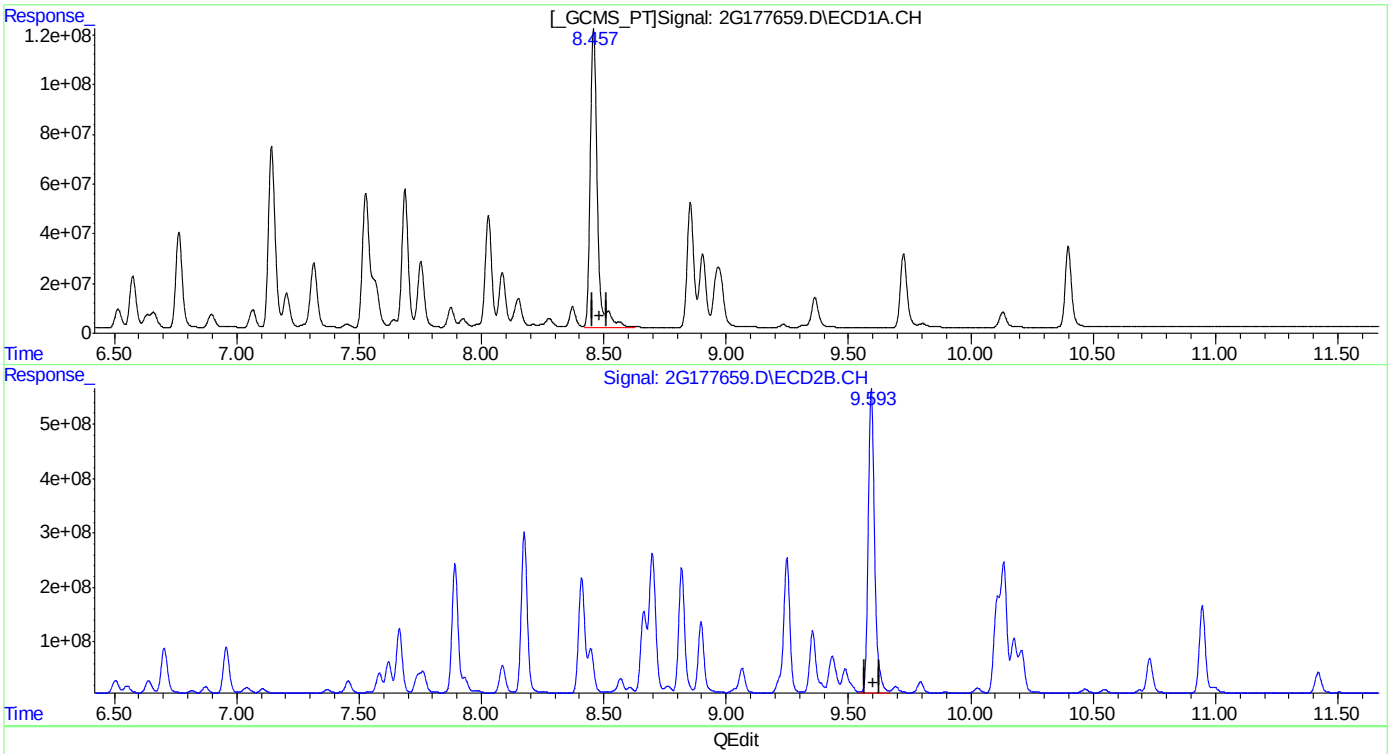
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177659.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:38 pm
Operator : tianweir
Sample : ic4614-3000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:40:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.457min 6593.752PPB m
response 2451965281

(39) AR1260-D #2
9.593min 3061.641PPB
response 10129609248

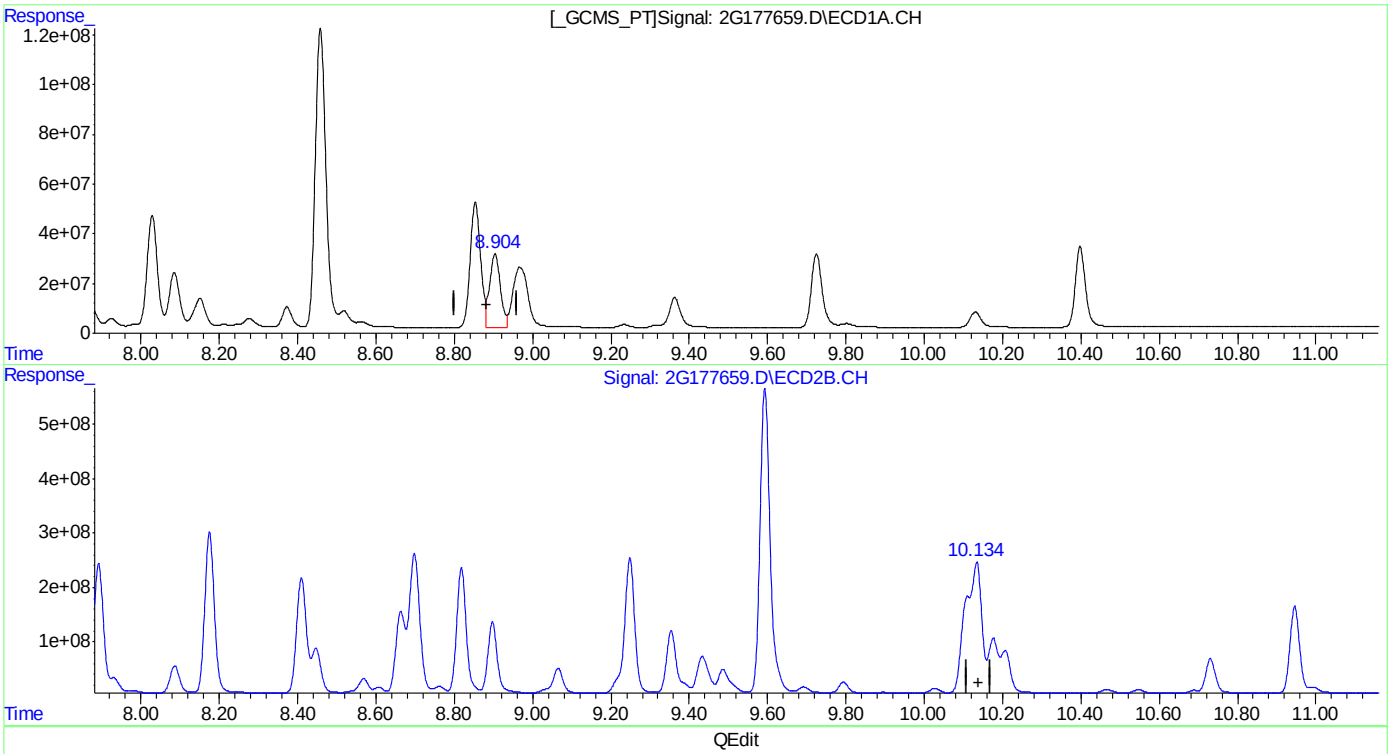
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177659.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:38 pm
Operator : tianweir
Sample : ic4614-3000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:40:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.904min 1575.382PPB
response 564118350

(40) AR1260-E #2
10.134min 2104.424PPB
response 6958847368

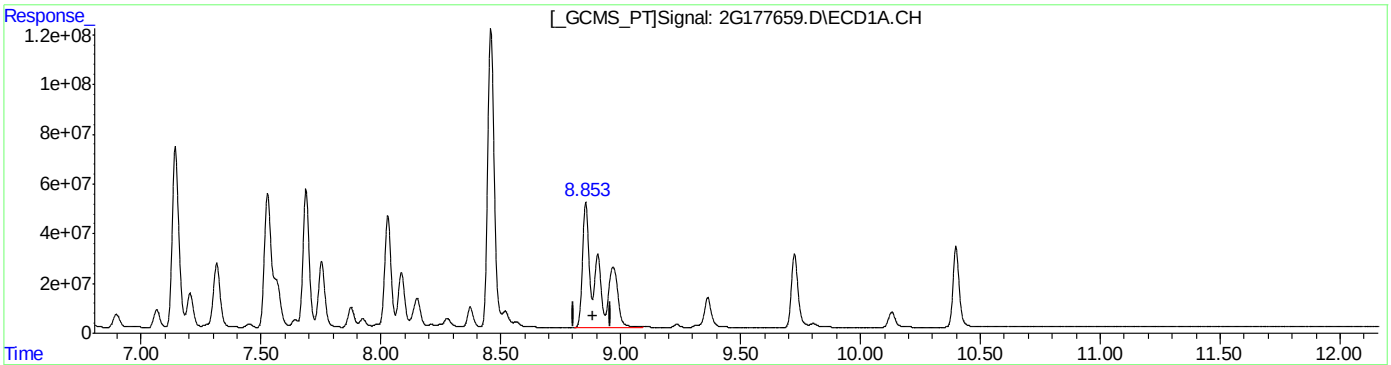
(+) = Expected Retention Time

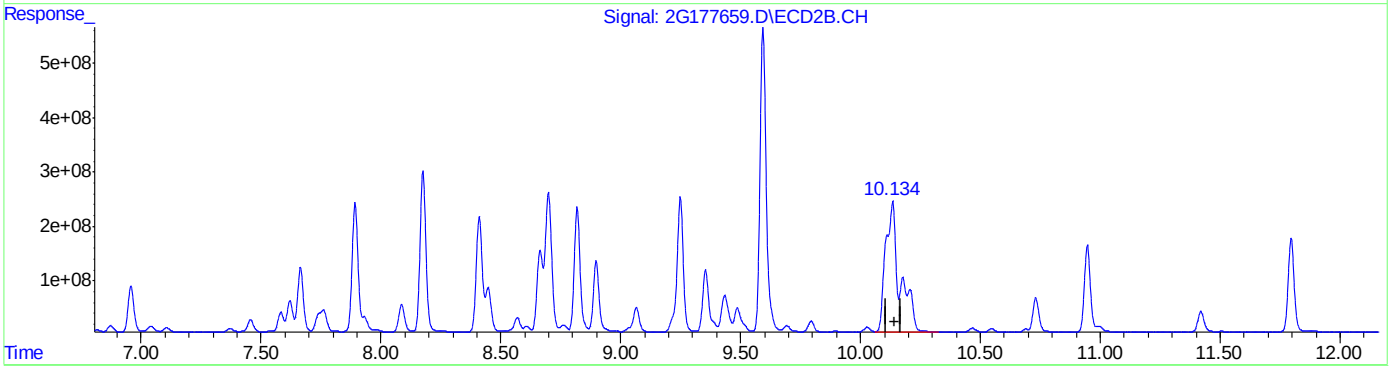
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177659.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:38 pm
Operator : tianweir
Sample : ic4614-3000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:40:21 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Tue Mar 26 08:33:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(40) AR1260-E
8.853min 6007.553PPB m
response 2151206057

(40) AR1260-E #2
10.134min 3023.032PPB m
response 9996475801

(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:41:20 2019 RPT1

2G177660.D

Manual Integrations APPROVED (compounds with "m" flag)

Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177660.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:55 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:47:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachlo...	3.061	3.484	232.1E6	1607.5E6	54.392	52.187	
	Spiked Amount 40.000			Recovery	=	135.98%	130.47%	
51)	S Decachlor...	10.401	11.799	255.4E6	1376.0E6	56.095	53.288	
	Spiked Amount 40.000			Recovery	=	140.24%	133.22%	
	Target Compounds							
2)	AR1221-A	2.529	2.940	25361738	181.0E6	959.224	919.325	
3)	AR1221-B	3.243	3.855	50689512	356.7E6	1811.715	938.142	#
4)	AR1221-C	3.455	4.120	160.3E6	864.9E6	1615.972	942.447	#
5)	AR1221-D	3.875	4.663	17060829	177.8E6	948.005	919.747	
6)	AR1221-E	4.035	4.740	15721741	104.9E6	1346.083	718.447	#
24)	AR1254-A	5.635	6.705	162.1E6	1257.3E6	1614.763	948.934	#
25)	AR1254-B	5.980	6.958	347.8E6	1375.9E6	1688.483	967.858	#
26)	AR1254-C	6.351	7.457	177.7E6	1131.2E6	1696.906	969.287	#
27)	AR1254-D	6.516	7.622	320.4E6	2407.0E6	1524.467	964.862	#
28)	AR1254-E	6.894	7.933	294.0E6	1580.1E6	1917.396	945.696	#
29)	AR1254-F	7.146	8.442	272.2E6	1794.4E6	1903.439	993.561	m#
30)	AR1254-G	7.529	8.701	368.2E6	2144.4E6	1866.740	967.452	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

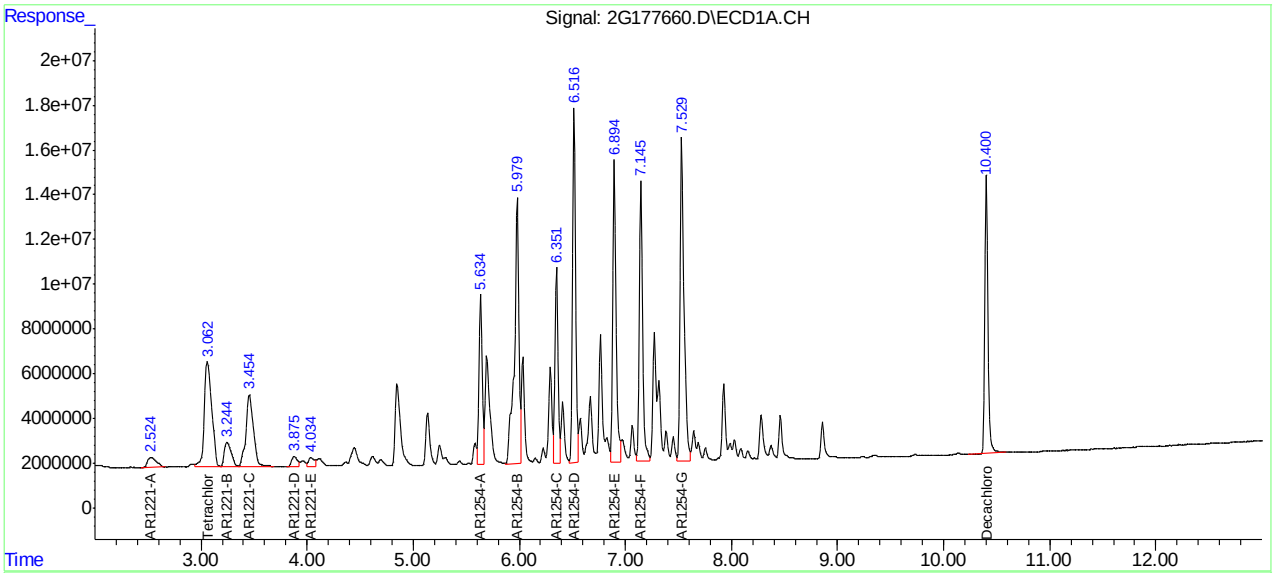
11.4.7 11

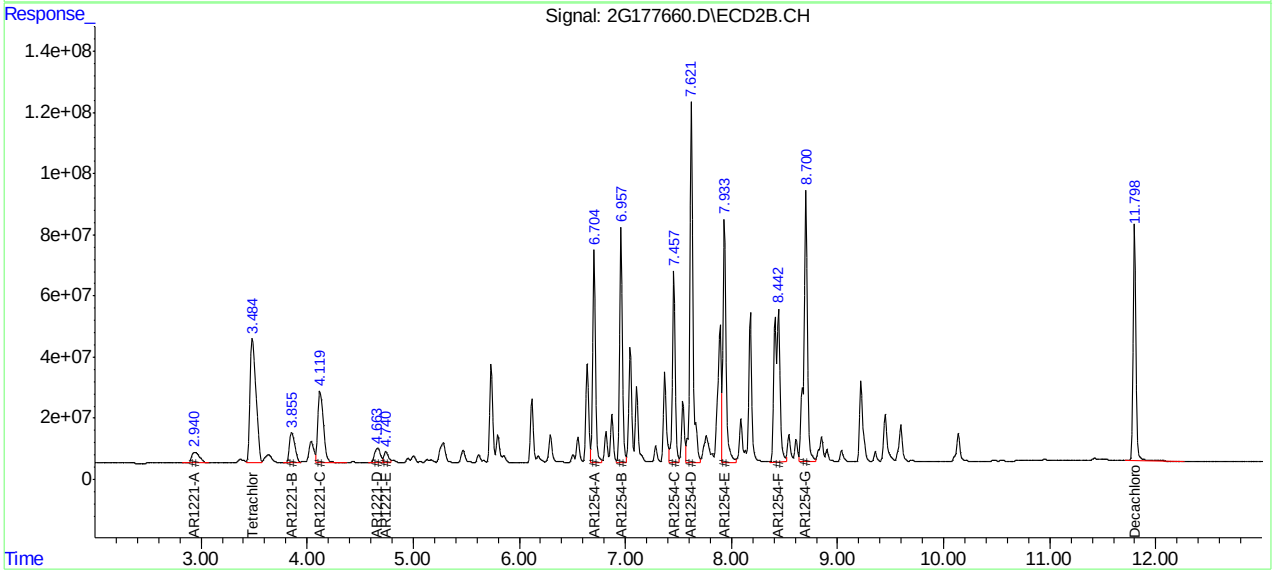
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177660.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:55 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:47:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-IC4614	**Method:**	SW846 8082A
Lab FileID:	2G177660.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 17:55	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

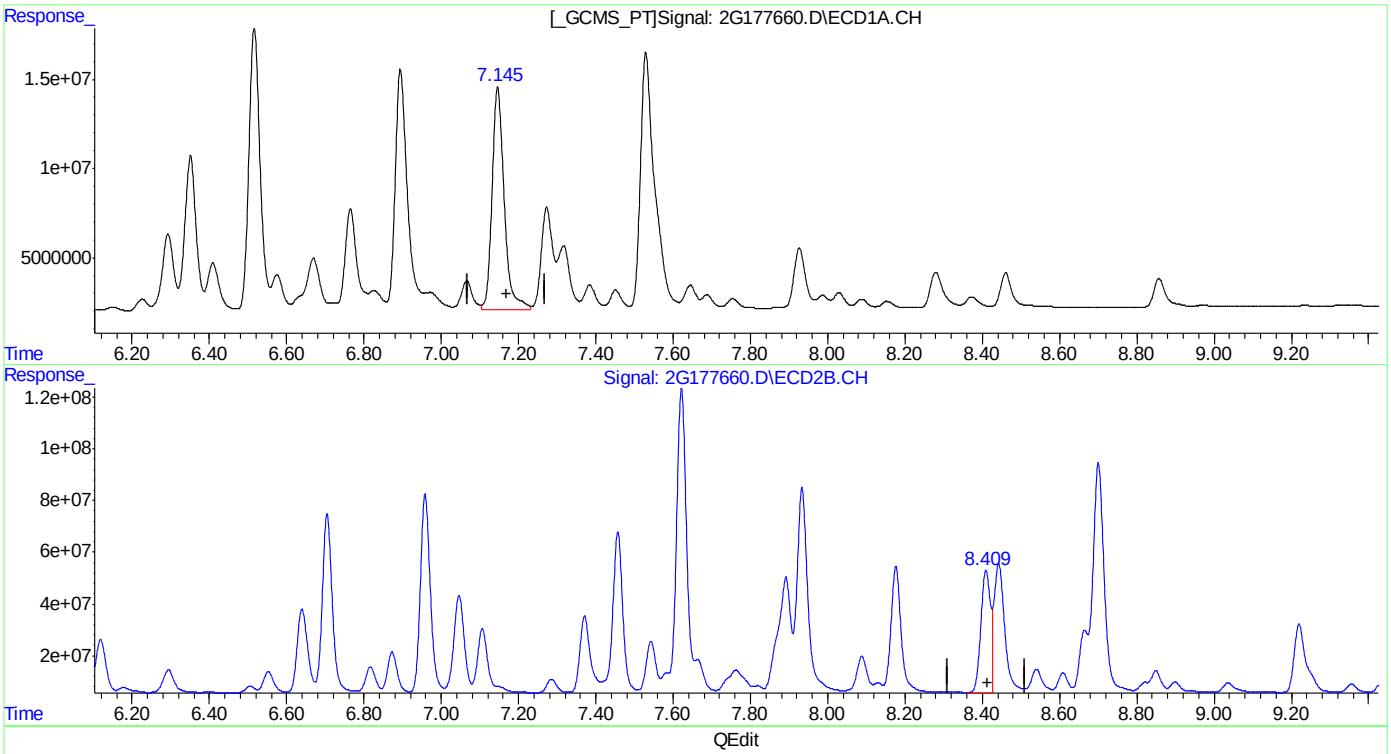
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1254-F		2	8.44	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177660.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:55 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:45:16 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(29) AR1254-F
7.146min 1903.439PPB
response 272193655

(29) AR1254-F #2
8.410min 445.788PPB
response 805085570

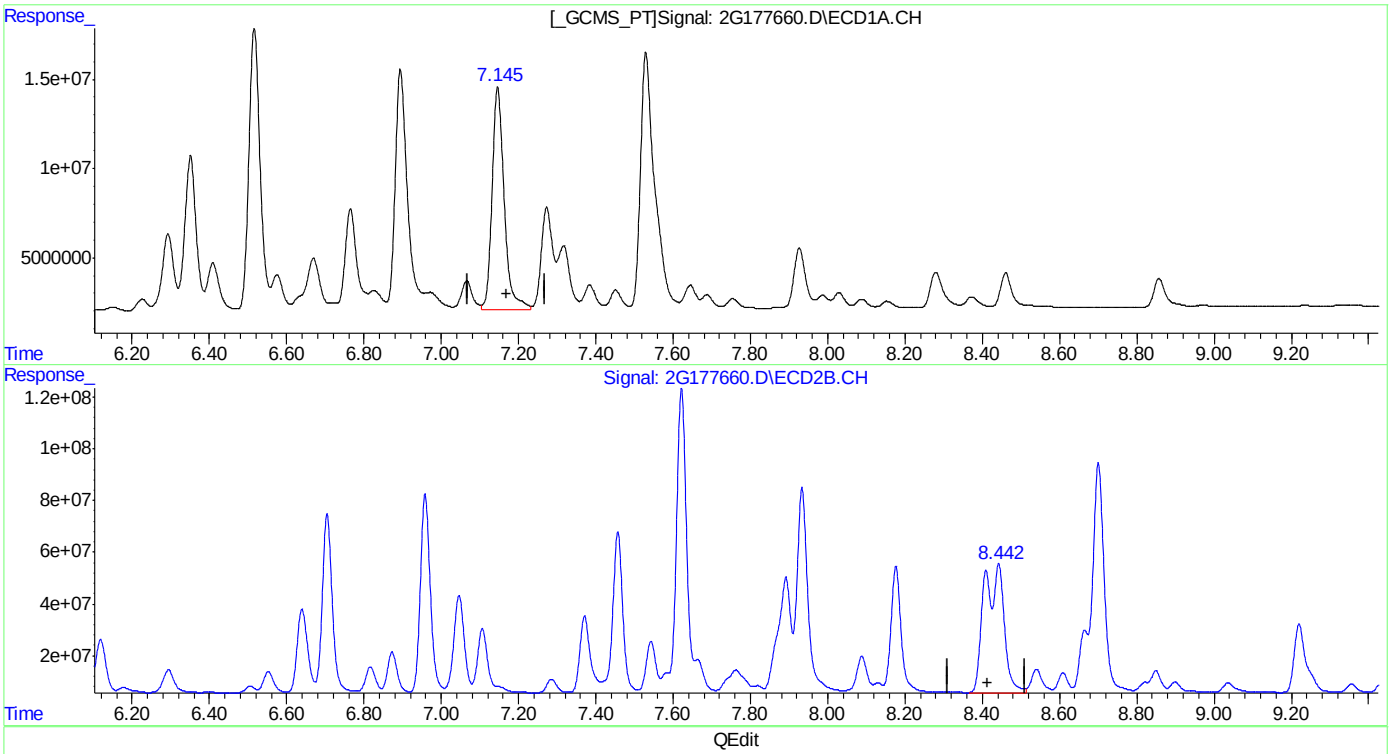
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:47:19 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177660.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 5:55 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:45:16 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(29) AR1254-F
7.146min 1903.439PPB
response 272193655

(29) AR1254-F #2
8.442min 993.561PPB m
response 1794354579

(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:47:25 2019 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177661.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:11 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:48:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachlo...	3.060	3.483	210.1E6	1457.6E6	49.250	47.321	
	Spiked Amount 40.000			Recovery	=	123.13%	118.30%	
51)	S Decachlor...	10.401	11.799	236.9E6	1274.0E6	52.031	49.339	
	Spiked Amount 40.000			Recovery	=	130.08%	123.35%	
	Target Compounds							
7)	AR1232-A	3.455	4.121	125.9E6	712.6E6	1642.559	938.091	#
8)	AR1232-B	3.873	4.667	85676490	583.2E6	1468.550	950.645	#
9)	AR1232-C	4.443	5.280	191.7E6	1242.2E6	1915.825	957.813	#
10)	AR1232-D	4.613	5.468	70766986	506.6E6	1721.449	935.288	#
11)	AR1232-E	5.136	6.117	67045181	347.8E6	1617.336	944.491	#
41)	AR1262-A	7.143	8.177	342.1E6	1462.0E6	2079.489	956.885	#
42)	AR1262-B	7.689	8.820	501.8E6	2042.1E6	2319.903	979.554	#
43)	AR1262-C	8.027	9.250	367.9E6	1959.8E6	1917.674m	981.933	#
44)	AR1262-D	8.461	9.595	965.2E6	4034.8E6	2192.420m	985.682	#
45)	AR1262-E	8.906	10.111	941.3E6	4490.2E6	2019.281m	986.170m	#

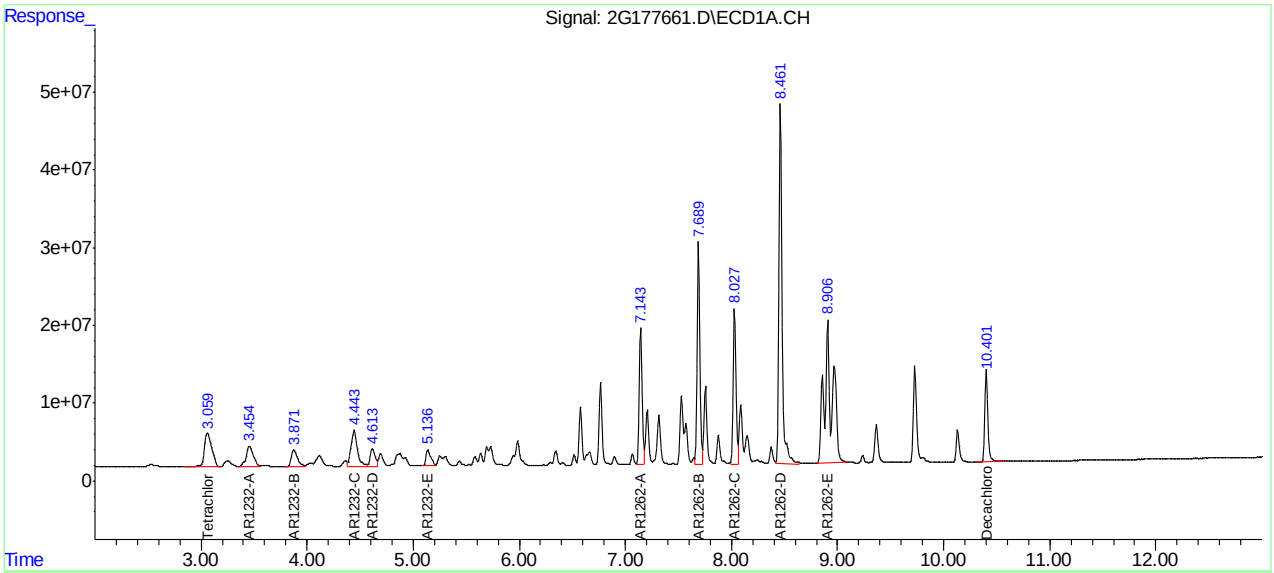
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

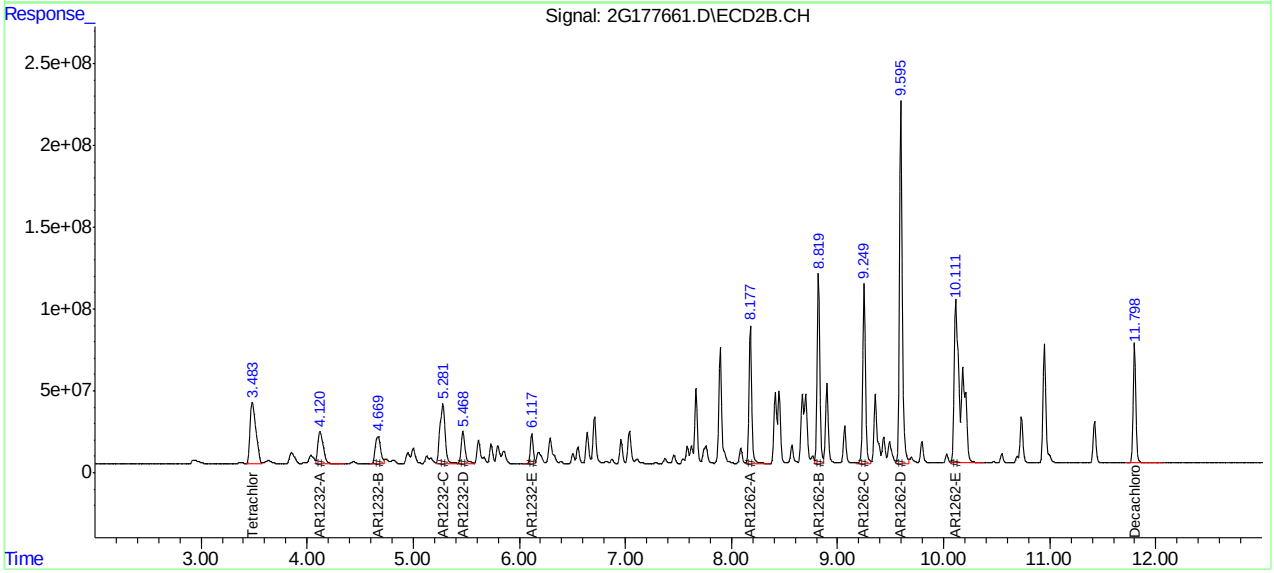
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177661.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:11 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:48:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-IC4614	**Method:**	SW846 8082A
Lab FileID:	2G177661.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 18:11	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

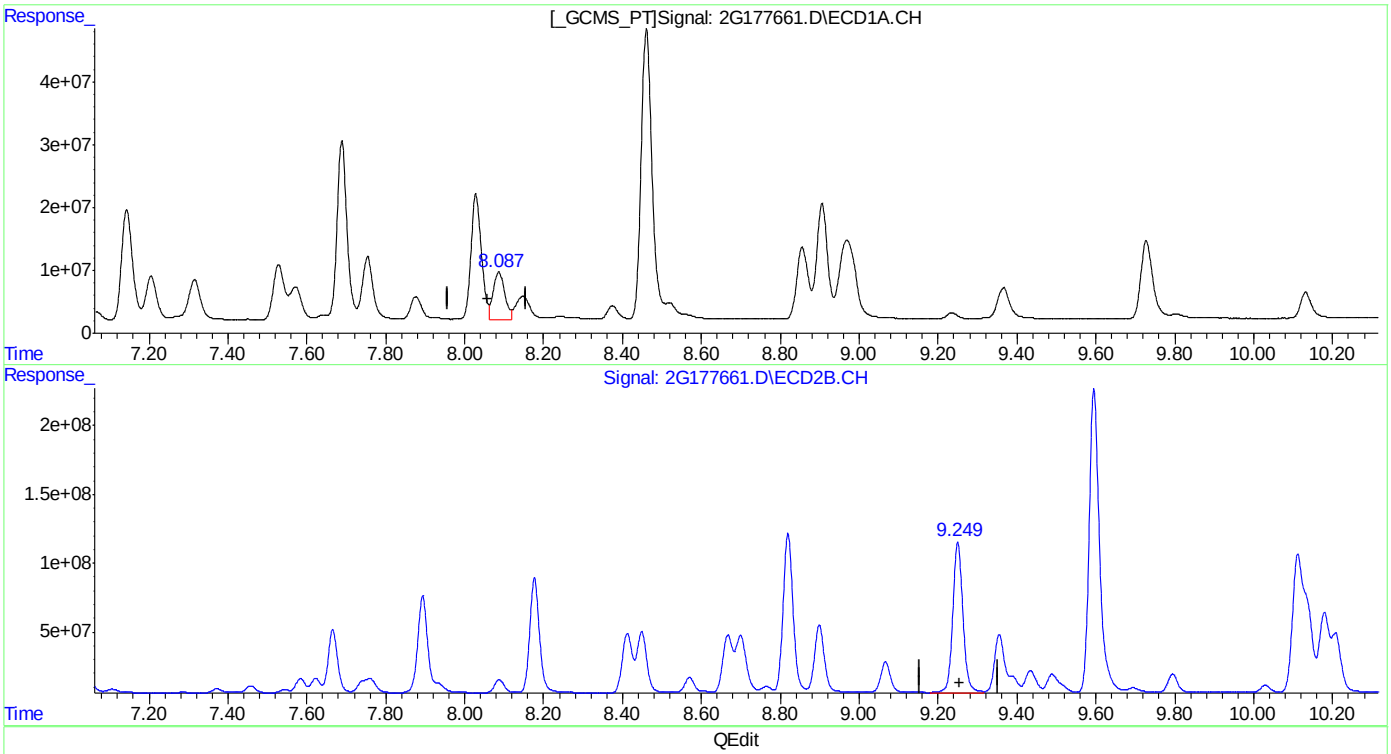
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1262-C		1	8.03	Split peak
AR1262-D		1	8.46	Split peak
AR1262-E		1	8.91	Split peak
AR1262-E		2	10.11	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177661.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:11 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:47:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(43) AR1262-C
8.087min 808.969PPB
response 155205945

(43) AR1262-C #2
9.250min 981.933PPB
response 1959770890

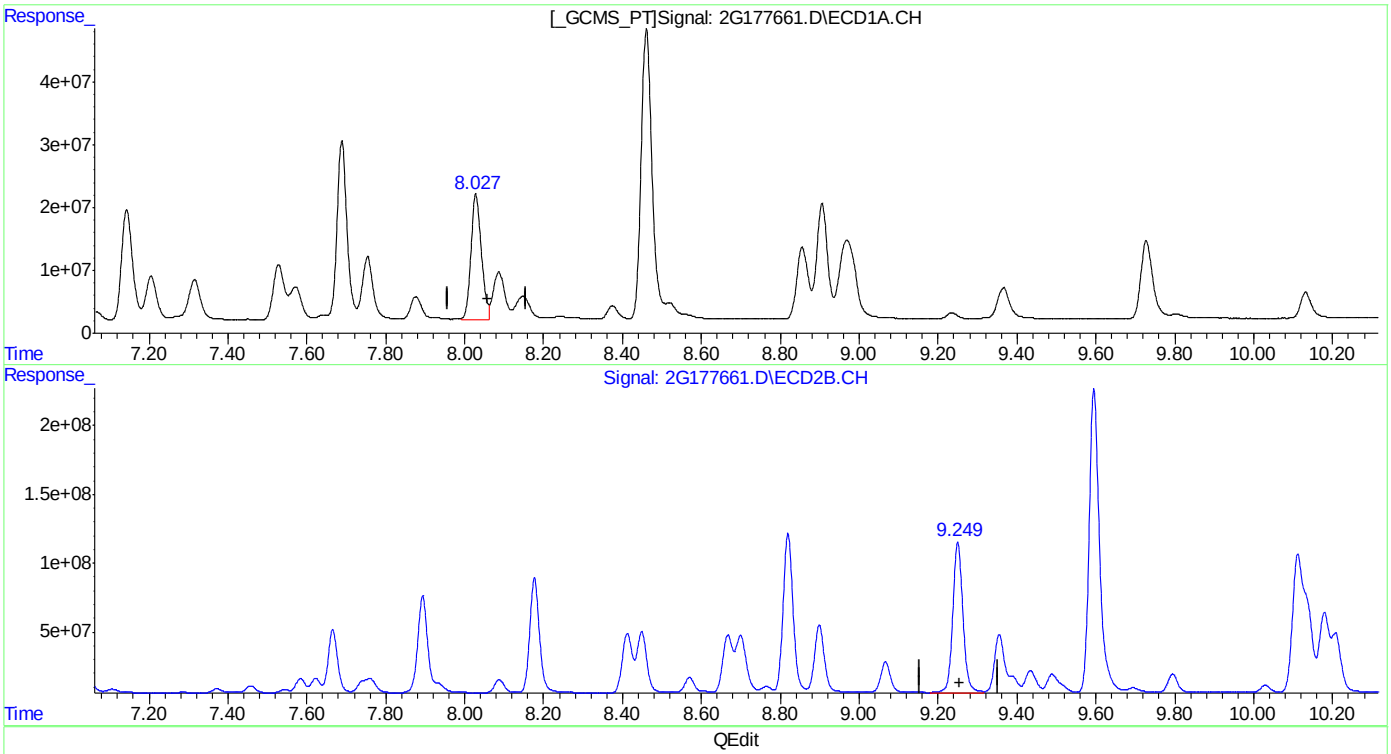
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:48:09 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177661.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:11 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:47:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(43) AR1262-C
8.027min 1917.674PPB m
response 367918282

(43) AR1262-C #2
9.250min 981.933PPB
response 1959770890

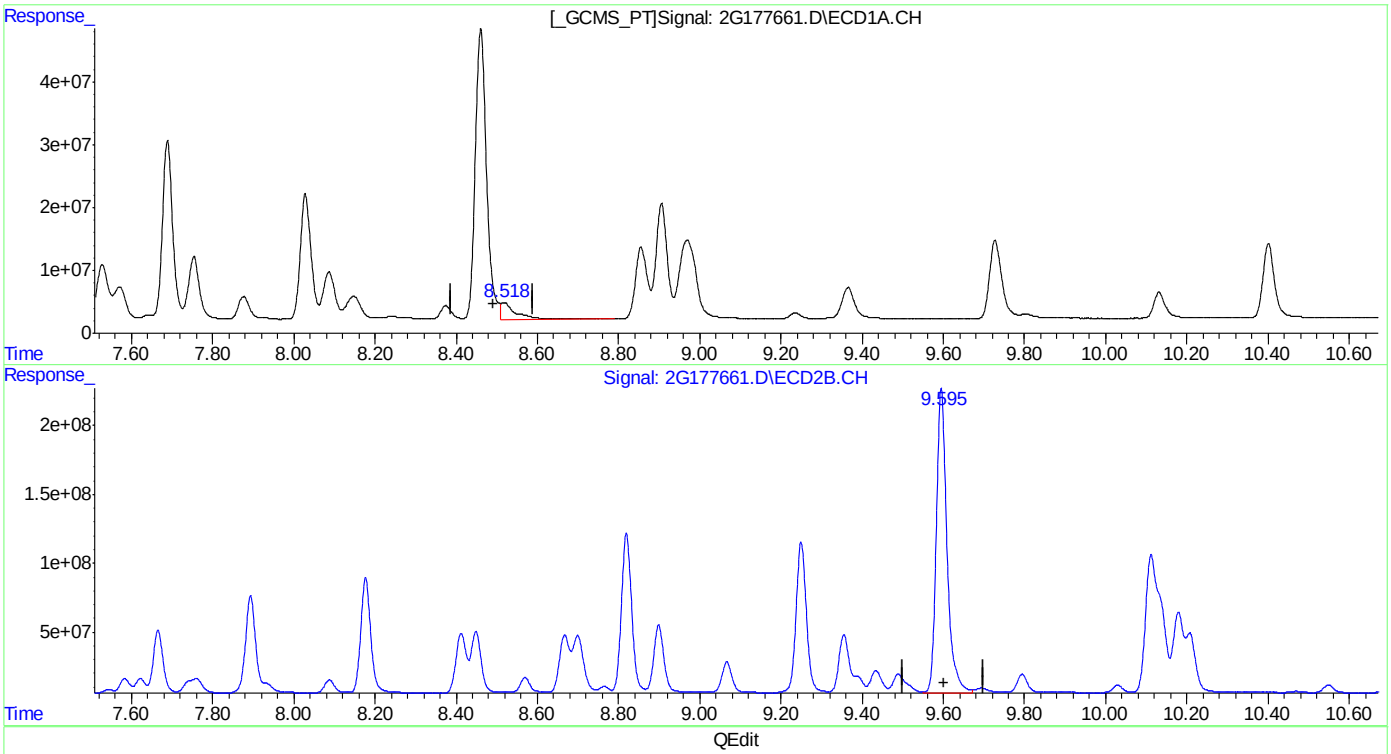
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:48:14 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177661.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:11 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:47:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1262-D
8.518min 156.637PPB
response 68959236

(44) AR1262-D #2
9.595min 985.682PPB
response 4034777369

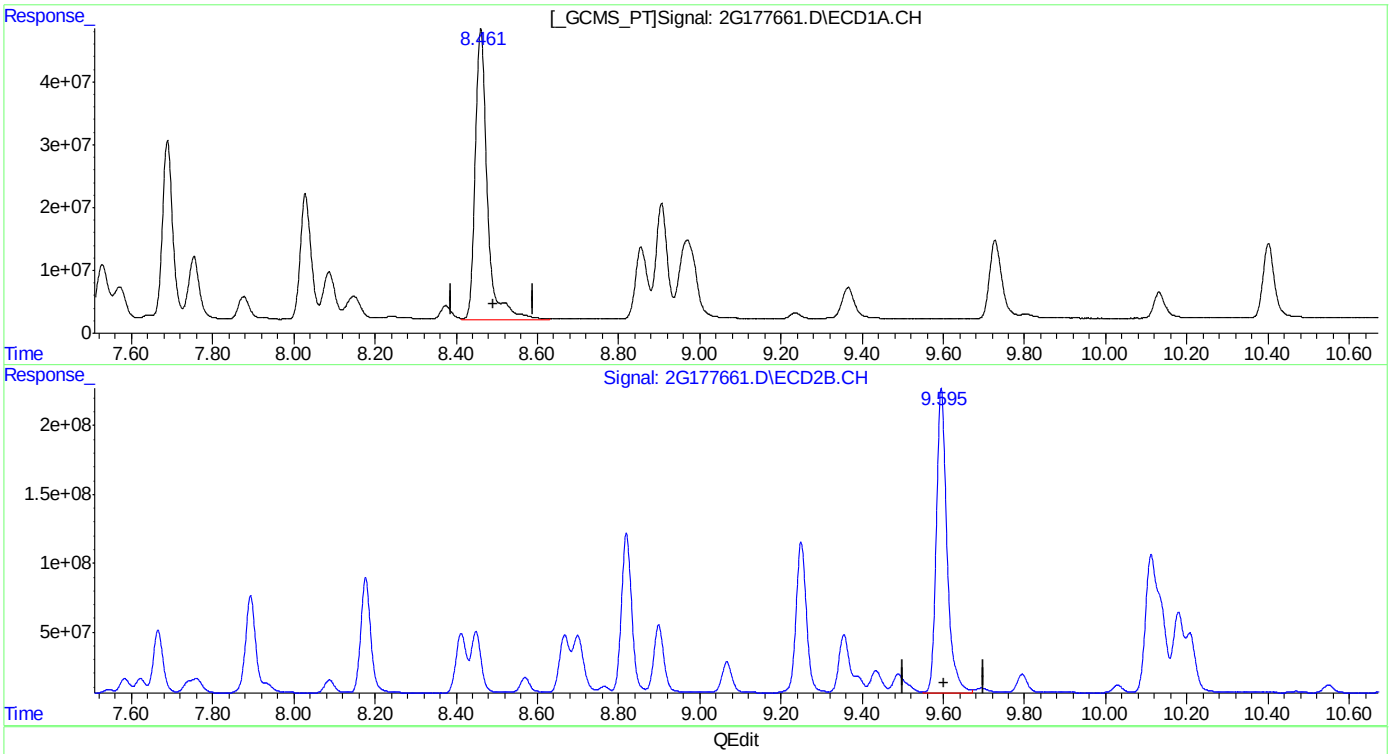
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177661.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:11 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:47:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(44) AR1262-D
8.461min 2192.420PPB m
response 965208060

(44) AR1262-D #2
9.595min 985.682PPB
response 4034777369

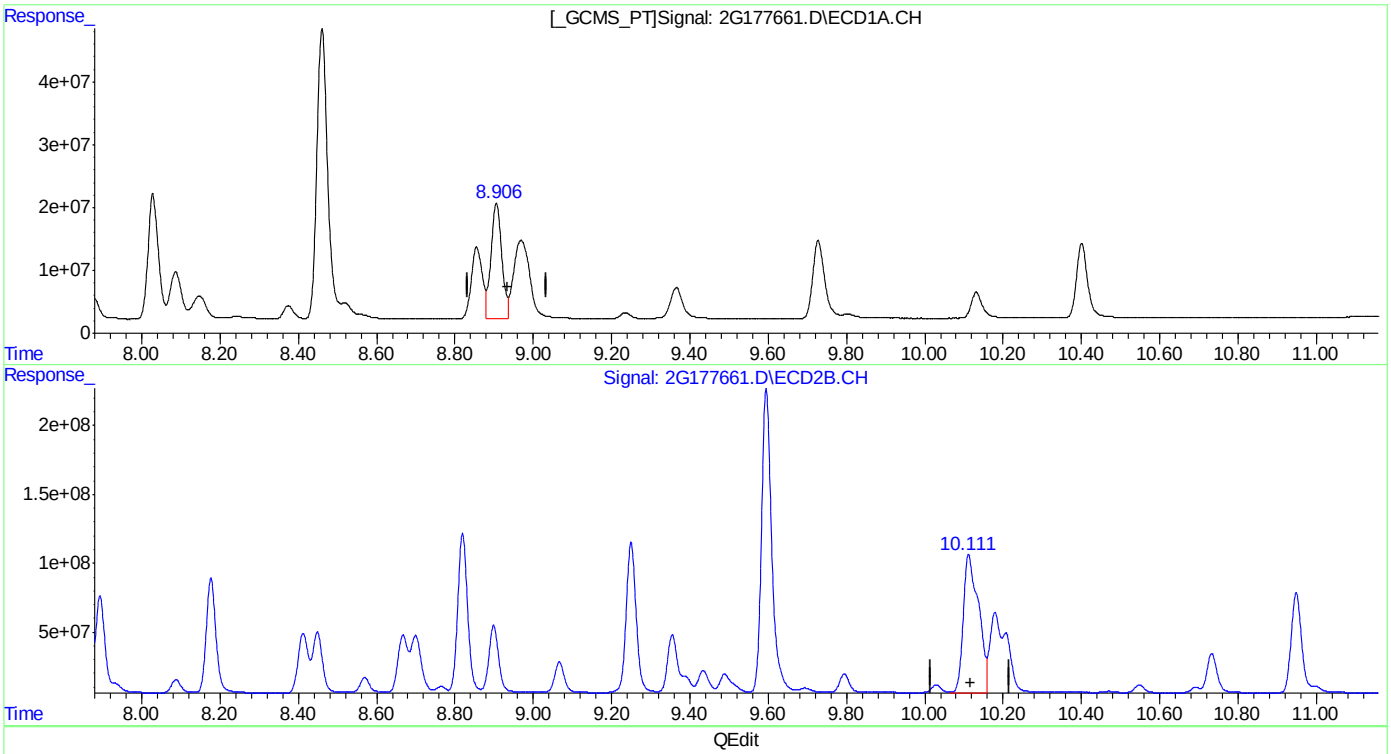
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:48:24 2019 RPT1 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177661.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:11 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:47:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(45) AR1262-E
8.906min 762.146PPB
response 355289019

(45) AR1262-E #2
10.112min 598.087PPB
response 2723219960

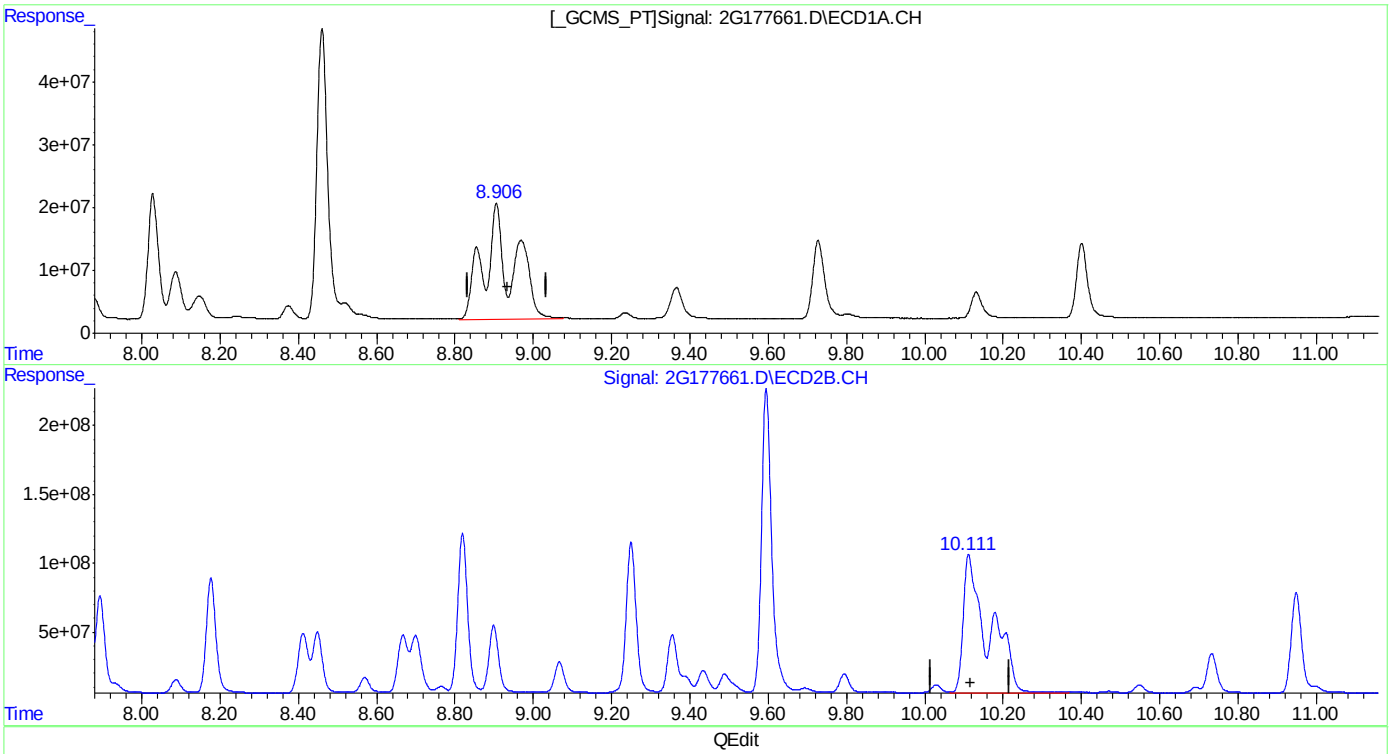
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:48:26 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177661.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:11 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:47:39 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(45) AR1262-E
8.906min 2019.281PPB m
response 941326991

(45) AR1262-E #2
10.111min 986.170PPB m
response 4490247206

(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:48:33 2019 RPT1

11.4.8.7 11

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177662.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:28 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:49:14 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachlo...	3.058	3.483	232.0E6	1664.2E6	54.381	54.026	
	Spiked Amount 40.000			Recovery	=	135.95%	135.07%	
51)	S Decachlor...	10.399	11.797	742.3E6	3697.7E6	163.031	143.202	
	Spiked Amount 40.000			Recovery	=	407.58%	358.01%	
	Target Compounds							
12)	AR1242-A	3.875	4.666	135.1E6	954.1E6	1539.093	969.196	#
13)	AR1242-B	4.441	5.280	320.3E6	2050.8E6	1926.648	971.413	#
14)	AR1242-C	4.613	5.468	118.4E6	823.8E6	1778.732	944.891	#
15)	AR1242-D	5.136	6.118	124.4E6	636.7E6	1685.862	968.399	#
16)	AR1242-E	5.729	6.708	115.3E6	804.6E6	1737.745	943.358	#
46)	AR1268-A	8.905	10.111	1070.3E6	4577.2E6	2278.295m	1012.908	#
47)	AR1268-B	8.961	10.178	1003.9E6	4541.1E6	2007.651	991.111	#
48)	AR1268-C	9.235	10.548	825.9E6	3692.7E6	2143.536	1008.354	#
49)	AR1268-D	9.726	10.947	315.1E6	1570.1E6	2011.446	1003.482	#
50)	AR1268-E	10.130	11.421	2462.4E6	11859.8E6	1815.989	1029.165	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

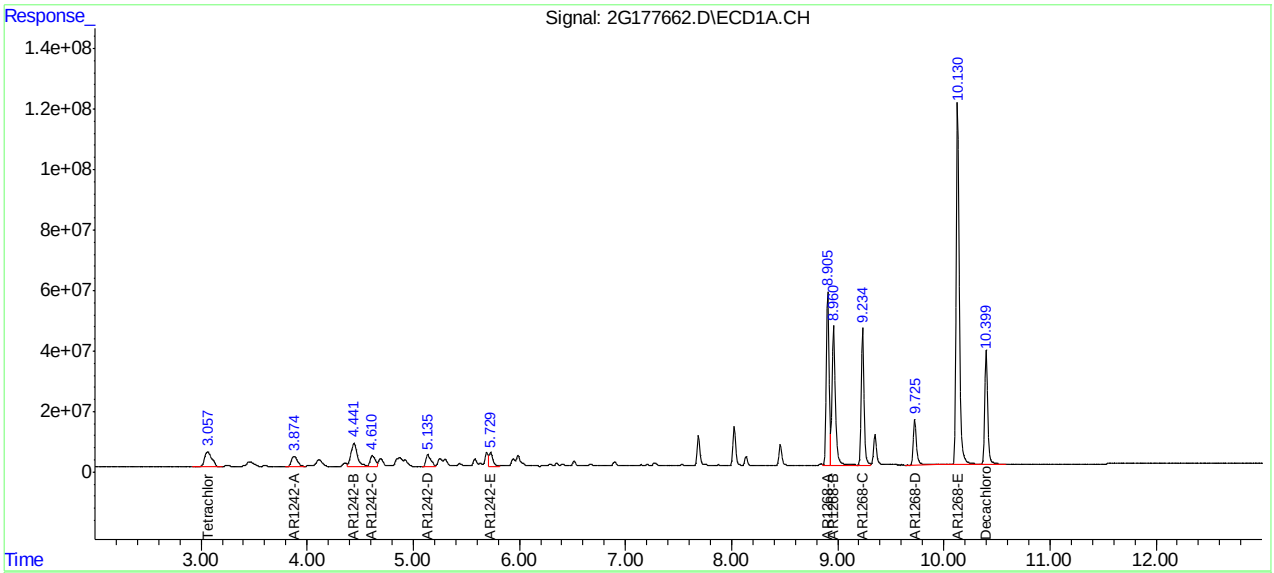
11.4.9 11

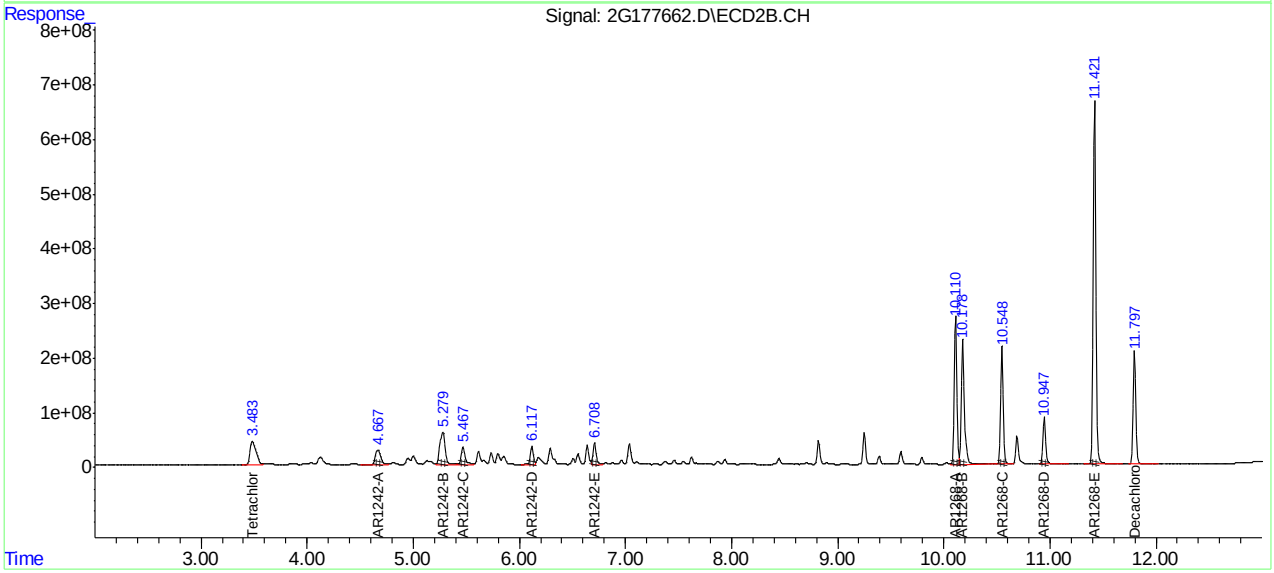
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177662.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:28 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:49:14 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-IC4614	**Method:**	SW846 8082A
Lab FileID:	2G177662.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 18:28	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

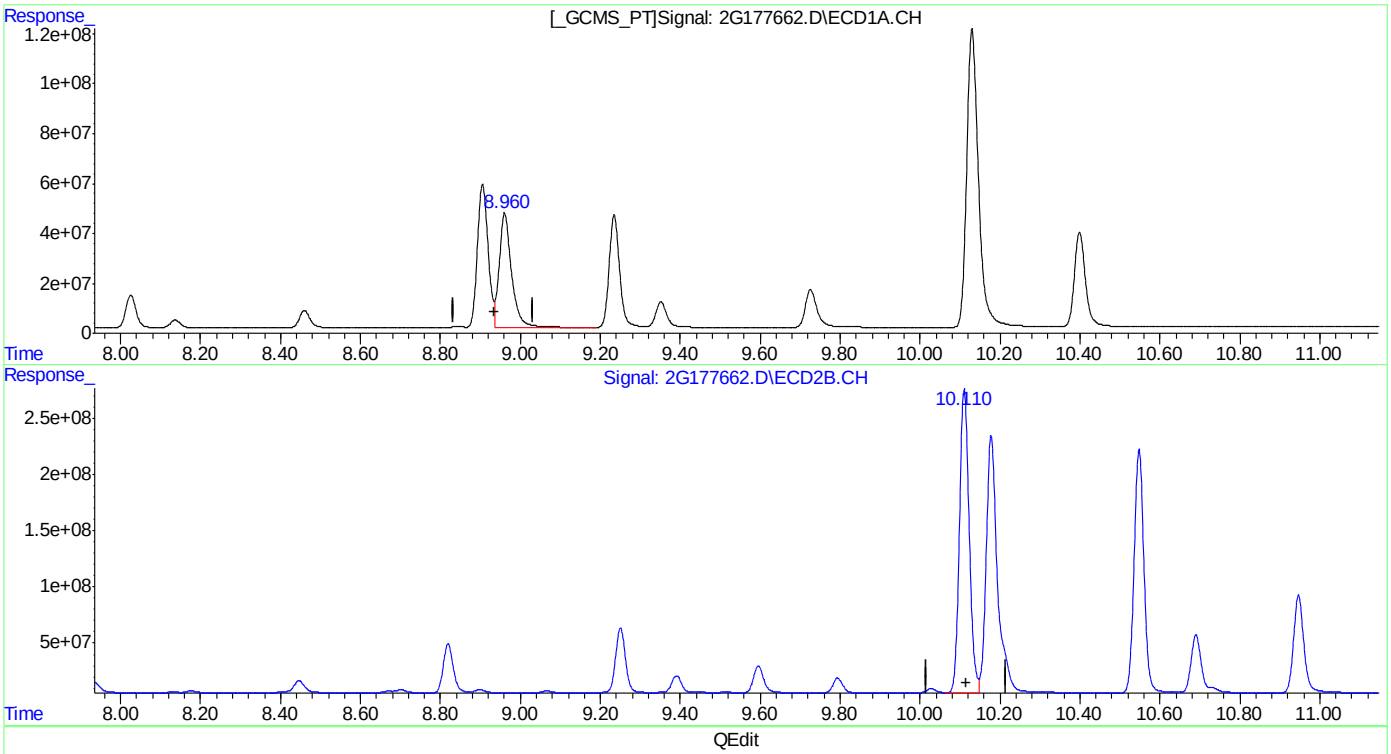
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1268-A		1	8.90	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177662.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:28 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:48:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(46) AR1268-A
8.961min 2137.038PPB
response 1003935769

(46) AR1268-A #2
10.111min 1012.908PPB
response 4577232561

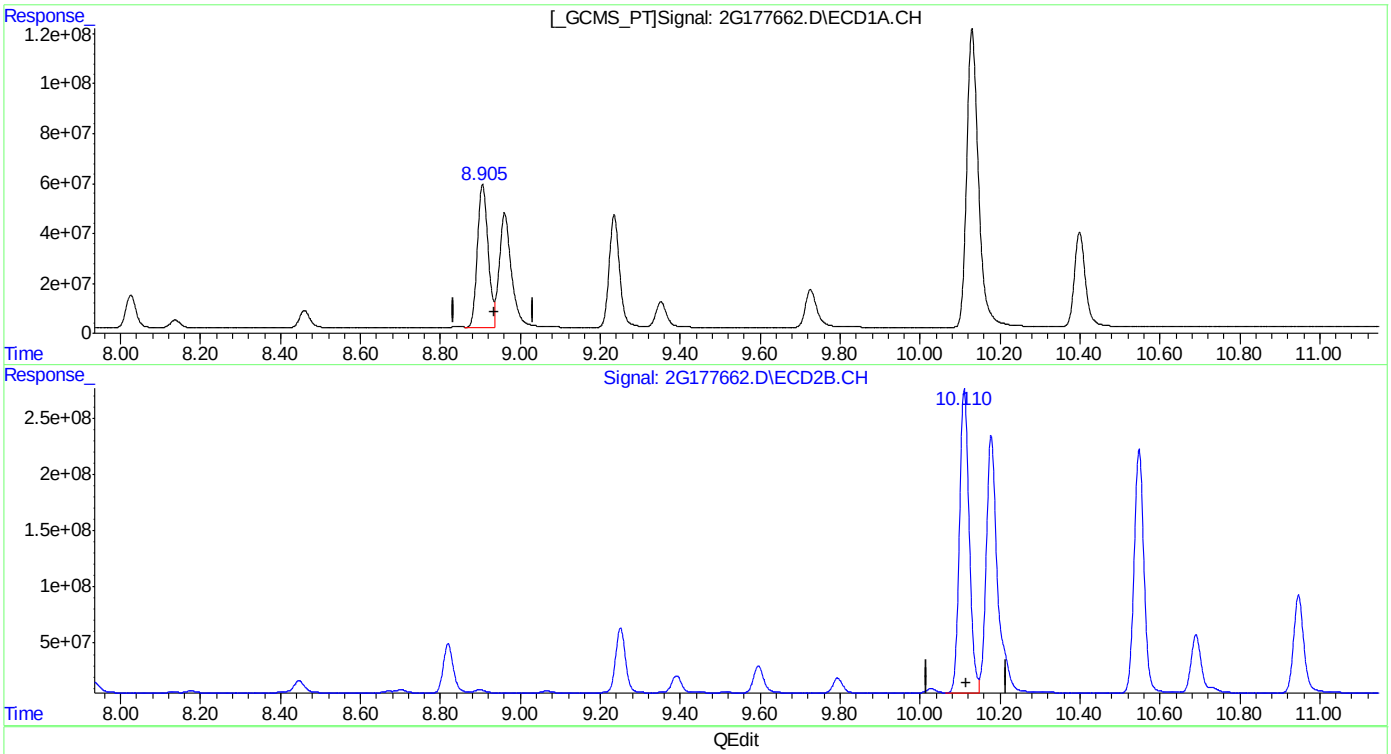
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177662.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:28 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:48:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(46) AR1268-A
8.905min 2278.295PPB m
response 1070295412

(46) AR1268-A #2
10.111min 1012.908PPB
response 4577232561

(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:49:16 2019 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177663.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:45 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:50:30 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachlo...	3.059	3.483	220.7E6	1601.3E6	51.730	51.985	
	Spiked Amount 40.000			Recovery	=	129.32%	129.96%	
51)	S Decachlor...	10.401	11.798	261.9E6	1401.6E6	57.514	54.279	
	Spiked Amount 40.000			Recovery	=	143.79%	135.70%	
	Target Compounds							
17)	AR1248-A	3.875	4.663	71481754	511.5E6	1578.130	1035.411	#
18)	AR1248-B	4.442	5.278	219.7E6	1369.8E6	1922.916	975.771	#
19)	AR1248-C	4.871	5.735	207.8E6	783.4E6	1428.282m	954.325	#
20)	AR1248-D	5.134	6.117	199.8E6	1039.1E6	1604.749	948.351	#
21)	AR1248-E	5.248	6.291	105.9E6	1158.4E6	1657.597m	909.044	#
22)	AR1248-F	5.727	6.708	196.7E6	1431.8E6	1616.027	898.206	#
23)	AR1248-G	5.987	7.037	175.1E6	1332.5E6	1688.017m	903.486	#

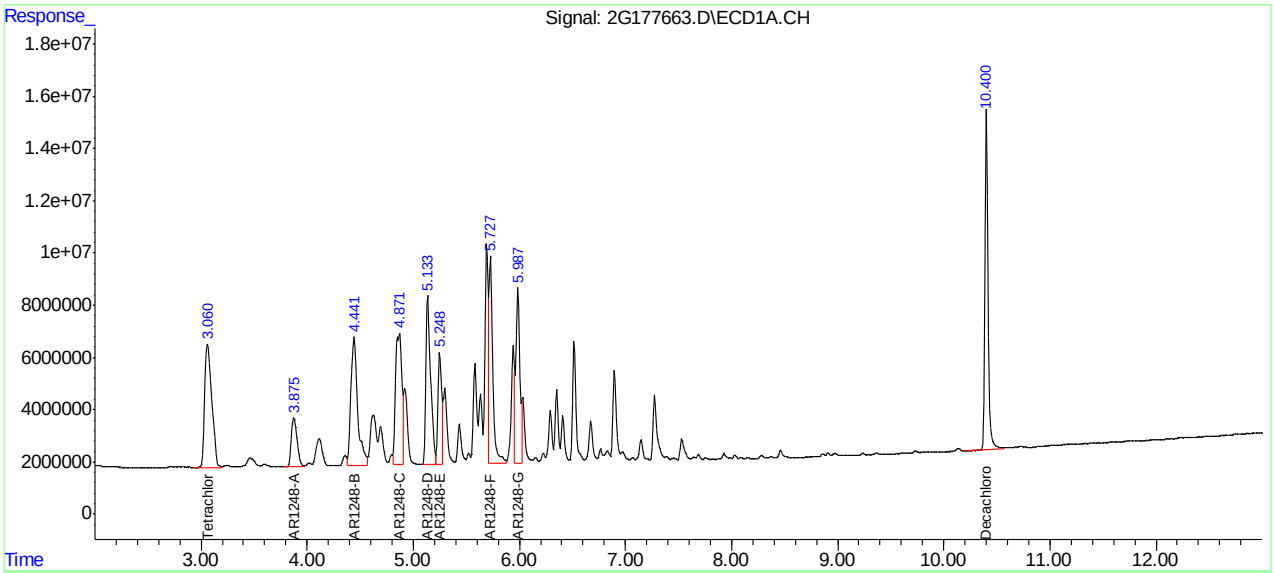
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

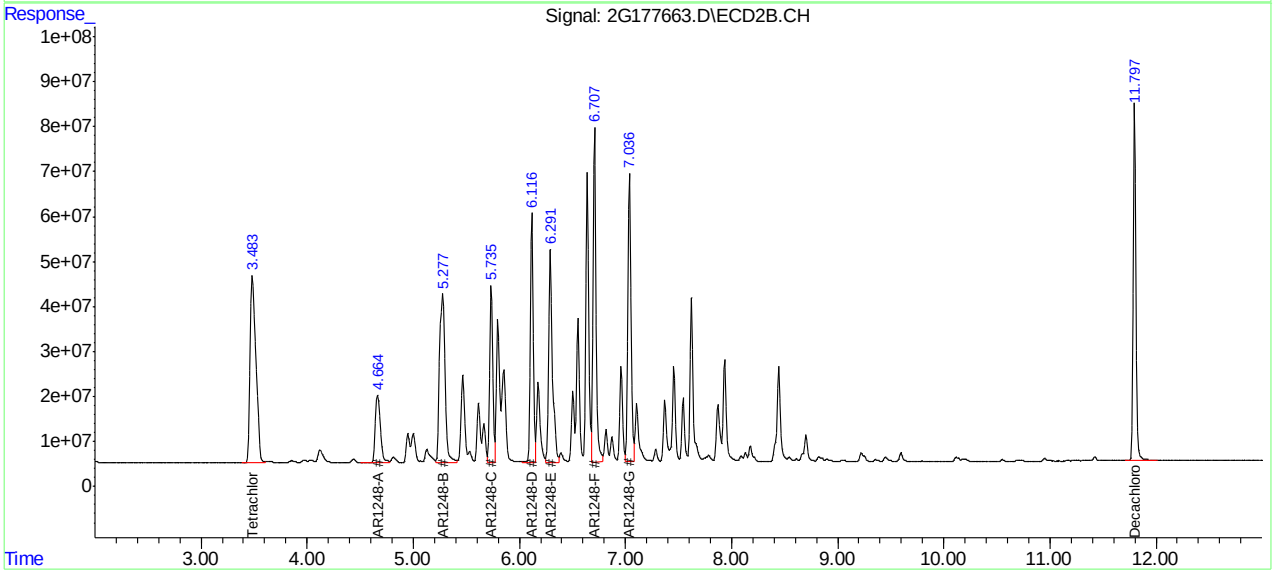
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177663.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:45 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:50:30 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-IC4614	**Method:**	SW846 8082A
Lab FileID:	2G177663.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 18:45	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

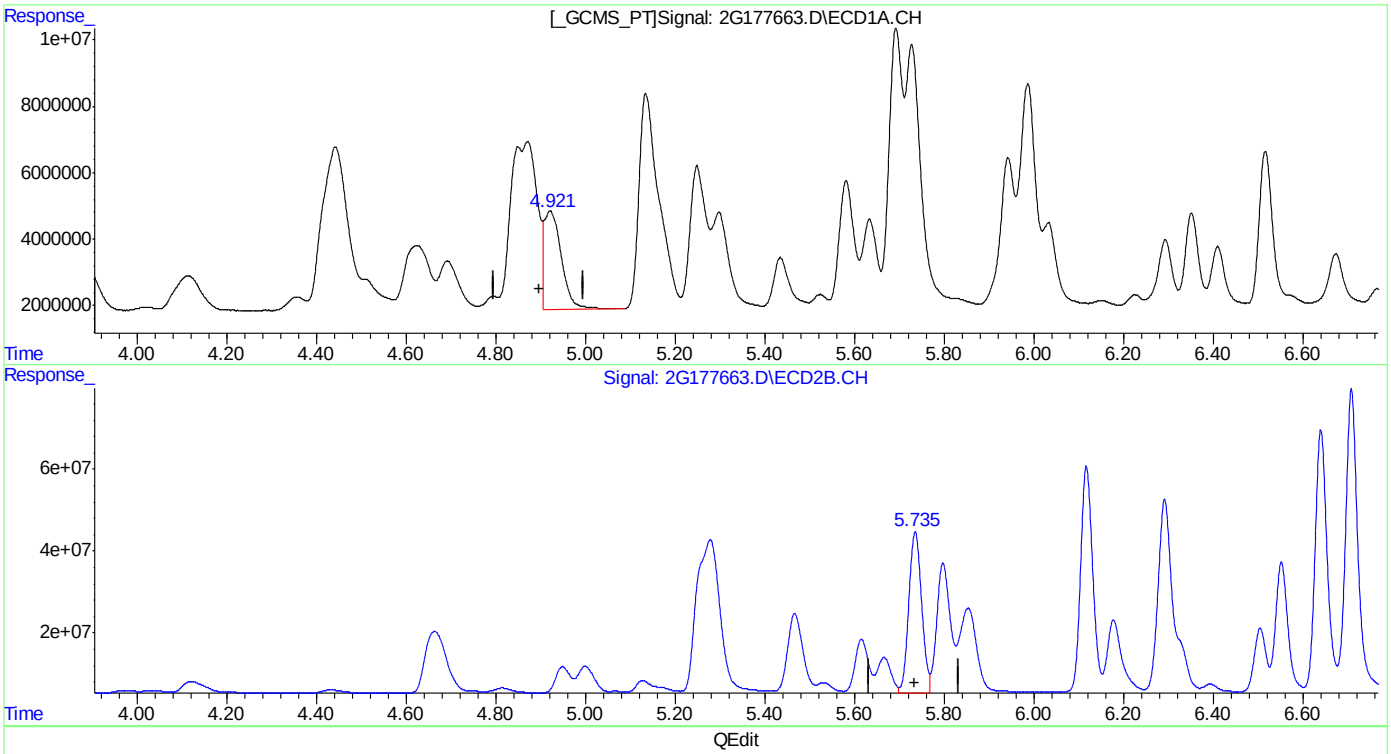
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1248-C		1	4.87	Split peak
AR1248-E		1	5.25	Split peak
Ar1248-G		1	5.99	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177663.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:45 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:49:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(19) AR1248-C
4.921min 540.631PPB
response 78645202

(19) AR1248-C #2
5.735min 954.325PPB
response 783400560

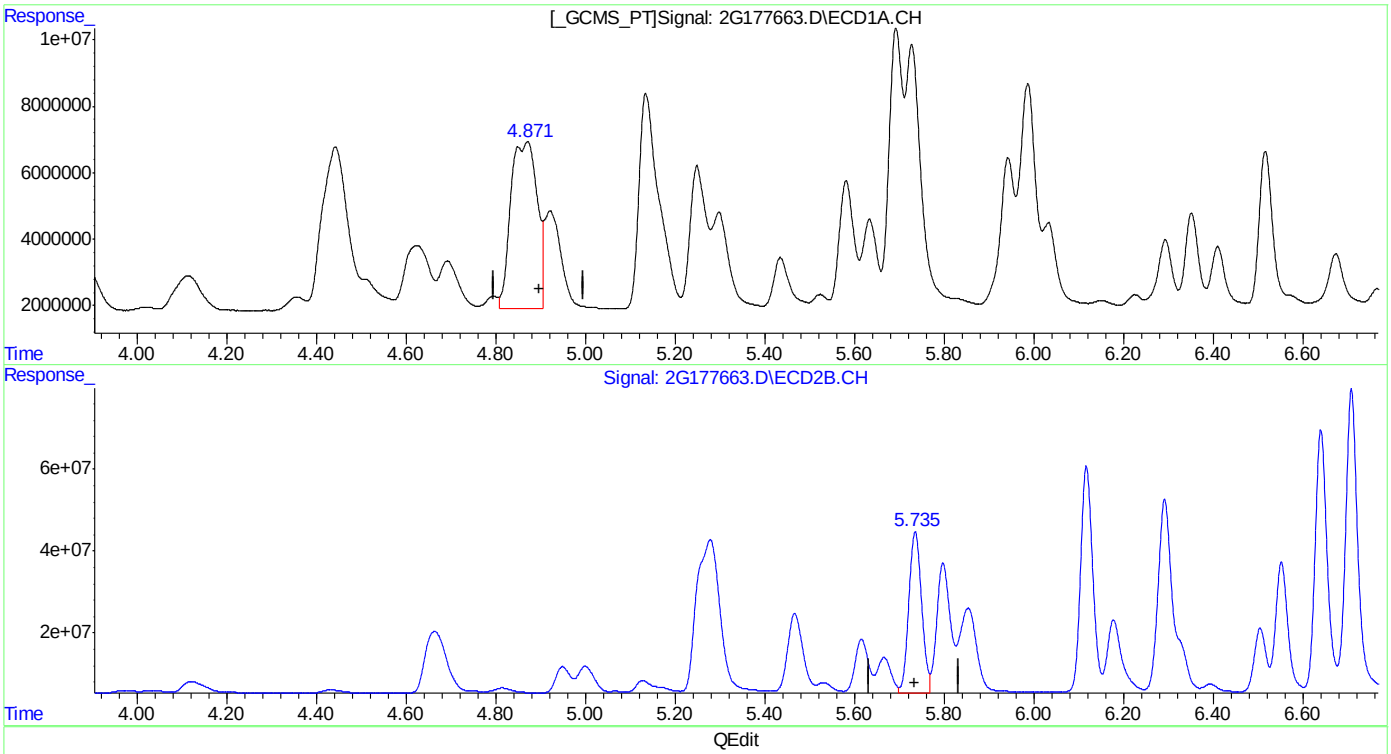
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177663.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:45 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:49:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(19) AR1248-C
4.871min 1428.282PPB m
response 207771189

(19) AR1248-C #2
5.735min 954.325PPB
response 783400560

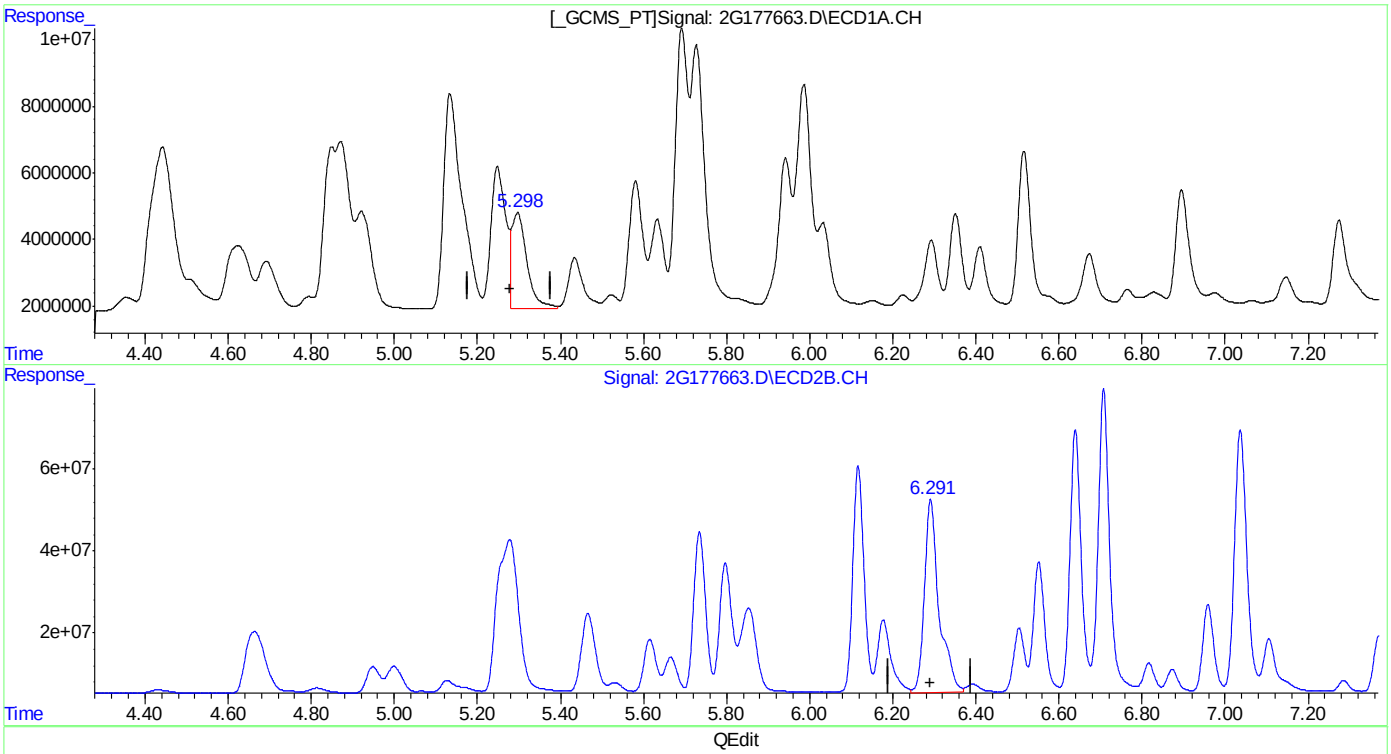
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177663.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:45 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:49:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(21) AR1248-E
5.297min 1172.589PPB
response 74925968

(21) AR1248-E #2
6.291min 909.044PPB
response 1158387652

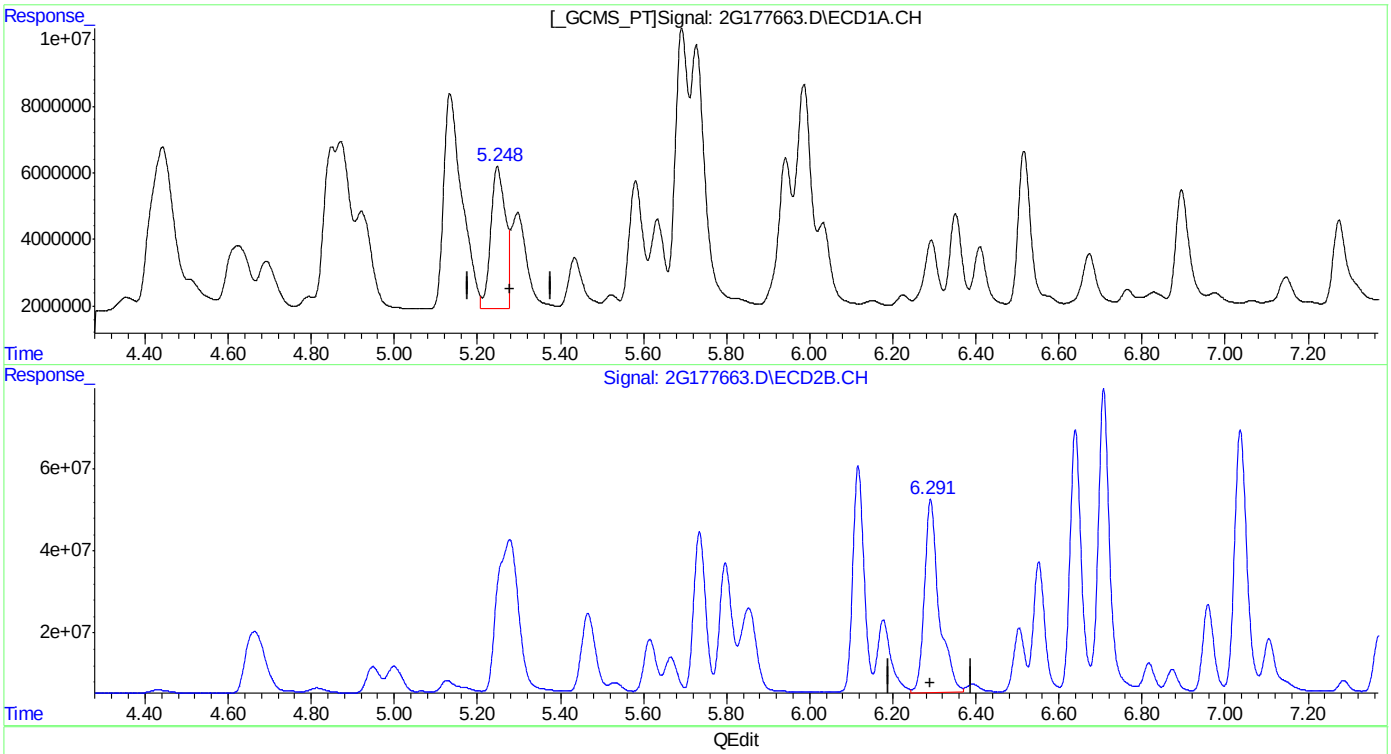
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177663.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:45 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:49:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(21) AR1248-E
5.248min 1657.597PPB m
response 105916957

(21) AR1248-E #2
6.291min 909.044PPB
response 1158387652

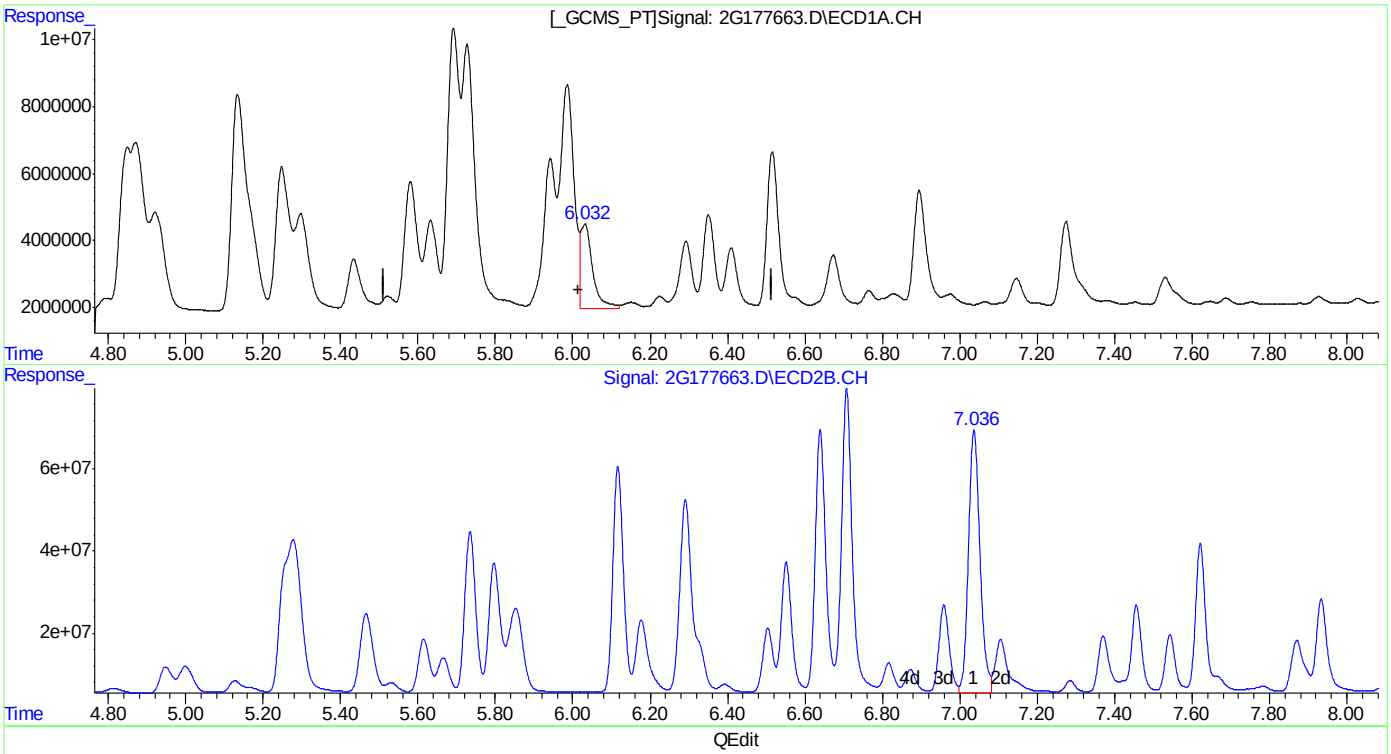
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177663.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:45 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:49:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(23) AR1248-G
6.032min 521.993
response 54132117

(23) AR1248-G #2
7.037min 903.486
response 1332462914

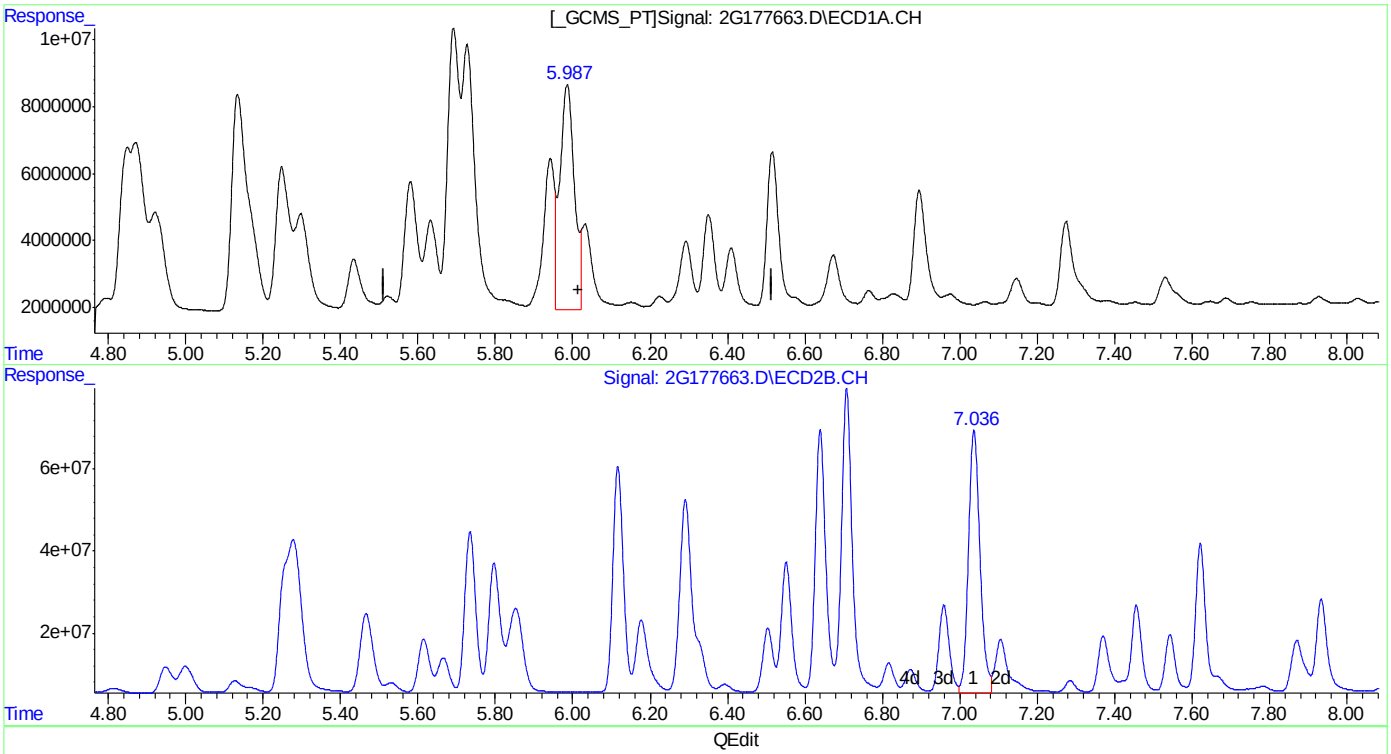
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177663.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 6:45 pm
Operator : tianweir
Sample : ic4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:49:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:43:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(23) AR1248-G
5.987min 1688.017 m
response 175052076

(23) AR1248-G #2
7.037min 903.486
response 1332462914

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177664.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:02 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:53:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.076f	3.496	157.9E6	1084.0E6	37.004	35.191
	Spiked Amount 40.000			Recovery	=	92.51%	87.98%
51)	S Decachlor...	10.400	11.798	200.7E6	1040.6E6	44.087	40.299
	Spiked Amount 40.000			Recovery	=	110.22%	100.75%
	Target Compounds						
31)	AR1016-A	3.470	4.132	88357564	535.7E6	980.468	1003.863
32)	AR1016-B	3.887	4.673	160.2E6	1051.3E6	953.526	887.717
33)	AR1016-C	4.452	5.286	380.7E6	2406.3E6	943.782	921.100
34)	AR1016-D	4.621	5.473	143.8E6	894.4E6	964.431	850.134
35)	AR1016-E	5.142	6.121	146.9E6	743.0E6	951.585	952.054
36)	AR1260-A	7.531	8.702	450.7E6	2345.6E6	1031.020	968.032m
37)	AR1260-B	7.690	8.821	326.1E6	1319.9E6	1078.676	994.493
38)	AR1260-C	8.032	9.251	280.9E6	1538.7E6	1065.573	994.171
39)	AR1260-D	8.461	9.595	811.5E6	3416.8E6	1083.989m	1023.153
40)	AR1260-E	8.857	10.136	662.9E6	3196.1E6	1010.294m	966.178m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

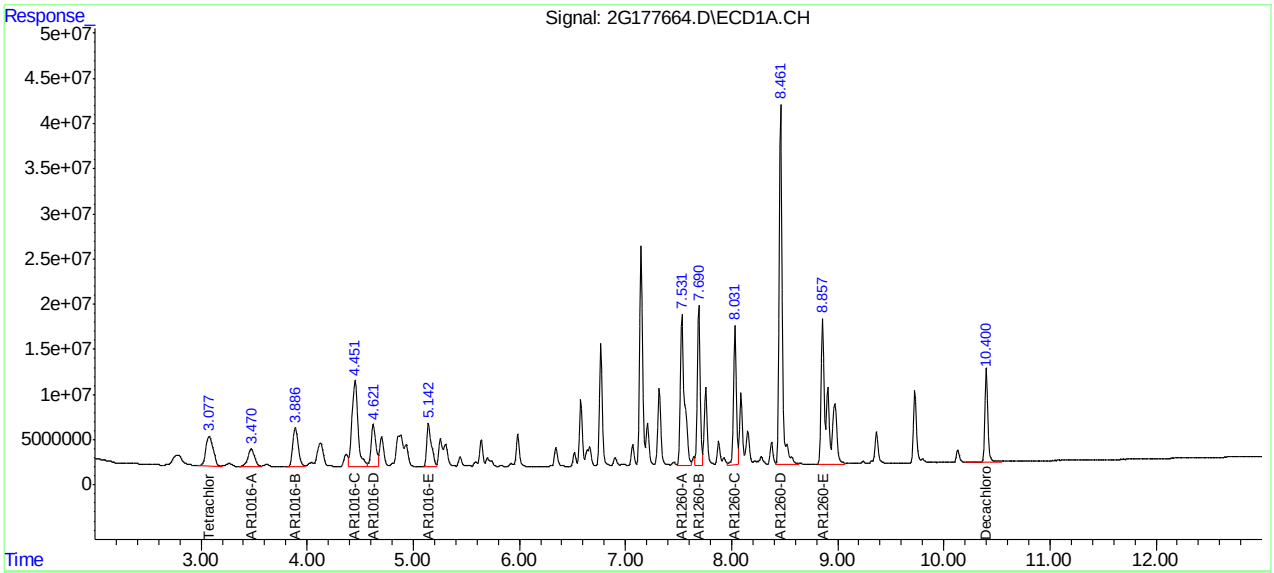
11.4.11
11

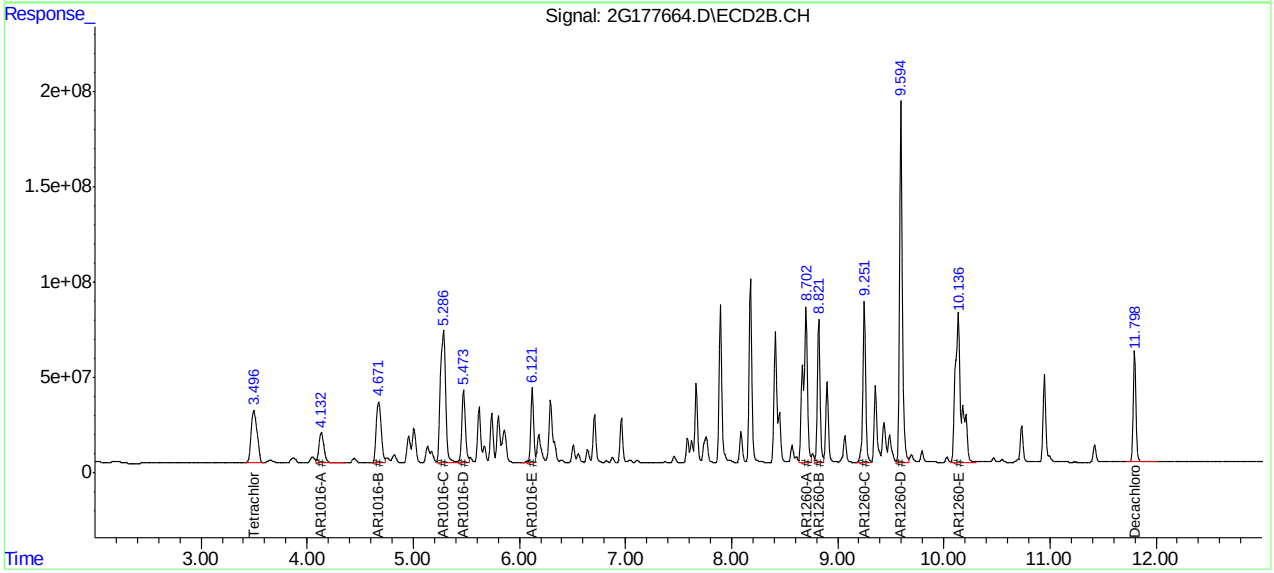
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177664.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:02 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:53:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-ICV4614	**Method:**	SW846 8082A
Lab FileID:	2G177664.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 19:02	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

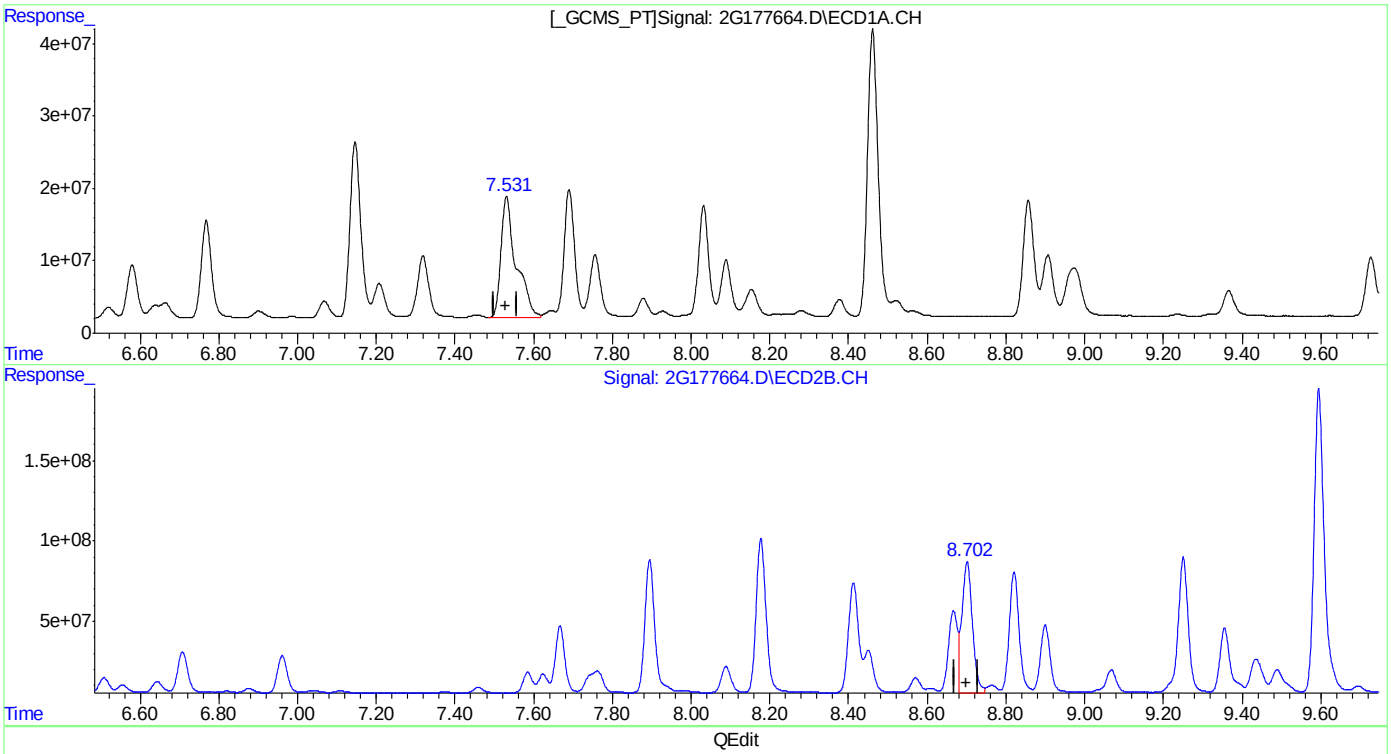
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-D		1	8.46	Split peak
AR1260-A		2	8.70	Split peak
AR1260-E		1	8.86	Split peak
AR1260-E		2	10.14	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177664.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:02 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:52:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(36) AR1260-A
7.531min 1031.020PPB
response 450744827

(36) AR1260-A #2
8.702min 631.098PPB
response 1529211630

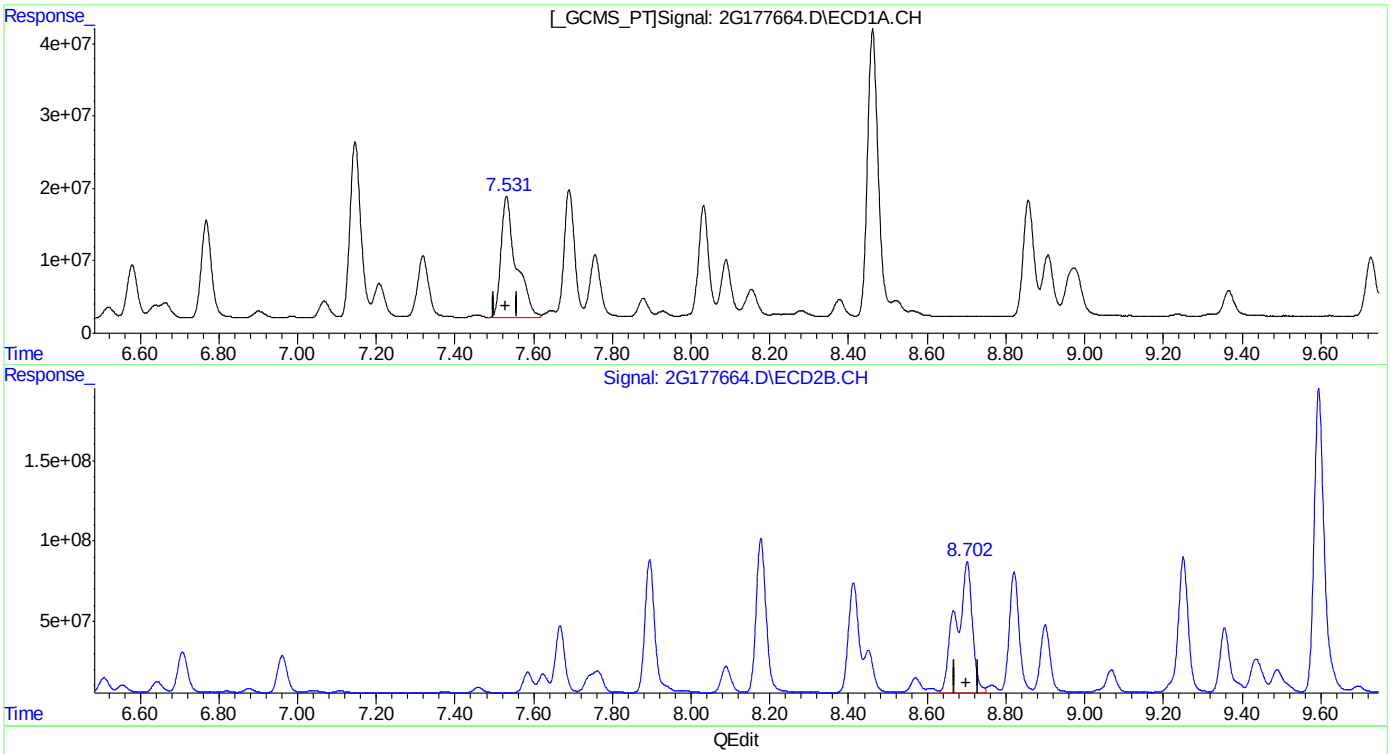
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177664.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:02 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:52:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(36) AR1260-A
7.531min 1031.020PPB
response 450744827

(36) AR1260-A #2
8.702min 968.032PPB m
response 2345636175

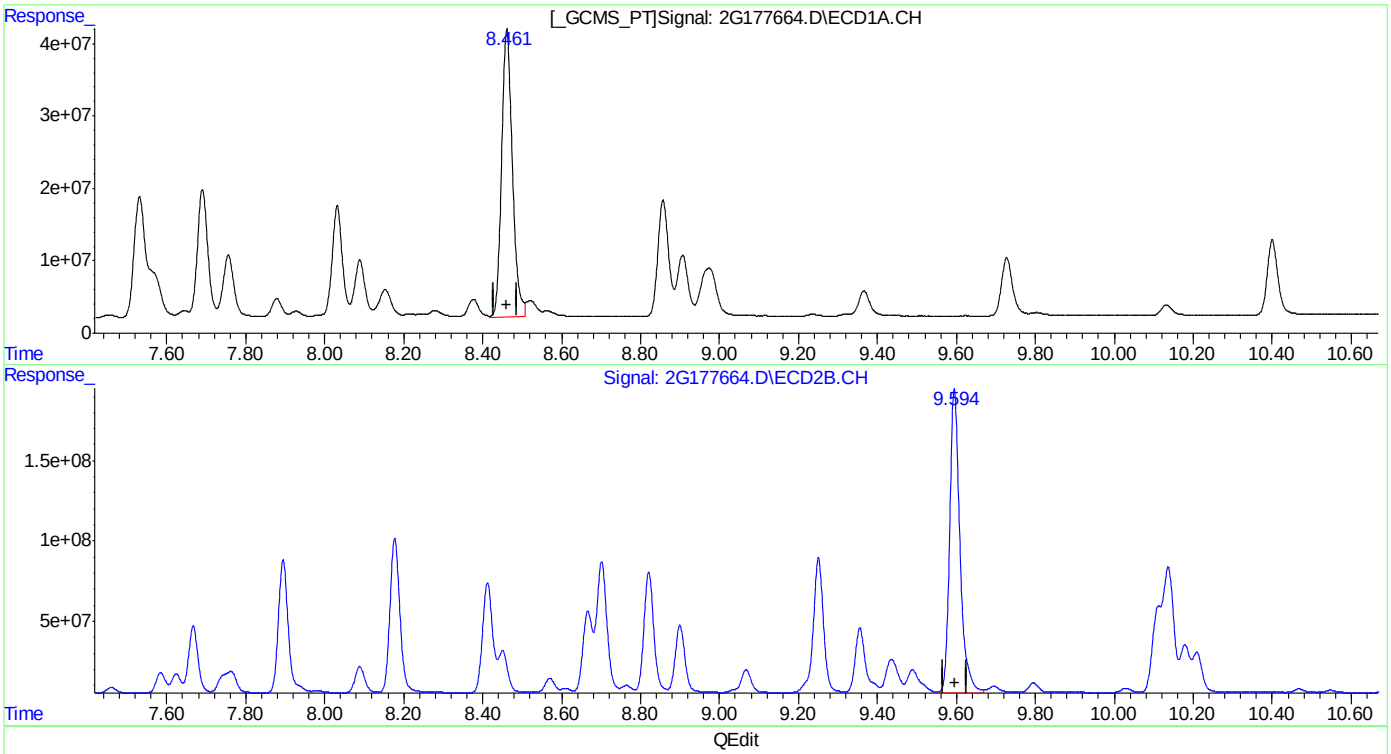
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177664.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:02 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:52:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.461min 1005.514PPB
response 752754182

(39) AR1260-D #2
9.595min 1023.153PPB
response 3416780231

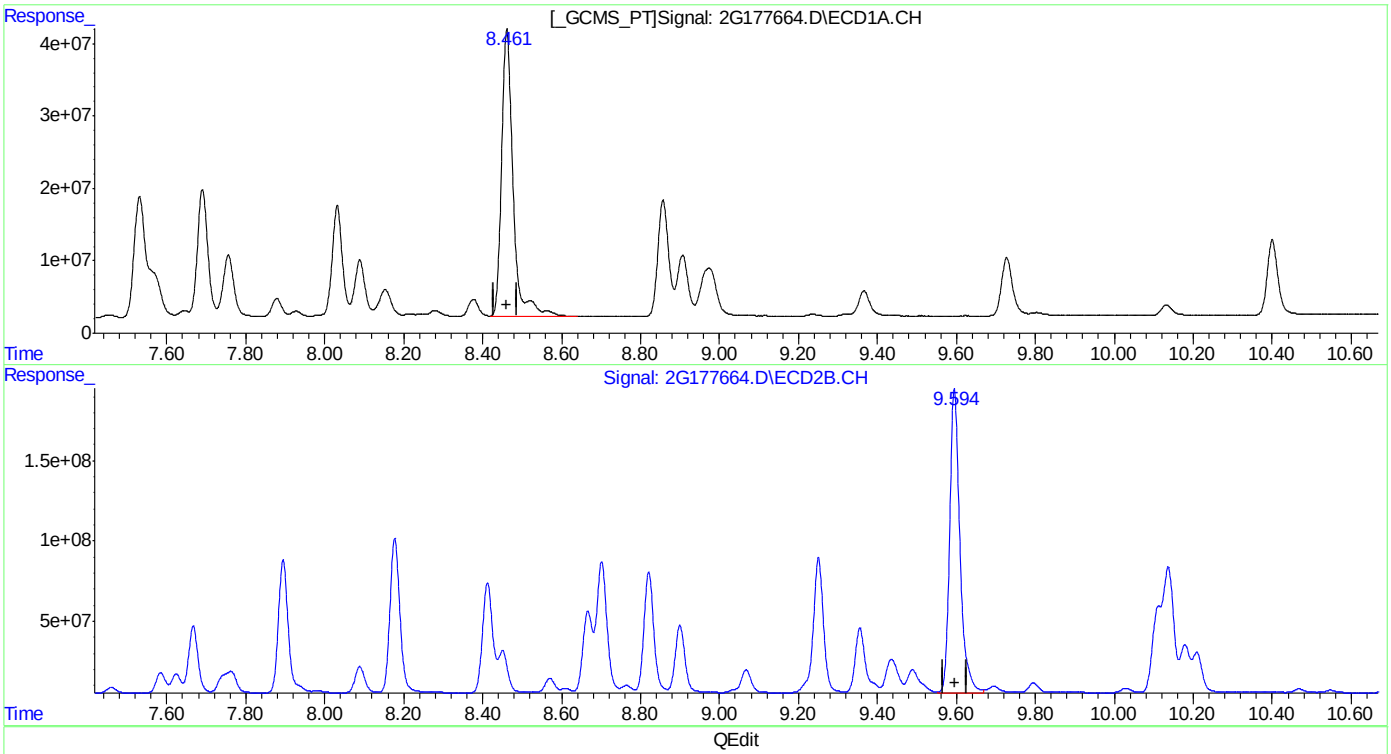
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:52:50 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177664.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:02 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:52:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(39) AR1260-D
8.461min 1083.989PPB m
response 811502743

(39) AR1260-D #2
9.595min 1023.153PPB
response 3416780231

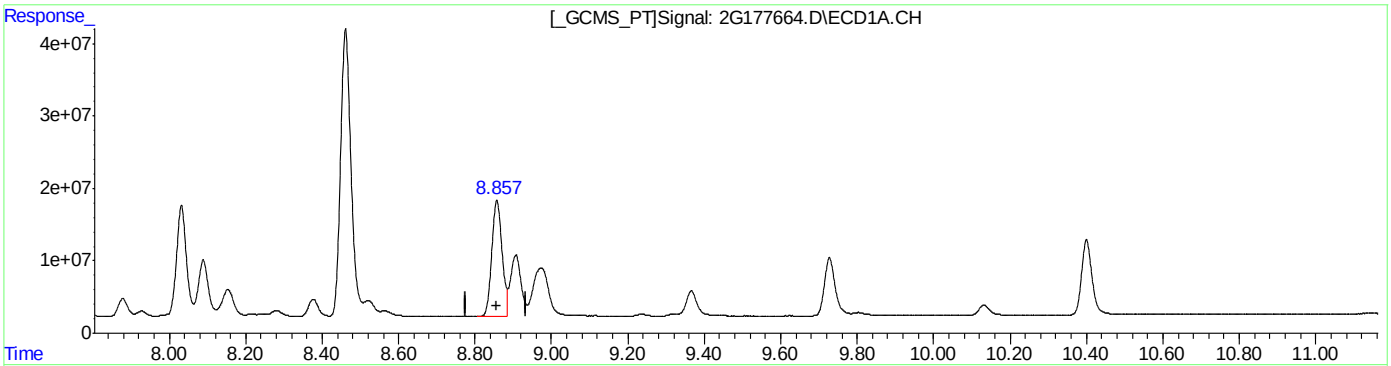
(+) = Expected Retention Time

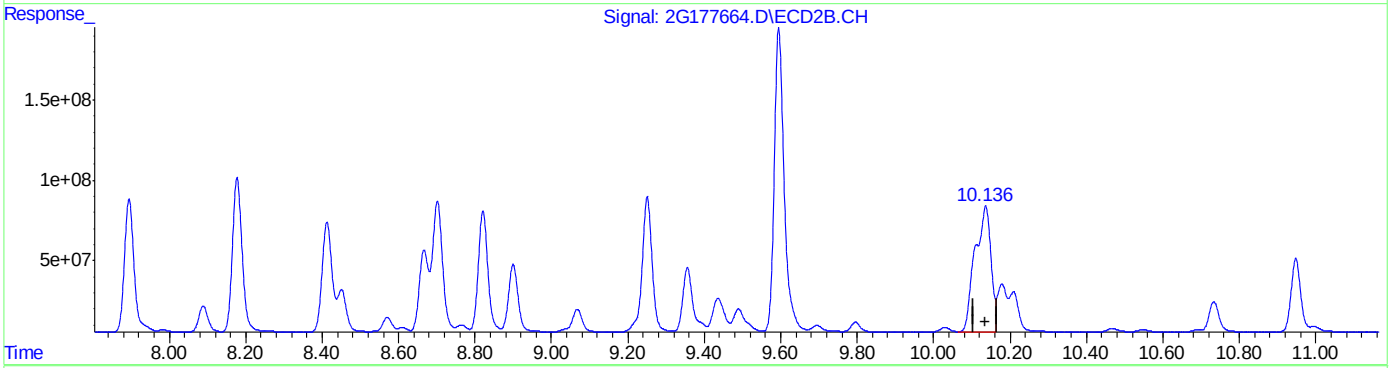
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177664.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:02 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:52:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(40) AR1260-E
8.857min 464.210PPB
response 304610168

(40) AR1260-E #2
10.136min 686.083PPB
response 2269521485

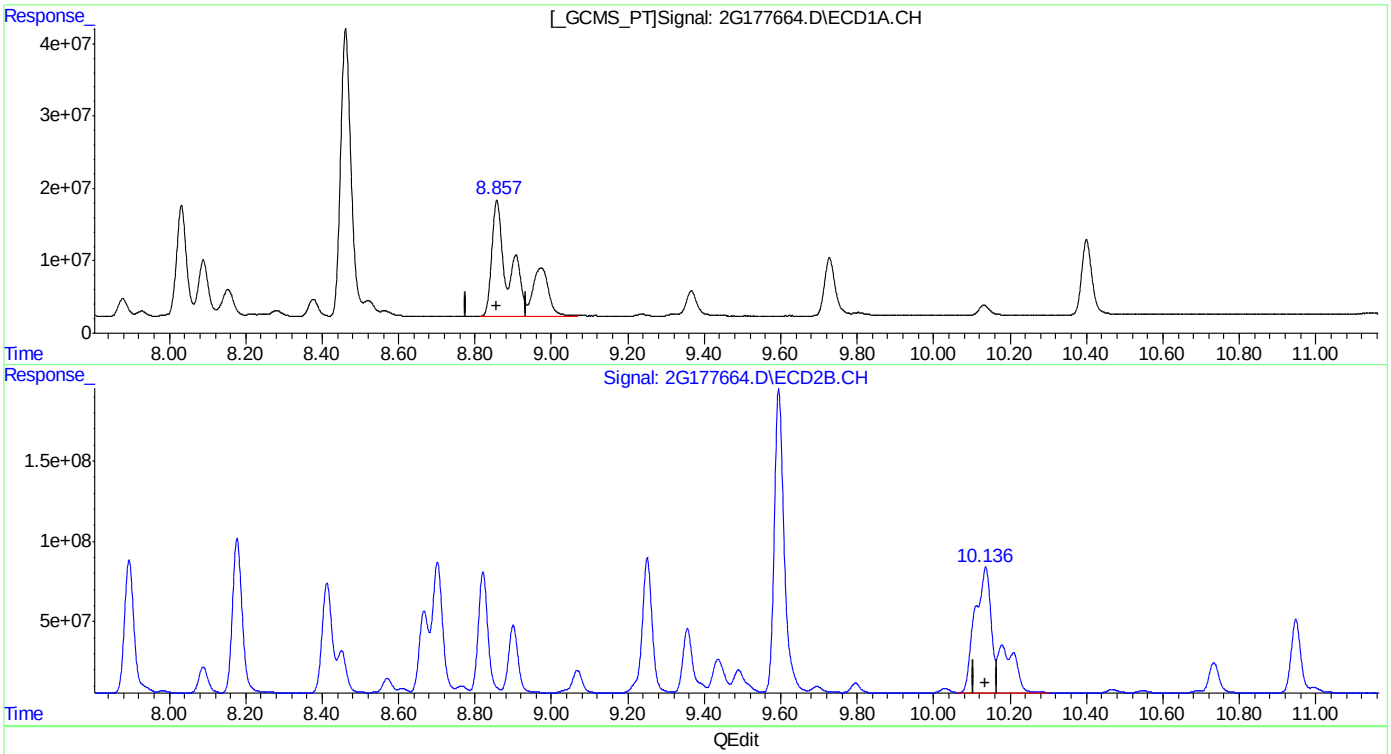
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:52:56 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177664.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:02 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:52:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.857min 1010.294PPB m
response 662945305

(40) AR1260-E #2
10.136min 966.178PPB m
response 3196059260

(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:53:03 2019 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177665.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:19 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:54:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.058	3.483	250.1E6	1702.2E6	58.615	55.261
	Spiked Amount 40.000			Recovery	=	146.54%	138.15%
51) S	Decachlor...	10.401	11.798	278.4E6	1467.1E6	61.141	56.816
	Spiked Amount 40.000			Recovery	=	152.85%	142.04%
	Target Compounds						
2)	AR1221-A	2.528	2.941	28034928	182.9E6	1105.402	1010.601
3)	AR1221-B	3.245	3.855	48351383	329.0E6	953.874	922.381
4)	AR1221-C	3.455	4.123	149.6E6	795.2E6	932.931	919.442
5)	AR1221-D	3.876	4.657	13768105	150.0E6	807.001	843.669
6)	AR1221-E	4.036	4.742	16944993	125.2E6	1077.806	1193.475
24)	AR1254-A	5.635	6.705	167.7E6	1269.8E6	1034.078	1009.940
25)	AR1254-B	5.980	6.959	358.2E6	1396.6E6	1030.038	1015.037
26)	AR1254-C	6.350	7.457	182.9E6	1148.3E6	1029.192	1015.172
27)	AR1254-D	6.515	7.623	329.5E6	2442.4E6	1028.400	1014.733
28)	AR1254-E	6.895	7.933	304.6E6	1605.9E6	1036.040	1016.328
29)	AR1254-F	7.146	8.443	283.6E6	1812.5E6	1041.935	1010.106m
30)	AR1254-G	7.530	8.701	380.9E6	2175.1E6	1034.634	1014.289

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

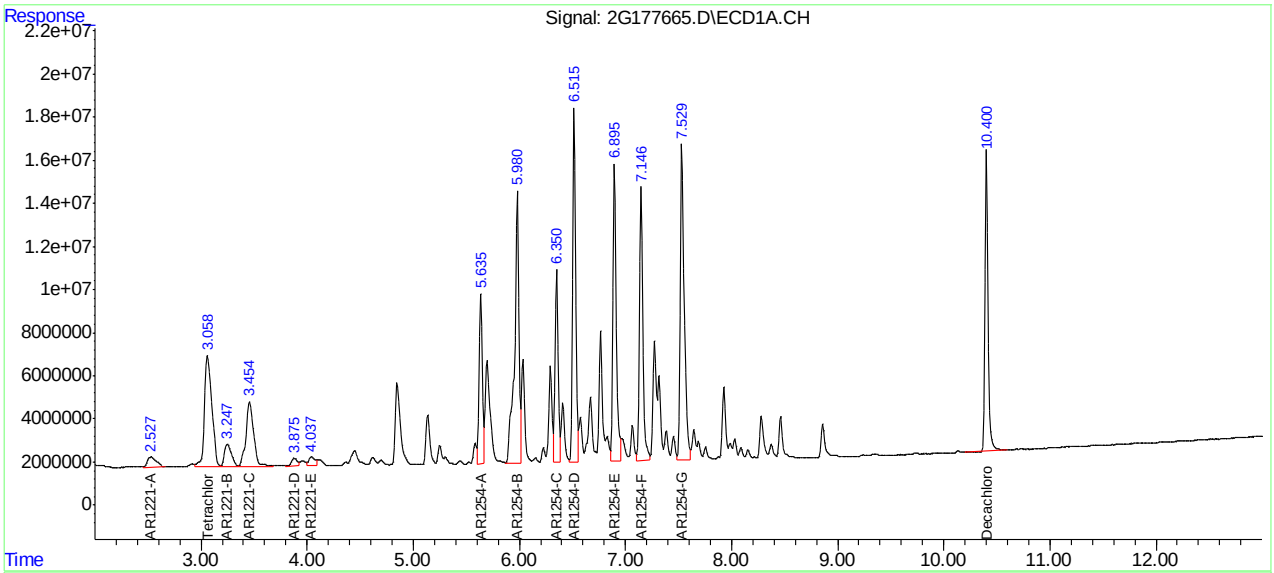
11.4.12
11

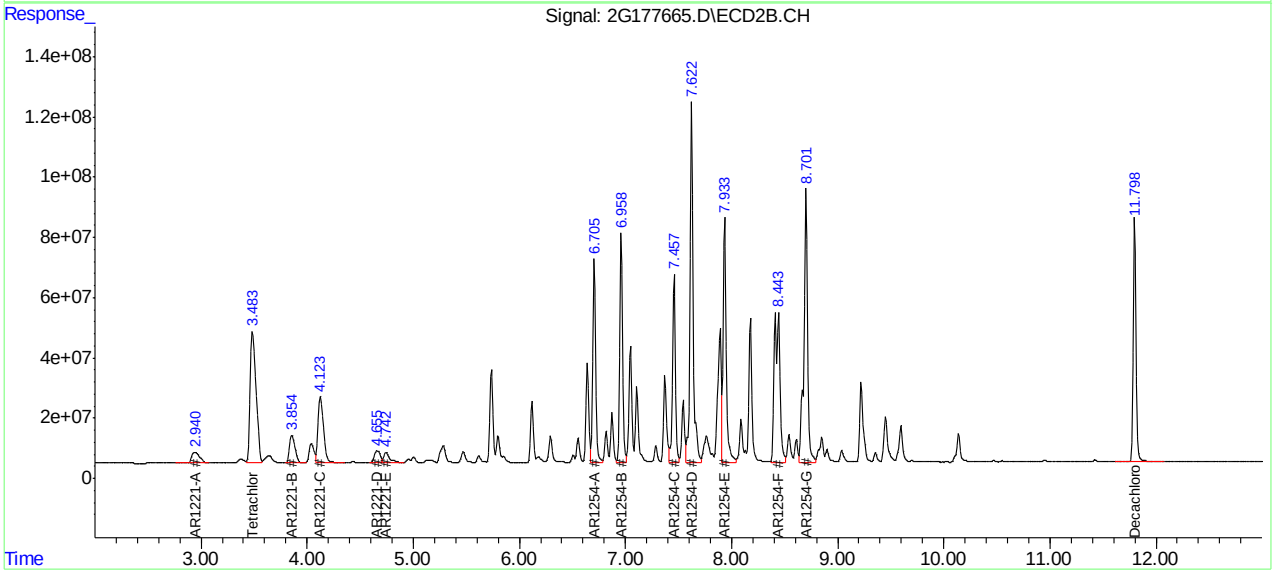
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177665.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:19 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:54:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-ICV4614	**Method:**	SW846 8082A
Lab FileID:	2G177665.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 19:19	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

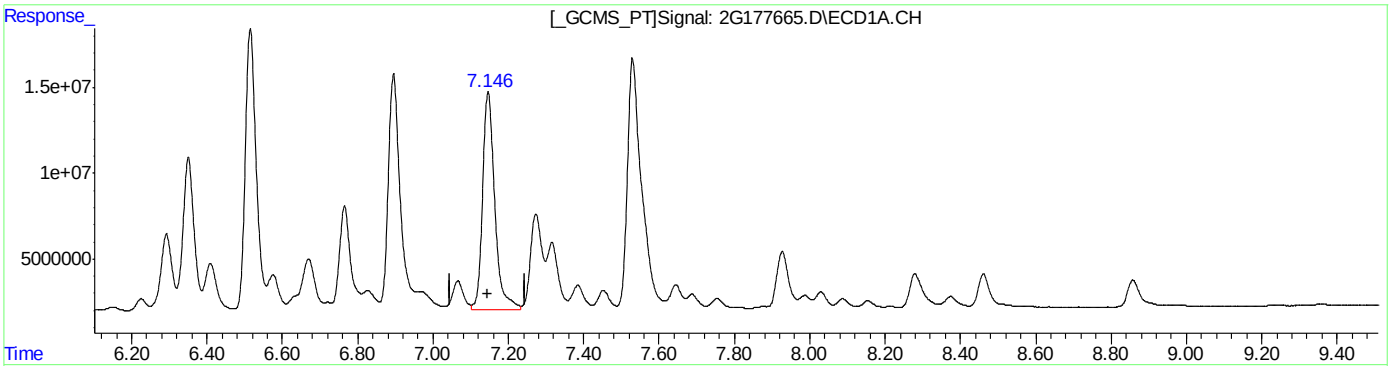
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1254-F		2	8.44	Split peak

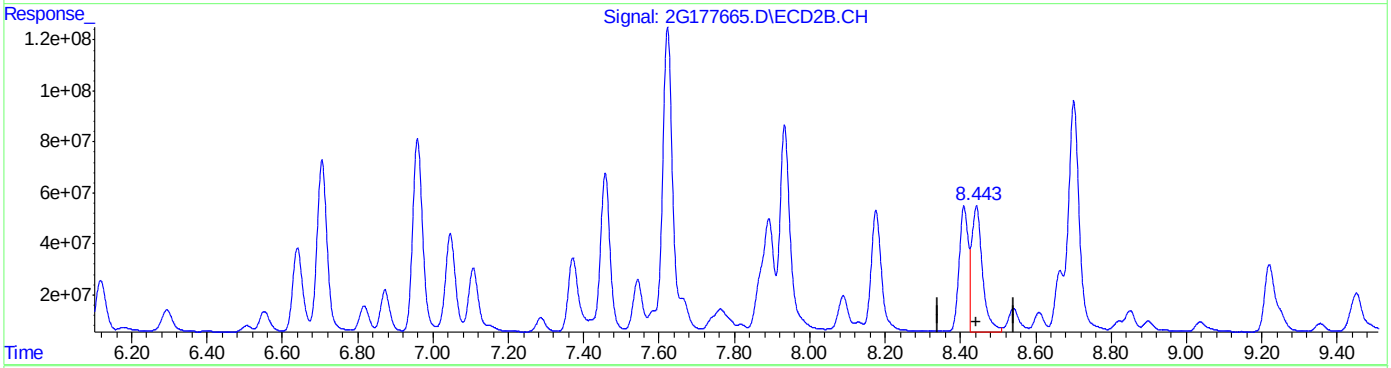
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177665.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:19 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:53:42 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(29) AR1254-F
7.146min 1041.935PPB
response 283608080

(29) AR1254-F #2
8.443min 551.650PPB
response 989855104

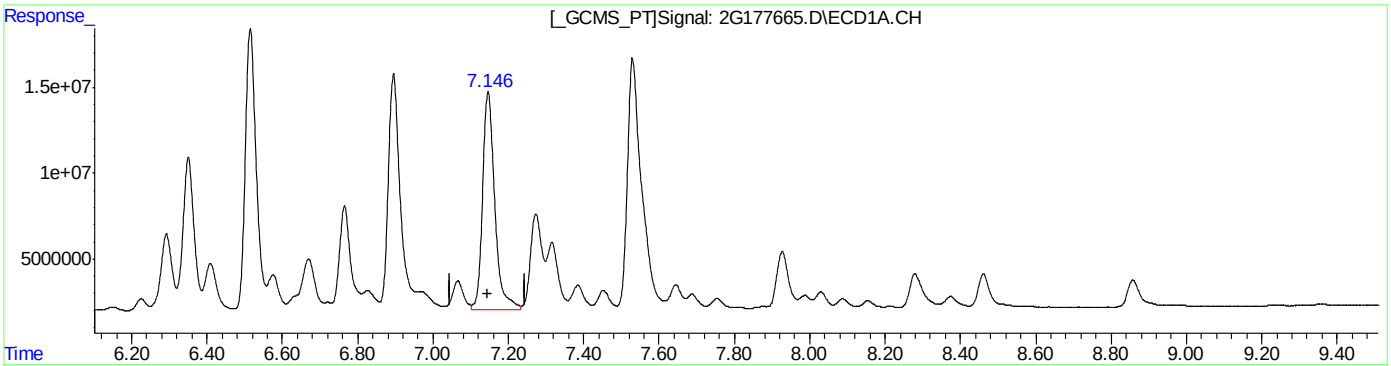
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:54:19 2019 RPT1

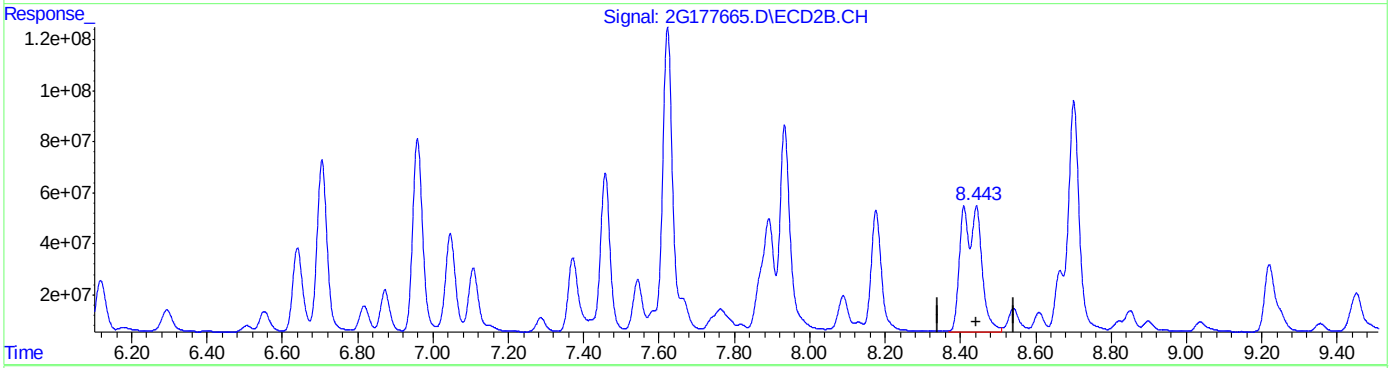
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177665.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:19 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:53:42 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(29) AR1254-F
7.146min 1041.935PPB
response 283608080

(29) AR1254-F #2
8.443min 1010.106PPB m
response 1812487886

(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:54:25 2019 RPT1

JC86089

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177666.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:36 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:55:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.058	3.483	254.7E6	1755.1E6	59.711	56.980
	Spiked Amount 40.000			Recovery	=	149.28%	142.45%
51) S	Decachlor...	10.401	11.799	292.7E6	1524.5E6	64.286	59.040
	Spiked Amount 40.000			Recovery	=	160.72%	147.60%
	Target Compounds						
7)	AR1232-A	3.455	4.121	120.7E6	679.4E6	958.340	953.438
8)	AR1232-B	3.875	4.665	83340668	555.7E6	972.737	952.927
9)	AR1232-C	4.445	5.281	185.2E6	1179.0E6	966.064	949.067
10)	AR1232-D	4.614	5.469	69089402	478.6E6	976.294	944.835
11)	AR1232-E	5.136	6.118	65202108	332.5E6	972.510	956.181
41)	AR1262-A	7.144	8.176	359.7E6	1499.0E6	1051.734	1025.274
42)	AR1262-B	7.689	8.820	528.6E6	2098.1E6	1053.446	1027.393
43)	AR1262-C	8.029	9.250	386.9E6	2007.4E6	1051.718	1024.301
44)	AR1262-D	8.460	9.596	1015.6E6	4147.3E6	1052.229	1027.896
45)	AR1262-E	8.905	10.112	999.9E6	4642.7E6	1062.177m	1033.959m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

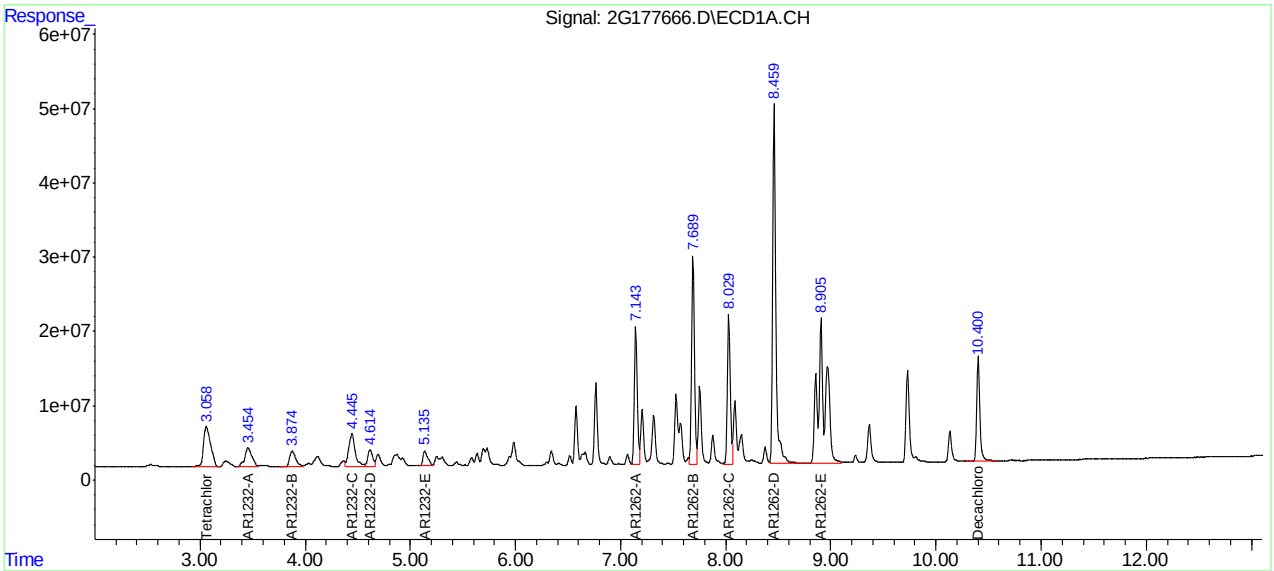
11.4.13 11

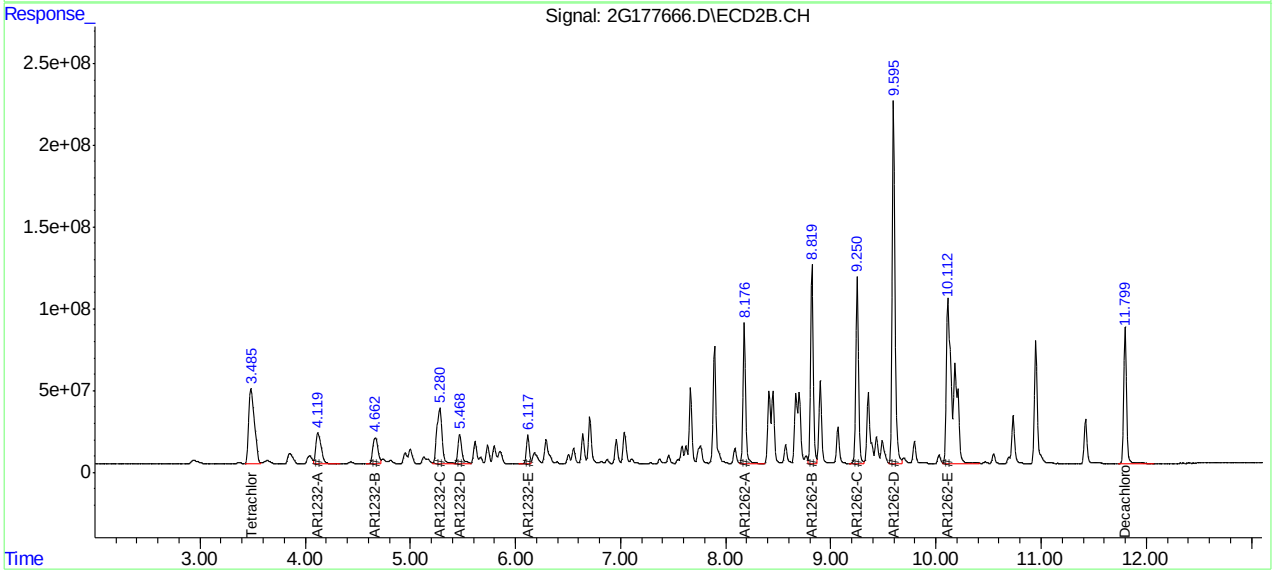
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177666.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:36 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:55:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-ICV4614	**Method:**	SW846 8082A
Lab FileID:	2G177666.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 19:36	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

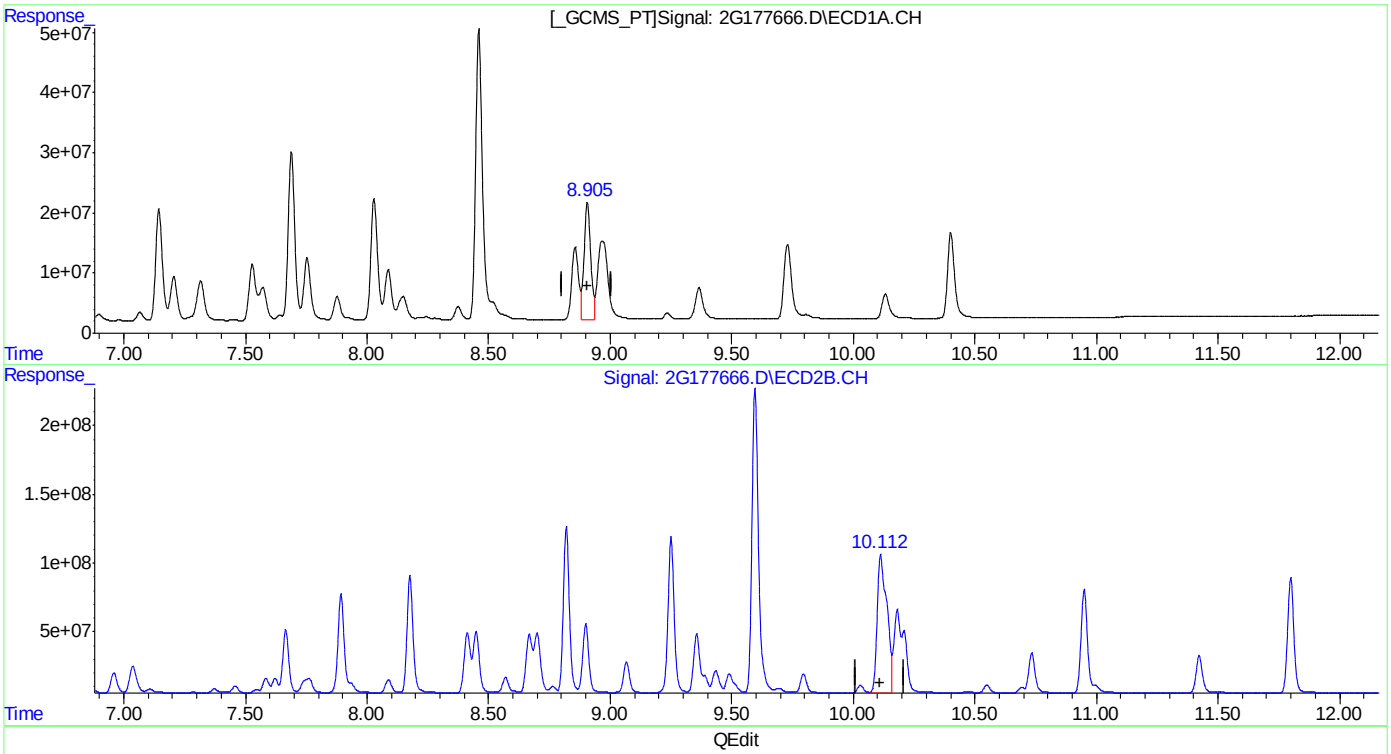
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1262-E		1	8.91	Split peak
AR1262-E		2	10.11	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177666.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:36 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:54:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(45) AR1262-E
8.906min 400.680PPB
response 377170720

(45) AR1262-E #2
10.112min 623.725PPB
response 2800681192

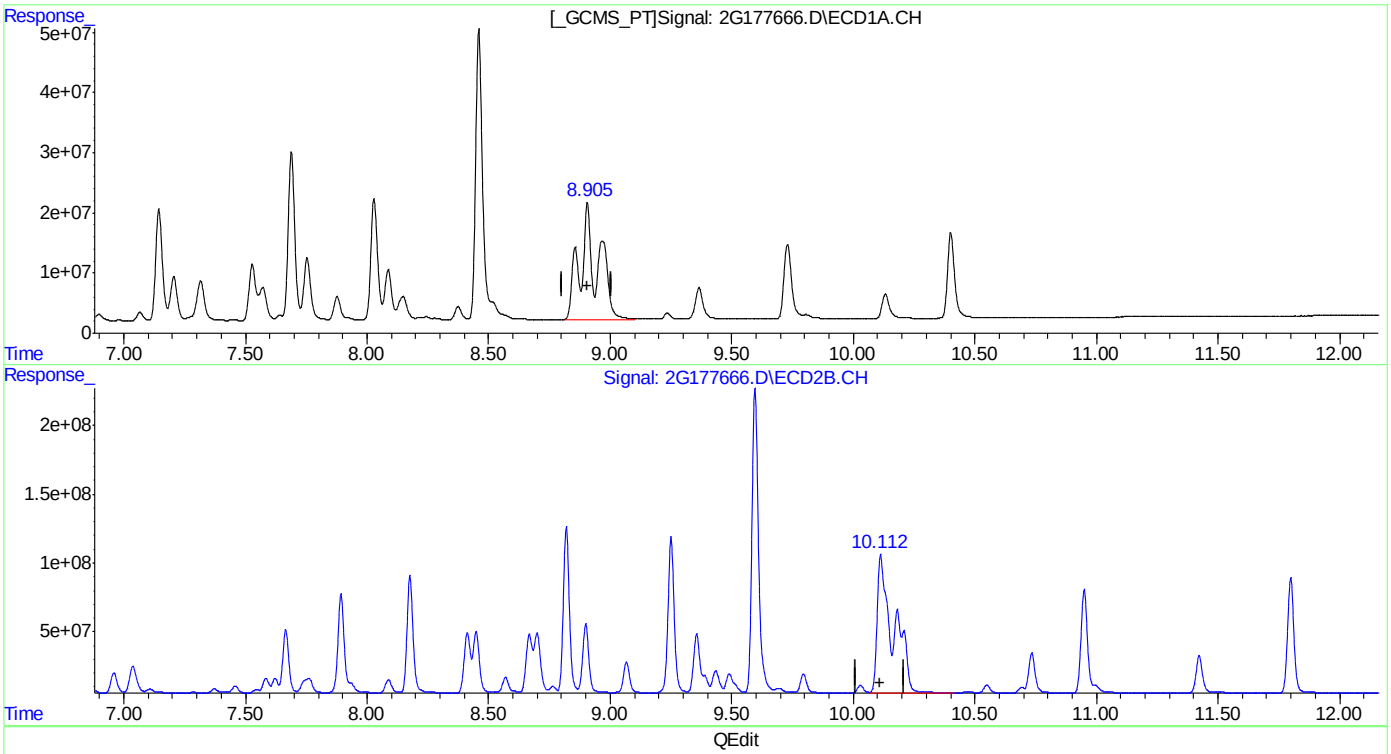
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:55:17 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177666.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:36 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:54:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(45) AR1262-E
8.905min 1062.177PPB m
response 999855963

(45) AR1262-E #2
10.112min 1033.959PPB m
response 4642733316

(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:55:25 2019 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177667.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:58 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:55:50 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.064	3.481	253.5E6	1789.3E6	59.407	58.089
	Spiked Amount 40.000			Recovery	=	148.52%	145.22%
51) S	Decachlor...	10.404	11.797	772.9E6	3776.8E6	169.762	146.264
	Spiked Amount 40.000			Recovery	=	424.40%	365.66%
	Target Compounds						
12)	AR1242-A	3.882	4.664	146.5E6	1017.6E6	1084.518	1066.548
13)	AR1242-B	4.450	5.279	346.4E6	2186.9E6	1081.451	1066.353
14)	AR1242-C	4.620	5.467	128.5E6	884.4E6	1085.633	1073.656
15)	AR1242-D	5.144	6.116	132.0E6	669.7E6	1060.493	1051.813
16)	AR1242-E	5.737	6.708	121.2E6	833.5E6	1051.298	1035.979
46)	AR1268-A	8.912	10.112	1091.9E6	4594.0E6	1020.165	1003.657
47)	AR1268-B	8.967	10.179	1022.0E6	4540.9E6	1017.970	999.957
48)	AR1268-C	9.240	10.548	845.0E6	3701.7E6	1023.159	1002.440
49)	AR1268-D	9.731	10.948	318.7E6	1570.7E6	1011.350	1000.394
50)	AR1268-E	10.137	11.422	2517.3E6	11892.3E6	1022.280	1002.743

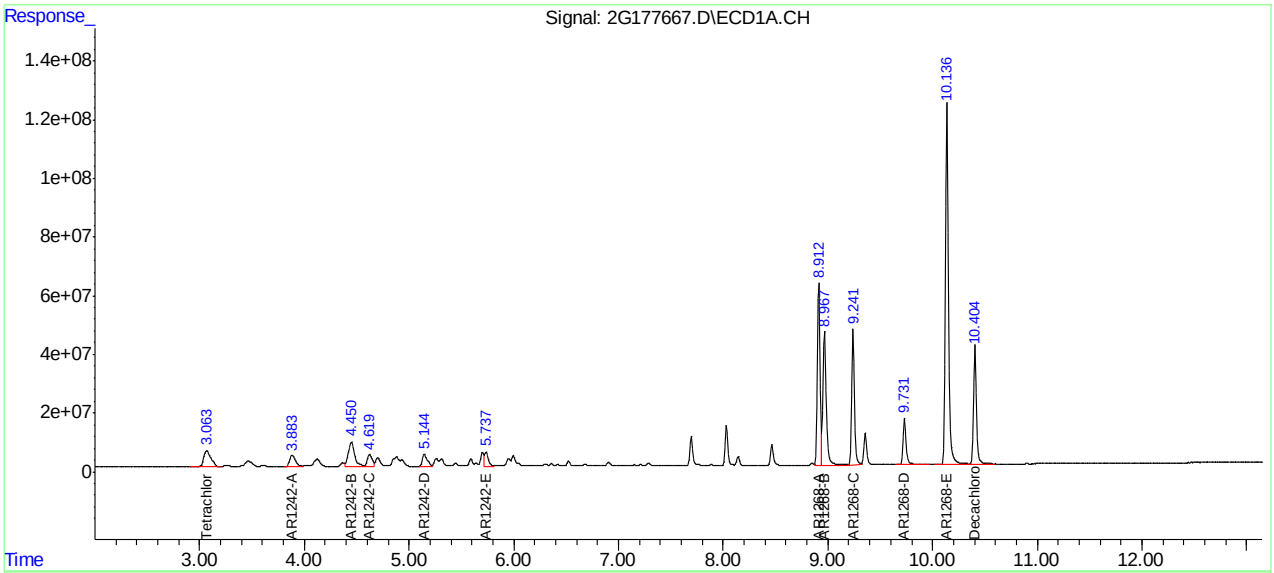
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

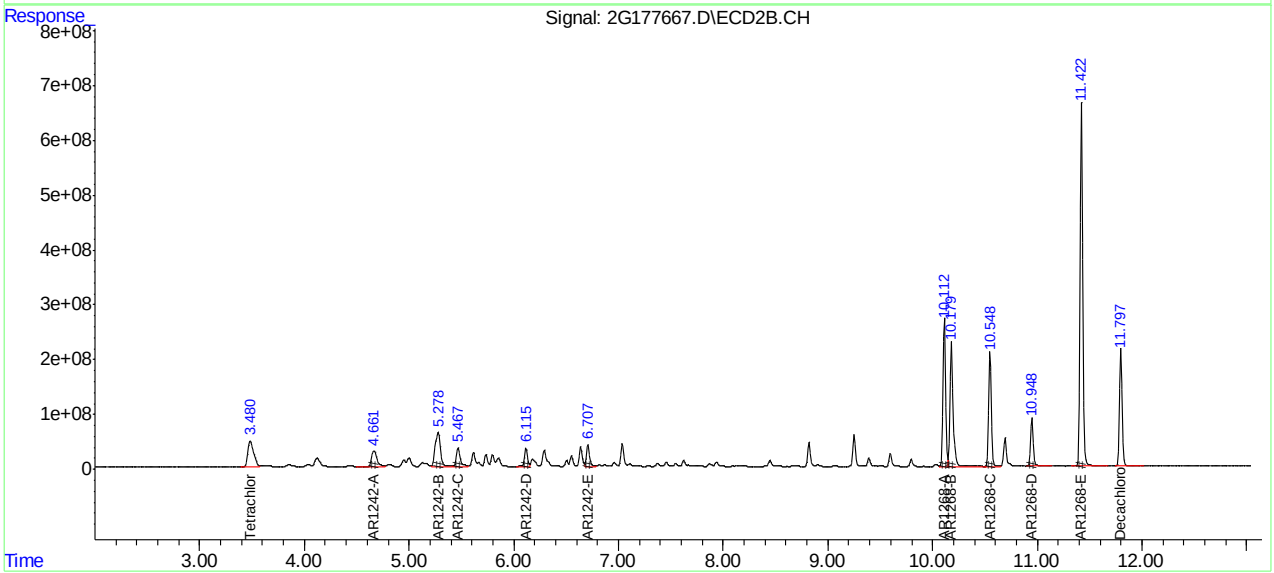
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177667.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 7:58 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:55:50 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/01/19 08:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177668.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 8:17 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:57:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.063	3.481	257.6E6	1828.7E6	60.377	59.366
	Spiked Amount 40.000			Recovery	=	150.94%	148.42%
51)	S Decachlor...	10.405	11.798	305.1E6	1584.4E6	67.003	61.359
	Spiked Amount 40.000			Recovery	=	167.51%	153.40%
	Target Compounds						
17)	AR1248-A	3.880	4.663	69600582	478.7E6	973.683	935.861
18)	AR1248-B	4.446	5.276	228.5E6	1382.9E6	1039.983	1009.578
19)	AR1248-C	4.878	5.733	217.4E6	811.7E6	1046.158m	1036.125
20)	AR1248-D	5.141	6.116	215.8E6	1085.8E6	1079.861	1044.933
21)	AR1248-E	5.254	6.291	121.5E6	1246.5E6	1147.578m	1076.056
22)	AR1248-F	5.731	6.707	224.2E6	1561.8E6	1139.320m	1090.760
23)	AR1248-G	5.990	7.037	185.5E6	1479.7E6	1059.676m	1110.525

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

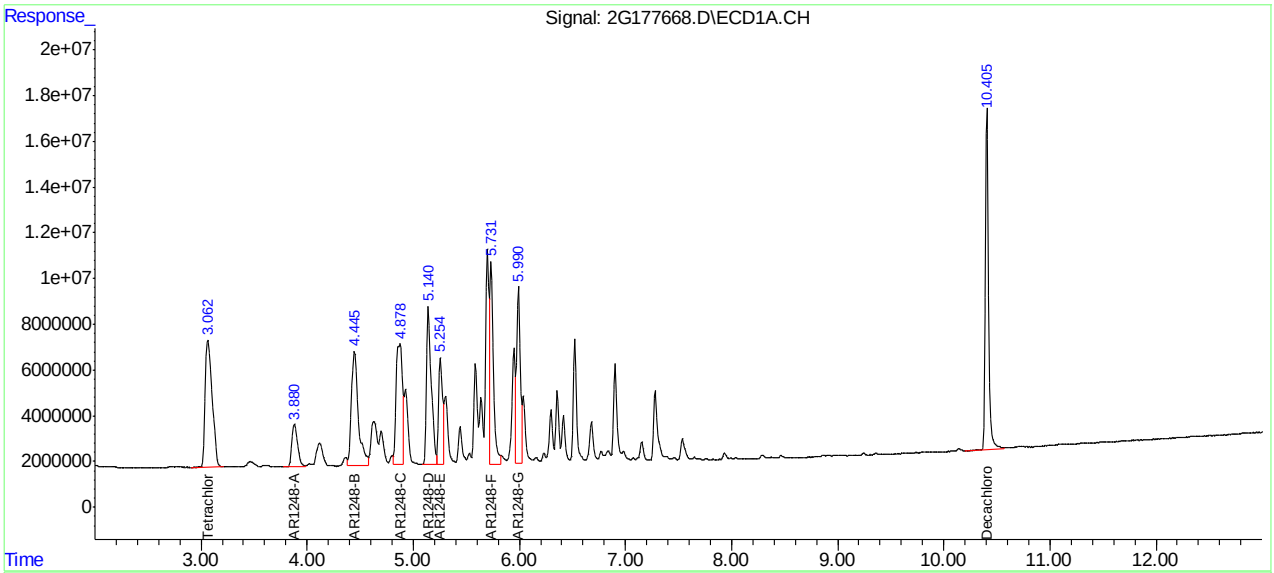
11.4.15 11

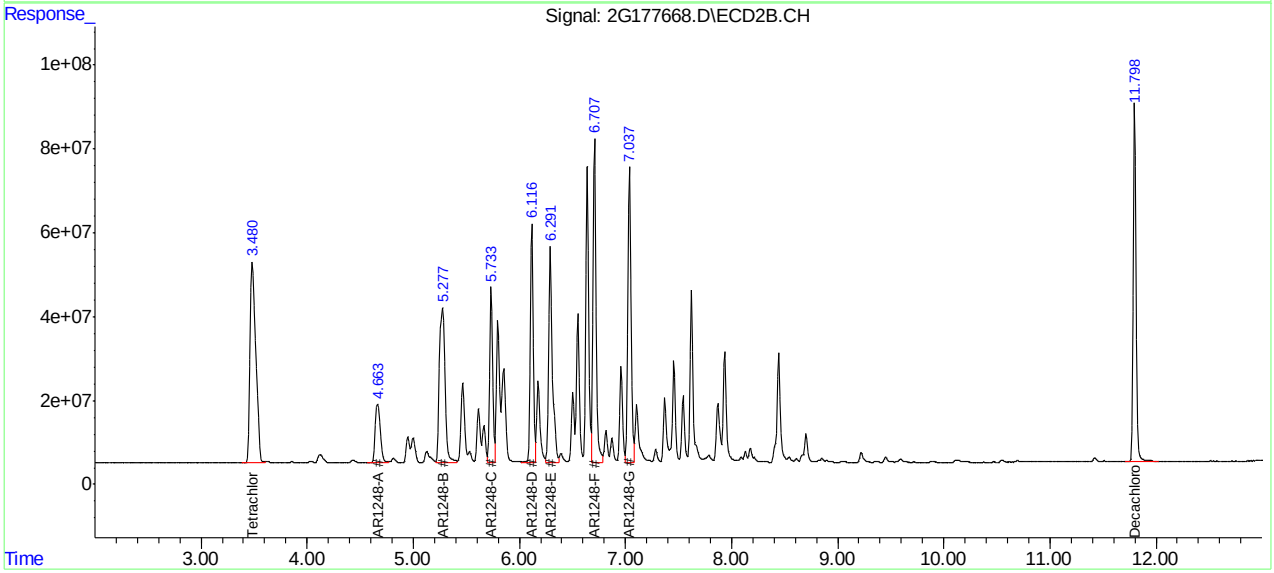
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177668.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 8:17 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:57:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4614-ICV4614	**Method:**	SW846 8082A
Lab FileID:	2G177668.D	**Analyst approved:**	03/28/19 09:45 Tianwei Ruan
Injection Time:	03/27/19 20:17	**Supervisor approved:**	04/01/19 08:51 Gwendolyn Burns

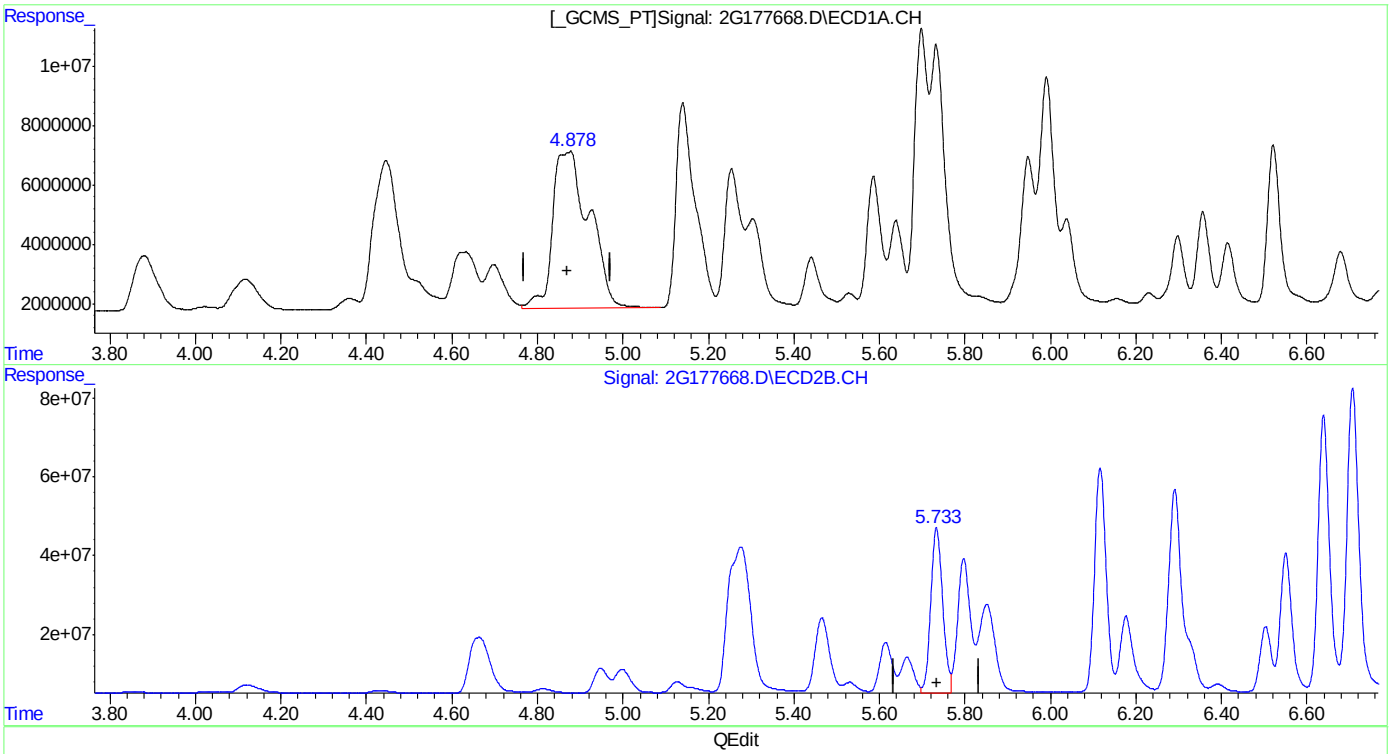
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1248-C		1	4.88	Split peak
AR1248-E		1	5.25	Split peak
AR1248-F		1	5.73	Split peak
Ar1248-G		1	5.99	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177668.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 8:17 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:56:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(19) AR1248-C
4.873min 1530.915PPB
response 318080001

(19) AR1248-C #2
5.733min 1036.125PPB
response 811700713

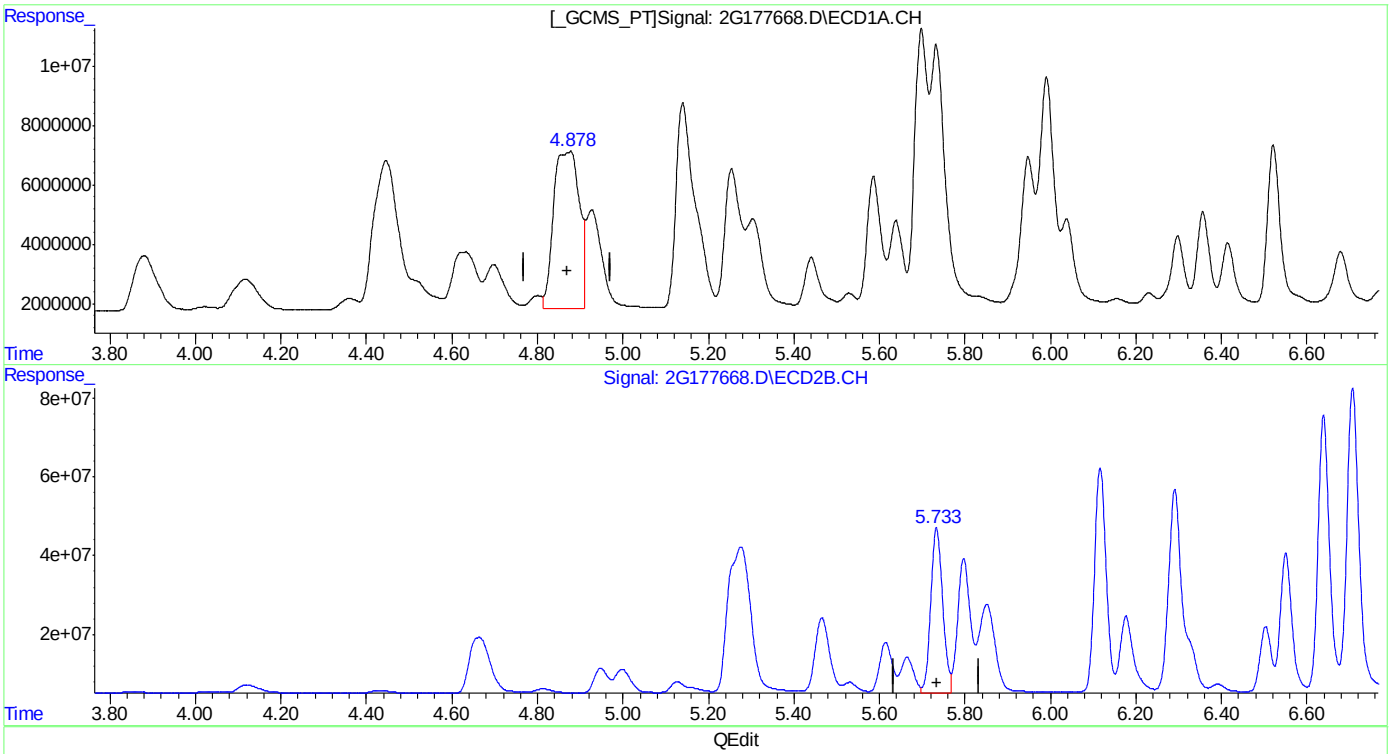
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177668.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 8:17 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:56:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(19) AR1248-C
4.878min 1046.158PPB m
response 217361516

(19) AR1248-C #2
5.733min 1036.125PPB
response 811700713

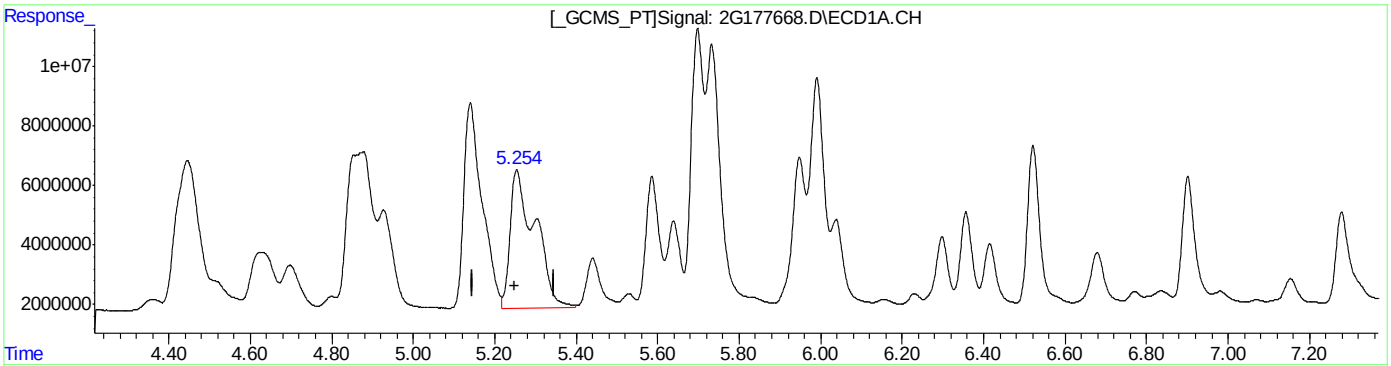
(+) = Expected Retention Time

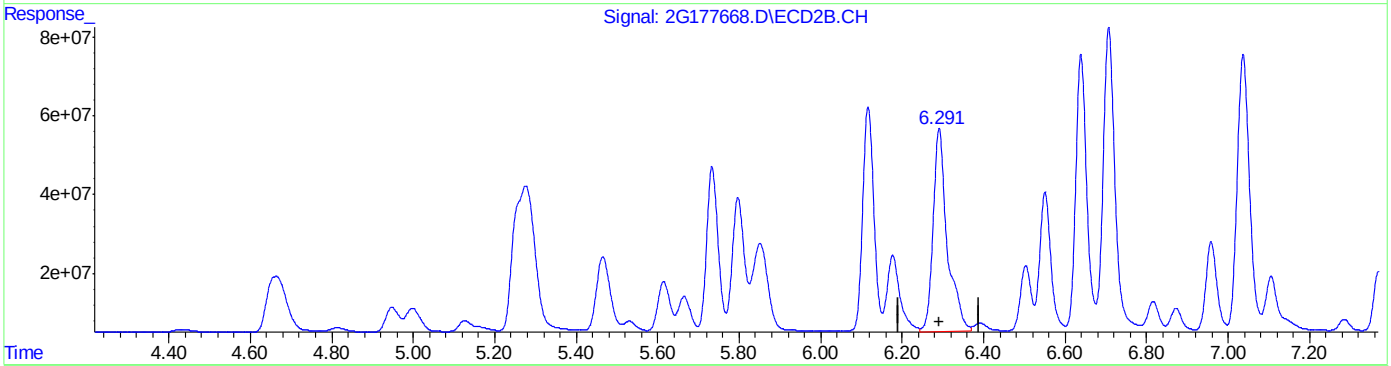
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177668.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 8:17 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:56:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(21) AR1248-E
5.255min 1866.856PPB
response 197731684

(21) AR1248-E #2
6.291min 1076.056PPB
response 1246490491

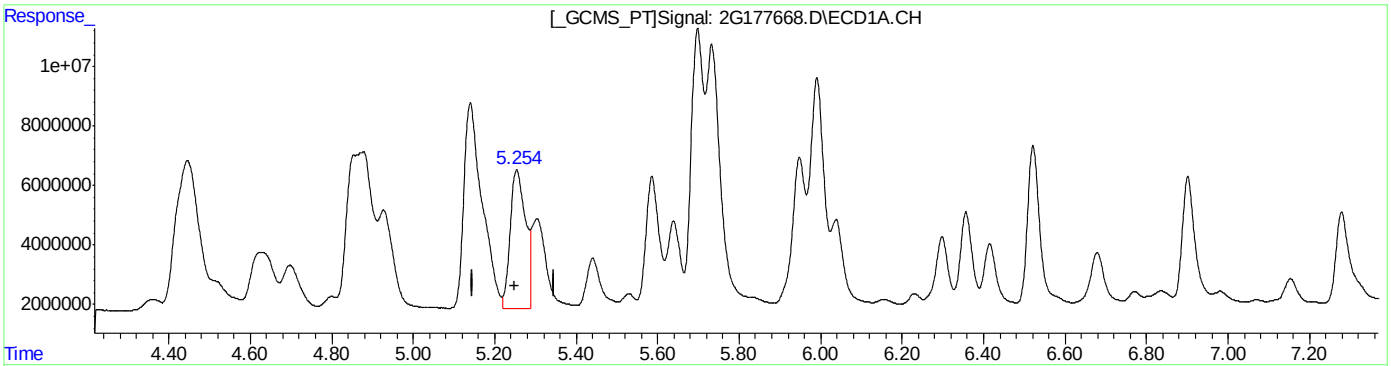
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:56:55 2019 RPT1

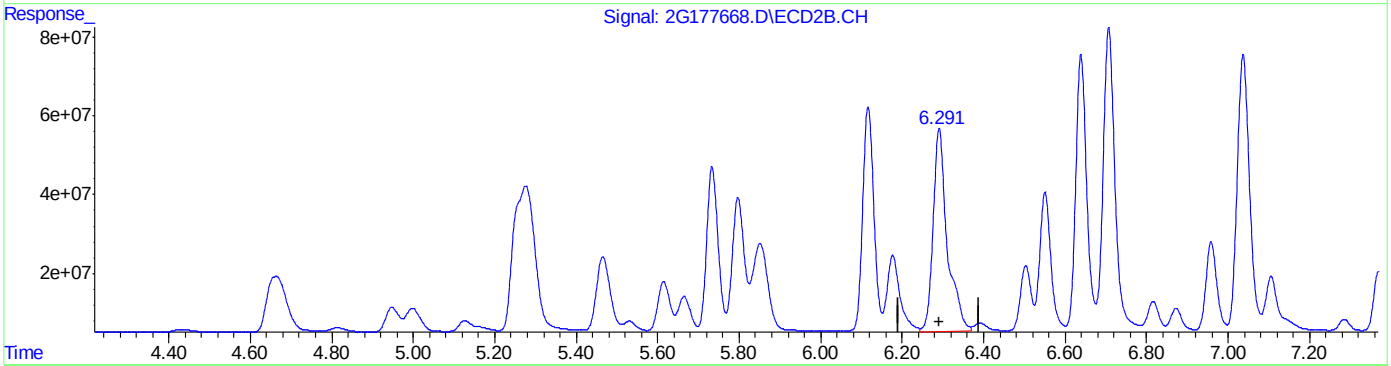
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177668.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 8:17 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:56:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(21) AR1248-E
5.254min 1147.578PPB m
response 121548023

(21) AR1248-E #2
6.291min 1076.056PPB
response 1246490491

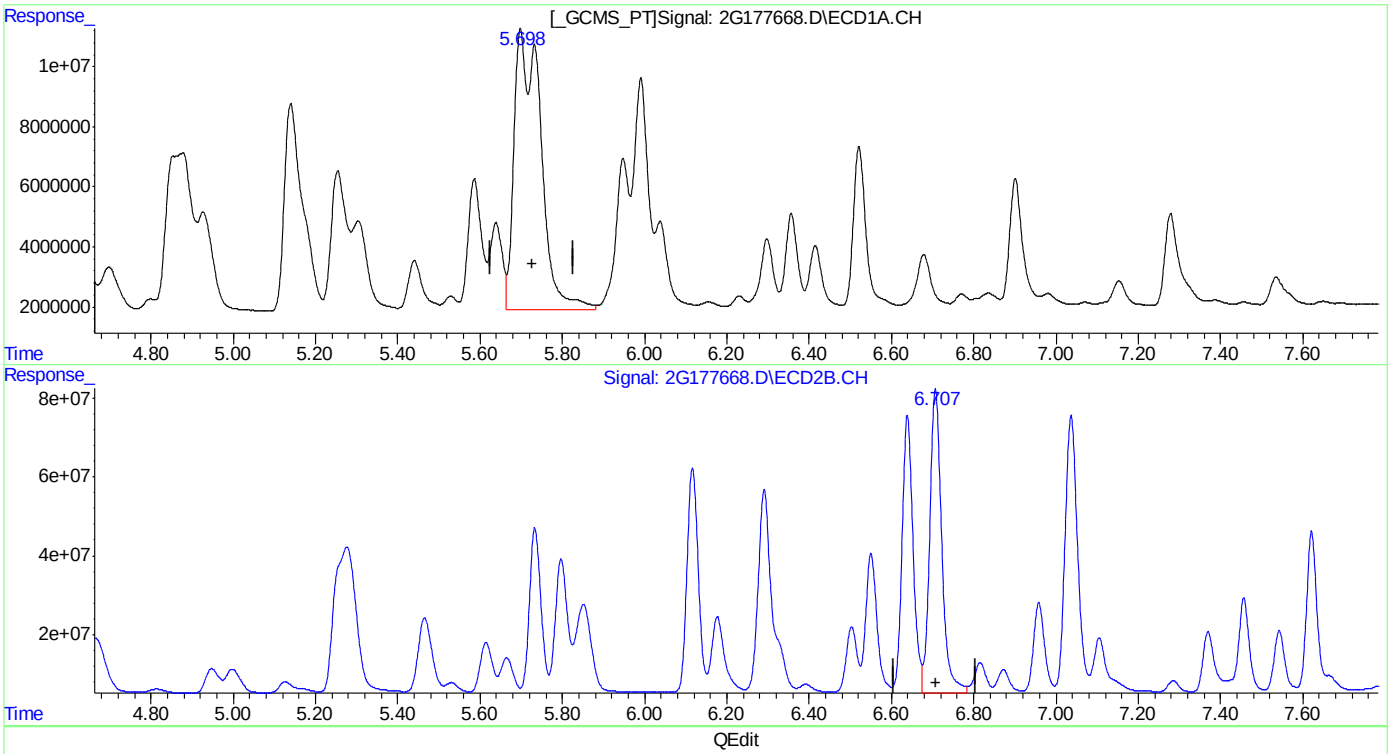
(+) = Expected Retention Time
2PCB4614.M Thu Mar 28 08:57:06 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177668.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 8:17 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:56:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(22) AR1248-F
5.699min 2129.925PPB
response 419046466

(22) AR1248-F #2
6.707min 1090.760PPB
response 1561767444

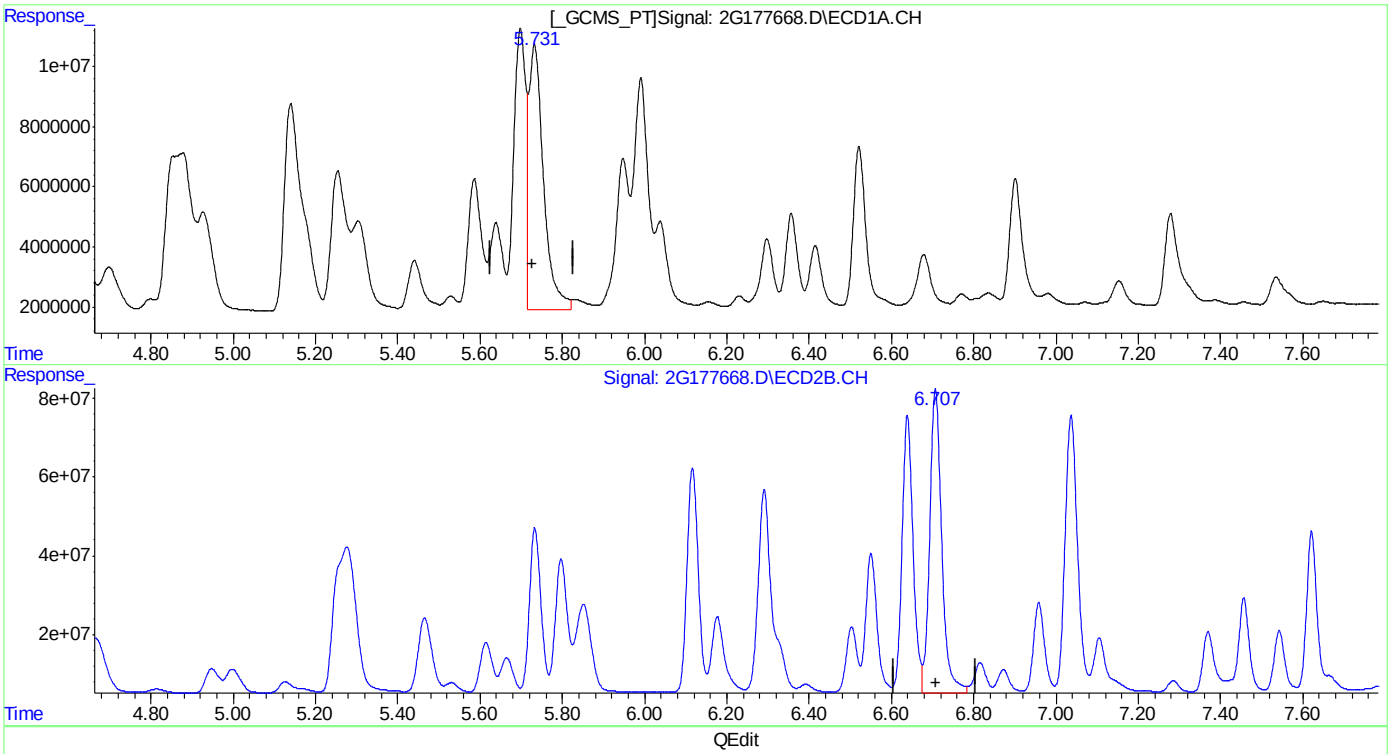
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177668.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 8:17 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:56:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(22) AR1248-F
5.731min 1139.320PPB m
response 224152570

(22) AR1248-F #2
6.707min 1090.760PPB
response 1561767444

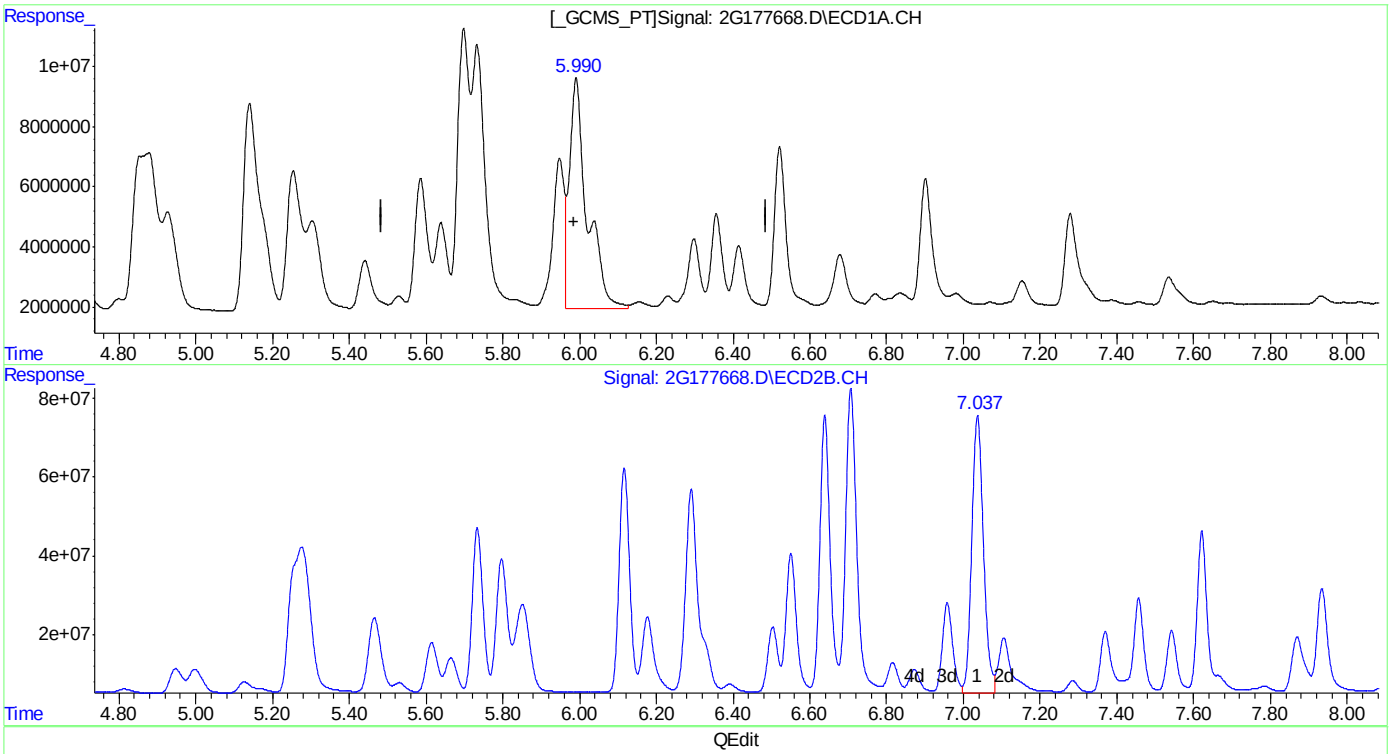
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177668.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 8:17 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:56:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(23) AR1248-G
5.991min 1420.826
response 248718606

(23) AR1248-G #2
7.037min 1110.525
response 1479733151

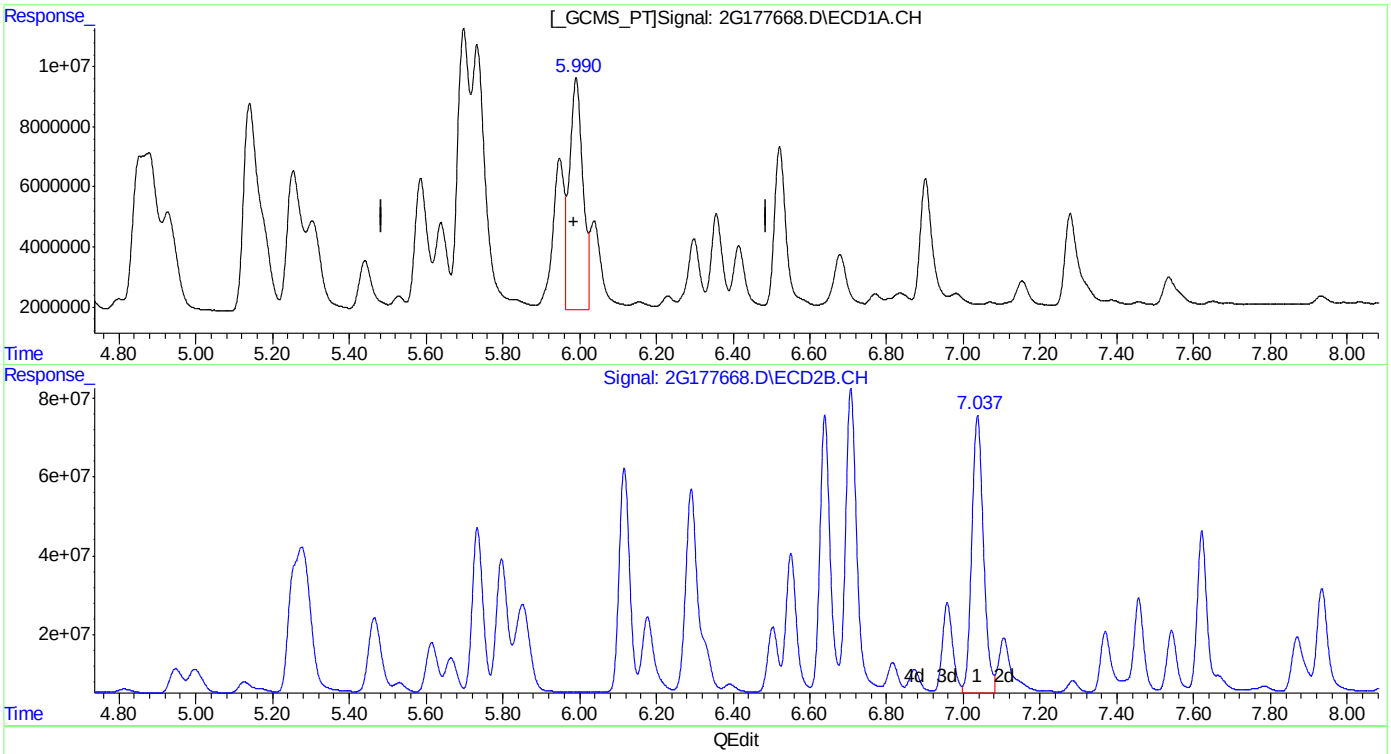
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4614\
Data File : 2G177668.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Mar 2019 8:17 pm
Operator : tianweir
Sample : icv4614-1000
Misc : op19329,G2G4614,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 08:56:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(23) AR1248-G
5.990min 1059.676 m
response 185498496

(23) AR1248-G #2
7.037min 1110.525
response 1479733151

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/12/19 12:05

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178319.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 10:40 pm
Operator : tianweir
Sample : cc4614-500
Misc : op19676,G2G4629,1,,,10,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:49:34 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.057	3.480	84529919	606.9E6	19.813	19.703
	Spiked Amount 40.000			Recovery	=	49.53%	49.26%
51) S	Decachlor...	10.398	11.789	93200323	599.9E6	20.470	23.234
	Spiked Amount 40.000			Recovery	=	51.17%	58.09%
	Target Compounds						
31)	AR1016-A	3.456	4.116	48766088	287.3E6	541.138	538.362
32)	AR1016-B	3.871	4.658	92386904	595.7E6	549.904	503.014
33)	AR1016-C	4.441	5.274	200.9E6	1317.3E6	498.033	504.269
34)	AR1016-D	4.610	5.461	77731728	538.8E6	521.217	512.142
35)	AR1016-E	5.131	6.110	82037934	400.3E6	531.476	512.953
36)	AR1260-A	7.527	8.692	194.7E6	1287.8E6	445.242	531.475m
37)	AR1260-B	7.684	8.812	107.8E6	696.3E6	356.455	524.624 #
38)	AR1260-C	8.025	9.242	113.5E6	803.7E6	430.371	519.278
39)	AR1260-D	8.459	9.589	307.8E6	1727.9E6	411.197	517.421 #
40)	AR1260-E	8.857	10.132	291.2E6	1731.0E6	443.741m	523.272m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

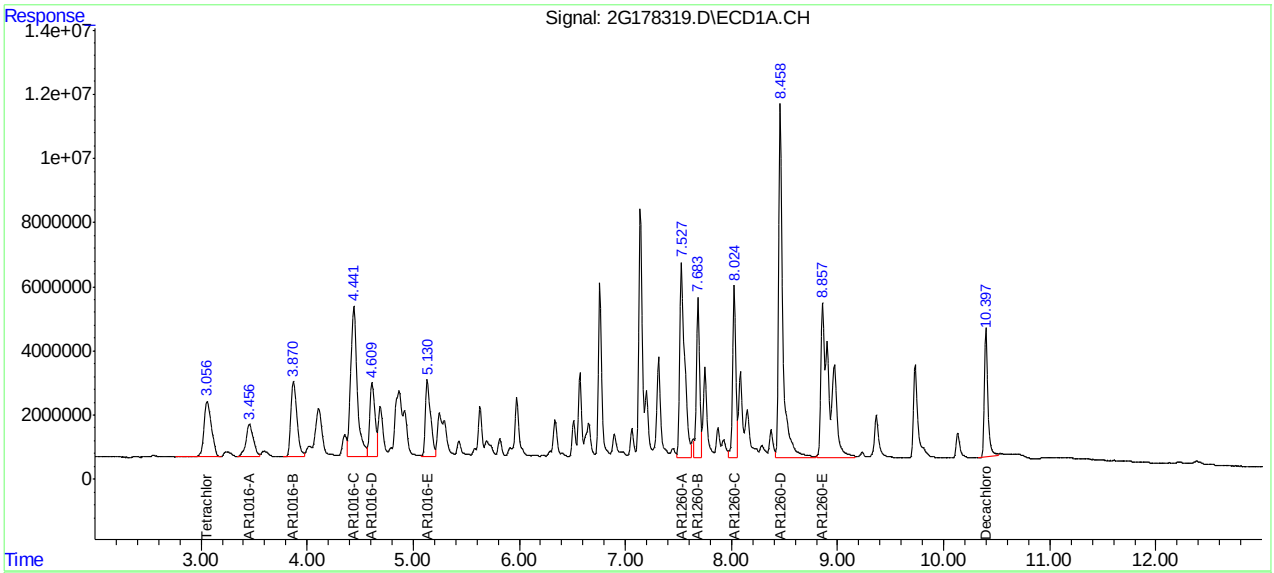
11.4.16 11

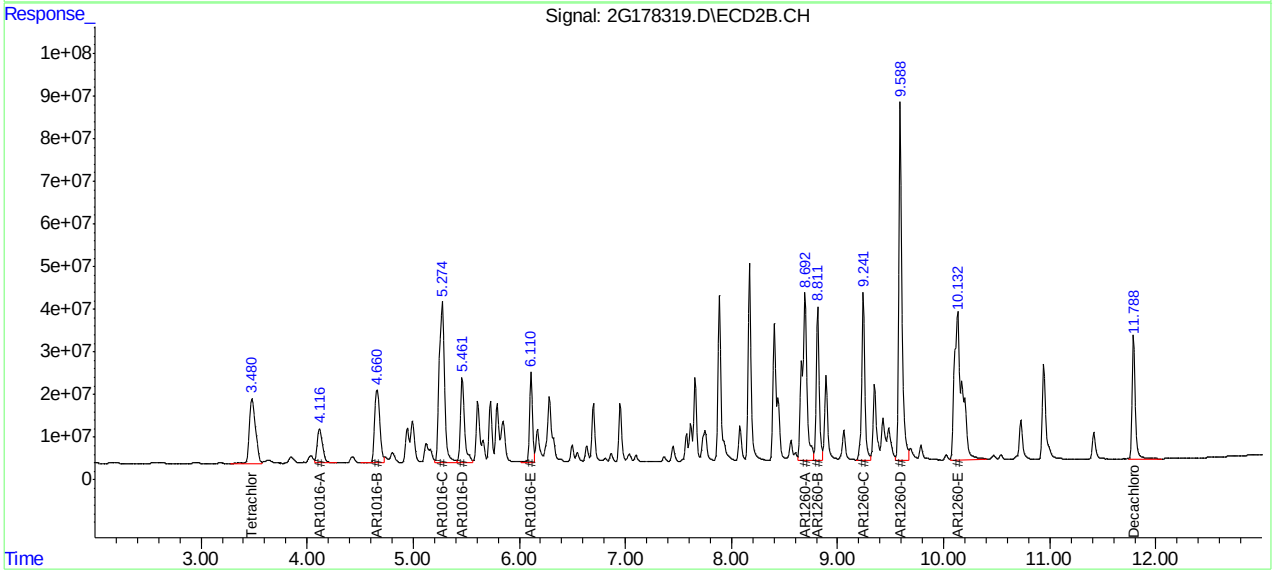
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178319.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 10:40 pm
Operator : tianweir
Sample : cc4614-500
Misc : op19676,G2G4629,1,,,10,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:49:34 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	G2G4629-CC4614	**Method:**	SW846 8082A
Lab FileID:	2G178319.D	**Analyst approved:**	04/12/19 10:09 Tianwei Ruan
Injection Time:	04/11/19 22:40	**Supervisor approved:**	04/12/19 12:05 Gwendolyn Burns

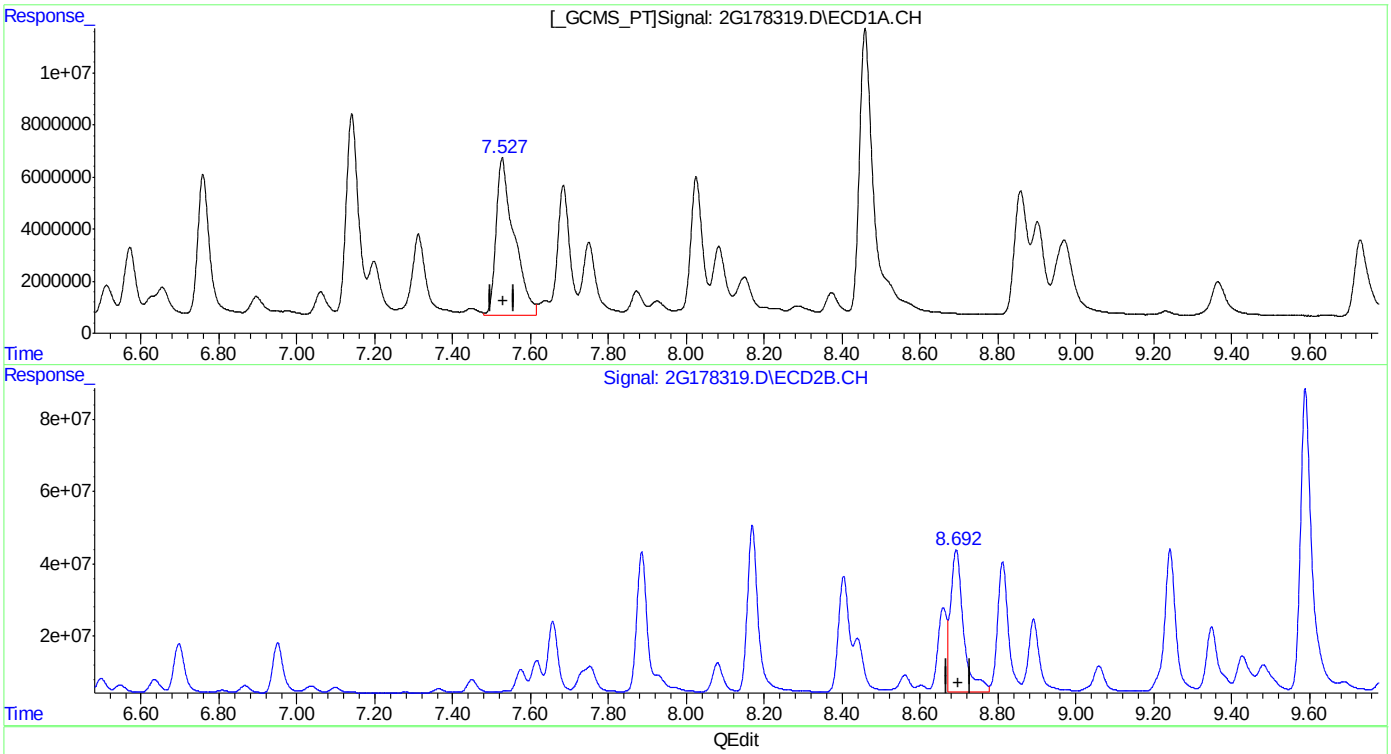
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-A		2	8.69	Split peak
AR1260-E		1	8.86	Split peak
AR1260-E		2	10.13	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178319.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 10:40 pm
Operator : tianweir
Sample : cc4614-500
Misc : op19676,G2G4629,1,,,10,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:49:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(36) AR1260-A
7.527min 445.242PPB
response 194652527

(36) AR1260-A #2
8.693min 380.103PPB
response 921025744

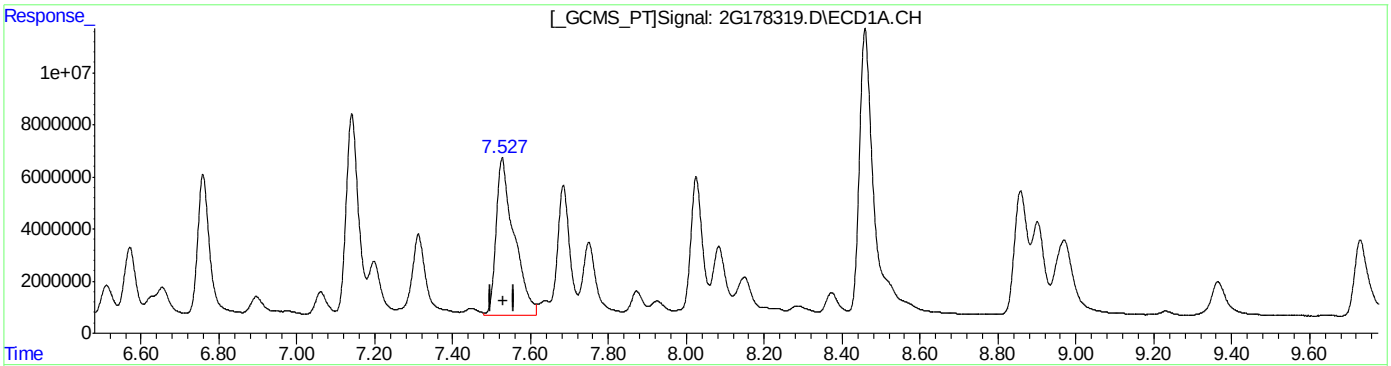
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:49:21 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178319.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 10:40 pm
Operator : tianweir
Sample : cc4614-500
Misc : op19676,G2G4629,1,,,10,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:49:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(36) AR1260-A
7.527min 445.242PPB
response 194652527

(36) AR1260-A #2
8.692min 531.475PPB m
response 1287816541

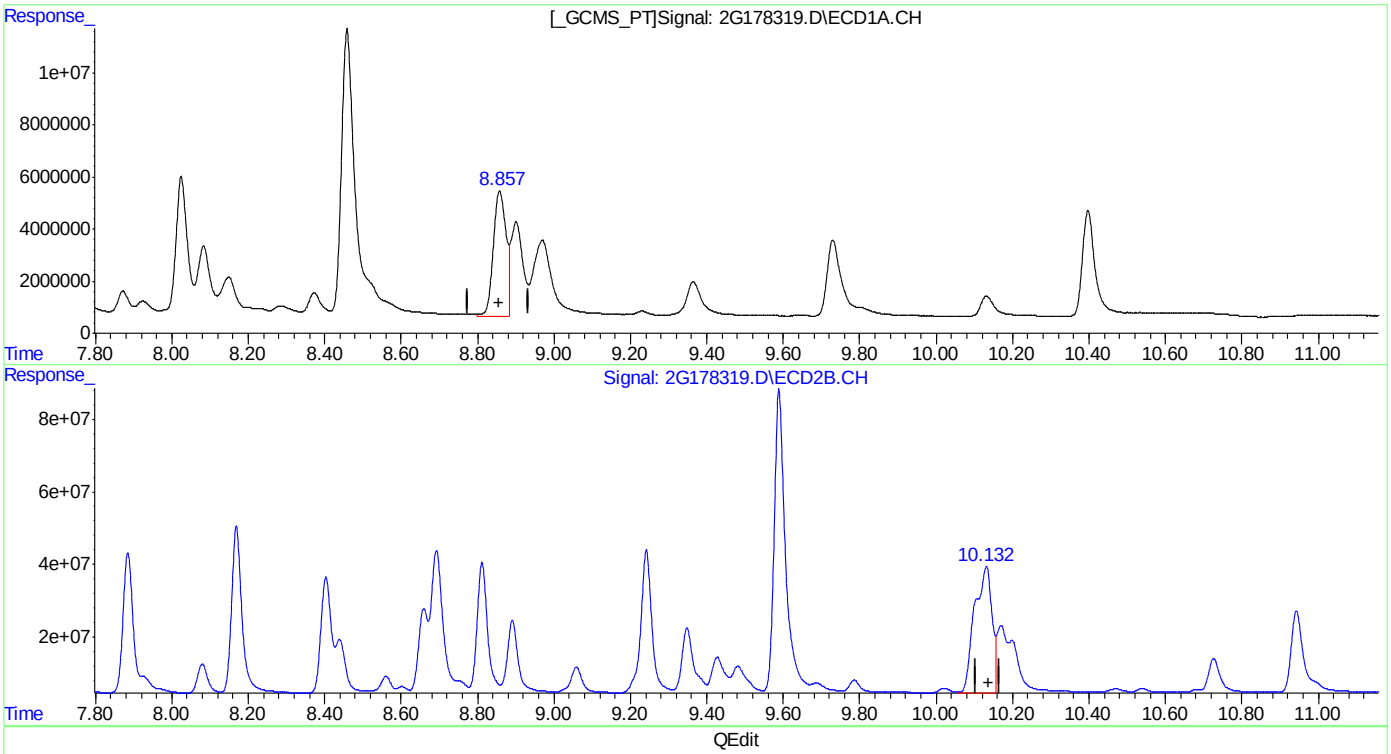
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:49:26 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178319.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 10:40 pm
Operator : tianweir
Sample : cc4614-500
Misc : op19676,G2G4629,1,,,10,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:49:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.858min 167.213PPB
response 109723819

(40) AR1260-E #2
10.132min 333.229PPB
response 1102302541

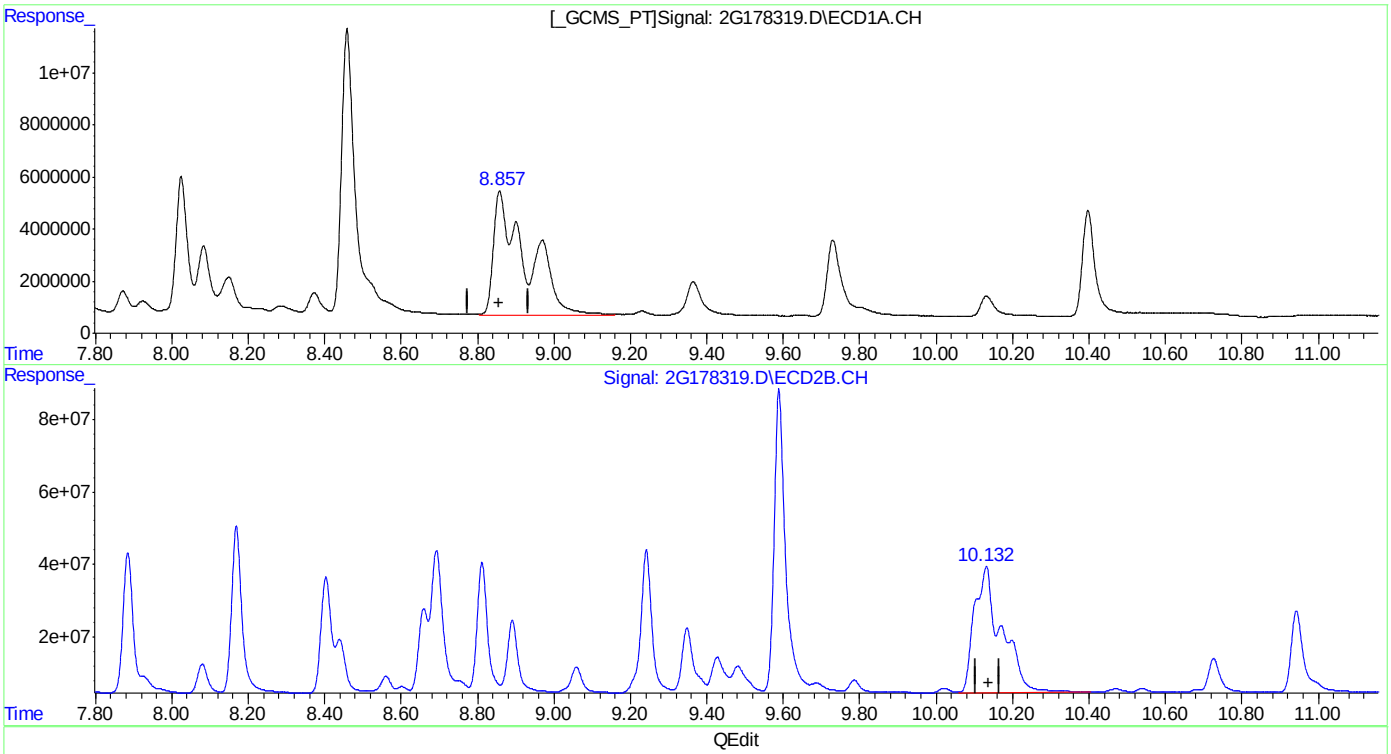
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:49:30 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178319.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 11 Apr 2019 10:40 pm
Operator : tianweir
Sample : cc4614-500
Misc : op19676,G2G4629,1,,,10,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:49:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.857min 443.741PPB m
response 291178712

(40) AR1260-E #2
10.132min 523.272PPB m
response 1730953027

(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:49:35 2019 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/12/19 12:05

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178330.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12 Apr 2019 2:26 am
Operator : tianweir
Sample : cc4614-1000
Misc : op19691,G2G4629,100,,,5,1
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:59:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.053	3.479	171.9E6	1198.3E6	40.294	38.903
	Spiked Amount 40.000			Recovery	=	100.74%	97.26%
51) S	Decachlor...	10.396	11.791	191.0E6	1084.0E6	41.961	41.978m
	Spiked Amount 40.000			Recovery	=	104.90%	104.94%
	Target Compounds						
31)	AR1016-A	3.451	4.116	94055437	538.2E6	1043.695	1008.478
32)	AR1016-B	3.867	4.660	178.5E6	1093.6E6	1062.378	923.442
33)	AR1016-C	4.437	5.275	404.4E6	2499.2E6	1002.643	956.664
34)	AR1016-D	4.606	5.462	152.1E6	1012.0E6	1020.191	961.909
35)	AR1016-E	5.126	6.110	159.9E6	740.1E6	1036.141	948.284
36)	AR1260-A	7.523	8.693	383.5E6	2365.5E6	877.271	976.227m
37)	AR1260-B	7.679	8.812	210.8E6	1277.1E6	697.222	962.228 #
38)	AR1260-C	8.021	9.243	216.2E6	1466.0E6	820.027	947.206
39)	AR1260-D	8.456	9.591	622.8E6	3212.7E6	831.979	962.049
40)	AR1260-E	8.858	10.132	587.2E6	3266.8E6	894.928m	987.574m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

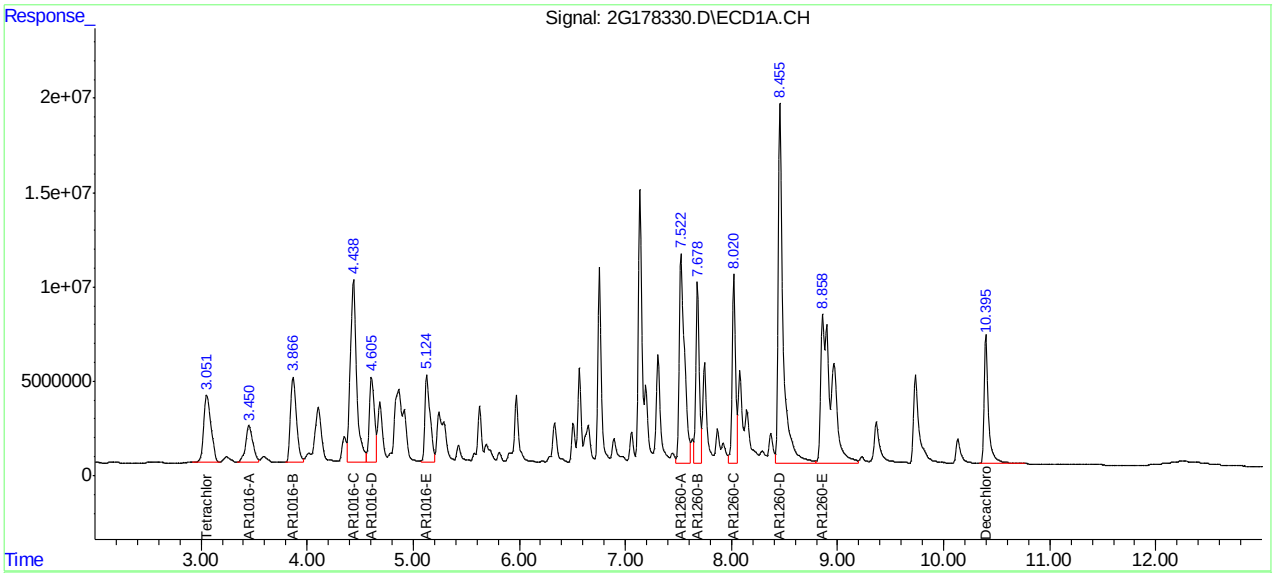
11.4.17 11

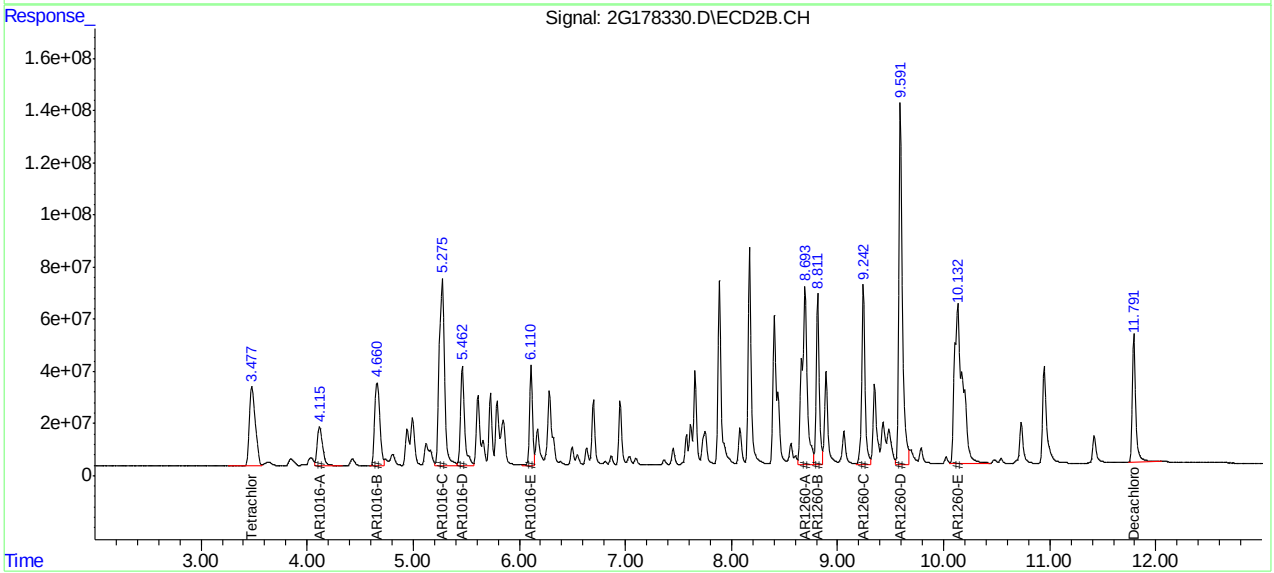
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178330.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12 Apr 2019 2:26 am
Operator : tianweir
Sample : cc4614-1000
Misc : op19691,G2G4629,100,,,5,1
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:59:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: G2G4629-CC4614 **Method:** SW846 8082A
Lab FileID: 2G178330.D **Analyst approved:** 04/12/19 10:09 Tianwei Ruan
Injection Time: 04/12/19 02:26 **Supervisor approved:** 04/12/19 12:05 Gwendolyn Burns

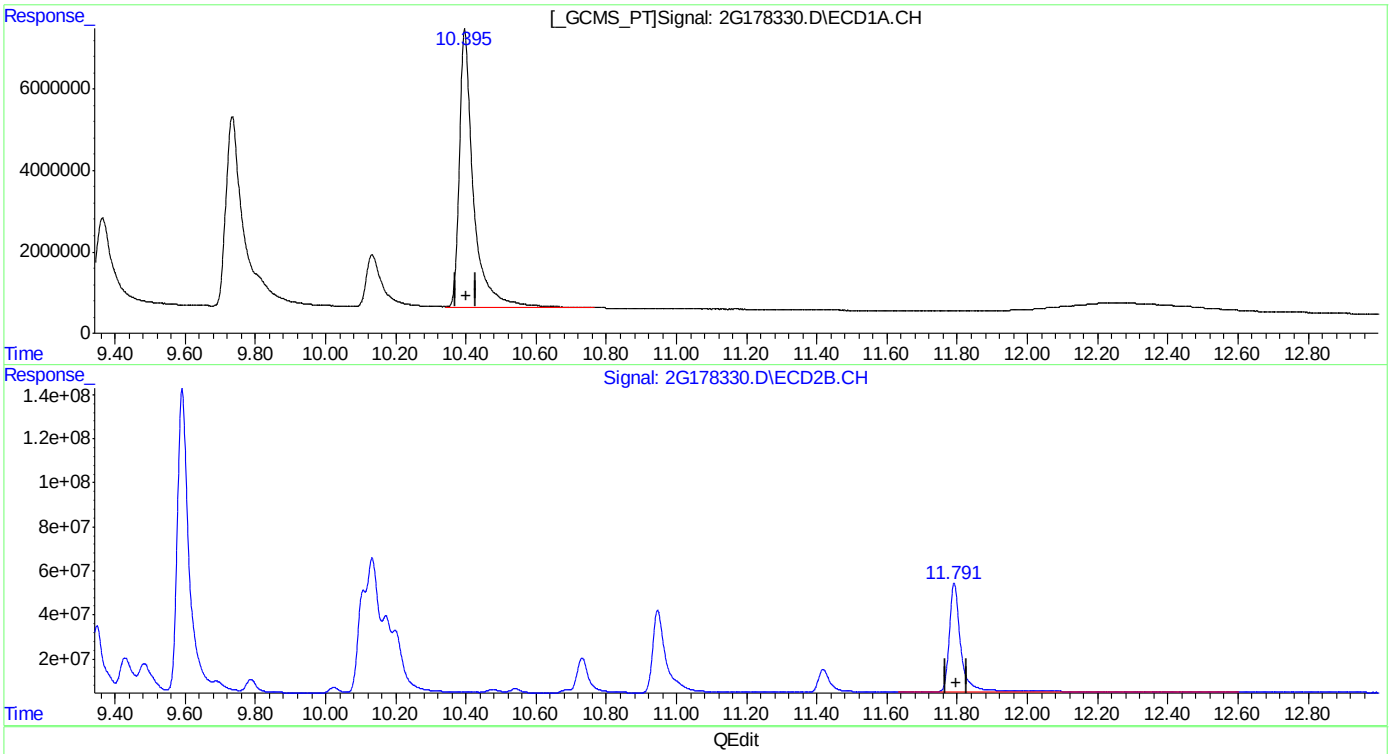
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-A		2	8.69	Split peak
AR1260-E		1	8.86	Split peak
AR1260-E		2	10.13	Split peak
Decachlorobiphenyl	2051-24-3	2	11.79	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178330.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12 Apr 2019 2:26 am
Operator : tianweir
Sample : cc4614-1000
Misc : op19691,G2G4629,100,,,5,1
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:58:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(51) Decachlorobiphenyl (S)
10.396min 41.961ppb
response 191046354

(51) Decachlorobiphenyl #2 (S)
11.792min 48.883ppb
response 1262246542

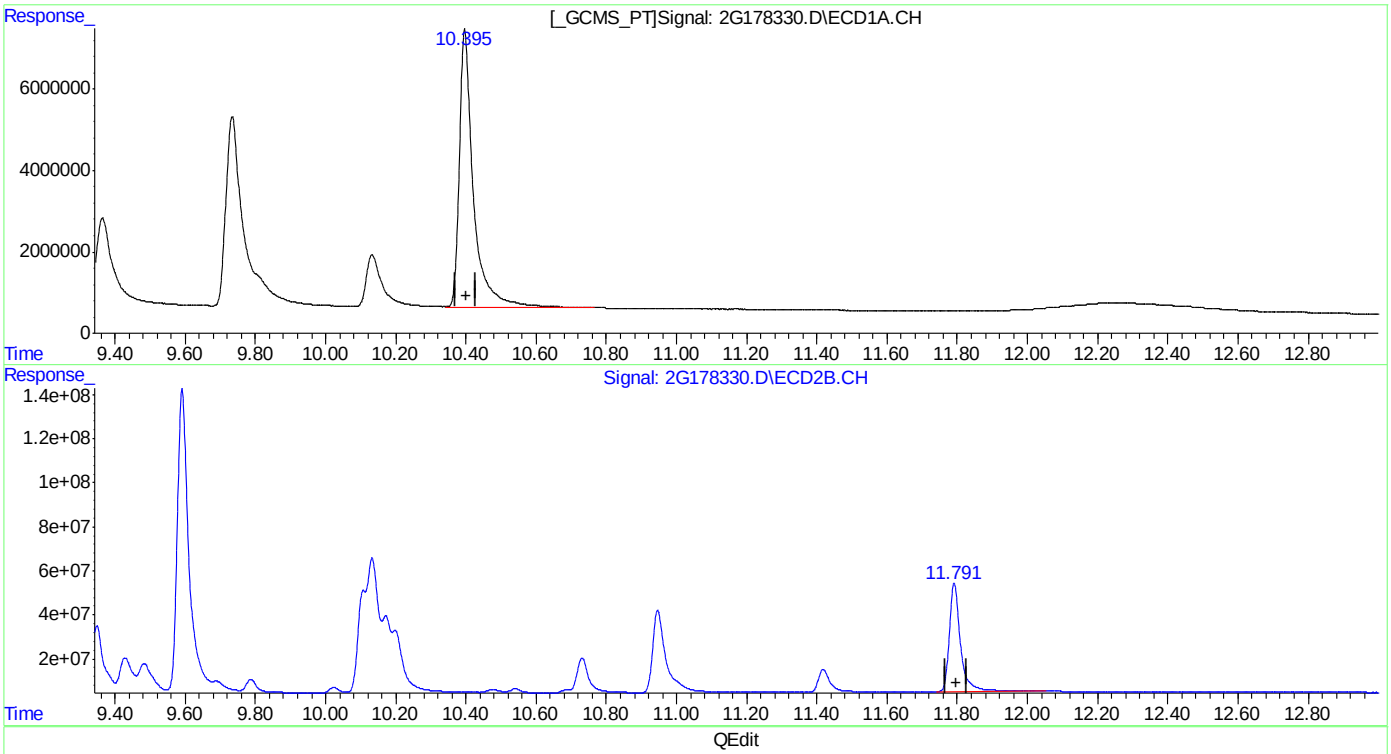
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:58:47 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178330.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12 Apr 2019 2:26 am
Operator : tianweir
Sample : cc4614-1000
Misc : op19691,G2G4629,100,,,5,1
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:58:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(51) Decachlorobiphenyl (S)
10.396min 41.961ppb
response 191046354

(51) Decachlorobiphenyl #2 (S)
11.791min 41.978ppb m
response 1083952787

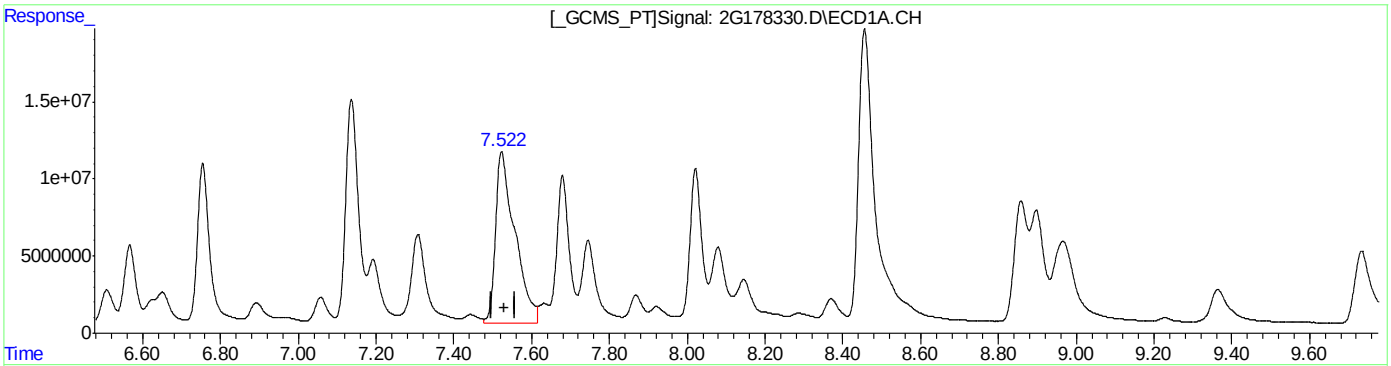
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:58:53 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178330.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12 Apr 2019 2:26 am
Operator : tianweir
Sample : cc4614-1000
Misc : op19691,G2G4629,100,,,5,1
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:58:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(36) AR1260-A
7.523min 877.271PPB
response 383527967

(36) AR1260-A #2
8.693min 708.648PPB
response 1717123157

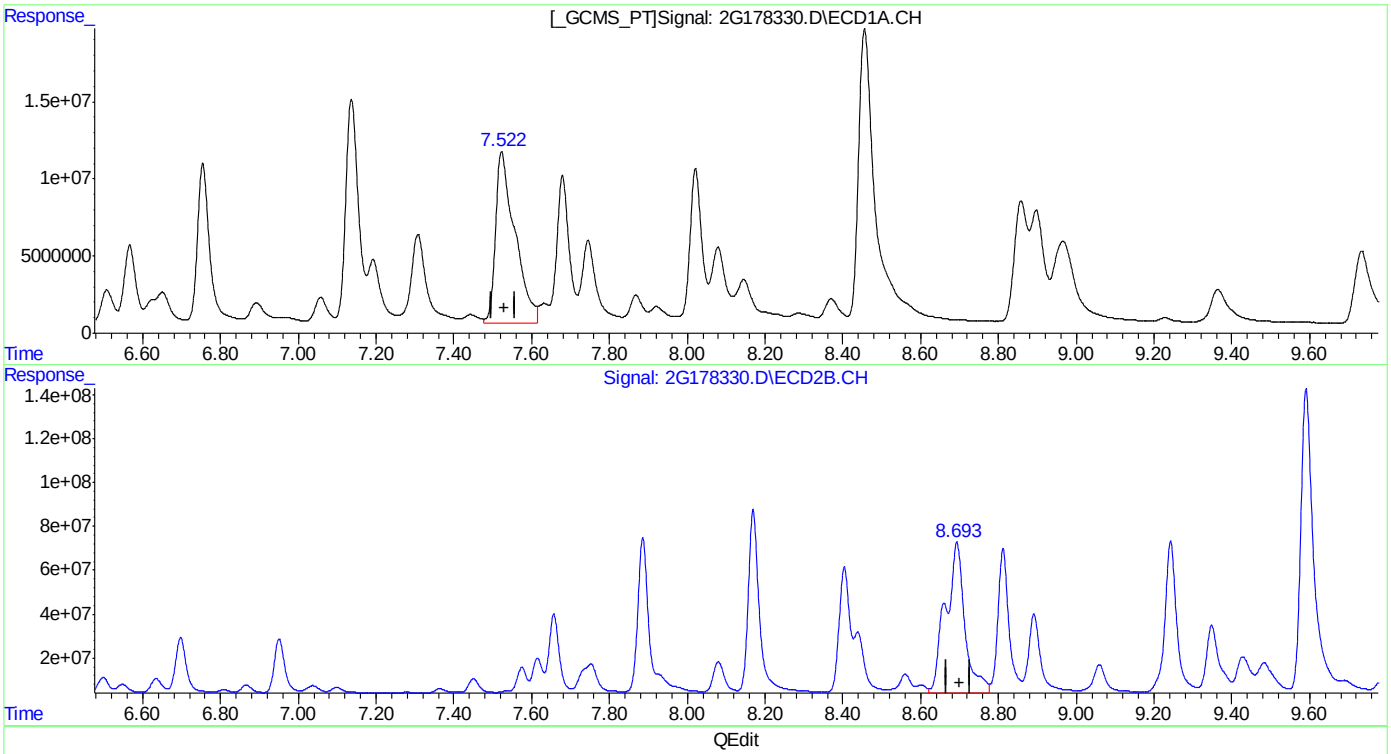
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:59:13 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178330.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12 Apr 2019 2:26 am
Operator : tianweir
Sample : cc4614-1000
Misc : op19691,G2G4629,100,,,5,1
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:58:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(36) AR1260-A
7.523min 877.271PPB
response 383527967

(36) AR1260-A #2
8.693min 976.227PPB m
response 2365494130

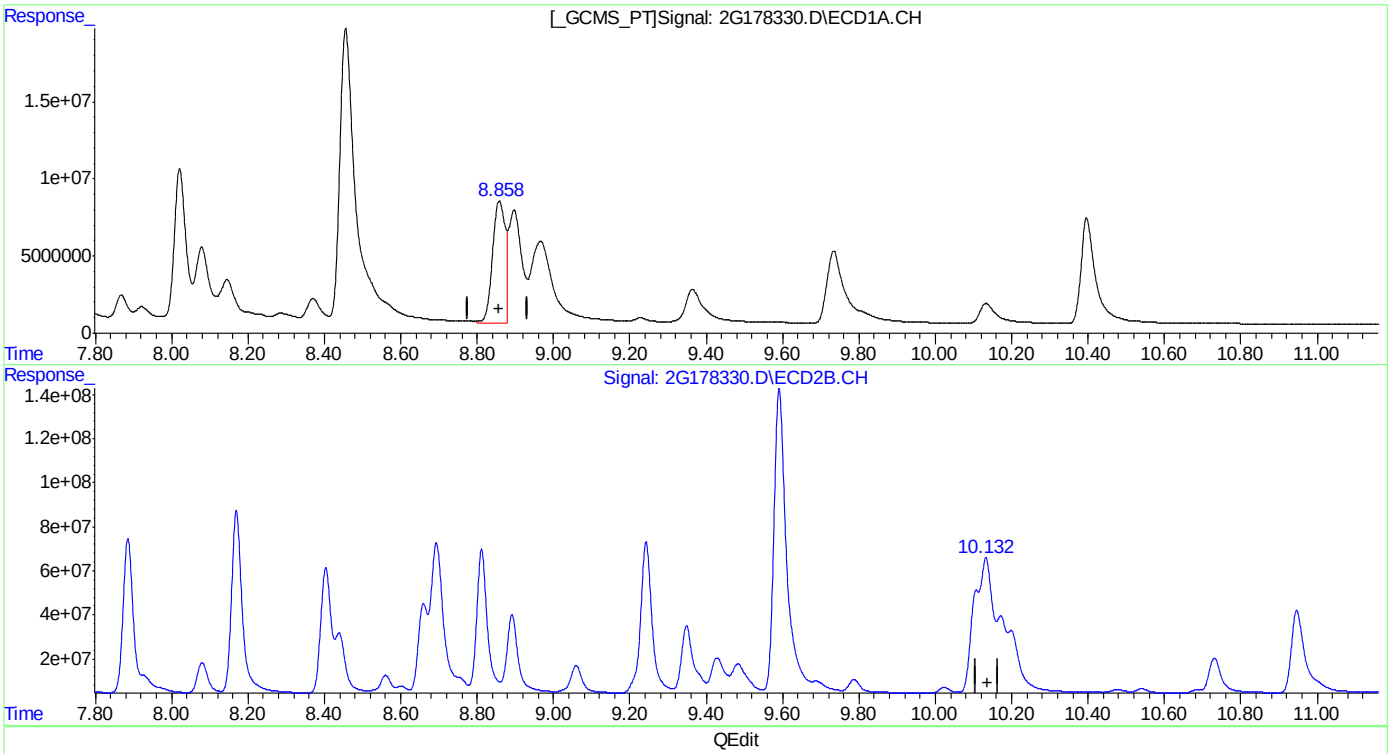
(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:59:18 2019 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178330.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12 Apr 2019 2:26 am
Operator : tianweir
Sample : cc4614-1000
Misc : op19691,G2G4629,100,,,5,1
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:58:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.858min 282.630PPB
response 185458840

(40) AR1260-E #2
10.132min 616.343PPB
response 2038825366

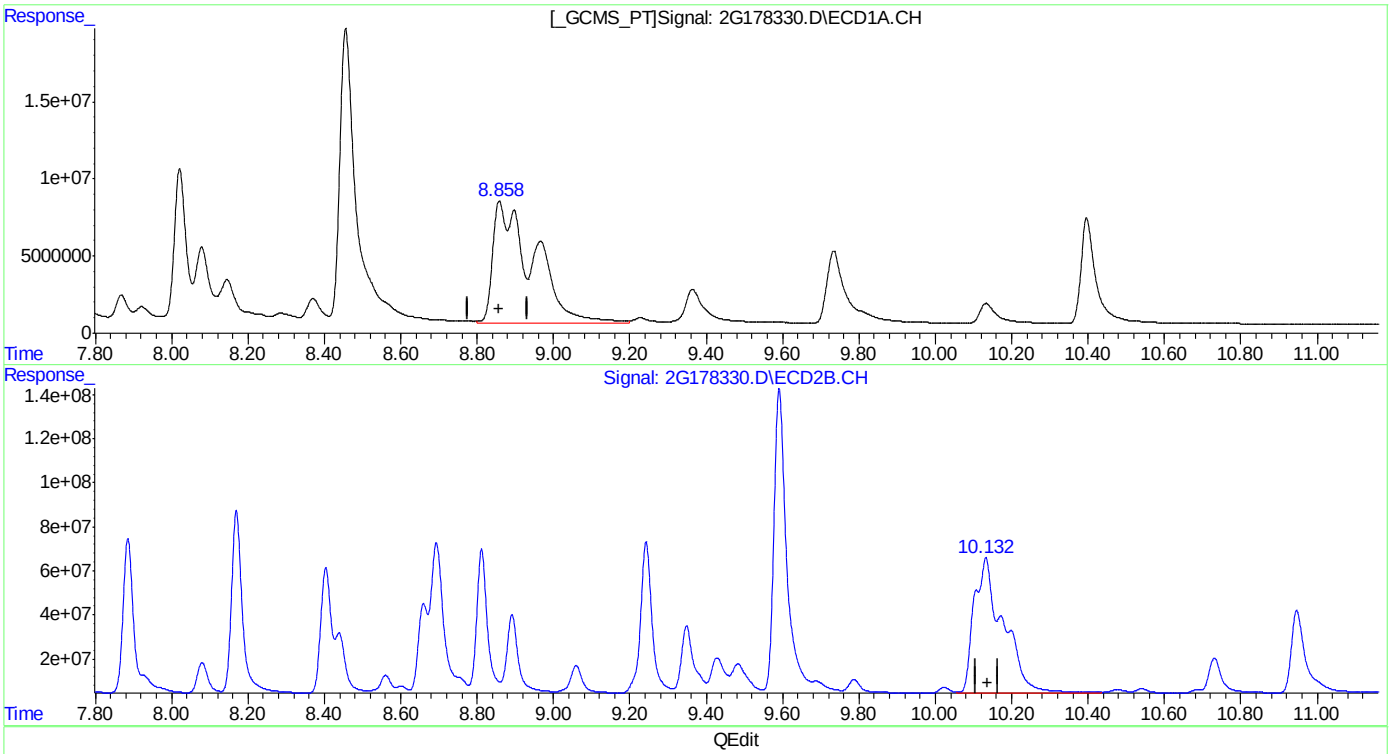
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2G4629\
Data File : 2G178330.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 12 Apr 2019 2:26 am
Operator : tianweir
Sample : cc4614-1000
Misc : op19691,G2G4629,100,,,5,1
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 12 09:58:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\2PCB4614.M
Quant Title :
QLast Update : Thu Mar 28 08:51:31 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1260-E
8.858min 894.928PPB m
response 587242750

(40) AR1260-E #2
10.132min 987.574PPB m
response 3266836347

(+) = Expected Retention Time
2PCB4614.M Fri Apr 12 09:59:30 2019 RPT1

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G2G4614

Print Analyst Name: TIGHWORTH

Analyst Signature: TR

Date: 3/27/19

Columns: ZBCLP1 / ZBCLP2

Method 8085V

Initial Cal. Method 2PC4614

Injection Volume: 1.0 µL

Date Archived:

Standard Data

Lot #	Description	Conc.
SV I8-2484-88	AR1221/1254	1000ppb
89	AR 1232/1262	↓
90	AR 1242/1268	↓
95	AR 1248	↓

Standard Data

Lot #	Description	Conc.
SV I8-2534-98A	AR1016/1260	50ppb
88B	↓	250ppb
88C	↓	500ppb
88D	↓	1000ppb
88E	↓	2000ppb
88F	↓	3000ppb
-26	IB	20ppb

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4/4/19

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	JG1776533a	IB				2				OK	
	654a	IC4614-50	AR1016/1260	1st		3				OK	
	655	-250	↓	↓		4				OK	
	656	-500				5				OK	
	657	IC4614-1000				6				OK	
	658	IC4614-2000				7				OK	
	659	-3000	↓			8				OK	
	660	IC4614-1000	AR1221/1254			9				OK	
	661	-1000	AR1232/1262			10				OK	
	662	-1000	AR1242/1268			11				OK	
	663	-1000	AR1248	↓		12				OK	
	664	ICV4614-1000	AR1016/1260	2nd		13				OK	SV I8-2484-81 @1000ppb
	665	-1000	AR1221/1254	↓		14				OK	SV I8-2484-90 @1000ppb
	666	-1000	AR1232/1262			15				OK	SV I8-2484-93 @1000ppb
	667	-1000	AR1242/1268			16				OK	SV I8-2484-94 @1000ppb
	668	-1000	AR1248	↓		17				OK	SV I8-2484-91 @1000ppb
	669	Resp Mix				18				OK	SV I8-2484-20 @ 50 ppb

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: GCR016-09
Rev. Date: 5/25/17

SGS JC86089

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G2G4629

Print Analyst Name: Tommie Finch

Date: 4/11/19

Analyst Signature: TF

Columns: ZB-CLP1 / ZB-CLP1

Method 8082A

Initial Cal. Method 2PCB4614

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 1805341014	AR1016/1260	500 ppb
1018	2	1000 ppb
26	18	2000 ppb
190683	hexane (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4/12/19

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	2G17525	OP19618-MA1	19618	8082A WIPE		3				NOT USING	NOT Needed
	282	JC85681-11	19676	8082A WIPE		4				OK	
	283	-12				5				OK	
	284	JC85683-3				6				OK	
	285	-4				7				OK	
	286	-5				8				OK	
	287	-6				9				OK	
	288	-7				10				OK	
	289	JC85681-10				11				OK	
	290	CC4614-1000				12				OK	1260/8 CV1 Std
	291	IB				2				OK	
	292	JC85683-8	19676 ~~19678~~ TR 4/11	8082A WIPE		13				OK	
	293	-9				14				OK	
	294	-10				15				OK	
	295	-11				16				OK	
	296	-12				17				OK	
	297	-13				18				OK	
	298	-14				19				OK	
	299	~~OP19670-MB1~~ hexane	TR 4/11			100				OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: QR016-09
Rev. Date: 5/25/17

123

11.5.2 11

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G2G4629

Print Analyst Name: Tianwei Zhou

Date: 4/11/19

Analyst Signature: TZ

Columns: ZB-CLP1 / ZB-CLP2

Method 8082

Initial Cal. Method ZPCB4614

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
180534 1018	AR1016 / 1260	500ppb
1018	1	1000ppb
26	IB	20ppb
19685	Hexane/Ether	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4/12/19

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	2G178300	CC4614-500				20				OK	1260 B L S T
	301	IB				2				OK	
	302	JC89755-14	19676 ~~19618~~ Team	WIPE 8082		21				OK	
	303	-15				22				OK	
	304	-16				23				OK	
	305	-17				24				OK	
	306	-18				25				OK	
	306A	OP19676-MB1				3				OK	
	307	hexane				100				OK	
	308	hexane				100				OK	
	309	CC4614-1000				26				OK	1260 B L S T
	310	IB				2				OK	
	311	OP19685-MB1	19685	8082 W		27				OK	
	312	-BS1				28				OK	
	313	-BSD				29				OK	
	314	LA53527-1				30				OK	
	315	JC86008-1				31				OK	
	316	-2				32				OK	XH
	317 / 318	hexane				100				OK	
	319	CC4614-500				33				OK	1260 B L S T
	320	IB				2				OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09
Rev. Date: 5/25/17

125

11.5.2 11

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G2G4629

Print Analyst Name: CHRISTINE PHILLIPS

Date: 4/11/19

Analyst Signature: CNP

Columns: ZBCLPI/ZBCLPII

Method 8082

Initial Cal. Method ZPCB4614

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 18-2534-101A	AR1016/1260	500ppb
-101B	AR1016/1260	1000ppb
-IB	IB	20ppb
190683	HEXANE (RESIDUE)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4/12/19

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	2G17832|	OP19691-MB1	19691	8082	W	34			On	
	322	-BS1				35				On	
	323	-BSD				36				On	
	324	jc 86089-1				37				On	
	325	-2				38				On	
	326	jc 86142-4				39				On	
	327	-5				40				On	
	328	jc 85400-2				41				On	
	329	HEXANE				100				On	
	330	CC4614-1000				42				On	
	331	IB				2				On	

TR 4/12

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09
Rev. Date: 5/25/17

127

11.5.2 11

LOGBOOK ID: 8-2322

Pest/PCB Extraction Log - Aqueous

Date Started: 4-11-2019 Time Started: 17:30
Date Finished: 4-11-2019 Time Finished: 22:15

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓
Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # GC 191691	RACK# PCb-2
Set-up by:	NIT
Extracted by:	NIT
Concentrated by:	NIT
Final Vol. Top-up:	NIT
Vialed by:	NIT
Supervisor Review:	aj 4/12/19

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	3	65	—	—	OK
Buchi Chiller	B3	10.3	—	—	OK
Waterbath (70-80°C)	5	74	0	74	—
Waterbath Chiller (GPM)	F3	6	—	—	2
NEVAP (32-38°C, LPM)	4	35	0	35	10

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	192336-74	400	1.0
PPCB LL			
WITNESS SIGN: LJ		SPIKE SIGN: NIT	

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST			
PEST LL			
PCB	192336-37	20ppm	1.0
PCB LL			
WITNESS SIGN: LJ		SPIKE SIGN: NIT	

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	191109	fisher	3x60
HEXANE	1906083	fisher	50

REAGENT	LOT #	BAKE BATCH #	BRAND
Sodium Sulfate	178494	3-25-19	fisher
Glass Wool	11708		lab
Filter Paper			
Copper	182231-127		aldrich
Florisil			
1:1 Sulfuric Acid			
Chlorine Strips			

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	pH	Sample Description	Sample Volume (mL)	Final Extract Color	Final Extract Vol(mL)	Extract Cleanup GPC	Copper	H2SO4	Florisil	KMnO4	Comments
	MB1	PCb			di h2o	1000	clear	5.0		✓				
	BS1	1			di h2o	1000	clear	5.0		✓				
	BSD ~~MS~~				di h2o	1000	clear	5.0		✓				
	MSD													
	BS													
	MS													
	MSD													
1	JC86089 - 1	PCb	5		Clear	1000	clear	5.0		✓				
2	- 2		3		Yellow	1000	clear	5.0		✓				
3	JC86142 - 4		1		Pink	1010	clear	5.0		✓				
4	- 5		2		Yellow	1010	clear	5.0		✓				
5	JC85460 - 2		1		Clear	100	clear	5.0		✓				
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume: due 4/17

Other:

Comments: QC Samples (MS, MSD, LINK and/or DUP, Link) Confirmed by:

- crush blank. 100mL used in diH2O.

SGS
Form: OP021A-10
Rev Date: 8/2/17

93

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:54	MA46497-STD1	1		STDA
10:59	MA46497-STD2	1		STDA
11:04	MA46497-STD3	1		STDA
11:09	MA46497-STD4	1		STDB
11:14	MA46497-STD5	1		STDC
11:19	MA46497-STD6	1		STDD
11:24	MA46497-STD7	1		STDE
11:29	MA46497-STD8	1		STDF
11:34	MA46497-STD9	1		STDG
11:39	MA46497-STD10	1		STDH
11:44	MA46497-STD11	1		STDI
11:49	MA46497-STD12	1		STDJ
11:54	MA46497-STD13	1		STDA
12:02	MA46497-ICVA1	1		
12:07	MA46497-ICV1	1		
12:12	MA46497-ICB1	1		
12:18	MA46497-CCVA1	1		
12:22	MA46497-CCB1	1		
12:28	MA46497-CRI1	1		
12:33	MA46497-ICSA1	1		
12:37	MA46497-ICSAB1	1		
12:43	MA46497-CCVA2	1		
12:48	MA46497-CCB2	1		
12:54	ZZZZZZ	2		
12:59	MP14051-B2	2		
13:04	MP14051-S3	2		
13:08	MP14051-S4	2		
13:13	ZZZZZZ	2		
13:18	MP14051-SD1	10		
13:23	JC86039-2	2		(sample used for QC only; not part of login JC86089)
13:28	MP14084-SD1	10		
13:33	ZZZZZZ	2		
13:38	MA46497-CCVA3	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:49	MA46497-CCB3	1		
13:54	MP14051-MB1	2		
13:59	ZZZZZZ	2		
14:04	ZZZZZZ	5		
14:09	ZZZZZZ	2		
14:14	JC85988-1	1		(sample used for QC only; not part of login JC86089)
14:19	MP14085-MB1	1		
14:24	MP14085-B1	1		
14:29	MP14085-B2	1		
14:34	MP14085-S1	1		
14:39	MP14085-S2	1		
14:44	MA46497-CCVA4	1		
14:49	MA46497-CCB4	1		
14:54	MP14059A-MB1	2		
14:59	MP14059A-B2	2		
15:04	MP14059A-S3	2		Na and Ca overrange
15:09	ZZZZZZ	2		
15:14	JC86095-4	2		(sample used for QC only; not part of login JC86089)
15:19	MP14059A-SD1	10		Na and Ca overrange
15:24	MP14059A-S4	2		Na and Ca overrange
15:29	MP14084-B1	2		
15:34	MP14084-S1	2		
15:39	MP14084-S2	2		
15:44	MA46497-CCVA5	1		
15:49	MA46497-CCB5	1		
15:54	JC85918-1	2		(sample used for QC only; not part of login JC86089)
15:59	MP14084-PS1	2		
16:04	MP14084-MB1	2		
16:09	ZZZZZZ	2		
16:14	ZZZZZZ	2		
16:19	ZZZZZZ	2		
16:24	ZZZZZZ	2		
16:29	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:34	ZZZZZZ	2		
16:39	ZZZZZZ	2		
16:44	MA46497-CCVA6	1		
16:49	MA46497-CCB6	1		
16:54	ZZZZZZ	2		
17:03	ZZZZZZ	2		
17:10	ZZZZZZ	2		
17:15	ZZZZZZ	2		
17:20	ZZZZZZ	2		
17:25	MP14051-S3	5		Ni and ZN. To reanalysis for Mn with QC sample on dilution
17:30	MP14051-S4	5		Ni and ZN. To reanalysis for Mn with QC sample on dilution
17:35	ZZZZZZ	20		
17:40	ZZZZZZ	5		
17:45	MP14085-S1	4		
17:50	MA46497-CCVA7	1		
17:55	MA46497-CCB7	1		
18:00	MP14085-S2	4		
18:05	JC85988-1	4		(sample used for QC only; not part of login JC86089)
18:10	ZZZZZZ	10		
18:15	ZZZZZZ	20		
18:20	ZZZZZZ	10		
18:25	ZZZZZZ	20		
18:30	ZZZZZZ	5		
18:35	ZZZZZZ	5		
18:40	ZZZZZZ	5		
18:45	ZZZZZZ	5		
18:50	MA46497-CCVA8	1		
18:55	MA46497-CCB8	1		
19:00	ZZZZZZ	1		
19:05	ZZZZZZ	2		
19:10	MP14115-B1	2		
19:16	ZZZZZZ	2		
19:21	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:26	ZZZZZZ	1		
19:31	ZZZZZZ	1		
19:36	ZZZZZZ	1		
19:41	ZZZZZZ	1		
19:46	MP14115-MB1	2		
19:52	MA46497-CCVA9	1		
19:56	MA46497-CCB9	1		
20:02	ZZZZZZ	2		
20:07	MP14115-S1	5		Ba overrange
20:12	MP14115-S2	5		Ba overrange
20:17	JC86081-4	5		(sample used for QC only; not part of login JC86089)
20:22	MP14115-SD1	25		
20:27	ZZZZZZ	5		
20:32	JC86089-1	2		
20:38	JC86089-2	2		
---------->	Last reportable sample/prep for job JC86089			
20:43	MP14114A-MB1	2		
20:48	MP14114A-B2	2		
20:53	MA46497-CCVA10	1		
20:58	MA46497-CCB10	1		
---------->	Last reportable CCB for job JC86089			
21:03	MP14114A-S3	2		
21:08	MP14114A-S4	2		
21:13	JC86125-1	2		(sample used for QC only; not part of login JC86089)
21:18	MP14114A-SD1	10		
21:23	ZZZZZZ	2		
21:28	ZZZZZZ	2		
21:33	ZZZZZZ	2		
21:38	ZZZZZZ	2		
21:43	ZZZZZZ	2		
21:50	ZZZZZZ	2		
21:56	MA46497-CCVA11	1		
22:02	MA46497-CCB11	1		
22:09	ZZZZZZ	2		
22:15	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:20	ZZZZZZ	2		
22:25	ZZZZZZ	2		
22:30	ZZZZZZ	2		
22:35	ZZZZZZ	2		
22:40	ZZZZZZ	2		
22:45	ZZZZZZ	2		
22:50	ZZZZZZ	2		
22:55	ZZZZZZ	2		
23:00	MA46497-CCVA12	1		
23:05	MA46497-CCB12	1		
23:10	ZZZZZZ	2		
23:15	ZZZZZZ	2		
23:20	ZZZZZZ	2		
23:25	ZZZZZZ	2		
23:30	ZZZZZZ	2		
23:35	ZZZZZZ	2		
23:40	ZZZZZZ	2		
23:45	ZZZZZZ	2		
23:50	ZZZZZZ	2		
23:55	ZZZZZZ	2		
00:00	MA46497-CCVA13	1		
00:05	MA46497-CCB13	1		
00:10	ZZZZZZ	2		
00:15	ZZZZZZ	2		
00:20	ZZZZZZ	2		
00:25	ZZZZZZ	2		
00:30	MA46497-CCVA14	1		CCB14 >12hrs after ICSA.
00:35	MA46497-CCB14	1		CCB14 >12hrs after ICSA.
00:40	ZZZZZZ	1		
00:45	ZZZZZZ	1		
00:50	ZZZZZZ	1		
00:55	ZZZZZZ	1		
01:00	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Se	Ag	
12:02	MA46497-ICVA1	1	X	X	X	X	X	X	X	X	X	X	
12:07	MA46497-ICV1	1	X										
12:12	MA46497-ICB1	1	X	X	X	X	X	X	X	X	X	X	
12:18	MA46497-CCVA1	1	X	X	X	X	X	X	X	X	X	X	
12:22	MA46497-CCB1	1	X	X	X	X	X	X	X	X	X	X	
12:28	MA46497-CRI1	1	X	X	X	X	X	X	X	X	X	X	
12:33	MA46497-ICSA1	1	X	X	X	X	X	X	X	X	X	X	
12:37	MA46497-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	
12:43	MA46497-CCVA2	1	X	X	X	X	X	X	X	X	X	X	
12:48	MA46497-CCB2	1	X	X	X	X	X	X	X	X	X	X	
12:54	ZZZZZZ	2											
12:59	MP14051-B2	2	X	X	X	X	X	X	X	X	X	X	
13:04	MP14051-S3	2	X	X	X	X	X	X	X	X	X	X	
13:08	MP14051-S4	2	X	X	X	X	X	X	X	X	X	X	
13:13	ZZZZZZ	2											
13:18	MP14051-SD1	10	X	X	X	X	X	X	X	X	X	X	
13:23	JC86039-2	2		X									(a)
13:28	MP14084-SD1	10		X									
13:33	ZZZZZZ	2											
13:38	MA46497-CCVA3	1	X	X	X	X	X	X	X	X	X	X	
13:49	MA46497-CCB3	1	X	X	X	X	X	X	X	X	X	X	
13:54	MP14051-MB1	2	X	X	X	X	X	X	X	X	X	X	
13:59	ZZZZZZ	2											
14:04	ZZZZZZ	5											
14:09	ZZZZZZ	2											
14:14	JC85988-1	1		X		X	X	X		X	X	X	(a)
14:19	MP14085-MB1	1		X		X	X	X	X	X	X	X	
14:24	MP14085-B1	1		X		X	X	X	X	X	X	X	
14:29	MP14085-B2	1		X		X	X	X	X	X	X	X	
14:34	MP14085-S1	1		X		X					X	X	
14:39	MP14085-S2	1		X		X					X	X	
14:44	MA46497-CCVA4	1	X	X	X	X	X	X	X	X	X	X	
14:49	MA46497-CCB4	1	X	X	X	X	X	X	X	X	X	X	
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Se	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Se	Ag	
14:54	MP14059A-MB1	2		X	X	X	X	X		X	X	X	
14:59	MP14059A-B2	2		X	X	X	X	X		X	X	X	
15:04	MP14059A-S3	2		X	X	X	X	X		X	X	X	
15:09	ZZZZZZ	2											
15:14	JC86095-4	2		X									(a)
15:19	MP14059A-SD1	10		X	X	X	X	X		X	X	X	
15:24	MP14059A-S4	2		X	X	X	X	X		X	X	X	
15:29	MP14084-B1	2		X									
15:34	MP14084-S1	2		X									
15:39	MP14084-S2	2		X									
15:44	MA46497-CCVA5	1	X	X	X	X	X	X	X	X	X	X	
15:49	MA46497-CCB5	1	X	X	X	X	X	X	X	X	X	X	
15:54	JC85918-1	2		X									(a)
15:59	MP14084-PS1	2		X									
16:04	MP14084-MB1	2		X									
16:09	ZZZZZZ	2											
16:14	ZZZZZZ	2											
16:19	ZZZZZZ	2											
16:24	ZZZZZZ	2											
16:29	ZZZZZZ	2											
16:34	ZZZZZZ	2											
16:39	ZZZZZZ	2											
16:44	MA46497-CCVA6	1	X	X	X	X	X	X	X	X	X	X	
16:49	MA46497-CCB6	1	X	X	X	X	X	X	X	X	X	X	
16:54	ZZZZZZ	2											
17:03	ZZZZZZ	2											
17:10	ZZZZZZ	2											
17:15	ZZZZZZ	2											
17:20	ZZZZZZ	2											
17:25	MP14051-S3	5											
17:30	MP14051-S4	5											
17:35	ZZZZZZ	20											
17:40	ZZZZZZ	5											
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Se	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Se	Ag	
17:45	MP14085-S1	4					X	X	X	X			
17:50	MA46497-CCVA7	1	X	X	X	X	X	X	X	X	X	X	
17:55	MA46497-CCB7	1	X	X	X	X	X	X	X	X	X	X	
18:00	MP14085-S2	4					X	X	X	X			
18:05	JC85988-1	4							X				(a)
18:10	ZZZZZZ	10											
18:15	ZZZZZZ	20											
18:20	ZZZZZZ	10											
18:25	ZZZZZZ	20											
18:30	ZZZZZZ	5											
18:35	ZZZZZZ	5											
18:40	ZZZZZZ	5											
18:45	ZZZZZZ	5											
18:50	MA46497-CCVA8	1	X	X	X	X	X	X	X	X	X	X	
18:55	MA46497-CCB8	1	X	X	X	X	X	X	X	X	X	X	
19:00	ZZZZZZ	1											
19:05	ZZZZZZ	2											
19:10	MP14115-B1	2	X	X	X	X	X	X	X	X	X	X	
19:16	ZZZZZZ	2											
19:21	ZZZZZZ	2											
19:26	ZZZZZZ	1											
19:31	ZZZZZZ	1											
19:36	ZZZZZZ	1											
19:41	ZZZZZZ	1											
19:46	MP14115-MB1	2	X	X	X	X	X	X	X	X	X	X	
19:52	MA46497-CCVA9	1	X	X	X	X	X	X	X	X	X	X	
19:56	MA46497-CCB9	1	X	X	X	X	X	X	X	X	X	X	
20:02	ZZZZZZ	2											
20:07	MP14115-S1	5	X	X		X	X	X	X	X	X	X	
20:12	MP14115-S2	5	X	X		X	X	X	X	X	X	X	
20:17	JC86081-4	5		X	X	X	X	X		X	X	X	(a)
20:22	MP14115-SD1	25	X	X	X	X	X	X	X	X	X	X	
20:27	ZZZZZZ	5											
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Se	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Se	Ag	
20:32	JC86089-1	2	X	X	X	X	X	X	X	X	X	X	
20:38	JC86089-2	2	X	X	X	X	X	X	X	X	X	X	
20:43	MP14114A-MB1	2		X									
20:48	MP14114A-B2	2		X									
20:53	MA46497-CCVA10	1	X	X	X	X	X	X	X	X	X	X	
20:58	MA46497-CCB10	1	X	X	X	X	X	X	X	X	X	X	
21:03	MP14114A-S3	2		X									
21:08	MP14114A-S4	2		X									
21:13	JC86125-1	2		X									(a)
21:18	MP14114A-SD1	10		X									
21:23	ZZZZZZ	2											
21:28	ZZZZZZ	2											
21:33	ZZZZZZ	2											
21:38	ZZZZZZ	2											
21:43	ZZZZZZ	2											
21:50	ZZZZZZ	2											
21:56	MA46497-CCVA11	1	X	X	X	X	X	X	X	X	X	X	
22:02	MA46497-CCB11	1	X	X	X	X	X	X	X	X	X	X	
22:09	ZZZZZZ	2											
22:15	ZZZZZZ	2											
22:20	ZZZZZZ	2											
22:25	ZZZZZZ	2											
22:30	ZZZZZZ	2											
22:35	ZZZZZZ	2											
22:40	ZZZZZZ	2											
22:45	ZZZZZZ	2											
22:50	ZZZZZZ	2											
22:55	ZZZZZZ	2											
23:00	MA46497-CCVA12	1	X	X	X	X	X	X	X	X	X	X	
23:05	MA46497-CCB12	1	X	X	X	X	X	X	X	X	X	X	
23:10	ZZZZZZ	2											
23:15	ZZZZZZ	2											
23:20	ZZZZZZ	2											
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Se	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Se	Ag
23:25	ZZZZZZ	2										
23:30	ZZZZZZ	2										
23:35	ZZZZZZ	2										
23:40	ZZZZZZ	2										
23:45	ZZZZZZ	2										
23:50	ZZZZZZ	2										
23:55	ZZZZZZ	2										
00:00	MA46497-CCVA13	1	X	X	X	X	X	X	X	X	X	X
00:05	MA46497-CCB13	1	X	X	X	X	X	X	X	X	X	X
00:10	ZZZZZZ	2										
00:15	ZZZZZZ	2										
00:20	ZZZZZZ	2										
00:25	ZZZZZZ	2										
00:30	MA46497-CCVA14	1	CCB14 >12hrs after ICSA.									
00:35	MA46497-CCB14	1	CCB14 >12hrs after ICSA.									
00:40	ZZZZZZ	1										
00:45	ZZZZZZ	1										
00:50	ZZZZZZ	1										
00:55	ZZZZZZ	1										
01:00	ZZZZZZ	1										

(a) Sample used for QC only; not part of login JC86089.

Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Se	Ag

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
10:54	MA46497-STD1	100	100	100	100	100	100	100	100
10:59	MA46497-STD2	100	100	100	100	100	100	100	100
11:04	MA46497-STD3	100	100	100	100	100	100	100	100
11:09	MA46497-STD4	99.644	100.336	100.856	99.674	99.58	99.662	101.132	100.049
11:14	MA46497-STD5	100.398	100.684	100.788	100.985	100.129	100.839	101.719	99.897
11:19	MA46497-STD6	99.263	99.228	99.184	98.604	99.013	97.962	99.412	98.847
11:24	MA46497-STD7	97.356	97.363	96.057	98.528	97.875	96.284	98.83	98.414
11:29	MA46497-STD8	95.177	96.558	97.348	96.46	96.871	95.688	96.432	97.083
11:34	MA46497-STD9	95.03	96.147	97.787	97.628	96.925	96.455	97.906	97.424
11:39	MA46497-STD10	96.127	97.98	98.103	97.107	97.444	97.707	98.439	99.577
11:44	MA46497-STD11	96.839	98.128	99.709	98.435	98.244	98.137	98.165	97.523
11:49	MA46497-STD12	97.332	99.778	100.656	98.622	98.528	97.676	97.041	97.241
11:54	MA46497-STD13	100	100	100	100	100	100	100	100
12:02	MA46497-ICVA1	99.762	98.393	100.635	97.693	98.137	100.232	96.204	99.608
12:07	MA46497-ICV1	99.205	97.865	98.828	99.216	97.838	99.977	98.842	98.228
12:12	MA46497-ICB1	99.989	98.196	99.021	98.26	98.388	100.409	98.445	99.431
12:18	MA46497-CCVA1	99.662	97.568	98.654	97.438	97.737	98.413	95.01	98.747
12:22	MA46497-CCB1	99.286	97.547	97.42	98.066	97.684	99.393	97.858	97.813
12:28	MA46497-CRI1	100.294	98.933	98.49	98.94	98.401	99.155	98.762	99.157
12:33	MA46497-ICSA1	96.067	93.855	92.304	90.563	94.637	89.234	84.867	86.048
12:37	MA46497-ICSAB1	93.863	92.547	91.276	94.495	93.899	88.271	88.201	86.144
12:43	MA46497-CCVA2	90.448	92.981	88.998	97.895	94.924	91.985	97.864	96.304
12:48	MA46497-CCB2	92.03	92.961	90.874	99.422	95.954	94.861	100.893	96.329
12:54	ZZZZZZ	91.757	90.956	88.617	102.551	92.426	90.657	101.054	92.501
12:59	MP14051-B2	97.192	95.544	91.58	105.427	96.275	93.134	101.451	97.1
13:04	MP14051-S3	95.064	95.686	91.133	104.967	92.089	90.71	100.099	93.166
13:08	MP14051-S4	97.357	98.043	92.703	106.456	94.72	91.453	101.005	95.668
13:13	ZZZZZZ	98.504	98.5	91.397	105.568	95.031	91.363	101.697	94.694
13:18	MP14051-SD1	102.662	103.092	98.564	106.078	105.59	102.977	105.77	105.526
13:23	JC86039-2	97.052	97.141	89.598	104.187	93.369	89.35	99.677	93.63
13:28	MP14084-SD1	100.453	99.607	96.13	102.234	101.525	100.186	102.975	102.805
13:33	ZZZZZZ	98.381	96.133	93.099	107.422	95.442	93.866	103.832	95.582
13:38	MA46497-CCVA3	106.463	107.918	102.633	107.878	107.569	104.073	105.071	109.162

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:49	MA46497-CCB3	104.525	105.723	104.044	106.556	105.863	105.688	106.106	106.324
13:54	MP14051-MB1	104.126	102.256	100.744	110.936	101.512	100.796	107.968	102.172
13:59	ZZZZZZ	107.421	103.89	100.941	112.626	103.162	100.767	108.861	103.231
14:04	ZZZZZZ	113.009	111.978	107.716	111.066	102.334	101.569	101.222	103.413
14:09	ZZZZZZ	107.149	101.591	99.133	111.788	100.336	98.501	107.225	101.036
14:14	JC85988-1	108.019	117.845	113.068	112.209	107.712	109.187	105.179	106.663
14:19	MP14085-MB1	107.08	109.038	106.405	110.298	108.682	108.164	109.259	109.736
14:24	MP14085-B1	106.355	107.466	105.6	109.355	107.611	106.325	106.02	108.481
14:29	MP14085-B2	104.476	105.628	105.51	108.033	106.235	106.179	105.308	107.047
14:34	MP14085-S1	104.268	115.856	109.97	108.901	104.981	107.073	102.483	105.125
14:39	MP14085-S2	103.942	115.401	109.635	110.33	105.631	105.7	102.2	105.526
14:44	MA46497-CCVA4	104.18	105.978	104.966	108.707	106.473	105.17	104.842	107.349
14:49	MA46497-CCB4	105.752	106.246	103.79	108.749	106.344	105.215	107.553	107.093
14:54	MP14059A-MB1	103.352	100.375	98.776	111.217	100.132	98.07	107.377	100.409
14:59	MP14059A-B2	108.191	104.222	101.409	115.12	102.61	100.043	109.213	103.558
15:04	MP14059A-S3	108.736	113.203	105.137	117.352	104.234	101.379	109.648	104.378
15:09	ZZZZZZ	108.144	113.058	105.562	117.205	104.857	101.434	110.12	105.134
15:14	JC86095-4	106.503	112.397	104.444	115.959	104.829	102.028	109.456	104.987
15:19	MP14059A-SD1	108.728	115.122	111.695	111.869	112.516	112.613	111.449	113.35
15:24	MP14059A-S4	104.004	110.831	103.785	115.139	102.744	100.495	107.588	103.278
15:29	MP14084-B1	110.703	111.222	106.04	117.705	108.798	103.454	111.495	109.272
15:34	MP14084-S1	109.231	109.896	104.254	116.396	105.218	100.739	109.614	105.605
15:39	MP14084-S2	109.071	108.266	103.433	115.418	104.461	101.61	109.179	105.091
15:44	MA46497-CCVA5	109.806	113.481	110.342	110.493	111.099	110.552	107.452	112.806
15:49	MA46497-CCB5	107.619	110.145	108.485	109.79	108.864	109.054	109.021	109.524
15:54	JC85918-1	104.677	105.345	103.363	111.611	101.139	101.018	105.22	101.563
15:59	MP14084-PS1	106.35	107.016	102.817	112.975	102.561	99.876	106.333	103.626
16:04	MP14084-MB1	109.159	109.217	105.649	117.72	107.287	103.8	112.59	106.843
16:09	ZZZZZZ	109.984	109.259	105.168	116.61	106.828	103.519	111.959	106.62
16:14	ZZZZZZ	110.821	110.122	105.789	116.67	107.567	104.653	111.796	107.702
16:19	ZZZZZZ	109.878	108.603	104.464	115.031	106.025	102.709	110.725	105.982
16:24	ZZZZZZ	110.649	111.027	106.663	116.835	107.37	105.32	112.119	107.072
16:29	ZZZZZZ	110.227	112.048	106.028	114.033	103.971	100.844	106.184	104.764

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
16:34	ZZZZZZ	109.783	109.528	104.58	113.223	106.424	103.03	109.483	106.362
16:39	ZZZZZZ	105.555	106.806	102.381	110.606	100.181	96.625	101.896	100.247
16:44	MA46497-CCVA6	108.429	111.658	109.453	109.017	109.331	108.304	105.808	109.864
16:49	MA46497-CCB6	106.826	109.924	108.18	109.033	108.273	108.913	107.614	108.791
16:54	ZZZZZZ	105.19	104.509	101.408	111.289	103.002	100.397	107.019	103.223
17:03	ZZZZZZ	107.951	111.645	101.009	109.088	103.658	97.483	102.605	104.429
17:10	ZZZZZZ	104.698	102.864	100.992	109.784	100.889	99.014	106.798	101.195
17:15	ZZZZZZ	101.974	102.295	99.574	107.699	96.941	94.45	99.24	97.297
17:20	ZZZZZZ	104.608	103.668	101.251	110.589	101.669	99.418	106.043	102.043
17:25	MP14051-S3	100.261	101.734	99.015	105.996	99.678	98.341	102.109	100.67
17:30	MP14051-S4	99.361	101.198	98.408	104.191	99.723	97.302	101.26	100.474
17:35	ZZZZZZ	103.373	105.006	103.222	104.847	102.376	101.814	100.939	102.587
17:40	ZZZZZZ	100.076	100.484	98.934	105.881	100.161	98.977	104.09	100.38
17:45	MP14085-S1	102.64	107.235	103.781	104.507	104.098	103.643	101.565	104.373
17:50	MA46497-CCVA7	104.014	108.249	105.764	106.202	106.526	104.421	102.853	107.723
17:55	MA46497-CCB7	105.259	108.572	105.589	107.373	106.978	107.412	107.199	108.3
18:00	MP14085-S2	103.337	111.21	105.704	106.137	105.918	104.826	103.259	106.03
18:05	JC85988-1	103.112	110.196	105.598	107.175	105.264	104.9	104.062	105.809
18:10	ZZZZZZ	99.696	102.285	100.107	106.143	102.73	101.377	104.296	103.014
18:15	ZZZZZZ	102.467	104.998	102.519	106.088	104.845	103.954	105.261	105.103
18:20	ZZZZZZ	106.546	113.225	101.083	105.846	109.836	100.98	104.205	110.295
18:25	ZZZZZZ	103.084	104.148	102.371	105.785	104.193	103.344	104.138	105.276
18:30	ZZZZZZ	105.958	110.564	107.948	105.607	107.606	109.036	105.94	108.52
18:35	ZZZZZZ	103.79	105.595	98.802	104.544	105.03	100.188	102.536	106.137
18:40	ZZZZZZ	107.947	112.386	111.226	105.293	109.916	112.323	105.949	111.041
18:45	ZZZZZZ	105.268	108.726	103.871	105.95	105.909	104.285	104.72	106.508
18:50	MA46497-CCVA8	105.244	108.288	104.847	105.302	105.771	104.451	102.743	107.357
18:55	MA46497-CCB8	105.667	108.556	105.343	106.075	106.669	105.837	105.167	107.33
19:00	ZZZZZZ	101.331	101.16	97.78	107.561	100.316	97.422	103.986	100.523
19:05	ZZZZZZ	102.744	102.308	98.793	108.117	100.996	98.562	104.605	101.928
19:10	MP14115-B1	102.743	102.098	98.581	108.017	101.219	97.61	103.112	101.832
19:16	ZZZZZZ	101.849	100.874	97.59	107.943	100.616	97.309	105.231	100.628
19:21	ZZZZZZ	103.182	103.33	99.609	108.27	101.731	99.182	105.878	102.166

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
19:26	ZZZZZZ	108.748	112.147	109.366	107.358	108.953	109.304	105.545	109.676
19:31	ZZZZZZ	106.162	111.268	108.94	105.923	107.425	107.245	103.245	109.523
19:36	ZZZZZZ	106.022	110.478	108.299	110.011	106.992	107.602	107.64	108.183
19:41	ZZZZZZ	101.212	102.14	107.743	106.18	102.08	107.813	105.115	102.739
19:46	MP14115-MB1	101.271	101.481	98.86	107.279	100.158	97.246	103.147	100.345
19:52	MA46497-CCVA9	105.684	110.824	107.973	105.4	107.008	105.109	102.209	108.465
19:56	MA46497-CCB9	104.801	109.72	105.963	106.304	106.817	107.438	104.241	107.248
20:02	ZZZZZZ	98.857	95.863	94.743	108.54	97.129	94.075	107.037	98.501
20:07	MP14115-S1	100.212	102.879	99.775	104.718	100.146	97.554	101.098	101.802
20:12	MP14115-S2	99.299	101.776	98.385	102.943	98.993	96.686	99.027	99.788
20:17	JC86081-4	98.49	99.088	96.29	102.909	97.806	95.405	99.071	97.738
20:22	MP14115-SD1	100.194	101.336	100.012	101.849	101.391	99.699	100.26	101.233
20:27	ZZZZZZ	99.193	99.335	97.312	103.645	98.792	96.883	101.799	98.717
20:32	JC86089-1	96.864	96.587	94.05	104.596	95.39	92.753	100.55	95.381
20:38	JC86089-2	96.481	95.822	92.43	103.048	94.536	91.346	99.892	94.47
20:43	MP14114A-MB1	98.376	96.761	95.027	105.038	96.354	93.731	101.714	96.697
20:48	MP14114A-B2	98.223	97.847	94.671	105.004	97.105	93.504	100.775	97.897
20:53	MA46497-CCVA10	103.079	105.917	105.609	103.223	104.902	104.069	100.264	105.844
20:58	MA46497-CCB10	101.667	105.222	104.428	103.11	103.976	105.207	102.59	105.032
21:03	MP14114A-S3	92.585	98.05	93.83	101.182	90.146	91.318	94.855	90.642
21:08	MP14114A-S4	94.686	99.688	94.461	101.715	92.679	92.549	94.724	92.609
21:13	JC86125-1	92.205	97.199	91.633	99.479	90.938	89.715	94.644	90.222
21:18	MP14114A-SD1	96.72	101.358	100.228	100.14	100.481	101.783	98.85	101.257
21:23	ZZZZZZ	89.788	101.51	94.56	105.041	90.678	89.397	95.66	89.517
21:28	ZZZZZZ	98.321	114.689	102.045	112.071	100.62	98.749	103.772	99.337
21:33	ZZZZZZ	99.036	108.755	90.706	109.344	100.565	86.312	102.541	99.402
21:38	ZZZZZZ	93.165	101.288	93.938	101.116	93.959	93.844	96.556	93.163
21:43	ZZZZZZ	90.47	95.121	88.736	94.104	85.781	86.04	86.562	83.42
21:50	ZZZZZZ	88.418	95.261	90.318	97.894	90.695	105.475	104.587	87.778
21:56	MA46497-CCVA11	93.696	97.152	96.104	97.338	97.832	96.527	95.237	98.578
22:02	MA46497-CCB11	90.316	90.079	96.604	98.272	93.022	98.599	98.259	94.496
22:09	ZZZZZZ	92.543	92.866	90.777	100.81	93.116	90.432	98.214	92.758
22:15	ZZZZZZ	88.086	92.997	89.766	96.573	85.319	86.763	89.553	84.775

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
22:20	ZZZZZZ	87.617	91.693	87.135	96.224	86.666	87.667	93.083	86.283
22:25	ZZZZZZ	88.615	91.093	87.131	96.912	87.679	85.029	92.184	87.421
22:30	ZZZZZZ	85.066	87.428	83.735	95.932	85.473	83.323	92.576	86.046
22:35	ZZZZZZ	86.714	88.731	85.84	95.048	83.488	81.821	86.472	83.982
22:40	ZZZZZZ	86.247	100.52	94.95	104.599	84.142	94.178	96.18	81.923
22:45	ZZZZZZ	85.701	92.307	84.922	106.07	86.426	84.624	98.722	85.444
22:50	ZZZZZZ	87.211	89.297	85.432	98.887	88.46	84.407	94.703	87.907
22:55	ZZZZZZ	86.196	89.422	83.915	94.433	87.115	99.896	102.478	84.725
23:00	MA46497-CCVA12	90.071	92.637	91.491	93.559	93.394	92.161	91.325	94.546
23:05	MA46497-CCB12	90.206	91.813	90.776	92.281	92.408	93.122	92.643	93.223
23:10	ZZZZZZ	84.863	88.174	84.735	93.042	81.994	84.411	88.347	81.597
23:15	ZZZZZZ	87.565	88.376	86.249	95.033	83.54	82.676	87.101	83.82
23:20	ZZZZZZ	91.407	90.068	85.529	91.217	80.691	76.006	78.96	80.945
23:25	ZZZZZZ	87.45	88.146	84.016	95.334	86.173	83.552	91.672	86.087
23:30	ZZZZZZ	84.944	89.157	83.681	96.246	85.47	87.191	94.725	84.503
23:35	ZZZZZZ	84.609	87.116	82.878	94.145	83.574	83.212	90.778	83.56
23:40	ZZZZZZ	85.933	87.171	83.854	94.188	83.925	81.315	88.444	84.049
23:45	ZZZZZZ	84.637	87.924	84.553	96.057	84.765	86.315	94.025	84.193
23:50	ZZZZZZ	85.404	88.39	84.478	94.64	84.105	82.699	89.208	84.442
23:55	ZZZZZZ	86.559	90.455	86.013	99.253	87.308	84.3	93.899	86.379
00:00	MA46497-CCVA13	91.091	94.629	93.924	94.978	94.579	94.238	92.433	95.798
00:05	MA46497-CCB13	90.264	93.696	92.586	94.985	93.955	94.892	94.03	94.309
00:10	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:15	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:20	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:25	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:30	MA46497-CCVA14	No results reported for the elements associated with this internal standard.							
00:35	MA46497-CCB14	No results reported for the elements associated with this internal standard.							
00:40	ZZZZZZ	95.715	99.305	98.286	98.637	99.397	100.457	97.354	99.764
00:45	ZZZZZZ	95.412	99.058	98.445	98.615	99.038	98.753	96.886	99.969
00:50	ZZZZZZ	95.324	99.484	98.87	99.037	99.159	99.621	98.296	99.846
00:55	ZZZZZZ	96.78	99.962	98.615	99.333	99.853	99.724	97.568	100.234
01:00	ZZZZZZ	95.773	99.76	98.819	98.81	99.826	99.417	98.849	99.999

! = Outside limits.

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (72-3)	60-125 %	60-125 %
Istd#8	Germanium (74-1)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
10:54	MA46497-STD1	100	100	100	100	100	100	100	100
10:59	MA46497-STD2	100	100	100	100	100	100	100	100
11:04	MA46497-STD3	100	100	100	100	100	100	100	100
11:09	MA46497-STD4	100.944	100.517	100.221	99.391	99.482	101.127	100.738	100.494
11:14	MA46497-STD5	100.935	101.31	101.406	100.204	101.092	101.019	100.285	101.142
11:19	MA46497-STD6	99.28	98.714	100.653	98.64	98.748	100.39	98.82	100.203
11:24	MA46497-STD7	96.498	98.274	98.565	95.27	98.201	97.57	95.483	98.509
11:29	MA46497-STD8	96.152	96.503	98.062	95.954	95.686	96.958	96.008	99.411
11:34	MA46497-STD9	97.401	98.327	96.778	96.488	97.511	98.315	97.344	97.543
11:39	MA46497-STD10	98.641	99.447	97.54	96.877	97.206	98.189	97.575	99.226
11:44	MA46497-STD11	98.09	98.052	96.618	95.619	95.301	97.366	97.462	98.879
11:49	MA46497-STD12	98.511	96.842	94.401	94.103	92.938	95.638	97.191	98.587
11:54	MA46497-STD13	100	100	100	100	100	100	100	100
12:02	MA46497-ICVA1	99.014	96.936	92.513	95.902	93.795	95.666	98.105	97.849
12:07	MA46497-ICV1	99.038	99.367	96.886	98.792	99.436	98.544	98.953	98.311
12:12	MA46497-ICB1	98.918	98.798	98.488	99.09	99.78	99.328	99.213	99.113
12:18	MA46497-CCVA1	97.211	96.223	93.315	94.439	93.905	95.06	95.934	98.193
12:22	MA46497-CCB1	97.505	99.024	96.647	98.175	98.977	97.513	97.801	99.11
12:28	MA46497-CRI1	98.018	98.896	98.264	98.337	99.152	99.075	98.846	99.031
12:33	MA46497-ICSA1	84.54	81.277	80.628	77.849	74.431	85.986	84.356	91.538
12:37	MA46497-ICSAB1	83.609	85.752	79.22	78.143	77.396	86.527	82.687	93.819
12:43	MA46497-CCVA2	91.337	98.631	93.974	92.934	96.914	96.932	91.676	102.03
12:48	MA46497-CCB2	94.401	101.049	97.063	97.195	102.373	99.718	95.341	101.507
12:54	ZZZZZZ	89.696	101.598	93.077	94.676	103.071	96.28	91.263	100.463
12:59	MP14051-B2	92.602	102.837	94.431	94.251	101.522	98.875	92.319	102.288
13:04	MP14051-S3	88.996	100.546	89.021	88.613	94.974	93.936	88.645	100.314
13:08	MP14051-S4	90.536	102.09	90.325	89.897	96.395	95.919	89.676	103.764
13:13	ZZZZZZ	89.879	101.183	91.165	90.673	97.419	97.541	90.011	103.913
13:18	MP14051-SD1	102.155	106.62	101.373	100.31	103.876	104.264	100.015	106.363
13:23	JC86039-2	88.721	99.322	90.476	89.025	96.015	95.695	88.421	103.924
13:28	MP14084-SD1	99.062	103.571	98.93	98.871	102.159	104.79	98.537	105.44
13:33	ZZZZZZ	92.834	104.442	93.447	94.162	102.419	98.705	92.619	103.71
13:38	MA46497-CCVA3	103.613	105.611	102.773	100.887	101.578	105.612	101.335	108.15

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:49	MA46497-CCB3	105.147	106.438	104.718	104.371	105.179	105.817	104.486	105.062
13:54	MP14051-MB1	99.939	108.512	102.302	102.146	107.639	104.471	99.807	106.116
13:59	ZZZZZZ	100.244	110.062	102.434	101.883	108.074	104.648	99.148	107.553
14:04	ZZZZZZ	100.902	101.257	95.313	93.884	92.952	99.994	97.828	104.659
14:09	ZZZZZZ	97.267	107.849	96.76	96.731	103.99	103.868	96.431	105.633
14:14	JC85988-1	106.317	104.724	97.149	97.405	94.522	102.697	103.278	105.67
14:19	MP14085-MB1	107.179	110.259	106.72	106.049	107.948	109.72	106.508	108.977
14:24	MP14085-B1	105.626	107.271	103.241	102.772	102.902	107.112	103.497	106.963
14:29	MP14085-B2	104.915	106.495	102.048	101.94	102.35	103.555	102.535	105.568
14:34	MP14085-S1	103.779	101.283	96.021	94.732	91.088	100.687	100.612	103.8
14:39	MP14085-S2	103.416	102.113	96.035	94.64	92.412	101.059	100.133	105.234
14:44	MA46497-CCVA4	104.181	105.976	101.499	100.848	100.902	104.194	101.969	105.884
14:49	MA46497-CCB4	103.935	108.581	105.267	103.621	106.065	107.685	103.149	106.606
14:54	MP14059A-MB1	96.761	107.88	99.946	99.997	107.361	102.237	97.086	106.23
14:59	MP14059A-B2	98.625	110.885	100.311	99.8	107.023	104.175	97.57	107.578
15:04	MP14059A-S3	99.595	109.902	97.829	96.333	101.725	102.601	96.613	107.451
15:09	ZZZZZZ	99.891	109.668	99.237	96.768	102.328	103.356	96.824	107.403
15:14	JC86095-4	99.737	109.804	99.917	98.127	103.398	105.252	98.465	108.644
15:19	MP14059A-SD1	111.385	111.642	108.454	106.986	105.972	111.307	108.859	109.587
15:24	MP14059A-S4	98.57	107.519	97.182	95.84	100.71	102.53	96.528	106.23
15:29	MP14084-B1	103.483	112.31	105.4	103.551	108.91	109.628	100.996	112.271
15:34	MP14084-S1	100.092	110.377	99.869	97.92	103.27	104.443	97.679	107.949
15:39	MP14084-S2	99.908	110.181	99.767	97.863	103.145	104.381	97.442	107.942
15:44	MA46497-CCVA5	109.327	108.347	105.732	103.69	102.091	109.232	105.833	109.594
15:49	MA46497-CCB5	108.529	108.29	107.557	106.183	106.71	108.663	106.676	108.108
15:54	JC85918-1	99.548	106.565	98.964	98.381	101.399	103.2	99.713	106.31
15:59	MP14084-PS1	99.024	106.505	98.408	96.324	100.636	103.308	96.975	106.615
16:04	MP14084-MB1	102.801	112.988	106.006	104.228	110.559	107.639	101.698	108.881
16:09	ZZZZZZ	102.548	112.403	105.711	103.577	110.307	108.463	101.783	111.404
16:14	ZZZZZZ	103.313	112.739	106.225	104.315	109.445	108.178	101.777	109.384
16:19	ZZZZZZ	101.634	109.967	104.716	102.697	108.974	107.413	100.515	108.03
16:24	ZZZZZZ	104.192	113.179	106.282	104.129	109.779	108.551	101.929	109.818
16:29	ZZZZZZ	99.93	107.106	99.776	96.494	100.099	104.902	98.006	107.489

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
16:34	ZZZZZZ	102.146	110.047	105.989	102.523	108.144	107.307	100.475	109.698
16:39	ZZZZZZ	95.738	101.333	94.891	92.315	95.961	99.598	94.625	105.955
16:44	MA46497-CCVA6	107.617	107.228	104.057	101.888	100.466	106.539	104.516	107.132
16:49	MA46497-CCB6	106.86	107.65	106.45	104.533	105.188	108.958	105.884	107.19
16:54	ZZZZZZ	99.249	108.034	103.389	100.839	106.888	105.58	99.127	107.111
17:03	ZZZZZZ	95.603	102.816	101.616	93.102	97.287	107.17	95.221	111.187
17:10	ZZZZZZ	98.065	106.554	102.451	99.585	105.42	103.939	98.19	106.244
17:15	ZZZZZZ	92.942	100.042	93.114	90.016	94.222	98.942	93.237	104.551
17:20	ZZZZZZ	98.306	106.304	101.922	100.584	105.683	104.703	98.639	105.982
17:25	MP14051-S3	97.501	103.168	96.653	94.359	98.378	100.47	95.878	104.279
17:30	MP14051-S4	96.505	102.019	96.619	93.597	97.576	100.899	95.354	104.57
17:35	ZZZZZZ	100.453	101.468	98.959	95.631	96.508	102.659	98.421	104.417
17:40	ZZZZZZ	97.458	103.657	99.75	96.779	101.571	101.308	97.173	104.618
17:45	MP14085-S1	101.627	101.826	98.872	96.178	96.78	102.982	99.214	104.127
17:50	MA46497-CCVA7	103.809	104.558	102.52	99.446	98.989	104.498	101.99	105.361
17:55	MA46497-CCB7	105.611	107.764	105.66	103.472	105.04	108.574	104.405	108.243
18:00	MP14085-S2	103.838	103.431	99.757	97.396	97.898	104.386	100.92	106.297
18:05	JC85988-1	102.611	104.616	99.672	97.948	98.645	104.667	101.403	106.55
18:10	ZZZZZZ	100.249	105.289	99.511	97.287	101.881	103.745	98.906	105.567
18:15	ZZZZZZ	102.594	106.022	102.786	99.377	102.624	105.972	100.808	106.534
18:20	ZZZZZZ	99.651	104.211	110.057	96.828	101.082	113.351	98.37	114.554
18:25	ZZZZZZ	101.309	105.043	101.443	98.424	101.419	105.063	99.815	105.126
18:30	ZZZZZZ	107.277	105.541	105.371	104.465	103.48	107.991	105.991	105.696
18:35	ZZZZZZ	98.733	103.186	102.229	95.299	99.747	105.32	96.457	106.41
18:40	ZZZZZZ	111.102	106.313	107.176	104.931	102.647	108.687	108.212	105.739
18:45	ZZZZZZ	102.978	104.865	105.95	100.299	103.088	108.451	102.038	107.073
18:50	MA46497-CCVA8	103.905	103.47	102.122	98.323	98.777	104.611	101.078	104.756
18:55	MA46497-CCB8	104.655	105.746	106.267	102.601	104	108.321	103.5	107.247
19:00	ZZZZZZ	95.778	104.42	101.206	97.823	104.445	104.822	96.168	105.942
19:05	ZZZZZZ	97.414	105.694	102.815	98.875	105.762	104.017	97.095	106.058
19:10	MP14115-B1	94.915	103.7	98.272	95.635	101.657	103.285	94.312	106.044
19:16	ZZZZZZ	96.267	105.282	100.489	97.461	104.353	102.895	95.743	106.205
19:21	ZZZZZZ	97.91	105.679	101.88	98.272	104.332	105.24	97.223	105.977

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
19:26	ZZZZZZ	107.57	106.127	108.452	104.105	104.392	109.347	105.825	107.242
19:31	ZZZZZZ	105.853	103.908	104.687	100.766	99.584	107.13	103.583	106.426
19:36	ZZZZZZ	106.275	108.21	105.89	102.481	106.381	108.271	104.303	107.182
19:41	ZZZZZZ	106.044	105.724	99.05	102.729	102.545	103.04	104.653	98.95
19:46	MP14115-MB1	96.194	104.516	101.297	97.383	103.893	103.474	95.818	105.199
19:52	MA46497-CCVA9	104.769	102.98	103.078	98.743	97.748	106.197	101.923	105.274
19:56	MA46497-CCB9	104.919	105.103	106.488	102.128	103.068	107.555	103.625	107.02
20:02	ZZZZZZ	93.744	108.391	93.262	90.34	99.166	96.772	89.44	103.559
20:07	MP14115-S1	96.849	101.584	98.154	93.704	97.498	102.109	95.929	103.414
20:12	MP14115-S2	95.02	100.276	96.691	92.375	96.434	100.298	94.002	103.173
20:17	JC86081-4	93.949	98.921	95.788	91.862	96.233	98.73	93.461	102.22
20:22	MP14115-SD1	98.69	100.102	99.837	95.494	98.608	102.869	97.556	102.781
20:27	ZZZZZZ	95.884	101.595	98.921	95.991	101.165	102.031	95.956	102.617
20:32	JC86089-1	91.828	101.686	94.677	90.93	97.852	98.498	91.272	101.864
20:38	JC86089-2	90.155	100.087	93.309	89.7	97.753	98.436	90.039	102.785
20:43	MP14114A-MB1	92.236	102.25	96.818	93.729	101.972	99.577	92.43	103.78
20:48	MP14114A-B2	92.298	101.165	96.744	91.983	99.025	99.644	91.76	102.044
20:53	MA46497-CCVA10	102.317	101.645	100.663	96.453	96.144	103.066	99.667	104.175
20:58	MA46497-CCB10	103	102.966	103.781	99.704	100.665	104.99	101.699	104.745
21:03	MP14114A-S3	87.459	93.094	84.487	81.247	84.794	91.207	86.05	99.593
21:08	MP14114A-S4	87.934	93.535	87.001	81.907	84.771	92.957	86.195	102.263
21:13	JC86125-1	85.647	92.032	86.13	81.445	84.796	93.69	85.629	100.791
21:18	MP14114A-SD1	98.806	99.062	96.68	92.805	93.081	100.765	97.27	102.85
21:23	ZZZZZZ	86.127	94.771	86.743	83.591	88.669	93.42	86.218	99.474
21:28	ZZZZZZ	95.203	103.209	97.547	93.98	98.138	102.5	94.621	106.672
21:33	ZZZZZZ	84.266	101.33	97.439	84.327	98.422	102.194	84.532	105.939
21:38	ZZZZZZ	87.509	92.955	87.859	81.931	85.03	94.525	86.404	102.936
21:43	ZZZZZZ	79.518	83.134	76.144	72.445	73.343	85.816	79.406	94.851
21:50	ZZZZZZ	86.54	91.199	83.841	77.533	80.519	90.657	82.822	107.727
21:56	MA46497-CCVA11	95.855	95.818	95.372	91.898	92.196	99.398	95.491	100.911
22:02	MA46497-CCB11	97.239	98.203	92.467	95.365	97.15	94.365	98.012	95.473
22:09	ZZZZZZ	90.184	98.888	95.488	91.795	98.31	98.412	91.441	101.532
22:15	ZZZZZZ	82.761	87.66	81.773	77.483	79.989	88.973	82.569	96.373

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
22:20	ZZZZZZ	82.973	90.784	83.651	79.418	83.969	90.401	83.584	99.676
22:25	ZZZZZZ	83.65	92.108	87.065	82.52	87.611	93.324	85.636	98.582
22:30	ZZZZZZ	82.18	93.133	86.458	81.969	89.823	91.613	83.669	96.283
22:35	ZZZZZZ	80.162	86.631	80.488	77.106	80.865	89.013	81.9	94.835
22:40	ZZZZZZ	80.699	85.303	75.121	73.122	75.944	85.597	78.619	100.008
22:45	ZZZZZZ	81.469	98.286	83.903	80.016	94.03	90.726	82.81	97.642
22:50	ZZZZZZ	83.652	95.228	89.081	84.783	93.649	93.887	85.262	98.16
22:55	ZZZZZZ	83.57	89.89	79.817	76.507	80.611	88.471	80.763	107.944
23:00	MA46497-CCVA12	90.651	92.518	91.585	87.365	88.33	96.508	90.681	98.327
23:05	MA46497-CCB12	90.894	93.194	94.04	89.644	92.162	96.831	92.35	98.169
23:10	ZZZZZZ	78.764	84.747	75.859	74.185	77.35	85.835	79.473	95.805
23:15	ZZZZZZ	80.403	87.294	79.477	77.648	81.084	88.617	82.153	94.055
23:20	ZZZZZZ	76.124	79.229	74.537	69.69 !a	70.863	84.89	76.605	90.151
23:25	ZZZZZZ	82.281	92.13	86.786	82.136	89.665	92.793	84.536	97.417
23:30	ZZZZZZ	81.404	91.283	84.986	79.348	86.719	90.196	81.68	100.31
23:35	ZZZZZZ	79.854	89.235	82.811	78.105	84.037	89.343	81.451	95.903
23:40	ZZZZZZ	79.884	89.089	83.446	78.296	83.916	89.279	82.233	94.868
23:45	ZZZZZZ	81.511	90.751	83.284	79.542	85.645	90.091	81.709	98.378
23:50	ZZZZZZ	80.692	89.057	83.117	78.003	83.288	89.442	81.838	96.802
23:55	ZZZZZZ	82.789	92.823	85.714	81.472	88.497	90.917	83.249	97.145
00:00	MA46497-CCVA13	92.317	93.046	93.08	88.547	88.195	96.795	92.73	99.415
00:05	MA46497-CCB13	93.677	94.655	94.844	91.272	92.901	97.892	94.1	97.529
00:10	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:15	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:20	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:25	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:30	MA46497-CCVA14	No results reported for the elements associated with this internal standard.							
00:35	MA46497-CCB14	No results reported for the elements associated with this internal standard.							
00:40	ZZZZZZ	97.546	98.127	99.927	95.085	95.445	102.44	97.806	102.357
00:45	ZZZZZZ	97.66	97.578	99.506	94.712	95.591	101.947	97.462	100.809
00:50	ZZZZZZ	98.623	97.893	100.491	95.122	95.583	102.931	98.082	101.682
00:55	ZZZZZZ	97.964	98.108	100.555	95.347	95.637	103.372	97.834	101.694
01:00	ZZZZZZ	98.197	98.271	100.774	95.15	96.077	102.778	97.749	101.033

! = Outside limits.

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	60-125 %	60-125 %
Istd#10	Germanium (74-3)	60-125 %	60-125 %
Istd#11	Rhodium (103-1)	60-125 %	60-125 %
Istd#12	Rhodium (103-2)	60-125 %	60-125 %
Istd#13	Rhodium (103-3)	60-125 %	60-125 %
Istd#14	Indium (115-1)	60-125 %	60-125 %
Istd#15	Indium (115-2)	60-125 %	60-125 %
Istd#16	Terbium (159-1)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
10:54	MA46497-STD1	100	100	100	100	100	100
10:59	MA46497-STD2	100	100	100	100	100	100
11:04	MA46497-STD3	100	100	100	100	100	100
11:09	MA46497-STD4	99.901	99.252	99.667	100.512	100.03	100.069
11:14	MA46497-STD5	100.898	101.343	100.444	100.81	101.757	100.575
11:19	MA46497-STD6	99.728	99.163	100.279	100.083	100.912	99.441
11:24	MA46497-STD7	96.491	98.406	100.538	96.976	100.321	97.435
11:29	MA46497-STD8	97.05	96.696	98.827	97.358	99.142	97.471
11:34	MA46497-STD9	98.013	98.122	98.403	97.725	99.118	97.533
11:39	MA46497-STD10	98.055	98.052	98.756	99.016	98.769	98.023
11:44	MA46497-STD11	98.778	97.338	98.616	98.898	95.518	94.809
11:49	MA46497-STD12	99.453	95.931	98.065	99.522	93.883	93.12
11:54	MA46497-STD13	100	100	100	100	100	100
12:02	MA46497-ICVA1	99.553	96.943	99.088	100.463	95.255	95.969
12:07	MA46497-ICV1	99.19	99.895	99.132	99.229	99.132	99.235
12:12	MA46497-ICB1	99.425	99.921	99.691	99.304	101	99.733
12:18	MA46497-CCVA1	97.832	96.854	98.66	98.219	95.234	94.803
12:22	MA46497-CCB1	98.304	100.06	99.518	98.444	100.02	98.814
12:28	MA46497-CRI1	98.739	99.797	100.429	98.994	100.964	99.149
12:33	MA46497-ICSA1	88.013	82.788	91.714	88.864	78.664	76.131
12:37	MA46497-ICSAB1	87.943	85.325	93.659	88.466	80.393	76.286
12:43	MA46497-CCVA2	97.397	100.221	102.908	97.671	99.352	95.519
12:48	MA46497-CCB2	98.184	102.821	101.329	98.65	104.038	99.881
12:54	ZZZZZZ	96.809	104.65	100.943	97.407	105.484	99.433
12:59	MP14051-B2	97.393	104.174	103.909	97.874	100.404	95.417
13:04	MP14051-S3	95.245	101.229	105.844	100.185	93.072	88.192
13:08	MP14051-S4	96.705	102.739	108.088	100.912	94.432	88.734
13:13	ZZZZZZ	96.65	103.978	109.446	100.683	96.802	89.852
13:18	MP14051-SD1	102.522	105.778	108.51	103.193	106.628	102.027
13:23	JC86039-2	95.384	103.39	108.087	100.609	96.08	88.889
13:28	MP14084-SD1	100.12	103.847	105.115	100.566	105.929	101.44
13:33	ZZZZZZ	97.881	105.685	104.712	98.497	100.686	94.55
13:38	MA46497-CCVA3	102.804	103.495	109.552	102.901	104.619	99.288

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
13:49	MA46497-CCB3	103.331	103.739	104.902	103.397	106.11	103.39
13:54	MP14051-MB1	101.864	107.215	105.418	102.206	106.294	101.238
13:59	ZZZZZZ	101.424	107.337	107.263	101.677	105.976	100.02
14:04	ZZZZZZ	99.571	98.279	104.332	100.652	90.224	86.897
14:09	ZZZZZZ	99.659	107.218	106.583	100.634	100.071	95.151
14:14	JC85988-1	103.457	99.937	107.928	105.75	93.356	91.963
14:19	MP14085-MB1	105.302	106.58	108.137	104.95	109.469	106.093
14:24	MP14085-B1	103.273	103.479	106.813	104.066	105.493	101.701
14:29	MP14085-B2	102.547	102.953	105.732	103.039	101.958	100.906
14:34	MP14085-S1	101.45	97.214	105.665	104.138	91.27	89.911
14:39	MP14085-S2	101.864	97.92	106.657	105.256	91.677	90.507
14:44	MA46497-CCVA4	102.736	102.184	106.163	103.2	101.917	99.692
14:49	MA46497-CCB4	102.768	105.584	106.243	102.968	106.259	103.092
14:54	MP14059A-MB1	99.237	107.248	105.99	99.994	105.008	99.499
14:59	MP14059A-B2	101.018	107.741	107.288	101.305	103.204	97.285
15:04	MP14059A-S3	100.19	105.452	110.119	103.778	97.686	92.17
15:09	ZZZZZZ	100.084	105.221	111.343	103.601	98.284	92.026
15:14	JC86095-4	101.721	106.534	111.755	104.601	100.599	94.119
15:19	MP14059A-SD1	106.445	105.827	109.508	106.662	107.558	104.687
15:24	MP14059A-S4	100.44	104.406	109.781	104.107	96.419	92.555
15:29	MP14084-B1	103.061	108.596	110.929	103.471	105.437	98.791
15:34	MP14084-S1	100.782	106.662	108.66	101.456	100.909	93.163
15:39	MP14084-S2	100.667	106.108	107.496	101.334	99.462	93.149
15:44	MA46497-CCVA5	104.794	102.892	108.579	105.331	103.451	100.363
15:49	MA46497-CCB5	104.307	104.749	106.168	104.844	106.616	103.92
15:54	JC85918-1	103.251	104.702	105.496	102.895	99.823	95.649
15:59	MP14084-PS1	99.542	103.172	106.597	99.693	97.936	92.747
16:04	MP14084-MB1	102.736	108.416	108.332	102.867	107.272	100.408
16:09	ZZZZZZ	102.872	109.492	108.738	102.527	107.324	100.7
16:14	ZZZZZZ	102.588	108.932	109.113	102.647	107.025	99.883
16:19	ZZZZZZ	101.544	107.968	107.389	101.536	106.823	99.496
16:24	ZZZZZZ	102.344	108.969	108.522	102.385	107.703	99.442
16:29	ZZZZZZ	100.957	103.96	107.397	101.841	96.579	91.948

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
16:34	ZZZZZZ	101.634	107.611	108.144	101.174	107.043	98.957
16:39	ZZZZZZ	98.198	101.444	104.386	98.557	92.818	87.97
16:44	MA46497-CCVA6	102.833	101.9	105.945	103.659	102.045	99.241
16:49	MA46497-CCB6	103.272	104.585	105.398	103.107	105.883	102.692
16:54	ZZZZZZ	100.792	106.967	106.125	101.01	106.395	98.994
17:03	ZZZZZZ	98.796	102.683	111.333	99.111	100.243	90.153
17:10	ZZZZZZ	99.797	106.746	104.966	100.222	104.02	98.247
17:15	ZZZZZZ	96.58	100.418	103.152	98.075	92.09	86.923
17:20	ZZZZZZ	101.983	106.765	105.922	100.773	105.432	98.537
17:25	MP14051-S3	98.235	102.634	105.213	100.051	98.152	93.652
17:30	MP14051-S4	97.854	102.334	105.2	99.406	98.026	93.21
17:35	ZZZZZZ	99.219	100.99	103.814	99.625	96.517	93.178
17:40	ZZZZZZ	98.049	103.873	103.662	98.944	102.509	96.892
17:45	MP14085-S1	99.419	100.318	104.737	100.126	97.973	94.36
17:50	MA46497-CCVA7	101.258	101.077	104.54	101.468	101.347	97.375
17:55	MA46497-CCB7	101.897	104.152	105.853	102.313	107.079	102.053
18:00	MP14085-S2	100.801	101.701	104.453	102.274	99.97	95.761
18:05	JC85988-1	101.069	102.142	104.945	101.825	100.684	96.385
18:10	ZZZZZZ	99.541	104.454	104.021	100.17	103.189	97.348
18:15	ZZZZZZ	100.03	104.463	104.475	100.956	105.206	98.787
18:20	ZZZZZZ	99.384	104.184	113.945	99.449	110.119	97.354
18:25	ZZZZZZ	99.71	103.348	104.98	99.397	103.904	98.639
18:30	ZZZZZZ	102.74	102.704	103.49	103.515	106.947	104.605
18:35	ZZZZZZ	97.785	101.382	104.781	96.687	103.896	95.485
18:40	ZZZZZZ	103.619	102.048	104.017	102.986	105.718	103.48
18:45	ZZZZZZ	101.075	103.988	105.003	100.358	106.297	99.962
18:50	MA46497-CCVA8	100.514	100.631	103.574	100.966	101.465	96.984
18:55	MA46497-CCB8	101.395	103.198	104.306	101.999	106.494	101.438
19:00	ZZZZZZ	98.193	105.826	104.018	98.843	105.623	98.127
19:05	ZZZZZZ	98.889	106.048	104.89	99.589	104.662	98.041
19:10	MP14115-B1	97.336	103.965	104.277	98.015	101.725	94.242
19:16	ZZZZZZ	97.782	105.235	103.538	98.106	103.924	96.333
19:21	ZZZZZZ	98.561	105.397	104.648	98.983	104.215	96.569

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
19:26	ZZZZZZ	102.391	103.253	104.832	102.543	107.88	102.569
19:31	ZZZZZZ	100.79	100.374	103.945	101.029	102.622	98.928
19:36	ZZZZZZ	101.73	105.72	103.985	102.111	106.786	101.378
19:41	ZZZZZZ	101.673	102.662	97.155	101.813	98.548	101.189
19:46	MP14115-MB1	97.679	104.662	102.898	98.47	103.031	96.456
19:52	MA46497-CCVA9	100.117	99.615	103.78	100.602	100.436	96.097
19:56	MA46497-CCB9	100.408	102.268	103.412	100.434	105.827	100.028
20:02	ZZZZZZ	94.072	103.44	101.647	94.757	94.406	87.887
20:07	MP14115-S1	97.072	101.444	102.447	97.845	97.161	92.624
20:12	MP14115-S2	95.92	100.576	101.051	96.162	96.893	91.7
20:17	JC86081-4	94.472	100.284	100.556	95.507	96.239	91.626
20:22	MP14115-SD1	96.499	100.056	100.876	96.881	102.302	95.527
20:27	ZZZZZZ	95.915	101.787	100.323	96.354	102.269	95.461
20:32	JC86089-1	93.634	102.06	100.414	94.361	98.129	90.73
20:38	JC86089-2	93.424	102.59	100.815	94.549	98.716	90.632
20:43	MP14114A-MB1	94.851	103.259	100.854	95.093	102.39	93.679
20:48	MP14114A-B2	94.707	102.331	101.869	94.704	96.649	90.877
20:53	MA46497-CCVA10	98.394	98.109	102.293	98.78	99.377	94.646
20:58	MA46497-CCB10	98.501	100.377	101.686	98.975	103.115	98.593
21:03	MP14114A-S3	92.169	94.903	117.242	111.063	82.581	78.237
21:08	MP14114A-S4	92.685	95.267	120.069	112.259	83.748	78.656
21:13	JC86125-1	92.233	95.315	117.735	110.36	83.621	79.025
21:18	MP14114A-SD1	97.037	97.592	104.242	101.721	95.099	93.234
21:23	ZZZZZZ	91.562	96.919	102.828	97.775	86.915	83.261
21:28	ZZZZZZ	96.952	100.711	107.001	100.827	100.807	92.95
21:33	ZZZZZZ	86.87	100.856	105.934	89.308	101.032	83.675
21:38	ZZZZZZ	93.004	95.581	123.84	115.152	83.61	78.882
21:43	ZZZZZZ	84.753	84.552	117.182	108.011	73.186	67.758 !a
21:50	ZZZZZZ	97.084	99.905	192.244 !a	179.772 !a	80.161	75.235
21:56	MA46497-CCVA11	95.888	95.167	99.389	96.337	95.192	93.448
22:02	MA46497-CCB11	96.154	97.148	92.103	96.299	94.99	97.247
22:09	ZZZZZZ	93.303	99.951	98.658	94.176	101.165	93.479
22:15	ZZZZZZ	88.207	90.549	112.401	105.94	78.799	75.205

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
22:20	ZZZZZZ	90.65	94.558	117.79	109.954	83.703	79.422
22:25	ZZZZZZ	89.771	94.207	96.541	90.668	87.663	83.483
22:30	ZZZZZZ	88.431	96.401	95.083	89.518	88.613	83.695
22:35	ZZZZZZ	86.532	89.829	94.598	88.55	79.858	75.756
22:40	ZZZZZZ	90.066	92.678	164.097	!a151.472	!a75.558	70.857
22:45	ZZZZZZ	88.467	104.392	102.116	95.331	86.16	81.225
22:50	ZZZZZZ	89.676	98.178	97.992	91.44	92.609	87.722
22:55	ZZZZZZ	97.025	101.175	210.848	!a195.149	!a80.549	75.861
23:00	MA46497-CCVA12	91.852	92.902	96.757	92.847	92.715	89.94
23:05	MA46497-CCB12	91.653	93.581	95.087	92.145	96.746	93.147
23:10	ZZZZZZ	86.737	89.463	123.161	115.693	77.109	72.834
23:15	ZZZZZZ	86.399	89.683	95.735	90.605	80.181	76.678
23:20	ZZZZZZ	79.171	79.022	87.989	80.229	71.39	65.049 !a
23:25	ZZZZZZ	88.86	96.233	95.988	89.799	89.888	85.073
23:30	ZZZZZZ	89.843	96.774	124.355	116.319	87.212	82.342
23:35	ZZZZZZ	87.365	93.18	108.223	100.9	84.447	79.85
23:40	ZZZZZZ	86.732	91.543	95.904	89.993	83.784	79.042
23:45	ZZZZZZ	88.36	94.437	114.196	106.823	84.663	80.899
23:50	ZZZZZZ	87.024	91.599	101.315	94.936	82.935	78.511
23:55	ZZZZZZ	87.85	94.125	97.805	92.581	87.513	83.138
00:00	MA46497-CCVA13	92.372	91.59	95.751	92.735	92.252	89.884
00:05	MA46497-CCB13	92.281	93.902	95.229	92.893	95.952	93.699
00:10	ZZZZZZ	No results reported for the elements associated with this internal standard.					
00:15	ZZZZZZ	No results reported for the elements associated with this internal standard.					
00:20	ZZZZZZ	No results reported for the elements associated with this internal standard.					
00:25	ZZZZZZ	No results reported for the elements associated with this internal standard.					
00:30	MA46497-CCVA14	No results reported for the elements associated with this internal standard.					
00:35	MA46497-CCB14	No results reported for the elements associated with this internal standard.					
00:40	ZZZZZZ	95.05	95.424	97.646	95.308	101.277	95.579
00:45	ZZZZZZ	94.717	95.682	97.233	95.048	99.613	94.932
00:50	ZZZZZZ	95.349	95.735	97.425	95.962	101.772	95.829
00:55	ZZZZZZ	94.696	95.949	97.8	95.856	101.408	95.487
01:00	ZZZZZZ	95.112	96.186	98.096	95.565	102.315	95.297

! = Outside limits.

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46497
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Se,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	60-125 %	60-125 %
Istd#18	Terbium (159-3)	60-125 %	60-125 %
Istd#19	Holmium (165-1)	60-125 %	60-125 %
Istd#20	Holmium (165-2)	60-125 %	60-125 %
Istd#21	Bismuth (209-1)	60-125 %	60-125 %
Istd#22	Bismuth (209-2)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA46497 Units: ug/l

Time:				12:12		12:22		12:48	
Sample ID:				ICB1		CCB1		CCB2	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28	20	-0.500	<25	-0.291	<25	1.26	<25
Antimony	2.0	.094	1.5						
Arsenic	0.50	.013	1.0	-0.00388	<1.5	0.0125	<1.5	0.0164	<1.5
Barium	1.0	.008	0.50	-0.000774	<1.0	0.0101	<1.0	0.00575	<1.0
Beryllium	0.50	.004	0.25						
Boron	25	.65	20						
Cadmium	0.50	.004	2.0	-0.00227	<3.0	0.00485	<3.0	0.0129	<3.0
Calcium	250	6.1	50						
Chromium	1.0	.014	3.0	0.00196	<4.0	0.0111	<4.0	0.0172	<4.0
Cobalt	0.50	.002	0.25						
Copper	2.0	.021	4.0	-0.000669	<5.0	0.00907	<5.0	0.0549	<5.0
Iron	25	.43	13	-1.08	<25	-0.457	<25	1.63	<25
Lead	0.50	.009	1.0	0.00361	<1.5	0.0133	<1.5	0.0138	<1.5
Magnesium	250	.15	130						
Manganese	1.0	.007	1.0						
Molybdenum	1.0	.015	0.50						
Nickel	1.0	.017	3.0						
Potassium	250	.71	50						
Selenium	0.50	.072	0.50	0.00259	<1.0	0.0494	<1.0	0.0352	<1.0
Silver	0.50	.004	0.50	0.00196	<1.0	0.0109	<1.0	0.0122	<1.0
Sodium	250	1	100						
Strontium	5.0	.003	5.0						
Thallium	0.50	.004	0.50						
Tin	5.0	.071	2.5						
Titanium	1.0	.035	1.0						
Vanadium	1.0	.009	1.0						
Zinc	5.0	.029	7.5						

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA46497 Units: ug/l

Time:				13:49		14:49		15:49	
Sample ID:				CCB3		CCB4		CCB5	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28	20	-0.136	<25	0.00661	<50	0.369	<25
Antimony	2.0	.094	1.5						
Arsenic	0.50	.013	1.0	0.00461	<0.50	0.0158	<1.0	0.0167	<1.5
Barium	1.0	.008	0.50	0.0112	<1.0	0.0160	<1.0	0.00774	<1.0
Beryllium	0.50	.004	0.25						
Boron	25	.65	20						
Cadmium	0.50	.004	2.0	0.000629	<0.50	0.00922	<0.50	0.00741	<3.0
Calcium	250	6.1	50						
Chromium	1.0	.014	3.0	0.00781	<1.0	0.0162	<4.0	0.0105	<4.0
Cobalt	0.50	.002	0.25						
Copper	2.0	.021	4.0	0.0272	<2.0	0.0370	<4.0	0.0372	<5.0
Iron	25	.43	13	-0.725	<25	0.207	<50	0.0601	<25
Lead	0.50	.009	1.0	0.00516	<0.50	0.0293	<0.50	0.0264	<1.5
Magnesium	250	.15	130						
Manganese	1.0	.007	1.0						
Molybdenum	1.0	.015	0.50						
Nickel	1.0	.017	3.0						
Potassium	250	.71	50						
Selenium	0.50	.072	0.50	-0.000107	<0.50	0.0455	<1.0	0.0956	<1.0
Silver	0.50	.004	0.50	0.00310	<0.50	0.0193	<2.0	0.0177	<1.0
Sodium	250	1	100						
Strontium	5.0	.003	5.0						
Thallium	0.50	.004	0.50						
Tin	5.0	.071	2.5						
Titanium	1.0	.035	1.0						
Vanadium	1.0	.009	1.0						
Zinc	5.0	.029	7.5						

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA46497 Units: ug/l

Time:				16:49		17:55		18:55	
Sample ID:				CCB6		CCB7		CCB8	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28	20	-0.0269	<25	0.602	<50	0.0495	<25
Antimony	2.0	.094	1.5						
Arsenic	0.50	.013	1.0	0.0217	<0.50	0.0133	<1.0	0.00747	<0.50
Barium	1.0	.008	0.50	0.0201	<1.0	0.0269	<1.0	0.0134	<1.0
Beryllium	0.50	.004	0.25						
Boron	25	.65	20						
Cadmium	0.50	.004	2.0	0.0101	<0.50	0.0104	<0.50	0.00379	<0.50
Calcium	250	6.1	50						
Chromium	1.0	.014	3.0	0.00901	<1.0	0.0298	<4.0	0.0124	<1.0
Cobalt	0.50	.002	0.25						
Copper	2.0	.021	4.0	0.0525	<2.0	0.0372	<4.0	0.0319	<2.0
Iron	25	.43	13	-0.121	<25	0.643	<50	-0.123	<25
Lead	0.50	.009	1.0	0.0177	<0.50	0.0256	<0.50	0.0169	<0.50
Magnesium	250	.15	130						
Manganese	1.0	.007	1.0						
Molybdenum	1.0	.015	0.50						
Nickel	1.0	.017	3.0						
Potassium	250	.71	50						
Selenium	0.50	.072	0.50	0.146	<0.50	0.0695	<1.0	0.0382	<0.50
Silver	0.50	.004	0.50	0.0153	<0.50	0.0210	<2.0	0.0168	<0.50
Sodium	250	1	100						
Strontium	5.0	.003	5.0						
Thallium	0.50	.004	0.50						
Tin	5.0	.071	2.5						
Titanium	1.0	.035	1.0						
Vanadium	1.0	.009	1.0						
Zinc	5.0	.029	7.5						

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA46497 Units: ug/l

Time:				19:56		20:58	
Sample ID:				CCB9		CCB10	
Metal	RL	IDL	LOD	raw	final	raw	final
Aluminum	25	.28	20	0.124	<25	0.111	<25
Antimony	2.0	.094	1.5				
Arsenic	0.50	.013	1.0	0.00383	<0.50	0.00647	<0.50
Barium	1.0	.008	0.50	0.0129	<1.0	0.0186	<1.0
Beryllium	0.50	.004	0.25				
Boron	25	.65	20				
Cadmium	0.50	.004	2.0	0.00380	<0.50	0.00991	<0.50
Calcium	250	6.1	50				
Chromium	1.0	.014	3.0	0.0121	<1.0	0.0140	<1.0
Cobalt	0.50	.002	0.25				
Copper	2.0	.021	4.0	0.0225	<2.0	0.0235	<2.0
Iron	25	.43	13	-0.151	<25	-0.0335	<25
Lead	0.50	.009	1.0	0.0178	<0.50	0.0204	<0.50
Magnesium	250	.15	130				
Manganese	1.0	.007	1.0				
Molybdenum	1.0	.015	0.50				
Nickel	1.0	.017	3.0				
Potassium	250	.71	50				
Selenium	0.50	.072	0.50	0.0469	<0.50	0.0658	<0.50
Silver	0.50	.004	0.50	0.0150	<0.50	0.0181	<0.50
Sodium	250	1	100				
Strontium	5.0	.003	5.0				
Thallium	0.50	.004	0.50				
Tin	5.0	.071	2.5				
Titanium	1.0	.035	1.0				
Vanadium	1.0	.009	1.0				
Zinc	5.0	.029	7.5				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA46497 Units: ug/l

Time:		12:02			12:07			12:18	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5500	5580	101.5	60	64.0	106.7	5000	5040	100.8
Antimony	anr								
Arsenic	60	58.5	97.5				50	48.5	97.0
Barium	60	61.1	101.8				50	50.2	100.4
Beryllium	anr								
Boron	anr								
Cadmium	60	57.7	96.2				50	48.8	97.6
Calcium	anr								
Chromium	60	57.8	96.3				50	49.5	99.0
Cobalt	anr								
Copper	60	56.3	93.8				50	48.3	96.6
Iron	5500	5470	99.5				5000	5050	101.0
Lead	60	61.4	102.3				50	50.9	101.8
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	260	260	100.0				200	199	99.5
Silver	60	59.4	99.0				50	50.1	100.2
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA46497 Units: ug/l

Time:		12:43			13:38			14:44	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4800	96.0	5000	4860	97.2	5000	4850	97.0
Antimony	anr								
Arsenic	50	50.9	101.8	50	50.0	100.0	50	49.4	98.8
Barium	50	49.1	98.2	50	50.3	100.6	50	50.5	101.0
Beryllium	anr								
Boron	anr								
Cadmium	50	49.6	99.2	50	49.4	98.8	50	49.2	98.4
Calcium	anr								
Chromium	50	51.0	102.0	50	50.5	101.0	50	49.7	99.4
Cobalt	anr								
Copper	50	51.0	102.0	50	49.7	99.4	50	48.4	96.8
Iron	5000	5230	104.6	5000	5120	102.4	5000	5030	100.6
Lead	50	50.8	101.6	50	50.4	100.8	50	50.6	101.2
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	200	197	98.5	200	197	98.5	200	199	99.5
Silver	50	49.4	98.8	50	49.7	99.4	50	49.8	99.6
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA46497 Units: ug/l

Time:		15:44			16:44			17:50	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4930	98.6	5000	4920	98.4	5000	4920	98.4
Antimony	anr								
Arsenic	50	49.6	99.2	50	48.9	97.8	50	49.2	98.4
Barium	50	50.3	100.6	50	50.5	101.0	50	50.9	101.8
Beryllium	anr								
Boron	anr								
Cadmium	50	49.3	98.6	50	49.0	98.0	50	49.0	98.0
Calcium	anr								
Chromium	50	49.9	99.8	50	49.4	98.8	50	49.5	99.0
Cobalt	anr								
Copper	50	48.3	96.6	50	47.7	95.4	50	48.0	96.0
Iron	5000	5110	102.2	5000	5030	100.6	5000	5090	101.8
Lead	50	50.6	101.2	50	50.3	100.6	50	50.3	100.6
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	200	198	99.0	200	198	99.0	200	199	99.5
Silver	50	49.3	98.6	50	49.3	98.6	50	49.5	99.0
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA46497 Units: ug/l

Time:		18:50			19:52			20:53	
Sample ID:	CCVA	CCVA8		CCVA	CCVA9		CCVA	CCVA10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4980	99.6	5000	4940	98.8	5000	4930	98.6
Antimony	anr								
Arsenic	50	49.4	98.8	50	48.6	97.2	50	48.4	96.8
Barium	50	50.7	101.4	50	50.4	100.8	50	50.2	100.4
Beryllium	anr								
Boron	anr								
Cadmium	50	49.0	98.0	50	49.0	98.0	50	48.9	97.8
Calcium	anr								
Chromium	50	49.9	99.8	50	49.3	98.6	50	48.7	97.4
Cobalt	anr								
Copper	50	48.2	96.4	50	47.1	94.2	50	46.8	93.6
Iron	5000	5150	103.0	5000	5100	102.0	5000	5050	101.0
Lead	50	50.1	100.2	50	50.1	100.2	50	50.2	100.4
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	200	199	99.5	200	200	100.0	200	199	99.5
Silver	50	49.2	98.4	50	48.9	97.8	50	49.0	98.0
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA46497 Units: ug/l

Time:			12:28	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	25.7	102.8
Antimony	2.0	0.25	anr	
Arsenic	0.50	0.50	0.530	106.0
Barium	1.0	0.50	1.03	103.0
Beryllium	0.50	0.25	anr	
Boron	25	2.5	anr	
Cadmium	0.50	0.25	0.490	98.0
Calcium	250	125	anr	
Chromium	1.0	2.0	1.01	101.0
Cobalt	0.50	0.25	anr	
Copper	2.0	2.0	2.07	103.5
Iron	25	25	25.8	103.2
Lead	0.50	0.25	0.505	101.0
Magnesium	250	125	anr	
Manganese	1.0	0.25	anr	
Molybdenum	1.0	0.50	anr	
Nickel	1.0	2.0	anr	
Potassium	250	125	anr	
Selenium	0.50	0.50	0.501	100.2
Silver	0.50	1.0	0.485	97.0
Sodium	250	125	anr	
Strontium	5.0	0.50		
Thallium	0.50	0.25	anr	
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0	anr	
Zinc	5.0	2.0	anr	

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041219M1L.CSV Date Analyzed: 04/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA46497 Units: ug/l

Time:			12:33		12:37	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	94800	94.8	91200	91.2
Antimony			0.115		0.180	
Arsenic		20	0.0843		18.4	92.0
Barium			0.144		0.229	
Beryllium			0.000612		0.000401	
Boron		50	0.781		46.1	92.2
Cadmium		20	-0.135		17.9	89.5
Calcium	100000	100000	97100	97.1	96700	96.7
Chromium		20	0.215		19.6	98.0
Cobalt		20	0.0611		18.7	93.5
Copper		20	0.288		17.6	88.0
Iron	100000	100000	90400	90.4	90100	90.1
Lead			0.103		0.0875	
Magnesium	100000	100000	91400	91.4	88100	88.1
Manganese		20	0.429		19.4	97.0
Molybdenum	2000	2000	2130	106.5	2170	108.5
Nickel		20	0.452		18.0	90.0
Potassium	100000	100000	98200	98.2	96700	96.7
Selenium		20	0.0492		18.9	94.5
Silver		20	0.0279		19.1	95.5
Sodium	100000	100000	92300	92.3	90500	90.5
Strontium	2000	2000	2070	103.5	2120	106.0
Thallium			0.00209		0.00168	
Tin	2000	2000	1880	94.0	1890	94.5
Titanium	2000	2000	1810	90.5	1780	89.0
Vanadium		20	0.00406		19.9	99.5
Zinc		20	0.559		16.7	83.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
Analyst: EAL Run ID: MA46511
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:15	MA46511-STD1	1		B=1.9897E-004, C=-4.0847E-002, RHO=0.9998854
11:16	MA46511-STD2	1		STDB
11:17	MA46511-STD3	1		STDC
11:19	MA46511-STD4	1		STDD
11:20	MA46511-STD5	1		STDE
11:22	MA46511-STD6	1		STDF
11:28	ZZZZZZ	1		
11:31	MA46511-ICV1	1		
11:33	MA46511-ICB1	1		
11:34	MA46511-CCV1	1		
11:36	MA46511-CCB1	1		
11:38	MA46511-CRI1	1		
12:35	MA46511-CCV2	1		
12:36	MA46511-CCB2	1		
12:38	ZZZZZZ	1		
12:39	MP14257-B1	1		
12:40	MP14257-S1	1		
12:42	MP14257-S2	1		
12:44	JC86320-4	1		(sample used for QC only; not part of login JC86089)
12:46	ZZZZZZ	1		
12:47	JC86089-1	1		
12:48	JC86089-1F	1		
12:50	JC86089-2	1		
12:51	MA46511-CCV3	1		
12:52	MA46511-CCB3	1		
12:54	JC86089-2F	1		
12:55	ZZZZZZ	1		
12:57	ZZZZZZ	1		
12:58	ZZZZZZ	1		
12:59	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:02	ZZZZZZ	1		
13:03	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
Analyst: EAL Run ID: MA46511
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:04	ZZZZZZ	1		
13:06	MA46511-CCV4	1		
13:07	MA46511-CCB4	1		
13:09	ZZZZZZ	1		
13:10	ZZZZZZ	1		
13:11	ZZZZZZ	1		
13:13	ZZZZZZ	1		
13:14	ZZZZZZ	1		
13:15	ZZZZZZ	1		
13:17	MP14258-MB1	1		
13:18	MP14258-B1	1		
13:19	MP14258-S1	1		
13:21	MA46511-CCV5	1		
13:23	MA46511-CCB5	1		
13:24	MP14258-S2	1		
13:26	JC86308-1F	1		(sample used for QC only; not part of login JC86089)
13:27	ZZZZZZ	1		
13:29	ZZZZZZ	1		
13:30	ZZZZZZ	1		
13:31	ZZZZZZ	1		
13:32	ZZZZZZ	1		
13:34	ZZZZZZ	1		
13:35	ZZZZZZ	1		
13:36	MA46511-CCV6	1		
13:38	MA46511-CCB6	1		
13:39	ZZZZZZ	1		
13:41	ZZZZZZ	1		
13:42	ZZZZZZ	1		
13:43	ZZZZZZ	1		
13:45	ZZZZZZ	1		
13:46	ZZZZZZ	1		
13:47	ZZZZZZ	1		
13:49	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
Analyst: EAL Run ID: MA46511
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:50	ZZZZZZ	1		
13:51	MA46511-CCV7	1		
13:53	MA46511-CCB7	1		
13:54	ZZZZZZ	1		
13:56	ZZZZZZ	1		
13:57	ZZZZZZ	1		
13:58	MP14259-MB1	1		
14:00	MP14259-B1	1		
14:01	MP14259-S1	1		
14:03	MP14259-S2	1		
14:04	JC86178-2	1		(sample used for QC only; not part of login JC86089)
14:06	ZZZZZZ	1		
14:07	MA46511-CCV8	1		
14:08	MA46511-CCB8	1		
14:10	ZZZZZZ	1		
14:12	ZZZZZZ	1		
14:13	ZZZZZZ	1		
14:14	ZZZZZZ	1		
14:15	ZZZZZZ	1		
14:17	ZZZZZZ	1		
14:18	ZZZZZZ	1		
14:19	ZZZZZZ	1		
14:21	ZZZZZZ	1		
14:22	MA46511-CCV9	1		
14:23	MA46511-CCB9	1		
14:25	ZZZZZZ	1		
14:26	ZZZZZZ	1		
14:28	ZZZZZZ	1		
14:29	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:32	ZZZZZZ	1		
14:33	ZZZZZZ	1		
14:34	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
Analyst: EAL Run ID: MA46511
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:36	ZZZZZZ	1		
14:37	MA46511-CCV10	1		
14:38	MA46511-CCB10	1		
14:40	MP14260-MB1	1		
14:41	MP14260-B1	1		
14:43	MP14260-S1	1		
14:44	MP14260-S2	1		
14:46	JC86178-24	1		(sample used for QC only; not part of login JC86089)
14:48	ZZZZZZ	1		
14:49	ZZZZZZ	1		
14:50	ZZZZZZ	1		
14:52	ZZZZZZ	1		
14:53	MA46511-CCV11	1		
14:55	MA46511-CCB11	1		
14:56	ZZZZZZ	1		
14:58	ZZZZZZ	1		
14:59	ZZZZZZ	1		
15:00	ZZZZZZ	1		
15:02	ZZZZZZ	1		
15:03	ZZZZZZ	1		
15:04	ZZZZZZ	1		
15:06	ZZZZZZ	1		
15:07	ZZZZZZ	1		
15:08	MA46511-CCV12	1		
15:10	MA46511-CCB12	1		
15:11	ZZZZZZ	1		
15:13	ZZZZZZ	1		
15:14	ZZZZZZ	1		
15:15	ZZZZZZ	1		
15:16	ZZZZZZ	1		
15:18	ZZZZZZ	1		
15:19	ZZZZZZ	1		
15:21	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
Analyst: EAL Run ID: MA46511
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:22	MA46511-CCV13	1		
15:24	MA46511-CCB13	1		
15:26	ZZZZZZ	1		
15:28	ZZZZZZ	1		
15:29	ZZZZZZ	1		
15:31	MP14257-MB1	1		
---------->	Last reportable sample/prep for job JC86089			
15:33	MA46511-CRI2	1		
15:34	MA46511-CCV14	1		
15:35	MA46511-CCB14	1		
---------->	Last reportable CCB for job JC86089			
	Refer to raw data for calibration curve and standards.			

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
Analyst: EAL Run ID: MA46511
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
11:28	ZZZZZZ	1		
11:31	MA46511-ICV1	1	X	
11:33	MA46511-ICB1	1	X	
11:34	MA46511-CCV1	1	X	
11:36	MA46511-CCB1	1	X	
11:38	MA46511-CRI1	1	X	
12:35	MA46511-CCV2	1	X	
12:36	MA46511-CCB2	1	X	
12:38	ZZZZZZ	1		
12:39	MP14257-B1	1	X	
12:40	MP14257-S1	1	X	
12:42	MP14257-S2	1	X	
12:44	JC86320-4	1	X	(a)
12:46	ZZZZZZ	1		
12:47	JC86089-1	1	X	
12:48	JC86089-1F	1	X	
12:50	JC86089-2	1	X	
12:51	MA46511-CCV3	1	X	
12:52	MA46511-CCB3	1	X	
12:54	JC86089-2F	1	X	
12:55	ZZZZZZ	1		
12:57	ZZZZZZ	1		
12:58	ZZZZZZ	1		
12:59	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:02	ZZZZZZ	1		
13:03	ZZZZZZ	1		
13:04	ZZZZZZ	1		
13:06	MA46511-CCV4	1	X	
13:07	MA46511-CCB4	1	X	
13:09	ZZZZZZ	1		
13:10	ZZZZZZ	1		
13:11	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
Analyst: EAL Run ID: MA46511
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
13:13	ZZZZZZ	1		
13:14	ZZZZZZ	1		
13:15	ZZZZZZ	1		
13:17	MP14258-MB1	1	X	
13:18	MP14258-B1	1	X	
13:19	MP14258-S1	1	X	
13:21	MA46511-CCV5	1	X	
13:23	MA46511-CCB5	1	X	
13:24	MP14258-S2	1	X	
13:26	JC86308-1F	1	X	(a)
13:27	ZZZZZZ	1		
13:29	ZZZZZZ	1		
13:30	ZZZZZZ	1		
13:31	ZZZZZZ	1		
13:32	ZZZZZZ	1		
13:34	ZZZZZZ	1		
13:35	ZZZZZZ	1		
13:36	MA46511-CCV6	1	X	
13:38	MA46511-CCB6	1	X	
13:39	ZZZZZZ	1		
13:41	ZZZZZZ	1		
13:42	ZZZZZZ	1		
13:43	ZZZZZZ	1		
13:45	ZZZZZZ	1		
13:46	ZZZZZZ	1		
13:47	ZZZZZZ	1		
13:49	ZZZZZZ	1		
13:50	ZZZZZZ	1		
13:51	MA46511-CCV7	1	X	
13:53	MA46511-CCB7	1	X	
13:54	ZZZZZZ	1		
13:56	ZZZZZZ	1		
13:57	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
Analyst: EAL Run ID: MA46511
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
13:58	MP14259-MB1	1	X	
14:00	MP14259-B1	1	X	
14:01	MP14259-S1	1	X	
14:03	MP14259-S2	1	X	
14:04	JC86178-2	1	X	(a)
14:06	ZZZZZZ	1		
14:07	MA46511-CCV8	1	X	
14:08	MA46511-CCB8	1	X	
14:10	ZZZZZZ	1		
14:12	ZZZZZZ	1		
14:13	ZZZZZZ	1		
14:14	ZZZZZZ	1		
14:15	ZZZZZZ	1		
14:17	ZZZZZZ	1		
14:18	ZZZZZZ	1		
14:19	ZZZZZZ	1		
14:21	ZZZZZZ	1		
14:22	MA46511-CCV9	1	X	
14:23	MA46511-CCB9	1	X	
14:25	ZZZZZZ	1		
14:26	ZZZZZZ	1		
14:28	ZZZZZZ	1		
14:29	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:32	ZZZZZZ	1		
14:33	ZZZZZZ	1		
14:34	ZZZZZZ	1		
14:36	ZZZZZZ	1		
14:37	MA46511-CCV10	1	X	
14:38	MA46511-CCB10	1	X	
14:40	MP14260-MB1	1	X	
14:41	MP14260-B1	1	X	
14:43	MP14260-S1	1	X	
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
Analyst: EAL Run ID: MA46511
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
14:44	MP14260-S2	1	X	
14:46	JC86178-24	1	X	(a)
14:48	ZZZZZZ	1		
14:49	ZZZZZZ	1		
14:50	ZZZZZZ	1		
14:52	ZZZZZZ	1		
14:53	MA46511-CCV11	1	X	
14:55	MA46511-CCB11	1	X	
14:56	ZZZZZZ	1		
14:58	ZZZZZZ	1		
14:59	ZZZZZZ	1		
15:00	ZZZZZZ	1		
15:02	ZZZZZZ	1		
15:03	ZZZZZZ	1		
15:04	ZZZZZZ	1		
15:06	ZZZZZZ	1		
15:07	ZZZZZZ	1		
15:08	MA46511-CCV12	1	X	
15:10	MA46511-CCB12	1	X	
15:11	ZZZZZZ	1		
15:13	ZZZZZZ	1		
15:14	ZZZZZZ	1		
15:15	ZZZZZZ	1		
15:16	ZZZZZZ	1		
15:18	ZZZZZZ	1		
15:19	ZZZZZZ	1		
15:21	ZZZZZZ	1		
15:22	MA46511-CCV13	1	X	
15:24	MA46511-CCB13	1	X	
15:26	ZZZZZZ	1		
15:28	ZZZZZZ	1		
15:29	ZZZZZZ	1		
15:31	MP14257-MB1	1	X	
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
Analyst: EAL Run ID: MA46511
Parameters: Hg

Time	Sample Description	Dilution	Element: Hg
15:33	MA46511-CRI2	1	X
15:34	MA46511-CCV14	1	X
15:35	MA46511-CCB14	1	X

(a) Sample used for QC only; not part of login JC86089.

Element: Hg

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA46511 Units: ug/l

Time:			11:33		11:36		12:36		12:52	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.02	-0.0393	<0.20	-0.0321	<0.20	-0.0211	<0.20	-0.0130	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA46511 Units: ug/l

Time:			13:07		13:23		13:38		13:53	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.02	-0.0211	<0.20	-0.0152	<0.20	-0.0192	<0.20	-0.0198	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA46511 Units: ug/l

Time:			14:08		14:23		14:38		14:55	
Sample ID:			CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.02	-0.0178	<0.20	-0.0213	<0.20	-0.0223	<0.20	-0.0249	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA46511 Units: ug/l

Time:			15:10		15:24		15:35	
Sample ID:			CCB12		CCB13		CCB14	
Metal	RL	IDL	raw	final	raw	final	raw	final
Mercury	0.20	.02	-0.0219	<0.20	-0.0219	<0.20	-0.0182	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA46511 Units: ug/l

Time:		11:31			11:34			12:35	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	2.76	92.0	2.5	2.57	102.8	2.5	2.52	100.8

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA46511 Units: ug/l

Time:		12:51			13:06			13:21	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.58	103.2	2.5	2.58	103.2	2.5	2.57	102.8

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA46511 Units: ug/l

Time:		13:36			13:51			14:07	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.58	103.2	2.5	2.55	102.0	2.5	2.56	102.4

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA46511 Units: ug/l

Time:		14:22			14:37			14:53	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.48	99.2	2.5	2.53	101.2	2.5	2.56	102.4

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA46511 Units: ug/l

Time:		15:08			15:22			15:34	
Sample ID:	CCV	CCV12		CCV	CCV13		CCV	CCV14	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.55	102.0	2.5	2.44	97.6	2.5	2.49	99.6

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: H8041619W1.CSV Date Analyzed: 04/16/19 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA46511 Units: ug/l

Time:			11:38		15:33	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Mercury	0.20		0.196	98.0	0.222	111.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:52	MA46517-STD1	1		STDA
09:57	MA46517-STD2	1		STDA
10:02	MA46517-STD3	1		STDA
10:06	MA46517-STD4	1		STDB
10:20	MA46517-STD5	1		STDC
10:25	MA46517-STD6	1		STDD
10:30	MA46517-STD7	1		STDE
10:35	MA46517-STD8	1		STDF
10:40	MA46517-STD9	1		STDG
10:44	MA46517-STD10	1		STDH
10:49	MA46517-STD11	1		STDI
10:54	MA46517-STD12	1		STDJ
10:59	MA46517-STD13	1		STDA
11:03	ZZZZZZ	1		
11:09	MA46517-ICV1	1		60ppb Al.
11:14	MA46517-ICB1	1		
11:19	MA46517-CCVA1	1		
11:24	MA46517-CCB1	1		
11:28	MA46517-CRI1	1		See rerun
11:34	MA46517-CRI2	1		
11:39	MA46517-ICSA1	1		
11:44	MA46517-ICSAB1	1		
11:50	MA46517-ICSA2	1		
11:55	ZZZZZZ	1		
12:00	MA46517-CCVA2	1		
12:05	MA46517-CCB2	1		
12:09	ZZZZZZ	2		
12:14	ZZZZZZ	2		
12:19	ZZZZZZ	2		
12:24	MP14115-S1	10		
12:28	MP14115-S2	10		
12:33	ZZZZZZ	2		
12:38	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:43	MP14185A-B2	2		Batch to reanalysis for Se, calibration issues.
12:48	ZZZZZZ	2		
12:52	MA46517-CCVA3	1		
12:57	MA46517-CCB3	1		
13:02	ZZZZZZ	1		
13:07	ZZZZZZ	1		
13:11	ZZZZZZ	1		
13:19	ZZZZZZ	1		
13:24	MA46517-CCVA4	1		
13:29	MA46517-CCB4	1		
13:34	MP14185A-MB1	2		
13:39	MP14185A-S3	2		
13:43	MP14185A-S4	2		
13:48	ZZZZZZ	2		
13:53	JC85901-2	2		(sample used for QC only; not part of login JC86089)
13:58	MP14185A-SD1	10		
14:03	JC86089-1F	2		
14:08	JC86089-2F	2		
---------->	Last reportable sample/prep for job JC86089			
14:12	MP14051-S3	100		
14:17	MA46517-CCVA5	1		
14:22	MA46517-CCB5	1		
---------->	Last reportable CCB for job JC86089			
14:27	ZZZZZZ	5		
14:32	ZZZZZZ	5		
14:36	ZZZZZZ	2		
14:41	ZZZZZZ	2		
14:46	ZZZZZZ	2		
14:59	ZZZZZZ	2		
15:03	MA46517-CCVA6	1		
15:08	MA46517-CCB6	1		
15:13	MP14051-S4	100		
15:18	JC86039-2	100		(sample used for QC only; not part of login JC86089)
15:22	MP14051-SD1	500		
15:27	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:32	MP14059A-S3	10		
15:37	MP14059A-S4	10		
15:42	MA46517-CCVA7	1		
15:46	MA46517-CCB7	1		
15:57	ZZZZZZ	2		
16:02	JC86095-4	10		(sample used for QC only; not part of login JC86089)
16:07	MP14059A-SD1	50		
16:11	ZZZZZZ	2		
16:16	ZZZZZZ	2		
16:21	ZZZZZZ	10		
16:26	ZZZZZZ	2		
16:30	ZZZZZZ	2		
16:35	ZZZZZZ	2		
16:40	ZZZZZZ	2		
16:45	MA46517-CCVA8	1		
16:49	MA46517-CCB8	1		
16:54	ZZZZZZ	2		
16:59	ZZZZZZ	2		
17:04	ZZZZZZ	2		
17:08	ZZZZZZ	2		
17:13	ZZZZZZ	2		
17:18	ZZZZZZ	2		
17:23	ZZZZZZ	2		
17:28	ZZZZZZ	2		
17:32	ZZZZZZ	2		
17:37	MA46517-CCVA9	1		
17:42	MA46517-CCB9	1		
17:47	MP14142A-MB1	2		
17:51	MP14142A-B2	2		
17:56	MP14142A-S3	2		
18:01	MP14142A-S4	2		
18:06	JC86215-1	2		(sample used for QC only; not part of login JC86089)
18:11	MP14142A-SD1	10		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:15	ZZZZZZ	2		
18:20	ZZZZZZ	2		
18:25	ZZZZZZ	2		
18:30	MA46517-CCVA10	1		
18:34	MA46517-CCB10	1		
18:39	ZZZZZZ	2		
18:44	ZZZZZZ	2		
18:49	ZZZZZZ	2		
18:53	ZZZZZZ	2		
18:58	ZZZZZZ	2		
19:03	ZZZZZZ	2		
19:08	ZZZZZZ	2		
19:13	ZZZZZZ	2		
19:17	ZZZZZZ	2		
19:22	MA46517-CCVA11	1		
19:27	MA46517-CCB11	1		
19:32	ZZZZZZ	2		
19:36	ZZZZZZ	2		
19:41	ZZZZZZ	2		
19:46	ZZZZZZ	2		
19:51	ZZZZZZ	2		
19:56	ZZZZZZ	2		
20:00	ZZZZZZ	2		
20:05	ZZZZZZ	2		
20:10	ZZZZZZ	1		
20:15	ZZZZZZ	1		
20:19	MA46517-CCVA12	1		
20:24	MA46517-CCB12	1		
20:29	MP14218-S3	10		
20:34	JC86162-111	10		(sample used for QC only; not part of login JC86089)
20:39	MP14247-MB1	1		(Will raise RL on Ba. Samples high)
20:43	MP14247-B1	1		
20:48	MP14247-S1	1		Ba overrange

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:53	MP14247-S2	1		Ba overrange
20:58	JC86317-4	1		(sample used for QC only; not part of login JC86089)
21:03	ZZZZZZ	1		
21:07	ZZZZZZ	1		
21:12	MA46517-CCVA13	1		
21:17	MA46517-CCB13	1		
21:22	ZZZZZZ	1		
21:26	ZZZZZZ	1		
21:31	ZZZZZZ	1		
21:36	ZZZZZZ	1		
21:41	ZZZZZZ	1		
21:45	ZZZZZZ	1		
21:50	ZZZZZZ	1		
21:55	MP14222-MB1	1		
22:00	MP14222-B1	1		
22:04	MA46517-CCVA14	1		FE out
22:09	MA46517-CCB14	1		
22:14	MP14222-S1	1		
22:19	MP14222-S2	1		
22:23	JC86264-42	1		(sample used for QC only; not part of login JC86089)
22:28	MP14222-S3	1		
22:33	JC86264-43	1		(sample used for QC only; not part of login JC86089)
22:38	ZZZZZZ	1		
22:42	ZZZZZZ	1		
22:47	ZZZZZZ	1		
22:52	ZZZZZZ	1		
22:57	ZZZZZZ	1		
23:02	MA46517-CCVA15	1		
23:06	MA46517-CCB15	1		
23:11	ZZZZZZ	1		
23:16	ZZZZZZ	1		
23:21	ZZZZZZ	1		
23:25	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:30	ZZZZZZ	1		
23:35	ZZZZZZ	1		
23:40	ZZZZZZ	1		
23:44	ZZZZZZ	1		
23:49	ZZZZZZ	1		
23:54	ZZZZZZ	1		
23:59	MA46517-CCVA16	1		
00:04	MA46517-CCB16	1		
00:08	ZZZZZZ	1		
00:13	ZZZZZZ	1		
00:18	ZZZZZZ	1		
00:23	MP14223-MB1	1		
00:27	MP14223-B1	1		
00:32	MP14223-S1	1		
00:37	MP14223-S2	1		
00:42	JC86264-63	1		(sample used for QC only; not part of login JC86089)
00:46	MP14223-S3	1		overrange
00:51	JC86264-64	1		(sample used for QC only; not part of login JC86089)
00:56	MA46517-CCVA17	1		
01:01	MA46517-CCB17	1		
01:06	ZZZZZZ	1		
01:10	ZZZZZZ	1		
01:15	ZZZZZZ	1		
01:20	ZZZZZZ	1		
01:25	ZZZZZZ	1		
01:29	ZZZZZZ	1		
01:34	ZZZZZZ	1		
01:39	ZZZZZZ	1		
01:44	ZZZZZZ	1		
01:48	ZZZZZZ	1		
01:53	MA46517-CCVA18	1		
01:58	MA46517-CCB18	1		
02:03	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
02:08	ZZZZZZ	1		
02:12	ZZZZZZ	1		
02:17	ZZZZZZ	1		
02:22	ZZZZZZ	1		
02:27	ZZZZZZ	1		
02:31	ZZZZZZ	1		
02:36	ZZZZZZ	1		
02:41	MP14224-MB1	1		
02:46	MP14224-B1	1		
02:51	MA46517-CCVA19	1		
02:55	MA46517-CCB19	1		
03:00	MP14224-S1	1		
03:05	MP14224-S2	1		
03:10	JC86264-83	1		(sample used for QC only; not part of login JC86089)
03:15	MP14224-S3	1		
03:19	JC86264-84	1		(sample used for QC only; not part of login JC86089)
03:24	ZZZZZZ	1		
03:29	ZZZZZZ	1		
03:34	ZZZZZZ	1		
03:38	ZZZZZZ	1		
03:43	ZZZZZZ	1		
03:48	MA46517-CCVA20	1		
03:53	MA46517-CCB20	1		
03:58	ZZZZZZ	1		
04:02	ZZZZZZ	1		
04:07	ZZZZZZ	1		
04:12	ZZZZZZ	1		
04:17	ZZZZZZ	1		
04:21	ZZZZZZ	1		
04:26	ZZZZZZ	1		
04:31	ZZZZZZ	1		
04:36	ZZZZZZ	1		
04:40	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
04:45	MA46517-CCVA21	1		
04:50	MA46517-CCB21	1		
04:55	ZZZZZZ	1		
05:00	ZZZZZZ	1		
05:04	ZZZZZZ	1		
05:09	ZZZZZZ	1		
05:14	ZZZZZZ	1		
05:19	ZZZZZZ	1		
05:23	ZZZZZZ	1		
05:28	MA46517-CCVA22	1		
05:33	MA46517-CCB22	1		
05:38	ZZZZZZ	1		
05:43	ZZZZZZ	1		
05:47	ZZZZZZ	1		
05:52	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag
11:03	ZZZZZZ	1									
11:09	MA46517-ICV1	1	X								
11:14	MA46517-ICB1	1	X	X	X	X	X	X	X	X	X
11:19	MA46517-CCVA1	1	X	X	X	X	X	X	X	X	X
11:24	MA46517-CCB1	1	X	X	X	X	X	X	X	X	X
11:28	MA46517-CRI1	1	See	rerun							
11:34	MA46517-CRI2	1	X	X	X	X	X	X	X	X	X
11:39	MA46517-ICSA1	1									
11:44	MA46517-ICSAB1	1	X	X	X	X	X	X	X	X	X
11:50	MA46517-ICSA2	1	X	X	X	X	X	X	X	X	X
11:55	ZZZZZZ	1									
12:00	MA46517-CCVA2	1	X	X	X	X	X	X	X	X	X
12:05	MA46517-CCB2	1	X	X	X	X	X	X	X	X	X
12:09	ZZZZZZ	2									
12:14	ZZZZZZ	2									
12:19	ZZZZZZ	2									
12:24	MP14115-S1	10			X						
12:28	MP14115-S2	10			X						
12:33	ZZZZZZ	2									
12:38	ZZZZZZ	2									
12:43	MP14185A-B2	2	X	X	X	X	X	X	X	X	X
12:48	ZZZZZZ	2									
12:52	MA46517-CCVA3	1	X	X	X	X	X	X	X	X	X
12:57	MA46517-CCB3	1	X	X	X	X	X	X	X	X	X
13:02	ZZZZZZ	1									
13:07	ZZZZZZ	1									
13:11	ZZZZZZ	1									
13:19	ZZZZZZ	1									
13:24	MA46517-CCVA4	1	X	X	X	X	X	X	X	X	X
13:29	MA46517-CCB4	1	X	X	X	X	X	X	X	X	X
13:34	MP14185A-MB1	2	X	X	X	X	X	X	X	X	X
13:39	MP14185A-S3	2	X	X	X	X	X	X	X	X	X
13:43	MP14185A-S4	2	X	X	X	X	X	X	X	X	X
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	
13:48	ZZZZZZ	2										
13:53	JC85901-2	2		X								(a)
13:58	MP14185A-SD1	10	X	X	X	X	X	X	X	X	X	
14:03	JC86089-1F	2	X	X	X	X	X	X	X	X	X	
14:08	JC86089-2F	2	X	X	X	X	X	X	X	X	X	
14:12	MP14051-S3	100										
14:17	MA46517-CCVA5	1	X	X	X	X	X	X	X	X	X	
14:22	MA46517-CCB5	1	X	X	X	X	X	X	X	X	X	
14:27	ZZZZZZ	5										
14:32	ZZZZZZ	5										
14:36	ZZZZZZ	2										
14:41	ZZZZZZ	2										
14:46	ZZZZZZ	2										
14:59	ZZZZZZ	2										
15:03	MA46517-CCVA6	1	X	X	X	X	X	X	X	X	X	
15:08	MA46517-CCB6	1	X	X	X	X	X	X	X	X	X	
15:13	MP14051-S4	100										
15:18	JC86039-2	100										(a)
15:22	MP14051-SD1	500										
15:27	ZZZZZZ	2										
15:32	MP14059A-S3	10										
15:37	MP14059A-S4	10										
15:42	MA46517-CCVA7	1	X	X	X	X	X	X	X	X	X	
15:46	MA46517-CCB7	1	X	X	X	X	X	X	X	X	X	
15:57	ZZZZZZ	2										
16:02	JC86095-4	10										(a)
16:07	MP14059A-SD1	50										
16:11	ZZZZZZ	2										
16:16	ZZZZZZ	2										
16:21	ZZZZZZ	10										
16:26	ZZZZZZ	2										
16:30	ZZZZZZ	2										
16:35	ZZZZZZ	2										
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	
16:40	ZZZZZZ	2										
16:45	MA46517-CCVA8	1	X	X	X	X	X	X	X	X	X	
16:49	MA46517-CCB8	1	X	X	X	X	X	X	X	X	X	
16:54	ZZZZZZ	2										
16:59	ZZZZZZ	2										
17:04	ZZZZZZ	2										
17:08	ZZZZZZ	2										
17:13	ZZZZZZ	2										
17:18	ZZZZZZ	2										
17:23	ZZZZZZ	2										
17:28	ZZZZZZ	2										
17:32	ZZZZZZ	2										
17:37	MA46517-CCVA9	1	X	X	X	X	X	X	X	X	X	
17:42	MA46517-CCB9	1	X	X	X	X	X	X	X	X	X	
17:47	MP14142A-MB1	2		X								
17:51	MP14142A-B2	2		X								
17:56	MP14142A-S3	2		X								
18:01	MP14142A-S4	2		X								
18:06	JC86215-1	2		X								(a)
18:11	MP14142A-SD1	10		X								
18:15	ZZZZZZ	2										
18:20	ZZZZZZ	2										
18:25	ZZZZZZ	2										
18:30	MA46517-CCVA10	1	X	X	X	X	X	X	X	X	X	
18:34	MA46517-CCB10	1	X	X	X	X	X	X	X	X	X	
18:39	ZZZZZZ	2										
18:44	ZZZZZZ	2										
18:49	ZZZZZZ	2										
18:53	ZZZZZZ	2										
18:58	ZZZZZZ	2										
19:03	ZZZZZZ	2										
19:08	ZZZZZZ	2										
19:13	ZZZZZZ	2										
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	
19:17	ZZZZZZ	2										
19:22	MA46517-CCVA11	1	X	X	X	X	X	X	X	X	X	
19:27	MA46517-CCB11	1	X	X	X	X	X	X	X	X	X	
19:32	ZZZZZZ	2										
19:36	ZZZZZZ	2										
19:41	ZZZZZZ	2										
19:46	ZZZZZZ	2										
19:51	ZZZZZZ	2										
19:56	ZZZZZZ	2										
20:00	ZZZZZZ	2										
20:05	ZZZZZZ	2										
20:10	ZZZZZZ	1										
20:15	ZZZZZZ	1										
20:19	MA46517-CCVA12	1	X	X	X	X	X	X	X	X	X	
20:24	MA46517-CCB12	1	X	X	X	X	X	X	X	X	X	
20:29	MP14218-S3	10								X		
20:34	JC86162-111	10								X		(a)
20:39	MP14247-MB1	1		X				X				
20:43	MP14247-B1	1		X	X			X				
20:48	MP14247-S1	1		X				X				
20:53	MP14247-S2	1		X				X				
20:58	JC86317-4	1						X				(a)
21:03	ZZZZZZ	1										
21:07	ZZZZZZ	1										
21:12	MA46517-CCVA13	1	X	X	X	X	X	X	X	X	X	
21:17	MA46517-CCB13	1	X	X	X	X	X	X	X	X	X	
21:22	ZZZZZZ	1										
21:26	ZZZZZZ	1										
21:31	ZZZZZZ	1										
21:36	ZZZZZZ	1										
21:41	ZZZZZZ	1										
21:45	ZZZZZZ	1										
21:50	ZZZZZZ	1										
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	
21:55	MP14222-MB1	1								X		
22:00	MP14222-B1	1								X		
22:04	MA46517-CCVA14	1	X	X	X	X	X	X	X	X	X	
22:09	MA46517-CCB14	1	X	X	X	X	X	X	X	X	X	
22:14	MP14222-S1	1								X		
22:19	MP14222-S2	1								X		
22:23	JC86264-42	1								X		(a)
22:28	MP14222-S3	1								X		
22:33	JC86264-43	1								X		(a)
22:38	ZZZZZZ	1										
22:42	ZZZZZZ	1										
22:47	ZZZZZZ	1										
22:52	ZZZZZZ	1										
22:57	ZZZZZZ	1										
23:02	MA46517-CCVA15	1			X					X	X	
23:06	MA46517-CCB15	1			X					X	X	
23:11	ZZZZZZ	1										
23:16	ZZZZZZ	1										
23:21	ZZZZZZ	1										
23:25	ZZZZZZ	1										
23:30	ZZZZZZ	1										
23:35	ZZZZZZ	1										
23:40	ZZZZZZ	1										
23:44	ZZZZZZ	1										
23:49	ZZZZZZ	1										
23:54	ZZZZZZ	1										
23:59	MA46517-CCVA16	1			X					X	X	
00:04	MA46517-CCB16	1			X					X	X	
00:08	ZZZZZZ	1										
00:13	ZZZZZZ	1										
00:18	ZZZZZZ	1										
00:23	MP14223-MB1	1								X		
00:27	MP14223-B1	1								X		
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	
00:32	MP14223-S1	1								X		
00:37	MP14223-S2	1								X		
00:42	JC86264-63	1								X		(a)
00:46	MP14223-S3	1	overrange									
00:51	JC86264-64	1								X		(a)
00:56	MA46517-CCVA17	1			X					X	X	
01:01	MA46517-CCB17	1			X					X	X	
01:06	ZZZZZZ	1										
01:10	ZZZZZZ	1										
01:15	ZZZZZZ	1										
01:20	ZZZZZZ	1										
01:25	ZZZZZZ	1										
01:29	ZZZZZZ	1										
01:34	ZZZZZZ	1										
01:39	ZZZZZZ	1										
01:44	ZZZZZZ	1										
01:48	ZZZZZZ	1										
01:53	MA46517-CCVA18	1			X					X	X	
01:58	MA46517-CCB18	1			X					X	X	
02:03	ZZZZZZ	1										
02:08	ZZZZZZ	1										
02:12	ZZZZZZ	1										
02:17	ZZZZZZ	1										
02:22	ZZZZZZ	1										
02:27	ZZZZZZ	1										
02:31	ZZZZZZ	1										
02:36	ZZZZZZ	1										
02:41	MP14224-MB1	1								X		
02:46	MP14224-B1	1								X		
02:51	MA46517-CCVA19	1			X					X	X	
02:55	MA46517-CCB19	1			X					X	X	
03:00	MP14224-S1	1								X		
03:05	MP14224-S2	1								X		
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	
03:10	JC86264-83	1								X		(a)
03:15	MP14224-S3	1								X		
03:19	JC86264-84	1								X		(a)
03:24	ZZZZZZ	1										
03:29	ZZZZZZ	1										
03:34	ZZZZZZ	1										
03:38	ZZZZZZ	1										
03:43	ZZZZZZ	1										
03:48	MA46517-CCVA20	1			X					X	X	
03:53	MA46517-CCB20	1			X					X	X	
03:58	ZZZZZZ	1										
04:02	ZZZZZZ	1										
04:07	ZZZZZZ	1										
04:12	ZZZZZZ	1										
04:17	ZZZZZZ	1										
04:21	ZZZZZZ	1										
04:26	ZZZZZZ	1										
04:31	ZZZZZZ	1										
04:36	ZZZZZZ	1										
04:40	ZZZZZZ	1										
04:45	MA46517-CCVA21	1			X					X	X	
04:50	MA46517-CCB21	1			X					X	X	
04:55	ZZZZZZ	1										
05:00	ZZZZZZ	1										
05:04	ZZZZZZ	1										
05:09	ZZZZZZ	1										
05:14	ZZZZZZ	1										
05:19	ZZZZZZ	1										
05:23	ZZZZZZ	1										
05:28	MA46517-CCVA22	1			X					X	X	
05:33	MA46517-CCB22	1			X					X	X	
05:38	ZZZZZZ	1										
05:43	ZZZZZZ	1										
		Element:	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag	

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Element: Dilution	Al	As	Ba	Cd	Cr	Cu	Fe	Pb	Ag
05:47	ZZZZZZ	1									
05:52	ZZZZZZ	1									

(a) Sample used for QC only; not part of login JC86089.

Element: Al As Ba Cd Cr Cu Fe Pb Ag

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
09:52	MA46517-STD1	100	100	100	100	100	100	100	100
09:57	MA46517-STD2	100	100	100	100	100	100	100	100
10:02	MA46517-STD3	100	100	100	100	100	100	100	100
10:06	MA46517-STD4	99.318	100.882	99.4	100.1	98.59	98.093	99.304	101.835
10:20	MA46517-STD5	101.159	100.545	99.591	100.145	100.333	98.311	100.056	100.386
10:25	MA46517-STD6	100.591	99.212	99.14	99.077	98.436	98.582	99.602	101.556
10:30	MA46517-STD7	98.606	98.581	99.027	99.203	96.821	97.481	97.915	99.907
10:35	MA46517-STD8	96.823	96.716	97.437	98.985	95.971	96.689	97.839	98.461
10:40	MA46517-STD9	97.405	97.602	97.564	97.961	97.961	97.324	97.506	98.17
10:44	MA46517-STD10	96.424	97.742	96.997	98.955	98.73	96.066	98.645	98.57
10:49	MA46517-STD11	96.486	97.506	98.042	97.382	95.067	95.792	96.16	95.74
10:54	MA46517-STD12	95.589	95.859	96.925	96.889	95.31	94.525	96.309	94.708
10:59	MA46517-STD13	97.11	98.154	98.156	99.511	96.544	97.521	98.396	98.295
11:03	ZZZZZZ	96.699	98.86	98.259	98.392	96.937	96.563	96.987	95.731
11:09	MA46517-ICV1	100.915	99.644	100.077	100.686	98.192	98.42	99.472	99.897
11:14	MA46517-ICB1	100.087	100.136	101.075	100.777	98.981	99.567	98.617	100.364
11:19	MA46517-CCVA1	98.67	99.764	100.587	98.728	97.101	97.194	97.395	96.07
11:24	MA46517-CCB1	100.733	99.351	100.273	100.135	98.351	99.464	98.2	99.825
11:28	MA46517-CRI1	No results reported for the elements associated with this internal standard.							
11:34	MA46517-CRI2	102.805	103.824	101.912	102.29	97.928	100.278	101.239	101.816
11:39	MA46517-ICSA1	No results reported for the elements associated with this internal standard.							
11:44	MA46517-ICSAB1	81.949	85.41	88.712	90.318	84.369	86.918	87.079	79.283
11:50	MA46517-ICSA2	87.405	91.622	93.68	96.175	88.852	92.455	92.311	83.284
11:55	ZZZZZZ	91.688	94.63	91.301	100.05	95.915	95.855	99.915	99.162
12:00	MA46517-CCVA2	96.134	99.79	95.87	105.335	101.878	97.934	102.157	99.382
12:05	MA46517-CCB2	101.971	105.671	99.392	107.77	104.623	102.419	106.093	105.221
12:09	ZZZZZZ	106.281	116.19	103.665	114.561	109.158	106.641	112.926	102.987
12:14	ZZZZZZ	108.38	117.929	107.111	118.856	110.269	107.96	114.278	106.631
12:19	ZZZZZZ	109.719	114.327	105.536	116.323	112.245	108.717	115.924	105.432
12:24	MP14115-S1	111.362	116.806	110.758	119.646	114.485	112.016	116.153	110.732
12:28	MP14115-S2	112.886	116.081	110.419	119.631	113.985	111.759	115.27	108.965
12:33	ZZZZZZ	116.31	118.433	109.019	121.076	116.169	112.143	119.197	111.618
12:38	ZZZZZZ	114.103	119.66	112.686	121.036	116.4	114.765	118.633	112.388

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
12:43	MP14185A-B2	114.109	118.483	110.019	119.601	116.89	111.874	116.897	110.21
12:48	ZZZZZZ	101.202	109.303	103.324	108.283	110.122	106.95	108.733	96.056
12:52	MA46517-CCVA3	107.165	113.158	108.117	113.999	109.968	108.216	110.445	105.591
12:57	MA46517-CCB3	111.72	115.193	110.217	113.555	110.447	110.505	110.956	110.709
13:02	ZZZZZZ	103.417	111.59	108.995	112.563	107.722	108.243	108.92	109.463
13:07	ZZZZZZ	110.992	112.563	108.687	113.284	110.437	108.867	110.175	108.25
13:11	ZZZZZZ	110.52	113.359	108.849	112.974	109.183	108.194	110.445	109.483
13:19	ZZZZZZ	109.841	114.041	109.025	112.02	109.39	109.773	109.727	108.874
13:24	MA46517-CCVA4	105.611	110.668	108.001	110.544	106.974	106.582	106.725	105.775
13:29	MA46517-CCB4	108.719	110.828	107.169	111.882	106.784	106.524	108.435	108.563
13:34	MP14185A-MB1	108.015	110.427	104.111	112.808	109.164	107.195	112.505	107.37
13:39	MP14185A-S3	104.884	106.631	101.59	107.977	105.738	101.676	105.393	97.927
13:43	MP14185A-S4	101.063	103.496	99.105	107.385	103.86	99.468	105.121	94.669
13:48	ZZZZZZ	106.509	108.246	102.101	110.174	107.752	105.891	111.5	106.355
13:53	JC85901-2	100.828	104.412	99.665	105.865	104.659	100.296	105.184	95.899
13:58	MP14185A-SD1	106.085	110.228	105.579	109.917	106.651	106.111	108.718	102.678
14:03	JC86089-1F	106.686	106.072	103.129	111.293	107.272	107.184	111.428	102.216
14:08	JC86089-2F	107.214	107.826	103.185	113.169	109.717	107.547	112.507	103.703
14:12	MP14051-S3	110.787	113.224	107.279	112.567	110.155	108.932	109.368	107.605
14:17	MA46517-CCVA5	102.648	108.677	105.388	110.614	106.937	104.835	106.832	103.832
14:22	MA46517-CCB5	107.543	110.094	108.148	111.229	110.03	107.897	107.237	104.446
14:27	ZZZZZZ	100.922	106.384	103.408	107.677	102.793	102.445	104.63	98.653
14:32	ZZZZZZ	98.445	109.891	107.32	110.676	102.336	102.407	104.481	96.803
14:36	ZZZZZZ	105.562	110.91	105.465	114.587	110.926	109.219	113.747	106.813
14:41	ZZZZZZ	110.011	113.441	109.578	116.564	114.427	113.122	116.758	110.513
14:46	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:59	ZZZZZZ	100.909	108.558	103.51	110.123	107.936	106.858	110.081	99.909
15:03	MA46517-CCVA6	101.292	112.196	108.987	112.623	108.803	107.696	108.268	106.606
15:08	MA46517-CCB6	106.446	113.393	110.582	112.233	109.663	110.88	109.836	109.313
15:13	MP14051-S4	105.908	113.601	110.268	111.372	110.251	110.624	109.205	108.843
15:18	JC86039-2	104.715	112.736	110.057	110.319	109.054	109.242	107.752	107.719
15:22	MP14051-SD1	105.161	109.198	107.928	110.466	109.156	107.776	108.237	106.215
15:27	ZZZZZZ	106.526	113.115	105.824	112.946	107.128	109.724	113.734	109.075

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:32	MP14059A-S3	105.925	112.064	107.708	110.835	109.777	106.071	108.603	105.309
15:37	MP14059A-S4	102.289	111.17	106.236	111.238	108.213	105.387	107.554	105.979
15:42	MA46517-CCVA7	101.635	110.605	107.274	110.697	106.463	105.845	105.706	104.4
15:46	MA46517-CCB7	105.073	109.509	108.105	110.495	109.021	107.588	107.367	104.272
15:57	ZZZZZZ	107.038	110.781	105.67	111.562	111.725	109.25	112.468	107.187
16:02	JC86095-4	102.88	110.556	107.709	110.333	105.116	106.334	106.243	106.877
16:07	MP14059A-SD1	103.719	110.645	108.847	111.191	107.435	107.684	107.904	106.894
16:11	ZZZZZZ	105.458	110.951	103.658	111.012	107.899	105.914	107.846	104.239
16:16	ZZZZZZ	102.825	111.102	104.521	112.111	106.092	103.235	109.109	103.244
16:21	ZZZZZZ	104.077	109.638	105.879	110.869	107.325	104.617	106.761	104.766
16:26	ZZZZZZ	104.478	109.752	104.115	111.773	108.035	107.955	112.059	108.093
16:30	ZZZZZZ	99.654	105.298	101.166	108.059	105.844	102.017	106.821	97.503
16:35	ZZZZZZ	92.755	100.689	95.561	99.744	98.042	96.548	96.821	89.981
16:40	ZZZZZZ	83.263	94.646	93.628	95.878	91.344	94.491	93.115	82.232
16:45	MA46517-CCVA8	95.216	104.431	102.169	104.832	101.944	102.636	102.918	100.207
16:49	MA46517-CCB8	96.561	103.921	104.69	111.374	103.724	104.702	107.346	104.238
16:54	ZZZZZZ	84.913	94.171	94.231	95.47	90.336	92.876	91.189	82.724
16:59	ZZZZZZ	87.031	95.924	94.88	99.864	96.302	97.091	97.847	88.579
17:04	ZZZZZZ	88.134	97.977	96.235	101.453	98.018	97.759	99.463	89.679
17:08	ZZZZZZ	98	105.64	100.612	106.364	105.675	103.881	107.191	102.732
17:13	ZZZZZZ	98.32	104.888	100.157	108.681	106.645	104.058	109.129	103.639
17:18	ZZZZZZ	93.926	107.078	100.05	105.346	100.148	100.363	102.505	93.703
17:23	ZZZZZZ	99.184	105.943	99.552	107.672	106.46	103.605	107.152	102.554
17:28	ZZZZZZ	94.365	106.831	99.801	106.55	101.592	100.243	104.268	93.271
17:32	ZZZZZZ	94.81	105.471	98.903	107.074	100.525	98.775	104.155	92.432
17:37	MA46517-CCVA9	94.205	102.871	100.892	105.034	103.202	100.505	102.029	102.335
17:42	MA46517-CCB9	96.214	103.895	100.902	105.323	102.042	100.653	102.635	102.164
17:47	MP14142A-MB1	99.718	105.553	99.323	108.872	103.421	104.339	111.248	101.678
17:51	MP14142A-B2	99.114	104.896	98.474	108.299	107.642	102.23	106.545	100.621
17:56	MP14142A-S3	94.854	105.666	97.379	106.693	101.185	100.446	105.751	98.635
18:01	MP14142A-S4	96.178	107.212	96.047	107.644	101.188	100.265	105.929	97.879
18:06	JC86215-1	98.359	104.153	97.131	106.791	104.746	99.309	106.465	96.929
18:11	MP14142A-SD1	97.582	105.794	101.772	107.116	104.054	103.056	104.745	104.254

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:15	ZZZZZZ	92.752	100.647	94.621	103.61	99.265	97.766	103.407	94.62
18:20	ZZZZZZ	93.704	101.386	93.756	104.237	100.559	96.889	102.222	94.378
18:25	ZZZZZZ	87.689	98.511	93.296	100.86	95.748	94.13	99.608	88.375
18:30	MA46517-CCVA10	96.038	104.194	100.613	106.842	103.641	101.324	103.116	99.512
18:34	MA46517-CCB10	98.473	106.563	101.161	105.758	102.25	102.47	103.474	102.018
18:39	ZZZZZZ	96.706	114.287	103.709	112.028	103.863	104.027	109.146	103.733
18:44	ZZZZZZ	96.89	102.664	97.13	104.757	101.803	98.887	102.359	95.867
18:49	ZZZZZZ	92.908	101.866	97.4	105.035	102.296	101.133	104.066	94.142
18:53	ZZZZZZ	92.412	102.572	97.27	104.392	102.656	99.821	101.639	95.757
18:58	ZZZZZZ	98.303	106.686	99.03	109.728	106.023	102.863	108.642	101.285
19:03	ZZZZZZ	94.62	104.918	97.994	105.794	104.318	100.514	103.523	95.291
19:08	ZZZZZZ	92.711	100.341	94.77	103.291	98.965	96.501	103.579	92.827
19:13	ZZZZZZ	94.066	104.527	97.17	104.746	101.04	96.839	102.42	94.337
19:17	ZZZZZZ	94.809	100.618	94.662	105.292	101.296	97.763	106.341	96.531
19:22	MA46517-CCVA11	97.183	104.213	99.523	104.168	100.884	99.215	101.427	99.762
19:27	MA46517-CCB11	98.546	103.338	99.51	104.033	101.033	99.444	100.707	100.663
19:32	ZZZZZZ	97.208	104.178	96.313	105.444	101.786	99.077	102.696	96.433
19:36	ZZZZZZ	91.257	108.112	98.128	106.774	100.734	99.386	102.859	92.092
19:41	ZZZZZZ	95.002	99.34	92.386	103.578	99.391	94.581	102.257	94.868
19:46	ZZZZZZ	97.751	101.623	94.366	104.596	103.275	95.861	101.874	95.232
19:51	ZZZZZZ	95.463	101.113	93.468	103.294	98.514	96.545	102.337	96.457
19:56	ZZZZZZ	96.999	103.439	94.766	104.805	100.771	97.533	102.892	97.465
20:00	ZZZZZZ	98.034	102.701	95.747	105.38	102.379	98.087	103.359	98.845
20:05	ZZZZZZ	98.931	106.567	96.919	105.694	101.129	95.893	102.281	97.262
20:10	ZZZZZZ	98.085	105.203	100.422	104.476	99.694	100.278	100.676	102.444
20:15	ZZZZZZ	96.77	102.137	99.742	102.908	100.658	98.948	100.67	100.374
20:19	MA46517-CCVA12	97.701	102.328	97.402	101.821	99.476	96.88	96.241	95.367
20:24	MA46517-CCB12	96.744	101.327	97.962	100.499	97.957	97.158	96.171	99.027
20:29	MP14218-S3	95.893	101.254	97.952	100.433	97.767	98.407	97.123	97.955
20:34	JC86162-111	95.311	99.831	97.951	100.553	98.319	97.88	98.054	96.837
20:39	MP14247-MB1	94.941	101.691	98.761	102.453	99.393	98.459	98.661	99.324
20:43	MP14247-B1	94.72	99.34	98.19	100.685	97.605	97.003	96.717	95.564
20:48	MP14247-S1	86.261	97.765	100.703	99.929	92.28	94.377	92.595	84.849

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
20:53	MP14247-S2	85.575	96.915	100.401	100.058	91.141	93.87	92.404	84.393
20:58	JC86317-4	85.338	96.247	97.644	98.927	90.452	94.731	92.235	84.397
21:03	ZZZZZZ	83.891	90.142	90.121	92.737	87.801	88.535	88.053	84.168
21:07	ZZZZZZ	81.989	89.824	90.705	92.439	87.647	88.494	89.309	83.557
21:12	MA46517-CCVA13	83.392	89.756	89.07	92.054	89.405	89.432	90.016	88.259
21:17	MA46517-CCB13	84.772	91.159	89.377	92.812	91.727	90.782	91.904	92.912
21:22	ZZZZZZ	85.25	92.103	91.863	95.192	91.599	93.363	93.078	90.353
21:26	ZZZZZZ	83.573	94.315	97.989	98.956	88.629	93.978	90.116	82.501
21:31	ZZZZZZ	85.847	92.48	90.66	94.975	92.489	92.354	92.469	93.303
21:36	ZZZZZZ	79.687	97.246	102.716	99.017	84.216	92.506	87.482	77.319
21:41	ZZZZZZ	94.329	108.425	110.354	110.247	98.159	102.192	99.237	88.659
21:45	ZZZZZZ	91.818	97.722	93.011	98.237	96.408	95.512	95.582	96.338
21:50	ZZZZZZ	87.563	99.257	102.779	105.619	91.859	96.877	95.632	85.42
21:55	MP14222-MB1	92.319	98.154	94.168	98.845	96.691	95.861	96.391	98.585
22:00	MP14222-B1	91.4	96.606	90.703	99.346	96.62	94.729	96.48	94.5
22:04	MA46517-CCVA14	89.763	96.426	91.398	99.266	95.666	92.627	96.217	93.542
22:09	MA46517-CCB14	90.986	97.877	94.075	100.09	96.789	94.513	96.271	95.121
22:14	MP14222-S1	87.76	95.798	92.477	96.358	95.61	95	95.285	93.588
22:19	MP14222-S2	88.072	95.556	93.579	95.72	96.014	95.456	94.073	93.385
22:23	JC86264-42	87.72	96.15	93.727	96.365	94.717	96.196	94.159	93.586
22:28	MP14222-S3	87.035	94.947	91.82	95.498	94.209	94.166	93.744	91.094
22:33	JC86264-43	85.353	94.266	92.519	95.299	92.991	94.863	93.117	92.988
22:38	ZZZZZZ	86.576	93.846	92.748	94.613	93.887	94.841	94.756	91.108
22:42	ZZZZZZ	85.489	92.79	91.685	93.687	92.04	93.087	91.863	91.36
22:47	ZZZZZZ	85.623	93.034	92.014	94.173	93.287	93.948	92.383	90.731
22:52	ZZZZZZ	85.321	92.753	91.566	93.67	92.925	93.729	92.378	90.623
22:57	ZZZZZZ	85.367	93.399	90.729	93.331	90.966	92.625	91.158	89.899
23:02	MA46517-CCVA15	85.498	91.187	88.435	92.99	90.545	88.817	89.924	87.885
23:06	MA46517-CCB15	85.918	92.449	88.952	93.724	89.899	91.107	90.87	92.278
23:11	ZZZZZZ	83.436	91.685	90.466	91.825	90.668	92.58	89.381	88.596
23:16	ZZZZZZ	82.554	90.336	89.626	92.232	89.883	92.04	88.798	88.721
23:21	ZZZZZZ	81.953	90.605	90.177	90.286	90.042	92.475	89.361	88.7
23:25	ZZZZZZ	82.06	89.233	89.553	90.742	89.134	91.405	89.198	86.437

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
23:30	ZZZZZZ	81.095	89.147	89.38	89.758	89.983	91.147	88.77	87.948
23:35	ZZZZZZ	80.278	89.466	89.564	90.723	88.959	91.376	89.44	88.567
23:40	ZZZZZZ	81.924	89.729	89.616	89.993	89.76	91.342	89.372	85.729
23:44	ZZZZZZ	82.298	89.371	89.763	88.846	89.895	91.118	87.777	86.546
23:49	ZZZZZZ	80.984	88.569	89.551	90.079	87.772	91.212	89.124	87.87
23:54	ZZZZZZ	81.494	89.771	89.701	90.192	89.033	91.028	88.981	88.04
23:59	MA46517-CCVA16	83.347	88.211	86.689	90.813	87.238	86.734	87.505	86.196
00:04	MA46517-CCB16	82.716	88.596	87.328	89.894	86.772	89.109	88.616	89.65
00:08	ZZZZZZ	80.617	87.95	88.66	89.113	87.66	90.358	87.39	87.448
00:13	ZZZZZZ	78.819	87.534	87.604	88.944	86.376	90.53	88.722	86.656
00:18	ZZZZZZ	80.147	88.441	86.896	87.483	87.296	90.243	86.03	85.905
00:23	MP14223-MB1	83.338	88.862	87.954	89.801	87.486	87.779	88.21	89.402
00:27	MP14223-B1	83.225	89.438	87.439	89.638	86.498	89.362	88.662	89.136
00:32	MP14223-S1	79.35	87.283	86.708	87.482	86.744	89.355	86.916	85.422
00:37	MP14223-S2	79.613	87.095	87.588	87.651	86.802	88.905	87.201	85.621
00:42	JC86264-63	81.057	88.69	89.028	87.998	87.787	89.961	85.482	85.062
00:46	MP14223-S3	No results reported for the elements associated with this internal standard.							
00:51	JC86264-64	79.573	87.532	87.885	88.59	85.966	89.822	87.573	87.542
00:56	MA46517-CCVA17	81.694	87.204	84.898	87.985	86.372	85.286	84.989	83.979
01:01	MA46517-CCB17	82.889	86.811	86.043	89.009	85.702	86.514	85.832	86.299
01:06	ZZZZZZ	78.184	86.716	87.018	86.957	85.773	88.387	86.097	86.009
01:10	ZZZZZZ	80.879	86.941	87.168	87.995	86.899	89.353	86.401	84.257
01:15	ZZZZZZ	78.802	86.546	87.893	87.883	86.787	89.851	86.219	84.876
01:20	ZZZZZZ	79.157	86.972	87.3	86.833	85.174	88.669	86.121	86.269
01:25	ZZZZZZ	79.354	86.594	88.054	87.604	86.035	90.071	85.667	85.203
01:29	ZZZZZZ	79.965	87.095	86.494	87.738	86.512	88.21	86.064	84.139
01:34	ZZZZZZ	79.888	90.235	88.761	88.162	88.668	88.53	86.573	90.295
01:39	ZZZZZZ	78.489	85.967	87.255	87.081	85.786	88.082	85.647	84.879
01:44	ZZZZZZ	79.171	85.398	87.038	87.55	86.272	86.981	85.778	83.845
01:48	ZZZZZZ	79.015	85.779	87.023	87.381	86.507	88.934	85.172	84.608
01:53	MA46517-CCVA18	81.731	86.066	84.608	86.785	84.752	84.721	84.396	83.475
01:58	MA46517-CCB18	81.469	86.275	84.708	88.399	84.97	85.118	85.413	86.225
02:03	ZZZZZZ	78.376	86.058	87.231	87.26	86.302	89.707	85.878	83.204

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
02:08	ZZZZZZ	78.313	86.523	87.606	85.926	85.103	88.947	84.683	86.021
02:12	ZZZZZZ	78.299	86.75	87.5	86.783	85.385	88.624	85.321	85.246
02:17	ZZZZZZ	78.614	85.343	86.638	86.133	85.865	88.497	84.985	84.977
02:22	ZZZZZZ	78.506	86.045	87.359	86.846	85.87	87.808	85.072	84.328
02:27	ZZZZZZ	78.724	86.385	85.584	86.886	83.779	87.941	84.283	84.788
02:31	ZZZZZZ	79.003	85.815	86.224	85.998	85.237	87.535	84.628	84.398
02:36	ZZZZZZ	77.46	85.218	86.705	86.963	83.742	87.324	84.976	84.708
02:41	MP14224-MB1	83.121	87.535	85.564	88.98	84.903	86.201	86.271	86.206
02:46	MP14224-B1	82.592	86.09	84.608	88.052	85.886	85.934	85.93	85.467
02:51	MA46517-CCVA19	81.232	85.773	84.092	86.24	84.083	83.026	83.968	82.677
02:55	MA46517-CCB19	81.2	87.267	84.725	87.508	84.748	85.501	85.085	85.136
03:00	MP14224-S1	78.821	85.784	86.032	86.257	84.902	88.593	83.637	84.095
03:05	MP14224-S2	78.206	85.451	86.135	85.349	84.796	87.422	83.685	83.32
03:10	JC86264-83	78.229	85.257	86.518	86.595	84.718	85.824	84.463	82.632
03:15	MP14224-S3	79.16	85.427	85.743	86.092	84.75	87.414	85.585	82.581
03:19	JC86264-84	78.367	84.729	86.03	85.096	84.97	85.75	83.255	83.519
03:24	ZZZZZZ	78.752	85.928	87.141	85.96	84.358	86.75	83.889	83.709
03:29	ZZZZZZ	78.217	85.03	85.608	85.363	83.862	87.075	84.076	83.009
03:34	ZZZZZZ	77.714	84.632	85.793	86.176	83.909	86.537	83.096	83.118
03:38	ZZZZZZ	78.106	84.838	86.176	85.116	84.873	86.795	82.849	83.806
03:43	ZZZZZZ	79.192	84.469	85.92	86.215	83.637	86.27	83.711	82.291
03:48	MA46517-CCVA20	80.131	85.388	82.796	85.529	82.83	82.27	81.586	81.805
03:53	MA46517-CCB20	80.292	85.631	83.274	86.505	83.015	82.997	83.233	84.211
03:58	ZZZZZZ	78.041	84.205	85.441	84.855	84.079	86.068	83.32	81.74
04:02	ZZZZZZ	77.916	84.814	85.217	84.503	84.243	87.026	82.57	82.587
04:07	ZZZZZZ	77.147	83.967	85.5	85.745	83.308	85.407	83.45	81.922
04:12	ZZZZZZ	78.083	84.578	85.164	84.127	84.081	85.75	81.901	83.054
04:17	ZZZZZZ	77.649	84.989	85.541	85.857	83.795	87.111	83.794	82.299
04:21	ZZZZZZ	77.612	84.884	85.22	84.805	83.237	85.382	83.116	82.817
04:26	ZZZZZZ	78.339	84.237	85.115	84.155	83.451	85.606	81.832	82.324
04:31	ZZZZZZ	77.635	84.06	85.217	85.009	82.13	86.133	82.566	81.998
04:36	ZZZZZZ	78.385	85.514	84.694	84.52	83.11	85.483	81.843	82.217
04:40	ZZZZZZ	77.893	85.266	85.13	83.618	82.937	85.947	82.253	81.928

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
04:45	MA46517-CCVA21	80.781	85.237	83.353	85.492	82.186	82.015	82.51	80.08
04:50	MA46517-CCB21	80.472	85.308	82.858	86.366	82.286	83.571	83.129	83.427
04:55	ZZZZZZ	77.02	84.608	85.508	84.321	83.26	86.371	83.003	82.455
05:00	ZZZZZZ	77.112	84.293	85.318	84.847	83.336	86.31	81.892	81.143
05:04	ZZZZZZ	77.932	85.056	85.166	84.192	83.084	86.497	81.476	82.431
05:09	ZZZZZZ	80.52	85.267	84.511	85.714	82.236	83.149	82.846	83.888
05:14	ZZZZZZ	81.49	85.241	84.544	85.99	83.343	82.158	82.838	82.784
05:19	ZZZZZZ	80.456	84.263	82.615	86.411	82.792	82.582	83.344	84.019
05:23	ZZZZZZ	80.783	85.608	83.697	86.234	83.212	83.56	83.353	84.514
05:28	MA46517-CCVA22	81.925	86.157	83.149	87.049	83.542	82.71	83.046	81.412
05:33	MA46517-CCB22	81.601	85.459	83.663	86.333	83.063	84.649	84.335	84.664
05:38	ZZZZZZ	82.523	86.444	84.391	86.395	82.963	84.147	84.296	85.009
05:43	ZZZZZZ	82.246	86.6	84.352	86.2	83.539	83.082	82.462	84.915
05:47	ZZZZZZ	81.203	86.329	85.913	87.093	83.039	83.965	83.4	84.375
05:52	ZZZZZZ	81.575	86.156	84.449	86.581	84.527	84.31	82.949	84.439

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Lithium	60-125 %
Istd#2	Scandium (45-1)	60-125 %
Istd#3	Scandium (45-2)	60-125 %
Istd#4	Scandium (45-3)	60-125 %
Istd#5	Germanium (74-1)	60-125 %
Istd#6	Germanium (74-2)	60-125 %
Istd#7	Germanium (74-3)	60-125 %
Istd#8	Rhodium (103-1)	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
09:52	MA46517-STD1	100	100	100	100	100	100	100	100
09:57	MA46517-STD2	100	100	100	100	100	100	100	100
10:02	MA46517-STD3	100	100	100	100	100	100	100	100
10:06	MA46517-STD4	98.857	99.508	98.573	99.489	98.925	99.707	99.541	98.547
10:20	MA46517-STD5	99.097	100.447	98.869	99.194	100.498	100.46	101.004	100.549
10:25	MA46517-STD6	99.036	99.538	98.932	99.32	99.253	100.512	100.526	99.802
10:30	MA46517-STD7	98.21	99.323	96.597	98.452	98.713	99.818	99.565	96.473
10:35	MA46517-STD8	96.912	98.466	96.609	96.857	96.722	98.572	99.15	96.614
10:40	MA46517-STD9	97.026	97.444	97.166	97.318	97.832	98.958	98.703	96.968
10:44	MA46517-STD10	97.279	98.046	96.535	97.845	97.578	98.97	99.027	98.324
10:49	MA46517-STD11	93.852	95.147	94.529	95.678	96.255	98.377	99.148	95.635
10:54	MA46517-STD12	92.973	92.752	94.027	94.452	96.564	97.494	96.658	96.554
10:59	MA46517-STD13	98.464	98.618	97.768	99.141	96.124	99.587	99.455	95.405
11:03	ZZZZZZ	94.58	93.922	95.006	96.257	95.812	98.321	96.609	95.987
11:09	MA46517-ICV1	98.511	98.621	98.133	99.008	97.709	99.156	98.25	96.219
11:14	MA46517-ICB1	99.133	98.831	100.046	99.137	97.062	99.936	97.712	97.763
11:19	MA46517-CCVA1	95.005	94.746	94.668	96.63	95.582	98.436	97.368	96.144
11:24	MA46517-CCB1	98.734	97.945	96.613	99.255	97.319	100.074	97.457	97.934
11:28	MA46517-CRI1	No results reported for the elements associated with this internal standard.							
11:34	MA46517-CRI2	99.77	99.251	97.278	100.554	99.211	100.562	98.858	97.189
11:39	MA46517-ICSA1	No results reported for the elements associated with this internal standard.							
11:44	MA46517-ICSAB1	80.254	79.756	83.485	85.172	88.478	89.557	87.24	88.903
11:50	MA46517-ICSA2	83.256	83.739	87.034	87.636	92.109	91.249	89.59	93.464
11:55	ZZZZZZ	96.682	98.886	100.125	95.803	98.93	98.63	99.717	101.575
12:00	MA46517-CCVA2	95.581	98.871	101.922	95.294	102.333	99.135	101.048	102.786
12:05	MA46517-CCB2	101.691	103.865	104.772	99.783	104.991	100.079	101.551	103.249
12:09	ZZZZZZ	100.135	103.448	103.058	97.538	108.3	101.542	103.806	109.074
12:14	ZZZZZZ	102.103	105.737	106.897	98.556	109.343	101.986	105.215	114.1
12:19	ZZZZZZ	101.377	104.057	107.675	98.765	110.101	101.096	104.501	110.202
12:24	MP14115-S1	105.832	108.349	111.143	103.779	110.773	102.803	105.715	108.892
12:28	MP14115-S2	105.654	106.916	109.59	103.323	107.94	102.278	103.454	107.144
12:33	ZZZZZZ	107.019	109.257	109.009	102.42	112.953	102.701	105.388	109.363
12:38	ZZZZZZ	109.671	110.39	111.464	104.883	108.882	103.688	105.039	109.86

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
12:43	MP14185A-B2	104.357	107.045	108.68	100.632	110.134	102.563	104.372	107.655
12:48	ZZZZZZ	91.603	92.7	99.487	93.331	102.656	97.147	97.579	102.824
12:52	MA46517-CCVA3	102.183	103.771	105.515	102.261	106.583	102.382	103.382	106.58
12:57	MA46517-CCB3	106.809	107.094	108.882	106.628	108.996	103.715	102.802	104.17
13:02	ZZZZZZ	101.252	102.76	109.71	101.832	101.983	102.837	102.102	103.793
13:07	ZZZZZZ	105.098	105.45	106.26	104.164	106.139	102.039	102.315	104.903
13:11	ZZZZZZ	105.882	105.857	106.718	105.61	105.477	103.073	102.037	104.894
13:19	ZZZZZZ	105.777	105.569	105.734	105.227	106.713	102.807	102.37	105.816
13:24	MA46517-CCVA4	100.314	101.042	104.065	100.929	103.578	101.509	100.301	103.969
13:29	MA46517-CCB4	104.642	104.802	105.937	103.324	104.631	102.204	100.875	102.304
13:34	MP14185A-MB1	103.467	104.915	106.681	100.196	104.694	102.106	102.079	106.269
13:39	MP14185A-S3	92.552	93.323	98.678	93.119	103.029	97.542	97.317	102.128
13:43	MP14185A-S4	91.076	92.74	97.727	92.37	100.43	97.569	98.187	100.865
13:48	ZZZZZZ	102	104.304	104.723	98.538	104.663	100.72	101.246	104.279
13:53	JC85901-2	92.157	93.296	98.038	92.04	101.815	96.137	96.094	101.651
13:58	MP14185A-SD1	101.176	100.83	103.046	101.912	103.859	101.906	101.447	104.751
14:03	JC86089-1F	99.519	101.903	103.848	98.708	104.803	101.106	102.125	105.967
14:08	JC86089-2F	100.234	102.932	103.79	98.962	105.222	101.577	102.454	105.295
14:12	MP14051-S3	104.301	104.415	106.772	103.504	106.754	103.457	101.635	106.012
14:17	MA46517-CCVA5	99.744	99.864	105.523	100.268	101.834	100.606	100.356	101.442
14:22	MA46517-CCB5	103.927	103.965	104.386	103.987	105.627	102.288	100.505	105.608
14:27	ZZZZZZ	95.534	96.206	99.872	96.664	101.51	98.415	98.506	101.845
14:32	ZZZZZZ	92.586	93.489	98.079	95.783	103.749	101.018	99.671	127.637
14:36	ZZZZZZ	103.719	105.761	105.208	100.93	104.859	103.109	102.935	104.56
14:41	ZZZZZZ	106.22	108.155	108.015	104.117	107.484	104.295	104.894	107.995
14:46	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:59	ZZZZZZ	96.042	97.124	101.215	96.695	103.978	100.525	100.407	105.284
15:03	MA46517-CCVA6	101.928	101.394	106.622	103.157	103.248	103.011	100.58	103.054
15:08	MA46517-CCB6	106.318	104.949	104.728	106.404	106.816	104	100.407	104.889
15:13	MP14051-S4	105.626	104.288	106.679	106.084	104.788	103.251	100.696	104.395
15:18	JC86039-2	104.612	103.142	106.53	105.377	103.399	102.423	99.924	102.449
15:22	MP14051-SD1	104.648	103.213	105.786	104.855	102.214	102.818	100.457	101.794
15:27	ZZZZZZ	103.908	105.29	102.506	101.683	104.748	102.321	101.607	101.356

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:32	MP14059A-S3	101.686	101.743	105.126	101.948	103.837	101.639	99.316	103.955
15:37	MP14059A-S4	101.306	100.725	106.716	102.234	102.475	101.073	100.917	102.722
15:42	MA46517-CCVA7	100.404	99.656	103.247	102.194	102.074	101.475	99.752	102.635
15:46	MA46517-CCB7	104.25	102.961	103.607	104.339	103.786	102.694	100.596	104.01
15:57	ZZZZZZ	102.746	104.194	104.83	101.534	105.878	102.301	101.434	106.419
16:02	JC86095-4	101.119	100.251	104.083	101.887	101.631	100.538	99.266	99.737
16:07	MP14059A-SD1	104.789	102.545	106.046	104.59	101.967	102.166	100.343	99.962
16:11	ZZZZZZ	100.443	100.821	103.097	98.837	102.963	100.578	99.189	104.959
16:16	ZZZZZZ	98.274	99.748	103.14	96.465	102.691	100.234	99.742	104.039
16:21	ZZZZZZ	100.997	100.828	104.599	100.52	102.688	100.766	99.49	102.118
16:26	ZZZZZZ	102.601	103.57	105.289	99.096	101.957	101.089	100.916	102.062
16:30	ZZZZZZ	93.043	94.136	99.082	93.772	101.642	98.069	97.393	101.145
16:35	ZZZZZZ	84.994	84.981	93.113	88.593	96.96	92.294	89.915	96.825
16:40	ZZZZZZ	80.924	80.303	85.14	86.993	89.312	90.519	88.322	89.223
16:45	MA46517-CCVA8	97.328	97.202	98.236	98.903	100.094	99.758	96.967	98.792
16:49	MA46517-CCB8	101.655	104.947	104.027	102.849	98.448	100.099	102.026	99.004
16:54	ZZZZZZ	80.546	79.082	85.326	86.545	89.255	89.741	86.871	90.577
16:59	ZZZZZZ	86.271	86.714	91.356	90.298	94.639	94.515	91.948	95.189
17:04	ZZZZZZ	87.505	87.921	92.605	90.65	94.922	95.271	92.861	94.47
17:08	ZZZZZZ	99.883	101.277	100.56	98.336	102.391	99.869	98.786	100.9
17:13	ZZZZZZ	99.812	101.582	102.861	98.737	102.333	100.837	100.465	102.018
17:18	ZZZZZZ	90.881	91.828	95.093	92.634	99.422	97.281	95.711	99.588
17:23	ZZZZZZ	97.691	98.971	101.178	95.894	101.997	98.962	99.65	102.933
17:28	ZZZZZZ	90.405	92.519	95.452	92.053	99.51	97.381	96.377	100.757
17:32	ZZZZZZ	90.503	92.62	95.23	92.542	99.91	97.354	97.043	100.937
17:37	MA46517-CCVA9	95.677	96.404	102.491	96.761	98.141	98.272	96.736	98.775
17:42	MA46517-CCB9	99.695	99.132	100.835	99.108	98.995	98.085	95.793	97.719
17:47	MP14142A-MB1	98.076	100.594	98.004	96.526	102.701	98.066	98.721	99.66
17:51	MP14142A-B2	96.025	97.458	102.498	94.454	100.133	96.722	96.365	102.599
17:56	MP14142A-S3	91.925	95.067	96.432	91.247	98.476	95.974	96.9	97.656
18:01	MP14142A-S4	91.987	95.314	95.797	91.99	99.892	95.601	96.931	97.682
18:06	JC86215-1	93.327	95.822	98.996	92.295	100.252	95.669	96.684	100.688
18:11	MP14142A-SD1	98.158	99.087	103.022	98.439	99.245	97.284	97.252	98.421

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:15	ZZZZZZ	89.918	92.732	95.312	89.633	100.915	95.07	96.437	125.316
18:20	ZZZZZZ	90.047	91.776	95.935	88.875	98.607	92.201	93.09	99.245
18:25	ZZZZZZ	84.676	85.32	90.697	85.967	94.047	90.226	90.25	94.545
18:30	MA46517-CCVA10	96.612	96.284	100.454	96.553	99.599	97.31	96.251	98.961
18:34	MA46517-CCB10	100.139	99.853	99.161	98.986	101.31	97.916	96.684	99.178
18:39	ZZZZZZ	97.087	97.987	100.988	95.219	99.004	97.659	97.488	100.863
18:44	ZZZZZZ	90.455	91.508	96.629	90.35	98.613	93.916	93.51	98.403
18:49	ZZZZZZ	89.844	91.008	95.198	90.268	98.147	93.49	92.856	97.475
18:53	ZZZZZZ	90.74	90.643	96.274	91.577	98.724	94.058	93.164	98.221
18:58	ZZZZZZ	96.084	97.866	100.609	94.008	100.661	96.316	95.842	99.931
19:03	ZZZZZZ	90.896	92.015	98.104	91.408	99.528	95.14	93.897	100.76
19:08	ZZZZZZ	88.787	90.608	94.145	88.562	98.274	93.326	93.525	97.818
19:13	ZZZZZZ	89.71	90.872	96.531	90.027	98.736	93.798	92.622	100.895
19:17	ZZZZZZ	91.919	93.982	97.728	90.732	98.187	92.738	93.918	97.703
19:22	MA46517-CCVA11	94.072	93.761	97.702	93.398	98.31	94.898	92.539	98.462
19:27	MA46517-CCB11	97.945	97.28	98.812	96.887	98.213	95.449	93.818	96.052
19:32	ZZZZZZ	90.706	93.776	97.689	90.61	98.571	93.919	94.171	104.185
19:36	ZZZZZZ	86.965	88.921	94.319	87.222	104.414	97.521	96.512	164.714 !a
19:41	ZZZZZZ	89.737	92.67	95.874	88.655	97.604	91.897	92.335	96.417
19:46	ZZZZZZ	92.185	93.782	97.336	89.286	99.118	92.656	92.281	99.552
19:51	ZZZZZZ	90.918	93.326	96.968	89.49	96.616	92.737	92.32	95.478
19:56	ZZZZZZ	92.467	94.83	97.356	90.252	97.865	93.698	94.951	98.47
20:00	ZZZZZZ	92.398	94.566	96.547	90.436	99.079	93.566	94.06	98.076
20:05	ZZZZZZ	92.234	94.676	96.571	90.434	98.546	93.791	94.302	100.197
20:10	ZZZZZZ	97.343	96.976	99.075	97.022	97.208	95.525	93.557	96.388
20:15	ZZZZZZ	96	95.216	98.981	94.995	95.513	93.364	91.529	94.773
20:19	MA46517-CCVA12	91.909	90.749	96.117	92.166	95.318	93.001	90.49	95.104
20:24	MA46517-CCB12	94.661	93.737	96.681	94.5	95.165	93.772	90.698	92.384
20:29	MP14218-S3	95.031	92.541	97.484	95.084	94.548	93.89	90.771	95.115
20:34	JC86162-111	95.138	93.837	98.299	94.681	93.836	93.633	91.294	93.892
20:39	MP14247-MB1	95.764	94.062	97.763	95.914	93.679	94.982	92.069	94.728
20:43	MP14247-B1	92.327	91.212	96.438	93.029	94.588	93.163	89.831	94.709
20:48	MP14247-S1	83.042	80.86	87.347	89.201	88.574	89.103	84.983	89.266

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
20:53	MP14247-S2	82.961	80.626	86.885	89.011	88.717	89.214	84.972	89.626
20:58	JC86317-4	83.135	80.942	86.865	89.12	89.077	89.206	85.182	89.724
21:03	ZZZZZZ	81.822	80.625	86.967	85.819	90.273	89.439	85.674	90.374
21:07	ZZZZZZ	82.138	80.762	86.22	87.021	87.318	90.023	86.283	87.566
21:12	MA46517-CCVA13	85.708	86.147	87.925	87.345	89.299	89.894	87.637	89.412
21:17	MA46517-CCB13	89.71	88.751	92.382	90.951	89.867	91.132	87.916	90.885
21:22	ZZZZZZ	88.13	87.169	90.573	89.662	91.628	91.807	89.188	90.86
21:26	ZZZZZZ	81.847	79.167	85.265	88.347	88.139	88.865	83.805	87.364
21:31	ZZZZZZ	90.699	90.429	92.208	92.177	92.672	92.325	89.932	91.622
21:36	ZZZZZZ	77.196	73.973	80.173	85.977	83.234	83.661	78.812	82.936
21:41	ZZZZZZ	87.517	84.571	92.204	93.623	91.419	90.697	85.756	91.354
21:45	ZZZZZZ	91.919	91.85	95.514	93.249	95.08	93.047	90.405	94.962
21:50	ZZZZZZ	84.665	82.078	88.279	90.079	89.72	88.97	85.005	88.75
21:55	MP14222-MB1	93.292	92.518	96.861	94.133	94.585	93.582	90.408	93.348
22:00	MP14222-B1	91.849	92.761	94.359	91.265	95.568	91.386	91.258	95.852
22:04	MA46517-CCVA14	88.376	88.821	94.305	88.69	93.191	90.541	89.137	94.222
22:09	MA46517-CCB14	92.458	92.902	95.772	92.638	93.718	91.638	90.436	93.995
22:14	MP14222-S1	90.004	89.171	94.455	91.478	92.515	91.923	88.769	93.623
22:19	MP14222-S2	89.664	89.013	93.828	91.825	93.796	91.472	88.53	93.238
22:23	JC86264-42	90.155	89.057	93.722	92.666	92.394	92.224	89.374	91.021
22:28	MP14222-S3	88.71	88.146	92.254	91.503	91.567	90.949	88.246	91.185
22:33	JC86264-43	89.236	87.318	92.635	91.582	90.484	91	87.138	89.433
22:38	ZZZZZZ	89.556	88.311	92.233	92.785	92.72	91.845	89.01	92.098
22:42	ZZZZZZ	88.268	86.717	92.172	91.011	90.933	90.234	86.782	89.776
22:47	ZZZZZZ	88.531	86.896	91.386	91.239	91.134	90.564	87.176	89.354
22:52	ZZZZZZ	88.344	86.842	91.496	91.227	90.337	91.184	87.067	89.823
22:57	ZZZZZZ	87.342	86.415	88.429	90.448	90.464	90.017	86.878	88.64
23:02	MA46517-CCVA15	85.385	85.066	88.117	86.269	89.57	87.748	85.991	89.179
23:06	MA46517-CCB15	88.83	88.092	90.604	88.899	89.667	88.907	86.808	88.311
23:11	ZZZZZZ	87.583	85.584	89.074	90.205	90.537	90.727	86.279	90.125
23:16	ZZZZZZ	86.563	84.856	89.561	90.084	88.346	89.814	85.862	87.714
23:21	ZZZZZZ	86.553	84.622	89.211	89.927	87.726	88.884	84.909	86.035
23:25	ZZZZZZ	86.298	84.772	88.597	89.86	88.198	89.769	86.017	88.465

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
23:30	ZZZZZZ	86.072	84.623	89.028	89.737	86.969	90.019	86.246	86.587
23:35	ZZZZZZ	86.94	84.412	88.828	89.773	87.961	89.883	86.307	87.041
23:40	ZZZZZZ	86.47	84.106	88.008	89.501	88.645	89.23	85.856	88.048
23:44	ZZZZZZ	86.039	83.265	88.169	89.988	88.639	89.279	84.466	87.552
23:49	ZZZZZZ	86.235	84.476	89.621	89.786	87.004	89.789	86.063	87.756
23:54	ZZZZZZ	85.832	84.325	88.123	89.515	88.305	88.816	86.432	87.255
23:59	MA46517-CCVA16	83.019	83.267	85.726	84.439	87.484	86.597	84.378	88.154
00:04	MA46517-CCB16	86.774	86.156	87.521	87.135	86.857	87.276	84.59	86.15
00:08	ZZZZZZ	85.383	83.169	86.834	88.825	86.192	88.607	83.41	84.933
00:13	ZZZZZZ	84.705	83.248	86.087	88.996	85.89	87.711	84.216	85.501
00:18	ZZZZZZ	84.403	81.894	86.237	87.98	85.568	87.397	82.899	84.906
00:23	MP14223-MB1	86.299	85.552	87.581	87.297	86.931	87.716	84.602	85.485
00:27	MP14223-B1	86.501	85.043	86.453	86.82	86.834	87.06	84.946	84.827
00:32	MP14223-S1	84.453	82.034	85.868	87.27	86.029	87.8	83.753	85.111
00:37	MP14223-S2	84.062	82.34	86.257	87.301	84.377	86.837	82.871	83.579
00:42	JC86264-63	85.174	81.788	85.188	88.062	86.46	87.04	82.141	85.932
00:46	MP14223-S3	No results reported for the elements associated with this internal standard.							
00:51	JC86264-64	84.769	82.605	86.441	88.705	84.386	87.839	84.268	83.33
00:56	MA46517-CCVA17	81.785	80.928	83.939	82.781	85.942	84.754	81.899	84.646
01:01	MA46517-CCB17	84.769	83.679	85.375	85.714	86.259	85.324	82.109	84.869
01:06	ZZZZZZ	83.989	81.462	84.745	87.266	83.108	86.948	82.231	81.98
01:10	ZZZZZZ	83.843	81.623	84.483	87.238	85.85	86.375	82.988	85.524
01:15	ZZZZZZ	84.23	82.231	85.599	88.359	84.473	87.308	83.382	84.796
01:20	ZZZZZZ	84.54	82.412	85.059	87.402	85.982	87.264	82.885	83.779
01:25	ZZZZZZ	83.9	81.848	86.149	87.598	84.722	87.392	83.739	84.019
01:29	ZZZZZZ	84.429	82.448	84.698	87.872	85.785	87.397	84.002	85.738
01:34	ZZZZZZ	84.199	81.888	88.155	87.423	94.533	87.473	83.286	86.95
01:39	ZZZZZZ	83.63	81.444	85.969	87.138	84.364	87.33	83.034	83.952
01:44	ZZZZZZ	83.193	81.286	84.287	86.84	84.65	85.883	82.456	85.097
01:48	ZZZZZZ	83.998	81.431	85.642	86.626	84.028	86.782	82.552	83.34
01:53	MA46517-CCVA18	80.63	80.433	83.765	82.356	85.108	83.629	81.745	82.955
01:58	MA46517-CCB18	84.646	83.355	84.913	85.199	84.799	85.574	81.533	83.728
02:03	ZZZZZZ	83.839	81.945	85.588	87.568	84.52	86.837	82.985	83.134

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
02:08	ZZZZZZ	83.385	81.22	84.658	87.516	83.427	86.787	81.872	82.626
02:12	ZZZZZZ	83.659	81.293	84.978	86.833	84.117	86.695	82.389	83.832
02:17	ZZZZZZ	82.981	80.451	84.973	85.884	84.362	85.592	81.361	82.688
02:22	ZZZZZZ	83.076	81.607	84.763	86.636	83.906	86.396	82.247	82.875
02:27	ZZZZZZ	82.633	80.863	82.661	85.919	84.014	85.617	81.633	83.016
02:31	ZZZZZZ	82.735	80.68	83.309	86.708	83.692	86.389	81.812	83.094
02:36	ZZZZZZ	82.969	80.363	84.722	86.358	81.892	84.96	81.189	81.117
02:41	MP14224-MB1	85.435	84.721	85.611	85.436	85.778	85.797	83.078	84.277
02:46	MP14224-B1	83.978	83.135	85.214	84.355	85.23	85.165	82.471	83.471
02:51	MA46517-CCVA19	79.926	79.05	82.179	81.664	84.789	82.614	80.725	83.517
02:55	MA46517-CCB19	83.757	83.052	84.573	84.106	83.842	84.814	82.4	84.311
03:00	MP14224-S1	82.478	79.812	82.598	85.95	82.676	84.779	80.089	82.24
03:05	MP14224-S2	82.076	79.271	83.029	85.214	82.847	84.745	80.172	80.636
03:10	JC86264-83	82.027	79.717	83.615	85.251	82.767	84.383	80.223	82.618
03:15	MP14224-S3	82.213	80.409	82.888	85.406	82.392	84.628	80.99	82.225
03:19	JC86264-84	82.179	78.945	84.305	85.263	82.748	84.471	79.626	81.982
03:24	ZZZZZZ	82.199	79.732	83.356	86.083	82.356	84.815	80.248	81.519
03:29	ZZZZZZ	81.702	79.647	82.447	84.782	81.923	84.088	79.586	80.914
03:34	ZZZZZZ	81.73	79.546	82.704	84.936	81.428	83.84	79.719	79.452
03:38	ZZZZZZ	81.567	78.735	83.509	84.877	80.851	83.641	78.425	80.87
03:43	ZZZZZZ	81.326	80.244	82.349	84.861	81.834	84.02	79.99	81.864
03:48	MA46517-CCVA20	79.289	78.282	81.087	79.616	82.412	81.227	79.326	81.361
03:53	MA46517-CCB20	82.023	80.595	82.569	82.251	82.281	82.328	79.09	80.754
03:58	ZZZZZZ	81.665	79.319	82.85	84.472	81.024	83.424	79.06	79.891
04:02	ZZZZZZ	81.428	78.875	82.878	84.512	81.5	83.691	78.851	80.646
04:07	ZZZZZZ	81.145	78.895	82.801	84.394	80.779	83.567	79.486	81.097
04:12	ZZZZZZ	81.114	79.114	83.046	84.16	80.556	83.894	79.099	80.13
04:17	ZZZZZZ	81.206	78.813	81.497	84.238	81.484	83.128	79.354	78.892
04:21	ZZZZZZ	81.161	78.321	83.047	83.999	80	83.36	78.552	78.728
04:26	ZZZZZZ	80.994	77.712	82.079	83.858	81.038	83.444	78.229	78.891
04:31	ZZZZZZ	80.472	78.399	82.382	84.247	81.408	83.291	79	79.033
04:36	ZZZZZZ	80.75	78.973	79.958	83.714	81.879	83.069	78.845	80.193
04:40	ZZZZZZ	80.903	78.513	82.143	84.415	80.849	83.509	78.683	78.543

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
04:45	MA46517-CCVA21	78.693	78.603	80.846	79.54	82.283	81.068	78.685	80.061
04:50	MA46517-CCB21	82.039	80.796	81.29	81.721	82.089	81.829	79.67	80.439
04:55	ZZZZZZ	80.696	78.265	82.126	83.998	80.35	83.71	78.35	79.637
05:00	ZZZZZZ	80.401	77.862	82.206	83.699	80.318	82.746	78.119	80.059
05:04	ZZZZZZ	81.108	77.713	81.226	83.712	81.056	82.688	78.3	79.38
05:09	ZZZZZZ	80.572	79.355	82.467	80.971	81.737	82.059	78.535	79.715
05:14	ZZZZZZ	79.919	79.296	80.967	80.639	82.819	81.783	79.061	80.014
05:19	ZZZZZZ	81.611	80.301	82.714	81.155	82.161	81.761	78.518	80.709
05:23	ZZZZZZ	81.425	80.468	82.86	82.394	81.374	81.907	78.947	80.393
05:28	MA46517-CCVA22	78.933	78.113	80.367	79.318	82.415	80.697	78.189	81.237
05:33	MA46517-CCB22	82.017	81.247	82.566	82.151	82.202	81.991	79.422	81.22
05:38	ZZZZZZ	81.9	81.409	82.745	82.002	82.443	82.169	79.597	80.849
05:43	ZZZZZZ	82.286	80.254	82.872	82.12	81.915	81.655	78.041	80.604
05:47	ZZZZZZ	82.349	81.369	83.451	82.709	80.616	81.221	78.596	80.076
05:52	ZZZZZZ	82.481	81.751	84.067	82.246	80.984	81.352	79.478	80.306

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#9	Rhodium (103-2)	60-125 %
Istd#10	Rhodium (103-3)	60-125 %
Istd#11	Indium (115-1)	60-125 %
Istd#12	Indium (115-2)	60-125 %
Istd#13	Terbium (159-1)	60-125 %
Istd#14	Terbium (159-2)	60-125 %
Istd#15	Terbium (159-3)	60-125 %
Istd#16	Holmium (165-1)	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19
09:52	MA46517-STD1	100	100	100
09:57	MA46517-STD2	100	100	100
10:02	MA46517-STD3	100	100	100
10:06	MA46517-STD4	100.368	99.577	100.116
10:20	MA46517-STD5	100.816	99.558	99.732
10:25	MA46517-STD6	100.579	100.229	99.624
10:30	MA46517-STD7	100.134	97.925	99.041
10:35	MA46517-STD8	99.495	97.676	98.026
10:40	MA46517-STD9	98.598	99.321	98.088
10:44	MA46517-STD10	99.624	97.161	97.265
10:49	MA46517-STD11	98.225	94.14	94.048
10:54	MA46517-STD12	98.45	93.805	92.907
10:59	MA46517-STD13	99.75	98.097	98.365
11:03	ZZZZZZ	98.138	92.8	93.496
11:09	MA46517-ICV1	99.633	97.172	98.701
11:14	MA46517-ICB1	100.12	97.886	98.957
11:19	MA46517-CCVA1	99.072	92.526	94.833
11:24	MA46517-CCB1	100.115	96.93	98.617
11:28	MA46517-CRI1	No results reported for the elements associated with this internal standard.		
11:34	MA46517-CRI2	100.505	99.778	99.375
11:39	MA46517-ICSA1	No results reported for the elements associated with this internal standard.		
11:44	MA46517-ICSAB1	89.925	80.422	81.167
11:50	MA46517-ICSA2	92.282	83.118	82.182
11:55	ZZZZZZ	99.884	100.911	99.157
12:00	MA46517-CCVA2	100.143	97.861	95.002
12:05	MA46517-CCB2	100.958	102.766	99.413
12:09	ZZZZZZ	105.404	102.572	97.391
12:14	ZZZZZZ	106.186	104.693	98.545
12:19	ZZZZZZ	103.831	101.892	95.912
12:24	MP14115-S1	103.749	103.316	98.427
12:28	MP14115-S2	103.75	103.228	97.679
12:33	ZZZZZZ	103.098	104.989	99.535
12:38	ZZZZZZ	104.573	103.317	100.03

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19
12:43	MP14185A-B2	102.694	101.831	96.689
12:48	ZZZZZZ	98.789	90.165	85.488
12:52	MA46517-CCVA3	104.322	100.006	97.685
12:57	MA46517-CCB3	104.606	103.523	101.143
13:02	ZZZZZZ	103.179	101.438	96.885
13:07	ZZZZZZ	102.955	101.511	100.335
13:11	ZZZZZZ	103.371	101.133	100.762
13:19	ZZZZZZ	103.343	102.652	100.85
13:24	MA46517-CCVA4	102.68	99.028	95.745
13:29	MA46517-CCB4	103.771	101.714	100.857
13:34	MP14185A-MB1	103.509	102.987	97.862
13:39	MP14185A-S3	98.737	91.166	86.801
13:43	MP14185A-S4	99.608	90.076	87.914
13:48	ZZZZZZ	101.841	102.009	97.895
13:53	JC85901-2	97.525	90.839	87.471
13:58	MP14185A-SD1	101.574	98.622	97.702
14:03	JC86089-1F	101.44	99.005	96.549
14:08	JC86089-2F	102.155	99.35	96.239
14:12	MP14051-S3	103.575	100.458	100.021
14:17	MA46517-CCVA5	102.491	96.764	95.837
14:22	MA46517-CCB5	102.474	97.858	100.109
14:27	ZZZZZZ	100.687	91.571	90.465
14:32	ZZZZZZ	126.338	88.917	87.748
14:36	ZZZZZZ	104.241	101.37	99.318
14:41	ZZZZZZ	105.237	101.011	99.92
14:46	ZZZZZZ	No results reported for the elements associated with this internal standard.		
14:59	ZZZZZZ	101.801	93.768	90.951
15:03	MA46517-CCVA6	103.271	98.908	96.498
15:08	MA46517-CCB6	104.153	100.308	100.965
15:13	MP14051-S4	104.433	100.605	99.952
15:18	JC86039-2	103.047	100.653	99.34
15:22	MP14051-SD1	103.427	99.656	100.386
15:27	ZZZZZZ	102.789	102.042	97.654

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19
15:32	MP14059A-S3	102.288	96.914	95.746
15:37	MP14059A-S4	102.146	97.754	95.869
15:42	MA46517-CCVA7	102.132	96.388	94.947
15:46	MA46517-CCB7	103.601	96.932	100.686
15:57	ZZZZZZ	103.502	98.901	98.065
16:02	JC86095-4	100.804	99.357	96.124
16:07	MP14059A-SD1	101.583	99.578	98.269
16:11	ZZZZZZ	101.754	97.346	95.37
16:16	ZZZZZZ	102.385	96.955	93.629
16:21	ZZZZZZ	100.749	96.723	95.298
16:26	ZZZZZZ	101.075	99.248	96.073
16:30	ZZZZZZ	98.558	90.009	87.73
16:35	ZZZZZZ	93.637	83.696	80.986
16:40	ZZZZZZ	92.125	75.932	76.657
16:45	MA46517-CCVA8	99.925	93.848	95.246
16:49	MA46517-CCB8	101.041	96.618	97.439
16:54	ZZZZZZ	90.765	75.944	76.006
16:59	ZZZZZZ	93.58	82.632	82.905
17:04	ZZZZZZ	95.034	83.929	83.825
17:08	ZZZZZZ	100.225	97.374	95.991
17:13	ZZZZZZ	100.829	96.789	96.338
17:18	ZZZZZZ	99.315	88.717	87.518
17:23	ZZZZZZ	100.303	95.653	92.944
17:28	ZZZZZZ	99.819	88.444	87.716
17:32	ZZZZZZ	100.776	88.748	87.797
17:37	MA46517-CCVA9	98.63	95.96	92.73
17:42	MA46517-CCB9	98.747	96.509	95.913
17:47	MP14142A-MB1	98.199	97.654	94.272
17:51	MP14142A-B2	97.467	93	90.69
17:56	MP14142A-S3	97.384	93.129	87.603
18:01	MP14142A-S4	97.868	94.375	88.013
18:06	JC86215-1	97.386	92.954	89.676
18:11	MP14142A-SD1	97.834	98.354	94.934

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19
18:15	ZZZZZZ	119.073	90.034	85.761
18:20	ZZZZZZ	94.011	89.258	84.842
18:25	ZZZZZZ	92.593	82.181	78.771
18:30	MA46517-CCVA10	98.324	92.305	91.528
18:34	MA46517-CCB10	99.247	96.292	95.191
18:39	ZZZZZZ	102.048	97.539	91.577
18:44	ZZZZZZ	95.756	87.726	83.855
18:49	ZZZZZZ	94.941	85.984	83.633
18:53	ZZZZZZ	95.03	87.155	84.64
18:58	ZZZZZZ	96.713	93.323	89.609
19:03	ZZZZZZ	96.774	88.951	85.275
19:08	ZZZZZZ	94.145	86.599	83.786
19:13	ZZZZZZ	95.543	87.729	85.1
19:17	ZZZZZZ	94.408	90.94	86.641
19:22	MA46517-CCVA11	95.359	91.422	88.693
19:27	MA46517-CCB11	95.434	92.996	92.698
19:32	ZZZZZZ	100.444	91.09	87.185
19:36	ZZZZZZ	156.382 !a	87.747	83.621
19:41	ZZZZZZ	93.097	90.136	86.089
19:46	ZZZZZZ	93.097	89.541	86.611
19:51	ZZZZZZ	92.909	91.939	86.782
19:56	ZZZZZZ	94.719	91.606	87.877
20:00	ZZZZZZ	94.562	91.833	87.701
20:05	ZZZZZZ	96.316	90.957	88.44
20:10	ZZZZZZ	95.95	94.585	92.461
20:15	ZZZZZZ	93.065	90.928	90.317
20:19	MA46517-CCVA12	93.125	88.452	86.448
20:24	MA46517-CCB12	93.151	90.806	89.589
20:29	MP14218-S3	93.518	90.817	91.236
20:34	JC86162-111	94.172	91.504	91.149
20:39	MP14247-MB1	95.05	92.624	91.945
20:43	MP14247-B1	93.293	88.087	88.72
20:48	MP14247-S1	90.094	76.53	77.036

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19
20:53	MP14247-S2	91.022	76.635	77.972
20:58	JC86317-4	91.576	77.036	77.355
21:03	ZZZZZZ	90.441	80.931	79.321
21:07	ZZZZZZ	90.496	79.735	80.454
21:12	MA46517-CCVA13	90.306	84.666	84.792
21:17	MA46517-CCB13	91.851	88.951	89.486
21:22	ZZZZZZ	93.448	85.311	85.952
21:26	ZZZZZZ	89.802	75.99	76.562
21:31	ZZZZZZ	92.703	89.458	90.292
21:36	ZZZZZZ	85.133	68.363	68.502
21:41	ZZZZZZ	91.913	76.796	77.287
21:45	ZZZZZZ	93.379	90.078	90.646
21:50	ZZZZZZ	89.758	76.815	76.018
21:55	MP14222-MB1	93.616	91.349	90.34
22:00	MP14222-B1	91.9	90.66	89.559
22:04	MA46517-CCVA14	91.702	87.609	85.541
22:09	MA46517-CCB14	92.412	90.406	89.213
22:14	MP14222-S1	91.853	88.772	87.955
22:19	MP14222-S2	91.846	86.951	88.325
22:23	JC86264-42	92.45	88.263	88.685
22:28	MP14222-S3	91.261	87.864	87.757
22:33	JC86264-43	91.838	87.658	87.756
22:38	ZZZZZZ	93.089	86.442	88.964
22:42	ZZZZZZ	90.451	87.642	87.569
22:47	ZZZZZZ	91.178	87.275	87.568
22:52	ZZZZZZ	92.19	87.156	87.307
22:57	ZZZZZZ	90.531	86.189	86.268
23:02	MA46517-CCVA15	88.95	82.628	83.139
23:06	MA46517-CCB15	89.503	87.04	87.024
23:11	ZZZZZZ	90.841	84.845	87.598
23:16	ZZZZZZ	90.861	85.722	86.668
23:21	ZZZZZZ	89.108	85.342	85.812
23:25	ZZZZZZ	90.61	83.018	85.908

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19
23:30	ZZZZZZ	91.211	84.704	86.634
23:35	ZZZZZZ	91.222	84.807	86.66
23:40	ZZZZZZ	90.092	83.766	86.015
23:44	ZZZZZZ	89.063	84.468	86.461
23:49	ZZZZZZ	89.83	84.863	87.156
23:54	ZZZZZZ	89.685	84.969	85.566
23:59	MA46517-CCVA16	87.577	81.745	82.052
00:04	MA46517-CCB16	87.371	87.362	85.295
00:08	ZZZZZZ	88.304	82.248	84.735
00:13	ZZZZZZ	88.366	81.988	84.285
00:18	ZZZZZZ	88.22	82.706	83.523
00:23	MP14223-MB1	87.558	85.377	85.301
00:27	MP14223-B1	86.728	86.421	84.447
00:32	MP14223-S1	88.406	83.14	84.632
00:37	MP14223-S2	87.999	81.623	84.213
00:42	JC86264-63	87.949	81.112	84.077
00:46	MP14223-S3	No results reported for the elements associated with this internal standard.		
00:51	JC86264-64	88.01	83.339	84.823
00:56	MA46517-CCVA17	84.824	79.829	79.555
01:01	MA46517-CCB17	84.875	81.776	82.998
01:06	ZZZZZZ	87.553	81.516	83.208
01:10	ZZZZZZ	88.626	79.808	84.135
01:15	ZZZZZZ	87.678	79.322	84.551
01:20	ZZZZZZ	88.164	82.544	84.428
01:25	ZZZZZZ	88.387	81.945	85.18
01:29	ZZZZZZ	88.317	81.15	84.733
01:34	ZZZZZZ	87.275	85.126	84.013
01:39	ZZZZZZ	87.999	81.019	84.389
01:44	ZZZZZZ	86.269	78.675	82.601
01:48	ZZZZZZ	87.116	78.867	84.057
01:53	MA46517-CCVA18	84.152	78.886	79.149
01:58	MA46517-CCB18	85.894	81.932	82.427
02:03	ZZZZZZ	87.126	80.404	84.272

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19
02:08	ZZZZZZ	87.424	81.032	83.236
02:12	ZZZZZZ	86.678	82.094	82.902
02:17	ZZZZZZ	86.471	81.042	82.207
02:22	ZZZZZZ	86.786	80.716	83.278
02:27	ZZZZZZ	86.444	80.719	82.514
02:31	ZZZZZZ	86.502	80.39	83.199
02:36	ZZZZZZ	84.882	80.591	82.51
02:41	MP14224-MB1	86.248	83.061	83.513
02:46	MP14224-B1	85.834	81.132	82.49
02:51	MA46517-CCVA19	83.5	79.036	78.379
02:55	MA46517-CCB19	83.854	81.348	81.553
03:00	MP14224-S1	85.791	79.522	81.602
03:05	MP14224-S2	84.774	78.449	81.511
03:10	JC86264-83	84.144	79.079	81.176
03:15	MP14224-S3	84.827	78.666	80.944
03:19	JC86264-84	85.501	79.009	80.916
03:24	ZZZZZZ	85.264	79.267	81.677
03:29	ZZZZZZ	84.582	78.915	80.645
03:34	ZZZZZZ	83.733	78.041	80.317
03:38	ZZZZZZ	83.573	78.239	80.105
03:43	ZZZZZZ	84.018	77.06	80.12
03:48	MA46517-CCVA20	81.616	77.372	76.628
03:53	MA46517-CCB20	82.24	79.467	79.296
03:58	ZZZZZZ	83.536	77.306	79.815
04:02	ZZZZZZ	83.996	76.719	79.861
04:07	ZZZZZZ	84.527	77.628	80.775
04:12	ZZZZZZ	84.607	77.327	80.244
04:17	ZZZZZZ	83.265	77.21	79.162
04:21	ZZZZZZ	83.784	79.068	79.89
04:26	ZZZZZZ	83.578	77.534	80.016
04:31	ZZZZZZ	82.978	78.021	79.313
04:36	ZZZZZZ	83.304	76.715	79.728
04:40	ZZZZZZ	83.562	77.957	79.861

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46517
Parameters: Al,As,Ba,Cd,Cr,Cu,Fe,Pb,Ag

Time	Sample Description	Istd#17	Istd#18	Istd#19
04:45	MA46517-CCVA21	81.411	76.036	76.146
04:50	MA46517-CCB21	82.254	79.034	79.358
04:55	ZZZZZZ	83.52	77.858	79.354
05:00	ZZZZZZ	83.455	77.249	79.852
05:04	ZZZZZZ	83.162	77.169	79.312
05:09	ZZZZZZ	82.229	78.187	77.75
05:14	ZZZZZZ	82.869	77.525	77.831
05:19	ZZZZZZ	82.006	78.533	78.752
05:23	ZZZZZZ	81.878	79.171	78.476
05:28	MA46517-CCVA22	81.351	76.008	75.742
05:33	MA46517-CCB22	82.279	78.645	79.152
05:38	ZZZZZZ	82.655	79.233	79.359
05:43	ZZZZZZ	81.209	77.437	78.321
05:47	ZZZZZZ	81.158	77.792	78.147
05:52	ZZZZZZ	81.91	78.237	78.616

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#17	Holmium (165-2)	60-125 %
Istd#18	Bismuth (209-1)	60-125 %
Istd#19	Bismuth (209-2)	60-125 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA46517 Units: ug/l

Time: / Sample ID:			11:14 ICB1		11:24 CCB1		12:05 CCB2		12:57 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27	0.000194	<25	0.396	<25	0.719	<25	0.874	<25
Antimony	2.0	.061								
Arsenic	0.50	.008	-0.00403	<0.50	0.0151	<0.50	0.00864	<0.50	0.0964	<0.50
Barium	1.0	.01	0.00340	<1.0	0.00647	<1.0	0.00566	<1.0	0.0111	<1.0
Beryllium	0.30	.005								
Boron	25	.67								
Cadmium	0.50	.002	0.00429	<0.50	-0.000170	<0.50	0.00611	<0.50	0.0687	<0.50
Calcium	250	1.8	anr							
Chromium	1.0	.018	-0.00873	<1.0	0.0187	<1.0	0.00261	<1.0	-0.000242	<1.0
Cobalt	0.50	.002								
Copper	2.0	.006	-0.00845	<2.0	-0.00314	<2.0	0.0127	<2.0	0.00481	<2.0
Iron	25	.16	0.210	<25	0.953	<25	1.32	<25	1.05	<25
Lead	0.50	.004	0.00316	<0.50	0.00654	<0.50	0.00724	<0.50	0.0150	<0.50
Magnesium	250	.14								
Manganese	1.0	.005	anr							
Molybdenum	1.0	.01								
Nickel	1.0	.008								
Potassium	250	1								
Selenium	0.50	.4	anr							
Silver	0.50	.002	-0.000549	<0.50	0.00762	<0.50	0.00510	<0.50	0.0115	<0.50
Sodium	250	.28	anr							
Strontium	1.0	.003								
Thallium	0.50	.002	anr							
Tin	5.0	.02								
Titanium	1.0	.02								
Vanadium	1.0	.023								
Zinc	5.0	.023								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA46517 Units: ug/l

Time:			13:29		14:22	
Sample ID:			CCB4		CCB5	
Metal	RL	IDL	raw	final	raw	final
Aluminum	25	.27	1.22	<50	1.06	<25
Antimony	2.0	.061				
Arsenic	0.50	.008	0.138	<1.0	0.114	<0.50
Barium	1.0	.01	0.0163	<1.0	0.0159	<1.0
Beryllium	0.30	.005				
Boron	25	.67				
Cadmium	0.50	.002	0.0731	<0.50	0.0766	<0.50
Calcium	250	1.8	anr			
Chromium	1.0	.018	0.0151	<4.0	0.00195	<1.0
Cobalt	0.50	.002				
Copper	2.0	.006	-0.00577	<4.0	-0.0139	<2.0
Iron	25	.16	0.756	<50	0.633	<25
Lead	0.50	.004	0.00555	<0.50	0.00465	<0.50
Magnesium	250	.14				
Manganese	1.0	.005	anr			
Molybdenum	1.0	.01				
Nickel	1.0	.008				
Potassium	250	1				
Selenium	0.50	.4	anr			
Silver	0.50	.002	0.00910	<2.0	0.00728	<0.50
Sodium	250	.28	anr			
Strontium	1.0	.003				
Thallium	0.50	.002	anr			
Tin	5.0	.02				
Titanium	1.0	.02				
Vanadium	1.0	.023				
Zinc	5.0	.023				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA46517 Units: ug/l

Time:		11:09			11:19			12:00	
Sample ID:	ICV	ICV1		CCVA	CCVA1		CCVA	CCVA2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	60	65.2	108.7	5000	5170	103.4	5000	4790	95.8
Antimony									
Arsenic				50	51.2	102.4	50	52.6	105.2
Barium				50	51.8	103.6	50	49.4	98.8
Beryllium									
Boron									
Cadmium				50	52.3	104.6	50	49.8	99.6
Calcium									
Chromium				50	51.6	103.2	50	50.3	100.6
Cobalt									
Copper				50	50.7	101.4	50	49.6	99.2
Iron				5000	5200	104.0	5000	5090	101.8
Lead				50	53.2	106.4	50	50.9	101.8
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver				50	53.0	106.0	50	48.0	96.0
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA46517 Units: ug/l

Time:		12:52			13:24			14:17	
Sample ID:	CCVA	CCVA3		CCVA	CCVA4		CCVA	CCVA5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	5000	4810	96.2	5000	4840	96.8	5000	4840	96.8
Antimony									
Arsenic	50	51.8	103.6	50	51.3	102.6	50	51.7	103.4
Barium	50	50.3	100.6	50	50.3	100.6	50	50.2	100.4
Beryllium									
Boron									
Cadmium	50	49.2	98.4	50	48.9	97.8	50	50.2	100.4
Calcium	anr								
Chromium	50	49.7	99.4	50	49.2	98.4	50	49.9	99.8
Cobalt									
Copper	50	48.7	97.4	50	47.7	95.4	50	48.4	96.8
Iron	5000	4970	99.4	5000	5000	100.0	5000	5110	102.2
Lead	50	50.1	100.2	50	49.9	99.8	50	51.5	103.0
Magnesium									
Manganese	anr								
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	50	50.4	100.8	50	49.3	98.6	50	48.7	97.4
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA46517 Units: ug/l

Time:			11:34	
Sample ID:	CRI	CRIA	CRI2	
Metal	True	True	Results	% Rec
Aluminum	25	25	26.0	104.0
Antimony	2.0	0.25		
Arsenic	0.50	0.50	0.485	97.0
Barium	1.0	0.50	1.04	104.0
Beryllium	0.50	0.25		
Boron	25	2.5		
Cadmium	0.50	0.25	0.539	107.8
Calcium	250	125	anr	
Chromium	1.0	2.0	0.956	95.6
Cobalt	0.50	0.25		
Copper	2.0	2.0	1.95	97.5
Iron	25	25	26.2	104.8
Lead	0.50	0.25	0.502	100.4
Magnesium	250	125		
Manganese	1.0	0.25	anr	
Molybdenum	1.0	0.50		
Nickel	1.0	2.0		
Potassium	250	125		
Selenium	0.50	0.50	anr	
Silver	0.50	1.0	0.515	103.0
Sodium	250	125	anr	
Strontium	5.0	0.50		
Thallium	0.50	0.25	anr	
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0		
Zinc	5.0	2.0		

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XB041619M3.CSV Date Analyzed: 04/16/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA46517 Units: ug/l

Time:			11:44		11:50	
Sample ID:	ICSA	ICSAB	ICSAB1		ICSA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	98300	98.3	95700	95.7
Antimony			0.173		0.196	
Arsenic		20	19.8	99.0	0.0645	
Barium			0.300		0.249	
Beryllium			0.00103		-0.000466	
Boron		50	50.5	101.0	2.06	
Cadmium		20	18.7	93.5	0.146	
Calcium	100000	100000	99400	99.4	97800	97.8
Chromium		20	20.4	102.0	0.247	
Cobalt		20	19.7	98.5	0.350	
Copper		20	19.0	95.0	0.106	
Iron	100000	100000	94100	94.1	90900	90.9
Lead			0.0848		0.0744	
Magnesium	100000	100000	95700	95.7	94100	94.1
Manganese		20	20.2	101.0	0.253	
Molybdenum	2000	2000	2180	109.0	2160	108.0
Nickel		20	19.0	95.0	0.792	
Potassium	100000	100000	101000	101.0	101000	101.0
Selenium		20	19.9	99.5	0.127	
Silver		20	20.3	101.5	0.00926	
Sodium	100000	100000	96200	96.2	94900	94.9
Strontium	2000	2000	2190	109.5	2150	107.5
Thallium			0.00269		0.00327	
Tin	2000	2000	1900	95.0	1880	94.0
Titanium	2000	2000	1830	91.5	1790	89.5
Vanadium		20	21.2	106.0	0.0164	
Zinc		20	20.7	103.5	0.453	

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:48	MA46528-STD1	1		STDA
15:52	MA46528-STD2	1		STDA
15:58	MA46528-STD3	1		STDA
16:03	MA46528-STD4	1		STDB
16:08	MA46528-STD5	1		STDC
16:13	MA46528-STD6	1		STDD
16:18	MA46528-STD7	1		STDE
16:23	MA46528-STD8	1		STDF
16:28	MA46528-STD9	1		STDG
16:33	MA46528-STD10	1		STDH
16:38	MA46528-STD11	1		STDI
16:43	MA46528-STD12	1		STDJ
16:48	MA46528-STD13	1		STDA
16:53	MA46528-ICVA1	1		
16:58	MA46528-ICV1	1		Not needed
17:03	MA46528-ICB1	1		
17:08	MA46528-CCVA1	1		
17:13	MA46528-CCB1	1		
17:18	MA46528-CRI1	1		
17:23	MA46528-ICSA1	1		
17:28	MA46528-ICSAB1	1		
17:34	MA46528-CCVA2	1		
17:39	MA46528-CCB2	1		
17:44	ZZZZZZ	2		
17:49	ZZZZZZ	2		
17:54	ZZZZZZ	5		
17:59	MP14185A-MB1	2		
18:04	MP14185A-B2	2		
18:09	JC86089-1F	2		
18:14	JC86089-2F	2		
18:19	MP14185A-S3	2		
18:24	MP14185A-S4	2		
18:29	MA46528-CCVA3	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	18:34	MA46528-CCB3	1		
	18:39	JC85901-2	2		(sample used for QC only; not part of login JC86089)
	18:44	MP14185A-SD1	10		
---------->	Last reportable sample/prep for job JC86089				
	18:49	MP14239-MB1	2		
	18:54	MP14239-B1	2		
	18:59	ZZZZZZ	5		
	19:04	ZZZZZZ	5		
	19:09	ZZZZZZ	5		
	19:14	MP14118-MB1	5		
	19:19	MP14118-B2	5		
	19:24	MA46528-CCVA4	1		
	19:29	MA46528-CCB4	1		
---------->	Last reportable CCB for job JC86089				
	19:34	MP14118-S3	5		Overrange. Need PS for Sb, B and Cu
	19:39	MP14118-S4	5		Overrange. Need PS for Sb, B and Cu
	19:44	ZZZZZZ	1		
	19:49	JC85833-1	5		(sample used for QC only; not part of login JC86089)
	19:55	MP14118-SD1	25		Overrange
	20:00	ZZZZZZ	5		
	20:05	ZZZZZZ	5		
	20:10	ZZZZZZ	5		
	20:15	ZZZZZZ	2		
	20:20	MA46528-CCVA5	1		
	20:25	MA46528-CCB5	1		
	20:30	ZZZZZZ	5		
	20:35	ZZZZZZ	5		
	20:40	ZZZZZZ	1		
	20:45	ZZZZZZ	5		
	20:50	ZZZZZZ	1		
	20:55	ZZZZZZ	1		
	21:00	MP14239-S1	2		Ba and Na overrange. Se needs PS
	21:05	MP14239-S2	2		Ba and Na overrange. Se needs PS
	21:10	JC86308-1	2		(sample used for QC only; not part of login JC86089)
	21:15	MP14239-SD1	2		Wrong dilution factor

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
21:20	MA46528-CCVA6	1		
21:25	MA46528-CCB6	1		
21:30	ZZZZZZ	1		
21:35	MP14251A-MB1	1		CCB problems.
21:40	MP14251A-MB2	1		CCB problems.
21:45	MP14251A-B2	1		CCB problems.
21:50	MP14251A-B3	25		CCB problems.
21:56	MP14251A-S3	1		CCB problems.
22:01	MP14251A-S4	1		CCB problems.
22:06	JC86379-1	1		(sample used for QC only; not part of login JC86089)
22:11	ZZZZZZ	1		
22:16	MA46528-CCVA7	1		CCB problems.
22:21	MA46528-CCB7	1		CCB problems.
22:26	ZZZZZZ	2		
22:31	ZZZZZZ	2		
22:36	ZZZZZZ	2		
22:41	ZZZZZZ	2		
22:46	ZZZZZZ	1		
22:51	ZZZZZZ	2		
22:56	ZZZZZZ	2		
23:01	ZZZZZZ	2		
23:06	ZZZZZZ	2		
23:11	MA46528-CCVA8	1		CCB problems.
23:16	MA46528-CCB8	1		CCB problems.
23:21	ZZZZZZ	2		
23:26	ZZZZZZ	2		
23:31	ZZZZZZ	2		
23:36	ZZZZZZ	1		
23:41	ZZZZZZ	2		
23:46	ZZZZZZ	2		
23:51	ZZZZZZ	1		
23:56	ZZZZZZ	2		
00:01	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
00:06	MA46528-CCVA9	1		
00:11	MA46528-CCB9	1		
00:16	ZZZZZZ	2		
00:21	MP14248A-MB1	2		
00:26	MP14248A-B2	2		
00:31	MP14248A-S3	2		
00:36	MP14248A-S4	2		
00:41	JC86341-1	2		(sample used for QC only; not part of login JC86089)
00:47	MP14248A-SD1	10		
00:52	ZZZZZZ	2		
00:57	ZZZZZZ	2		
01:02	MA46528-CCVA10	1		
01:07	MA46528-CCB10	1		
01:12	ZZZZZZ	2		
01:17	ZZZZZZ	2		
01:22	ZZZZZZ	2		
01:27	ZZZZZZ	2		
01:32	ZZZZZZ	2		
01:37	ZZZZZZ	1		
01:42	ZZZZZZ	2		
01:47	ZZZZZZ	2		
01:52	ZZZZZZ	2		
01:57	MA46528-CCVA11	1		
02:02	MA46528-CCB11	1		
02:07	ZZZZZZ	2		
02:12	ZZZZZZ	2		
02:17	ZZZZZZ	2		
02:22	ZZZZZZ	1		
02:27	ZZZZZZ	2		
02:32	ZZZZZZ	2		
02:37	ZZZZZZ	1		
02:42	ZZZZZZ	2		
02:47	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
02:52	MA46528-CCVA12	1		
02:58	MA46528-CCB12	1		
03:03	MP14247-MB1	1		
03:08	MP14247-S1	2		
03:13	MP14247-S2	2		
03:18	ZZZZZZ	2		
03:23	ZZZZZZ	100		
03:28	ZZZZZZ	1		
03:33	ZZZZZZ	1		
03:38	ZZZZZZ	1		
03:43	ZZZZZZ	1		
03:48	MA46528-CCVA13	1		
03:53	MA46528-CCB13	1		
03:58	ZZZZZZ	1		
04:03	ZZZZZZ	1		
04:08	ZZZZZZ	1		
04:13	ZZZZZZ	1		
04:18	ZZZZZZ	1		
04:23	MA46528-CCVA14	1		
04:28	MA46528-CCB14	1		
04:33	ZZZZZZ	1		
04:38	ZZZZZZ	1		
04:43	ZZZZZZ	1		
04:48	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Element: Dilution	Se
16:53	MA46528-ICVA1	1	X
16:58	MA46528-ICV1	1	Not needed
17:03	MA46528-ICB1	1	X
17:08	MA46528-CCVA1	1	X
17:13	MA46528-CCB1	1	X
17:18	MA46528-CRI1	1	X
17:23	MA46528-ICSA1	1	X
17:28	MA46528-ICSAB1	1	X
17:34	MA46528-CCVA2	1	X
17:39	MA46528-CCB2	1	X
17:44	ZZZZZZ	2	
17:49	ZZZZZZ	2	
17:54	ZZZZZZ	5	
17:59	MP14185A-MB1	2	X
18:04	MP14185A-B2	2	X
18:09	JC86089-1F	2	X
18:14	JC86089-2F	2	X
18:19	MP14185A-S3	2	X
18:24	MP14185A-S4	2	X
18:29	MA46528-CCVA3	1	X
18:34	MA46528-CCB3	1	X
18:39	JC85901-2	2	(a)
18:44	MP14185A-SD1	10	X
18:49	MP14239-MB1	2	X
18:54	MP14239-B1	2	X
18:59	ZZZZZZ	5	
19:04	ZZZZZZ	5	
19:09	ZZZZZZ	5	
19:14	MP14118-MB1	5	X
19:19	MP14118-B2	5	X
19:24	MA46528-CCVA4	1	X
19:29	MA46528-CCB4	1	X
19:34	MP14118-S3	5	X
		Element:	Se

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Element: Dilution	Se
19:39	MP14118-S4	5	X
19:44	ZZZZZZ	1	
19:49	JC85833-1	5	X (a)
19:55	MP14118-SD1	25	X
20:00	ZZZZZZ	5	
20:05	ZZZZZZ	5	
20:10	ZZZZZZ	5	
20:15	ZZZZZZ	2	
20:20	MA46528-CCVA5	1	X
20:25	MA46528-CCB5	1	X
20:30	ZZZZZZ	5	
20:35	ZZZZZZ	5	
20:40	ZZZZZZ	1	
20:45	ZZZZZZ	5	
20:50	ZZZZZZ	1	
20:55	ZZZZZZ	1	
21:00	MP14239-S1	2	X
21:05	MP14239-S2	2	X
21:10	JC86308-1	2	(a)
21:15	MP14239-SD1	2	Wrong dilution factor
21:20	MA46528-CCVA6	1	X
21:25	MA46528-CCB6	1	X
21:30	ZZZZZZ	1	
21:35	MP14251A-MB1	1	CCB problems.
21:40	MP14251A-MB2	1	CCB problems.
21:45	MP14251A-B2	1	CCB problems.
21:50	MP14251A-B3	25	CCB problems.
21:56	MP14251A-S3	1	CCB problems.
22:01	MP14251A-S4	1	CCB problems.
22:06	JC86379-1	1	CCB problems.
22:11	ZZZZZZ	1	
22:16	MA46528-CCVA7	1	CCB problems.
22:21	MA46528-CCB7	1	CCB problems.
		Element:	Se

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Element: Dilution	Se
22:26	ZZZZZZ	2	
22:31	ZZZZZZ	2	
22:36	ZZZZZZ	2	
22:41	ZZZZZZ	2	
22:46	ZZZZZZ	1	
22:51	ZZZZZZ	2	
22:56	ZZZZZZ	2	
23:01	ZZZZZZ	2	
23:06	ZZZZZZ	2	
23:11	MA46528-CCVA8	1	CCB problems.
23:16	MA46528-CCB8	1	CCB problems.
23:21	ZZZZZZ	2	
23:26	ZZZZZZ	2	
23:31	ZZZZZZ	2	
23:36	ZZZZZZ	1	
23:41	ZZZZZZ	2	
23:46	ZZZZZZ	2	
23:51	ZZZZZZ	1	
23:56	ZZZZZZ	2	
00:01	ZZZZZZ	2	
00:06	MA46528-CCVA9	1	X
00:11	MA46528-CCB9	1	X
00:16	ZZZZZZ	2	
00:21	MP14248A-MB1	2	
00:26	MP14248A-B2	2	
00:31	MP14248A-S3	2	
00:36	MP14248A-S4	2	
00:41	JC86341-1	2	(a)
00:47	MP14248A-SD1	10	
00:52	ZZZZZZ	2	
00:57	ZZZZZZ	2	
01:02	MA46528-CCVA10	1	X
01:07	MA46528-CCB10	1	X
		Element:	Se

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Element: Dilution	Se
01:12	ZZZZZZ	2	
01:17	ZZZZZZ	2	
01:22	ZZZZZZ	2	
01:27	ZZZZZZ	2	
01:32	ZZZZZZ	2	
01:37	ZZZZZZ	1	
01:42	ZZZZZZ	2	
01:47	ZZZZZZ	2	
01:52	ZZZZZZ	2	
01:57	MA46528-CCVA11	1	X
02:02	MA46528-CCB11	1	X
02:07	ZZZZZZ	2	
02:12	ZZZZZZ	2	
02:17	ZZZZZZ	2	
02:22	ZZZZZZ	1	
02:27	ZZZZZZ	2	
02:32	ZZZZZZ	2	
02:37	ZZZZZZ	1	
02:42	ZZZZZZ	2	
02:47	ZZZZZZ	2	
02:52	MA46528-CCVA12	1	X
02:58	MA46528-CCB12	1	X
03:03	MP14247-MB1	1	
03:08	MP14247-S1	2	
03:13	MP14247-S2	2	
03:18	ZZZZZZ	2	
03:23	ZZZZZZ	100	
03:28	ZZZZZZ	1	
03:33	ZZZZZZ	1	
03:38	ZZZZZZ	1	
03:43	ZZZZZZ	1	
03:48	MA46528-CCVA13	1	X
03:53	MA46528-CCB13	1	X
		Element:	Se

REPORTED ELEMENTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Element: Dilution	Se
03:58	ZZZZZZ	1	
04:03	ZZZZZZ	1	
04:08	ZZZZZZ	1	
04:13	ZZZZZZ	1	
04:18	ZZZZZZ	1	
04:23	MA46528-CCVA14	1	X
04:28	MA46528-CCB14	1	X
04:33	ZZZZZZ	1	
04:38	ZZZZZZ	1	
04:43	ZZZZZZ	1	
04:48	ZZZZZZ	1	

(a) Sample used for QC only; not part of login JC86089.

Element: Se

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:48	MA46528-STD1	100	100	100	100	100	100	100	100
15:52	MA46528-STD2	100	100	100	100	100	100	100	100
15:58	MA46528-STD3	100	100	100	100	100	100	100	100
16:03	MA46528-STD4	99.088	99.731	99.19	100.348	99.227	100.155	102.122	100.228
16:08	MA46528-STD5	99.318	99.598	100.319	98.049	99.52	100.412	100.956	99.844
16:13	MA46528-STD6	98.734	99.381	99.922	99.78	99.437	99.239	100.958	99.621
16:18	MA46528-STD7	98.39	98.959	99.954	99.358	98.481	100.118	101.282	99.537
16:23	MA46528-STD8	97.58	98.971	101.199	99.091	99.326	100.281	99.945	99.441
16:28	MA46528-STD9	96.972	98.195	99.908	98.952	99.07	100.688	99.376	98.9
16:33	MA46528-STD10	97.56	98.539	100.814	99.323	98.575	101.708	100.652	100.163
16:38	MA46528-STD11	96.147	98.416	98.966	97.134	98.54	99.197	99.191	98.173
16:43	MA46528-STD12	94.344	95.231	99.569	95.797	96.369	99.21	97.9	96.344
16:48	MA46528-STD13	100	100	100	100	100	100	100	100
16:53	MA46528-ICVA1	100.991	100.873	100.287	99.889	100.759	100.248	97.772	100.685
16:58	MA46528-ICV1	No results reported for the elements associated with this internal standard.							
17:03	MA46528-ICB1	105.228	104.058	103.422	102.906	103.897	104.504	101.925	102.931
17:08	MA46528-CCVA1	102.294	103.022	103.097	102.594	102.966	102.455	99.56	102.157
17:13	MA46528-CCB1	102.197	102.462	103.175	101.978	102.116	102.471	100.31	101.055
17:18	MA46528-CRI1	103.487	103.802	102.845	102.401	103.191	103.897	101.808	103.114
17:23	MA46528-ICSA1	87.898	90.773	92.929	91.772	92.821	93.344	90.319	89.027
17:28	MA46528-ICSAB1	84.875	91.879	90.924	92.581	95.056	94.316	91.415	91.368
17:34	MA46528-CCVA2	84.168	90.825	88.949	94.721	95.274	93.187	95.775	95.348
17:39	MA46528-CCB2	85.659	92.938	90.711	95.986	97.174	97.456	99.436	96.671
17:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:49	ZZZZZZ	85.984	94.903	91.699	103.661	96.393	96.372	103.677	95.928
17:54	ZZZZZZ	89.17	100.767	97.871	107.094	102.663	106.287	109.132	100.737
17:59	MP14185A-MB1	90.626	98.727	96.608	109.759	103.391	101.676	109.723	101.9
18:04	MP14185A-B2	94.53	102.698	100.758	111.173	104.788	103.897	108.962	104.177
18:09	JC86089-1F	95.233	103.243	101.436	112.109	106.51	106.418	111.322	106.304
18:14	JC86089-2F	95.864	104.248	102.258	113.591	107.355	107.531	112.671	105.658
18:19	MP14185A-S3	91.39	101.068	97.809	106.469	102.925	101.939	105.272	102.747
18:24	MP14185A-S4	90.369	99.249	96.533	104.853	100.653	99.672	103.015	100.238
18:29	MA46528-CCVA3	96.119	105.011	102.471	110.981	106.704	107.778	109.324	107.268

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:34	MA46528-CCB3	97.429	104.232	103.294	109.487	107.336	108.779	109.368	106.368
18:39	JC85901-2	89.431	97.14	95.315	103.196	99.755	99.109	102.446	98.389
18:44	MP14185A-SD1	97.306	104.944	103.687	108.237	106.911	109.127	108.352	107.081
18:49	MP14239-MB1	95.29	100.901	98.764	108.406	104.203	102.815	108.507	102.986
18:54	MP14239-B1	92.609	99.563	96.722	107.269	100.9	98.718	105.594	101.02
18:59	ZZZZZZ	93.676	101.361	99.338	106.762	103.215	103.652	105.618	102.213
19:04	ZZZZZZ	94.011	100.17	99.73	107.161	103.724	102.88	107.267	102.435
19:09	ZZZZZZ	96.289	102.931	101.648	108.057	105.639	103.887	107.431	104.476
19:14	MP14118-MB1	100.73	106.672	105.107	109.751	108.498	107.693	109.856	107.088
19:19	MP14118-B2	97.681	104.555	103.684	108.822	104.968	106.055	107.168	105.284
19:24	MA46528-CCVA4	97.093	104.731	103.674	106.927	105.875	104.827	104.881	105.034
19:29	MA46528-CCB4	97.863	103.522	103.432	107.706	105.523	106.337	106.587	105.432
19:34	MP14118-S3	92.92	117.813	116.348	119.959	105.806	107.119	106.062	102.01
19:39	MP14118-S4	89.282	113.248	112.644	117.265	102.566	104.762	103.901	99.766
19:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:49	JC85833-1	90.043	112.663	111.916	115.915	103.245	105.13	104.298	99.946
19:55	MP14118-SD1	94.622	105.031	105.015	107.84	106.101	106.629	106.311	104.972
20:00	ZZZZZZ	91.207	114.813	112.57	117.124	101.742	101.679	101.551	99.098
20:05	ZZZZZZ	87.125	111.418	110.119	114.539	101.787	104.259	102.333	99.149
20:10	ZZZZZZ	51.866 !a	104.081	101.315	106.309	100.106	103.373	102.363	98.859
20:15	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:20	MA46528-CCVA5	87.556	97.135	96.076	101.808	101.288	99.359	102.682	100.984
20:25	MA46528-CCB5	88.938	97.842	97.096	102.398	102.348	101.311	103.476	101.592
20:30	ZZZZZZ	85.623	111.132	109.915	114.671	101.547	104.747	102.642	99.168
20:35	ZZZZZZ	86.034	109.795	108.737	115.458	101.684	103.123	104.032	98.421
20:40	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:45	ZZZZZZ	48.568 !a	103.6	100.886	105.13	100.277	103.477	101.017	98.582
20:50	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:55	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:00	MP14239-S1	77.204	91.133	89.019	95.725	96.85	95.392	98.242	97.187
21:05	MP14239-S2	76.278	89.483	89.01	94.547	95.943	94.107	97.003	96.03
21:10	JC86308-1	77.291	91.137	88.665	96.513	98.007	95.668	98.752	96.72
21:15	MP14239-SD1	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
21:20	MA46528-CCVA6	86.732	97.235	95.707	99.82	101.08	100.018	100.277	101.28
21:25	MA46528-CCB6	86.7	96.473	95.68	100.045	102.018	100.631	101.161	100.782
21:30	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:35	MP14251A-MB1	No results reported for the elements associated with this internal standard.							
21:40	MP14251A-MB2	No results reported for the elements associated with this internal standard.							
21:45	MP14251A-B2	No results reported for the elements associated with this internal standard.							
21:50	MP14251A-B3	No results reported for the elements associated with this internal standard.							
21:56	MP14251A-S3	No results reported for the elements associated with this internal standard.							
22:01	MP14251A-S4	No results reported for the elements associated with this internal standard.							
22:06	JC86379-1	No results reported for the elements associated with this internal standard.							
22:11	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:16	MA46528-CCVA7	No results reported for the elements associated with this internal standard.							
22:21	MA46528-CCB7	No results reported for the elements associated with this internal standard.							
22:26	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:31	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:36	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:41	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:46	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:51	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:56	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:01	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:06	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:11	MA46528-CCVA8	No results reported for the elements associated with this internal standard.							
23:16	MA46528-CCB8	No results reported for the elements associated with this internal standard.							
23:21	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:26	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:31	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:36	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:41	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:46	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:51	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:56	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:01	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
00:06	MA46528-CCVA9	83.279	94.105	92.753	97.498	98.78	97.475	98.811	98.982
00:11	MA46528-CCB9	83.896	94.181	92.537	97.509	99.264	97.404	100.553	98.767
00:16	ZZZZZZ	76.096	88.697	88.287	95.109	93.723	92.802	95.1	92.091
00:21	MP14248A-MB1	82.971	91.398	88.561	98.092	98.02	95.298	101.061	97.554
00:26	MP14248A-B2	81.059	90.497	87.65	96.483	95.817	92.231	97.8	94.57
00:31	MP14248A-S3	78.606	88.924	86.717	95.398	94.104	91.118	97.615	93.999
00:36	MP14248A-S4	78.581	87.877	85.481	94.857	93.375	91.452	96.267	93.151
00:41	JC86341-1	77.578	86.796	84.003	93.525	91.898	91.738	95.855	92.307
00:47	MP14248A-SD1	83.001	93.794	91.312	95.105	98.816	99.325	97.023	98.286
00:52	ZZZZZZ	77.156	86.629	84.614	93.733	92.473	89.203	95.404	91.043
00:57	ZZZZZZ	77.062	86.355	84.956	94.948	92.611	91.168	95.855	92.263
01:02	MA46528-CCVA10	82.413	92.957	91.777	95.985	97.172	95.314	96.337	97.468
01:07	MA46528-CCB10	83.163	92.625	90.781	96.051	97.817	96.627	97.062	96.954
01:12	ZZZZZZ	78.656	86.816	83.992	94.286	93.595	90.191	97.184	93.287
01:17	ZZZZZZ	79.422	88.895	86.018	94.782	95.108	91.334	98.038	94.932
01:22	ZZZZZZ	80.16	89.316	85.866	95.177	93.833	91.976	96.095	93.749
01:27	ZZZZZZ	79.098	88.503	85.597	94.727	93.525	91.877	97.486	93.353
01:32	ZZZZZZ	76.028	86.91	85.301	93.768	92.463	91.011	95.481	91.626
01:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
01:42	ZZZZZZ	78.701	89.068	87.538	96.224	93.929	92.505	97.025	93.405
01:47	ZZZZZZ	79.369	89.093	86.747	95.429	95.001	92.755	98.547	94.791
01:52	ZZZZZZ	79.569	90.647	87.752	97.487	95.698	92.898	98.458	96.039
01:57	MA46528-CCVA11	85.402	95.708	94.422	98.198	99.824	98.017	98.155	99.859
02:02	MA46528-CCB11	85.106	94.525	93.122	97.29	98.757	98.355	97.46	98.03
02:07	ZZZZZZ	78.959	89.104	85.934	94.812	93.913	91.637	96.221	94.222
02:12	ZZZZZZ	79.04	88.158	86.907	94.425	93.127	89.638	94.719	91.958
02:17	ZZZZZZ	79.059	88.97	86.116	94.87	92.747	90.188	94.527	92.51
02:22	ZZZZZZ	No results reported for the elements associated with this internal standard.							
02:27	ZZZZZZ	78.069	87.801	86.357	93.88	92.672	89.943	93.808	91.766
02:32	ZZZZZZ	77.793	87.189	84.388	92.846	92.386	88.729	93.945	91.084
02:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
02:42	ZZZZZZ	76.645	84.604	82.221	91.453	90.509	86.66	93.697	89.302
02:47	ZZZZZZ	76.941	85.737	83.753	91.753	89.947	87.739	93.405	89.615

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
02:52	MA46528-CCVA12	82.725	91.051	89.854	94.229	95.37	93.542	95.787	95.052
02:58	MA46528-CCB12	81.807	90.745	89.28	93.398	95.371	93.581	95.596	95.368
03:03	MP14247-MB1	82.31	90.788	90.194	94.917	95.749	94.772	96.06	96.185
03:08	MP14247-S1	79.341	91.748	90.998	92.94	94.109	93.591	93.081	94.321
03:13	MP14247-S2	78.246	90.924	89.71	93.077	94.341	92.955	91.881	93.972
03:18	ZZZZZZ	79.958	90.043	89.975	94.576	93.769	93.68	93.978	94.278
03:23	ZZZZZZ	81.745	91.342	90.505	95.118	96.547	96.08	97.415	96.312
03:28	ZZZZZZ	No results reported for the elements associated with this internal standard.							
03:33	ZZZZZZ	No results reported for the elements associated with this internal standard.							
03:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							
03:43	ZZZZZZ	No results reported for the elements associated with this internal standard.							
03:48	MA46528-CCVA13	81.781	93.477	90.846	98.173	98.579	96.213	99.366	98.389
03:53	MA46528-CCB13	82.046	93.171	90.071	98.409	98.389	96.445	99.915	97.648
03:58	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:08	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:13	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:18	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:23	MA46528-CCVA14	78.946	90.359	88.768	95.826	95.4	93.177	96.611	95.154
04:28	MA46528-CCB14	80.505	90.826	87.981	95.783	96.618	95.603	97.855	96.698
04:33	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:43	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:48	ZZZZZZ	No results reported for the elements associated with this internal standard.							

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (72-3)	60-125 %	60-125 %
Istd#8	Germanium (74-1)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:48	MA46528-STD1	100	100	100	100	100	100	100	100
15:52	MA46528-STD2	100	100	100	100	100	100	100	100
15:58	MA46528-STD3	100	100	100	100	100	100	100	100
16:03	MA46528-STD4	99.474	99.932	100.344	99.992	99.246	99.506	98.944	99.668
16:08	MA46528-STD5	100.641	99.824	99.38	99.389	99.025	98.401	99.636	98.751
16:13	MA46528-STD6	99.836	100.383	99.38	100.098	99.451	98.043	98.592	99.161
16:18	MA46528-STD7	99.458	100.471	99.19	100.842	99.636	98.769	99.865	99.568
16:23	MA46528-STD8	100.311	99.36	98.874	99.017	98.736	98.893	99.245	99.213
16:28	MA46528-STD9	101.392	100.283	98.305	99.796	99.124	98.591	100.091	99.64
16:33	MA46528-STD10	102.087	100.973	98.532	100.119	99.274	98.172	101.096	99.82
16:38	MA46528-STD11	99.789	98.08	96.313	97.334	96.029	96.655	98.872	99.82
16:43	MA46528-STD12	99.02	96.678	93.626	96.001	94.245	95.292	98.974	98.386
16:48	MA46528-STD13	100	100	100	100	100	100	100	100
16:53	MA46528-ICVA1	102.817	98.673	98.124	98.912	97.129	98.897	99.541	99.798
16:58	MA46528-ICV1	No results reported for the elements associated with this internal standard.							
17:03	MA46528-ICB1	104.417	103.4	102.802	104.301	102.959	103.242	103.905	102.244
17:08	MA46528-CCVA1	103.634	101.051	101.034	99.902	98.875	100.871	101.318	101.469
17:13	MA46528-CCB1	104.541	102.067	102.267	102.603	101.647	103.004	102.677	100.619
17:18	MA46528-CRI1	104.548	102.209	103.572	102.952	102.793	102.496	104.465	101.806
17:23	MA46528-ICSA1	92.103	89.124	84.812	85.263	83.639	88.694	89.586	92.854
17:28	MA46528-ICSAB1	93.3	91.121	86.359	85.74	85.174	91.074	89.184	95.664
17:34	MA46528-CCVA2	95.435	96.505	95.495	94.423	97.037	98.668	94.792	102.357
17:39	MA46528-CCB2	97.818	99.277	99.519	98.112	101.199	100.556	97.271	102.459
17:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:49	ZZZZZZ	96.54	102.611	95.672	94.872	101.28	98.983	92.581	103.065
17:54	ZZZZZZ	102.567	107.799	99.022	98.257	102.345	102.257	97.014	107.431
17:59	MP14185A-MB1	103.139	110.422	101.949	102.225	108.678	103.749	97.818	105.368
18:04	MP14185A-B2	104.837	109.902	102.925	101.961	107.205	105.672	98.333	106.712
18:09	JC86089-1F	107.38	113.424	103.707	102.862	107.824	107.227	100.307	107.415
18:14	JC86089-2F	108.804	113.639	102.988	103.117	108.019	106.945	99.897	107.659
18:19	MP14185A-S3	101.864	105.041	96.334	95.461	98.718	101.383	94.7	104.815
18:24	MP14185A-S4	100.28	104.536	94.839	94.045	98.178	99.772	94.247	104.889
18:29	MA46528-CCVA3	108.211	109.734	104.665	102.836	105.605	106.572	101.69	107.125

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:34	MA46528-CCB3	107.948	109.64	106.569	105.706	108.502	107.678	103.913	106.45
18:39	JC85901-2	99.699	103.03	94.562	93.869	97.872	98.581	94.409	102.692
18:44	MP14185A-SD1	109.678	108.996	104.233	104.184	105.93	107.278	104.439	107.473
18:49	MP14239-MB1	102.959	108.376	102.609	102.117	106.781	104.878	99.688	105.401
18:54	MP14239-B1	100.703	105.639	100.339	98.708	103.96	101.268	95.235	104.822
18:59	ZZZZZZ	103.686	106.312	99.273	98.695	102.005	103.28	98.716	104.361
19:04	ZZZZZZ	102.841	106.596	100.13	99.476	103.486	102.683	98.257	104.158
19:09	ZZZZZZ	105.47	108.929	104.519	103.766	107.398	105.336	100.615	105.426
19:14	MP14118-MB1	108.996	110.885	107.376	106.926	110.32	107.451	104.554	107.21
19:19	MP14118-B2	107.643	108.628	102.961	103.254	105.579	104.607	100.845	106.214
19:24	MA46528-CCVA4	106.734	108.197	102.736	102.473	103.469	104.071	102.135	105.37
19:29	MA46528-CCB4	107.018	107.398	104.936	104.135	106.928	106.523	102.835	104.84
19:34	MP14118-S3	104.448	102.309	98.933	97.531	98.142	102.206	99.034	105.422
19:39	MP14118-S4	100.456	100.635	97.138	94.832	95.86	100.759	96.332	104.15
19:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							
19:49	JC85833-1	101.561	100.445	97.68	96.369	97.456	101.376	97.399	104.415
19:55	MP14118-SD1	107.549	106.845	104.519	102.744	104.326	106.437	104.351	106.725
20:00	ZZZZZZ	99.547	99.663	97.447	95.22	97.378	99.585	95.889	103.171
20:05	ZZZZZZ	100.131	98.872	97.84	95.296	96.548	100.255	96.698	103.765
20:10	ZZZZZZ	98.344	99.823	96.428	93.936	95.271	99.84	94.118	103.239
20:15	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:20	MA46528-CCVA5	101.822	103.144	99.83	98.008	100.706	102.06	97.903	104.725
20:25	MA46528-CCB5	102.065	103.591	102.992	100.993	104.296	104.477	100.744	103.915
20:30	ZZZZZZ	101.025	99.735	97.072	95.074	96.217	99.712	96.745	103.215
20:35	ZZZZZZ	99.774	99.984	96.176	95.24	96.917	99.486	96.705	103.286
20:40	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:45	ZZZZZZ	98.861	98.475	95.765	92.424	94.285	99.268	93.993	102.456
20:50	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:55	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:00	MP14239-S1	96.501	98.694	89.182	87.767	91.17	93.237	89.417	99.164
21:05	MP14239-S2	96.307	98.177	88.89	86.676	90.512	93.499	89.235	99.306
21:10	JC86308-1	97.484	99.465	89.94	87.303	91.073	93.628	89.857	99.995
21:15	MP14239-SD1	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
21:20	MA46528-CCVA6	101.465	102.054	100.048	97.438	100.278	102.232	97.81	104.209
21:25	MA46528-CCB6	101.755	102.894	102.183	100.1	102.725	103.418	99.887	103.042
21:30	ZZZZZZ	No results reported for the elements associated with this internal standard.							
21:35	MP14251A-MB1	No results reported for the elements associated with this internal standard.							
21:40	MP14251A-MB2	No results reported for the elements associated with this internal standard.							
21:45	MP14251A-B2	No results reported for the elements associated with this internal standard.							
21:50	MP14251A-B3	No results reported for the elements associated with this internal standard.							
21:56	MP14251A-S3	No results reported for the elements associated with this internal standard.							
22:01	MP14251A-S4	No results reported for the elements associated with this internal standard.							
22:06	JC86379-1	No results reported for the elements associated with this internal standard.							
22:11	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:16	MA46528-CCVA7	No results reported for the elements associated with this internal standard.							
22:21	MA46528-CCB7	No results reported for the elements associated with this internal standard.							
22:26	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:31	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:36	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:41	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:46	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:51	ZZZZZZ	No results reported for the elements associated with this internal standard.							
22:56	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:01	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:06	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:11	MA46528-CCVA8	No results reported for the elements associated with this internal standard.							
23:16	MA46528-CCB8	No results reported for the elements associated with this internal standard.							
23:21	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:26	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:31	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:36	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:41	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:46	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:51	ZZZZZZ	No results reported for the elements associated with this internal standard.							
23:56	ZZZZZZ	No results reported for the elements associated with this internal standard.							
00:01	ZZZZZZ	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
00:06	MA46528-CCVA9	99.452	99	98.192	95.674	99.129	101.685	96.632	104.484
00:11	MA46528-CCB9	99.781	100.35	100.587	97.741	100.898	102.386	99.348	102.982
00:16	ZZZZZZ	93.218	96.103	88.812	87.073	91.139	94.127	89.557	99.439
00:21	MP14248A-MB1	95.599	101.47	98.162	95.248	101.791	101.041	93.813	102.974
00:26	MP14248A-B2	93.346	99.176	95.771	92.308	99.056	97.956	91.226	102.526
00:31	MP14248A-S3	91.997	98.314	91.671	88.955	95.219	96.567	89.345	101.383
00:36	MP14248A-S4	92.722	97.246	91.425	88.863	95.072	95.764	88.917	100.428
00:41	JC86341-1	91.451	97.621	90.589	88.117	95.128	95.537	88.629	100.102
00:47	MP14248A-SD1	98.216	98.904	98.678	95.115	98.143	101.874	97.229	104.428
00:52	ZZZZZZ	90.883	96.033	90.481	88.038	94.626	95.298	89.351	100.444
00:57	ZZZZZZ	91.32	96.83	92.382	89.45	96.039	95.699	89.372	100.873
01:02	MA46528-CCVA10	97.098	97.954	96.11	94.179	97.307	100.024	96.232	102.442
01:07	MA46528-CCB10	97.354	98.196	98.985	95.406	99.113	100.757	96.812	102.441
01:12	ZZZZZZ	91.867	98.244	94.033	90.686	98.874	97.379	90.854	99.633
01:17	ZZZZZZ	92.998	98.009	94.703	91.786	98.966	98.224	90.832	100.713
01:22	ZZZZZZ	93.105	97.654	94.606	91.34	97.473	96.95	90.9	100.251
01:27	ZZZZZZ	92.232	97.463	91.571	89.796	96.343	95.122	89.778	100.254
01:32	ZZZZZZ	91.412	94.559	89.492	86.901	92.828	94.334	88.547	98.936
01:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
01:42	ZZZZZZ	93.241	97.738	92.598	89.358	94.841	96.661	91.569	100.802
01:47	ZZZZZZ	93.863	98.386	93.901	90.353	96.368	96.775	90.535	101.092
01:52	ZZZZZZ	94.86	99.847	93.849	90.977	97.724	97.739	92.056	101.287
01:57	MA46528-CCVA11	99.717	99.141	99.157	95.177	97.687	102.096	97.921	103.474
02:02	MA46528-CCB11	98.865	100.111	100.012	97.506	100.75	101.903	98.675	102.703
02:07	ZZZZZZ	93.066	97.057	92.677	89.507	95.366	96.958	90.483	100.174
02:12	ZZZZZZ	91.005	95.458	89.379	86.742	92.146	93.55	88.427	99.276
02:17	ZZZZZZ	91.203	95.945	90.579	86.5	91.163	94.132	88.4	99.971
02:22	ZZZZZZ	No results reported for the elements associated with this internal standard.							
02:27	ZZZZZZ	89.897	95.986	89.444	85.919	91.87	93.904	88.717	98.956
02:32	ZZZZZZ	89.682	94.84	88.232	86	92.253	94.122	87.043	98.539
02:37	ZZZZZZ	No results reported for the elements associated with this internal standard.							
02:42	ZZZZZZ	87.814	93.47	88.09	85.57	93.276	93.677	86.863	98.025
02:47	ZZZZZZ	88.763	93.475	87.884	84.894	91.186	93.507	87.552	98.012

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
02:52	MA46528-CCVA12	94.484	95.54	95.398	91.464	94.915	99.094	93.796	101.108
02:58	MA46528-CCB12	94.874	96.239	96.849	93.628	98.163	99.291	94.881	100.372
03:03	MP14247-MB1	96.06	96.065	97.161	94.29	98.518	100.122	96.043	101.532
03:08	MP14247-S1	94.825	94.512	90.467	87.562	89.56	96.223	92.712	99.791
03:13	MP14247-S2	94.814	93.955	90.666	87.648	89.51	95.893	92.697	99.493
03:18	ZZZZZZ	94.737	95.704	91.808	89.638	92.825	97.584	94.225	101.335
03:23	ZZZZZZ	96.014	97.49	97.123	94.346	98.593	100.928	96.48	102.949
03:28	ZZZZZZ	No results reported for the elements associated with this internal standard.							
03:33	ZZZZZZ	No results reported for the elements associated with this internal standard.							
03:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							
03:43	ZZZZZZ	No results reported for the elements associated with this internal standard.							
03:48	MA46528-CCVA13	96.533	99.409	97.642	93.797	98.232	101.601	95.206	104.795
03:53	MA46528-CCB13	97.005	100.243	99.539	96.004	101.056	102.763	96.458	104.248
03:58	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:08	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:13	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:18	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:23	MA46528-CCVA14	94.674	97.577	95.176	92.255	96.978	99.941	93.47	102.083
04:28	MA46528-CCB14	95.402	97.852	98.148	94.549	99.923	101.221	95.371	102.765
04:33	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:38	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:43	ZZZZZZ	No results reported for the elements associated with this internal standard.							
04:48	ZZZZZZ	No results reported for the elements associated with this internal standard.							

! = Outside limits.

LEGEND:			CCV/CCB
Istd#	Parameter	Limits	Limits
Istd#9	Germanium (74-2)	60-125 %	60-125 %
Istd#10	Germanium (74-3)	60-125 %	60-125 %
Istd#11	Rhodium (103-1)	60-125 %	60-125 %
Istd#12	Rhodium (103-2)	60-125 %	60-125 %
Istd#13	Rhodium (103-3)	60-125 %	60-125 %
Istd#14	Indium (115-1)	60-125 %	60-125 %
Istd#15	Indium (115-2)	60-125 %	60-125 %
Istd#16	Terbium (159-1)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
15:48	MA46528-STD1	100	100	100	100	100	100
15:52	MA46528-STD2	100	100	100	100	100	100
15:58	MA46528-STD3	100	100	100	100	100	100
16:03	MA46528-STD4	99.685	99.793	100.561	100.793	100.123	100.089
16:08	MA46528-STD5	99.983	99.634	99.606	100.237	99.681	99.705
16:13	MA46528-STD6	99.443	100.714	100.259	100.486	99.988	99.4
16:18	MA46528-STD7	100.016	100.053	101.005	100.357	100.44	100.251
16:23	MA46528-STD8	99.512	99.497	99.893	100.265	100.494	99.755
16:28	MA46528-STD9	100.259	100.375	100.472	99.746	99.896	99.773
16:33	MA46528-STD10	100.118	101.352	100.7	100.513	100.854	100.355
16:38	MA46528-STD11	100.047	99.519	99.927	100.702	98.653	97.866
16:43	MA46528-STD12	99.515	98.561	98.024	100.845	97.774	97.618
16:48	MA46528-STD13	100	100	100	100	100	100
16:53	MA46528-ICVA1	100.527	99.119	100.546	101.3	97.753	99.051
16:58	MA46528-ICV1	No results reported for the elements associated with this internal standard.					
17:03	MA46528-ICB1	103.368	101.676	102.959	103.19	102.114	102.033
17:08	MA46528-CCVA1	101.714	100.218	102.789	102.135	99.554	99.425
17:13	MA46528-CCB1	102.131	100.665	101.647	102.393	100.449	101.168
17:18	MA46528-CRI1	102.894	100.938	102.441	102.758	101.416	101.913
17:23	MA46528-ICSA1	94.284	90.085	93.998	94.537	87.147	87.029
17:28	MA46528-ICSAB1	94.003	91.599	96.741	95.249	89.979	87.104
17:34	MA46528-CCVA2	97.853	100.993	102.704	98.925	101.495	97.785
17:39	MA46528-CCB2	99.182	102.792	102.877	100.29	104.64	99.8
17:44	ZZZZZZ	No results reported for the elements associated with this internal standard.					
17:49	ZZZZZZ	97.341	104.797	110.913	104.238	106.364	99.421
17:54	ZZZZZZ	102.091	108.45	134.312	!a127.886	104.703	99.408
17:59	MP14185A-MB1	99.204	107.391	106.207	99.975	107.425	101.929
18:04	MP14185A-B2	100.536	107.113	108.285	101.025	105.415	98.972
18:09	JC86089-1F	100.147	107.92	107.769	101.832	106.783	100.7
18:14	JC86089-2F	100.171	108.278	106.755	101.419	105.077	99.898
18:19	MP14185A-S3	97.075	103.997	105.475	98.52	98.405	92.861
18:24	MP14185A-S4	97.718	103.742	105.36	98.712	98.073	92.494
18:29	MA46528-CCVA3	102.266	106.134	107.688	103.261	104.027	99.597

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
18:34	MA46528-CCB3	102.175	106.299	106.676	103.355	106.313	102.868
18:39	JC85901-2	96.864	102.965	103.899	98.871	98.824	93.927
18:44	MP14185A-SD1	102.969	106.303	107.197	104.412	105.24	101.917
18:49	MP14239-MB1	99.543	106.067	105.739	100.075	105.955	100.799
18:54	MP14239-B1	98.217	105.828	105.425	99.47	103.219	98.231
18:59	ZZZZZZ	99.566	104.911	104.963	100.824	100.657	96.372
19:04	ZZZZZZ	99.246	105.168	104.534	100.964	101.652	97.933
19:09	ZZZZZZ	100.841	106.017	105.233	101.225	104.42	100.843
19:14	MP14118-MB1	102.783	107.73	107.48	103.506	108.369	104.31
19:19	MP14118-B2	101.066	105.638	106.759	102.469	103.214	100.942
19:24	MA46528-CCVA4	101.965	104.313	105.017	103.194	102.63	100.723
19:29	MA46528-CCB4	101.647	105.772	105.743	102.057	104.742	101.869
19:34	MP14118-S3	101.553	102.755	123.369	119.033	99.755	96.119
19:39	MP14118-S4	99.354	100.904	123.053	118.11	98.674	95.228
19:44	ZZZZZZ	No results reported for the elements associated with this internal standard.					
19:49	JC85833-1	99.764	102.146	120.145	116.202	99.685	95.791
19:55	MP14118-SD1	103.411	105.008	110.679	107.806	106.326	103.29
20:00	ZZZZZZ	98.992	101.327	111.091	106.856	99.452	94.449
20:05	ZZZZZZ	98.995	101.697	116.183	111.339	99.185	95.594
20:10	ZZZZZZ	99.194	101.75	118.495	114.474	98.478	95.036
20:15	ZZZZZZ	No results reported for the elements associated with this internal standard.					
20:20	MA46528-CCVA5	98.799	103.513	104.765	99.825	102.339	98.593
20:25	MA46528-CCB5	100.367	103.821	104.163	100.987	104.416	101.039
20:30	ZZZZZZ	99.645	101.007	120.193	115.762	99.498	96.053
20:35	ZZZZZZ	99.322	101.347	117.449	112.341	98.773	95.616
20:40	ZZZZZZ	No results reported for the elements associated with this internal standard.					
20:45	ZZZZZZ	97.905	100.708	117.612	112.578	97.282	93.71
20:50	ZZZZZZ	No results reported for the elements associated with this internal standard.					
20:55	ZZZZZZ	No results reported for the elements associated with this internal standard.					
21:00	MP14239-S1	93.611	98.744	99.867	95.597	95.385	89.953
21:05	MP14239-S2	93.724	98.553	99.808	94.746	93.419	88.145
21:10	JC86308-1	93.886	98.784	101.126	95.33	93.971	88.263
21:15	MP14239-SD1	No results reported for the elements associated with this internal standard.					

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
21:20	MA46528-CCVA6	99.435	102.901	104.25	100.55	102.515	98.855
21:25	MA46528-CCB6	99.832	103.176	103.156	100.255	104.18	101.016
21:30	ZZZZZZ	No results reported for the elements associated with this internal standard.					
21:35	MP14251A-MB1	No results reported for the elements associated with this internal standard.					
21:40	MP14251A-MB2	No results reported for the elements associated with this internal standard.					
21:45	MP14251A-B2	No results reported for the elements associated with this internal standard.					
21:50	MP14251A-B3	No results reported for the elements associated with this internal standard.					
21:56	MP14251A-S3	No results reported for the elements associated with this internal standard.					
22:01	MP14251A-S4	No results reported for the elements associated with this internal standard.					
22:06	JC86379-1	No results reported for the elements associated with this internal standard.					
22:11	ZZZZZZ	No results reported for the elements associated with this internal standard.					
22:16	MA46528-CCVA7	No results reported for the elements associated with this internal standard.					
22:21	MA46528-CCB7	No results reported for the elements associated with this internal standard.					
22:26	ZZZZZZ	No results reported for the elements associated with this internal standard.					
22:31	ZZZZZZ	No results reported for the elements associated with this internal standard.					
22:36	ZZZZZZ	No results reported for the elements associated with this internal standard.					
22:41	ZZZZZZ	No results reported for the elements associated with this internal standard.					
22:46	ZZZZZZ	No results reported for the elements associated with this internal standard.					
22:51	ZZZZZZ	No results reported for the elements associated with this internal standard.					
22:56	ZZZZZZ	No results reported for the elements associated with this internal standard.					
23:01	ZZZZZZ	No results reported for the elements associated with this internal standard.					
23:06	ZZZZZZ	No results reported for the elements associated with this internal standard.					
23:11	MA46528-CCVA8	No results reported for the elements associated with this internal standard.					
23:16	MA46528-CCB8	No results reported for the elements associated with this internal standard.					
23:21	ZZZZZZ	No results reported for the elements associated with this internal standard.					
23:26	ZZZZZZ	No results reported for the elements associated with this internal standard.					
23:31	ZZZZZZ	No results reported for the elements associated with this internal standard.					
23:36	ZZZZZZ	No results reported for the elements associated with this internal standard.					
23:41	ZZZZZZ	No results reported for the elements associated with this internal standard.					
23:46	ZZZZZZ	No results reported for the elements associated with this internal standard.					
23:51	ZZZZZZ	No results reported for the elements associated with this internal standard.					
23:56	ZZZZZZ	No results reported for the elements associated with this internal standard.					
00:01	ZZZZZZ	No results reported for the elements associated with this internal standard.					

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
00:06	MA46528-CCVA9	99.852	103.032	104.393	100.611	103.367	98.836
00:11	MA46528-CCB9	98.635	102.828	103.157	100.439	104.579	100.365
00:16	ZZZZZZ	93.693	99.58	100.386	95.809	94.636	89.302
00:21	MP14248A-MB1	95.875	103.84	104.189	97.008	105.056	97.756
00:26	MP14248A-B2	95.41	103.007	103.282	96.024	102.745	95.947
00:31	MP14248A-S3	94.078	102.194	101.735	95.987	99.838	92.774
00:36	MP14248A-S4	93.955	101.961	101.39	95.842	99.206	92.746
00:41	JC86341-1	93.379	101.448	100.29	93.983	99.221	92.64
00:47	MP14248A-SD1	98.502	102.294	105.521	99.816	106.194	100.337
00:52	ZZZZZZ	93.467	100.767	99.757	95.33	99.33	93.294
00:57	ZZZZZZ	93.604	100.812	100.996	95.802	100.994	94.406
01:02	MA46528-CCVA10	97.764	101.558	103.637	98.859	102.142	97.903
01:07	MA46528-CCB10	97.249	101.856	102.031	98.152	103.388	99.203
01:12	ZZZZZZ	94.153	102.376	100.553	94.405	103.632	96.175
01:17	ZZZZZZ	94.13	102.522	101.368	94.457	102.572	96.212
01:22	ZZZZZZ	95.104	101.241	101.743	97.174	101.432	96.429
01:27	ZZZZZZ	93.374	102.487	100.437	94.532	100.469	93.899
01:32	ZZZZZZ	92.805	99.353	100.564	94.565	95.961	90.646
01:37	ZZZZZZ	No results reported for the elements associated with this internal standard.					
01:42	ZZZZZZ	94.737	100.214	101.491	96.576	98.254	92.871
01:47	ZZZZZZ	94.932	101.099	102.221	96.623	101.063	94.871
01:52	ZZZZZZ	95.323	102.63	101.737	96.088	100.338	94.609
01:57	MA46528-CCVA11	98.936	101.853	104.695	100.142	101.939	98.213
02:02	MA46528-CCB11	98.672	101.929	102.258	99.901	103.154	99.818
02:07	ZZZZZZ	93.72	101.072	100.353	94.911	99.996	93.449
02:12	ZZZZZZ	93.709	99.647	100.307	95.271	95.53	89.491
02:17	ZZZZZZ	92.916	99.787	101.436	95.333	95.377	89.447
02:22	ZZZZZZ	No results reported for the elements associated with this internal standard.					
02:27	ZZZZZZ	92.751	99.889	99.073	94.018	95.465	89.525
02:32	ZZZZZZ	92.462	99.148	99.835	92.833	97.503	90.285
02:37	ZZZZZZ	No results reported for the elements associated with this internal standard.					
02:42	ZZZZZZ	91.343	99.206	99.256	92.359	98.426	91.268
02:47	ZZZZZZ	91.718	99.191	98.883	92.541	95.913	89.153

INTERNAL STANDARD SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
Analyst: ZC Run ID: MA46528
Parameters: Se

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
02:52	MA46528-CCVA12	96.39	99.934	101.598	97.51	100.774	95.964
02:58	MA46528-CCB12	95.37	100.933	100.756	96.563	101.968	97.365
03:03	MP14247-MB1	96.085	100.814	100.334	96.507	103.374	98.956
03:08	MP14247-S1	95.915	97.918	100.864	97.588	95.681	91.178
03:13	MP14247-S2	95.799	98.538	100.699	97.637	95.629	91.35
03:18	ZZZZZZ	96.996	100.61	101.717	97.489	97.786	93.621
03:23	ZZZZZZ	96.481	101.324	102.505	98.059	103.228	99.089
03:28	ZZZZZZ	No results reported for the elements associated with this internal standard.					
03:33	ZZZZZZ	No results reported for the elements associated with this internal standard.					
03:38	ZZZZZZ	No results reported for the elements associated with this internal standard.					
03:43	ZZZZZZ	No results reported for the elements associated with this internal standard.					
03:48	MA46528-CCVA13	97.263	102.336	104.667	98.145	102.605	96.448
03:53	MA46528-CCB13	96.841	102.856	104.386	97.843	104.892	99.019
03:58	ZZZZZZ	No results reported for the elements associated with this internal standard.					
04:03	ZZZZZZ	No results reported for the elements associated with this internal standard.					
04:08	ZZZZZZ	No results reported for the elements associated with this internal standard.					
04:13	ZZZZZZ	No results reported for the elements associated with this internal standard.					
04:18	ZZZZZZ	No results reported for the elements associated with this internal standard.					
04:23	MA46528-CCVA14	95.957	101.686	102.22	96.896	102.062	96.329
04:28	MA46528-CCB14	96.246	102.263	102.811	97.049	104.316	98.94
04:33	ZZZZZZ	No results reported for the elements associated with this internal standard.					
04:38	ZZZZZZ	No results reported for the elements associated with this internal standard.					
04:43	ZZZZZZ	No results reported for the elements associated with this internal standard.					
04:48	ZZZZZZ	No results reported for the elements associated with this internal standard.					

! = Outside limits.

LEGEND: Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	60-125 %	60-125 %
Istd#18	Terbium (159-3)	60-125 %	60-125 %
Istd#19	Holmium (165-1)	60-125 %	60-125 %
Istd#20	Holmium (165-2)	60-125 %	60-125 %
Istd#21	Bismuth (209-1)	60-125 %	60-125 %
Istd#22	Bismuth (209-2)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA46528 Units: ug/l

Time: / Sample ID:			17:03 ICB1		17:13 CCB1		17:39 CCB2		18:34 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.28	anr							
Antimony	2.0	.094	anr							
Arsenic	0.50	.013	anr							
Barium	1.0	.008	anr							
Beryllium	0.50	.004	anr							
Boron	25	.65	anr							
Cadmium	0.50	.004	anr							
Calcium	250	6.1	anr							
Chromium	1.0	.014	anr							
Cobalt	0.50	.002	anr							
Copper	2.0	.021	anr							
Iron	25	.43								
Lead	0.50	.009	anr							
Magnesium	250	.15								
Manganese	1.0	.007								
Molybdenum	1.0	.015	anr							
Nickel	1.0	.017	anr							
Potassium	250	.71								
Selenium	0.50	.072	0.0482	<0.50	0.0868	<0.50	0.0832	<0.50	0.0722	<0.50
Silver	0.50	.004	anr							
Sodium	250	1	anr							
Strontium	5.0	.003								
Thallium	0.50	.004	anr							
Tin	5.0	.071								
Titanium	1.0	.035								
Vanadium	1.0	.009	anr							
Zinc	5.0	.029	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA46528 Units: ug/l

Time:			19:29	
Sample ID:			CCB4	
Metal	RL	IDL	raw	final
Aluminum	25	.28	anr	
Antimony	2.0	.094	anr	
Arsenic	0.50	.013	anr	
Barium	1.0	.008	anr	
Beryllium	0.50	.004	anr	
Boron	25	.65	anr	
Cadmium	0.50	.004	anr	
Calcium	250	6.1	anr	
Chromium	1.0	.014	anr	
Cobalt	0.50	.002	anr	
Copper	2.0	.021	anr	
Iron	25	.43		
Lead	0.50	.009	anr	
Magnesium	250	.15		
Manganese	1.0	.007		
Molybdenum	1.0	.015	anr	
Nickel	1.0	.017	anr	
Potassium	250	.71		
Selenium	0.50	.072	0.0890	<0.50
Silver	0.50	.004	anr	
Sodium	250	1	anr	
Strontium	5.0	.003		
Thallium	0.50	.004	anr	
Tin	5.0	.071		
Titanium	1.0	.035		
Vanadium	1.0	.009	anr	
Zinc	5.0	.029	anr	

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA46528 Units: ug/l

Time:		16:53			17:08			17:34	
Sample ID:	ICVA	ICVA1		CCVA	CCVA1		CCVA	CCVA2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	260	263	101.2	200	196	98.0	200	195	97.5
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA46528 Units: ug/l

Time:		18:29			19:24	
Sample ID:	CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron	anr					
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron						
Lead	anr					
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	anr					
Potassium						
Selenium	200	193	96.5	200	192	96.0
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA46528 Units: ug/l

Time:			17:18	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25	anr	
Antimony	2.0	0.25	anr	
Arsenic	0.50	0.50	anr	
Barium	1.0	0.50	anr	
Beryllium	0.50	0.25	anr	
Boron	25	2.5	anr	
Cadmium	0.50	0.25	anr	
Calcium	250	125	anr	
Chromium	1.0	2.0	anr	
Cobalt	0.50	0.25	anr	
Copper	2.0	2.0	anr	
Iron	25	25		
Lead	0.50	0.25	anr	
Magnesium	250	125		
Manganese	1.0	0.25		
Molybdenum	1.0	0.50	anr	
Nickel	1.0	2.0	anr	
Potassium	250	125		
Selenium	0.50	0.50	0.585	117.0
Silver	0.50	1.0	anr	
Sodium	250	125	anr	
Strontium	5.0	0.50		
Thallium	0.50	0.25	anr	
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0	anr	
Zinc	5.0	2.0	anr	

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: XA041719M1.CSV Date Analyzed: 04/17/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA46528 Units: ug/l

Time:			17:23		17:28	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	94500	94.5	94900	94.9
Antimony			0.159		0.194	
Arsenic		20	0.0669		20.1	100.5
Barium			0.216		0.295	
Beryllium			0.00105		0.00143	
Boron		50	1.14		50.1	100.2
Cadmium		20	-0.0626		19.0	95.0
Calcium	100000	100000	94800	94.8	96100	96.1
Chromium		20	0.278		20.7	103.5
Cobalt		20	0.331		20.2	101.0
Copper		20	0.171		20.0	100.0
Iron	100000	100000	89600	89.6	92500	92.5
Lead			0.0887		0.0960	
Magnesium	100000	100000	88800	88.8	89300	89.3
Manganese		20	0.380		20.9	104.5
Molybdenum	2000	2000	2040	102.0	2080	104.0
Nickel		20	0.663		20.1	100.5
Potassium	100000	100000	95700	95.7	96900	96.9
Selenium		20	0.172		19.1	95.5
Silver		20	0.0190		20.5	102.5
Sodium	100000	100000	88600	88.6	91400	91.4
Strontium	2000	2000	2020	101.0	2110	105.5
Thallium			0.000500		0.00377	
Tin	2000	2000	1880	94.0	1900	95.0
Titanium	2000	2000	1750	87.5	1780	89.0
Vanadium		20	-0.00615		21.2	106.0
Zinc		20	0.509		20.9	104.5

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14115
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 04/12/19

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.55	32	2.4	<50
Antimony	4.0	.19	1.7		
Arsenic	1.0	.026	.94	0.065	<1.0
Barium	2.0	.016	.73	0.025	<2.0
Beryllium	1.0	.008	.15		
Boron	50	1.3	14		
Cadmium	1.0	.008	.17	0.0045	<1.0
Calcium	500	12	64		
Chromium	2.0	.028	.62	0.45	<2.0
Cobalt	1.0	.004	.17		
Copper	4.0	.042	1.9	0.33	<4.0
Iron	50	.86	19	1.1	<50
Lead	1.0	.018	.52	0.040	<1.0
Magnesium	500	.3	46		
Manganese	2.0	.014	.63		
Molybdenum	2.0	.03	.45		
Nickel	2.0	.034	.95		
Potassium	500	1.4	68		
Selenium	1.0	.14	.55	-0.0041	<1.0
Silver	1.0	.008	.16	0.020	<1.0
Sodium	500	2.1	140		
Strontium	10	.006	2.4		
Thallium	1.0	.008	.17		
Tin	10	.14	2.6		
Titanium	2.0	.07	1.6		
Vanadium	2.0	.018	1.8		
Zinc	10	.058	5.4		

Associated samples MP14115: JC86089-1, JC86089-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14115
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 04/12/19

Metal	JC86081-4 Original	MS	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	115	4120	4000	100.1	75-125
Antimony	anr				
Arsenic	0.75	73.5	80	90.9	75-125
Barium	427	530	80	128.8(a)	75-125
Beryllium	anr				
Boron					
Cadmium	0.0	77.6	80	97.0	75-125
Calcium					
Chromium	3.9	85.9	80	102.5	75-125
Cobalt					
Copper	25.8	104	80	97.8	75-125
Iron	90.0	4410	4000	108.0	75-125
Lead	1.9	85.2	80	104.1	75-125
Magnesium					
Manganese					
Molybdenum					
Nickel	anr				
Potassium					
Selenium	0.0	367	400	91.8	75-125
Silver	0.080	78.5	80	98.0	75-125
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium	anr				
Zinc	anr				

Associated samples MP14115: JC86089-1, JC86089-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14115
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 04/12/19

Metal	JC86081-4 Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum	115	4150	4000	100.9	0.7	20
Antimony	anr					
Arsenic	0.75	73.8	80	91.3	0.4	20
Barium	427	516	80	111.3	3.6	20
Beryllium	anr					
Boron						
Cadmium	0.0	78.1	80	97.6	0.6	20
Calcium						
Chromium	3.9	86.2	80	102.9	0.3	20
Cobalt						
Copper	25.8	104	80	97.8	0.0	20
Iron	90.0	4400	4000	107.8	0.2	20
Lead	1.9	84.9	80	103.8	0.4	20
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Potassium						
Selenium	0.0	371	400	92.8	1.1	20
Silver	0.080	79.3	80	99.0	1.0	20
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP14115: JC86089-1, JC86089-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14115
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 04/12/19

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	3920	4000	98.0	80-120
Antimony	anr			
Arsenic	71.4	80	89.3	80-120
Barium	79.5	80	99.4	80-120
Beryllium	anr			
Boron				
Cadmium	76.0	80	95.0	80-120
Calcium				
Chromium	81.7	80	102.1	80-120
Cobalt				
Copper	78.6	80	98.3	80-120
Iron	4260	4000	106.5	80-120
Lead	81.5	80	101.9	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Potassium				
Selenium	351	400	87.8	80-120
Silver	80.5	80	100.6	80-120
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP14115: JC86089-1, JC86089-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14115
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 04/12/19

Metal	JC86081-4 Original	SDL 5:25	%DIF	QC Limits
Aluminum	115	122	5.8	0-10
Antimony	anr			
Arsenic	0.755	0.891	18.1 (a)	0-10
Barium	427	436	2.0	0-10
Beryllium	anr			
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	3.89	4.75	22.0*(b)	0-10
Cobalt				
Copper	25.8	27.3	5.6	0-10
Iron	90.0	83.9	6.8	0-10
Lead	1.89	1.88	0.2	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Potassium				
Selenium	0.00	0.00	NC	0-10
Silver	0.0805	0.130	61.3 (a)	0-10
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP14115: JC86089-1, JC86089-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14185A
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 04/15/19

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.54	32	8.6	<50
Antimony	4.0	.12	1.7		
Arsenic	1.0	.016	.94	0.33	<1.0
Barium	2.0	.016	.73	0.13	<2.0
Beryllium	1.0	.008	.15		
Boron	50	1.3	14		
Cadmium	1.0	.004	.17	0.091	<1.0
Calcium	500	3.7	64		
Chromium	2.0	.028	.62	0.46	<2.0
Cobalt	1.0	.004	.17		
Copper	4.0	.012	1.9	0.32	<4.0
Iron	50	.31	19	4.2	<50
Lead	1.0	.008	.52	0.069	<1.0
Magnesium	500	.27	46		
Manganese	2.0	.01	.63		
Molybdenum	2.0	.02	.45		
Nickel	2.0	.016	.95		
Potassium	500	1.4	68		
Selenium	1.0	.14	.55	0.18	<1.0
Silver	1.0	.004	.16	0.028	<1.0
Sodium	500	.56	140		
Strontium	10	.006	2.4		
Thallium	1.0	.004	.17		
Tin	10	.07	2.6		
Titanium	2.0	.04	1.6		
Vanadium	2.0	.018	1.8		
Zinc	10	.046	5.4		

Associated samples MP14185A: JC86089-1F, JC86089-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14185A
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 04/15/19

Metal	JC85901-2 Original	MS	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	697	4410	4000	92.8	75-125
Antimony					
Arsenic	0.97	71.0	80	87.5	75-125
Barium	81.8	160	80	97.8	75-125
Beryllium					
Boron					
Cadmium	0.11	76.3	80	95.2	75-125
Calcium					
Chromium	2.9	80.7	80	97.3	75-125
Cobalt					
Copper	1.7	75.8	80	92.6	75-125
Iron	621	4530	4000	97.7	75-125
Lead	0.39	82.5	80	102.6	75-125
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium	0.54	338	400	84.4	75-125
Silver	0.011	78.7	80	98.4	75-125
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP14185A: JC86089-1F, JC86089-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14185A
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 04/15/19

Metal	JC85901-2 Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum	697	4360	4000	91.6	1.1	20
Antimony						
Arsenic	0.97	71.9	80	88.7	1.3	20
Barium	81.8	159	80	96.5	0.6	20
Beryllium						
Boron						
Cadmium	0.11	74.2	80	92.6	2.8	20
Calcium						
Chromium	2.9	79.6	80	95.9	1.4	20
Cobalt						
Copper	1.7	74.5	80	91.0	1.7	20
Iron	621	4450	4000	95.7	1.8	20
Lead	0.39	81.4	80	101.3	1.3	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	0.54	329	400	82.1	2.7	20
Silver	0.011	76.2	80	95.2	3.2	20
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP14185A: JC86089-1F, JC86089-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14185A
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 04/15/19

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum	3800	4000	95.0	80-120
Antimony				
Arsenic	71.8	80	89.8	80-120
Barium	79.2	80	99.0	80-120
Beryllium				
Boron				
Cadmium	78.4	80	98.0	80-120
Calcium				
Chromium	80.3	80	100.4	80-120
Cobalt				
Copper	78.4	80	98.0	80-120
Iron	3970	4000	99.3	80-120
Lead	81.1	80	101.4	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	343	400	85.8	80-120
Silver	82.0	80	102.5	80-120
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP14185A: JC86089-1F, JC86089-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14185A
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 04/15/19

Metal	JC85901-2 Original	SDL 2:10	%DIF	QC Limits
Aluminum	697	765	9.7	0-10
Antimony				
Arsenic	0.973	1.75	80.3*(a)	0-10
Barium	81.8	86.1	5.2	0-10
Beryllium				
Boron				
Cadmium	0.110	0.653	493.0(b)	0-10
Calcium				
Chromium	2.88	2.35	18.2*(a)	0-10
Cobalt				
Copper	1.74	3.52	102.4*(a	0-10
Iron	621	637	2.6	0-10
Lead	0.393	0.836	112.4(b)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	0.536	0.00	100.0(b)	0-10
Silver	0.0113	0.0404	256.7(b)	0-10
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP14185A: JC86089-1F, JC86089-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.
(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14257 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 04/16/19

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.02	.095	-0.047	<0.20

Associated samples MP14257: JC86089-1, JC86089-2, JC86089-1F, JC86089-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14257
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 04/16/19

Metal	JC86320-4 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	1.9	2	95.0	75-125

Associated samples MP14257: JC86089-1, JC86089-2, JC86089-1F, JC86089-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14257 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 04/16/19

Metal	JC86320-4 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	1.8	2	90.0	5.4	20

Associated samples MP14257: JC86089-1, JC86089-2, JC86089-1F, JC86089-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

QC Batch ID: MP14257
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 04/16/19

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	2.1	2	105.0	80-120

Associated samples MP14257: JC86089-1, JC86089-2, JC86089-1F, JC86089-2F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

Instrument Detection Limits

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: AGICPMS1 **Effective Date:** 01/31/19

Analyte	IDL ug/l
Aluminum	.045
Aluminum	.276
Antimony	.094
Arsenic	.12
Arsenic	.013
Barium	.008
Beryllium	.004
Boron	.648
Cadmium	.007
Cadmium	.004
Calcium	6.11
Chromium	.036
Chromium	.014
Cobalt	.0041
Cobalt	.002
Copper	.1044
Copper	.021
Iron	1.21
Iron	.432
Lead	.009
Magnesium	.033
Magnesium	.152
Manganese	.006
Manganese	.007
Molybdenum	.015
Nickel	.046
Nickel	.017
Potassium	.506
Potassium	.707
Selenium	.503
Selenium	.072
Silver	.004
Sodium	.357
Sodium	1.037
Strontium	.003
Thallium	.004
Tin	.025
Tin	.071
Titanium	.035
Titanium	.035
Vanadium	.112
Vanadium	.009
Zinc	.041
Zinc	.029

Instrument Detection Limits

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: AGICPMS1 **Effective Date:** 01/31/19

Analyte	IDL ug/l

The above applies to the following instrument runs:
MA46497,MA46528

Instrument Detection Limits

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: AGICPMS2 **Effective Date:** 01/31/19

Analyte	IDL ug/l
Aluminum	.371
Aluminum	.272
Antimony	.061
Arsenic	.253
Arsenic	.008
Barium	.01
Beryllium	.005
Boron	.671
Cadmium	.005
Cadmium	.002
Calcium	1.84
Chromium	.147
Chromium	.018
Cobalt	.003
Cobalt	.002
Copper	.018
Copper	.006
Iron	3.211
Iron	.155
Lead	.004
Magnesium	.163
Magnesium	.136
Manganese	.012
Manganese	.005
Molybdenum	.01
Nickel	.012
Nickel	.008
Potassium	3.978
Potassium	1.01
Selenium	.84
Selenium	.4
Silver	.002
Sodium	.503
Sodium	.278
Strontium	.003
Thallium	.002
Tin	.02
Tin	.035
Titanium	.197
Titanium	.02
Vanadium	.113
Vanadium	.023
Zinc	.886
Zinc	.023

Instrument Detection Limits

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: AGICPMS2 **Effective Date:** 01/31/19

Analyte	IDL ug/l

The above applies to the following instrument runs:
MA46517

Instrument Detection Limits

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: LEEMANHG8 **Effective Date:** 01/31/19

Analyte	IDL ug/l
Mercury	.0201

The above applies to the following instrument runs:
MA46511

Instrument Linear Ranges

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: AGICPMS1 **Effective Date:** 09/10/18

Analyte	Linear Range ug/l
Aluminum	10000
Aluminum	10000
Antimony	100
Arsenic	100
Arsenic	100
Barium	100
Beryllium	100
Boron	200
Cadmium	100
Cadmium	100
Calcium	10000
Chromium	100
Chromium	100
Cobalt	100
Cobalt	100
Copper	100
Copper	100
Iron	10000
Iron	10000
Lithium	100
Lead	100
Magnesium	10000
Magnesium	10000
Manganese	100
Manganese	100
Molybdenum	100
Nickel	100
Nickel	100
Potassium	10000
Potassium	10000
Selenium	400
Selenium	400
Silver	100
Sodium	10000
Sodium	10000
Strontium	100
Thallium	100
Tin	100
Tin	100
Titanium	100
Titanium	100
Tungsten	100
Uranium	100
Vanadium	100
Vanadium	100
Zinc	100

Instrument Linear Ranges

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: AGICPMS1 **Effective Date:** 09/10/18

Analyte	Linear Range ug/l
Zinc	100

The above applies to the following instrument runs:
MA46497,MA46528

Instrument Linear Ranges

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: AGICPMS2 **Effective Date:** 09/10/18

Analyte	Linear Range ug/l
Aluminum	10000
Aluminum	10000
Antimony	100
Arsenic	100
Arsenic	100
Barium	100
Beryllium	100
Boron	200
Cadmium	100
Cadmium	100
Calcium	10000
Chromium	100
Chromium	100
Cobalt	100
Cobalt	100
Copper	100
Copper	100
Iron	10000
Iron	10000
Lithium	100
Lead	100
Magnesium	10000
Magnesium	10000
Manganese	100
Manganese	100
Molybdenum	100
Nickel	100
Nickel	100
Potassium	10000
Potassium	10000
Selenium	400
Selenium	400
Silver	100
Sodium	10000
Sodium	10000
Strontium	100
Thallium	100
Tin	100
Tin	100
Titanium	100
Titanium	100
Tungsten	100
Uranium	100
Vanadium	100
Vanadium	100
Zinc	100

Instrument Linear Ranges

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: AGICPMS2 **Effective Date:** 09/10/18

Analyte	Linear Range ug/l
Zinc	100

The above applies to the following instrument runs:
MA46517

Instrument Linear Ranges

Job Number: JC86089
Account: TCMAW Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Instrument ID: LEEMANHG8 **Effective Date:** 03/10/17

Analyte	Linear Range ug/l
Mercury	5

The above applies to the following instrument runs:
MA46511

Metals Analysis

Raw Data

Quantitation Report

File Name	001CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 10:54
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-307.38	56.00	2.023E-05	Pulse	0.25	3
B			1	-1.097	ug/l	-2.73	4,949.74	1.788E-03	Pulse	0.15	3
Ca			1	-0.489	ug/l	-50.17	20,526.66	4.153E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	9582.32	906.73	1.329E-04	Pulse	0.10	3
Mo			1	-0.006	ug/l	-17.49	80.00	1.172E-05	Pulse	0.10	3
Ag			1	-0.001	ug/l	-87.46	36.67	5.074E-06	Pulse	0.10	3
Sn			1	0.347	ug/l	2.27	2,426.97	3.353E-04	Pulse	0.10	3
Sb			1	-0.046	ug/l	-2.64	136.68	1.428E-05	Pulse	0.10	3
Ba			1	0.000	ug/l	1263.18	106.67	1.115E-05	Pulse	0.10	3
Tl			1	-0.005	ug/l	-21.14	326.68	5.763E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	1099.83	316.68	5.590E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-405.46	243.35	4.298E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-773.89	1,223.41	2.160E-04	Pulse	0.10	3
Na			2	-1.033	ug/l	-28.22	8,644.51	5.430E-02	Pulse	0.30	3
Mg			2	-0.601	ug/l	-6.81	316.67	1.986E-03	Pulse	0.30	3
Al			2	-0.377	ug/l	-29.90	182.23	1.142E-03	Pulse	0.30	3
K			2	-0.682	ug/l	-48.30	6,999.32	4.394E-02	Pulse	0.30	3
Ca			2	-5.169	ug/l	-3.59	116.67	7.325E-04	Pulse	0.30	3
Ti			2	0.057	ug/l	52.82	13.33	8.303E-05	Pulse	0.30	3
V			2	-0.002	ug/l	-172.41	395.57	2.481E-03	Pulse	0.30	3
Cr			2	0.011	ug/l	61.19	622.24	3.903E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	2220.08	101.11	6.316E-04	Pulse	0.30	3
Fe			2	-1.106	ug/l	-3.81	5,318.88	3.341E-02	Pulse	0.30	3
Co			2	0.001	ug/l	42.08	111.11	6.979E-04	Pulse	0.30	3
Ni			2	0.004	ug/l	133.78	85.55	5.371E-04	Pulse	0.30	3
Cu			2	0.013	ug/l	51.67	835.59	5.253E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.141	ug/l	14.62	418.90	2.627E-03	Pulse	0.30	3
As			2	0.016	ug/l	132.00	27.00	1.678E-04	Pulse	1.00	3
Cd			2	0.008	ug/l	101.25	35.54	4.160E-05	Pulse	0.30	3
Sn			2	0.008	ug/l	127.06	414.46	4.829E-04	Pulse	0.30	3
Se			3	-0.023	ug/l	-11.10	8.20	3.978E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,770,000.86	0.94	100.0	Pulse	0.10	3
1	Sc		4,942,313.78	0.89	100.0	Pulse	0.10	3
1	Ge		924,574.02	0.78	100.0	Pulse	0.10	3
1	Ge		1,298,974.70	0.30	100.0	Pulse	0.10	3
1	Rh		6,828,907.40	1.28	100.0	Analog	0.10	3
1	In		7,241,121.86	0.59	100.0	Analog	0.10	3
1	Tb		9,561,773.61	0.58	100.0	Analog	0.10	3
1	Ho		904,334.49	0.49	100.0	Pulse	0.10	3
1	Bi		5,665,022.42	0.41	100.0	Analog	0.10	3
2	Sc		159,364.10	2.92	100.0	Pulse	0.30	3
2	Ge		88,965.04	1.81	100.0	Pulse	0.30	3
2	Ge		135,601.52	2.61	100.0	Pulse	0.30	3
2	Rh		2,816,332.67	3.01	100.0	Pulse	0.30	3
2	In		857,551.19	2.83	100.0	Pulse	0.30	3
2	Tb		3,403,219.45	0.91	100.0	Mix	0.30	3
2	Ho		325,132.09	3.06	100.0	Pulse	0.30	3
2	Bi		2,243,844.63	2.86	100.0	Pulse	0.30	3
3	Sc		220,626.12	1.10	100.0	Pulse	0.30	3
3	Ge		132,121.44	1.01	100.0	Pulse	0.30	3
3	Ge		206,087.96	0.52	100.0	Pulse	0.30	3
3	Rh		2,507,220.67	0.53	100.0	Pulse	0.30	3
3	Tb		3,770,749.71	0.70	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 10:59
Sample Name	STDA
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	312.31	64.00	2.327E-05	Pulse	0.25	3
B			1	-1.100	ug/l	-0.54	4,880.82	1.775E-03	Pulse	0.15	3
Ca			1	-0.148	ug/l	-73.42	20,803.59	4.269E-03	Pulse	0.10	3
Sr			1	0.001	ug/l	230.54	946.73	1.407E-04	Pulse	0.10	3
Mo			1	-0.008	ug/l	-15.71	43.33	6.447E-06	Pulse	0.10	3
Ag			1	-0.001	ug/l	-16.34	46.67	6.469E-06	Pulse	0.10	3
Sn			1	0.340	ug/l	3.01	2,246.91	3.115E-04	Pulse	0.10	3
Sb			1	-0.047	ug/l	-1.88	126.68	1.336E-05	Pulse	0.10	3
Ba			1	0.001	ug/l	1170.10	110.00	1.161E-05	Pulse	0.10	3
Tl			1	-0.005	ug/l	-7.79	286.68	5.087E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	174.21	343.36	6.095E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	372.30	273.35	4.848E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	49.08	1,353.42	2.402E-04	Pulse	0.10	3
Na			2	-0.321	ug/l	-324.73	9,833.91	6.166E-02	Pulse	0.30	3
Mg			2	-0.591	ug/l	-1.62	324.45	2.035E-03	Pulse	0.30	3
Al			2	-0.499	ug/l	-10.62	152.23	9.550E-04	Pulse	0.30	3
K			2	0.091	ug/l	208.30	7,360.62	4.617E-02	Pulse	0.30	3
Ca			2	-6.470	ug/l	-2.83	82.23	5.157E-04	Pulse	0.30	3
Ti			2	0.037	ug/l	130.62	8.89	5.562E-05	Pulse	0.30	3
V			2	0.003	ug/l	201.98	431.12	2.704E-03	Pulse	0.30	3
Cr			2	0.010	ug/l	45.46	615.58	3.861E-03	Pulse	0.30	3
Mn			2	-0.002	ug/l	-96.68	92.22	5.785E-04	Pulse	0.30	3
Fe			2	-1.103	ug/l	-0.64	5,348.70	3.355E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-7004.73	95.56	5.998E-04	Pulse	0.30	3
Ni			2	0.004	ug/l	67.21	84.44	5.296E-04	Pulse	0.30	3
Cu			2	0.018	ug/l	12.26	902.26	5.659E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.150	ug/l	17.56	432.23	2.711E-03	Pulse	0.30	3
As			2	0.001	ug/l	504.40	14.33	8.987E-05	Pulse	1.00	3
Cd			2	-0.003	ug/l	-107.94	7.78	9.075E-06	Pulse	0.30	3
Sn			2	-0.009	ug/l	-55.01	338.90	3.966E-04	Pulse	0.30	3
Se			3	-0.008	ug/l	-38.64	11.87	5.859E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,749,648.81	0.58	100.0	Pulse	0.10	3
1	Sc		4,873,548.57	0.73	100.0	Pulse	0.10	3
1	Ge		917,556.81	1.08	100.0	Pulse	0.10	3
1	Ge		1,284,209.41	0.71	100.0	Pulse	0.10	3
1	Rh		6,723,712.61	0.77	100.0	Analog	0.10	3
1	In		7,215,409.54	1.42	100.0	Analog	0.10	3
1	Tb		9,472,991.94	0.47	100.0	Analog	0.10	3
1	Ho		897,045.95	0.82	100.0	Pulse	0.10	3
1	Bi		5,635,127.42	0.36	100.0	Analog	0.10	3
2	Sc		159,421.09	0.35	100.0	Pulse	0.30	3
2	Ge		89,075.03	0.62	100.0	Pulse	0.30	3
2	Ge		136,085.97	0.52	100.0	Pulse	0.30	3
2	Rh		2,824,630.38	0.72	100.0	Pulse	0.30	3
2	In		854,278.37	0.53	100.0	Pulse	0.30	3
2	Tb		3,349,734.80	0.28	100.0	Pulse	0.30	3
2	Ho		325,124.49	0.55	100.0	Pulse	0.30	3
2	Bi		2,239,448.80	0.45	100.0	Pulse	0.30	3
3	Sc		219,132.70	0.28	100.0	Pulse	0.30	3
3	Ge		131,593.73	0.18	100.0	Pulse	0.30	3
3	Ge		202,560.04	0.44	100.0	Pulse	0.30	3
3	Rh		2,483,345.25	0.64	100.0	Pulse	0.30	3
3	Tb		3,727,881.10	0.46	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 11:04
Sample Name	STDA
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	976.43	61.33	2.242E-05	Pulse	0.25	3
B			1	-1.117	ug/l	-1.47	4,647.43	1.701E-03	Pulse	0.15	3
Ca			1	-0.446	ug/l	-47.25	20,263.07	4.167E-03	Pulse	0.10	3
Sr			1	0.001	ug/l	174.98	930.06	1.403E-04	Pulse	0.10	3
Mo			1	-0.009	ug/l	-20.66	33.33	5.054E-06	Pulse	0.10	3
Ag			1	-0.001	ug/l	-106.84	46.67	6.535E-06	Pulse	0.10	3
Sn			1	0.337	ug/l	1.47	2,136.89	3.001E-04	Pulse	0.10	3
Sb			1	-0.047	ug/l	-0.89	113.34	1.212E-05	Pulse	0.10	3
Ba			1	-0.002	ug/l	-106.10	83.33	8.906E-06	Pulse	0.10	3
Tl			1	-0.005	ug/l	-14.74	300.02	5.443E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-368.71	280.02	5.083E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-135.35	230.01	4.174E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-168.70	1,113.40	2.021E-04	Pulse	0.10	3
Na			2	-0.747	ug/l	-67.38	9,080.24	5.727E-02	Pulse	0.30	3
Mg			2	-0.646	ug/l	-1.05	281.12	1.772E-03	Pulse	0.30	3
Al			2	-0.614	ug/l	-12.30	123.34	7.775E-04	Pulse	0.30	3
K			2	0.142	ug/l	63.03	7,347.25	4.632E-02	Pulse	0.30	3
Ca			2	-6.708	ug/l	-7.39	75.55	4.760E-04	Pulse	0.30	3
Ti			2	0.016	ug/l	115.22	4.45	2.793E-05	Pulse	0.30	3
V			2	-0.003	ug/l	-304.49	387.79	2.446E-03	Pulse	0.30	3
Cr			2	0.009	ug/l	65.94	603.35	3.803E-03	Pulse	0.30	3
Mn			2	0.001	ug/l	507.04	102.22	6.449E-04	Pulse	0.30	3
Fe			2	-1.143	ug/l	-1.51	5,024.17	3.168E-02	Pulse	0.30	3
Co			2	0.000	ug/l	128.87	100.00	6.304E-04	Pulse	0.30	3
Ni			2	0.004	ug/l	21.77	82.22	5.183E-04	Pulse	0.30	3
Cu			2	0.009	ug/l	35.00	790.03	4.979E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.102	ug/l	6.05	353.34	2.227E-03	Pulse	0.30	3
As			2	0.009	ug/l	37.22	21.00	1.324E-04	Pulse	1.00	3
Cd			2	-0.002	ug/l	-0.80	10.00	1.172E-05	Pulse	0.30	3
Sn			2	0.004	ug/l	239.76	394.45	4.622E-04	Pulse	0.30	3
Se			3	-0.019	ug/l	-53.08	9.13	4.508E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,731,973.08	0.58	100.0	Pulse	0.10	3
1	Sc		4,861,959.72	0.77	100.0	Pulse	0.10	3
1	Ge		913,916.58	0.71	100.0	Pulse	0.10	3
1	Ge		1,281,974.77	0.19	100.0	Pulse	0.10	3
1	Rh		6,628,419.70	1.04	100.0	Analog	0.10	3
1	In		7,122,813.67	0.82	100.0	Analog	0.10	3
1	Tb		9,352,266.11	0.30	100.0	Analog	0.10	3
1	Ho		890,324.13	1.19	100.0	Pulse	0.10	3
1	Bi		5,511,592.84	0.25	100.0	Analog	0.10	3
2	Sc		158,626.73	0.66	100.0	Pulse	0.30	3
2	Ge		89,114.12	0.98	100.0	Pulse	0.30	3
2	Ge		135,464.37	0.38	100.0	Pulse	0.30	3
2	Rh		2,818,402.60	0.06	100.0	Pulse	0.30	3
2	In		853,218.83	0.44	100.0	Pulse	0.30	3
2	Tb		3,335,624.52	0.37	100.0	Pulse	0.30	3
2	Ho		322,303.76	0.43	100.0	Pulse	0.30	3
2	Bi		2,218,451.58	0.21	100.0	Pulse	0.30	3
3	Sc		219,301.68	0.82	100.0	Pulse	0.30	3
3	Ge		130,463.85	0.63	100.0	Pulse	0.30	3
3	Ge		202,488.95	0.34	100.0	Pulse	0.30	3
3	Rh		2,468,272.96	0.59	100.0	Pulse	0.30	3
3	Tb		3,720,656.10	0.12	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 11:09
Sample Name	STDB
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.508	ug/l	4.05	6,545.34	2.404E-03	Pulse	0.25	3
B			1	23.931	ug/l	1.09	299,592.49	1.100E-01	Pulse	0.15	3
Ca			1	258.318	ug/l	0.67	449,251.88	9.209E-02	Pulse	0.10	3
Sr			1	4.987	ug/l	0.84	426,257.29	6.416E-02	Pulse	0.10	3
Mo			1	0.966	ug/l	3.27	15,918.43	2.396E-03	Pulse	0.10	3
Ag			1	0.476	ug/l	4.17	20,664.13	2.869E-03	Pulse	0.10	3
Sn			1	5.148	ug/l	2.35	132,772.57	1.843E-02	Pulse	0.10	3
Sb			1	1.852	ug/l	2.36	53,150.98	5.656E-03	Pulse	0.10	3
Ba			1	0.994	ug/l	3.36	11,768.23	1.252E-03	Pulse	0.10	3
Tl			1	0.493	ug/l	0.36	36,752.93	6.666E-03	Pulse	0.10	3
Pb			1	0.509	ug/l	3.43	12,856.06	2.332E-03	Pulse	0.10	3
Pb			1	0.516	ug/l	2.97	11,648.45	2.113E-03	Pulse	0.10	3
Pb			1	0.500	ug/l	0.91	51,356.49	9.315E-03	Pulse	0.10	3
Na			2	251.719	ug/l	0.65	426,687.42	2.667E+00	Pulse	0.30	3
Mg			2	255.728	ug/l	0.21	196,802.45	1.230E+00	Pulse	0.30	3
Al			2	25.115	ug/l	4.76	6,454.63	4.035E-02	Pulse	0.30	3
K			2	254.671	ug/l	0.79	124,889.15	7.807E-01	Pulse	0.30	3
Ca			2	270.860	ug/l	0.69	7,477.30	4.674E-02	Pulse	0.30	3
Ti			2	1.017	ug/l	18.88	216.67	1.353E-03	Pulse	0.30	3
V			2	1.005	ug/l	1.52	7,485.12	4.679E-02	Pulse	0.30	3
Cr			2	1.004	ug/l	1.22	9,760.76	6.101E-02	Pulse	0.30	3
Mn			2	1.002	ug/l	2.88	4,702.95	2.940E-02	Pulse	0.30	3
Fe			2	25.142	ug/l	0.75	200,269.10	1.252E+00	Pulse	0.30	3
Co			2	0.499	ug/l	3.11	8,319.94	5.201E-02	Pulse	0.30	3
Ni			2	0.973	ug/l	1.96	4,525.11	2.828E-02	Pulse	0.30	3
Cu			2	1.996	ug/l	2.48	24,676.40	1.543E-01	Pulse	0.30	3
Zn			2	5.183	ug/l	1.06	8,518.97	5.325E-02	Pulse	0.30	3
As			2	0.485	ug/l	6.41	404.68	2.530E-03	Pulse	1.00	3
Cd			2	0.506	ug/l	5.91	1,235.97	1.438E-03	Pulse	0.30	3
Sn			2	4.814	ug/l	1.18	21,808.54	2.537E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.471	ug/l	8.41	132.07	6.490E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,722,249.33	0.96	99.6	Pulse	0.10	3
1	Sc		4,878,300.97	0.95	100.3	Pulse	0.10	3
1	Ge		910,074.52	0.89	99.6	Pulse	0.10	3
1	Ge		1,282,603.03	0.33	100.0	Pulse	0.10	3
1	Rh		6,643,089.90	0.44	100.2	Analog	0.10	3
1	In		7,203,098.04	0.48	101.1	Analog	0.10	3
1	Tb		9,398,461.53	1.46	100.5	Analog	0.10	3
1	Ho		887,358.87	1.47	99.7	Pulse	0.10	3
1	Bi		5,513,258.25	1.18	100.0	Mix	0.10	3
2	Sc		159,983.87	0.52	100.9	Pulse	0.30	3
2	Ge		88,812.65	0.55	99.7	Pulse	0.30	3
2	Ge		136,742.89	0.30	100.9	Pulse	0.30	3
2	Rh		2,801,239.06	0.50	99.4	Pulse	0.30	3
2	In		859,514.67	0.30	100.7	Pulse	0.30	3
2	Tb		3,332,322.65	0.26	99.9	Pulse	0.30	3
2	Ho		323,954.81	0.56	100.5	Pulse	0.30	3
2	Bi		2,219,972.27	0.38	100.1	Pulse	0.30	3
3	Sc		218,587.60	0.80	99.7	Pulse	0.30	3
3	Ge		131,940.05	0.44	101.1	Pulse	0.30	3
3	Ge		203,534.84	0.33	100.5	Pulse	0.30	3
3	Rh		2,455,492.82	0.60	99.5	Pulse	0.30	3
3	Tb		3,692,811.24	1.07	99.3	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 11:14
Sample Name	STDC
Sample Type	CalStd
Comment	5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	5.080	ug/l	2.26	65,420.20	2.386E-02	Pulse	0.25	3
B			1	4.129	ug/l	1.32	66,911.15	2.439E-02	Pulse	0.15	3
Ca			1	15.815	ug/l	0.32	47,448.34	9.693E-03	Pulse	0.10	3
Sr			1	5.020	ug/l	0.91	434,092.56	6.458E-02	Pulse	0.10	3
Mo			1	5.001	ug/l	0.28	82,672.98	1.230E-02	Pulse	0.10	3
Ag			1	5.004	ug/l	1.23	216,179.55	3.005E-02	Pulse	0.10	3
Sn			1	5.432	ug/l	2.18	140,316.09	1.950E-02	Pulse	0.10	3
Sb			1	4.928	ug/l	1.44	139,974.23	1.480E-02	Pulse	0.10	3
Ba			1	5.049	ug/l	1.92	59,709.01	6.313E-03	Pulse	0.10	3
Tl			1	5.010	ug/l	0.77	374,212.33	6.672E-02	Pulse	0.10	3
Pb			1	5.101	ug/l	1.27	128,138.11	2.285E-02	Pulse	0.10	3
Pb			1	5.012	ug/l	1.81	112,835.16	2.012E-02	Pulse	0.10	3
Pb			1	5.028	ug/l	1.64	514,517.49	9.174E-02	Pulse	0.10	3
Na			2	6.458	ug/l	5.40	21,062.14	1.317E-01	Pulse	0.30	3
Mg			2	4.906	ug/l	4.29	4,536.22	2.837E-02	Pulse	0.30	3
Al			2	5.626	ug/l	3.87	1,658.99	1.038E-02	Pulse	0.30	3
K			2	5.608	ug/l	10.85	9,925.28	6.209E-02	Pulse	0.30	3
Ca			2	36.894	ug/l	11.41	1,237.84	7.743E-03	Pulse	0.30	3
Ti			2	4.941	ug/l	8.44	1,046.71	6.549E-03	Pulse	0.30	3
V			2	5.136	ug/l	1.70	36,529.09	2.285E-01	Pulse	0.30	3
Cr			2	5.144	ug/l	0.42	47,815.34	2.991E-01	Pulse	0.30	3
Mn			2	5.128	ug/l	1.66	23,648.14	1.479E-01	Pulse	0.30	3
Fe			2	5.275	ug/l	1.67	52,694.59	3.296E-01	Pulse	0.30	3
Co			2	5.116	ug/l	1.54	84,369.54	5.277E-01	Pulse	0.30	3
Ni			2	5.069	ug/l	0.29	23,280.92	1.456E-01	Pulse	0.30	3
Cu			2	5.177	ug/l	0.90	62,858.13	3.932E-01	Pulse	0.30	3
Zn			2	5.430	ug/l	3.25	8,909.17	5.573E-02	Pulse	0.30	3
As			2	5.078	ug/l	1.90	4,105.86	2.568E-02	Pulse	1.00	3
Cd			2	5.007	ug/l	3.24	12,042.75	1.407E-02	Pulse	0.30	3
Sn			2	5.127	ug/l	0.71	23,098.15	2.699E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	5.048	ug/l	0.84	1,291.05	6.293E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,742,858.05	1.25	100.4	Pulse	0.10	3
1	Sc		4,895,207.84	0.91	100.7	Pulse	0.10	3
1	Ge		915,097.85	0.38	100.1	Pulse	0.10	3
1	Ge		1,280,657.35	0.64	99.9	Pulse	0.10	3
1	Rh		6,721,615.73	0.51	101.4	Analog	0.10	3
1	In		7,195,380.64	0.94	101.0	Analog	0.10	3
1	Tb		9,459,031.32	0.35	101.1	Analog	0.10	3
1	Ho		894,274.44	1.16	100.4	Pulse	0.10	3
1	Bi		5,608,413.67	0.29	101.8	Analog	0.10	3
2	Sc		159,877.47	0.56	100.8	Pulse	0.30	3
2	Ge		89,861.62	0.36	100.8	Pulse	0.30	3
2	Ge		136,730.39	0.85	100.9	Pulse	0.30	3
2	Rh		2,824,142.53	0.25	100.2	Pulse	0.30	3
2	In		855,649.88	0.43	100.3	Pulse	0.30	3
2	Tb		3,365,579.59	0.70	100.9	Pulse	0.30	3
2	Ho		324,912.94	0.61	100.8	Pulse	0.30	3
2	Bi		2,231,215.96	0.68	100.6	Pulse	0.30	3
3	Sc		221,460.83	1.00	101.0	Pulse	0.30	3
3	Ge		132,706.44	0.95	101.7	Pulse	0.30	3
3	Ge		205,141.36	0.95	101.3	Pulse	0.30	3
3	Rh		2,495,234.07	0.97	101.1	Pulse	0.30	3
3	Tb		3,770,634.02	0.67	101.3	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 11:19
Sample Name	STDD
Sample Type	CalStd
Comment	25
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	24.523	ug/l	0.55	312,090.32	1.151E-01	Pulse	0.25	3
B			1	23.653	ug/l	1.39	295,168.10	1.088E-01	Pulse	0.15	3
Ca			1	39.836	ug/l	2.52	86,133.53	1.786E-02	Pulse	0.10	3
Sr			1	24.368	ug/l	0.23	2,088,163.15	3.130E-01	Pulse	0.10	3
Mo			1	24.759	ug/l	0.78	405,569.07	6.079E-02	Pulse	0.10	3
Ag			1	24.377	ug/l	1.26	1,046,188.94	1.463E-01	Pulse	0.10	3
Sn			1	24.710	ug/l	1.40	659,009.71	9.217E-02	Pulse	0.10	3
Sb			1	24.630	ug/l	0.23	687,336.03	7.334E-02	Pulse	0.10	3
Ba			1	24.461	ug/l	0.42	286,229.54	3.054E-02	Pulse	0.10	3
Tl			1	24.332	ug/l	1.03	1,799,689.56	3.236E-01	Pulse	0.10	3
Pb			1	24.637	ug/l	1.73	612,596.80	1.101E-01	Pulse	0.10	3
Pb			1	24.392	ug/l	1.18	543,648.88	9.775E-02	Pulse	0.10	3
Pb			1	24.471	ug/l	1.41	2,478,774.31	4.457E-01	Pulse	0.10	3
Na			2	25.259	ug/l	0.97	51,305.12	3.261E-01	Pulse	0.30	3
Mg			2	24.700	ug/l	1.50	19,385.63	1.232E-01	Pulse	0.30	3
Al			2	25.964	ug/l	1.04	6,553.56	4.165E-02	Pulse	0.30	3
K			2	25.679	ug/l	2.23	18,878.57	1.200E-01	Pulse	0.30	3
Ca			2	174.457	ug/l	4.07	4,825.21	3.067E-02	Pulse	0.30	3
Ti			2	24.617	ug/l	3.27	5,129.74	3.260E-02	Pulse	0.30	3
V			2	24.665	ug/l	0.42	171,101.63	1.088E+00	Pulse	0.30	3
Cr			2	24.644	ug/l	0.58	223,472.50	1.420E+00	Pulse	0.30	3
Mn			2	24.671	ug/l	0.55	111,576.61	7.092E-01	Pulse	0.30	3
Fe			2	25.673	ug/l	0.69	200,827.58	1.276E+00	Pulse	0.30	3
Co			2	24.835	ug/l	0.36	402,671.51	2.559E+00	Pulse	0.30	3
Ni			2	24.617	ug/l	1.06	111,006.49	7.056E-01	Pulse	0.30	3
Cu			2	24.853	ug/l	0.29	294,405.82	1.871E+00	Pulse	0.30	3
Zn			2	24.520	ug/l	0.60	38,922.80	2.474E-01	Pulse	0.30	3
As			2	24.953	ug/l	0.79	19,801.64	1.259E-01	Pulse	1.00	3
Cd			2	24.531	ug/l	0.41	58,076.44	6.888E-02	Pulse	0.30	3
Sn			2	24.674	ug/l	0.46	108,111.86	1.282E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	24.749	ug/l	0.66	6,113.41	3.058E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,711,845.99	0.72	99.3	Pulse	0.10	3
1	Sc		4,824,402.01	0.69	99.2	Pulse	0.10	3
1	Ge		904,899.18	0.17	99.0	Pulse	0.10	3
1	Ge		1,267,196.86	1.29	98.8	Pulse	0.10	3
1	Rh		6,671,689.90	0.71	100.7	Analog	0.10	3
1	In		7,150,622.31	0.85	100.4	Analog	0.10	3
1	Tb		9,371,211.53	0.76	100.2	Analog	0.10	3
1	Ho		892,812.07	1.23	100.3	Pulse	0.10	3
1	Bi		5,561,866.79	0.66	100.9	Analog	0.10	3
2	Sc		157,332.78	0.27	99.2	Pulse	0.30	3
2	Ge		87,297.72	0.26	98.0	Pulse	0.30	3
2	Ge		134,488.86	0.16	99.3	Pulse	0.30	3
2	Rh		2,780,063.78	0.12	98.6	Pulse	0.30	3
2	In		843,149.32	0.37	98.8	Pulse	0.30	3
2	Tb		3,326,556.88	0.25	99.7	Pulse	0.30	3
2	Ho		322,572.82	0.66	100.1	Pulse	0.30	3
2	Bi		2,206,042.14	0.27	99.4	Pulse	0.30	3
3	Sc		216,240.52	0.71	98.6	Pulse	0.30	3
3	Ge		129,696.63	0.22	99.4	Pulse	0.30	3
3	Ge		199,885.66	0.31	98.7	Pulse	0.30	3
3	Rh		2,437,370.53	0.17	98.7	Pulse	0.30	3
3	Tb		3,689,531.10	0.45	99.2	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 11:24
Sample Name	STDE
Sample Type	CalStd
Comment	50
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.891	ug/l	0.59	610,211.25	2.294E-01	Pulse	0.25	3
B			1	47.552	ug/l	1.09	564,472.10	2.122E-01	Pulse	0.15	3
Ca			1	78.506	ug/l	0.60	146,717.91	3.100E-02	Pulse	0.10	3
Sr			1	49.003	ug/l	1.51	4,110,908.06	6.293E-01	Pulse	0.10	3
Mo			1	50.290	ug/l	1.13	806,493.43	1.234E-01	Pulse	0.10	3
Ag			1	48.788	ug/l	1.12	2,035,009.81	2.928E-01	Pulse	0.10	3
Sn			1	49.461	ug/l	1.32	1,288,791.36	1.855E-01	Pulse	0.10	3
Sb			1	49.819	ug/l	0.25	1,365,356.13	1.482E-01	Pulse	0.10	3
Ba			1	49.532	ug/l	1.28	569,682.39	6.184E-02	Pulse	0.10	3
Tl			1	48.952	ug/l	0.27	3,598,857.55	6.509E-01	Pulse	0.10	3
Pb			1	49.508	ug/l	0.38	1,223,515.79	2.213E-01	Pulse	0.10	3
Pb			1	48.667	ug/l	0.48	1,078,098.37	1.950E-01	Pulse	0.10	3
Pb			1	49.057	ug/l	0.29	4,939,034.63	8.933E-01	Pulse	0.10	3
Na			2	53.189	ug/l	4.92	93,575.94	6.148E-01	Pulse	0.30	3
Mg			2	52.954	ug/l	4.37	39,357.88	2.586E-01	Pulse	0.30	3
Al			2	52.818	ug/l	4.62	12,628.17	8.296E-02	Pulse	0.30	3
K			2	53.416	ug/l	4.76	30,449.96	2.000E-01	Pulse	0.30	3
Ca			2	354.757	ug/l	3.18	9,244.88	6.072E-02	Pulse	0.30	3
Ti			2	50.409	ug/l	6.15	10,157.65	6.675E-02	Pulse	0.30	3
V			2	50.042	ug/l	4.21	335,436.18	2.204E+00	Pulse	0.30	3
Cr			2	50.165	ug/l	4.71	439,507.39	2.888E+00	Pulse	0.30	3
Mn			2	50.342	ug/l	4.30	220,160.97	1.446E+00	Pulse	0.30	3
Fe			2	54.004	ug/l	4.06	394,485.30	2.592E+00	Pulse	0.30	3
Co			2	50.492	ug/l	4.07	791,918.20	5.203E+00	Pulse	0.30	3
Ni			2	50.211	ug/l	4.58	218,956.60	1.439E+00	Pulse	0.30	3
Cu			2	50.623	ug/l	4.04	579,488.93	3.807E+00	Pulse	0.30	3
Zn			2	50.445	ug/l	5.27	77,252.47	5.077E-01	Pulse	0.30	3
As			2	51.024	ug/l	3.05	39,169.63	2.573E-01	Pulse	1.00	3
Cd			2	49.860	ug/l	4.14	113,926.05	1.400E-01	Pulse	0.30	3
Sn			2	50.284	ug/l	4.12	212,299.06	2.609E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	49.065	ug/l	0.83	12,052.56	6.057E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,659,736.30	0.42	97.4	Pulse	0.10	3
1	Sc		4,733,730.87	1.22	97.4	Pulse	0.10	3
1	Ge		894,492.56	0.54	97.9	Pulse	0.10	3
1	Ge		1,261,644.35	1.18	98.4	Pulse	0.10	3
1	Rh		6,533,319.28	0.71	98.6	Analog	0.10	3
1	In		6,949,751.07	1.05	97.6	Analog	0.10	3
1	Tb		9,212,836.95	0.21	98.5	Analog	0.10	3
1	Ho		895,116.47	1.62	100.5	Pulse	0.10	3
1	Bi		5,529,272.83	0.75	100.3	Mix	0.10	3
2	Sc		152,371.82	3.87	96.1	Pulse	0.30	3
2	Ge		85,802.54	2.21	96.3	Pulse	0.30	3
2	Ge		130,720.13	2.20	96.5	Pulse	0.30	3
2	Rh		2,685,079.27	3.76	95.3	Pulse	0.30	3
2	In		814,677.89	3.76	95.5	Pulse	0.30	3
2	Tb		3,218,578.00	3.44	96.5	Pulse	0.30	3
2	Ho		312,555.71	4.64	97.0	Pulse	0.30	3
2	Bi		2,161,543.32	3.24	97.4	Pulse	0.30	3
3	Sc		216,073.47	0.68	98.5	Pulse	0.30	3
3	Ge		128,937.64	1.07	98.8	Pulse	0.30	3
3	Ge		198,993.76	0.56	98.3	Pulse	0.30	3
3	Rh		2,423,874.14	0.97	98.2	Pulse	0.30	3
3	Tb		3,661,356.66	0.57	98.4	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 11:29
Sample Name	STDF
Sample Type	CalStd
Comment	100
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	101.559	ug/l	0.68	1,239,089.46	4.765E-01	Pulse	0.25	3
B			1	100.088	ug/l	0.62	1,142,676.86	4.395E-01	Pulse	0.15	3
Ca			1	148.055	ug/l	1.43	256,450.97	5.463E-02	Pulse	0.10	3
Sr			1	100.657	ug/l	0.65	8,401,114.88	1.292E+00	Analog	0.10	3
Mo			1	101.339	ug/l	1.01	1,616,757.64	2.487E-01	Pulse	0.10	3
Ag			1	101.938	ug/l	1.74	4,224,987.44	6.118E-01	Pulse	0.10	3
Sn			1	100.334	ug/l	1.88	2,604,784.49	3.772E-01	Pulse	0.10	3
Sb			1	100.790	ug/l	1.34	2,785,969.65	2.997E-01	Pulse	0.10	3
Ba			1	100.366	ug/l	0.89	1,164,829.20	1.253E-01	Pulse	0.10	3
Tl			1	100.690	ug/l	1.24	7,314,589.06	1.339E+00	Analog	0.10	3
Pb			1	101.836	ug/l	0.54	2,486,801.37	4.551E-01	Pulse	0.10	3
Pb			1	100.615	ug/l	0.21	2,202,447.15	4.031E-01	Pulse	0.10	3
Pb			1	101.497	ug/l	0.25	10,097,349.90	1.848E+00	Mix	0.10	3
Na			2	100.245	ug/l	0.76	170,052.02	1.101E+00	Pulse	0.30	3
Mg			2	101.110	ug/l	0.53	75,558.31	4.893E-01	Pulse	0.30	3
Al			2	102.183	ug/l	2.44	24,531.27	1.589E-01	Pulse	0.30	3
K			2	100.423	ug/l	1.20	51,826.48	3.356E-01	Pulse	0.30	3
Ca			2	701.700	ug/l	1.32	18,305.78	1.185E-01	Pulse	0.30	3
Ti			2	99.894	ug/l	1.68	20,424.89	1.323E-01	Pulse	0.30	3
V			2	100.160	ug/l	0.74	680,703.86	4.408E+00	Pulse	0.30	3
Cr			2	100.053	ug/l	0.94	888,893.37	5.757E+00	Pulse	0.30	3
Mn			2	99.905	ug/l	0.58	443,169.72	2.870E+00	Pulse	0.30	3
Fe			2	104.312	ug/l	0.24	760,791.64	4.927E+00	Pulse	0.30	3
Co			2	100.792	ug/l	0.43	1,603,633.48	1.039E+01	Pulse	0.30	3
Ni			2	100.138	ug/l	0.59	442,990.59	2.869E+00	Pulse	0.30	3
Cu			2	101.049	ug/l	0.58	1,172,809.36	7.595E+00	Pulse	0.30	3
Zn			2	100.256	ug/l	0.32	155,621.44	1.008E+00	Pulse	0.30	3
As			2	99.971	ug/l	0.34	77,824.57	5.040E-01	Pulse	1.00	3
Cd			2	100.609	ug/l	0.16	231,368.98	2.824E-01	Pulse	0.30	3
Sn			2	100.238	ug/l	0.13	425,603.96	5.196E-01	Pulse	0.30	3
Se			3	101.822	ug/l	0.36	24,546.45	1.256E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,600,220.85	1.18	95.2	Pulse	0.10	3
1	Sc		4,694,618.58	0.70	96.6	Pulse	0.10	3
1	Ge		885,322.20	1.09	96.9	Pulse	0.10	3

Quantitation Report

1	Ge		1,244,575.87	1.02	97.1	Pulse	0.10	3
1	Rh		6,499,990.32	0.85	98.1	Analog	0.10	3
1	In		6,906,134.23	0.91	97.0	Analog	0.10	3
1	Tb		9,297,147.57	0.87	99.4	Analog	0.10	3
1	Ho		879,883.58	1.56	98.8	Pulse	0.10	3
1	Bi		5,464,294.92	1.08	99.1	Mix	0.10	3
2	Sc		154,419.99	0.68	97.3	Pulse	0.30	3
2	Ge		85,271.77	0.51	95.7	Pulse	0.30	3
2	Ge		130,251.83	1.02	96.2	Pulse	0.30	3
2	Rh		2,704,359.54	0.08	96.0	Pulse	0.30	3
2	In		819,159.51	0.23	96.0	Pulse	0.30	3
2	Tb		3,237,207.37	0.28	97.0	Pulse	0.30	3
2	Ho		313,788.10	0.21	97.4	Pulse	0.30	3
2	Bi		2,162,340.54	0.29	97.5	Pulse	0.30	3
3	Sc		211,538.85	0.25	96.5	Pulse	0.30	3
3	Ge		125,808.62	0.18	96.4	Pulse	0.30	3
3	Ge		195,407.60	0.59	96.5	Pulse	0.30	3
3	Rh		2,361,785.74	0.50	95.7	Pulse	0.30	3
3	Tb		3,597,737.91	0.53	96.7	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 11:34
Sample Name	STDG
Sample Type	CalStd
Comment	500MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.016	ug/l	34.99	245.34	9.459E-05	Pulse	0.25	3
B			1	200.892	ug/l	0.75	2,272,941.30	8.755E-01	Pulse	0.15	3
Ca			1	500.422	ug/l	0.32	815,055.54	1.744E-01	Pulse	0.10	3
Sr			1	0.018	ug/l	10.57	2,360.26	3.681E-04	Pulse	0.10	3
Mo			1	0.135	ug/l	13.72	2,300.25	3.586E-04	Pulse	0.10	3
Ag			1	0.016	ug/l	20.98	743.38	1.063E-04	Pulse	0.10	3
Sn			1	0.520	ug/l	5.33	6,921.80	9.883E-04	Pulse	0.10	3
Sb			1	0.683	ug/l	7.49	19,890.03	2.180E-03	Pulse	0.10	3
Ba			1	0.013	ug/l	9.73	246.68	2.704E-05	Pulse	0.10	3
Tl			1	0.035	ug/l	6.04	3,213.85	5.882E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	3.30	873.38	1.599E-04	Pulse	0.10	3
Pb			1	0.029	ug/l	8.05	883.39	1.618E-04	Pulse	0.10	3
Pb			1	0.025	ug/l	9.79	3,733.67	6.838E-04	Pulse	0.10	3
Na			2	485.975	ug/l	0.68	789,322.82	5.089E+00	Pulse	0.30	3
Mg			2	493.007	ug/l	0.60	367,158.33	2.367E+00	Pulse	0.30	3
Al			2	499.138	ug/l	0.48	119,344.39	7.694E-01	Pulse	0.30	3
K			2	490.926	ug/l	1.12	226,813.17	1.462E+00	Pulse	0.30	3
Ca			2	492.074	ug/l	1.70	12,968.49	8.361E-02	Pulse	0.30	3
Ti			2	0.092	ug/l	91.83	20.00	1.292E-04	Pulse	0.30	3
V			2	-0.008	ug/l	-56.94	344.45	2.220E-03	Pulse	0.30	3
Cr			2	0.025	ug/l	12.45	728.92	4.700E-03	Pulse	0.30	3
Mn			2	0.025	ug/l	35.30	210.00	1.353E-03	Pulse	0.30	3
Fe			2	501.054	ug/l	0.49	3,620,856.24	2.334E+01	Pulse	0.30	3
Co			2	0.031	ug/l	5.01	595.58	3.839E-03	Pulse	0.30	3
Ni			2	0.035	ug/l	18.25	218.89	1.411E-03	Pulse	0.30	3
Cu			2	0.009	ug/l	64.09	773.36	4.986E-03	Pulse	0.30	3
Zn			2	0.085	ug/l	15.39	320.01	2.063E-03	Pulse	0.30	3
As			2	0.028	ug/l	33.51	35.67	2.300E-04	Pulse	1.00	3
Cd			2	0.009	ug/l	85.51	36.51	4.389E-05	Pulse	0.30	3
Sn			2	0.237	ug/l	11.44	1,387.86	1.671E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	199.550	ug/l	0.42	49,002.58	2.461E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,596,181.38	1.05	95.0	Pulse	0.10	3
1	Sc		4,674,635.55	1.15	96.1	Pulse	0.10	3
1	Ge		885,815.58	1.30	96.9	Pulse	0.10	3
1	Ge		1,248,946.21	1.31	97.4	Pulse	0.10	3
1	Rh		6,414,856.36	1.39	96.8	Analog	0.10	3
1	In		7,002,769.05	1.03	98.3	Analog	0.10	3
1	Tb		9,122,436.53	0.58	97.5	Analog	0.10	3
1	Ho		876,105.58	0.98	98.4	Pulse	0.10	3
1	Bi		5,462,979.92	1.19	99.1	Pulse	0.10	3
2	Sc		155,116.83	0.55	97.8	Pulse	0.30	3
2	Ge		85,955.41	0.74	96.5	Pulse	0.30	3
2	Ge		131,943.71	0.68	97.4	Pulse	0.30	3
2	Rh		2,719,422.32	0.30	96.5	Pulse	0.30	3
2	In		830,557.82	0.79	97.3	Pulse	0.30	3
2	Tb		3,269,334.73	0.47	98.0	Pulse	0.30	3
2	Ho		314,971.13	0.48	97.7	Pulse	0.30	3
2	Bi		2,163,722.14	0.39	97.5	Pulse	0.30	3
3	Sc		214,100.60	0.15	97.6	Pulse	0.30	3
3	Ge		127,731.48	0.70	97.9	Pulse	0.30	3
3	Ge		199,102.12	0.21	98.3	Pulse	0.30	3
3	Rh		2,406,837.13	0.10	97.5	Pulse	0.30	3
3	Tb		3,650,775.41	0.43	98.1	Pulse	0.30	3

Quantitation Report

File Name	010CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 11:39
Sample Name	STDH
Sample Type	CalStd
Comment	1000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	59.18	94.67	3.603E-05	Pulse	0.25	3
B			1	2.088	ug/l	2.62	40,878.27	1.557E-02	Pulse	0.15	3
Ca			1	972.201	ug/l	0.72	1,594,199.82	3.347E-01	Pulse	0.10	3
Sr			1	0.011	ug/l	10.27	1,760.18	2.723E-04	Pulse	0.10	3
Mo			1	0.032	ug/l	13.28	673.38	1.042E-04	Pulse	0.10	3
Ag			1	0.003	ug/l	49.10	203.35	2.912E-05	Pulse	0.10	3
Sn			1	0.465	ug/l	1.12	5,471.16	7.822E-04	Pulse	0.10	3
Sb			1	0.186	ug/l	7.09	6,538.26	7.047E-04	Pulse	0.10	3
Ba			1	0.001	ug/l	82.54	116.67	1.258E-05	Pulse	0.10	3
Tl			1	0.005	ug/l	28.57	1,006.74	1.848E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	38.01	503.36	9.260E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	33.90	403.36	7.412E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	8.72	1,906.78	3.504E-04	Pulse	0.10	3
Na			2	953.528	ug/l	0.92	1,543,942.93	9.922E+00	Pulse	0.30	3
Mg			2	970.493	ug/l	1.11	724,322.25	4.655E+00	Pulse	0.30	3
Al			2	981.502	ug/l	0.93	235,167.09	1.511E+00	Pulse	0.30	3
K			2	978.059	ug/l	1.30	446,229.20	2.868E+00	Pulse	0.30	3
Ca			2	957.233	ug/l	0.89	25,074.50	1.611E-01	Pulse	0.30	3
Ti			2	0.038	ug/l	88.42	8.89	5.694E-05	Pulse	0.30	3
V			2	-0.002	ug/l	-324.09	384.45	2.472E-03	Pulse	0.30	3
Cr			2	0.020	ug/l	31.80	685.58	4.406E-03	Pulse	0.30	3
Mn			2	0.010	ug/l	5.88	142.23	9.140E-04	Pulse	0.30	3
Fe			2	990.392	ug/l	0.85	7,167,029.16	4.606E+01	Analog	0.30	3
Co			2	0.047	ug/l	6.10	851.14	5.468E-03	Pulse	0.30	3
Ni			2	0.039	ug/l	13.71	237.78	1.527E-03	Pulse	0.30	3
Cu			2	-0.005	ug/l	-121.73	615.58	3.958E-03	Pulse	0.30	3
Zn			2	0.077	ug/l	23.01	307.79	1.979E-03	Pulse	0.30	3
As			2	0.021	ug/l	23.63	29.67	1.905E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	285.04	18.85	2.265E-05	Pulse	0.30	3
Sn			2	0.158	ug/l	10.48	1,047.83	1.259E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	393.820	ug/l	0.43	97,795.65	4.857E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,626,171.94	0.65	96.1	Pulse	0.10	3
1	Sc		4,763,733.05	1.01	98.0	Pulse	0.10	3
1	Ge		890,559.28	0.88	97.4	Pulse	0.10	3
1	Ge		1,276,556.15	1.17	99.6	Pulse	0.10	3
1	Rh		6,465,349.07	0.36	97.5	Analog	0.10	3
1	In		6,993,787.75	0.99	98.2	Analog	0.10	3
1	Tb		9,279,920.91	0.96	99.2	Analog	0.10	3
1	Ho		879,250.85	1.40	98.8	Pulse	0.10	3
1	Bi		5,443,751.17	1.43	98.8	Mix	0.10	3
2	Sc		155,616.92	0.84	98.1	Pulse	0.30	3
2	Ge		87,071.17	0.77	97.7	Pulse	0.30	3
2	Ge		133,622.91	0.45	98.6	Pulse	0.30	3
2	Rh		2,730,387.60	0.32	96.9	Pulse	0.30	3
2	In		832,526.75	0.11	97.6	Pulse	0.30	3
2	Tb		3,270,743.69	0.32	98.1	Pulse	0.30	3
2	Ho		319,131.00	0.22	99.0	Pulse	0.30	3
2	Bi		2,174,600.33	0.54	98.0	Pulse	0.30	3
3	Sc		212,957.83	0.15	97.1	Pulse	0.30	3
3	Ge		128,427.56	1.15	98.4	Pulse	0.30	3
3	Ge		201,369.83	0.56	99.4	Pulse	0.30	3
3	Rh		2,399,306.78	0.79	97.2	Pulse	0.30	3
3	Tb		3,648,183.88	0.46	98.1	Pulse	0.30	3

Quantitation Report

File Name	011CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 11:44
Sample Name	STDI
Sample Type	CalStd
Comment	5000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	60.90	78.67	2.974E-05	Pulse	0.25	3
B			1	0.792	ug/l	4.89	26,354.11	9.962E-03	Pulse	0.15	3
Ca			1	4860.570	ug/l	1.02	7,899,741.13	1.656E+00	Analog	0.10	3
Sr			1	0.046	ug/l	4.11	4,594.15	7.173E-04	Pulse	0.10	3
Mo			1	0.019	ug/l	7.40	463.36	7.238E-05	Pulse	0.10	3
Ag			1	0.001	ug/l	66.20	126.67	1.824E-05	Pulse	0.10	3
Sn			1	0.378	ug/l	0.30	3,157.12	4.552E-04	Pulse	0.10	3
Sb			1	0.098	ug/l	11.10	4,100.69	4.433E-04	Pulse	0.10	3
Ba			1	0.000	ug/l	209.99	106.67	1.153E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	48.25	886.73	1.682E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	58.48	433.36	8.223E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	78.36	396.69	7.515E-05	Pulse	0.10	3
Pb			1	0.006	ug/l	22.12	1,726.77	3.278E-04	Pulse	0.10	3
Na			2	4894.675	ug/l	1.36	8,012,464.96	5.066E+01	Analog	0.30	3
Mg			2	4854.260	ug/l	1.07	3,679,144.99	2.326E+01	Pulse	0.30	3
Al			2	4972.593	ug/l	1.20	1,209,784.15	7.649E+00	Pulse	0.30	3
K			2	4919.987	ug/l	1.07	2,252,170.88	1.424E+01	Pulse	0.30	3
Ca			2	4809.945	ug/l	0.70	127,042.62	8.033E-01	Pulse	0.30	3
Ti			2	0.037	ug/l	123.83	8.89	5.633E-05	Pulse	0.30	3
V			2	-0.004	ug/l	-58.76	376.68	2.382E-03	Pulse	0.30	3
Cr			2	0.027	ug/l	37.31	765.58	4.839E-03	Pulse	0.30	3
Mn			2	0.068	ug/l	35.05	408.90	2.581E-03	Pulse	0.30	3
Fe			2	4960.275	ug/l	0.45	36,429,786.33	2.303E+02	Analog	0.30	3
Co			2	0.226	ug/l	3.75	3,770.48	2.384E-02	Pulse	0.30	3
Ni			2	0.173	ug/l	6.07	848.92	5.368E-03	Pulse	0.30	3
Cu			2	0.006	ug/l	52.56	748.91	4.737E-03	Pulse	0.30	3
Zn			2	0.097	ug/l	6.99	345.56	2.185E-03	Pulse	0.30	3
As			2	0.035	ug/l	29.28	41.67	2.635E-04	Pulse	1.00	3
Cd			2	0.005	ug/l	99.81	27.75	3.341E-05	Pulse	0.30	3
Sn			2	0.047	ug/l	7.84	571.13	6.869E-04	Pulse	0.30	3
Se			3	0.125	ug/l	8.79	44.27	2.230E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,645,609.51	0.21	96.8	Pulse	0.10	3
1	Sc		4,770,920.76	1.15	98.1	Pulse	0.10	3
1	Ge		897,869.34	0.70	98.2	Pulse	0.10	3

Quantitation Report

1	Ge		1,250,217.59	0.77	97.5	Pulse	0.10	3
1	Rh		6,404,250.53	1.40	96.6	Analog	0.10	3
1	In		6,935,163.27	0.95	97.4	Analog	0.10	3
1	Tb		9,247,429.03	0.85	98.9	Analog	0.10	3
1	Ho		878,003.58	0.58	98.6	Pulse	0.10	3
1	Bi		5,264,581.28	1.41	95.5	Pulse	0.10	3
2	Sc		158,164.57	1.01	99.7	Pulse	0.30	3
2	Ge		87,454.23	0.99	98.1	Pulse	0.30	3
2	Ge		132,877.15	0.21	98.1	Pulse	0.30	3
2	Rh		2,694,927.12	0.29	95.6	Pulse	0.30	3
2	In		831,560.62	0.44	97.5	Pulse	0.30	3
2	Tb		3,294,875.56	0.60	98.8	Pulse	0.30	3
2	Ho		318,752.64	0.52	98.9	Pulse	0.30	3
2	Bi		2,103,299.91	0.42	94.8	Pulse	0.30	3
3	Sc		215,869.09	0.55	98.4	Pulse	0.30	3
3	Ge		128,069.38	0.50	98.2	Pulse	0.30	3
3	Ge		198,543.77	0.49	98.1	Pulse	0.30	3
3	Rh		2,352,292.82	0.10	95.3	Pulse	0.30	3
3	Tb		3,621,599.86	0.24	97.3	Pulse	0.30	3

Quantitation Report

File Name	012CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 11:49
Sample Name	STDJ
Sample Type	CalStd
Comment	10000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	86.15	85.33	3.206E-05	Pulse	0.25	3
B			1	0.322	ug/l	11.90	21,077.86	7.926E-03	Pulse	0.15	3
Ca			1	10072.266	ug/l	1.24	16,622,901.42	3.427E+00	Analog	0.10	3
Sr			1	0.089	ug/l	4.82	7,988.96	1.277E-03	Pulse	0.10	3
Mo			1	0.015	ug/l	24.13	390.02	6.236E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	26.20	160.01	2.351E-05	Pulse	0.10	3
Sn			1	1.247	ug/l	2.03	25,387.96	3.728E-03	Pulse	0.10	3
Sb			1	0.087	ug/l	9.52	3,787.28	4.108E-04	Pulse	0.10	3
Ba			1	0.018	ug/l	22.64	310.01	3.359E-05	Pulse	0.10	3
Tl			1	0.003	ug/l	60.21	796.72	1.540E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	2.25	636.71	1.231E-04	Pulse	0.10	3
Pb			1	0.012	ug/l	26.08	490.03	9.464E-05	Pulse	0.10	3
Pb			1	0.012	ug/l	10.92	2,223.49	4.299E-04	Pulse	0.10	3
Na			2	10057.968	ug/l	1.93	16,609,398.78	1.040E+02	Analog	0.30	3
Mg			2	10185.348	ug/l	0.51	7,792,513.58	4.881E+01	Analog	0.30	3
Al			2	10161.425	ug/l	0.76	2,495,476.85	1.563E+01	Pulse	0.30	3
K			2	10108.737	ug/l	1.12	4,663,636.62	2.921E+01	Pulse	0.30	3
Ca			2	9978.197	ug/l	0.78	265,777.85	1.665E+00	Pulse	0.30	3
Ti			2	0.042	ug/l	65.46	10.00	6.277E-05	Pulse	0.30	3
V			2	-0.003	ug/l	-194.21	390.01	2.444E-03	Pulse	0.30	3
Cr			2	0.099	ug/l	7.64	1,431.19	8.962E-03	Pulse	0.30	3
Mn			2	0.170	ug/l	6.49	880.04	5.512E-03	Pulse	0.30	3
Fe			2	10020.707	ug/l	2.39	74,271,612.60	4.652E+02	Analog	0.30	3
Co			2	0.471	ug/l	0.58	7,851.96	4.918E-02	Pulse	0.30	3
Ni			2	0.388	ug/l	0.51	1,840.13	1.152E-02	Pulse	0.30	3
Cu			2	0.059	ug/l	13.20	1,398.97	8.758E-03	Pulse	0.30	3
Zn			2	1.071	ug/l	4.05	1,910.14	1.196E-02	Pulse	0.30	3
As			2	0.051	ug/l	11.72	54.67	3.423E-04	Pulse	1.00	3
Cd			2	0.003	ug/l	65.37	21.08	2.544E-05	Pulse	0.30	3
Sn			2	0.888	ug/l	5.86	4,180.60	5.043E-03	Pulse	0.30	3
Se			3	0.034	ug/l	23.34	21.60	1.102E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,659,089.70	0.98	97.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,851,177.11	0.99	99.8	Pulse	0.10	3
1	Ge		900,467.49	1.10	98.5	Pulse	0.10	3
1	Ge		1,246,605.55	0.92	97.2	Pulse	0.10	3
1	Rh		6,257,308.45	0.92	94.4	Analog	0.10	3
1	In		6,812,086.82	1.15	95.6	Analog	0.10	3
1	Tb		9,220,083.82	1.03	98.6	Analog	0.10	3
1	Ho		873,096.94	1.48	98.1	Pulse	0.10	3
1	Bi		5,174,461.59	1.01	93.9	Pulse	0.10	3
2	Sc		159,667.99	1.01	100.7	Pulse	0.30	3
2	Ge		87,043.16	0.84	97.7	Pulse	0.30	3
2	Ge		133,447.05	0.65	98.5	Pulse	0.30	3
2	Rh		2,652,197.39	0.68	94.1	Pulse	0.30	3
2	In		829,252.85	0.70	97.2	Pulse	0.30	3
2	Tb		3,317,372.92	0.45	99.5	Pulse	0.30	3
2	Ho		320,763.93	0.49	99.5	Pulse	0.30	3
2	Bi		2,065,828.25	0.58	93.1	Pulse	0.30	3
3	Sc		216,279.02	0.50	98.6	Pulse	0.30	3
3	Ge		126,602.90	0.54	97.0	Pulse	0.30	3
3	Ge		196,093.51	0.45	96.8	Pulse	0.30	3
3	Rh		2,293,951.65	0.27	92.9	Pulse	0.30	3
3	Tb		3,569,265.69	0.36	95.9	Pulse	0.30	3

Quantitation Report

File Name	013CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 11:54
Sample Name	STDA
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-7735.23	57.33	2.158E-05	Pulse	0.25	3
B			1	0.000	ug/l	---	17,358.08	6.535E-03	Pulse	0.15	3
Ca			1	0.000	ug/l	---	21,080.84	4.319E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	---	903.39	1.327E-04	Pulse	0.10	3
Mo			1	0.000	ug/l	1860.42	180.01	2.645E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	244.07	90.00	1.246E-05	Pulse	0.10	3
Sn			1	0.346	ug/l	1.67	2,400.28	3.321E-04	Pulse	0.10	3
Sb			1	0.006	ug/l	58.37	1,590.13	1.690E-04	Pulse	0.10	3
Ba			1	0.000	ug/l	---	103.34	1.098E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	---	656.71	1.192E-04	Pulse	0.10	3
Pb			1	0.000	ug/l	-1156.39	300.01	5.449E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-891.21	246.68	4.485E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	560.98	1,240.06	2.252E-04	Pulse	0.10	3
Na			2	0.000	ug/l	---	10,404.51	6.498E-02	Pulse	0.30	3
Mg			2	0.036	ug/l	356.87	806.70	5.039E-03	Pulse	0.30	3
Al			2	-0.027	ug/l	-810.40	268.89	1.680E-03	Pulse	0.30	3
K			2	0.400	ug/l	39.41	7,536.22	4.706E-02	Pulse	0.30	3
Ca			2	-6.649	ug/l	-17.06	77.78	4.860E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	1.11	6.935E-06	Pulse	0.30	3
V			2	-0.001	ug/l	-1340.50	401.12	2.507E-03	Pulse	0.30	3
Cr			2	-0.001	ug/l	-532.44	514.46	3.212E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	---	100.00	6.244E-04	Pulse	0.30	3
Fe			2	0.000	ug/l	---	13,569.16	8.475E-02	Pulse	0.30	3
Co			2	0.000	ug/l	85177.40	96.67	6.039E-04	Pulse	0.30	3
Ni			2	0.000	ug/l	122.94	67.78	4.233E-04	Pulse	0.30	3
Cu			2	-0.001	ug/l	-352.45	670.02	4.185E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.013	ug/l	-135.70	172.23	1.075E-03	Pulse	0.30	3
As			2	0.000	ug/l	3229.92	14.00	8.738E-05	Pulse	1.00	3
Cd			2	0.000	ug/l	17746.44	15.55	1.819E-05	Pulse	0.30	3
Sn			2	0.004	ug/l	42.97	394.46	4.618E-04	Pulse	0.30	3
Se			3	-0.001	ug/l	-2105.21	13.87	6.808E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,656,194.46	0.08	100.0	Pulse	0.10	3
1	Sc		4,881,801.49	0.65	100.0	Pulse	0.10	3
1	Ge		917,134.65	0.51	100.0	Pulse	0.10	3
1	Ge		1,280,012.61	0.97	100.0	Pulse	0.10	3
1	Rh		6,805,369.90	0.04	100.0	Analog	0.10	3
1	In		7,225,860.59	0.95	100.0	Analog	0.10	3
1	Tb		9,408,850.69	0.70	100.0	Analog	0.10	3
1	Ho		888,285.77	0.26	100.0	Pulse	0.10	3
1	Bi		5,507,767.21	1.03	100.0	Analog	0.10	3
2	Sc		160,125.05	0.46	100.0	Pulse	0.30	3
2	Ge		87,964.90	1.06	100.0	Pulse	0.30	3
2	Ge		136,023.78	1.26	100.0	Pulse	0.30	3
2	Rh		2,808,055.31	0.53	100.0	Pulse	0.30	3
2	In		854,239.72	0.50	100.0	Pulse	0.30	3
2	Tb		3,320,895.91	0.22	100.0	Pulse	0.30	3
2	Ho		321,488.65	0.11	100.0	Pulse	0.30	3
2	Bi		2,203,927.55	0.10	100.0	Pulse	0.30	3
3	Sc		220,407.92	0.64	100.0	Pulse	0.30	3
3	Ge		132,418.39	1.01	100.0	Pulse	0.30	3
3	Ge		203,528.55	0.56	100.0	Pulse	0.30	3
3	Rh		2,474,976.36	0.41	100.0	Pulse	0.30	3
3	Tb		3,690,513.46	0.23	100.0	Pulse	0.30	3

Quantitation Report

File Name 014_ICV.d
File Path C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File
Method Path
Acq Time 4/12/2019 12:02
Sample Name ICVA
Sample Type ICV
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/12/2019 17:58
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	59.808	ug/l	0.65	743,689.46	2.806E-01	Pulse	0.25	3
B			1	122.571	ug/l	1.09	1,422,277.72	5.367E-01	Pulse	0.15	3
Ca			1	5538.025	ug/l	0.79	9,059,661.95	1.886E+00	Analog	0.10	3
Sr			1	62.263	ug/l	0.59	5,033,696.38	7.995E-01	Pulse	0.10	3
Mo			1	59.498	ug/l	0.31	919,483.06	1.460E-01	Pulse	0.10	3
Ag			1	59.359	ug/l	0.99	2,462,724.81	3.563E-01	Pulse	0.10	3
Sn			1	56.817	ug/l	0.43	1,473,606.28	2.132E-01	Pulse	0.10	3
Sb			1	61.271	ug/l	1.75	1,677,545.18	1.822E-01	Pulse	0.10	3
Ba			1	61.057	ug/l	1.89	701,666.26	7.622E-02	Pulse	0.10	3
Tl			1	63.692	ug/l	0.44	4,442,880.56	8.468E-01	Pulse	0.10	3
Pb			1	63.685	ug/l	0.93	1,493,258.83	2.846E-01	Pulse	0.10	3
Pb			1	59.478	ug/l	0.41	1,250,111.15	2.383E-01	Pulse	0.10	3
Pb			1	61.354	ug/l	0.16	5,860,848.90	1.117E+00	Pulse	0.10	3
Na			2	5453.872	ug/l	3.68	9,090,281.31	5.644E+01	Analog	0.30	3
Mg			2	5394.031	ug/l	2.46	4,163,797.47	2.585E+01	Pulse	0.30	3
Al			2	5577.507	ug/l	2.67	1,381,987.17	8.580E+00	Pulse	0.30	3
K			2	5486.851	ug/l	2.82	2,557,139.48	1.588E+01	Pulse	0.30	3
Ca			2	5714.311	ug/l	2.64	153,663.32	9.540E-01	Pulse	0.30	3
Ti			2	56.182	ug/l	2.90	11,983.31	7.440E-02	Pulse	0.30	3
V			2	58.958	ug/l	2.72	418,131.30	2.596E+00	Pulse	0.30	3
Cr			2	57.809	ug/l	3.43	535,893.43	3.327E+00	Pulse	0.30	3
Mn			2	58.532	ug/l	2.55	270,884.52	1.682E+00	Pulse	0.30	3
Fe			2	5470.674	ug/l	3.03	40,914,961.71	2.540E+02	Analog	0.30	3
Co			2	57.787	ug/l	3.10	959,024.33	5.954E+00	Pulse	0.30	3
Ni			2	56.888	ug/l	3.27	262,513.78	1.630E+00	Pulse	0.30	3
Cu			2	56.304	ug/l	2.69	681,965.93	4.234E+00	Pulse	0.30	3
Zn			2	56.034	ug/l	2.29	90,817.91	5.638E-01	Pulse	0.30	3
As			2	58.508	ug/l	2.25	47,518.23	2.950E-01	Pulse	1.00	3
Cd			2	57.659	ug/l	2.63	135,608.46	1.619E-01	Pulse	0.30	3
Sn			2	56.257	ug/l	2.62	244,444.06	2.918E-01	Pulse	0.30	3
Se			3	260.397	ug/l	1.12	63,355.50	3.211E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,649,884.17	0.51	99.8	Pulse	0.10	3
1	Sc		4,803,350.66	0.34	98.4	Pulse	0.10	3
1	Ge		900,052.15	0.36	98.1	Pulse	0.10	3

Quantitation Report

1	Ge		1,274,995.55	0.99	99.6	Pulse	0.10	3
1	Rh		6,295,876.78	0.83	92.5	Analog	0.10	3
1	In		6,912,690.04	0.81	95.7	Analog	0.10	3
1	Tb		9,206,509.03	1.03	97.8	Analog	0.10	3
1	Ho		880,182.36	1.26	99.1	Pulse	0.10	3
1	Bi		5,246,420.34	0.70	95.3	Pulse	0.10	3
2	Sc		161,142.57	2.41	100.6	Pulse	0.30	3
2	Ge		88,169.25	2.08	100.2	Pulse	0.30	3
2	Ge		134,682.96	1.99	99.0	Pulse	0.30	3
2	Rh		2,692,967.67	2.10	95.9	Pulse	0.30	3
2	In		838,052.77	2.27	98.1	Pulse	0.30	3
2	Tb		3,306,044.52	2.03	99.6	Pulse	0.30	3
2	Ho		322,975.74	1.75	100.5	Pulse	0.30	3
2	Bi		2,115,096.24	2.26	96.0	Pulse	0.30	3
3	Sc		215,322.20	0.90	97.7	Pulse	0.30	3
3	Ge		127,391.84	0.67	96.2	Pulse	0.30	3
3	Ge		197,291.78	0.85	96.9	Pulse	0.30	3
3	Rh		2,321,411.16	0.48	93.8	Pulse	0.30	3
3	Tb		3,577,709.44	0.44	96.9	Pulse	0.30	3

Quantitation Report

File Name	015_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 12:07
Sample Name	ICV
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.004	ug/l	131.81	101.33	3.853E-05	Pulse	0.25	3
B			1	0.897	ug/l	2.11	27,444.86	1.042E-02	Pulse	0.15	3
Ca			1	5.133	ug/l	8.53	28,966.05	6.063E-03	Pulse	0.10	3
Sr			1	0.008	ug/l	31.80	1,516.80	2.302E-04	Pulse	0.10	3
Mo			1	0.046	ug/l	13.64	916.73	1.391E-04	Pulse	0.10	3
Ag			1	0.008	ug/l	29.73	433.36	6.083E-05	Pulse	0.10	3
Sn			1	0.459	ug/l	1.10	5,417.80	7.609E-04	Pulse	0.10	3
Sb			1	0.016	ug/l	12.62	1,830.17	1.979E-04	Pulse	0.10	3
Ba			1	0.011	ug/l	32.67	223.34	2.414E-05	Pulse	0.10	3
Tl			1	0.015	ug/l	4.35	1,763.51	3.230E-04	Pulse	0.10	3
Pb			1	0.012	ug/l	37.87	583.37	1.069E-04	Pulse	0.10	3
Pb			1	0.012	ug/l	13.44	506.70	9.280E-05	Pulse	0.10	3
Pb			1	0.012	ug/l	15.23	2,443.53	4.475E-04	Pulse	0.10	3
Na			2	0.170	ug/l	132.59	10,561.16	6.674E-02	Pulse	0.30	3
Mg			2	-0.267	ug/l	-28.80	567.79	3.587E-03	Pulse	0.30	3
Al			2	64.042	ug/l	1.27	15,858.66	1.002E-01	Pulse	0.30	3
K			2	-0.060	ug/l	-644.07	7,237.19	4.574E-02	Pulse	0.30	3
Ca			2	-0.845	ug/l	-140.99	230.00	1.453E-03	Pulse	0.30	3
Ti			2	0.027	ug/l	104.15	6.66	4.220E-05	Pulse	0.30	3
V			2	0.000	ug/l	727.00	407.79	2.577E-03	Pulse	0.30	3
Cr			2	0.066	ug/l	15.45	1,117.83	7.065E-03	Pulse	0.30	3
Mn			2	0.001	ug/l	417.78	104.45	6.603E-04	Pulse	0.30	3
Fe			2	-0.171	ug/l	-22.01	12,153.47	7.680E-02	Pulse	0.30	3
Co			2	0.003	ug/l	45.18	150.00	9.483E-04	Pulse	0.30	3
Ni			2	0.007	ug/l	91.08	97.78	6.184E-04	Pulse	0.30	3
Cu			2	-0.001	ug/l	-504.18	667.80	4.221E-03	Pulse	0.30	3
Zn			2	0.170	ug/l	11.85	461.12	2.914E-03	Pulse	0.30	3
As			2	0.010	ug/l	34.11	21.33	1.348E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.003	ug/l	42.00	23.26	2.752E-05	Pulse	0.30	3
Sn			2	0.161	ug/l	6.34	1,078.94	1.276E-03	Pulse	0.30	3
Se			3	0.053	ug/l	53.97	27.07	1.339E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,635,073.88	0.53	99.2	Pulse	0.10	3
1	Sc		4,777,560.66	0.88	97.9	Pulse	0.10	3
1	Ge		897,305.85	0.78	97.8	Pulse	0.10	3
1	Ge		1,257,327.77	0.31	98.2	Pulse	0.10	3
1	Rh		6,593,466.36	0.83	96.9	Analog	0.10	3
1	In		7,120,642.92	0.74	98.5	Analog	0.10	3
1	Tb		9,249,932.99	0.37	98.3	Analog	0.10	3
1	Ho		880,576.94	0.95	99.1	Pulse	0.10	3
1	Bi		5,459,938.88	0.54	99.1	Mix	0.10	3
2	Sc		158,247.75	0.40	98.8	Pulse	0.30	3
2	Ge		87,944.45	0.75	100.0	Pulse	0.30	3
2	Ge		134,715.76	0.35	99.0	Pulse	0.30	3
2	Rh		2,774,130.93	0.09	98.8	Pulse	0.30	3
2	In		845,295.50	0.12	99.0	Pulse	0.30	3
2	Tb		3,293,991.33	0.16	99.2	Pulse	0.30	3
2	Ho		319,009.95	0.11	99.2	Pulse	0.30	3
2	Bi		2,187,069.91	0.50	99.2	Pulse	0.30	3
3	Sc		218,680.06	0.30	99.2	Pulse	0.30	3
3	Ge		130,884.89	0.91	98.8	Pulse	0.30	3
3	Ge		202,240.76	0.30	99.4	Pulse	0.30	3
3	Rh		2,461,029.35	0.50	99.4	Pulse	0.30	3
3	Tb		3,686,627.08	0.63	99.9	Pulse	0.30	3

Quantitation Report

File Name	016_ICB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 12:12
Sample Name	ICB
Sample Type	ICB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	8.94	82.67	3.113E-05	Pulse	0.25	3
B			1	0.264	ug/l	13.26	20,392.66	7.678E-03	Pulse	0.15	3
Ca			1	-1.311	ug/l	-49.99	18,567.69	3.873E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	4058.73	893.40	1.332E-04	Pulse	0.10	3
Mo			1	0.008	ug/l	12.01	306.68	4.576E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	55.29	166.68	2.321E-05	Pulse	0.10	3
Sn			1	0.351	ug/l	1.54	2,530.30	3.524E-04	Pulse	0.10	3
Sb			1	-0.017	ug/l	-8.72	933.40	1.001E-04	Pulse	0.10	3
Ba			1	-0.001	ug/l	-79.82	93.34	1.002E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	277.64	686.71	1.235E-04	Pulse	0.10	3
Pb			1	0.004	ug/l	65.60	406.69	7.321E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	63.50	340.02	6.121E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	30.87	1,590.10	2.860E-04	Pulse	0.10	3
Na			2	-0.869	ug/l	-14.31	8,879.09	5.600E-02	Pulse	0.30	3
Mg			2	-0.659	ug/l	-11.65	271.12	1.711E-03	Pulse	0.30	3
Al			2	-0.500	ug/l	-11.02	151.11	9.529E-04	Pulse	0.30	3
K			2	-0.217	ug/l	-194.13	7,179.40	4.528E-02	Pulse	0.30	3
Ca			2	-7.043	ug/l	-9.85	66.67	4.202E-04	Pulse	0.30	3
Ti			2	0.021	ug/l	155.48	5.55	3.498E-05	Pulse	0.30	3
V			2	-0.012	ug/l	-49.44	323.34	2.039E-03	Pulse	0.30	3
Cr			2	0.002	ug/l	237.04	537.79	3.392E-03	Pulse	0.30	3
Mn			2	-0.004	ug/l	-98.31	78.89	4.972E-04	Pulse	0.30	3
Fe			2	-1.084	ug/l	-0.88	5,455.43	3.441E-02	Pulse	0.30	3
Co			2	0.000	ug/l	732.10	97.78	6.165E-04	Pulse	0.30	3
Ni			2	0.000	ug/l	27578.54	65.55	4.135E-04	Pulse	0.30	3
Cu			2	-0.001	ug/l	-246.26	673.36	4.247E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.011	ug/l	-145.28	174.45	1.100E-03	Pulse	0.30	3
As			2	-0.004	ug/l	-92.16	10.67	6.725E-05	Pulse	1.00	3
Cd			2	-0.002	ug/l	-106.52	9.97	1.176E-05	Pulse	0.30	3
Sn			2	0.029	ug/l	46.42	501.12	5.914E-04	Pulse	0.30	3
Se			3	0.003	ug/l	128.63	14.47	7.195E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,655,905.21	0.24	100.0	Pulse	0.10	3
1	Sc		4,793,721.28	0.85	98.2	Pulse	0.10	3
1	Ge		902,351.18	0.78	98.4	Pulse	0.10	3
1	Ge		1,272,725.92	0.63	99.4	Pulse	0.10	3
1	Rh		6,702,472.40	1.12	98.5	Analog	0.10	3
1	In		7,177,307.40	0.88	99.3	Analog	0.10	3
1	Tb		9,325,411.11	1.47	99.1	Analog	0.10	3
1	Ho		885,537.49	2.10	99.7	Pulse	0.10	3
1	Bi		5,562,827.63	1.27	101.0	Analog	0.10	3
2	Sc		158,557.11	0.44	99.0	Pulse	0.30	3
2	Ge		88,324.40	0.55	100.4	Pulse	0.30	3
2	Ge		134,552.60	0.43	98.9	Pulse	0.30	3
2	Rh		2,782,507.74	0.35	99.1	Pulse	0.30	3
2	In		847,520.39	0.48	99.2	Pulse	0.30	3
2	Tb		3,301,802.85	0.45	99.4	Pulse	0.30	3
2	Ho		319,251.21	0.49	99.3	Pulse	0.30	3
2	Bi		2,198,033.73	0.50	99.7	Pulse	0.30	3
3	Sc		216,573.08	0.30	98.3	Pulse	0.30	3
3	Ge		130,359.56	1.03	98.4	Pulse	0.30	3
3	Ge		201,082.68	0.87	98.8	Pulse	0.30	3
3	Rh		2,469,519.69	0.71	99.8	Pulse	0.30	3
3	Tb		3,687,609.44	0.71	99.9	Pulse	0.30	3

Quantitation Report

File Name	017_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 12:18
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.628	ug/l	0.82	628,917.60	2.376E-01	Pulse	0.25	3
B			1	99.702	ug/l	0.68	1,158,961.93	4.378E-01	Pulse	0.15	3
Ca			1	5119.900	ug/l	0.91	8,306,773.21	1.744E+00	Analog	0.10	3
Sr			1	51.670	ug/l	1.24	4,213,672.96	6.635E-01	Pulse	0.10	3
Mo			1	51.602	ug/l	0.86	804,408.79	1.267E-01	Pulse	0.10	3
Ag			1	50.055	ug/l	0.64	2,063,525.18	3.004E-01	Pulse	0.10	3
Sn			1	48.745	ug/l	1.56	1,255,074.83	1.828E-01	Pulse	0.10	3
Sb			1	49.110	ug/l	1.29	1,349,695.81	1.461E-01	Pulse	0.10	3
Ba			1	50.185	ug/l	1.32	578,811.45	6.265E-02	Pulse	0.10	3
Tl			1	51.132	ug/l	0.68	3,565,893.38	6.799E-01	Pulse	0.10	3
Pb			1	51.477	ug/l	0.62	1,206,770.09	2.301E-01	Pulse	0.10	3
Pb			1	50.715	ug/l	0.47	1,065,757.61	2.032E-01	Pulse	0.10	3
Pb			1	50.902	ug/l	0.74	4,861,342.61	9.268E-01	Pulse	0.10	3
Na			2	5022.345	ug/l	1.39	8,211,546.62	5.198E+01	Analog	0.30	3
Mg			2	4931.260	ug/l	0.52	3,733,139.16	2.363E+01	Pulse	0.30	3
Al			2	5041.026	ug/l	0.15	1,225,013.91	7.755E+00	Pulse	0.30	3
K			2	4983.919	ug/l	0.20	2,278,699.21	1.442E+01	Pulse	0.30	3
Ca			2	5177.708	ug/l	0.74	136,572.11	8.646E-01	Pulse	0.30	3
Ti			2	50.064	ug/l	2.15	10,473.40	6.630E-02	Pulse	0.30	3
V			2	50.105	ug/l	0.22	348,564.76	2.207E+00	Pulse	0.30	3
Cr			2	49.470	ug/l	0.41	449,880.30	2.848E+00	Pulse	0.30	3
Mn			2	49.360	ug/l	0.62	224,045.19	1.418E+00	Pulse	0.30	3
Fe			2	5053.646	ug/l	0.64	37,070,396.31	2.347E+02	Analog	0.30	3
Co			2	49.187	ug/l	0.81	800,636.60	5.068E+00	Pulse	0.30	3
Ni			2	48.772	ug/l	0.67	220,754.71	1.397E+00	Pulse	0.30	3
Cu			2	48.295	ug/l	0.38	573,779.07	3.632E+00	Pulse	0.30	3
Zn			2	48.140	ug/l	1.08	76,541.40	4.845E-01	Pulse	0.30	3
As			2	48.524	ug/l	0.49	38,650.07	2.447E-01	Pulse	1.00	3
Cd			2	48.845	ug/l	0.62	112,385.60	1.371E-01	Pulse	0.30	3
Sn			2	49.080	ug/l	0.23	208,663.27	2.546E-01	Pulse	0.30	3
Se			3	199.108	ug/l	0.40	48,093.37	2.456E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,647,228.96	0.14	99.7	Pulse	0.10	3
1	Sc		4,763,089.51	0.53	97.6	Pulse	0.10	3
1	Ge		896,377.54	1.18	97.7	Pulse	0.10	3

Quantitation Report

1	Ge		1,263,968.76	0.98	98.7	Pulse	0.10	3
1	Rh		6,350,463.66	0.34	93.3	Analog	0.10	3
1	In		6,868,872.83	1.87	95.1	Analog	0.10	3
1	Tb		9,238,796.11	0.35	98.2	Analog	0.10	3
1	Ho		876,383.69	1.42	98.7	Pulse	0.10	3
1	Bi		5,245,280.96	1.39	95.2	Pulse	0.10	3
2	Sc		157,970.48	0.29	98.7	Pulse	0.30	3
2	Ge		86,568.57	1.21	98.4	Pulse	0.30	3
2	Ge		132,229.57	1.23	97.2	Pulse	0.30	3
2	Rh		2,651,885.73	0.63	94.4	Pulse	0.30	3
2	In		819,506.46	0.40	95.9	Pulse	0.30	3
2	Tb		3,248,895.50	0.42	97.8	Pulse	0.30	3
2	Ho		315,761.40	0.22	98.2	Pulse	0.30	3
2	Bi		2,089,379.50	0.36	94.8	Pulse	0.30	3
3	Sc		214,760.71	0.69	97.4	Pulse	0.30	3
3	Ge		125,810.90	0.77	95.0	Pulse	0.30	3
3	Ge		195,841.87	0.36	96.2	Pulse	0.30	3
3	Rh		2,324,124.70	0.18	93.9	Pulse	0.30	3
3	Tb		3,574,405.69	0.36	96.9	Pulse	0.30	3

Quantitation Report

File Name	018_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 12:22
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.005	ug/l	77.61	120.00	4.553E-05	Pulse	0.25	3
B			1	1.066	ug/l	1.72	29,392.42	1.115E-02	Pulse	0.15	3
Ca			1	-0.726	ug/l	-47.46	19,391.91	4.072E-03	Pulse	0.10	3
Sr			1	0.005	ug/l	30.21	1,326.78	2.018E-04	Pulse	0.10	3
Mo			1	0.086	ug/l	5.62	1,566.81	2.383E-04	Pulse	0.10	3
Ag			1	0.011	ug/l	6.28	540.03	7.664E-05	Pulse	0.10	3
Sn			1	0.433	ug/l	2.79	4,650.87	6.599E-04	Pulse	0.10	3
Sb			1	0.329	ug/l	9.05	10,540.56	1.130E-03	Pulse	0.10	3
Ba			1	0.010	ug/l	61.26	220.01	2.364E-05	Pulse	0.10	3
Tl			1	0.010	ug/l	22.37	1,406.79	2.554E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	16.72	676.71	1.228E-04	Pulse	0.10	3
Pb			1	0.010	ug/l	5.96	473.36	8.593E-05	Pulse	0.10	3
Pb			1	0.013	ug/l	4.58	2,546.86	4.623E-04	Pulse	0.10	3
Na			2	-0.439	ug/l	-38.14	9,428.28	6.045E-02	Pulse	0.30	3
Mg			2	-0.236	ug/l	-7.10	583.35	3.739E-03	Pulse	0.30	3
Al			2	-0.291	ug/l	-46.65	198.89	1.274E-03	Pulse	0.30	3
K			2	-0.251	ug/l	-170.87	7,048.23	4.518E-02	Pulse	0.30	3
Ca			2	-7.129	ug/l	-1.63	63.33	4.059E-04	Pulse	0.30	3
Ti			2	0.016	ug/l	114.35	4.45	2.858E-05	Pulse	0.30	3
V			2	-0.006	ug/l	-74.31	358.90	2.301E-03	Pulse	0.30	3
Cr			2	0.011	ug/l	34.85	611.13	3.918E-03	Pulse	0.30	3
Mn			2	0.002	ug/l	99.77	105.56	6.768E-04	Pulse	0.30	3
Fe			2	-0.457	ug/l	-6.49	9,911.97	6.354E-02	Pulse	0.30	3
Co			2	0.003	ug/l	54.81	146.67	9.405E-04	Pulse	0.30	3
Ni			2	0.004	ug/l	166.25	81.11	5.196E-04	Pulse	0.30	3
Cu			2	0.009	ug/l	44.89	776.70	4.978E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.024	ug/l	19.79	225.56	1.446E-03	Pulse	0.30	3
As			2	0.012	ug/l	83.32	23.33	1.497E-04	Pulse	1.00	3
Cd			2	0.005	ug/l	175.53	26.57	3.176E-05	Pulse	0.30	3
Sn			2	0.110	ug/l	6.54	843.37	1.009E-03	Pulse	0.30	3
Se			3	0.049	ug/l	27.63	26.13	1.297E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,637,229.17	1.27	99.3	Pulse	0.10	3
1	Sc		4,762,037.01	0.74	97.5	Pulse	0.10	3
1	Ge		895,891.32	1.00	97.7	Pulse	0.10	3
1	Ge		1,252,013.21	1.31	97.8	Pulse	0.10	3
1	Rh		6,577,163.03	0.67	96.6	Analog	0.10	3
1	In		7,046,118.72	0.69	97.5	Analog	0.10	3
1	Tb		9,325,145.07	0.89	99.1	Analog	0.10	3
1	Ho		884,005.69	0.39	99.5	Pulse	0.10	3
1	Bi		5,508,843.46	0.43	100.0	Analog	0.10	3
2	Sc		155,994.56	0.50	97.4	Pulse	0.30	3
2	Ge		87,430.88	0.42	99.4	Pulse	0.30	3
2	Ge		132,630.36	1.13	97.5	Pulse	0.30	3
2	Rh		2,756,810.03	0.16	98.2	Pulse	0.30	3
2	In		835,451.67	0.29	97.8	Pulse	0.30	3
2	Tb		3,264,570.84	0.18	98.3	Pulse	0.30	3
2	Ho		316,487.07	0.48	98.4	Pulse	0.30	3
2	Bi		2,177,791.03	0.21	98.8	Pulse	0.30	3
3	Sc		216,144.95	0.30	98.1	Pulse	0.30	3
3	Ge		129,582.12	0.23	97.9	Pulse	0.30	3
3	Ge		201,541.19	0.34	99.0	Pulse	0.30	3
3	Rh		2,449,648.10	0.39	99.0	Pulse	0.30	3
3	Tb		3,692,712.35	0.38	100.1	Pulse	0.30	3

Quantitation Report

File Name	019LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 12:28
Sample Name	CRI
Sample Type	LLCCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.506	ug/l	4.12	6,378.62	2.395E-03	Pulse	0.25	3
B			1	25.355	ug/l	2.23	309,557.18	1.162E-01	Pulse	0.15	3
Ca			1	257.267	ug/l	1.56	443,016.09	9.174E-02	Pulse	0.10	3
Sr			1	4.935	ug/l	1.76	424,477.26	6.349E-02	Pulse	0.10	3
Mo			1	0.985	ug/l	2.32	16,328.89	2.442E-03	Pulse	0.10	3
Ag			1	0.485	ug/l	1.76	20,917.69	2.922E-03	Pulse	0.10	3
Sn			1	5.163	ug/l	1.33	132,371.89	1.849E-02	Pulse	0.10	3
Sb			1	2.004	ug/l	2.47	56,900.17	6.106E-03	Pulse	0.10	3
Ba			1	1.031	ug/l	0.91	12,098.51	1.298E-03	Pulse	0.10	3
Tl			1	0.493	ug/l	1.94	37,120.52	6.676E-03	Pulse	0.10	3
Pb			1	0.517	ug/l	1.83	13,149.62	2.365E-03	Pulse	0.10	3
Pb			1	0.502	ug/l	1.34	11,428.15	2.055E-03	Pulse	0.10	3
Pb			1	0.505	ug/l	2.25	52,301.37	9.407E-03	Pulse	0.10	3
Na			2	251.401	ug/l	1.04	420,075.70	2.664E+00	Pulse	0.30	3
Mg			2	255.881	ug/l	0.85	194,108.52	1.231E+00	Pulse	0.30	3
Al			2	25.704	ug/l	1.01	6,505.77	4.125E-02	Pulse	0.30	3
K			2	257.089	ug/l	0.72	124,209.81	7.876E-01	Pulse	0.30	3
Ca			2	278.726	ug/l	0.90	7,577.36	4.805E-02	Pulse	0.30	3
Ti			2	0.921	ug/l	22.10	193.34	1.227E-03	Pulse	0.30	3
V			2	0.996	ug/l	0.95	7,310.58	4.635E-02	Pulse	0.30	3
Cr			2	1.014	ug/l	2.48	9,714.05	6.160E-02	Pulse	0.30	3
Mn			2	1.013	ug/l	1.54	4,686.27	2.972E-02	Pulse	0.30	3
Fe			2	25.786	ug/l	0.68	202,128.32	1.282E+00	Pulse	0.30	3
Co			2	0.510	ug/l	1.51	8,385.57	5.317E-02	Pulse	0.30	3
Ni			2	1.001	ug/l	4.07	4,586.24	2.907E-02	Pulse	0.30	3
Cu			2	2.069	ug/l	0.79	25,182.68	1.597E-01	Pulse	0.30	3
Zn			2	5.236	ug/l	2.79	8,482.27	5.378E-02	Pulse	0.30	3
As			2	0.530	ug/l	3.34	434.68	2.756E-03	Pulse	1.00	3
Cd			2	0.490	ug/l	7.05	1,177.07	1.394E-03	Pulse	0.30	3
Sn			2	4.917	ug/l	0.77	21,876.42	2.591E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.501	ug/l	4.45	138.20	6.867E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,664,003.92	0.53	100.3	Pulse	0.10	3
1	Sc		4,829,700.97	1.13	98.9	Pulse	0.10	3
1	Ge		902,468.97	0.99	98.4	Pulse	0.10	3
1	Ge		1,269,228.16	0.71	99.2	Pulse	0.10	3
1	Rh		6,687,237.19	2.59	98.3	Analog	0.10	3
1	In		7,159,003.60	1.65	99.1	Analog	0.10	3
1	Tb		9,317,712.15	0.45	99.0	Analog	0.10	3
1	Ho		892,100.48	1.01	100.4	Pulse	0.10	3
1	Bi		5,560,864.09	1.59	101.0	Mix	0.10	3
2	Sc		157,707.32	1.00	98.5	Pulse	0.30	3
2	Ge		87,221.84	1.01	99.2	Pulse	0.30	3
2	Ge		133,327.36	1.18	98.0	Pulse	0.30	3
2	Rh		2,761,364.89	0.42	98.3	Pulse	0.30	3
2	In		844,382.15	0.18	98.8	Pulse	0.30	3
2	Tb		3,279,022.79	0.24	98.7	Pulse	0.30	3
2	Ho		318,254.84	0.27	99.0	Pulse	0.30	3
2	Bi		2,185,177.34	0.21	99.1	Pulse	0.30	3
3	Sc		218,072.42	0.78	98.9	Pulse	0.30	3
3	Ge		130,778.42	0.58	98.8	Pulse	0.30	3
3	Ge		201,280.81	0.47	98.9	Pulse	0.30	3
3	Rh		2,453,988.51	0.72	99.2	Pulse	0.30	3
3	Tb		3,683,029.44	0.57	99.8	Pulse	0.30	3

Quantitation Report

File Name	020ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 12:33
Sample Name	ICSA
Sample Type	ICSA
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	105.95	62.67	2.454E-05	Pulse	0.25	3
B			1	0.781	ug/l	7.70	25,299.09	9.915E-03	Pulse	0.15	3
Ca			1	97098.330	ug/l	1.42	151,178,921.08	3.300E+01	Analog	0.10	3
Sr			1	2066.586	ug/l	1.73	145,552,254.50	2.653E+01	Analog	0.10	3
Mo			1	2125.170	ug/l	1.83	28,611,758.74	5.216E+00	Analog	0.10	3
Ag			1	0.028	ug/l	19.41	1,110.08	1.789E-04	Pulse	0.10	3
Sn			1	1815.427	ug/l	0.81	42,509,834.36	6.842E+00	Analog	0.10	3
Sb			1	0.115	ug/l	5.06	4,257.39	4.942E-04	Pulse	0.10	3
Ba			1	0.144	ug/l	4.68	1,643.48	1.908E-04	Pulse	0.10	3
Tl			1	0.002	ug/l	77.57	636.70	1.470E-04	Pulse	0.10	3
Pb			1	0.104	ug/l	5.75	2,260.26	5.215E-04	Pulse	0.10	3
Pb			1	0.104	ug/l	9.20	2,006.88	4.634E-04	Pulse	0.10	3
Pb			1	0.103	ug/l	6.11	9,078.10	2.095E-03	Pulse	0.10	3
Na			2	92305.711	ug/l	0.57	141,044,238.84	9.543E+02	Analog	0.30	3
Mg			2	91398.727	ug/l	0.53	64,724,875.21	4.379E+02	Analog	0.30	3
Al			2	94822.182	ug/l	0.27	21,554,645.81	1.458E+02	Analog	0.30	3
K			2	98170.369	ug/l	1.10	41,867,092.78	2.833E+02	Analog	0.30	3
Ca			2	102800.454	ug/l	0.08	2,532,610.53	1.714E+01	Pulse	0.30	3
Ti			2	1807.141	ug/l	0.22	353,669.70	2.393E+00	Pulse	0.30	3
V			2	0.004	ug/l	177.64	404.46	2.737E-03	Pulse	0.30	3
Cr			2	0.215	ug/l	2.24	2,311.30	1.564E-02	Pulse	0.30	3
Mn			2	0.429	ug/l	3.86	1,914.58	1.295E-02	Pulse	0.30	3
Fe			2	90386.948	ug/l	0.38	620,138,784.25	4.196E+03	Analog	0.30	3
Co			2	0.061	ug/l	4.79	1,018.94	6.895E-03	Pulse	0.30	3
Ni			2	0.452	ug/l	0.70	1,975.70	1.337E-02	Pulse	0.30	3
Cu			2	0.288	ug/l	7.53	3,829.38	2.592E-02	Pulse	0.30	3
Zn			2	0.559	ug/l	5.57	1,007.82	6.819E-03	Pulse	0.30	3
As			2	0.084	ug/l	12.53	75.67	5.118E-04	Pulse	1.00	3
Cd			2	-0.135	ug/l	-8.81	-260.66	-3.616E-04	Pulse	0.30	3
Sn			2	1876.089	ug/l	0.38	7,001,682.92	9.717E+00	Analog	0.30	3
Se			3	0.049	ug/l	6.33	21.40	1.294E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,551,713.22	1.03	96.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,581,805.35	0.91	93.9	Pulse	0.10	3
1	Ge		867,952.80	1.06	94.6	Pulse	0.10	3
1	Ge		1,101,427.09	0.54	86.0	Pulse	0.10	3
1	Rh		5,487,059.92	1.97	80.6	Mix	0.10	3
1	In		6,213,206.49	1.50	86.0	Analog	0.10	3
1	Tb		8,612,719.04	1.45	91.5	Analog	0.10	3
1	Ho		814,685.40	1.71	91.7	Pulse	0.10	3
1	Bi		4,332,632.85	1.62	78.7	Pulse	0.10	3
2	Sc		147,801.42	0.77	92.3	Pulse	0.30	3
2	Ge		78,494.93	1.21	89.2	Pulse	0.30	3
2	Ge		114,995.14	0.36	84.5	Pulse	0.30	3
2	Rh		2,186,031.44	0.54	77.8	Pulse	0.30	3
2	In		720,604.91	0.52	84.4	Pulse	0.30	3
2	Tb		2,922,834.26	0.13	88.0	Pulse	0.30	3
2	Ho		285,688.72	0.13	88.9	Pulse	0.30	3
2	Bi		1,677,863.86	0.27	76.1	Pulse	0.30	3
3	Sc		199,607.98	0.44	90.6	Pulse	0.30	3
3	Ge		112,378.89	0.58	84.9	Pulse	0.30	3
3	Ge		165,420.93	0.57	81.3	Pulse	0.30	3
3	Rh		1,842,161.66	0.48	74.4	Pulse	0.30	3
3	Tb		3,055,303.56	0.57	82.8	Pulse	0.30	3

Quantitation Report

File Name	021ICSB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 12:37
Sample Name	ICSAB
Sample Type	ICSB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	188.31	58.67	2.355E-05	Pulse	0.25	3
B			1	46.063	ug/l	0.44	513,054.37	2.058E-01	Pulse	0.15	3
Ca			1	96675.999	ug/l	0.93	148,432,297.79	3.285E+01	Analog	0.10	3
Sr			1	2119.701	ug/l	0.52	146,721,754.48	2.721E+01	Analog	0.10	3
Mo			1	2174.471	ug/l	0.49	28,769,634.57	5.337E+00	Analog	0.10	3
Ag			1	19.052	ug/l	0.85	714,903.14	1.144E-01	Pulse	0.10	3
Sn			1	1808.706	ug/l	1.70	42,609,872.70	6.816E+00	Analog	0.10	3
Sb			1	0.180	ug/l	4.87	6,058.08	6.861E-04	Pulse	0.10	3
Ba			1	0.229	ug/l	9.45	2,616.99	2.963E-04	Pulse	0.10	3
Tl			1	0.002	ug/l	36.52	626.71	1.416E-04	Pulse	0.10	3
Pb			1	0.087	ug/l	10.66	1,973.55	4.455E-04	Pulse	0.10	3
Pb			1	0.087	ug/l	15.30	1,736.83	3.923E-04	Pulse	0.10	3
Pb			1	0.087	ug/l	8.64	8,027.86	1.813E-03	Pulse	0.10	3
Na			2	90518.414	ug/l	1.56	136,760,692.34	9.358E+02	Analog	0.30	3
Mg			2	88100.349	ug/l	0.58	61,694,230.88	4.221E+02	Analog	0.30	3
Al			2	91156.862	ug/l	0.73	20,490,149.19	1.402E+02	Analog	0.30	3
K			2	96694.710	ug/l	1.67	40,777,647.27	2.790E+02	Analog	0.30	3
Ca			2	101591.786	ug/l	0.93	2,474,859.21	1.693E+01	Pulse	0.30	3
Ti			2	1778.683	ug/l	1.04	344,206.15	2.355E+00	Pulse	0.30	3
V			2	19.949	ug/l	0.70	128,619.22	8.800E-01	Pulse	0.30	3
Cr			2	19.584	ug/l	1.19	165,055.69	1.129E+00	Pulse	0.30	3
Mn			2	19.445	ug/l	1.50	81,714.49	5.591E-01	Pulse	0.30	3
Fe			2	90054.706	ug/l	1.58	610,929,984.61	4.180E+03	Analog	0.30	3
Co			2	18.665	ug/l	1.19	281,136.44	1.924E+00	Pulse	0.30	3
Ni			2	17.954	ug/l	0.97	75,220.18	5.147E-01	Pulse	0.30	3
Cu			2	17.585	ug/l	0.23	193,691.48	1.325E+00	Pulse	0.30	3
Zn			2	16.723	ug/l	1.86	24,714.22	1.691E-01	Pulse	0.30	3
As			2	18.429	ug/l	0.39	13,589.32	9.298E-02	Pulse	1.00	3
Cd			2	17.924	ug/l	1.04	35,552.67	5.033E-02	Pulse	0.30	3
Sn			2	1887.823	ug/l	0.23	6,906,133.48	9.777E+00	Analog	0.30	3
Se			3	18.880	ug/l	0.26	4,074.91	2.335E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,493,190.37	0.84	93.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,517,972.12	1.07	92.5	Pulse	0.10	3
1	Ge		861,176.50	0.96	93.9	Pulse	0.10	3
1	Ge		1,102,653.97	1.26	86.1	Pulse	0.10	3
1	Rh		5,391,188.04	1.02	79.2	Pulse	0.10	3
1	In		6,252,299.67	1.88	86.5	Analog	0.10	3
1	Tb		8,827,336.33	1.15	93.8	Analog	0.10	3
1	Ho		831,956.45	1.02	93.7	Pulse	0.10	3
1	Bi		4,427,832.85	0.88	80.4	Pulse	0.10	3
2	Sc		146,155.78	0.81	91.3	Pulse	0.30	3
2	Ge		77,647.47	0.38	88.3	Pulse	0.30	3
2	Ge		113,727.83	0.38	83.6	Pulse	0.30	3
2	Rh		2,194,311.72	0.13	78.1	Pulse	0.30	3
2	In		706,342.66	0.28	82.7	Pulse	0.30	3
2	Tb		2,920,501.97	0.20	87.9	Pulse	0.30	3
2	Ho		284,407.00	0.25	88.5	Pulse	0.30	3
2	Bi		1,681,282.78	0.26	76.3	Pulse	0.30	3
3	Sc		208,275.20	0.17	94.5	Pulse	0.30	3
3	Ge		116,794.99	0.89	88.2	Pulse	0.30	3
3	Ge		174,530.36	0.74	85.8	Pulse	0.30	3
3	Rh		1,915,528.39	0.21	77.4	Pulse	0.30	3
3	Tb		3,148,928.90	0.58	85.3	Pulse	0.30	3

Quantitation Report

File Name	022_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 12:43
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.969	ug/l	0.43	552,060.05	2.298E-01	Pulse	0.25	3
B			1	99.790	ug/l	0.29	1,052,720.68	4.382E-01	Pulse	0.15	3
Ca			1	5079.827	ug/l	0.84	7,854,296.97	1.730E+00	Analog	0.10	3
Sr			1	51.305	ug/l	0.75	4,213,322.65	6.588E-01	Pulse	0.10	3
Mo			1	51.458	ug/l	0.77	807,833.45	1.263E-01	Pulse	0.10	3
Ag			1	49.351	ug/l	0.77	2,074,693.35	2.962E-01	Pulse	0.10	3
Sn			1	49.176	ug/l	0.93	1,291,451.73	1.844E-01	Pulse	0.10	3
Sb			1	48.133	ug/l	1.56	1,374,503.16	1.432E-01	Pulse	0.10	3
Ba			1	49.090	ug/l	1.69	588,271.79	6.128E-02	Pulse	0.10	3
Tl			1	50.940	ug/l	0.43	3,706,141.82	6.773E-01	Pulse	0.10	3
Pb			1	51.250	ug/l	0.08	1,253,446.21	2.291E-01	Pulse	0.10	3
Pb			1	50.489	ug/l	0.42	1,106,888.19	2.023E-01	Pulse	0.10	3
Pb			1	50.788	ug/l	0.53	5,060,316.96	9.248E-01	Pulse	0.10	3
Na			2	4967.816	ug/l	0.22	7,327,648.60	5.142E+01	Analog	0.30	3
Mg			2	4824.642	ug/l	0.40	3,294,976.26	2.312E+01	Pulse	0.30	3
Al			2	4802.720	ug/l	0.65	1,052,879.78	7.388E+00	Pulse	0.30	3
K			2	4925.049	ug/l	0.35	2,031,461.94	1.426E+01	Pulse	0.30	3
Ca			2	5144.106	ug/l	0.24	122,408.40	8.590E-01	Pulse	0.30	3
Ti			2	49.765	ug/l	1.43	9,391.63	6.590E-02	Pulse	0.30	3
V			2	51.486	ug/l	0.83	323,103.58	2.267E+00	Pulse	0.30	3
Cr			2	50.950	ug/l	0.68	417,980.10	2.933E+00	Pulse	0.30	3
Mn			2	50.098	ug/l	0.17	205,139.09	1.439E+00	Pulse	0.30	3
Fe			2	5226.912	ug/l	0.66	34,588,586.40	2.427E+02	Analog	0.30	3
Co			2	51.460	ug/l	0.34	755,643.02	5.302E+00	Pulse	0.30	3
Ni			2	50.978	ug/l	0.42	208,153.76	1.461E+00	Pulse	0.30	3
Cu			2	51.046	ug/l	0.57	547,067.61	3.839E+00	Pulse	0.30	3
Zn			2	49.505	ug/l	0.87	71,004.71	4.982E-01	Pulse	0.30	3
As			2	50.917	ug/l	0.40	36,585.70	2.567E-01	Pulse	1.00	3
Cd			2	49.647	ug/l	1.00	109,152.67	1.394E-01	Pulse	0.30	3
Sn			2	49.161	ug/l	0.56	199,726.52	2.550E-01	Pulse	0.30	3
Se			3	196.772	ug/l	0.71	48,717.68	2.427E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,402,463.93	0.16	90.4	Pulse	0.10	3
1	Sc		4,539,139.83	1.02	93.0	Pulse	0.10	3
1	Ge		870,583.19	0.70	94.9	Pulse	0.10	3

Quantitation Report

1	Ge		1,232,708.19	1.11	96.3	Pulse	0.10	3
1	Rh		6,395,306.99	0.34	94.0	Analog	0.10	3
1	In		7,004,199.55	0.13	96.9	Analog	0.10	3
1	Tb		9,599,846.52	0.79	102.0	Analog	0.10	3
1	Ho		914,113.79	1.75	102.9	Pulse	0.10	3
1	Bi		5,472,062.62	1.10	99.4	Mix	0.10	3
2	Sc		142,508.51	0.07	89.0	Pulse	0.30	3
2	Ge		80,914.15	0.53	92.0	Pulse	0.30	3
2	Ge		124,239.46	0.54	91.3	Pulse	0.30	3
2	Rh		2,609,633.85	0.91	92.9	Pulse	0.30	3
2	In		783,129.98	0.68	91.7	Pulse	0.30	3
2	Tb		3,234,440.77	0.40	97.4	Mix	0.30	3
2	Ho		314,002.16	1.18	97.7	Pulse	0.30	3
2	Bi		2,105,176.79	0.97	95.5	Pulse	0.30	3
3	Sc		215,768.70	0.22	97.9	Pulse	0.30	3
3	Ge		129,590.28	0.47	97.9	Pulse	0.30	3
3	Ge		200,741.58	0.68	98.6	Pulse	0.30	3
3	Rh		2,398,594.28	0.06	96.9	Pulse	0.30	3
3	Tb		3,698,678.33	0.48	100.2	Pulse	0.30	3

Quantitation Report

File Name	023_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 12:48
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	2.90	129.33	5.291E-05	Pulse	0.25	3
B			1	0.930	ug/l	6.67	25,808.91	1.056E-02	Pulse	0.15	3
Ca			1	0.151	ug/l	109.06	19,832.46	4.370E-03	Pulse	0.10	3
Sr			1	0.041	ug/l	8.77	4,370.75	6.616E-04	Pulse	0.10	3
Mo			1	0.205	ug/l	2.08	3,490.52	5.284E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	35.59	613.38	8.495E-05	Pulse	0.10	3
Sn			1	0.502	ug/l	2.18	6,634.96	9.207E-04	Pulse	0.10	3
Sb			1	0.318	ug/l	5.25	10,457.16	1.095E-03	Pulse	0.10	3
Ba			1	0.006	ug/l	9.81	173.34	1.815E-05	Pulse	0.10	3
Tl			1	0.008	ug/l	5.53	1,326.78	2.315E-04	Pulse	0.10	3
Pb			1	0.016	ug/l	35.62	736.71	1.286E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	16.54	563.37	9.830E-05	Pulse	0.10	3
Pb			1	0.014	ug/l	2.51	2,706.86	4.724E-04	Pulse	0.10	3
Na			2	4.486	ug/l	0.57	16,204.52	1.114E-01	Pulse	0.30	3
Mg			2	1.417	ug/l	18.83	1,695.66	1.166E-02	Pulse	0.30	3
Al			2	1.263	ug/l	10.45	533.35	3.665E-03	Pulse	0.30	3
K			2	3.907	ug/l	10.35	8,319.95	5.718E-02	Pulse	0.30	3
Ca			2	-5.716	ug/l	-16.82	93.33	6.415E-04	Pulse	0.30	3
Ti			2	0.104	ug/l	19.41	21.11	1.451E-04	Pulse	0.30	3
V			2	-0.006	ug/l	-111.90	335.56	2.307E-03	Pulse	0.30	3
Cr			2	0.017	ug/l	70.66	621.13	4.268E-03	Pulse	0.30	3
Mn			2	0.005	ug/l	74.12	111.11	7.636E-04	Pulse	0.30	3
Fe			2	1.631	ug/l	3.03	23,350.88	1.605E-01	Pulse	0.30	3
Co			2	0.005	ug/l	18.66	168.89	1.160E-03	Pulse	0.30	3
Ni			2	0.003	ug/l	108.00	73.33	5.036E-04	Pulse	0.30	3
Cu			2	0.055	ug/l	6.17	1,225.62	8.423E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.022	ug/l	71.44	207.78	1.428E-03	Pulse	0.30	3
As			2	0.016	ug/l	38.67	24.67	1.695E-04	Pulse	1.00	3
Cd			2	0.013	ug/l	23.26	44.24	5.431E-05	Pulse	0.30	3
Sn			2	0.193	ug/l	8.99	1,175.62	1.443E-03	Pulse	0.30	3
Se			3	0.035	ug/l	27.97	23.07	1.121E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,444,508.56	0.17	92.0	Pulse	0.10	3
1	Sc		4,538,172.22	0.31	93.0	Pulse	0.10	3
1	Ge		880,028.76	0.74	96.0	Pulse	0.10	3
1	Ge		1,233,020.86	1.04	96.3	Pulse	0.10	3
1	Rh		6,605,477.40	0.36	97.1	Analog	0.10	3
1	In		7,205,461.87	1.04	99.7	Analog	0.10	3
1	Tb		9,550,614.23	1.22	101.5	Analog	0.10	3
1	Ho		900,090.79	0.82	101.3	Pulse	0.10	3
1	Bi		5,730,184.71	0.44	104.0	Analog	0.10	3
2	Sc		145,512.69	0.51	90.9	Pulse	0.30	3
2	Ge		83,444.52	0.38	94.9	Pulse	0.30	3
2	Ge		128,408.41	0.11	94.4	Pulse	0.30	3
2	Rh		2,729,291.63	0.54	97.2	Pulse	0.30	3
2	In		814,443.48	0.38	95.3	Pulse	0.30	3
2	Tb		3,260,604.80	0.36	98.2	Pulse	0.30	3
2	Ho		317,147.16	0.24	98.6	Pulse	0.30	3
2	Bi		2,201,303.39	0.09	99.9	Pulse	0.30	3
3	Sc		219,133.06	0.58	99.4	Pulse	0.30	3
3	Ge		133,600.98	0.27	100.9	Pulse	0.30	3
3	Ge		205,663.76	0.19	101.0	Pulse	0.30	3
3	Rh		2,533,719.62	0.54	102.4	Pulse	0.30	3
3	Tb		3,794,620.41	0.48	102.8	Pulse	0.30	3

Quantitation Report

File Name	024SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 12:54
Sample Name	mp14051-mb1conf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	40.35	88.00	3.610E-05	Pulse	0.25	3
B			1	1.557	ug/l	4.45	24,135.48	9.902E-03	Pulse	0.15	3
Ca			1	18.634	ug/l	2.91	33,237.18	7.485E-03	Pulse	0.10	3
Sr			1	0.178	ug/l	2.34	8,092.31	1.278E-03	Pulse	0.10	3
Mo			1	0.377	ug/l	5.80	3,097.09	4.893E-04	Pulse	0.10	3
Ag			1	0.027	ug/l	6.50	633.37	9.110E-05	Pulse	0.10	3
Sn			1	1.585	ug/l	3.18	14,023.37	2.016E-03	Pulse	0.10	3
Sb			1	0.630	ug/l	3.71	10,280.37	1.087E-03	Pulse	0.10	3
Ba			1	0.097	ug/l	5.70	673.38	7.122E-05	Pulse	0.10	3
Tl			1	0.031	ug/l	2.06	1,890.19	3.254E-04	Pulse	0.10	3
Pb			1	0.065	ug/l	9.24	1,163.43	2.003E-04	Pulse	0.10	3
Pb			1	0.062	ug/l	6.93	983.40	1.693E-04	Pulse	0.10	3
Pb			1	0.062	ug/l	3.83	4,533.78	7.803E-04	Pulse	0.10	3
Na			2	21.164	ug/l	6.59	24,732.62	1.744E-01	Pulse	0.30	3
Mg			2	7.814	ug/l	8.29	3,344.82	2.359E-02	Pulse	0.30	3
Al			2	6.587	ug/l	6.56	963.37	6.788E-03	Pulse	0.30	3
K			2	8.990	ug/l	9.39	8,353.29	5.888E-02	Pulse	0.30	3
Ca			2	9.843	ug/l	41.94	342.23	2.414E-03	Pulse	0.30	3
Ti			2	0.558	ug/l	23.58	53.33	3.764E-04	Pulse	0.30	3
V			2	0.275	ug/l	6.63	1,221.17	8.607E-03	Pulse	0.30	3
Cr			2	0.408	ug/l	6.56	2,131.27	1.501E-02	Pulse	0.30	3
Mn			2	0.686	ug/l	3.22	1,486.75	1.048E-02	Pulse	0.30	3
Fe			2	10.570	ug/l	1.73	46,831.61	3.301E-01	Pulse	0.30	3
Co			2	0.028	ug/l	23.39	287.78	2.030E-03	Pulse	0.30	3
Ni			2	0.652	ug/l	6.47	1,383.41	9.751E-03	Pulse	0.30	3
Cu			2	2.427	ug/l	3.80	13,539.03	9.545E-02	Pulse	0.30	3
Zn			2	0.755	ug/l	2.80	708.91	4.995E-03	Pulse	0.30	3
As			2	0.070	ug/l	32.48	37.33	2.632E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.011	ug/l	122.90	26.47	3.389E-05	Pulse	0.30	3
Sn			2	0.954	ug/l	1.33	2,271.30	2.913E-03	Pulse	0.30	3
Se			3	0.062	ug/l	49.32	22.13	1.070E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,437,243.94	1.00	91.8	Pulse	0.10	3
1	Sc		4,440,303.16	0.75	91.0	Pulse	0.10	3
1	Ge		847,669.88	0.99	92.4	Pulse	0.10	3
1	Ge		1,184,026.36	0.70	92.5	Pulse	0.10	3
1	Rh		6,334,258.86	1.75	93.1	Analog	0.10	3
1	In		6,957,030.95	1.89	96.3	Analog	0.10	3
1	Tb		9,452,446.32	0.95	100.5	Analog	0.10	3
1	Ho		896,663.63	1.08	100.9	Pulse	0.10	3
1	Bi		5,809,823.45	0.25	105.5	Analog	0.10	3
2	Sc		141,898.54	1.55	88.6	Pulse	0.30	3
2	Ge		79,746.44	0.73	90.7	Pulse	0.30	3
2	Ge		122,007.69	0.56	89.7	Pulse	0.30	3
2	Rh		2,658,549.89	0.36	94.7	Pulse	0.30	3
2	In		779,601.11	0.55	91.3	Pulse	0.30	3
2	Tb		3,214,941.19	0.27	96.8	Pulse	0.30	3
2	Ho		313,152.68	0.42	97.4	Pulse	0.30	3
2	Bi		2,191,429.36	0.37	99.4	Pulse	0.30	3
3	Sc		226,029.88	0.21	102.6	Pulse	0.30	3
3	Ge		133,813.61	0.79	101.1	Pulse	0.30	3
3	Ge		206,780.45	0.91	101.6	Pulse	0.30	3
3	Rh		2,550,975.45	0.47	103.1	Pulse	0.30	3
3	Tb		3,862,136.10	0.79	104.7	Pulse	0.30	3

Quantitation Report

File Name	025SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 12:59
Sample Name	mp14051-b2 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.105	ug/l	0.47	448,882.32	1.739E-01	Pulse	0.25	3
B			1	82.718	ug/l	0.50	478,721.91	1.854E-01	Pulse	0.15	3
Ca			1	4171.660	ug/l	0.58	3,325,853.39	7.131E-01	Pulse	0.10	3
Sr			1	82.963	ug/l	0.16	3,423,365.26	5.327E-01	Pulse	0.10	3
Mo			1	83.548	ug/l	0.30	659,009.14	1.025E-01	Pulse	0.10	3
Ag			1	79.503	ug/l	0.43	1,704,627.68	2.386E-01	Pulse	0.10	3
Sn			1	79.153	ug/l	0.76	1,058,814.33	1.482E-01	Pulse	0.10	3
Sb			1	78.139	ug/l	0.69	1,118,882.79	1.163E-01	Pulse	0.10	3
Ba			1	79.890	ug/l	0.61	479,950.51	4.987E-02	Pulse	0.10	3
Tl			1	81.763	ug/l	1.31	3,005,873.39	5.436E-01	Pulse	0.10	3
Pb			1	82.372	ug/l	0.95	1,018,024.75	1.841E-01	Pulse	0.10	3
Pb			1	81.175	ug/l	1.59	899,206.32	1.626E-01	Pulse	0.10	3
Pb			1	81.797	ug/l	1.39	4,118,191.35	7.447E-01	Pulse	0.10	3
Na			2	4012.420	ug/l	1.04	3,050,565.64	2.080E+01	Pulse	0.30	3
Mg			2	3963.648	ug/l	1.04	1,393,094.08	9.500E+00	Pulse	0.30	3
Al			2	3894.310	ug/l	0.89	439,379.64	2.996E+00	Pulse	0.30	3
K			2	4014.732	ug/l	0.86	855,958.26	5.837E+00	Pulse	0.30	3
Ca			2	4342.745	ug/l	0.93	53,302.62	3.635E-01	Pulse	0.30	3
Ti			2	80.371	ug/l	0.52	7,804.13	5.322E-02	Pulse	0.30	3
V			2	82.392	ug/l	0.87	266,089.90	1.815E+00	Pulse	0.30	3
Cr			2	82.493	ug/l	0.91	348,265.36	2.375E+00	Pulse	0.30	3
Mn			2	80.955	ug/l	1.15	170,561.31	1.163E+00	Pulse	0.30	3
Fe			2	4251.780	ug/l	1.58	14,483,201.64	9.877E+01	Analog	0.30	3
Co			2	83.248	ug/l	0.61	628,945.91	4.289E+00	Pulse	0.30	3
Ni			2	82.743	ug/l	0.60	173,835.00	1.185E+00	Pulse	0.30	3
Cu			2	84.120	ug/l	0.53	463,938.85	3.164E+00	Pulse	0.30	3
Zn			2	81.945	ug/l	0.96	60,500.83	4.126E-01	Pulse	0.30	3
As			2	73.199	ug/l	1.73	27,062.29	1.846E-01	Pulse	1.00	3
Cd			2	75.024	ug/l	0.64	83,058.30	1.053E-01	Pulse	0.30	3
Sn			2	80.234	ug/l	0.53	164,193.57	2.082E-01	Pulse	0.30	3
Se			3	346.752	ug/l	0.38	44,757.76	2.138E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,581,611.10	0.62	97.2	Pulse	0.10	3
1	Sc		4,664,255.87	0.94	95.5	Pulse	0.10	3
1	Ge		882,971.68	0.89	96.3	Pulse	0.10	3

Quantitation Report

1	Ge		1,242,888.89	0.57	97.1	Pulse	0.10	3
1	Rh		6,426,349.07	1.18	94.4	Analog	0.10	3
1	In		7,144,596.27	0.59	98.9	Analog	0.10	3
1	Tb		9,624,134.44	0.38	102.3	Analog	0.10	3
1	Ho		923,012.25	1.15	103.9	Pulse	0.10	3
1	Bi		5,530,009.92	0.88	100.4	Analog	0.10	3
2	Sc		146,642.06	0.76	91.6	Pulse	0.30	3
2	Ge		81,924.81	0.43	93.1	Pulse	0.30	3
2	Ge		125,960.68	1.00	92.6	Pulse	0.30	3
2	Rh		2,646,607.32	0.54	94.3	Pulse	0.30	3
2	In		788,626.77	0.26	92.3	Pulse	0.30	3
2	Tb		3,234,328.34	0.05	97.4	Pulse	0.30	3
2	Ho		314,654.60	0.24	97.9	Pulse	0.30	3
2	Bi		2,102,915.68	1.07	95.4	Pulse	0.30	3
3	Sc		232,369.37	0.40	105.4	Pulse	0.30	3
3	Ge		134,340.21	1.41	101.5	Pulse	0.30	3
3	Ge		209,302.36	0.75	102.8	Pulse	0.30	3
3	Rh		2,512,652.26	0.40	101.5	Pulse	0.30	3
3	Tb		3,844,552.62	0.38	104.2	Pulse	0.30	3

Quantitation Report

File Name	026SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 13:04
Sample Name	mp14051-s3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	73.607	ug/l	0.06	436,102.23	1.727E-01	Pulse	0.25	3
B			1	105.735	ug/l	0.27	593,941.66	2.352E-01	Pulse	0.15	3
Ca			1	107987.775	ug/l	0.21	85,722,475.39	1.835E+01	Analog	0.10	3
Sr			1	603.223	ug/l	1.51	23,456,241.32	3.872E+00	Analog	0.10	3
Mo			1	85.991	ug/l	0.59	639,373.55	1.055E-01	Pulse	0.10	3
Ag			1	76.168	ug/l	0.17	1,551,561.70	2.286E-01	Pulse	0.10	3
Sn			1	80.041	ug/l	1.10	1,017,312.82	1.499E-01	Pulse	0.10	3
Sb			1	76.905	ug/l	0.67	1,079,977.33	1.144E-01	Pulse	0.10	3
Ba			1	123.789	ug/l	0.41	729,264.39	7.727E-02	Pulse	0.10	3
Tl			1	83.904	ug/l	0.45	2,859,368.71	5.578E-01	Pulse	0.10	3
Pb			1	83.944	ug/l	0.84	961,632.80	1.876E-01	Pulse	0.10	3
Pb			1	82.069	ug/l	0.42	842,754.80	1.644E-01	Pulse	0.10	3
Pb			1	82.935	ug/l	0.43	3,870,633.98	7.551E-01	Pulse	0.10	3
Na			2	35590.679	ug/l	1.58	26,853,230.04	1.840E+02	Analog	0.30	3
Mg			2	27870.379	ug/l	0.25	9,743,836.00	6.677E+01	Analog	0.30	3
Al			2	4267.482	ug/l	0.64	479,121.51	3.283E+00	Pulse	0.30	3
K			2	6932.551	ug/l	0.68	1,465,999.11	1.005E+01	Pulse	0.30	3
Ca			2	108372.596	ug/l	0.23	1,318,102.27	9.033E+00	Pulse	0.30	3
Ti			2	88.094	ug/l	2.23	8,512.34	5.833E-02	Pulse	0.30	3
V			2	83.677	ug/l	0.42	268,925.08	1.843E+00	Pulse	0.30	3
Cr			2	82.479	ug/l	0.78	346,512.36	2.375E+00	Pulse	0.30	3
Mn			2	7256.324	ug/l	1.12	15,205,777.73	1.042E+02	Analog	0.30	3
Fe			2	5874.010	ug/l	0.66	19,906,471.43	1.364E+02	Analog	0.30	3
Co			2	344.775	ug/l	0.24	2,591,846.70	1.776E+01	Pulse	0.30	3
Ni			2	208.948	ug/l	0.67	436,746.76	2.993E+00	Pulse	0.30	3
Cu			2	76.602	ug/l	0.34	420,475.72	2.881E+00	Pulse	0.30	3
Zn			2	264.483	ug/l	0.51	193,925.07	1.329E+00	Pulse	0.30	3
As			2	73.845	ug/l	0.30	27,170.13	1.862E-01	Pulse	1.00	3
Cd			2	72.933	ug/l	0.71	77,532.13	1.024E-01	Pulse	0.30	3
Sn			2	80.234	ug/l	0.09	157,659.34	2.082E-01	Pulse	0.30	3
Se			3	352.639	ug/l	0.27	44,503.55	2.175E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,525,076.30	1.13	95.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,671,201.50	0.79	95.7	Pulse	0.10	3
1	Ge		844,580.38	1.39	92.1	Pulse	0.10	3
1	Ge		1,192,537.59	0.87	93.2	Pulse	0.10	3
1	Rh		6,058,217.83	1.72	89.0	Analog	0.10	3
1	In		6,787,717.56	0.81	93.9	Analog	0.10	3
1	Tb		9,438,362.15	1.30	100.3	Analog	0.10	3
1	Ho		940,193.84	1.05	105.8	Pulse	0.10	3
1	Bi		5,126,187.11	1.42	93.1	Pulse	0.10	3
2	Sc		145,925.98	0.45	91.1	Pulse	0.30	3
2	Ge		79,793.33	0.30	90.7	Pulse	0.30	3
2	Ge		121,055.31	0.64	89.0	Pulse	0.30	3
2	Rh		2,488,313.72	0.52	88.6	Pulse	0.30	3
2	In		757,238.10	0.30	88.6	Pulse	0.30	3
2	Tb		3,162,998.97	0.21	95.2	Pulse	0.30	3
2	Ho		322,082.79	0.48	100.2	Pulse	0.30	3
2	Bi		1,943,695.20	0.35	88.2	Pulse	0.30	3
3	Sc		231,354.81	0.17	105.0	Pulse	0.30	3
3	Ge		132,549.95	0.34	100.1	Pulse	0.30	3
3	Ge		204,638.87	0.57	100.5	Pulse	0.30	3
3	Rh		2,350,591.30	0.55	95.0	Pulse	0.30	3
3	Tb		3,735,853.32	0.40	101.2	Pulse	0.30	3

Quantitation Report

File Name	027SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 13:08
Sample Name	mp14051-s4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	72.887	ug/l	0.94	442,263.96	1.710E-01	Pulse	0.25	3
B			1	106.194	ug/l	0.59	610,828.88	2.362E-01	Pulse	0.15	3
Ca			1	107881.952	ug/l	0.84	87,742,552.03	1.833E+01	Analog	0.10	3
Sr			1	606.895	ug/l	0.46	23,948,878.81	3.896E+00	Analog	0.10	3
Mo			1	85.683	ug/l	1.82	646,485.80	1.052E-01	Pulse	0.10	3
Ag			1	75.796	ug/l	1.33	1,576,443.47	2.275E-01	Pulse	0.10	3
Sn			1	79.130	ug/l	1.45	1,026,766.96	1.482E-01	Pulse	0.10	3
Sb			1	75.156	ug/l	0.97	1,091,588.73	1.118E-01	Pulse	0.10	3
Ba			1	121.762	ug/l	0.55	741,952.77	7.600E-02	Pulse	0.10	3
Tl			1	83.391	ug/l	0.91	2,883,605.38	5.544E-01	Pulse	0.10	3
Pb			1	83.698	ug/l	0.49	972,898.21	1.871E-01	Pulse	0.10	3
Pb			1	82.728	ug/l	1.25	861,991.65	1.657E-01	Pulse	0.10	3
Pb			1	83.121	ug/l	0.39	3,936,201.40	7.568E-01	Pulse	0.10	3
Na			2	35519.169	ug/l	0.19	27,261,243.92	1.837E+02	Analog	0.30	3
Mg			2	27750.019	ug/l	0.98	9,868,551.27	6.648E+01	Analog	0.30	3
Al			2	4171.497	ug/l	1.90	476,375.20	3.210E+00	Pulse	0.30	3
K			2	6838.851	ug/l	0.99	1,471,134.70	9.911E+00	Pulse	0.30	3
Ca			2	107521.485	ug/l	0.62	1,330,244.39	8.962E+00	Pulse	0.30	3
Ti			2	88.241	ug/l	0.87	8,672.56	5.843E-02	Pulse	0.30	3
V			2	82.619	ug/l	0.80	270,094.32	1.820E+00	Pulse	0.30	3
Cr			2	81.723	ug/l	0.35	349,258.87	2.353E+00	Pulse	0.30	3
Mn			2	7263.419	ug/l	2.06	15,481,438.83	1.043E+02	Analog	0.30	3
Fe			2	5791.452	ug/l	0.17	19,965,172.54	1.345E+02	Analog	0.30	3
Co			2	344.330	ug/l	0.93	2,632,974.55	1.774E+01	Pulse	0.30	3
Ni			2	208.438	ug/l	1.07	443,166.11	2.986E+00	Pulse	0.30	3
Cu			2	75.625	ug/l	0.82	422,257.01	2.845E+00	Pulse	0.30	3
Zn			2	264.404	ug/l	0.52	197,201.96	1.329E+00	Pulse	0.30	3
As			2	72.618	ug/l	0.38	27,178.81	1.831E-01	Pulse	1.00	3
Cd			2	73.765	ug/l	1.26	79,327.38	1.036E-01	Pulse	0.30	3
Sn			2	79.065	ug/l	0.18	157,174.58	2.052E-01	Pulse	0.30	3
Se			3	349.048	ug/l	0.60	44,727.76	2.153E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,585,988.89	0.98	97.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,786,270.45	1.40	98.0	Pulse	0.10	3
1	Ge		868,714.02	1.16	94.7	Pulse	0.10	3
1	Ge		1,224,557.85	1.28	95.7	Pulse	0.10	3
1	Rh		6,146,938.03	0.77	90.3	Analog	0.10	3
1	In		6,930,987.11	1.64	95.9	Analog	0.10	3
1	Tb		9,762,996.94	2.04	103.8	Analog	0.10	3
1	Ho		960,131.39	1.65	108.1	Pulse	0.10	3
1	Bi		5,201,113.46	0.42	94.4	Pulse	0.10	3
2	Sc		148,440.07	0.89	92.7	Pulse	0.30	3
2	Ge		80,446.31	1.58	91.5	Pulse	0.30	3
2	Ge		123,150.60	1.26	90.5	Pulse	0.30	3
2	Rh		2,524,356.50	0.10	89.9	Pulse	0.30	3
2	In		766,045.31	0.36	89.7	Pulse	0.30	3
2	Tb		3,211,464.52	0.15	96.7	Pulse	0.30	3
2	Ho		324,419.50	0.28	100.9	Pulse	0.30	3
2	Bi		1,955,640.48	0.04	88.7	Pulse	0.30	3
3	Sc		234,638.48	0.28	106.5	Pulse	0.30	3
3	Ge		133,749.62	0.20	101.0	Pulse	0.30	3
3	Ge		207,782.10	0.58	102.1	Pulse	0.30	3
3	Rh		2,385,759.28	0.75	96.4	Pulse	0.30	3
3	Tb		3,791,610.54	0.64	102.7	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 13:13
Sample Name	jc86039-2conf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.473	ug/l	6.00	2,957.62	1.130E-03	Pulse	0.25	3
B			1	22.658	ug/l	1.12	145,316.79	5.554E-02	Pulse	0.15	3
Ca			1	102381.101	ug/l	0.76	83,658,260.42	1.740E+01	Analog	0.10	3
Sr			1	510.904	ug/l	1.16	20,349,015.11	3.280E+00	Analog	0.10	3
Mo			1	0.291	ug/l	13.94	2,380.28	3.833E-04	Pulse	0.10	3
Ag			1	0.024	ug/l	5.87	596.70	8.466E-05	Pulse	0.10	3
Sn			1	1.245	ug/l	1.57	9,693.33	1.375E-03	Pulse	0.10	3
Sb			1	0.099	ug/l	19.26	2,923.72	2.990E-04	Pulse	0.10	3
Ba			1	44.445	ug/l	1.38	271,292.60	2.775E-02	Pulse	0.10	3
Tl			1	0.119	ug/l	6.31	4,867.67	9.128E-04	Pulse	0.10	3
Pb			1	0.546	ug/l	5.11	6,791.81	1.274E-03	Pulse	0.10	3
Pb			1	0.504	ug/l	2.29	5,624.66	1.055E-03	Pulse	0.10	3
Pb			1	0.536	ug/l	2.58	27,201.00	5.102E-03	Pulse	0.10	3
Na			2	31639.823	ug/l	2.33	23,941,642.38	1.636E+02	Analog	0.30	3
Mg			2	23917.448	ug/l	0.91	8,386,260.78	5.730E+01	Analog	0.30	3
Al			2	508.852	ug/l	15.17	57,478.59	3.930E-01	Pulse	0.30	3
K			2	2927.789	ug/l	0.19	624,816.57	4.269E+00	Pulse	0.30	3
Ca			2	102648.116	ug/l	0.99	1,252,045.54	8.556E+00	Pulse	0.30	3
Ti			2	13.389	ug/l	19.62	1,298.22	8.871E-03	Pulse	0.30	3
V			2	1.129	ug/l	13.88	4,010.93	2.739E-02	Pulse	0.30	3
Cr			2	1.643	ug/l	8.67	7,392.05	5.052E-02	Pulse	0.30	3
Mn			2	7112.560	ug/l	1.33	14,946,847.74	1.021E+02	Analog	0.30	3
Fe			2	1728.249	ug/l	1.96	5,883,312.40	4.020E+01	Analog	0.30	3
Co			2	266.897	ug/l	0.64	2,012,170.20	1.375E+01	Pulse	0.30	3
Ni			2	132.394	ug/l	0.80	277,548.17	1.897E+00	Pulse	0.30	3
Cu			2	2.103	ug/l	1.98	12,187.95	8.328E-02	Pulse	0.30	3
Zn			2	190.589	ug/l	0.60	140,194.52	9.580E-01	Pulse	0.30	3
As			2	1.693	ug/l	1.82	637.01	4.353E-03	Pulse	1.00	3
Cd			2	0.220	ug/l	12.01	251.01	3.265E-04	Pulse	0.30	3
Sn			2	0.592	ug/l	4.42	1,518.98	1.976E-03	Pulse	0.30	3
Se			3	0.833	ug/l	7.05	119.87	5.822E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,616,468.49	0.35	98.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,808,589.09	1.17	98.5	Pulse	0.10	3
1	Ge		871,558.74	1.10	95.0	Pulse	0.10	3
1	Ge		1,212,098.29	0.74	94.7	Pulse	0.10	3
1	Rh		6,204,081.57	1.16	91.2	Analog	0.10	3
1	In		7,048,145.67	1.54	97.5	Analog	0.10	3
1	Tb		9,776,981.31	0.65	103.9	Analog	0.10	3
1	Ho		972,193.66	1.81	109.4	Pulse	0.10	3
1	Bi		5,331,644.92	1.04	96.8	Pulse	0.10	3
2	Sc		146,348.75	0.89	91.4	Pulse	0.30	3
2	Ge		80,367.20	0.64	91.4	Pulse	0.30	3
2	Ge		122,257.23	0.49	89.9	Pulse	0.30	3
2	Rh		2,546,150.73	0.43	90.7	Pulse	0.30	3
2	In		768,907.80	0.30	90.0	Pulse	0.30	3
2	Tb		3,209,634.11	0.69	96.6	Pulse	0.30	3
2	Ho		323,684.83	0.29	100.7	Pulse	0.30	3
2	Bi		1,980,262.28	0.02	89.9	Pulse	0.30	3
3	Sc		232,679.45	0.71	105.6	Pulse	0.30	3
3	Ge		134,664.88	0.87	101.7	Pulse	0.30	3
3	Ge		205,935.70	0.65	101.2	Pulse	0.30	3
3	Rh		2,411,105.39	0.64	97.4	Pulse	0.30	3
3	Tb		3,837,329.57	0.82	104.0	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 13:18
Sample Name	mp14051-sd1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.574	ug/l	18.68	793.36	2.908E-04	Pulse	0.25	3
B			1	21.120	ug/l	4.18	42,727.39	1.567E-02	Pulse	0.15	3
Ca			1	103298.601	ug/l	0.68	17,686,940.57	3.514E+00	Analog	0.10	3
Sr			1	479.847	ug/l	1.38	4,250,942.75	6.162E-01	Pulse	0.10	3
Mo			1	0.521	ug/l	4.45	1,063.41	1.541E-04	Pulse	0.10	3
Ag			1	0.061	ug/l	9.38	360.02	4.778E-05	Pulse	0.10	3
Sn			1	3.674	ug/l	1.08	3,117.11	4.137E-04	Pulse	0.10	3
Sb			1	-0.199	ug/l	-15.67	926.73	9.256E-05	Pulse	0.10	3
Ba			1	46.433	ug/l	3.50	58,106.03	5.807E-03	Pulse	0.10	3
Tl			1	0.110	ug/l	14.32	1,560.15	2.656E-04	Pulse	0.10	3
Pb			1	0.569	ug/l	15.26	1,816.84	3.094E-04	Pulse	0.10	3
Pb			1	0.513	ug/l	6.17	1,476.80	2.515E-04	Pulse	0.10	3
Pb			1	0.521	ug/l	6.28	6,864.21	1.169E-03	Pulse	0.10	3
Na			2	30203.987	ug/l	1.11	4,937,787.72	3.129E+01	Pulse	0.30	3
Mg			2	23133.760	ug/l	1.31	1,750,019.10	1.109E+01	Pulse	0.30	3
Al			2	450.704	ug/l	7.06	11,214.52	7.104E-02	Pulse	0.30	3
K			2	2947.780	ug/l	1.38	141,461.08	8.964E-01	Pulse	0.30	3
Ca			2	102762.292	ug/l	1.09	270,549.74	1.714E+00	Pulse	0.30	3
Ti			2	7.087	ug/l	42.55	148.90	9.453E-04	Pulse	0.30	3
V			2	0.576	ug/l	24.85	803.36	5.092E-03	Pulse	0.30	3
Cr			2	1.516	ug/l	18.57	1,892.62	1.200E-02	Pulse	0.30	3
Mn			2	7025.959	ug/l	0.79	3,184,768.35	2.018E+01	Pulse	0.30	3
Fe			2	1686.393	ug/l	1.29	1,248,776.69	7.913E+00	Pulse	0.30	3
Co			2	267.010	ug/l	0.86	434,252.29	2.752E+00	Pulse	0.30	3
Ni			2	135.875	ug/l	0.77	61,489.64	3.896E-01	Pulse	0.30	3
Cu			2	2.421	ug/l	2.57	3,548.20	2.248E-02	Pulse	0.30	3
Zn			2	248.871	ug/l	1.61	39,623.30	2.511E-01	Pulse	0.30	3
As			2	1.906	ug/l	4.36	165.33	1.047E-03	Pulse	1.00	3
Cd			2	0.301	ug/l	20.80	87.72	1.027E-04	Pulse	0.30	3
Sn			2	0.345	ug/l	28.44	530.02	6.203E-04	Pulse	0.30	3
Se			3	0.829	ug/l	26.56	37.07	1.710E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,726,908.65	0.71	102.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,032,740.76	0.36	103.1	Pulse	0.10	3
1	Ge		968,403.58	0.96	105.6	Pulse	0.10	3
1	Ge		1,350,739.82	1.62	105.5	Pulse	0.10	3
1	Rh		6,898,831.56	0.28	101.4	Analog	0.10	3
1	In		7,533,949.27	0.36	104.3	Analog	0.10	3
1	Tb		10,007,577.56	0.63	106.4	Analog	0.10	3
1	Ho		963,882.33	0.81	108.5	Pulse	0.10	3
1	Bi		5,872,796.37	0.26	106.6	Analog	0.10	3
2	Sc		157,826.13	0.74	98.6	Pulse	0.30	3
2	Ge		90,583.20	0.61	103.0	Pulse	0.30	3
2	Ge		138,954.54	0.49	102.2	Pulse	0.30	3
2	Rh		2,816,746.97	0.33	100.3	Pulse	0.30	3
2	In		854,364.93	0.24	100.0	Pulse	0.30	3
2	Tb		3,404,658.82	0.31	102.5	Pulse	0.30	3
2	Ho		331,754.06	0.41	103.2	Pulse	0.30	3
2	Bi		2,248,611.09	0.30	102.0	Pulse	0.30	3
3	Sc		233,803.68	0.24	106.1	Pulse	0.30	3
3	Ge		140,058.59	0.51	105.8	Pulse	0.30	3
3	Ge		217,002.63	1.00	106.6	Pulse	0.30	3
3	Rh		2,570,915.24	0.56	103.9	Pulse	0.30	3
3	Tb		3,903,768.04	0.45	105.8	Pulse	0.30	3

Quantitation Report

File Name 030SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File
Method Path
Acq Time 4/12/2019 13:23
Sample Name jc86039-2
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/12/2019 17:58
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.476	ug/l	5.02	2,929.64	1.138E-03	Pulse	0.25	3
B			1	21.250	ug/l	5.39	135,149.34	5.249E-02	Pulse	0.15	3
Ca			1	99422.150	ug/l	7.73	79,821,642.14	1.690E+01	Analog	0.10	3
Sr			1	497.391	ug/l	7.64	19,591,058.87	3.193E+00	Analog	0.10	3
Mo			1	0.203	ug/l	13.34	1,683.48	2.749E-04	Pulse	0.10	3
Ag			1	0.014	ug/l	15.97	363.35	5.236E-05	Pulse	0.10	3
Sn			1	1.191	ug/l	0.63	8,806.06	1.274E-03	Pulse	0.10	3
Sb			1	0.032	ug/l	54.01	1,930.19	1.987E-04	Pulse	0.10	3
Ba			1	43.357	ug/l	7.82	263,609.38	2.707E-02	Pulse	0.10	3
Tl			1	0.093	ug/l	7.85	3,894.00	7.373E-04	Pulse	0.10	3
Pb			1	0.536	ug/l	6.20	6,621.77	1.254E-03	Pulse	0.10	3
Pb			1	0.508	ug/l	13.07	5,601.29	1.063E-03	Pulse	0.10	3
Pb			1	0.507	ug/l	10.93	25,506.28	4.838E-03	Pulse	0.10	3
Na			2	31444.494	ug/l	0.97	23,326,406.85	1.626E+02	Analog	0.30	3
Mg			2	23601.146	ug/l	0.32	8,112,469.40	5.655E+01	Analog	0.30	3
Al			2	466.515	ug/l	4.19	51,712.36	3.605E-01	Pulse	0.30	3
K			2	2923.925	ug/l	1.35	611,682.87	4.264E+00	Pulse	0.30	3
Ca			2	102401.516	ug/l	0.86	1,224,476.86	8.535E+00	Pulse	0.30	3
Ti			2	9.805	ug/l	24.37	931.30	6.498E-03	Pulse	0.30	3
V			2	1.043	ug/l	6.91	3,658.36	2.551E-02	Pulse	0.30	3
Cr			2	1.671	ug/l	8.19	7,365.74	5.133E-02	Pulse	0.30	3
Mn			2	7102.127	ug/l	0.79	14,631,824.42	1.020E+02	Analog	0.30	3
Fe			2	1708.500	ug/l	0.30	5,701,092.83	3.974E+01	Analog	0.30	3
Co			2	265.441	ug/l	0.40	1,961,856.52	1.367E+01	Pulse	0.30	3
Ni			2	131.715	ug/l	0.69	270,699.04	1.887E+00	Pulse	0.30	3
Cu			2	2.068	ug/l	2.62	11,759.86	8.196E-02	Pulse	0.30	3
Zn			2	189.592	ug/l	0.57	136,721.34	9.530E-01	Pulse	0.30	3
As			2	1.571	ug/l	5.10	580.68	4.047E-03	Pulse	1.00	3
Cd			2	0.239	ug/l	5.94	266.60	3.530E-04	Pulse	0.30	3
Sn			2	0.554	ug/l	10.91	1,416.75	1.875E-03	Pulse	0.30	3
Se			3	0.772	ug/l	8.76	110.07	5.445E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,577,883.12	4.12	97.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,742,221.39	7.36	97.1	Mix	0.10	3
1	Ge		856,321.18	4.15	93.4	Pulse	0.10	3
1	Ge		1,198,479.98	4.49	93.6	Pulse	0.10	3
1	Rh		6,157,220.32	6.97	90.5	Analog	0.10	3
1	In		6,914,800.56	4.38	95.7	Analog	0.10	3
1	Tb		9,778,085.89	7.86	103.9	Analog	0.10	3
1	Ho		960,120.87	6.44	108.1	Pulse	0.10	3
1	Bi		5,291,836.28	6.09	96.1	Mix	0.10	3
2	Sc		143,468.67	0.70	89.6	Pulse	0.30	3
2	Ge		78,596.38	0.62	89.3	Pulse	0.30	3
2	Ge		120,681.23	0.57	88.7	Pulse	0.30	3
2	Rh		2,499,881.84	0.48	89.0	Pulse	0.30	3
2	In		755,330.39	0.64	88.4	Pulse	0.30	3
2	Tb		3,167,613.07	0.41	95.4	Pulse	0.30	3
2	Ho		323,445.38	0.60	100.6	Pulse	0.30	3
2	Bi		1,959,050.55	0.27	88.9	Pulse	0.30	3
3	Sc		229,635.40	0.16	104.2	Pulse	0.30	3
3	Ge		131,990.12	0.53	99.7	Pulse	0.30	3
3	Ge		202,148.19	0.39	99.3	Pulse	0.30	3
3	Rh		2,376,347.75	0.08	96.0	Pulse	0.30	3
3	Tb		3,815,626.79	0.22	103.4	Pulse	0.30	3

Quantitation Report

File Name	031SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 13:28
Sample Name	mp14084-sd1 5
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.010	ug/l	179.58	70.67	2.648E-05	Pulse	0.25	3
B			1	102.187	ug/l	0.72	135,378.63	5.074E-02	Pulse	0.15	3
Ca			1	39733.587	ug/l	0.16	6,586,142.40	1.354E+00	Analog	0.10	3
Sr			1	288.773	ug/l	1.28	2,496,700.33	3.709E-01	Pulse	0.10	3
Mo			1	0.375	ug/l	17.06	796.72	1.183E-04	Pulse	0.10	3
Ag			1	0.030	ug/l	4.56	223.34	2.950E-05	Pulse	0.10	3
Sn			1	3.506	ug/l	2.19	2,653.64	3.505E-04	Pulse	0.10	3
Sb			1	-0.249	ug/l	-10.57	770.10	7.755E-05	Pulse	0.10	3
Ba			1	15.017	ug/l	3.49	18,701.77	1.885E-03	Pulse	0.10	3
Tl			1	-0.030	ug/l	-28.50	463.36	7.945E-05	Pulse	0.10	3
Pb			1	10.976	ug/l	1.87	28,935.69	4.960E-03	Pulse	0.10	3
Pb			1	10.365	ug/l	1.79	24,491.01	4.197E-03	Pulse	0.10	3
Pb			1	10.569	ug/l	0.54	113,536.24	1.946E-02	Pulse	0.10	3
Na			2	21870.360	ug/l	0.22	3,490,006.73	2.267E+01	Pulse	0.30	3
Mg			2	5317.036	ug/l	0.62	392,882.28	2.552E+00	Pulse	0.30	3
Al			2	1.289	ug/l	118.96	295.56	1.920E-03	Pulse	0.30	3
K			2	7428.344	ug/l	0.21	336,952.83	2.189E+00	Pulse	0.30	3
Ca			2	39283.645	ug/l	0.61	101,027.28	6.563E-01	Pulse	0.30	3
Ti			2	0.818	ug/l	60.61	17.78	1.153E-04	Pulse	0.30	3
V			2	-0.014	ug/l	-539.77	384.45	2.497E-03	Pulse	0.30	3
Cr			2	0.441	ug/l	22.87	895.59	5.817E-03	Pulse	0.30	3
Mn			2	46.990	ug/l	0.74	20,869.95	1.356E-01	Pulse	0.30	3
Fe			2	1022.157	ug/l	0.46	743,382.19	4.829E+00	Pulse	0.30	3
Co			2	0.821	ug/l	5.99	1,395.63	9.066E-03	Pulse	0.30	3
Ni			2	6.126	ug/l	2.26	2,764.71	1.796E-02	Pulse	0.30	3
Cu			2	65.404	ug/l	0.65	76,287.86	4.956E-01	Pulse	0.30	3
Zn			2	98.457	ug/l	1.65	15,401.75	1.001E-01	Pulse	0.30	3
As			2	42.185	ug/l	1.54	3,286.34	2.135E-02	Pulse	1.00	3
Cd			2	0.015	ug/l	325.55	18.84	2.241E-05	Pulse	0.30	3
Sn			2	0.107	ug/l	125.51	418.90	4.975E-04	Pulse	0.30	3
Se			3	-0.101	ug/l	-56.29	11.87	5.629E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,668,239.17	0.45	100.5	Pulse	0.10	3
1	Sc		4,862,618.99	0.73	99.6	Pulse	0.10	3
1	Ge		931,117.90	0.87	101.5	Pulse	0.10	3

Quantitation Report

1	Ge		1,315,911.59	0.67	102.8	Pulse	0.10	3
1	Rh		6,732,562.61	1.44	98.9	Analog	0.10	3
1	In		7,571,960.55	0.51	104.8	Analog	0.10	3
1	Tb		9,920,733.60	1.57	105.4	Analog	0.10	3
1	Ho		933,721.97	1.31	105.1	Pulse	0.10	3
1	Bi		5,834,328.46	0.67	105.9	Analog	0.10	3
2	Sc		153,927.85	0.47	96.1	Pulse	0.30	3
2	Ge		88,128.93	0.49	100.2	Pulse	0.30	3
2	Ge		134,747.56	0.75	99.1	Pulse	0.30	3
2	Rh		2,776,340.17	0.40	98.9	Pulse	0.30	3
2	In		841,743.15	0.41	98.5	Pulse	0.30	3
2	Tb		3,324,886.60	0.59	100.1	Pulse	0.30	3
2	Ho		323,308.04	0.41	100.6	Pulse	0.30	3
2	Bi		2,235,656.71	0.67	101.4	Pulse	0.30	3
3	Sc		225,332.23	0.47	102.2	Pulse	0.30	3
3	Ge		136,357.56	0.43	103.0	Pulse	0.30	3
3	Ge		210,797.23	0.24	103.6	Pulse	0.30	3
3	Rh		2,528,423.02	0.52	102.2	Pulse	0.30	3
3	Tb		3,832,494.15	0.31	103.8	Pulse	0.30	3

Quantitation Report

File Name 032SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File
Method Path
Acq Time 4/12/2019 13:33
Sample Name jc85970-1 4
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/12/2019 17:58
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.129	ug/l	7.46	850.70	3.254E-04	Pulse	0.25	3
B			1	30.491	ug/l	0.36	189,406.07	7.248E-02	Pulse	0.15	3
Ca			1	35333.353	ug/l	1.08	28,193,897.91	6.007E+00	Analog	0.10	3
Sr			1	120.333	ug/l	0.58	4,913,080.03	7.726E-01	Pulse	0.10	3
Mo			1	0.998	ug/l	1.00	7,958.84	1.251E-03	Pulse	0.10	3
Ag			1	0.181	ug/l	2.88	3,947.31	5.535E-04	Pulse	0.10	3
Sn			1	2.140	ug/l	2.86	21,829.04	3.062E-03	Pulse	0.10	3
Sb			1	1.203	ug/l	1.25	18,921.97	1.939E-03	Pulse	0.10	3
Ba			1	38.752	ug/l	1.72	236,093.22	2.420E-02	Pulse	0.10	3
Tl			1	0.036	ug/l	12.51	1,993.55	3.597E-04	Pulse	0.10	3
Pb			1	22.453	ug/l	1.43	278,471.44	5.022E-02	Pulse	0.10	3
Pb			1	21.197	ug/l	0.63	235,659.67	4.250E-02	Pulse	0.10	3
Pb			1	21.605	ug/l	1.37	1,091,645.93	1.969E-01	Pulse	0.10	3
Na			2	3922.503	ug/l	1.06	3,031,927.45	2.034E+01	Pulse	0.30	3
Mg			2	7196.567	ug/l	1.27	2,570,709.69	1.725E+01	Pulse	0.30	3
Al			2	2175.921	ug/l	1.32	249,685.64	1.675E+00	Pulse	0.30	3
K			2	7745.580	ug/l	0.84	1,672,429.34	1.122E+01	Pulse	0.30	3
Ca			2	34774.311	ug/l	0.55	432,233.08	2.899E+00	Pulse	0.30	3
Ti			2	45.053	ug/l	18.21	4,444.03	2.983E-02	Pulse	0.30	3
V			2	7.600	ug/l	0.70	25,298.31	1.697E-01	Pulse	0.30	3
Cr			2	16.567	ug/l	1.64	71,493.03	4.796E-01	Pulse	0.30	3
Mn			2	243.179	ug/l	0.95	520,659.84	3.493E+00	Pulse	0.30	3
Fe			2	5976.983	ug/l	2.22	20,690,275.29	1.388E+02	Analog	0.30	3
Co			2	1.768	ug/l	2.35	13,664.67	9.167E-02	Pulse	0.30	3
Ni			2	5.164	ug/l	1.06	11,086.05	7.437E-02	Pulse	0.30	3
Cu			2	68.769	ug/l	0.78	385,683.05	2.587E+00	Pulse	0.30	3
Zn			2	113.360	ug/l	1.23	85,011.56	5.703E-01	Pulse	0.30	3
As			2	3.613	ug/l	1.06	1,370.39	9.192E-03	Pulse	1.00	3
Cd			2	0.190	ug/l	1.37	225.17	2.846E-04	Pulse	0.30	3
Sn			2	1.523	ug/l	2.37	3,469.32	4.385E-03	Pulse	0.30	3
Se			3	0.273	ug/l	4.15	50.40	2.371E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,613,184.58	1.05	98.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,693,023.37	0.61	96.1	Pulse	0.10	3
1	Ge		875,333.69	0.76	95.4	Pulse	0.10	3
1	Ge		1,223,457.98	0.79	95.6	Pulse	0.10	3
1	Rh		6,359,446.57	1.28	93.4	Analog	0.10	3
1	In		7,132,278.60	1.53	98.7	Analog	0.10	3
1	Tb		9,757,901.94	0.26	103.7	Analog	0.10	3
1	Ho		930,142.48	0.86	104.7	Pulse	0.10	3
1	Bi		5,545,551.37	1.05	100.7	Analog	0.10	3
2	Sc		149,075.04	0.80	93.1	Pulse	0.30	3
2	Ge		82,569.05	0.76	93.9	Pulse	0.30	3
2	Ge		126,276.39	0.84	92.8	Pulse	0.30	3
2	Rh		2,644,134.90	0.38	94.2	Pulse	0.30	3
2	In		791,188.50	0.46	92.6	Pulse	0.30	3
2	Tb		3,250,516.88	0.46	97.9	Pulse	0.30	3
2	Ho		316,657.49	0.35	98.5	Pulse	0.30	3
2	Bi		2,083,823.39	0.23	94.6	Pulse	0.30	3
3	Sc		236,766.64	1.05	107.4	Pulse	0.30	3
3	Ge		137,492.62	0.42	103.8	Pulse	0.30	3
3	Ge		212,569.69	0.57	104.4	Pulse	0.30	3
3	Rh		2,534,846.08	0.40	102.4	Pulse	0.30	3
3	Tb		3,900,321.37	0.48	105.7	Pulse	0.30	3

Quantitation Report

File Name	033_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 13:38
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	49.350	ug/l	0.92	654,851.31	2.316E-01	Pulse	0.25	3
B			1	100.053	ug/l	1.47	1,242,295.44	4.393E-01	Pulse	0.15	3
Ca			1	5104.765	ug/l	0.53	9,161,255.28	1.739E+00	Analog	0.10	3
Sr			1	52.009	ug/l	1.74	4,670,579.83	6.679E-01	Pulse	0.10	3
Mo			1	51.383	ug/l	1.92	882,075.43	1.261E-01	Pulse	0.10	3
Ag			1	49.746	ug/l	0.63	2,278,510.69	2.986E-01	Pulse	0.10	3
Sn			1	48.694	ug/l	1.40	1,393,149.56	1.826E-01	Pulse	0.10	3
Sb			1	49.422	ug/l	1.40	1,495,974.82	1.470E-01	Pulse	0.10	3
Ba			1	50.275	ug/l	1.34	638,635.79	6.276E-02	Pulse	0.10	3
Tl			1	50.847	ug/l	1.54	3,895,364.32	6.761E-01	Pulse	0.10	3
Pb			1	50.990	ug/l	1.92	1,313,105.60	2.279E-01	Pulse	0.10	3
Pb			1	50.141	ug/l	1.36	1,157,459.41	2.009E-01	Pulse	0.10	3
Pb			1	50.418	ug/l	1.40	5,289,528.83	9.180E-01	Pulse	0.10	3
Na			2	4984.564	ug/l	0.80	8,478,730.22	5.159E+01	Analog	0.30	3
Mg			2	4844.715	ug/l	0.30	3,815,536.80	2.322E+01	Pulse	0.30	3
Al			2	4862.844	ug/l	0.07	1,229,384.74	7.481E+00	Pulse	0.30	3
K			2	5031.037	ug/l	0.26	2,392,921.30	1.456E+01	Pulse	0.30	3
Ca			2	5186.124	ug/l	0.31	142,312.09	8.660E-01	Pulse	0.30	3
Ti			2	48.730	ug/l	3.11	10,605.69	6.453E-02	Pulse	0.30	3
V			2	51.226	ug/l	0.16	370,725.70	2.256E+00	Pulse	0.30	3
Cr			2	50.515	ug/l	0.89	477,911.61	2.908E+00	Pulse	0.30	3
Mn			2	50.022	ug/l	0.78	236,199.99	1.437E+00	Pulse	0.30	3
Fe			2	5122.167	ug/l	0.42	39,089,244.00	2.379E+02	Analog	0.30	3
Co			2	50.383	ug/l	0.39	853,169.01	5.192E+00	Pulse	0.30	3
Ni			2	49.428	ug/l	0.10	232,743.04	1.416E+00	Pulse	0.30	3
Cu			2	49.683	ug/l	0.21	614,048.45	3.736E+00	Pulse	0.30	3
Zn			2	48.610	ug/l	0.14	80,405.18	4.893E-01	Pulse	0.30	3
As			2	50.039	ug/l	0.49	41,463.26	2.523E-01	Pulse	1.00	3
Cd			2	49.383	ug/l	0.83	120,015.40	1.386E-01	Pulse	0.30	3
Sn			2	48.906	ug/l	0.75	219,629.74	2.537E-01	Pulse	0.30	3
Se			3	196.958	ug/l	0.90	52,213.99	2.429E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,827,873.43	0.41	106.5	Pulse	0.10	3
1	Sc		5,268,350.86	0.54	107.9	Mix	0.10	3
1	Ge		986,551.91	0.36	107.6	Pulse	0.10	3

Quantitation Report

1	Ge		1,397,282.27	0.45	109.2	Pulse	0.10	3
1	Rh		6,994,104.90	1.11	102.8	Analog	0.10	3
1	In		7,631,366.96	0.45	105.6	Analog	0.10	3
1	Tb		10,175,684.64	0.41	108.2	Analog	0.10	3
1	Ho		973,132.17	0.27	109.6	Pulse	0.10	3
1	Bi		5,762,148.04	0.61	104.6	Analog	0.10	3
2	Sc		164,341.30	0.61	102.6	Pulse	0.30	3
2	Ge		91,547.51	0.23	104.1	Pulse	0.30	3
2	Ge		140,937.91	0.35	103.6	Pulse	0.30	3
2	Rh		2,832,971.28	0.54	100.9	Pulse	0.30	3
2	In		865,642.48	0.71	101.3	Pulse	0.30	3
2	Tb		3,414,030.42	0.73	102.8	Pulse	0.30	3
2	Ho		330,815.98	0.28	102.9	Pulse	0.30	3
2	Bi		2,188,236.09	0.52	99.3	Pulse	0.30	3
3	Sc		237,772.24	0.26	107.9	Pulse	0.30	3
3	Ge		139,133.24	1.30	105.1	Pulse	0.30	3
3	Ge		214,949.02	0.73	105.6	Pulse	0.30	3
3	Rh		2,514,043.16	0.31	101.6	Pulse	0.30	3
3	Tb		3,819,508.88	0.13	103.5	Pulse	0.30	3

Quantitation Report

File Name	034_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 13:49
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	112.98	82.67	2.971E-05	Pulse	0.25	3
B			1	0.053	ug/l	53.94	18,777.39	6.764E-03	Pulse	0.15	3
Ca			1	-0.023	ug/l	-2658.53	22,245.61	4.311E-03	Pulse	0.10	3
Sr			1	0.010	ug/l	23.33	1,846.84	2.593E-04	Pulse	0.10	3
Mo			1	0.016	ug/l	11.43	470.02	6.593E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	38.36	230.01	3.006E-05	Pulse	0.10	3
Sn			1	0.362	ug/l	0.88	3,002.05	3.926E-04	Pulse	0.10	3
Sb			1	0.054	ug/l	14.49	3,073.74	3.111E-04	Pulse	0.10	3
Ba			1	0.011	ug/l	27.02	246.68	2.495E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	-621.90	690.04	1.181E-04	Pulse	0.10	3
Pb			1	0.004	ug/l	37.98	416.69	7.128E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	39.43	460.02	7.867E-05	Pulse	0.10	3
Pb			1	0.005	ug/l	6.86	1,836.78	3.142E-04	Pulse	0.10	3
Na			2	0.903	ug/l	8.47	12,381.27	7.432E-02	Pulse	0.30	3
Mg			2	-0.182	ug/l	-37.97	665.58	3.996E-03	Pulse	0.30	3
Al			2	-0.136	ug/l	-139.20	252.23	1.513E-03	Pulse	0.30	3
K			2	1.958	ug/l	14.23	8,588.96	5.156E-02	Pulse	0.30	3
Ca			2	-5.960	ug/l	-17.74	100.00	6.006E-04	Pulse	0.30	3
Ti			2	0.035	ug/l	66.25	8.89	5.343E-05	Pulse	0.30	3
V			2	0.000	ug/l	1536.34	430.01	2.580E-03	Pulse	0.30	3
Cr			2	0.008	ug/l	100.65	621.13	3.729E-03	Pulse	0.30	3
Mn			2	0.044	ug/l	11.12	313.34	1.881E-03	Pulse	0.30	3
Fe			2	-0.725	ug/l	-2.99	8,508.95	5.108E-02	Pulse	0.30	3
Co			2	0.005	ug/l	29.42	185.56	1.113E-03	Pulse	0.30	3
Ni			2	0.001	ug/l	387.86	73.33	4.404E-04	Pulse	0.30	3
Cu			2	0.027	ug/l	15.99	1,055.60	6.337E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.003	ug/l	820.86	205.56	1.235E-03	Pulse	0.30	3
As			2	0.005	ug/l	104.38	18.33	1.101E-04	Pulse	1.00	3
Cd			2	0.001	ug/l	245.28	17.76	1.990E-05	Pulse	0.30	3
Sn			2	0.032	ug/l	21.11	542.24	6.075E-04	Pulse	0.30	3
Se			3	0.000	ug/l	-6330.94	14.87	6.862E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,776,395.13	1.01	104.5	Pulse	0.10	3
1	Sc		5,161,190.55	0.78	105.7	Pulse	0.10	3
1	Ge		970,904.65	0.51	105.9	Pulse	0.10	3
1	Ge		1,360,964.88	1.30	106.3	Pulse	0.10	3
1	Rh		7,126,452.40	1.24	104.7	Analog	0.10	3
1	In		7,646,218.49	0.52	105.8	Analog	0.10	3
1	Tb		9,885,132.15	1.24	105.1	Analog	0.10	3
1	Ho		931,833.66	0.48	104.9	Pulse	0.10	3
1	Bi		5,844,273.66	1.12	106.1	Analog	0.10	3
2	Sc		166,599.83	0.55	104.0	Pulse	0.30	3
2	Ge		92,968.69	0.64	105.7	Pulse	0.30	3
2	Ge		143,025.59	0.88	105.1	Pulse	0.30	3
2	Rh		2,930,799.81	0.35	104.4	Pulse	0.30	3
2	In		892,559.07	0.50	104.5	Pulse	0.30	3
2	Tb		3,431,500.97	0.59	103.3	Pulse	0.30	3
2	Ho		332,410.17	0.56	103.4	Pulse	0.30	3
2	Bi		2,278,636.44	0.30	103.4	Pulse	0.30	3
3	Sc		234,857.90	0.40	106.6	Pulse	0.30	3
3	Ge		140,503.76	0.65	106.1	Pulse	0.30	3
3	Ge		216,631.23	0.10	106.4	Pulse	0.30	3
3	Rh		2,603,154.96	0.68	105.2	Pulse	0.30	3
3	Tb		3,828,502.77	0.71	103.7	Pulse	0.30	3

Quantitation Report

File Name	035SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 13:54
Sample Name	mp14051-mb1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	42.43	98.67	3.572E-05	Pulse	0.25	3
B			1	0.345	ug/l	16.85	20,136.85	7.281E-03	Pulse	0.15	3
Ca			1	5.792	ug/l	2.85	26,471.93	5.303E-03	Pulse	0.10	3
Sr			1	0.028	ug/l	2.61	2,166.90	3.112E-04	Pulse	0.10	3
Mo			1	0.043	ug/l	29.04	546.70	7.843E-05	Pulse	0.10	3
Ag			1	0.014	ug/l	17.12	400.02	5.300E-05	Pulse	0.10	3
Sn			1	1.019	ug/l	1.69	7,161.84	9.488E-04	Pulse	0.10	3
Sb			1	0.192	ug/l	10.45	4,370.78	4.376E-04	Pulse	0.10	3
Ba			1	0.025	ug/l	14.53	266.68	2.670E-05	Pulse	0.10	3
Tl			1	0.005	ug/l	62.73	893.40	1.527E-04	Pulse	0.10	3
Pb			1	0.024	ug/l	17.66	636.71	1.088E-04	Pulse	0.10	3
Pb			1	0.031	ug/l	18.23	630.04	1.077E-04	Pulse	0.10	3
Pb			1	0.024	ug/l	19.98	2,590.20	4.426E-04	Pulse	0.10	3
Na			2	5.144	ug/l	2.34	14,772.09	9.157E-02	Pulse	0.30	3
Mg			2	0.081	ug/l	29.76	816.70	5.062E-03	Pulse	0.30	3
Al			2	0.860	ug/l	32.14	384.45	2.384E-03	Pulse	0.30	3
K			2	3.547	ug/l	4.97	8,230.99	5.102E-02	Pulse	0.30	3
Ca			2	-4.230	ug/l	-91.51	200.01	1.242E-03	Pulse	0.30	3
Ti			2	0.488	ug/l	44.26	53.34	3.300E-04	Pulse	0.30	3
V			2	0.229	ug/l	5.07	1,224.50	7.591E-03	Pulse	0.30	3
Cr			2	0.275	ug/l	7.67	1,805.67	1.119E-02	Pulse	0.30	3
Mn			2	0.194	ug/l	1.64	551.13	3.416E-03	Pulse	0.30	3
Fe			2	-0.307	ug/l	-2.08	12,520.44	7.761E-02	Pulse	0.30	3
Co			2	0.017	ug/l	43.00	242.23	1.502E-03	Pulse	0.30	3
Ni			2	0.023	ug/l	51.29	120.00	7.447E-04	Pulse	0.30	3
Cu			2	0.213	ug/l	3.02	1,983.48	1.230E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.941	ug/l	7.05	956.71	5.929E-03	Pulse	0.30	3
As			2	0.039	ug/l	29.45	30.00	1.861E-04	Pulse	1.00	3
Cd			2	0.004	ug/l	337.48	19.97	2.346E-05	Pulse	0.30	3
Sn			2	0.377	ug/l	8.57	1,208.39	1.417E-03	Pulse	0.30	3
Se			3	-0.011	ug/l	-92.69	13.67	6.190E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,765,795.15	1.26	104.1	Pulse	0.10	3
1	Sc		4,991,957.53	0.90	102.3	Pulse	0.10	3
1	Ge		931,003.19	0.86	101.5	Pulse	0.10	3
1	Ge		1,307,812.25	0.66	102.2	Pulse	0.10	3
1	Rh		6,962,024.27	1.03	102.3	Analog	0.10	3
1	In		7,548,944.43	0.27	104.5	Analog	0.10	3
1	Tb		9,984,270.27	1.15	106.1	Analog	0.10	3
1	Ho		936,409.67	1.27	105.4	Pulse	0.10	3
1	Bi		5,854,445.33	0.82	106.3	Analog	0.10	3
2	Sc		161,317.06	0.81	100.7	Pulse	0.30	3
2	Ge		88,665.09	1.07	100.8	Pulse	0.30	3
2	Ge		135,940.54	0.85	99.9	Pulse	0.30	3
2	Rh		2,868,327.94	0.57	102.1	Pulse	0.30	3
2	In		852,593.59	0.38	99.8	Pulse	0.30	3
2	Tb		3,382,781.39	0.60	101.9	Pulse	0.30	3
2	Ho		328,581.99	0.62	102.2	Pulse	0.30	3
2	Bi		2,231,219.22	0.66	101.2	Pulse	0.30	3
3	Sc		244,510.82	0.92	110.9	Pulse	0.30	3
3	Ge		142,969.07	0.40	108.0	Pulse	0.30	3
3	Ge		220,852.19	0.77	108.5	Pulse	0.30	3
3	Rh		2,664,043.64	0.40	107.6	Pulse	0.30	3
3	Tb		3,956,767.06	0.76	107.2	Pulse	0.30	3

Quantitation Report

File Name	036SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 13:59
Sample Name	jc86039-9
Sample Type	Sample
Comment	wfb
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.016	ug/l	44.34	172.00	6.026E-05	Pulse	0.25	3
B			1	0.543	ug/l	2.74	21,999.04	7.710E-03	Pulse	0.15	3
Ca			1	240.784	ug/l	0.35	229,374.71	4.523E-02	Pulse	0.10	3
Sr			1	5.553	ug/l	0.50	249,414.72	3.578E-02	Pulse	0.10	3
Mo			1	0.038	ug/l	49.71	506.69	7.263E-05	Pulse	0.10	3
Ag			1	0.012	ug/l	18.30	350.02	4.626E-05	Pulse	0.10	3
Sn			1	1.102	ug/l	1.17	8,355.81	1.105E-03	Pulse	0.10	3
Sb			1	0.046	ug/l	32.72	2,230.26	2.205E-04	Pulse	0.10	3
Ba			1	0.925	ug/l	5.41	5,954.71	5.882E-04	Pulse	0.10	3
Tl			1	0.006	ug/l	61.71	930.06	1.593E-04	Pulse	0.10	3
Pb			1	0.027	ug/l	26.71	673.38	1.154E-04	Pulse	0.10	3
Pb			1	0.042	ug/l	31.70	753.38	1.290E-04	Pulse	0.10	3
Pb			1	0.029	ug/l	16.42	2,830.21	4.849E-04	Pulse	0.10	3
Na			2	105.703	ug/l	0.44	98,810.66	6.113E-01	Pulse	0.30	3
Mg			2	17.594	ug/l	0.93	7,599.57	4.702E-02	Pulse	0.30	3
Al			2	2.035	ug/l	25.10	531.13	3.287E-03	Pulse	0.30	3
K			2	25.885	ug/l	3.02	13,455.55	8.325E-02	Pulse	0.30	3
Ca			2	249.172	ug/l	2.59	3,613.77	2.236E-02	Pulse	0.30	3
Ti			2	1.388	ug/l	145.35	150.12	9.260E-04	Pulse	0.30	3
V			2	0.304	ug/l	9.33	1,494.53	9.246E-03	Pulse	0.30	3
Cr			2	0.447	ug/l	7.51	2,606.90	1.613E-02	Pulse	0.30	3
Mn			2	0.974	ug/l	5.21	2,361.31	1.461E-02	Pulse	0.30	3
Fe			2	0.593	ug/l	20.26	15,921.35	9.850E-02	Pulse	0.30	3
Co			2	0.272	ug/l	3.93	2,364.64	1.463E-02	Pulse	0.30	3
Ni			2	2.140	ug/l	1.59	5,020.82	3.106E-02	Pulse	0.30	3
Cu			2	0.300	ug/l	3.91	2,516.89	1.557E-02	Pulse	0.30	3
Zn			2	16.771	ug/l	3.10	13,802.62	8.540E-02	Pulse	0.30	3
As			2	0.044	ug/l	9.06	32.00	1.980E-04	Pulse	1.00	3
Cd			2	-0.004	ug/l	-119.14	11.09	1.309E-05	Pulse	0.30	3
Sn			2	0.461	ug/l	6.02	1,384.52	1.635E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.016	ug/l	130.66	17.60	7.852E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,853,306.72	0.75	107.4	Pulse	0.10	3
1	Sc		5,071,688.36	1.62	103.9	Pulse	0.10	3
1	Ge		946,132.77	1.45	103.2	Pulse	0.10	3
1	Ge		1,321,370.29	0.97	103.2	Pulse	0.10	3
1	Rh		6,971,038.44	0.74	102.4	Analog	0.10	3
1	In		7,561,724.34	0.74	104.6	Analog	0.10	3
1	Tb		10,119,546.93	0.99	107.6	Analog	0.10	3
1	Ho		952,803.34	1.43	107.3	Pulse	0.10	3
1	Bi		5,836,892.62	0.18	106.0	Analog	0.10	3
2	Sc		161,632.22	0.32	100.9	Pulse	0.30	3
2	Ge		88,639.51	1.76	100.8	Pulse	0.30	3
2	Ge		136,355.52	0.78	100.2	Pulse	0.30	3
2	Rh		2,860,929.40	0.45	101.9	Pulse	0.30	3
2	In		846,959.56	0.40	99.1	Pulse	0.30	3
2	Tb		3,368,187.16	0.63	101.4	Pulse	0.30	3
2	Ho		326,881.51	0.69	101.7	Pulse	0.30	3
2	Bi		2,204,373.52	0.18	100.0	Pulse	0.30	3
3	Sc		248,237.64	0.63	112.6	Pulse	0.30	3
3	Ge		144,151.58	0.92	108.9	Pulse	0.30	3
3	Ge		224,007.60	0.80	110.1	Pulse	0.30	3
3	Rh		2,674,795.73	0.28	108.1	Pulse	0.30	3
3	Tb		3,961,268.04	0.46	107.3	Pulse	0.30	3

Quantitation Report

File Name	037SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 14:04
Sample Name	jc85043-2f
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.038	ug/l	45.06	173.33	5.767E-05	Pulse	0.25	3
B			1	49.129	ug/l	1.28	147,186.29	4.904E-02	Pulse	0.15	3
Ca			1	208366.554	ug/l	1.62	77,419,052.18	1.416E+01	Analog	0.10	3
Sr			1	778.636	ug/l	1.11	12,969,341.47	1.999E+00	Analog	0.10	3
Mo			1	5.399	ug/l	1.43	17,356.60	2.676E-03	Pulse	0.10	3
Ag			1	0.025	ug/l	25.02	296.68	4.101E-05	Pulse	0.10	3
Sn			1	2.657	ug/l	2.12	7,458.69	1.032E-03	Pulse	0.10	3
Sb			1	0.194	ug/l	27.21	2,623.66	2.667E-04	Pulse	0.10	3
Ba			1	948.756	ug/l	1.11	2,332,390.33	2.369E-01	Pulse	0.10	3
Tl			1	0.023	ug/l	17.97	893.39	1.798E-04	Pulse	0.10	3
Pb			1	1.198	ug/l	7.70	5,591.26	1.126E-03	Pulse	0.10	3
Pb			1	1.096	ug/l	5.36	4,590.89	9.241E-04	Pulse	0.10	3
Pb			1	1.137	ug/l	3.81	21,656.94	4.359E-03	Pulse	0.10	3
Na			2	725726.602	ug/l	0.96	258,788,016.38	1.500E+03	Analog	0.30	3
Mg			2	30111.385	ug/l	0.59	4,977,531.19	2.886E+01	Pulse	0.30	3
Al			2	760.904	ug/l	2.00	40,661.18	2.358E-01	Pulse	0.30	3
K			2	2769.612	ug/l	1.31	283,537.51	1.644E+00	Pulse	0.30	3
Ca			2	208670.605	ug/l	1.07	1,199,927.03	6.957E+00	Pulse	0.30	3
Ti			2	34.882	ug/l	1.32	1,594.54	9.244E-03	Pulse	0.30	3
V			2	3.557	ug/l	0.90	5,838.87	3.385E-02	Pulse	0.30	3
Cr			2	3.150	ug/l	1.67	6,813.73	3.950E-02	Pulse	0.30	3
Mn			2	4740.398	ug/l	1.17	4,696,330.09	2.723E+01	Pulse	0.30	3
Fe			2	1069.197	ug/l	1.09	1,726,569.34	1.001E+01	Pulse	0.30	3
Co			2	2.017	ug/l	0.75	7,271.68	4.216E-02	Pulse	0.30	3
Ni			2	3.128	ug/l	3.44	3,162.56	1.833E-02	Pulse	0.30	3
Cu			2	23.742	ug/l	0.69	62,262.62	3.610E-01	Pulse	0.30	3
Zn			2	20.395	ug/l	2.02	7,271.68	4.216E-02	Pulse	0.30	3
As			2	0.540	ug/l	27.16	108.67	6.307E-04	Pulse	1.00	3
Cd			2	0.241	ug/l	12.39	128.08	1.533E-04	Pulse	0.30	3
Sn			2	0.937	ug/l	7.60	1,180.06	1.412E-03	Pulse	0.30	3
Se			3	0.223	ug/l	76.30	25.53	1.238E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		3,001,731.04	0.81	113.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,466,559.50	1.68	112.0	Analog	0.10	3
1	Ge		938,537.36	1.28	102.3	Pulse	0.10	3
1	Ge		1,323,697.48	0.53	103.4	Pulse	0.10	3
1	Rh		6,486,414.90	0.98	95.3	Analog	0.10	3
1	In		7,225,396.67	1.09	100.0	Analog	0.10	3
1	Tb		9,847,250.48	1.50	104.7	Analog	0.10	3
1	Ho		926,764.18	1.20	104.3	Pulse	0.10	3
1	Bi		4,969,305.45	0.97	90.2	Pulse	0.10	3
2	Sc		172,479.84	0.92	107.7	Pulse	0.30	3
2	Ge		89,345.28	0.88	101.6	Pulse	0.30	3
2	Ge		137,251.33	0.07	100.9	Pulse	0.30	3
2	Rh		2,636,320.59	0.58	93.9	Pulse	0.30	3
2	In		835,686.84	0.45	97.8	Pulse	0.30	3
2	Tb		3,306,661.67	0.63	99.6	Pulse	0.30	3
2	Ho		323,585.09	0.88	100.7	Pulse	0.30	3
2	Bi		1,915,155.48	0.58	86.9	Pulse	0.30	3
3	Sc		244,797.89	0.51	111.1	Pulse	0.30	3
3	Ge		134,036.50	0.74	101.2	Pulse	0.30	3
3	Ge		206,086.35	0.25	101.3	Pulse	0.30	3
3	Rh		2,300,536.99	0.26	93.0	Pulse	0.30	3
3	Tb		3,626,982.50	0.29	98.3	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 14:09
Sample Name	jc85970-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.005	ug/l	28.82	97.33	3.420E-05	Pulse	0.25	3
B			1	34.098	ug/l	0.93	228,469.07	8.028E-02	Pulse	0.15	3
Ca			1	21619.572	ug/l	0.61	18,238,520.56	3.677E+00	Analog	0.10	3
Sr			1	861.556	ug/l	0.87	36,419,743.62	5.531E+00	Analog	0.10	3
Mo			1	23.274	ug/l	1.16	188,236.45	2.859E-02	Pulse	0.10	3
Ag			1	0.013	ug/l	14.61	383.35	5.105E-05	Pulse	0.10	3
Sn			1	1.500	ug/l	5.10	13,919.93	1.856E-03	Pulse	0.10	3
Sb			1	2.568	ug/l	1.85	39,430.26	3.967E-03	Pulse	0.10	3
Ba			1	28.218	ug/l	0.94	175,130.13	1.762E-02	Pulse	0.10	3
Tl			1	0.000	ug/l	-232.58	640.04	1.161E-04	Pulse	0.10	3
Pb			1	0.172	ug/l	8.94	2,416.95	4.389E-04	Pulse	0.10	3
Pb			1	0.159	ug/l	0.96	2,010.21	3.647E-04	Pulse	0.10	3
Pb			1	0.157	ug/l	3.85	9,098.05	1.651E-03	Pulse	0.10	3
Na			2	14636.809	ug/l	1.76	12,019,567.58	7.572E+01	Analog	0.30	3
Mg			2	4374.986	ug/l	0.16	1,664,488.03	1.049E+01	Pulse	0.30	3
Al			2	39.417	ug/l	3.79	5,084.24	3.203E-02	Pulse	0.30	3
K			2	4875.184	ug/l	0.48	1,123,627.94	7.079E+00	Pulse	0.30	3
Ca			2	25339.874	ug/l	0.24	335,456.95	2.113E+00	Pulse	0.30	3
Ti			2	0.455	ug/l	11.01	48.89	3.080E-04	Pulse	0.30	3
V			2	1.306	ug/l	6.17	4,965.26	3.128E-02	Pulse	0.30	3
Cr			2	0.552	ug/l	2.87	3,040.32	1.915E-02	Pulse	0.30	3
Mn			2	3.377	ug/l	2.89	7,796.37	4.912E-02	Pulse	0.30	3
Fe			2	22.676	ug/l	1.00	96,994.63	6.111E-01	Pulse	0.30	3
Co			2	0.049	ug/l	4.87	498.90	3.143E-03	Pulse	0.30	3
Ni			2	0.404	ug/l	7.21	983.38	6.196E-03	Pulse	0.30	3
Cu			2	3.033	ug/l	3.22	18,764.22	1.182E-01	Pulse	0.30	3
Zn			2	1.540	ug/l	5.50	1,418.97	8.940E-03	Pulse	0.30	3
As			2	1.464	ug/l	3.97	599.34	3.776E-03	Pulse	1.00	3
Cd			2	0.009	ug/l	18.97	25.59	3.106E-05	Pulse	0.30	3
Sn			2	0.825	ug/l	1.60	2,124.62	2.579E-03	Pulse	0.30	3
Se			3	0.020	ug/l	63.67	17.80	8.113E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,846,079.60	1.24	107.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,959,483.68	1.05	101.6	Pulse	0.10	3
1	Ge		920,217.57	1.45	100.3	Pulse	0.10	3
1	Ge		1,293,275.58	0.85	101.0	Pulse	0.10	3
1	Rh		6,584,856.15	0.41	96.8	Analog	0.10	3
1	In		7,505,352.06	1.37	103.9	Analog	0.10	3
1	Tb		9,938,807.77	1.06	105.6	Analog	0.10	3
1	Ho		946,763.82	0.95	106.6	Pulse	0.10	3
1	Bi		5,511,650.96	1.73	100.1	Mix	0.10	3
2	Sc		158,736.94	0.54	99.1	Pulse	0.30	3
2	Ge		86,646.46	0.04	98.5	Pulse	0.30	3
2	Ge		132,305.64	0.84	97.3	Pulse	0.30	3
2	Rh		2,716,272.11	0.24	96.7	Pulse	0.30	3
2	In		823,753.97	0.10	96.4	Pulse	0.30	3
2	Tb		3,309,576.95	0.42	99.7	Pulse	0.30	3
2	Ho		323,526.46	0.16	100.6	Pulse	0.30	3
2	Bi		2,097,048.18	0.13	95.2	Pulse	0.30	3
3	Sc		246,389.29	0.80	111.8	Pulse	0.30	3
3	Ge		141,985.09	0.34	107.2	Pulse	0.30	3
3	Ge		219,503.41	0.84	107.8	Pulse	0.30	3
3	Rh		2,573,725.94	0.23	104.0	Pulse	0.30	3
3	Tb		3,956,896.09	0.07	107.2	Pulse	0.30	3

Quantitation Report

File Name 039SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File
Method Path
Acq Time 4/12/2019 14:14
Sample Name jc85988-1 1
Sample Type Sample
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/12/2019 17:58
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.283	ug/l	2.57	3,873.83	1.350E-03	Pulse	0.25	3
B			1	23.460	ug/l	0.72	309,898.18	1.080E-01	Pulse	0.15	3
Ca			1	14733.185	ug/l	1.20	28,828,360.40	5.011E+00	Analog	0.10	3
Sr			1	110.878	ug/l	1.22	9,411,012.57	1.424E+00	Analog	0.10	3
Mo			1	1.337	ug/l	2.04	21,868.97	3.309E-03	Pulse	0.10	3
Ag			1	0.059	ug/l	10.51	2,720.34	3.664E-04	Pulse	0.10	3
Sn			1	2.681	ug/l	2.75	67,796.79	9.135E-03	Pulse	0.10	3
Sb			1	1.025	ug/l	0.61	31,783.17	3.197E-03	Pulse	0.10	3
Ba			1	85.147	ug/l	0.45	1,056,771.99	1.063E-01	Pulse	0.10	3
Tl			1	0.099	ug/l	3.37	7,385.44	1.436E-03	Pulse	0.10	3
Pb			1	42.792	ug/l	0.43	983,481.91	1.913E-01	Pulse	0.10	3
Pb			1	40.067	ug/l	0.11	825,434.21	1.605E-01	Pulse	0.10	3
Pb			1	41.118	ug/l	0.17	3,849,934.27	7.487E-01	Pulse	0.10	3
Na			2	94553.702	ug/l	0.88	176,969,975.19	9.775E+02	Analog	0.30	3
Mg			2	4390.351	ug/l	0.71	3,809,262.21	2.104E+01	Pulse	0.30	3
Al			2	5768.003	ug/l	0.77	1,606,378.55	8.873E+00	Pulse	0.30	3
K			2	5541.717	ug/l	1.02	2,902,866.62	1.603E+01	Pulse	0.30	3
Ca			2	15343.199	ug/l	1.17	463,252.79	2.559E+00	Pulse	0.30	3
Ti			2	244.954	ug/l	1.07	58,723.68	3.244E-01	Pulse	0.30	3
V			2	14.816	ug/l	0.64	118,453.59	6.543E-01	Pulse	0.30	3
Cr			2	19.464	ug/l	0.27	203,221.52	1.122E+00	Pulse	0.30	3
Mn			2	414.372	ug/l	0.39	2,154,774.64	1.190E+01	Pulse	0.30	3
Fe			2	18373.090	ug/l	0.70	154,420,953.86	8.529E+02	Analog	0.30	3
Co			2	2.674	ug/l	0.88	49,979.90	2.761E-01	Pulse	0.30	3
Ni			2	9.236	ug/l	2.98	47,966.26	2.650E-01	Pulse	0.30	3
Cu			2	40.583	ug/l	1.06	552,709.86	3.053E+00	Pulse	0.30	3
Zn			2	194.016	ug/l	0.77	352,883.55	1.949E+00	Pulse	0.30	3
As			2	6.324	ug/l	1.53	5,786.70	3.196E-02	Pulse	1.00	3
Cd			2	0.175	ug/l	8.03	450.03	5.101E-04	Pulse	0.30	3
Sn			2	2.383	ug/l	2.61	11,276.36	1.278E-02	Pulse	0.30	3
Se			3	0.386	ug/l	5.30	116.13	5.448E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,869,185.20	0.69	108.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,752,936.79	1.47	117.8	Analog	0.10	3
1	Ge		987,861.21	1.92	107.7	Pulse	0.10	3
1	Ge		1,365,304.25	1.80	106.7	Pulse	0.10	3
1	Rh		6,611,337.61	1.71	97.1	Analog	0.10	3
1	In		7,420,717.42	0.86	102.7	Analog	0.10	3
1	Tb		9,942,297.77	0.71	105.7	Analog	0.10	3
1	Ho		958,709.44	1.38	107.9	Pulse	0.10	3
1	Bi		5,141,819.92	1.07	93.4	Pulse	0.10	3
2	Sc		181,050.38	0.66	113.1	Pulse	0.30	3
2	Ge		96,046.30	1.21	109.2	Pulse	0.30	3
2	Ge		144,616.44	0.40	106.3	Pulse	0.30	3
2	Rh		2,735,177.81	0.27	97.4	Pulse	0.30	3
2	In		882,240.63	0.44	103.3	Pulse	0.30	3
2	Tb		3,435,696.12	0.41	103.5	Pulse	0.30	3
2	Ho		339,975.32	0.87	105.8	Pulse	0.30	3
2	Bi		2,026,789.36	0.25	92.0	Pulse	0.30	3
3	Sc		247,316.89	0.80	112.2	Pulse	0.30	3
3	Ge		139,276.35	0.09	105.2	Pulse	0.30	3
3	Ge		213,143.22	0.87	104.7	Pulse	0.30	3
3	Rh		2,339,395.67	0.19	94.5	Pulse	0.30	3
3	Tb		3,688,176.94	0.85	99.9	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 14:19
Sample Name	mp14085-mb1
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-1739.91	60.00	2.109E-05	Pulse	0.25	3
B			1	-0.416	ug/l	-2.59	13,472.33	4.737E-03	Pulse	0.15	3
Ca			1	5.511	ug/l	8.07	32,960.23	6.192E-03	Pulse	0.10	3
Sr			1	0.032	ug/l	9.03	3,973.99	5.470E-04	Pulse	0.10	3
Mo			1	0.012	ug/l	10.19	406.69	5.598E-05	Pulse	0.10	3
Ag			1	0.001	ug/l	59.73	160.01	2.021E-05	Pulse	0.10	3
Sn			1	0.380	ug/l	2.85	3,647.23	4.598E-04	Pulse	0.10	3
Sb			1	-0.023	ug/l	-19.81	856.73	8.347E-05	Pulse	0.10	3
Ba			1	0.037	ug/l	39.83	583.37	5.695E-05	Pulse	0.10	3
Tl			1	-0.001	ug/l	-101.03	666.71	1.106E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	5.60	863.39	1.432E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	17.27	716.72	1.189E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	10.47	3,343.61	5.545E-04	Pulse	0.10	3
Na			2	14.253	ug/l	7.72	36,175.79	2.123E-01	Pulse	0.30	3
Mg			2	0.401	ug/l	44.03	1,156.72	6.789E-03	Pulse	0.30	3
Al			2	1.055	ug/l	20.24	570.03	3.345E-03	Pulse	0.30	3
K			2	2.741	ug/l	12.49	9,169.29	5.382E-02	Pulse	0.30	3
Ca			2	-0.799	ug/l	-125.64	248.89	1.461E-03	Pulse	0.30	3
Ti			2	0.118	ug/l	44.00	27.78	1.630E-04	Pulse	0.30	3
V			2	-0.011	ug/l	-70.95	351.12	2.061E-03	Pulse	0.30	3
Cr			2	0.038	ug/l	29.35	934.48	5.485E-03	Pulse	0.30	3
Mn			2	0.117	ug/l	4.89	676.69	3.971E-03	Pulse	0.30	3
Fe			2	2.391	ug/l	7.17	33,345.96	1.957E-01	Pulse	0.30	3
Co			2	0.004	ug/l	29.49	164.45	9.651E-04	Pulse	0.30	3
Ni			2	0.048	ug/l	17.38	304.45	1.787E-03	Pulse	0.30	3
Cu			2	0.077	ug/l	8.82	1,720.11	1.010E-02	Pulse	0.30	3
Zn			2	1.792	ug/l	0.64	3,270.36	1.919E-02	Pulse	0.30	3
As			2	0.010	ug/l	43.70	23.00	1.350E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.003	ug/l	-103.08	9.98	1.099E-05	Pulse	0.30	3
Sn			2	0.041	ug/l	15.46	596.69	6.558E-04	Pulse	0.30	3
Se			3	-0.013	ug/l	-66.20	11.87	5.287E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,844,259.96	0.17	107.1	Pulse	0.10	3
1	Sc		5,323,042.42	0.38	109.0	Mix	0.10	3
1	Ge		996,758.81	0.90	108.7	Pulse	0.10	3
1	Ge		1,404,631.18	0.95	109.7	Pulse	0.10	3
1	Rh		7,262,680.10	0.79	106.7	Analog	0.10	3
1	In		7,928,228.04	1.21	109.7	Analog	0.10	3
1	Tb		10,253,457.76	1.01	109.0	Analog	0.10	3
1	Ho		960,569.07	0.41	108.1	Pulse	0.10	3
1	Bi		6,029,291.16	0.35	109.5	Analog	0.10	3
2	Sc		170,380.85	0.17	106.4	Pulse	0.30	3
2	Ge		95,146.76	0.68	108.2	Pulse	0.30	3
2	Ge		145,789.06	0.26	107.2	Pulse	0.30	3
2	Rh		2,977,926.06	0.58	106.0	Pulse	0.30	3
2	In		909,831.28	0.35	106.5	Pulse	0.30	3
2	Tb		3,496,977.08	0.87	105.3	Pulse	0.30	3
2	Ho		337,402.44	0.32	105.0	Pulse	0.30	3
2	Bi		2,338,202.34	0.32	106.1	Pulse	0.30	3
3	Sc		243,104.53	0.88	110.3	Pulse	0.30	3
3	Ge		144,679.17	0.09	109.3	Pulse	0.30	3
3	Ge		224,407.90	0.36	110.3	Pulse	0.30	3
3	Rh		2,671,683.37	0.38	107.9	Pulse	0.30	3
3	Tb		3,933,360.26	0.48	106.6	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 14:24
Sample Name	mp14085-b1
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	77.673	ug/l	1.13	1,029,631.29	3.645E-01	Pulse	0.25	3
B			1	78.383	ug/l	1.65	976,265.52	3.456E-01	Pulse	0.15	3
Ca			1	2038.415	ug/l	0.71	3,656,553.80	6.970E-01	Pulse	0.10	3
Sr			1	81.599	ug/l	0.98	7,361,598.64	1.048E+00	Analog	0.10	3
Mo			1	77.070	ug/l	1.22	1,329,025.87	1.892E-01	Pulse	0.10	3
Ag			1	77.425	ug/l	1.82	3,596,143.90	4.647E-01	Pulse	0.10	3
Sn			1	72.995	ug/l	1.02	2,121,825.02	2.742E-01	Pulse	0.10	3
Sb			1	79.546	ug/l	1.33	2,380,245.75	2.365E-01	Pulse	0.10	3
Ba			1	79.621	ug/l	0.92	1,000,198.14	9.939E-02	Pulse	0.10	3
Tl			1	79.075	ug/l	2.09	6,107,976.57	1.051E+00	Analog	0.10	3
Pb			1	78.581	ug/l	1.37	2,040,439.45	3.512E-01	Pulse	0.10	3
Pb			1	77.588	ug/l	1.49	1,805,856.28	3.108E-01	Pulse	0.10	3
Pb			1	78.422	ug/l	1.06	8,295,807.01	1.428E+00	Pulse	0.10	3
Na			2	1910.911	ug/l	1.27	3,350,932.71	1.982E+01	Pulse	0.30	3
Mg			2	1909.943	ug/l	0.99	1,548,111.43	9.156E+00	Pulse	0.30	3
Al			2	1929.739	ug/l	1.22	502,100.04	2.970E+00	Pulse	0.30	3
K			2	1975.443	ug/l	0.97	971,411.94	5.745E+00	Pulse	0.30	3
Ca			2	2410.421	ug/l	0.68	68,198.57	4.033E-01	Pulse	0.30	3
Ti			2	73.238	ug/l	0.80	16,398.21	9.698E-02	Pulse	0.30	3
V			2	79.228	ug/l	0.66	589,691.82	3.488E+00	Pulse	0.30	3
Cr			2	78.868	ug/l	0.34	767,382.30	4.538E+00	Pulse	0.30	3
Mn			2	78.292	ug/l	0.97	380,305.94	2.249E+00	Pulse	0.30	3
Fe			2	2010.092	ug/l	1.35	15,790,761.60	9.339E+01	Analog	0.30	3
Co			2	78.054	ug/l	0.97	1,359,822.48	8.042E+00	Pulse	0.30	3
Ni			2	77.238	ug/l	0.99	374,148.32	2.213E+00	Pulse	0.30	3
Cu			2	77.361	ug/l	0.55	983,351.80	5.816E+00	Pulse	0.30	3
Zn			2	76.305	ug/l	0.76	129,748.12	7.673E-01	Pulse	0.30	3
As			2	74.891	ug/l	0.65	63,840.95	3.776E-01	Pulse	1.00	3
Cd			2	77.240	ug/l	0.43	191,715.77	2.168E-01	Pulse	0.30	3
Sn			2	74.221	ug/l	0.59	340,229.29	3.848E-01	Pulse	0.30	3
Se			3	197.262	ug/l	0.54	53,117.47	2.433E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,824,999.96	0.15	106.4	Pulse	0.10	3
1	Sc		5,246,266.38	0.55	107.5	Pulse	0.10	3
1	Ge		986,936.24	1.16	107.6	Pulse	0.10	3

Quantitation Report

1	Ge		1,388,576.23	0.85	108.5	Pulse	0.10	3
1	Rh		7,025,959.90	1.01	103.2	Analog	0.10	3
1	In		7,739,798.86	1.41	107.1	Analog	0.10	3
1	Tb		10,063,971.94	1.65	107.0	Analog	0.10	3
1	Ho		948,806.55	0.62	106.8	Pulse	0.10	3
1	Bi		5,810,307.20	0.63	105.5	Analog	0.10	3
2	Sc		169,092.76	1.02	105.6	Pulse	0.30	3
2	Ge		93,528.64	1.11	106.3	Pulse	0.30	3
2	Ge		143,675.84	1.00	105.6	Pulse	0.30	3
2	Rh		2,885,902.31	0.59	102.8	Pulse	0.30	3
2	In		884,112.42	0.30	103.5	Pulse	0.30	3
2	Tb		3,429,585.00	0.69	103.3	Pulse	0.30	3
2	Ho		334,561.15	0.26	104.1	Pulse	0.30	3
2	Bi		2,241,410.75	0.43	101.7	Pulse	0.30	3
3	Sc		241,027.72	0.58	109.4	Pulse	0.30	3
3	Ge		140,390.58	0.49	106.0	Pulse	0.30	3
3	Ge		218,327.68	1.00	107.3	Pulse	0.30	3
3	Rh		2,546,808.30	0.61	102.9	Pulse	0.30	3
3	Tb		3,818,896.93	0.77	103.5	Pulse	0.30	3

Quantitation Report

File Name	042SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 14:29
Sample Name	mp14085-b2
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	76.841	ug/l	0.53	1,000,600.89	3.606E-01	Pulse	0.25	3
B			1	77.603	ug/l	0.39	949,651.56	3.422E-01	Pulse	0.15	3
Ca			1	2040.847	ug/l	0.34	3,598,242.13	6.978E-01	Pulse	0.10	3
Sr			1	80.415	ug/l	0.98	7,170,794.27	1.033E+00	Analog	0.10	3
Mo			1	76.370	ug/l	0.59	1,301,830.55	1.875E-01	Pulse	0.10	3
Ag			1	78.291	ug/l	1.09	3,515,757.45	4.699E-01	Pulse	0.10	3
Sn			1	72.960	ug/l	1.17	2,050,288.56	2.740E-01	Pulse	0.10	3
Sb			1	78.209	ug/l	1.32	2,309,930.38	2.326E-01	Pulse	0.10	3
Ba			1	77.841	ug/l	1.65	965,115.90	9.717E-02	Pulse	0.10	3
Tl			1	79.843	ug/l	1.27	5,960,983.46	1.062E+00	Analog	0.10	3
Pb			1	78.501	ug/l	1.13	1,970,084.60	3.508E-01	Pulse	0.10	3
Pb			1	77.957	ug/l	0.94	1,753,699.04	3.123E-01	Pulse	0.10	3
Pb			1	78.285	ug/l	0.79	8,003,922.74	1.425E+00	Pulse	0.10	3
Na			2	1889.145	ug/l	0.83	3,310,292.92	1.959E+01	Pulse	0.30	3
Mg			2	1894.545	ug/l	0.54	1,534,413.83	9.082E+00	Pulse	0.30	3
Al			2	1919.477	ug/l	0.65	499,041.07	2.954E+00	Pulse	0.30	3
K			2	1955.709	ug/l	0.59	961,015.10	5.688E+00	Pulse	0.30	3
Ca			2	2385.698	ug/l	1.64	67,445.51	3.992E-01	Pulse	0.30	3
Ti			2	75.014	ug/l	2.33	16,782.52	9.933E-02	Pulse	0.30	3
V			2	77.228	ug/l	0.62	574,348.62	3.400E+00	Pulse	0.30	3
Cr			2	76.659	ug/l	0.31	745,285.72	4.411E+00	Pulse	0.30	3
Mn			2	76.491	ug/l	0.29	371,263.54	2.198E+00	Pulse	0.30	3
Fe			2	1973.028	ug/l	0.89	15,487,590.50	9.167E+01	Analog	0.30	3
Co			2	76.396	ug/l	0.45	1,329,881.48	7.872E+00	Pulse	0.30	3
Ni			2	75.841	ug/l	0.93	367,090.35	2.173E+00	Pulse	0.30	3
Cu			2	75.788	ug/l	0.38	962,577.25	5.698E+00	Pulse	0.30	3
Zn			2	74.664	ug/l	0.98	126,853.41	7.508E-01	Pulse	0.30	3
As			2	73.888	ug/l	0.85	62,934.84	3.725E-01	Pulse	1.00	3
Cd			2	76.494	ug/l	0.67	188,100.88	2.148E-01	Pulse	0.30	3
Sn			2	73.729	ug/l	0.76	334,831.75	3.823E-01	Pulse	0.30	3
Se			3	195.278	ug/l	0.32	52,204.15	2.409E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,775,078.15	0.48	104.5	Pulse	0.10	3
1	Sc		5,156,536.49	0.76	105.6	Pulse	0.10	3
1	Ge		974,320.32	1.04	106.2	Pulse	0.10	3

Quantitation Report

1	Ge		1,370,216.75	0.76	107.0	Pulse	0.10	3
1	Rh		6,944,719.90	0.58	102.0	Analog	0.10	3
1	In		7,482,754.76	1.30	103.6	Analog	0.10	3
1	Tb		9,932,737.14	0.60	105.6	Analog	0.10	3
1	Ho		939,204.98	1.13	105.7	Pulse	0.10	3
1	Bi		5,615,625.96	0.42	102.0	Analog	0.10	3
2	Sc		168,947.52	0.13	105.5	Pulse	0.30	3
2	Ge		93,400.09	0.53	106.2	Pulse	0.30	3
2	Ge		142,709.74	0.57	104.9	Pulse	0.30	3
2	Rh		2,862,525.51	0.27	101.9	Pulse	0.30	3
2	In		875,893.02	0.22	102.5	Pulse	0.30	3
2	Tb		3,405,493.55	0.65	102.5	Pulse	0.30	3
2	Ho		331,258.32	0.62	103.0	Pulse	0.30	3
2	Bi		2,223,886.93	0.44	100.9	Pulse	0.30	3
3	Sc		238,113.31	0.25	108.0	Pulse	0.30	3
3	Ge		139,447.01	0.29	105.3	Pulse	0.30	3
3	Ge		216,748.74	0.23	106.5	Pulse	0.30	3
3	Rh		2,533,126.77	0.97	102.3	Pulse	0.30	3
3	Tb		3,799,511.24	0.38	103.0	Pulse	0.30	3

Quantitation Report

File Name	043SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 14:34
Sample Name	mp14085-s1
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	73.838	ug/l	0.97	959,626.64	3.465E-01	Pulse	0.25	3
B			1	100.481	ug/l	0.13	1,221,846.41	4.412E-01	Pulse	0.15	3
Ca			1	16536.546	ug/l	1.47	31,798,713.69	5.623E+00	Analog	0.10	3
Sr			1	194.161	ug/l	0.42	16,290,340.18	2.493E+00	Analog	0.10	3
Mo			1	77.010	ug/l	1.39	1,235,168.55	1.890E-01	Pulse	0.10	3
Ag			1	70.631	ug/l	0.23	3,084,201.41	4.239E-01	Pulse	0.10	3
Sn			1	71.005	ug/l	1.23	1,940,187.11	2.667E-01	Pulse	0.10	3
Sb			1	65.256	ug/l	1.38	1,895,348.62	1.941E-01	Pulse	0.10	3
Ba			1	163.078	ug/l	0.82	1,988,044.50	2.036E-01	Pulse	0.10	3
Tl			1	79.232	ug/l	0.41	5,295,426.38	1.053E+00	Pulse	0.10	3
Pb			1	124.026	ug/l	0.28	2,786,215.27	5.543E-01	Pulse	0.10	3
Pb			1	120.145	ug/l	0.04	2,419,362.20	4.813E-01	Pulse	0.10	3
Pb			1	121.526	ug/l	0.58	11,122,132.59	2.212E+00	Analog	0.10	3
Na			2	96485.431	ug/l	1.42	175,640,975.24	9.975E+02	Analog	0.30	3
Mg			2	6329.597	ug/l	1.38	5,341,011.60	3.033E+01	Analog	0.30	3
Al			2	7901.492	ug/l	0.77	2,140,162.55	1.215E+01	Pulse	0.30	3
K			2	7400.453	ug/l	0.49	3,767,701.10	2.140E+01	Pulse	0.30	3
Ca			2	17685.076	ug/l	1.20	519,296.87	2.949E+00	Pulse	0.30	3
Ti			2	324.615	ug/l	1.10	75,687.38	4.298E-01	Pulse	0.30	3
V			2	89.946	ug/l	0.52	697,138.37	3.959E+00	Pulse	0.30	3
Cr			2	91.501	ug/l	0.82	927,058.75	5.265E+00	Pulse	0.30	3
Mn			2	486.834	ug/l	0.58	2,462,206.85	1.398E+01	Pulse	0.30	3
Fe			2	20268.129	ug/l	0.38	165,682,820.08	9.409E+02	Analog	0.30	3
Co			2	72.867	ug/l	0.44	1,322,077.79	7.508E+00	Pulse	0.30	3
Ni			2	75.804	ug/l	0.81	382,414.36	2.172E+00	Pulse	0.30	3
Cu			2	109.672	ug/l	0.67	1,451,453.41	8.243E+00	Pulse	0.30	3
Zn			2	251.142	ug/l	0.70	444,215.75	2.523E+00	Pulse	0.30	3
As			2	72.726	ug/l	0.75	64,562.78	3.667E-01	Pulse	1.00	3
Cd			2	70.152	ug/l	0.37	169,272.03	1.970E-01	Pulse	0.30	3
Sn			2	70.835	ug/l	0.41	315,672.68	3.673E-01	Pulse	0.30	3
Se			3	171.649	ug/l	0.75	43,642.86	2.117E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,769,566.79	0.59	104.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,655,848.46	2.01	115.9	Analog	0.10	3
1	Ge		962,815.69	0.85	105.0	Pulse	0.10	3
1	Ge		1,345,618.94	0.80	105.1	Pulse	0.10	3
1	Rh		6,534,611.15	0.55	96.0	Analog	0.10	3
1	In		7,275,476.94	1.40	100.7	Analog	0.10	3
1	Tb		9,766,396.52	0.40	103.8	Analog	0.10	3
1	Ho		938,605.95	0.87	105.7	Pulse	0.10	3
1	Bi		5,026,924.51	0.50	91.3	Pulse	0.10	3
2	Sc		176,089.88	0.43	110.0	Pulse	0.30	3
2	Ge		94,186.84	0.45	107.1	Pulse	0.30	3
2	Ge		141,164.28	0.46	103.8	Pulse	0.30	3
2	Rh		2,660,126.01	0.37	94.7	Pulse	0.30	3
2	In		859,464.57	0.11	100.6	Pulse	0.30	3
2	Tb		3,369,049.59	0.81	101.5	Pulse	0.30	3
2	Ho		334,793.20	0.54	104.1	Pulse	0.30	3
2	Bi		1,981,570.83	0.26	89.9	Pulse	0.30	3
3	Sc		240,027.30	0.14	108.9	Pulse	0.30	3
3	Ge		135,705.87	0.86	102.5	Pulse	0.30	3
3	Ge		206,139.31	0.31	101.3	Pulse	0.30	3
3	Rh		2,254,406.92	0.42	91.1	Pulse	0.30	3
3	Tb		3,587,682.22	0.45	97.2	Pulse	0.30	3

Quantitation Report

File Name 044SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File
Method Path
Acq Time 4/12/2019 14:39
Sample Name mp14085-s2
Sample Type Sample
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/12/2019 17:58
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.404	ug/l	1.28	963,914.86	3.491E-01	Pulse	0.25	3
B			1	101.075	ug/l	1.17	1,225,137.17	4.437E-01	Pulse	0.15	3
Ca			1	16855.226	ug/l	0.67	32,289,870.35	5.732E+00	Analog	0.10	3
Sr			1	197.457	ug/l	0.35	16,568,879.75	2.535E+00	Analog	0.10	3
Mo			1	77.555	ug/l	1.09	1,244,086.23	1.904E-01	Pulse	0.10	3
Ag			1	72.070	ug/l	1.30	3,158,572.35	4.326E-01	Pulse	0.10	3
Sn			1	71.169	ug/l	0.87	1,951,725.65	2.673E-01	Pulse	0.10	3
Sb			1	65.106	ug/l	1.25	1,917,153.57	1.936E-01	Pulse	0.10	3
Ba			1	164.038	ug/l	1.08	2,027,453.93	2.048E-01	Pulse	0.10	3
Tl			1	81.637	ug/l	0.54	5,480,476.17	1.085E+00	Analog	0.10	3
Pb			1	124.687	ug/l	0.30	2,813,581.94	5.572E-01	Pulse	0.10	3
Pb			1	121.734	ug/l	0.34	2,462,301.06	4.876E-01	Pulse	0.10	3
Pb			1	122.934	ug/l	0.19	11,301,227.70	2.238E+00	Analog	0.10	3
Na			2	98611.953	ug/l	0.75	178,961,250.67	1.019E+03	Analog	0.30	3
Mg			2	6471.675	ug/l	0.70	5,444,421.31	3.101E+01	Analog	0.30	3
Al			2	8002.116	ug/l	0.74	2,160,770.88	1.231E+01	Pulse	0.30	3
K			2	7500.404	ug/l	0.55	3,806,778.88	2.169E+01	Pulse	0.30	3
Ca			2	17968.107	ug/l	1.04	525,983.62	2.996E+00	Pulse	0.30	3
Ti			2	328.645	ug/l	0.86	76,393.00	4.352E-01	Pulse	0.30	3
V			2	90.742	ug/l	0.95	701,125.47	3.994E+00	Pulse	0.30	3
Cr			2	92.301	ug/l	1.08	932,267.15	5.311E+00	Pulse	0.30	3
Mn			2	493.740	ug/l	0.97	2,489,434.90	1.418E+01	Pulse	0.30	3
Fe			2	20427.958	ug/l	1.34	166,472,228.94	9.483E+02	Analog	0.30	3
Co			2	73.483	ug/l	0.61	1,329,152.83	7.571E+00	Pulse	0.30	3
Ni			2	76.755	ug/l	0.24	386,042.03	2.199E+00	Pulse	0.30	3
Cu			2	108.280	ug/l	0.73	1,428,642.69	8.138E+00	Pulse	0.30	3
Zn			2	255.851	ug/l	0.97	451,146.35	2.570E+00	Pulse	0.30	3
As			2	72.992	ug/l	0.78	64,600.25	3.680E-01	Pulse	1.00	3
Cd			2	70.883	ug/l	0.65	170,218.66	1.990E-01	Pulse	0.30	3
Sn			2	71.602	ug/l	0.65	317,565.27	3.713E-01	Pulse	0.30	3
Se			3	173.273	ug/l	1.12	44,414.18	2.137E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,760,914.22	0.66	103.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,633,649.50	0.30	115.4	Analog	0.10	3
1	Ge		968,774.08	0.64	105.6	Pulse	0.10	3
1	Ge		1,350,742.37	0.72	105.5	Pulse	0.10	3
1	Rh		6,535,545.94	1.08	96.0	Analog	0.10	3
1	In		7,302,358.14	1.14	101.1	Analog	0.10	3
1	Tb		9,901,311.31	1.11	105.2	Analog	0.10	3
1	Ho		947,418.14	0.78	106.7	Pulse	0.10	3
1	Bi		5,049,379.19	0.80	91.7	Pulse	0.10	3
2	Sc		175,552.52	0.72	109.6	Pulse	0.30	3
2	Ge		92,978.81	0.69	105.7	Pulse	0.30	3
2	Ge		140,670.18	0.57	103.4	Pulse	0.30	3
2	Rh		2,657,543.30	0.51	94.6	Pulse	0.30	3
2	In		855,378.05	0.30	100.1	Pulse	0.30	3
2	Tb		3,382,804.80	0.42	101.9	Pulse	0.30	3
2	Ho		338,386.24	0.58	105.3	Pulse	0.30	3
2	Bi		1,994,718.32	0.07	90.5	Pulse	0.30	3
3	Sc		243,174.97	0.54	110.3	Pulse	0.30	3
3	Ge		135,331.55	0.17	102.2	Pulse	0.30	3
3	Ge		207,830.08	0.92	102.1	Pulse	0.30	3
3	Rh		2,287,178.03	0.51	92.4	Pulse	0.30	3
3	Tb		3,613,744.86	0.40	97.9	Pulse	0.30	3

Quantitation Report

File Name	045_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 14:44
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	49.787	ug/l	1.05	646,482.40	2.336E-01	Pulse	0.25	3
B			1	103.000	ug/l	1.13	1,250,940.12	4.521E-01	Pulse	0.15	3
Ca			1	5135.777	ug/l	0.45	9,050,917.36	1.749E+00	Analog	0.10	3
Sr			1	52.087	ug/l	1.37	4,619,811.60	6.689E-01	Pulse	0.10	3
Mo			1	52.131	ug/l	1.42	883,851.47	1.280E-01	Pulse	0.10	3
Ag			1	49.782	ug/l	1.48	2,249,603.51	2.988E-01	Pulse	0.10	3
Sn			1	49.022	ug/l	0.99	1,383,831.07	1.838E-01	Pulse	0.10	3
Sb			1	49.832	ug/l	0.71	1,476,826.28	1.482E-01	Pulse	0.10	3
Ba			1	50.458	ug/l	1.48	627,544.43	6.299E-02	Pulse	0.10	3
Tl			1	51.101	ug/l	1.12	3,813,944.11	6.794E-01	Pulse	0.10	3
Pb			1	50.974	ug/l	1.11	1,278,865.35	2.278E-01	Pulse	0.10	3
Pb			1	50.323	ug/l	1.22	1,131,719.64	2.016E-01	Pulse	0.10	3
Pb			1	50.618	ug/l	1.50	5,173,699.53	9.217E-01	Pulse	0.10	3
Na			2	4926.402	ug/l	1.45	8,570,101.33	5.099E+01	Analog	0.30	3
Mg			2	4798.740	ug/l	0.80	3,865,181.10	2.300E+01	Pulse	0.30	3
Al			2	4845.649	ug/l	0.96	1,252,841.93	7.454E+00	Pulse	0.30	3
K			2	5008.468	ug/l	0.70	2,436,336.36	1.450E+01	Pulse	0.30	3
Ca			2	5171.047	ug/l	1.02	145,120.31	8.634E-01	Pulse	0.30	3
Ti			2	49.956	ug/l	2.44	11,118.26	6.616E-02	Pulse	0.30	3
V			2	50.234	ug/l	0.07	371,817.13	2.212E+00	Pulse	0.30	3
Cr			2	49.686	ug/l	0.73	480,749.11	2.860E+00	Pulse	0.30	3
Mn			2	49.138	ug/l	0.56	237,307.11	1.412E+00	Pulse	0.30	3
Fe			2	5032.103	ug/l	1.05	39,273,140.66	2.337E+02	Analog	0.30	3
Co			2	49.359	ug/l	0.68	854,831.07	5.086E+00	Pulse	0.30	3
Ni			2	48.572	ug/l	0.95	233,911.52	1.392E+00	Pulse	0.30	3
Cu			2	48.426	ug/l	1.13	612,119.59	3.642E+00	Pulse	0.30	3
Zn			2	47.870	ug/l	0.76	80,984.83	4.818E-01	Pulse	0.30	3
As			2	49.415	ug/l	0.43	41,876.96	2.492E-01	Pulse	1.00	3
Cd			2	49.192	ug/l	0.68	120,297.85	1.381E-01	Pulse	0.30	3
Sn			2	48.868	ug/l	0.79	220,829.13	2.535E-01	Pulse	0.30	3
Se			3	198.726	ug/l	0.83	52,864.46	2.451E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,767,222.64	0.55	104.2	Pulse	0.10	3
1	Sc		5,173,652.42	0.83	106.0	Pulse	0.10	3
1	Ge		976,499.23	1.16	106.5	Pulse	0.10	3

Quantitation Report

1	Ge		1,374,077.07	1.01	107.3	Pulse	0.10	3
1	Rh		6,907,382.60	1.13	101.5	Analog	0.10	3
1	In		7,528,911.64	0.13	104.2	Analog	0.10	3
1	Tb		9,962,467.77	0.70	105.9	Analog	0.10	3
1	Ho		943,031.08	1.21	106.2	Pulse	0.10	3
1	Bi		5,613,367.42	0.42	101.9	Analog	0.10	3
2	Sc		168,076.99	0.55	105.0	Pulse	0.30	3
2	Ge		92,512.93	0.90	105.2	Pulse	0.30	3
2	Ge		141,710.31	2.05	104.2	Pulse	0.30	3
2	Rh		2,831,875.24	0.47	100.8	Pulse	0.30	3
2	In		871,055.76	0.47	102.0	Pulse	0.30	3
2	Tb		3,411,744.24	0.35	102.7	Pulse	0.30	3
2	Ho		331,777.78	0.96	103.2	Pulse	0.30	3
2	Bi		2,197,140.12	0.94	99.7	Pulse	0.30	3
3	Sc		239,597.95	0.91	108.7	Pulse	0.30	3
3	Ge		138,830.39	0.61	104.8	Pulse	0.30	3
3	Ge		215,692.41	0.89	106.0	Pulse	0.30	3
3	Rh		2,497,311.78	0.43	100.9	Pulse	0.30	3
3	Tb		3,771,121.93	0.77	102.2	Pulse	0.30	3

Quantitation Report

File Name	046_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 14:49
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.014	ug/l	14.05	240.01	8.542E-05	Pulse	0.25	3
B			1	1.521	ug/l	1.46	36,838.05	1.311E-02	Pulse	0.15	3
Ca			1	0.182	ug/l	104.42	22,719.58	4.381E-03	Pulse	0.10	3
Sr			1	0.018	ug/l	5.09	2,603.64	3.635E-04	Pulse	0.10	3
Mo			1	0.090	ug/l	16.25	1,763.51	2.461E-04	Pulse	0.10	3
Ag			1	0.019	ug/l	8.98	990.07	1.273E-04	Pulse	0.10	3
Sn			1	0.475	ug/l	1.68	6,388.18	8.209E-04	Pulse	0.10	3
Sb			1	0.327	ug/l	7.55	11,257.80	1.122E-03	Pulse	0.10	3
Ba			1	0.016	ug/l	18.84	310.01	3.094E-05	Pulse	0.10	3
Tl			1	0.019	ug/l	9.04	2,163.58	3.697E-04	Pulse	0.10	3
Pb			1	0.033	ug/l	19.00	1,186.77	2.029E-04	Pulse	0.10	3
Pb			1	0.026	ug/l	8.75	880.06	1.503E-04	Pulse	0.10	3
Pb			1	0.029	ug/l	7.16	4,413.78	7.543E-04	Pulse	0.10	3
Na			2	6.043	ug/l	2.29	21,181.15	1.275E-01	Pulse	0.30	3
Mg			2	0.002	ug/l	3973.21	811.14	4.878E-03	Pulse	0.30	3
Al			2	0.007	ug/l	2454.28	287.79	1.732E-03	Pulse	0.30	3
K			2	1.643	ug/l	9.51	8,417.75	5.065E-02	Pulse	0.30	3
Ca			2	-6.639	ug/l	-7.74	81.11	4.875E-04	Pulse	0.30	3
Ti			2	0.030	ug/l	29.90	7.78	4.687E-05	Pulse	0.30	3
V			2	0.000	ug/l	-1289.16	422.23	2.539E-03	Pulse	0.30	3
Cr			2	0.016	ug/l	34.92	700.02	4.211E-03	Pulse	0.30	3
Mn			2	0.039	ug/l	7.36	290.01	1.745E-03	Pulse	0.30	3
Fe			2	0.207	ug/l	19.38	15,682.02	9.436E-02	Pulse	0.30	3
Co			2	0.007	ug/l	25.79	225.56	1.356E-03	Pulse	0.30	3
Ni			2	0.005	ug/l	114.89	90.00	5.424E-04	Pulse	0.30	3
Cu			2	0.037	ug/l	7.86	1,175.61	7.075E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.014	ug/l	142.66	224.45	1.351E-03	Pulse	0.30	3
As			2	0.016	ug/l	40.16	27.67	1.666E-04	Pulse	1.00	3
Cd			2	0.009	ug/l	72.09	38.78	4.402E-05	Pulse	0.30	3
Sn			2	0.185	ug/l	4.90	1,235.62	1.402E-03	Pulse	0.30	3
Se			3	0.045	ug/l	20.00	27.60	1.249E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,808,972.42	0.66	105.8	Pulse	0.10	3
1	Sc		5,186,742.94	1.54	106.2	Mix	0.10	3
1	Ge		975,317.38	1.07	106.3	Pulse	0.10	3
1	Ge		1,370,805.76	1.25	107.1	Pulse	0.10	3
1	Rh		7,163,795.31	0.53	105.3	Analog	0.10	3
1	In		7,781,133.66	0.54	107.7	Analog	0.10	3
1	Tb		10,030,427.56	2.50	106.6	Analog	0.10	3
1	Ho		943,740.27	1.06	106.2	Pulse	0.10	3
1	Bi		5,852,477.41	0.90	106.3	Analog	0.10	3
2	Sc		166,193.84	0.96	103.8	Pulse	0.30	3
2	Ge		92,551.92	1.06	105.2	Pulse	0.30	3
2	Ge		141,376.25	1.10	103.9	Pulse	0.30	3
2	Rh		2,909,728.43	0.85	103.6	Pulse	0.30	3
2	In		881,135.55	0.48	103.1	Pulse	0.30	3
2	Tb		3,412,815.21	0.62	102.8	Pulse	0.30	3
2	Ho		331,030.06	0.77	103.0	Pulse	0.30	3
2	Bi		2,272,081.09	0.75	103.1	Pulse	0.30	3
3	Sc		239,691.85	1.24	108.7	Pulse	0.30	3
3	Ge		142,419.82	0.96	107.6	Pulse	0.30	3
3	Ge		220,992.68	0.47	108.6	Pulse	0.30	3
3	Rh		2,625,092.39	0.66	106.1	Pulse	0.30	3
3	Tb		3,896,608.32	0.98	105.6	Pulse	0.30	3

Quantitation Report

File Name	047SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 14:54
Sample Name	mp14059a-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.023	ug/l	26.22	208.00	7.579E-05	Pulse	0.25	3
B			1	2.431	ug/l	4.79	32,373.27	1.179E-02	Pulse	0.15	3
Ca			1	19.759	ug/l	4.04	37,616.76	7.676E-03	Pulse	0.10	3
Sr			1	0.062	ug/l	6.84	3,590.53	5.280E-04	Pulse	0.10	3
Mo			1	0.117	ug/l	21.25	1,153.41	1.694E-04	Pulse	0.10	3
Ag			1	0.036	ug/l	16.69	886.73	1.200E-04	Pulse	0.10	3
Sn			1	1.450	ug/l	3.62	13,012.48	1.761E-03	Pulse	0.10	3
Sb			1	0.454	ug/l	9.69	8,259.17	8.261E-04	Pulse	0.10	3
Ba			1	0.066	ug/l	18.35	520.02	5.202E-05	Pulse	0.10	3
Tl			1	0.040	ug/l	8.12	2,220.25	3.840E-04	Pulse	0.10	3
Pb			1	0.078	ug/l	9.01	1,333.44	2.305E-04	Pulse	0.10	3
Pb			1	0.081	ug/l	12.97	1,200.10	2.074E-04	Pulse	0.10	3
Pb			1	0.081	ug/l	5.94	5,513.95	9.531E-04	Pulse	0.10	3
Na			2	21.241	ug/l	2.31	27,642.66	1.748E-01	Pulse	0.30	3
Mg			2	1.308	ug/l	4.25	1,265.62	8.002E-03	Pulse	0.30	3
Al			2	3.716	ug/l	8.06	724.47	4.580E-03	Pulse	0.30	3
K			2	3.747	ug/l	27.32	8,115.38	5.131E-02	Pulse	0.30	3
Ca			2	6.665	ug/l	11.50	340.01	2.150E-03	Pulse	0.30	3
Ti			2	0.414	ug/l	11.88	44.44	2.810E-04	Pulse	0.30	3
V			2	0.254	ug/l	12.78	1,286.74	8.138E-03	Pulse	0.30	3
Cr			2	0.374	ug/l	3.03	2,220.18	1.404E-02	Pulse	0.30	3
Mn			2	0.256	ug/l	3.99	680.02	4.299E-03	Pulse	0.30	3
Fe			2	4.908	ug/l	2.17	31,421.12	1.987E-01	Pulse	0.30	3
Co			2	0.022	ug/l	28.10	277.78	1.756E-03	Pulse	0.30	3
Ni			2	0.056	ug/l	15.18	193.34	1.222E-03	Pulse	0.30	3
Cu			2	0.232	ug/l	5.57	2,055.71	1.300E-02	Pulse	0.30	3
Zn			2	0.575	ug/l	7.75	647.80	4.095E-03	Pulse	0.30	3
As			2	0.069	ug/l	27.24	41.33	2.612E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.014	ug/l	59.76	31.04	3.741E-05	Pulse	0.30	3
Sn			2	0.897	ug/l	4.59	2,293.52	2.766E-03	Pulse	0.30	3
Se			3	0.044	ug/l	83.54	21.07	9.591E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,745,225.86	0.45	103.4	Pulse	0.10	3
1	Sc		4,900,112.22	1.72	100.4	Pulse	0.10	3
1	Ge		918,342.64	1.94	100.1	Pulse	0.10	3
1	Ge		1,285,252.54	1.54	100.4	Pulse	0.10	3
1	Rh		6,801,682.81	0.84	99.9	Analog	0.10	3
1	In		7,387,471.42	0.37	102.2	Analog	0.10	3
1	Tb		9,995,035.68	1.12	106.2	Analog	0.10	3
1	Ho		941,489.83	0.90	106.0	Pulse	0.10	3
1	Bi		5,783,575.33	0.88	105.0	Analog	0.10	3
2	Sc		158,164.93	0.51	98.8	Pulse	0.30	3
2	Ge		86,266.91	1.29	98.1	Pulse	0.30	3
2	Ge		131,618.24	0.31	96.8	Pulse	0.30	3
2	Rh		2,807,969.75	0.17	100.0	Pulse	0.30	3
2	In		829,351.26	0.44	97.1	Pulse	0.30	3
2	Tb		3,295,567.79	0.31	99.2	Pulse	0.30	3
2	Ho		321,470.94	0.51	100.0	Pulse	0.30	3
2	Bi		2,192,892.20	0.04	99.5	Pulse	0.30	3
3	Sc		245,131.71	0.33	111.2	Pulse	0.30	3
3	Ge		142,186.52	0.71	107.4	Pulse	0.30	3
3	Ge		219,565.82	0.53	107.9	Pulse	0.30	3
3	Rh		2,657,152.46	0.22	107.4	Pulse	0.30	3
3	Tb		3,958,005.82	0.13	107.2	Pulse	0.30	3

Quantitation Report

File Name	048SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 14:59
Sample Name	mp14059a-b2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.870	ug/l	1.42	504,832.15	1.757E-01	Pulse	0.25	3
B			1	86.250	ug/l	1.70	554,852.16	1.931E-01	Pulse	0.15	3
Ca			1	4296.373	ug/l	0.37	3,735,772.13	7.343E-01	Pulse	0.10	3
Sr			1	85.220	ug/l	1.47	3,735,516.40	5.472E-01	Pulse	0.10	3
Mo			1	82.360	ug/l	0.79	690,105.46	1.011E-01	Pulse	0.10	3
Ag			1	81.717	ug/l	2.17	1,845,802.42	2.452E-01	Pulse	0.10	3
Sn			1	78.408	ug/l	2.33	1,104,874.90	1.468E-01	Pulse	0.10	3
Sb			1	77.518	ug/l	2.46	1,167,216.73	1.153E-01	Pulse	0.10	3
Ba			1	80.945	ug/l	2.11	511,371.32	5.053E-02	Pulse	0.10	3
Tl			1	83.495	ug/l	1.12	3,155,277.66	5.551E-01	Pulse	0.10	3
Pb			1	84.484	ug/l	0.98	1,073,266.16	1.888E-01	Pulse	0.10	3
Pb			1	83.183	ug/l	1.05	947,188.63	1.666E-01	Pulse	0.10	3
Pb			1	83.450	ug/l	0.95	4,318,668.56	7.598E-01	Pulse	0.10	3
Na			2	4147.610	ug/l	0.86	3,491,498.47	2.150E+01	Pulse	0.30	3
Mg			2	4058.259	ug/l	0.76	1,579,448.23	9.727E+00	Pulse	0.30	3
Al			2	4003.016	ug/l	1.28	500,107.38	3.080E+00	Pulse	0.30	3
K			2	4160.374	ug/l	0.61	981,961.39	6.047E+00	Pulse	0.30	3
Ca			2	4601.826	ug/l	1.54	62,526.43	3.851E-01	Pulse	0.30	3
Ti			2	79.731	ug/l	0.99	8,572.31	5.279E-02	Pulse	0.30	3
V			2	82.983	ug/l	1.08	296,763.89	1.828E+00	Pulse	0.30	3
Cr			2	83.848	ug/l	1.33	391,971.79	2.414E+00	Pulse	0.30	3
Mn			2	81.953	ug/l	0.44	191,203.93	1.178E+00	Pulse	0.30	3
Fe			2	4318.928	ug/l	1.09	16,290,167.13	1.003E+02	Analog	0.30	3
Co			2	82.926	ug/l	0.61	693,758.25	4.273E+00	Pulse	0.30	3
Ni			2	81.718	ug/l	0.61	190,109.28	1.171E+00	Pulse	0.30	3
Cu			2	81.110	ug/l	1.15	495,364.82	3.051E+00	Pulse	0.30	3
Zn			2	78.157	ug/l	0.47	63,905.91	3.936E-01	Pulse	0.30	3
As			2	70.498	ug/l	0.58	28,863.36	1.778E-01	Pulse	1.00	3
Cd			2	76.306	ug/l	0.19	89,284.37	1.071E-01	Pulse	0.30	3
Sn			2	79.678	ug/l	0.44	172,336.12	2.068E-01	Pulse	0.30	3
Se			3	347.022	ug/l	0.78	48,297.36	2.140E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,873,750.14	0.59	108.2	Pulse	0.10	3
1	Sc		5,087,909.93	1.59	104.2	Pulse	0.10	3
1	Ge		941,071.24	1.40	102.6	Pulse	0.10	3

Quantitation Report

1	Ge		1,325,550.87	1.04	103.6	Pulse	0.10	3
1	Rh		6,826,564.07	0.41	100.3	Analog	0.10	3
1	In		7,527,532.46	0.78	104.2	Analog	0.10	3
1	Tb		10,121,837.35	0.99	107.6	Analog	0.10	3
1	Ho		953,021.47	1.19	107.3	Pulse	0.10	3
1	Bi		5,684,211.17	1.25	103.2	Analog	0.10	3
2	Sc		162,381.32	0.65	101.4	Pulse	0.30	3
2	Ge		88,002.74	0.54	100.0	Pulse	0.30	3
2	Ge		134,153.94	0.97	98.6	Pulse	0.30	3
2	Rh		2,802,449.06	0.25	99.8	Pulse	0.30	3
2	In		833,485.33	0.19	97.6	Pulse	0.30	3
2	Tb		3,354,698.76	0.35	101.0	Pulse	0.30	3
2	Ho		325,683.27	0.86	101.3	Pulse	0.30	3
2	Bi		2,144,080.75	0.52	97.3	Pulse	0.30	3
3	Sc		253,734.40	0.61	115.1	Pulse	0.30	3
3	Ge		144,617.90	0.53	109.2	Pulse	0.30	3
3	Ge		225,682.72	0.63	110.9	Pulse	0.30	3
3	Rh		2,648,782.53	0.34	107.0	Pulse	0.30	3
3	Tb		3,976,212.20	0.34	107.7	Pulse	0.30	3

Quantitation Report

File Name	049SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 15:04
Sample Name	mp14059a-s3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.077	ug/l	0.18	502,009.30	1.738E-01	Pulse	0.25	3
B			1	154.376	ug/l	0.93	983,228.71	3.404E-01	Pulse	0.15	3
Ca			1	33754.585	ug/l	0.41	31,716,104.53	5.739E+00	Analog	0.10	3
Sr			1	335.977	ug/l	0.45	14,359,184.79	2.157E+00	Analog	0.10	3
Mo			1	90.863	ug/l	0.96	742,435.62	1.115E-01	Pulse	0.10	3
Ag			1	78.446	ug/l	0.89	1,745,432.84	2.354E-01	Pulse	0.10	3
Sn			1	77.675	ug/l	0.93	1,078,025.40	1.454E-01	Pulse	0.10	3
Sb			1	73.703	ug/l	1.20	1,108,700.97	1.097E-01	Pulse	0.10	3
Ba			1	172.628	ug/l	1.39	1,089,317.20	1.077E-01	Pulse	0.10	3
Tl			1	83.977	ug/l	0.39	3,003,840.16	5.583E-01	Pulse	0.10	3
Pb			1	105.425	ug/l	0.59	1,267,649.90	2.356E-01	Pulse	0.10	3
Pb			1	102.884	ug/l	0.06	1,108,850.92	2.061E-01	Pulse	0.10	3
Pb			1	103.908	ug/l	0.19	5,089,804.74	9.460E-01	Pulse	0.10	3
Na			2	40790.290	ug/l	0.78	35,505,361.92	2.109E+02	Analog	0.30	3
Mg			2	8053.029	ug/l	0.36	3,248,672.86	1.930E+01	Pulse	0.30	3
Al			2	13586.506	ug/l	0.63	1,759,177.15	1.045E+01	Pulse	0.30	3
K			2	9267.029	ug/l	0.32	2,258,238.52	1.341E+01	Pulse	0.30	3
Ca			2	35127.551	ug/l	0.66	493,080.12	2.929E+00	Pulse	0.30	3
Ti			2	511.862	ug/l	1.54	57,054.04	3.389E-01	Pulse	0.30	3
V			2	101.022	ug/l	0.66	374,470.08	2.224E+00	Pulse	0.30	3
Cr			2	97.942	ug/l	0.41	474,614.86	2.819E+00	Pulse	0.30	3
Mn			2	453.919	ug/l	0.49	1,097,480.69	6.519E+00	Pulse	0.30	3
Fe			2	14857.800	ug/l	1.09	58,067,162.14	3.449E+02	Analog	0.30	3
Co			2	82.455	ug/l	0.57	715,184.19	4.248E+00	Pulse	0.30	3
Ni			2	86.478	ug/l	1.03	208,575.60	1.239E+00	Pulse	0.30	3
Cu			2	91.093	ug/l	0.74	576,717.86	3.426E+00	Pulse	0.30	3
Zn			2	120.718	ug/l	1.18	102,226.26	6.072E-01	Pulse	0.30	3
As			2	73.348	ug/l	0.53	31,134.15	1.849E-01	Pulse	1.00	3
Cd			2	74.459	ug/l	0.20	86,267.57	1.045E-01	Pulse	0.30	3
Sn			2	78.519	ug/l	1.05	168,168.01	2.038E-01	Pulse	0.30	3
Se			3	341.579	ug/l	0.44	47,120.30	2.107E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,888,233.35	1.14	108.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,526,353.46	0.66	113.2	Analog	0.10	3
1	Ge		955,968.03	1.30	104.2	Pulse	0.10	3
1	Ge		1,336,050.09	1.12	104.4	Pulse	0.10	3
1	Rh		6,657,621.57	1.44	97.8	Analog	0.10	3
1	In		7,413,779.60	1.26	102.6	Analog	0.10	3
1	Tb		10,109,862.56	0.12	107.5	Analog	0.10	3
1	Ho		978,171.18	1.54	110.1	Pulse	0.10	3
1	Bi		5,380,298.67	1.27	97.7	Pulse	0.10	3
2	Sc		168,351.03	0.36	105.1	Pulse	0.30	3
2	Ge		89,177.96	1.19	101.4	Pulse	0.30	3
2	Ge		135,472.35	0.86	99.6	Pulse	0.30	3
2	Rh		2,705,078.43	0.27	96.3	Pulse	0.30	3
2	In		825,303.00	0.17	96.6	Pulse	0.30	3
2	Tb		3,327,193.20	0.14	100.2	Pulse	0.30	3
2	Ho		333,633.49	0.19	103.8	Pulse	0.30	3
2	Bi		2,031,366.73	0.49	92.2	Pulse	0.30	3
3	Sc		258,653.98	0.35	117.4	Pulse	0.30	3
3	Ge		145,193.75	0.10	109.6	Pulse	0.30	3
3	Ge		223,682.42	0.29	109.9	Pulse	0.30	3
3	Rh		2,517,670.66	0.39	101.7	Pulse	0.30	3
3	Tb		3,891,724.15	0.76	105.5	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 15:09
Sample Name	mp14059a-s4conf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	73.585	ug/l	0.42	495,965.52	1.727E-01	Pulse	0.25	3
B			1	155.240	ug/l	0.61	983,220.10	3.423E-01	Pulse	0.15	3
Ca			1	33164.875	ug/l	0.60	31,122,244.54	5.639E+00	Analog	0.10	3
Sr			1	333.279	ug/l	1.40	14,450,131.03	2.140E+00	Analog	0.10	3
Mo			1	88.245	ug/l	0.70	731,500.49	1.083E-01	Pulse	0.10	3
Ag			1	77.910	ug/l	1.77	1,746,097.37	2.338E-01	Pulse	0.10	3
Sn			1	77.023	ug/l	1.58	1,076,779.02	1.442E-01	Pulse	0.10	3
Sb			1	73.594	ug/l	1.05	1,106,584.30	1.095E-01	Pulse	0.10	3
Ba			1	172.407	ug/l	0.74	1,087,441.94	1.076E-01	Pulse	0.10	3
Tl			1	83.237	ug/l	1.21	2,995,593.81	5.534E-01	Pulse	0.10	3
Pb			1	103.758	ug/l	1.52	1,255,188.16	2.319E-01	Pulse	0.10	3
Pb			1	101.612	ug/l	0.87	1,101,847.35	2.035E-01	Pulse	0.10	3
Pb			1	102.658	ug/l	0.94	5,059,306.61	9.346E-01	Pulse	0.10	3
Na			2	40285.564	ug/l	2.28	35,201,465.27	2.083E+02	Analog	0.30	3
Mg			2	7904.594	ug/l	1.58	3,201,238.76	1.894E+01	Pulse	0.30	3
Al			2	13487.206	ug/l	1.31	1,753,184.72	1.037E+01	Pulse	0.30	3
K			2	9144.445	ug/l	1.92	2,237,084.01	1.324E+01	Pulse	0.30	3
Ca			2	34473.485	ug/l	0.83	485,836.14	2.874E+00	Pulse	0.30	3
Ti			2	525.401	ug/l	5.64	58,772.63	3.479E-01	Pulse	0.30	3
V			2	99.986	ug/l	1.40	372,088.37	2.202E+00	Pulse	0.30	3
Cr			2	96.650	ug/l	0.92	470,215.76	2.782E+00	Pulse	0.30	3
Mn			2	448.459	ug/l	1.35	1,088,540.10	6.441E+00	Pulse	0.30	3
Fe			2	14639.498	ug/l	1.07	57,441,102.16	3.399E+02	Analog	0.30	3
Co			2	81.126	ug/l	1.73	706,399.59	4.180E+00	Pulse	0.30	3
Ni			2	85.615	ug/l	1.79	207,298.05	1.227E+00	Pulse	0.30	3
Cu			2	90.509	ug/l	1.46	575,268.02	3.404E+00	Pulse	0.30	3
Zn			2	104.310	ug/l	0.09	88,716.41	5.249E-01	Pulse	0.30	3
As			2	72.404	ug/l	0.41	30,856.97	1.826E-01	Pulse	1.00	3
Cd			2	73.124	ug/l	1.32	84,906.26	1.027E-01	Pulse	0.30	3
Sn			2	77.620	ug/l	0.75	166,606.03	2.014E-01	Pulse	0.30	3
Se			3	340.209	ug/l	0.36	46,831.41	2.098E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,872,515.60	0.47	108.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,519,283.88	0.84	113.1	Analog	0.10	3
1	Ge		961,680.45	1.35	104.9	Pulse	0.10	3
1	Ge		1,345,726.65	1.03	105.1	Pulse	0.10	3
1	Rh		6,753,433.44	0.98	99.2	Analog	0.10	3
1	In		7,468,344.00	0.45	103.4	Analog	0.10	3
1	Tb		10,105,362.97	0.44	107.4	Analog	0.10	3
1	Ho		989,047.33	1.25	111.3	Pulse	0.10	3
1	Bi		5,413,241.59	0.03	98.3	Mix	0.10	3
2	Sc		169,030.98	1.41	105.6	Pulse	0.30	3
2	Ge		89,225.94	0.57	101.4	Pulse	0.30	3
2	Ge		135,875.48	0.88	99.9	Pulse	0.30	3
2	Rh		2,717,288.29	0.10	96.8	Pulse	0.30	3
2	In		827,106.96	0.22	96.8	Pulse	0.30	3
2	Tb		3,323,671.39	0.36	100.1	Pulse	0.30	3
2	Ho		333,065.46	0.41	103.6	Pulse	0.30	3
2	Bi		2,028,180.06	0.35	92.0	Pulse	0.30	3
3	Sc		258,329.16	0.44	117.2	Pulse	0.30	3
3	Ge		145,819.20	0.67	110.1	Pulse	0.30	3
3	Ge		223,206.32	0.16	109.7	Pulse	0.30	3
3	Rh		2,532,595.52	0.21	102.3	Pulse	0.30	3
3	Tb		3,883,179.43	0.26	105.2	Pulse	0.30	3

Quantitation Report

File Name	051SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 15:14
Sample Name	jc86095-4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.632	ug/l	1.71	4,253.92	1.504E-03	Pulse	0.25	3
B			1	68.982	ug/l	0.19	440,542.18	1.557E-01	Pulse	0.15	3
Ca			1	29340.414	ug/l	0.75	27,375,259.59	4.989E+00	Analog	0.10	3
Sr			1	238.348	ug/l	0.58	10,404,445.05	1.530E+00	Analog	0.10	3
Mo			1	6.791	ug/l	0.80	56,848.45	8.360E-03	Pulse	0.10	3
Ag			1	0.070	ug/l	16.16	1,676.82	2.204E-04	Pulse	0.10	3
Sn			1	2.435	ug/l	0.92	27,521.56	3.619E-03	Pulse	0.10	3
Sb			1	0.462	ug/l	3.90	8,562.69	8.377E-04	Pulse	0.10	3
Ba			1	83.011	ug/l	1.43	529,611.10	5.182E-02	Pulse	0.10	3
Tl			1	0.136	ug/l	7.58	5,664.62	1.022E-03	Pulse	0.10	3
Pb			1	18.582	ug/l	0.90	230,337.21	4.157E-02	Pulse	0.10	3
Pb			1	17.316	ug/l	0.73	192,407.18	3.473E-02	Pulse	0.10	3
Pb			1	17.877	ug/l	0.23	902,789.36	1.629E-01	Pulse	0.10	3
Na			2	36238.543	ug/l	0.29	31,335,976.53	1.874E+02	Analog	0.30	3
Mg			2	3799.455	ug/l	0.58	1,523,052.34	9.107E+00	Pulse	0.30	3
Al			2	7721.233	ug/l	0.76	993,270.55	5.939E+00	Pulse	0.30	3
K			2	4835.104	ug/l	0.42	1,174,142.59	7.021E+00	Pulse	0.30	3
Ca			2	30214.941	ug/l	1.03	421,359.14	2.520E+00	Pulse	0.30	3
Ti			2	356.131	ug/l	2.01	39,434.83	2.358E-01	Pulse	0.30	3
V			2	18.539	ug/l	0.79	68,616.47	4.103E-01	Pulse	0.30	3
Cr			2	16.914	ug/l	1.37	81,872.67	4.896E-01	Pulse	0.30	3
Mn			2	357.725	ug/l	0.88	859,215.14	5.138E+00	Pulse	0.30	3
Fe			2	9464.572	ug/l	0.89	36,751,399.65	2.198E+02	Analog	0.30	3
Co			2	3.877	ug/l	0.87	33,498.51	2.003E-01	Pulse	0.30	3
Ni			2	8.885	ug/l	2.32	21,352.83	1.277E-01	Pulse	0.30	3
Cu			2	13.770	ug/l	0.19	87,212.57	5.215E-01	Pulse	0.30	3
Zn			2	42.982	ug/l	1.83	36,286.85	2.170E-01	Pulse	0.30	3
As			2	4.838	ug/l	1.91	2,053.80	1.228E-02	Pulse	1.00	3
Cd			2	0.102	ug/l	14.89	136.19	1.619E-04	Pulse	0.30	3
Sn			2	1.854	ug/l	7.56	4,409.56	5.242E-03	Pulse	0.30	3
Se			3	2.287	ug/l	3.22	330.47	1.479E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,828,937.36	0.25	106.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,486,980.54	0.33	112.4	Analog	0.10	3
1	Ge		961,424.46	0.79	104.8	Pulse	0.10	3
1	Ge		1,343,848.16	0.99	105.0	Pulse	0.10	3
1	Rh		6,799,745.73	1.00	99.9	Analog	0.10	3
1	In		7,605,395.02	0.39	105.3	Analog	0.10	3
1	Tb		10,222,141.93	1.45	108.6	Analog	0.10	3
1	Ho		992,704.44	1.21	111.8	Pulse	0.10	3
1	Bi		5,540,780.96	0.41	100.6	Analog	0.10	3
2	Sc		167,240.85	0.37	104.4	Pulse	0.30	3
2	Ge		89,748.63	0.50	102.0	Pulse	0.30	3
2	Ge		135,665.91	0.29	99.7	Pulse	0.30	3
2	Rh		2,755,448.57	0.37	98.1	Pulse	0.30	3
2	In		841,125.79	0.22	98.5	Pulse	0.30	3
2	Tb		3,378,043.76	0.43	101.7	Pulse	0.30	3
2	Ho		336,281.70	0.62	104.6	Pulse	0.30	3
2	Bi		2,074,309.43	0.24	94.1	Pulse	0.30	3
3	Sc		255,583.07	0.53	116.0	Pulse	0.30	3
3	Ge		144,939.29	0.62	109.5	Pulse	0.30	3
3	Ge		223,482.93	0.05	109.8	Pulse	0.30	3
3	Rh		2,559,071.57	0.81	103.4	Pulse	0.30	3
3	Tb		3,931,665.40	0.69	106.5	Pulse	0.30	3

Quantitation Report

File Name	052SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 15:19
Sample Name	mp14059a-sd1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.696	ug/l	13.64	1,005.38	3.482E-04	Pulse	0.25	3
B			1	68.251	ug/l	1.79	104,134.34	3.606E-02	Pulse	0.15	3
Ca			1	29898.636	ug/l	1.46	5,733,139.71	1.020E+00	Analog	0.10	3
Sr			1	223.240	ug/l	0.99	2,116,285.13	2.867E-01	Pulse	0.10	3
Mo			1	6.414	ug/l	2.31	11,811.45	1.600E-03	Pulse	0.10	3
Ag			1	0.111	ug/l	8.58	626.70	7.793E-05	Pulse	0.10	3
Sn			1	4.447	ug/l	2.41	5,671.26	7.053E-04	Pulse	0.10	3
Sb			1	0.253	ug/l	2.89	2,336.93	2.266E-04	Pulse	0.10	3
Ba			1	85.225	ug/l	2.47	109,796.91	1.065E-02	Pulse	0.10	3
Tl			1	0.123	ug/l	14.97	1,676.82	2.833E-04	Pulse	0.10	3
Pb			1	18.030	ug/l	3.56	48,038.61	8.112E-03	Pulse	0.10	3
Pb			1	16.614	ug/l	0.30	39,694.25	6.700E-03	Pulse	0.10	3
Pb			1	17.159	ug/l	2.17	186,311.05	3.146E-02	Pulse	0.10	3
Na			2	35194.785	ug/l	0.80	6,518,436.55	3.645E+01	Analog	0.30	3
Mg			2	3819.607	ug/l	1.30	328,171.57	1.835E+00	Pulse	0.30	3
Al			2	7963.150	ug/l	1.09	219,345.63	1.226E+00	Pulse	0.30	3
K			2	4853.014	ug/l	0.09	258,625.53	1.446E+00	Pulse	0.30	3
Ca			2	30564.317	ug/l	0.43	91,392.46	5.110E-01	Pulse	0.30	3
Ti			2	362.700	ug/l	7.07	8,590.27	4.803E-02	Pulse	0.30	3
V			2	17.478	ug/l	2.33	14,208.45	7.944E-02	Pulse	0.30	3
Cr			2	16.197	ug/l	1.67	17,243.52	9.642E-02	Pulse	0.30	3
Mn			2	362.032	ug/l	0.57	186,075.92	1.040E+00	Pulse	0.30	3
Fe			2	9512.152	ug/l	1.36	7,912,356.63	4.424E+01	Analog	0.30	3
Co			2	3.815	ug/l	5.19	7,136.06	3.991E-02	Pulse	0.30	3
Ni			2	8.927	ug/l	3.53	4,647.37	2.598E-02	Pulse	0.30	3
Cu			2	14.129	ug/l	0.57	19,750.85	1.104E-01	Pulse	0.30	3
Zn			2	55.767	ug/l	3.96	10,228.84	5.720E-02	Pulse	0.30	3
As			2	5.470	ug/l	3.65	508.68	2.844E-03	Pulse	1.00	3
Cd			2	0.154	ug/l	25.01	57.18	6.148E-05	Pulse	0.30	3
Sn			2	1.041	ug/l	2.28	912.26	9.810E-04	Pulse	0.30	3
Se			3	2.473	ug/l	5.15	84.93	3.737E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,888,031.18	0.20	108.7	Pulse	0.10	3
1	Sc		5,620,027.21	1.41	115.1	Analog	0.10	3
1	Ge		1,031,926.52	1.45	112.5	Pulse	0.10	3

Quantitation Report

1	Ge		1,450,899.35	0.91	113.4	Pulse	0.10	3
1	Rh		7,380,726.14	0.74	108.5	Analog	0.10	3
1	In		8,042,863.30	0.99	111.3	Analog	0.10	3
1	Tb		10,310,856.72	0.94	109.6	Analog	0.10	3
1	Ho		972,744.57	1.29	109.5	Pulse	0.10	3
1	Bi		5,924,049.91	1.58	107.6	Analog	0.10	3
2	Sc		178,850.99	0.48	111.7	Pulse	0.30	3
2	Ge		99,060.34	0.31	112.6	Pulse	0.30	3
2	Ge		151,509.90	0.85	111.4	Pulse	0.30	3
2	Rh		3,004,213.35	0.42	107.0	Pulse	0.30	3
2	In		929,917.90	0.26	108.9	Pulse	0.30	3
2	Tb		3,534,913.61	0.55	106.4	Pulse	0.30	3
2	Ho		342,906.34	0.74	106.7	Pulse	0.30	3
2	Bi		2,307,218.17	0.29	104.7	Pulse	0.30	3
3	Sc		246,568.20	0.07	111.9	Pulse	0.30	3
3	Ge		147,579.52	0.76	111.4	Pulse	0.30	3
3	Ge		227,224.11	0.55	111.6	Pulse	0.30	3
3	Rh		2,622,793.78	0.29	106.0	Pulse	0.30	3
3	Tb		3,905,572.48	0.38	105.8	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 15:24
Sample Name	mp14059a-s4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	75.124	ug/l	0.86	486,953.57	1.763E-01	Pulse	0.25	3
B			1	154.351	ug/l	0.43	940,255.10	3.404E-01	Pulse	0.15	3
Ca			1	33764.557	ug/l	0.67	31,061,622.04	5.741E+00	Analog	0.10	3
Sr			1	335.109	ug/l	0.86	14,227,665.21	2.151E+00	Analog	0.10	3
Mo			1	89.996	ug/l	1.04	730,522.33	1.105E-01	Pulse	0.10	3
Ag			1	78.037	ug/l	1.38	1,734,952.58	2.342E-01	Pulse	0.10	3
Sn			1	77.680	ug/l	1.58	1,077,310.77	1.454E-01	Pulse	0.10	3
Sb			1	73.849	ug/l	1.16	1,098,263.87	1.099E-01	Pulse	0.10	3
Ba			1	172.866	ug/l	0.83	1,078,411.91	1.079E-01	Pulse	0.10	3
Tl			1	84.412	ug/l	0.29	2,980,199.75	5.612E-01	Pulse	0.10	3
Pb			1	106.177	ug/l	0.40	1,260,027.46	2.373E-01	Pulse	0.10	3
Pb			1	102.701	ug/l	0.44	1,092,482.79	2.057E-01	Pulse	0.10	3
Pb			1	104.202	ug/l	0.57	5,037,702.92	9.487E-01	Pulse	0.10	3
Na			2	41264.089	ug/l	1.78	35,453,761.92	2.133E+02	Analog	0.30	3
Mg			2	7984.582	ug/l	0.80	3,179,624.18	1.913E+01	Pulse	0.30	3
Al			2	13564.902	ug/l	0.99	1,733,774.72	1.043E+01	Pulse	0.30	3
K			2	9236.639	ug/l	0.94	2,221,873.87	1.337E+01	Pulse	0.30	3
Ca			2	35266.404	ug/l	0.29	488,666.61	2.940E+00	Pulse	0.30	3
Ti			2	512.803	ug/l	1.04	56,423.63	3.395E-01	Pulse	0.30	3
V			2	101.772	ug/l	0.60	372,398.28	2.241E+00	Pulse	0.30	3
Cr			2	98.051	ug/l	0.94	469,023.17	2.822E+00	Pulse	0.30	3
Mn			2	456.309	ug/l	0.11	1,089,079.99	6.553E+00	Pulse	0.30	3
Fe			2	14840.855	ug/l	1.38	57,254,462.17	3.445E+02	Analog	0.30	3
Co			2	82.688	ug/l	0.32	707,988.46	4.260E+00	Pulse	0.30	3
Ni			2	86.248	ug/l	0.64	205,347.54	1.236E+00	Pulse	0.30	3
Cu			2	91.421	ug/l	0.54	571,351.02	3.438E+00	Pulse	0.30	3
Zn			2	120.475	ug/l	0.85	100,708.04	6.060E-01	Pulse	0.30	3
As			2	73.512	ug/l	0.81	30,802.18	1.854E-01	Pulse	1.00	3
Cd			2	73.987	ug/l	0.41	85,646.82	1.039E-01	Pulse	0.30	3
Sn			2	78.133	ug/l	0.33	167,195.07	2.028E-01	Pulse	0.30	3
Se			3	343.606	ug/l	0.31	46,371.24	2.119E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,762,550.73	0.68	104.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,410,560.13	0.30	110.8	Analog	0.10	3
1	Ge		942,301.73	1.51	102.7	Pulse	0.10	3
1	Ge		1,321,972.22	0.92	103.3	Pulse	0.10	3
1	Rh		6,613,628.44	0.38	97.2	Analog	0.10	3
1	In		7,408,689.63	0.71	102.5	Analog	0.10	3
1	Tb		9,995,059.43	0.71	106.2	Analog	0.10	3
1	Ho		975,166.73	1.68	109.8	Pulse	0.10	3
1	Bi		5,310,557.52	1.42	96.4	Pulse	0.10	3
2	Sc		166,186.06	0.40	103.8	Pulse	0.30	3
2	Ge		88,400.23	0.98	100.5	Pulse	0.30	3
2	Ge		134,078.54	0.19	98.6	Pulse	0.30	3
2	Rh		2,691,235.03	0.49	95.8	Pulse	0.30	3
2	In		824,583.07	0.31	96.5	Pulse	0.30	3
2	Tb		3,335,523.83	0.19	100.4	Pulse	0.30	3
2	Ho		334,692.82	0.80	104.1	Pulse	0.30	3
2	Bi		2,039,845.68	0.38	92.6	Pulse	0.30	3
3	Sc		253,776.31	1.13	115.1	Pulse	0.30	3
3	Ge		142,465.67	0.22	107.6	Pulse	0.30	3
3	Ge		218,831.01	0.55	107.5	Pulse	0.30	3
3	Rh		2,492,540.60	0.35	100.7	Pulse	0.30	3
3	Tb		3,853,120.68	0.54	104.4	Pulse	0.30	3

Quantitation Report

File Name	054SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 15:29
Sample Name	mp14084-b1 5
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	73.136	ug/l	0.91	504,623.75	1.716E-01	Pulse	0.25	3
B			1	84.469	ug/l	0.43	556,411.21	1.892E-01	Pulse	0.15	3
Ca			1	4159.286	ug/l	1.01	3,860,205.67	7.110E-01	Pulse	0.10	3
Sr			1	81.475	ug/l	1.13	3,752,448.69	5.231E-01	Pulse	0.10	3
Mo			1	80.367	ug/l	0.84	707,554.99	9.864E-02	Pulse	0.10	3
Ag			1	78.033	ug/l	0.33	1,855,021.12	2.342E-01	Pulse	0.10	3
Sn			1	75.600	ug/l	0.84	1,120,819.46	1.415E-01	Pulse	0.10	3
Sb			1	75.372	ug/l	0.90	1,184,546.05	1.121E-01	Pulse	0.10	3
Ba			1	77.363	ug/l	1.37	510,104.83	4.829E-02	Pulse	0.10	3
Tl			1	80.433	ug/l	1.16	3,105,215.68	5.347E-01	Pulse	0.10	3
Pb			1	80.877	ug/l	0.28	1,049,662.22	1.808E-01	Pulse	0.10	3
Pb			1	79.521	ug/l	0.39	925,109.96	1.593E-01	Pulse	0.10	3
Pb			1	80.174	ug/l	0.28	4,239,057.41	7.300E-01	Pulse	0.10	3
Na			2	4014.723	ug/l	0.33	3,534,418.33	2.082E+01	Pulse	0.30	3
Mg			2	3950.860	ug/l	0.63	1,607,913.68	9.470E+00	Pulse	0.30	3
Al			2	3887.474	ug/l	0.13	507,885.66	2.991E+00	Pulse	0.30	3
K			2	4072.507	ug/l	0.13	1,005,301.42	5.921E+00	Pulse	0.30	3
Ca			2	4423.295	ug/l	1.82	62,857.62	3.702E-01	Pulse	0.30	3
Ti			2	77.256	ug/l	3.80	8,685.69	5.115E-02	Pulse	0.30	3
V			2	79.847	ug/l	0.16	298,613.04	1.759E+00	Pulse	0.30	3
Cr			2	79.601	ug/l	0.15	389,152.34	2.292E+00	Pulse	0.30	3
Mn			2	78.180	ug/l	0.56	190,735.60	1.123E+00	Pulse	0.30	3
Fe			2	4187.044	ug/l	0.67	16,514,816.57	9.726E+01	Analog	0.30	3
Co			2	79.177	ug/l	0.54	692,651.67	4.079E+00	Pulse	0.30	3
Ni			2	78.080	ug/l	0.19	189,948.48	1.119E+00	Pulse	0.30	3
Cu			2	77.469	ug/l	0.26	494,788.40	2.914E+00	Pulse	0.30	3
Zn			2	64.398	ug/l	0.61	55,097.48	3.245E-01	Pulse	0.30	3
As			2	68.899	ug/l	0.52	29,498.15	1.737E-01	Pulse	1.00	3
Cd			2	74.090	ug/l	0.45	89,734.42	1.040E-01	Pulse	0.30	3
Sn			2	76.744	ug/l	0.86	171,835.56	1.992E-01	Pulse	0.30	3
Se			3	335.543	ug/l	0.45	47,301.81	2.069E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,940,481.70	0.91	110.7	Pulse	0.10	3
1	Sc		5,429,660.75	1.11	111.2	Analog	0.10	3
1	Ge		997,820.58	1.11	108.8	Pulse	0.10	3

Quantitation Report

1	Ge		1,398,694.04	1.16	109.3	Pulse	0.10	3
1	Rh		7,172,859.48	0.66	105.4	Analog	0.10	3
1	In		7,921,552.80	1.52	109.6	Analog	0.10	3
1	Tb		10,563,432.13	1.30	112.3	Analog	0.10	3
1	Ho		985,368.47	1.13	110.9	Pulse	0.10	3
1	Bi		5,807,235.12	0.97	105.4	Analog	0.10	3
2	Sc		169,795.93	0.24	106.0	Pulse	0.30	3
2	Ge		91,003.37	0.94	103.5	Pulse	0.30	3
2	Ge		140,760.83	0.42	103.5	Pulse	0.30	3
2	Rh		2,907,782.52	0.39	103.6	Pulse	0.30	3
2	In		862,748.80	0.44	101.0	Pulse	0.30	3
2	Tb		3,422,534.52	0.33	103.1	Pulse	0.30	3
2	Ho		332,647.44	0.49	103.5	Pulse	0.30	3
2	Bi		2,177,282.90	0.28	98.8	Pulse	0.30	3
3	Sc		259,431.03	0.92	117.7	Pulse	0.30	3
3	Ge		147,639.95	1.26	111.5	Pulse	0.30	3
3	Ge		228,583.45	0.21	112.3	Pulse	0.30	3
3	Rh		2,695,498.09	0.19	108.9	Pulse	0.30	3
3	Tb		4,007,766.93	0.20	108.6	Pulse	0.30	3

Quantitation Report

File Name	055SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 15:34
Sample Name	mp14084-s1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.116	ug/l	0.68	504,556.61	1.739E-01	Pulse	0.25	3
B			1	197.830	ug/l	1.47	1,260,365.58	4.344E-01	Pulse	0.15	3
Ca			1	43836.499	ug/l	0.39	39,978,314.40	7.452E+00	Analog	0.10	3
Sr			1	398.859	ug/l	1.96	17,399,841.41	2.561E+00	Analog	0.10	3
Mo			1	83.892	ug/l	1.68	699,763.87	1.030E-01	Pulse	0.10	3
Ag			1	78.136	ug/l	1.29	1,769,619.71	2.345E-01	Pulse	0.10	3
Sn			1	78.452	ug/l	1.15	1,108,432.46	1.469E-01	Pulse	0.10	3
Sb			1	77.696	ug/l	0.14	1,174,102.04	1.156E-01	Pulse	0.10	3
Ba			1	94.546	ug/l	0.78	599,424.65	5.902E-02	Pulse	0.10	3
Tl			1	81.936	ug/l	0.61	3,027,574.75	5.447E-01	Pulse	0.10	3
Pb			1	94.156	ug/l	1.28	1,169,436.78	2.104E-01	Pulse	0.10	3
Pb			1	92.323	ug/l	1.18	1,027,834.72	1.849E-01	Pulse	0.10	3
Pb			1	93.084	ug/l	1.25	4,709,903.03	8.475E-01	Pulse	0.10	3
Na			2	26900.501	ug/l	1.89	23,220,105.74	1.391E+02	Analog	0.30	3
Mg			2	9254.744	ug/l	0.74	3,701,903.32	2.218E+01	Pulse	0.30	3
Al			2	3853.430	ug/l	0.72	494,950.15	2.965E+00	Pulse	0.30	3
K			2	11700.321	ug/l	0.68	2,825,168.85	1.692E+01	Pulse	0.30	3
Ca			2	44769.103	ug/l	0.73	623,055.13	3.732E+00	Pulse	0.30	3
Ti			2	78.532	ug/l	2.38	8,681.23	5.200E-02	Pulse	0.30	3
V			2	81.026	ug/l	0.73	297,905.76	1.785E+00	Pulse	0.30	3
Cr			2	80.447	ug/l	0.56	386,651.61	2.316E+00	Pulse	0.30	3
Mn			2	119.706	ug/l	0.77	287,063.21	1.720E+00	Pulse	0.30	3
Fe			2	5171.664	ug/l	0.45	20,051,422.53	1.201E+02	Analog	0.30	3
Co			2	79.066	ug/l	0.84	680,018.29	4.074E+00	Pulse	0.30	3
Ni			2	82.125	ug/l	1.60	196,408.99	1.177E+00	Pulse	0.30	3
Cu			2	136.432	ug/l	0.47	856,147.55	5.129E+00	Pulse	0.30	3
Zn			2	135.174	ug/l	0.94	113,477.96	6.798E-01	Pulse	0.30	3
As			2	105.117	ug/l	0.64	44,238.10	2.650E-01	Pulse	1.00	3
Cd			2	74.361	ug/l	1.73	87,100.89	1.044E-01	Pulse	0.30	3
Sn			2	79.471	ug/l	0.35	172,077.71	2.062E-01	Pulse	0.30	3
Se			3	333.907	ug/l	0.15	46,261.19	2.059E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,901,382.54	0.16	109.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,364,918.04	1.41	109.9	Mix	0.10	3
1	Ge		964,987.90	1.02	105.2	Pulse	0.10	3
1	Ge		1,351,763.05	1.08	105.6	Pulse	0.10	3
1	Rh		6,796,446.78	1.21	99.9	Analog	0.10	3
1	In		7,546,903.62	0.75	104.4	Analog	0.10	3
1	Tb		10,156,777.14	0.58	107.9	Analog	0.10	3
1	Ho		965,208.40	0.88	108.7	Pulse	0.10	3
1	Bi		5,557,855.54	0.62	100.9	Analog	0.10	3
2	Sc		166,936.21	0.54	104.3	Pulse	0.30	3
2	Ge		88,614.68	0.87	100.7	Pulse	0.30	3
2	Ge		136,148.90	0.85	100.1	Pulse	0.30	3
2	Rh		2,749,656.35	0.15	97.9	Pulse	0.30	3
2	In		834,414.27	0.57	97.7	Pulse	0.30	3
2	Tb		3,346,874.38	0.08	100.8	Pulse	0.30	3
2	Ho		326,168.10	0.07	101.5	Pulse	0.30	3
2	Bi		2,053,240.47	0.39	93.2	Pulse	0.30	3
3	Sc		256,545.79	0.71	116.4	Pulse	0.30	3
3	Ge		145,148.89	0.12	109.6	Pulse	0.30	3
3	Ge		224,648.97	0.59	110.4	Pulse	0.30	3
3	Rh		2,555,902.67	0.32	103.3	Pulse	0.30	3
3	Tb		3,936,372.48	0.25	106.7	Pulse	0.30	3

Quantitation Report

File Name	056SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 15:39
Sample Name	mp14084-s2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	73.024	ug/l	0.82	496,408.69	1.713E-01	Pulse	0.25	3
B			1	195.183	ug/l	0.48	1,241,937.76	4.287E-01	Pulse	0.15	3
Ca			1	43614.434	ug/l	0.43	39,186,217.75	7.414E+00	Analog	0.10	3
Sr			1	386.642	ug/l	0.41	16,851,944.33	2.482E+00	Analog	0.10	3
Mo			1	82.246	ug/l	1.56	685,394.26	1.009E-01	Pulse	0.10	3
Ag			1	76.621	ug/l	0.36	1,734,310.34	2.299E-01	Pulse	0.10	3
Sn			1	77.184	ug/l	0.37	1,089,756.80	1.445E-01	Pulse	0.10	3
Sb			1	75.658	ug/l	1.52	1,143,239.23	1.126E-01	Pulse	0.10	3
Ba			1	92.611	ug/l	0.88	587,123.59	5.781E-02	Pulse	0.10	3
Tl			1	81.894	ug/l	1.18	2,982,255.27	5.445E-01	Pulse	0.10	3
Pb			1	93.724	ug/l	1.16	1,147,305.53	2.095E-01	Pulse	0.10	3
Pb			1	92.049	ug/l	1.34	1,009,992.22	1.844E-01	Pulse	0.10	3
Pb			1	92.981	ug/l	1.30	4,636,783.71	8.465E-01	Pulse	0.10	3
Na			2	26873.558	ug/l	1.12	23,015,494.08	1.390E+02	Analog	0.30	3
Mg			2	9175.459	ug/l	0.90	3,641,261.25	2.199E+01	Pulse	0.30	3
Al			2	3822.847	ug/l	0.88	487,153.52	2.941E+00	Pulse	0.30	3
K			2	11584.146	ug/l	0.98	2,775,134.54	1.676E+01	Pulse	0.30	3
Ca			2	44519.964	ug/l	0.70	614,715.13	3.712E+00	Pulse	0.30	3
Ti			2	76.261	ug/l	0.19	8,363.31	5.050E-02	Pulse	0.30	3
V			2	80.336	ug/l	0.54	293,048.14	1.769E+00	Pulse	0.30	3
Cr			2	80.481	ug/l	0.45	383,774.37	2.317E+00	Pulse	0.30	3
Mn			2	118.590	ug/l	0.45	282,154.39	1.704E+00	Pulse	0.30	3
Fe			2	5142.580	ug/l	1.10	19,781,290.88	1.194E+02	Analog	0.30	3
Co			2	78.885	ug/l	0.43	673,133.11	4.064E+00	Pulse	0.30	3
Ni			2	82.332	ug/l	0.79	195,360.66	1.180E+00	Pulse	0.30	3
Cu			2	135.879	ug/l	0.33	845,985.09	5.108E+00	Pulse	0.30	3
Zn			2	135.469	ug/l	0.69	112,832.57	6.813E-01	Pulse	0.30	3
As			2	104.504	ug/l	1.21	43,632.18	2.635E-01	Pulse	1.00	3
Cd			2	73.641	ug/l	0.32	86,053.69	1.034E-01	Pulse	0.30	3
Sn			2	79.357	ug/l	2.00	171,419.45	2.059E-01	Pulse	0.30	3
Se			3	329.012	ug/l	0.29	45,502.21	2.029E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,897,150.41	0.45	109.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,285,322.21	1.48	108.3	Mix	0.10	3
1	Ge		958,050.12	0.84	104.5	Pulse	0.10	3
1	Ge		1,345,176.18	1.42	105.1	Pulse	0.10	3
1	Rh		6,789,490.73	1.18	99.8	Analog	0.10	3
1	In		7,542,402.51	1.32	104.4	Analog	0.10	3
1	Tb		10,156,139.01	0.74	107.9	Analog	0.10	3
1	Ho		954,872.75	0.79	107.5	Pulse	0.10	3
1	Bi		5,478,119.50	1.57	99.5	Mix	0.10	3
2	Sc		165,622.84	0.67	103.4	Pulse	0.30	3
2	Ge		89,381.21	1.25	101.6	Pulse	0.30	3
2	Ge		135,898.98	0.54	99.9	Pulse	0.30	3
2	Rh		2,748,037.88	0.19	97.9	Pulse	0.30	3
2	In		832,390.49	0.17	97.4	Pulse	0.30	3
2	Tb		3,343,054.52	0.38	100.7	Pulse	0.30	3
2	Ho		325,776.70	0.46	101.3	Pulse	0.30	3
2	Bi		2,052,947.00	0.34	93.1	Pulse	0.30	3
3	Sc		254,389.40	0.68	115.4	Pulse	0.30	3
3	Ge		144,572.74	0.31	109.2	Pulse	0.30	3
3	Ge		224,250.41	0.40	110.2	Pulse	0.30	3
3	Rh		2,552,807.19	0.24	103.1	Pulse	0.30	3
3	Tb		3,915,926.37	0.35	106.1	Pulse	0.30	3

Quantitation Report

File Name	057_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 15:44
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.347	ug/l	1.15	689,094.67	2.363E-01	Pulse	0.25	3
B			1	103.196	ug/l	1.27	1,321,047.59	4.529E-01	Pulse	0.15	3
Ca			1	5189.857	ug/l	1.35	9,791,890.27	1.768E+00	Analog	0.10	3
Sr			1	52.435	ug/l	1.28	4,843,772.74	6.733E-01	Pulse	0.10	3
Mo			1	51.630	ug/l	1.31	911,722.72	1.267E-01	Pulse	0.10	3
Ag			1	49.330	ug/l	1.10	2,336,498.82	2.961E-01	Pulse	0.10	3
Sn			1	48.239	ug/l	1.15	1,427,172.89	1.808E-01	Pulse	0.10	3
Sb			1	49.659	ug/l	1.71	1,523,221.64	1.477E-01	Pulse	0.10	3
Ba			1	50.299	ug/l	1.70	647,477.76	6.279E-02	Pulse	0.10	3
Tl			1	51.007	ug/l	0.78	3,864,337.75	6.782E-01	Pulse	0.10	3
Pb			1	50.980	ug/l	1.16	1,298,324.48	2.279E-01	Pulse	0.10	3
Pb			1	50.412	ug/l	0.73	1,150,827.04	2.020E-01	Pulse	0.10	3
Pb			1	50.563	ug/l	0.83	5,246,000.65	9.207E-01	Pulse	0.10	3
Na			2	4998.648	ug/l	1.03	9,141,263.80	5.174E+01	Analog	0.30	3
Mg			2	4849.893	ug/l	0.78	4,106,460.39	2.324E+01	Pulse	0.30	3
Al			2	4929.098	ug/l	0.39	1,339,719.39	7.583E+00	Pulse	0.30	3
K			2	5082.484	ug/l	0.50	2,598,877.26	1.471E+01	Pulse	0.30	3
Ca			2	5250.145	ug/l	1.05	154,881.85	8.766E-01	Pulse	0.30	3
Ti			2	51.184	ug/l	2.90	11,975.52	6.778E-02	Pulse	0.30	3
V			2	50.642	ug/l	0.45	394,030.03	2.230E+00	Pulse	0.30	3
Cr			2	49.851	ug/l	0.53	507,043.19	2.870E+00	Pulse	0.30	3
Mn			2	49.522	ug/l	0.21	251,409.63	1.423E+00	Pulse	0.30	3
Fe			2	5105.313	ug/l	1.01	41,885,455.00	2.371E+02	Analog	0.30	3
Co			2	49.408	ug/l	0.63	899,500.90	5.091E+00	Pulse	0.30	3
Ni			2	48.511	ug/l	0.82	245,582.21	1.390E+00	Pulse	0.30	3
Cu			2	48.301	ug/l	0.93	641,832.11	3.633E+00	Pulse	0.30	3
Zn			2	47.319	ug/l	1.40	84,152.76	4.763E-01	Pulse	0.30	3
As			2	49.581	ug/l	0.63	44,169.23	2.500E-01	Pulse	1.00	3
Cd			2	49.299	ug/l	0.23	125,131.53	1.384E-01	Pulse	0.30	3
Sn			2	48.839	ug/l	0.26	229,065.68	2.534E-01	Pulse	0.30	3
Se			3	198.319	ug/l	0.27	53,939.00	2.446E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,916,660.30	0.67	109.8	Pulse	0.10	3
1	Sc		5,539,901.17	2.23	113.5	Analog	0.10	3
1	Ge		1,018,924.99	1.33	111.1	Pulse	0.10	3

Quantitation Report

1	Ge		1,443,936.33	1.11	112.8	Pulse	0.10	3
1	Rh		7,195,472.81	2.74	105.7	Analog	0.10	3
1	In		7,892,935.42	2.56	109.2	Analog	0.10	3
1	Tb		10,311,504.02	0.33	109.6	Analog	0.10	3
1	Ho		964,492.38	1.28	108.6	Pulse	0.10	3
1	Bi		5,697,861.17	0.93	103.5	Analog	0.10	3
2	Sc		176,684.96	0.51	110.3	Pulse	0.30	3
2	Ge		97,246.69	0.62	110.6	Pulse	0.30	3
2	Ge		148,710.13	0.29	109.3	Pulse	0.30	3
2	Rh		2,911,659.89	0.47	103.7	Pulse	0.30	3
2	In		904,064.73	0.23	105.8	Pulse	0.30	3
2	Tb		3,480,101.60	0.21	104.8	Pulse	0.30	3
2	Ho		338,627.10	0.63	105.3	Pulse	0.30	3
2	Bi		2,211,926.37	0.43	100.4	Pulse	0.30	3
3	Sc		243,535.99	0.37	110.5	Pulse	0.30	3
3	Ge		142,286.71	0.65	107.5	Pulse	0.30	3
3	Ge		220,517.14	0.36	108.3	Pulse	0.30	3
3	Rh		2,526,716.29	0.42	102.1	Pulse	0.30	3
3	Tb		3,797,233.18	0.60	102.9	Pulse	0.30	3

Quantitation Report

File Name	058_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 15:49
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.013	ug/l	14.49	240.01	8.398E-05	Pulse	0.25	3
B			1	1.764	ug/l	3.43	40,488.46	1.416E-02	Pulse	0.15	3
Ca			1	0.758	ug/l	57.16	24,608.80	4.576E-03	Pulse	0.10	3
Sr			1	0.024	ug/l	8.64	3,197.15	4.368E-04	Pulse	0.10	3
Mo			1	0.081	ug/l	26.09	1,643.48	2.242E-04	Pulse	0.10	3
Ag			1	0.018	ug/l	9.20	926.73	1.180E-04	Pulse	0.10	3
Sn			1	0.430	ug/l	2.72	5,104.37	6.497E-04	Pulse	0.10	3
Sb			1	0.317	ug/l	5.74	11,117.62	1.093E-03	Pulse	0.10	3
Ba			1	0.008	ug/l	17.91	210.01	2.065E-05	Pulse	0.10	3
Tl			1	0.017	ug/l	22.67	2,010.22	3.424E-04	Pulse	0.10	3
Pb			1	0.027	ug/l	12.58	1,030.07	1.754E-04	Pulse	0.10	3
Pb			1	0.026	ug/l	15.94	880.06	1.499E-04	Pulse	0.10	3
Pb			1	0.026	ug/l	9.19	4,120.38	7.018E-04	Pulse	0.10	3
Na			2	2.806	ug/l	8.11	16,328.02	9.399E-02	Pulse	0.30	3
Mg			2	0.155	ug/l	39.93	974.49	5.610E-03	Pulse	0.30	3
Al			2	0.369	ug/l	47.66	397.79	2.289E-03	Pulse	0.30	3
K			2	2.379	ug/l	13.12	9,167.06	5.277E-02	Pulse	0.30	3
Ca			2	-5.346	ug/l	-28.99	122.22	7.031E-04	Pulse	0.30	3
Ti			2	0.033	ug/l	24.90	8.89	5.117E-05	Pulse	0.30	3
V			2	0.000	ug/l	16756.28	444.46	2.559E-03	Pulse	0.30	3
Cr			2	0.010	ug/l	11.37	674.47	3.883E-03	Pulse	0.30	3
Mn			2	0.045	ug/l	13.24	331.12	1.906E-03	Pulse	0.30	3
Fe			2	0.060	ug/l	40.68	15,206.02	8.753E-02	Pulse	0.30	3
Co			2	0.007	ug/l	35.20	234.45	1.350E-03	Pulse	0.30	3
Ni			2	0.003	ug/l	41.52	88.89	5.118E-04	Pulse	0.30	3
Cu			2	0.037	ug/l	6.47	1,232.28	7.094E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.001	ug/l	2916.89	211.11	1.215E-03	Pulse	0.30	3
As			2	0.017	ug/l	31.37	29.67	1.708E-04	Pulse	1.00	3
Cd			2	0.007	ug/l	28.01	35.45	3.892E-05	Pulse	0.30	3
Sn			2	0.115	ug/l	1.78	944.48	1.036E-03	Pulse	0.30	3
Se			3	0.096	ug/l	6.04	41.13	1.866E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,858,577.36	0.36	107.6	Pulse	0.10	3
1	Sc		5,377,080.96	0.37	110.1	Analog	0.10	3
1	Ge		998,429.49	0.68	108.9	Pulse	0.10	3
1	Ge		1,401,914.72	0.88	109.5	Pulse	0.10	3
1	Rh		7,319,656.97	1.11	107.6	Analog	0.10	3
1	In		7,851,817.79	1.67	108.7	Analog	0.10	3
1	Tb		10,171,680.06	0.77	108.1	Analog	0.10	3
1	Ho		943,078.22	0.98	106.2	Pulse	0.10	3
1	Bi		5,872,161.58	0.64	106.6	Analog	0.10	3
2	Sc		173,711.73	0.30	108.5	Pulse	0.30	3
2	Ge		95,928.90	0.87	109.1	Pulse	0.30	3
2	Ge		147,625.91	0.19	108.5	Pulse	0.30	3
2	Rh		2,981,675.44	0.35	106.2	Pulse	0.30	3
2	In		911,271.69	0.63	106.7	Pulse	0.30	3
2	Tb		3,463,911.67	0.45	104.3	Pulse	0.30	3
2	Ho		337,062.57	0.60	104.8	Pulse	0.30	3
2	Bi		2,290,322.13	0.50	103.9	Pulse	0.30	3
3	Sc		241,986.27	0.87	109.8	Pulse	0.30	3
3	Ge		144,363.51	1.05	109.0	Pulse	0.30	3
3	Ge		220,401.79	0.27	108.3	Pulse	0.30	3
3	Rh		2,641,052.53	0.28	106.7	Pulse	0.30	3
3	Tb		3,865,766.65	0.15	104.7	Pulse	0.30	3

Quantitation Report

File Name	059SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 15:54
Sample Name	jc85918-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.016	ug/l	55.88	165.34	5.954E-05	Pulse	0.25	3
B			1	110.255	ug/l	0.20	681,184.28	2.450E-01	Pulse	0.15	3
Ca			1	39021.135	ug/l	0.80	34,115,424.49	6.634E+00	Analog	0.10	3
Sr			1	298.392	ug/l	1.29	12,901,176.06	1.916E+00	Analog	0.10	3
Mo			1	0.336	ug/l	9.50	2,953.72	4.386E-04	Pulse	0.10	3
Ag			1	0.041	ug/l	13.27	1,003.40	1.345E-04	Pulse	0.10	3
Sn			1	1.499	ug/l	0.81	13,819.84	1.853E-03	Pulse	0.10	3
Sb			1	0.521	ug/l	8.88	9,273.12	9.263E-04	Pulse	0.10	3
Ba			1	14.995	ug/l	0.13	93,719.21	9.369E-03	Pulse	0.10	3
Tl			1	0.019	ug/l	13.43	1,346.77	2.449E-04	Pulse	0.10	3
Pb			1	11.273	ug/l	0.78	138,786.14	2.524E-02	Pulse	0.10	3
Pb			1	10.740	ug/l	1.11	118,509.24	2.156E-02	Pulse	0.10	3
Pb			1	10.882	ug/l	0.64	545,797.49	9.927E-02	Pulse	0.10	3
Na			2	22042.579	ug/l	7.87	18,791,482.59	1.140E+02	Analog	0.30	3
Mg			2	5118.901	ug/l	7.78	2,022,403.60	1.227E+01	Pulse	0.30	3
Al			2	7.112	ug/l	79.53	1,225.81	7.191E-03	Pulse	0.30	3
K			2	7307.474	ug/l	7.67	1,745,445.28	1.059E+01	Pulse	0.30	3
Ca			2	38992.983	ug/l	7.63	535,978.76	3.251E+00	Pulse	0.30	3
Ti			2	0.535	ug/l	84.01	62.22	3.613E-04	Pulse	0.30	3
V			2	0.293	ug/l	9.33	1,485.64	9.007E-03	Pulse	0.30	3
Cr			2	0.668	ug/l	14.84	3,698.24	2.249E-02	Pulse	0.30	3
Mn			2	39.970	ug/l	8.10	94,709.73	5.746E-01	Pulse	0.30	3
Fe			2	989.570	ug/l	7.40	3,800,952.90	2.305E+01	Pulse	0.30	3
Co			2	0.610	ug/l	5.31	5,286.47	3.202E-02	Pulse	0.30	3
Ni			2	5.492	ug/l	9.69	13,025.26	7.907E-02	Pulse	0.30	3
Cu			2	59.000	ug/l	7.51	366,076.83	2.220E+00	Pulse	0.30	3
Zn			2	71.321	ug/l	8.09	59,212.91	3.592E-01	Pulse	0.30	3
As			2	34.982	ug/l	8.38	14,543.48	8.825E-02	Pulse	1.00	3
Cd			2	0.023	ug/l	29.08	43.17	5.064E-05	Pulse	0.30	3
Sn			2	0.821	ug/l	5.63	2,181.28	2.567E-03	Pulse	0.30	3
Se			3	0.090	ug/l	3.76	26.93	1.242E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,780,418.89	0.56	104.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,142,755.13	0.70	105.3	Pulse	0.10	3
1	Ge		927,580.40	0.61	101.1	Pulse	0.10	3
1	Ge		1,300,015.89	1.04	101.6	Pulse	0.10	3
1	Rh		6,734,838.65	0.63	99.0	Analog	0.10	3
1	In		7,457,106.26	0.97	103.2	Analog	0.10	3
1	Tb		10,002,568.39	1.79	106.3	Analog	0.10	3
1	Ho		937,106.71	0.96	105.5	Pulse	0.10	3
1	Bi		5,498,000.33	0.69	99.8	Analog	0.10	3
2	Sc		165,510.06	7.69	103.4	Pulse	0.30	3
2	Ge		88,860.17	6.48	101.0	Pulse	0.30	3
2	Ge		135,408.81	6.31	99.5	Pulse	0.30	3
2	Rh		2,762,581.00	8.21	98.4	Pulse	0.30	3
2	In		851,785.26	7.51	99.7	Pulse	0.30	3
2	Tb		3,428,862.71	8.55	103.3	Mix	0.30	3
2	Ho		330,794.51	7.30	102.9	Pulse	0.30	3
2	Bi		2,108,036.51	7.17	95.6	Pulse	0.30	3
3	Sc		246,000.12	0.91	111.6	Pulse	0.30	3
3	Ge		139,330.23	0.72	105.2	Pulse	0.30	3
3	Ge		216,891.10	0.26	106.6	Pulse	0.30	3
3	Rh		2,509,605.04	0.28	101.4	Pulse	0.30	3
3	Tb		3,864,058.87	0.14	104.7	Pulse	0.30	3

Quantitation Report

File Name	060SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 15:59
Sample Name	mp14084-ps1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	78.318	ug/l	0.94	519,112.97	1.838E-01	Pulse	0.25	3
B			1	189.885	ug/l	0.69	1,178,566.55	4.172E-01	Pulse	0.15	3
Ca			1	40480.590	ug/l	1.93	35,949,678.63	6.882E+00	Analog	0.10	3
Sr			1	368.076	ug/l	1.45	15,823,493.10	2.363E+00	Analog	0.10	3
Mo			1	83.265	ug/l	1.54	684,395.12	1.022E-01	Pulse	0.10	3
Ag			1	77.193	ug/l	0.79	1,729,291.33	2.317E-01	Pulse	0.10	3
Sn			1	76.484	ug/l	0.64	1,068,716.31	1.432E-01	Pulse	0.10	3
Sb			1	75.183	ug/l	1.08	1,122,063.84	1.119E-01	Pulse	0.10	3
Ba			1	96.233	ug/l	1.24	602,521.06	6.007E-02	Pulse	0.10	3
Tl			1	87.183	ug/l	1.25	3,126,449.23	5.796E-01	Pulse	0.10	3
Pb			1	97.718	ug/l	1.48	1,177,878.58	2.184E-01	Pulse	0.10	3
Pb			1	96.006	ug/l	0.83	1,037,371.81	1.923E-01	Pulse	0.10	3
Pb			1	96.674	ug/l	0.74	4,747,485.19	8.802E-01	Pulse	0.10	3
Na			2	24939.066	ug/l	0.46	21,232,701.93	1.290E+02	Analog	0.30	3
Mg			2	8749.507	ug/l	0.27	3,451,717.09	2.097E+01	Pulse	0.30	3
Al			2	3935.544	ug/l	0.16	498,538.85	3.028E+00	Pulse	0.30	3
K			2	10964.430	ug/l	0.20	2,611,548.30	1.586E+01	Pulse	0.30	3
Ca			2	40890.698	ug/l	0.15	561,276.12	3.409E+00	Pulse	0.30	3
Ti			2	78.217	ug/l	1.11	8,526.72	5.179E-02	Pulse	0.30	3
V			2	85.046	ug/l	0.75	308,363.76	1.873E+00	Pulse	0.30	3
Cr			2	84.482	ug/l	0.49	400,435.31	2.432E+00	Pulse	0.30	3
Mn			2	119.595	ug/l	0.42	282,854.52	1.718E+00	Pulse	0.30	3
Fe			2	5167.991	ug/l	0.12	19,761,469.77	1.200E+02	Analog	0.30	3
Co			2	83.328	ug/l	0.32	706,818.76	4.293E+00	Pulse	0.30	3
Ni			2	86.081	ug/l	0.73	203,043.47	1.233E+00	Pulse	0.30	3
Cu			2	134.016	ug/l	0.14	829,424.36	5.038E+00	Pulse	0.30	3
Zn			2	133.359	ug/l	0.44	110,418.61	6.707E-01	Pulse	0.30	3
As			2	102.358	ug/l	0.91	42,484.83	2.581E-01	Pulse	1.00	3
Cd			2	78.058	ug/l	0.77	90,774.53	1.096E-01	Pulse	0.30	3
Sn			2	78.092	ug/l	0.80	167,878.70	2.027E-01	Pulse	0.30	3
Se			3	344.166	ug/l	0.25	46,009.35	2.123E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,824,872.04	0.49	106.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,224,306.69	0.96	107.0	Mix	0.10	3
1	Ge		940,626.26	1.39	102.6	Pulse	0.10	3
1	Ge		1,326,428.21	0.82	103.6	Pulse	0.10	3
1	Rh		6,697,005.32	1.27	98.4	Analog	0.10	3
1	In		7,464,892.47	0.57	103.3	Analog	0.10	3
1	Tb		10,031,208.39	1.35	106.6	Analog	0.10	3
1	Ho		946,883.24	0.85	106.6	Pulse	0.10	3
1	Bi		5,394,067.84	0.63	97.9	Mix	0.10	3
2	Sc		164,636.41	0.14	102.8	Pulse	0.30	3
2	Ge		87,855.54	0.75	99.9	Pulse	0.30	3
2	Ge		134,696.31	0.09	99.0	Pulse	0.30	3
2	Rh		2,704,819.62	0.52	96.3	Pulse	0.30	3
2	In		828,396.58	0.28	97.0	Pulse	0.30	3
2	Tb		3,305,694.66	0.29	99.5	Pulse	0.30	3
2	Ho		320,500.14	0.60	99.7	Pulse	0.30	3
2	Bi		2,044,072.49	0.07	92.7	Pulse	0.30	3
3	Sc		249,006.00	0.88	113.0	Pulse	0.30	3
3	Ge		140,804.89	0.83	106.3	Pulse	0.30	3
3	Ge		216,767.93	0.39	106.5	Pulse	0.30	3
3	Rh		2,490,724.42	0.75	100.6	Pulse	0.30	3
3	Tb		3,807,588.32	0.75	103.2	Pulse	0.30	3

Quantitation Report

File Name	061SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 16:04
Sample Name	mp14084-mb1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.019	ug/l	42.54	194.67	6.727E-05	Pulse	0.25	3
B			1	2.708	ug/l	1.14	35,929.35	1.239E-02	Pulse	0.15	3
Ca			1	15.532	ug/l	2.78	37,095.59	6.958E-03	Pulse	0.10	3
Sr			1	0.068	ug/l	13.92	4,080.68	5.663E-04	Pulse	0.10	3
Mo			1	0.078	ug/l	14.98	880.06	1.221E-04	Pulse	0.10	3
Ag			1	0.030	ug/l	1.71	780.04	1.003E-04	Pulse	0.10	3
Sn			1	1.113	ug/l	0.29	8,759.49	1.126E-03	Pulse	0.10	3
Sb			1	0.330	ug/l	6.23	6,574.95	6.422E-04	Pulse	0.10	3
Ba			1	0.052	ug/l	12.27	443.35	4.329E-05	Pulse	0.10	3
Tl			1	0.024	ug/l	16.54	1,650.16	2.793E-04	Pulse	0.10	3
Pb			1	0.072	ug/l	11.07	1,280.10	2.167E-04	Pulse	0.10	3
Pb			1	0.063	ug/l	22.25	1,010.07	1.710E-04	Pulse	0.10	3
Pb			1	0.064	ug/l	10.08	4,767.14	8.070E-04	Pulse	0.10	3
Na			2	17.515	ug/l	1.70	26,309.45	1.555E-01	Pulse	0.30	3
Mg			2	1.225	ug/l	13.75	1,320.07	7.803E-03	Pulse	0.30	3
Al			2	2.750	ug/l	12.15	648.91	3.837E-03	Pulse	0.30	3
K			2	5.271	ug/l	23.57	9,051.43	5.351E-02	Pulse	0.30	3
Ca			2	1.204	ug/l	99.00	286.67	1.694E-03	Pulse	0.30	3
Ti			2	0.217	ug/l	55.06	25.55	1.509E-04	Pulse	0.30	3
V			2	0.288	ug/l	3.53	1,505.64	8.900E-03	Pulse	0.30	3
Cr			2	0.270	ug/l	9.30	1,866.80	1.104E-02	Pulse	0.30	3
Mn			2	0.212	ug/l	5.57	620.02	3.664E-03	Pulse	0.30	3
Fe			2	3.193	ug/l	1.21	26,873.07	1.589E-01	Pulse	0.30	3
Co			2	0.024	ug/l	10.20	313.34	1.852E-03	Pulse	0.30	3
Ni			2	0.053	ug/l	17.29	197.78	1.169E-03	Pulse	0.30	3
Cu			2	0.213	ug/l	4.01	2,082.38	1.231E-02	Pulse	0.30	3
Zn			2	0.601	ug/l	15.62	714.47	4.223E-03	Pulse	0.30	3
As			2	0.080	ug/l	11.96	48.67	2.877E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.006	ug/l	159.53	23.28	2.682E-05	Pulse	0.30	3
Sn			2	0.478	ug/l	20.51	1,460.19	1.680E-03	Pulse	0.30	3
Se			3	0.114	ug/l	6.28	32.00	1.392E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,899,475.13	1.01	109.2	Pulse	0.10	3
1	Sc		5,331,759.92	0.87	109.2	Mix	0.10	3
1	Ge		983,963.40	1.84	107.3	Pulse	0.10	3
1	Ge		1,367,600.29	1.05	106.8	Pulse	0.10	3
1	Rh		7,214,107.39	1.76	106.0	Analog	0.10	3
1	In		7,777,863.95	2.06	107.6	Analog	0.10	3
1	Tb		10,244,449.22	2.64	108.9	Analog	0.10	3
1	Ho		962,298.37	1.25	108.3	Pulse	0.10	3
1	Bi		5,908,288.04	0.35	107.3	Analog	0.10	3
2	Sc		169,171.31	0.54	105.6	Pulse	0.30	3
2	Ge		91,307.25	1.02	103.8	Pulse	0.30	3
2	Ge		139,833.31	0.26	102.8	Pulse	0.30	3
2	Rh		2,926,766.21	0.43	104.2	Pulse	0.30	3
2	In		868,743.03	0.35	101.7	Pulse	0.30	3
2	Tb		3,411,741.39	0.30	102.7	Pulse	0.30	3
2	Ho		330,706.89	0.27	102.9	Pulse	0.30	3
2	Bi		2,212,927.83	0.25	100.4	Pulse	0.30	3
3	Sc		259,463.38	0.14	117.7	Pulse	0.30	3
3	Ge		149,089.42	0.34	112.6	Pulse	0.30	3
3	Ge		229,963.41	0.54	113.0	Pulse	0.30	3
3	Rh		2,736,312.74	0.43	110.6	Pulse	0.30	3
3	Tb		4,001,114.29	1.04	108.4	Pulse	0.30	3

Quantitation Report

File Name	062SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 16:09
Sample Name	jc85846-2 4
Sample Type	Sample
Comment	wfb
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.150	ug/l	5.19	1,094.72	3.747E-04	Pulse	0.25	3
B			1	3.112	ug/l	1.19	38,755.56	1.327E-02	Pulse	0.15	3
Ca			1	146.124	ug/l	0.94	155,449.74	2.915E-02	Pulse	0.10	3
Sr			1	11.140	ug/l	2.74	515,247.86	7.164E-02	Pulse	0.10	3
Mo			1	0.032	ug/l	17.66	473.36	6.575E-05	Pulse	0.10	3
Ag			1	0.017	ug/l	14.10	496.69	6.341E-05	Pulse	0.10	3
Sn			1	1.499	ug/l	2.05	14,533.85	1.855E-03	Pulse	0.10	3
Sb			1	0.043	ug/l	49.72	2,263.58	2.159E-04	Pulse	0.10	3
Ba			1	7.839	ug/l	1.39	51,392.77	4.903E-03	Pulse	0.10	3
Tl			1	0.009	ug/l	44.92	1,060.08	1.793E-04	Pulse	0.10	3
Pb			1	0.071	ug/l	12.87	1,260.10	2.131E-04	Pulse	0.10	3
Pb			1	0.067	ug/l	10.71	1,060.08	1.794E-04	Pulse	0.10	3
Pb			1	0.064	ug/l	5.08	4,743.78	8.025E-04	Pulse	0.10	3
Na			2	184.548	ug/l	1.14	171,570.29	1.019E+00	Pulse	0.30	3
Mg			2	20.013	ug/l	1.61	8,893.53	5.281E-02	Pulse	0.30	3
Al			2	29.194	ug/l	2.45	4,070.53	2.417E-02	Pulse	0.30	3
K			2	16.879	ug/l	7.21	11,830.96	7.026E-02	Pulse	0.30	3
Ca			2	195.075	ug/l	2.29	3,005.86	1.785E-02	Pulse	0.30	3
Ti			2	0.249	ug/l	77.77	28.89	1.719E-04	Pulse	0.30	3
V			2	0.275	ug/l	0.42	1,447.86	8.598E-03	Pulse	0.30	3
Cr			2	0.307	ug/l	5.83	2,039.04	1.211E-02	Pulse	0.30	3
Mn			2	1.660	ug/l	0.95	4,119.45	2.446E-02	Pulse	0.30	3
Fe			2	2.382	ug/l	0.60	23,581.47	1.400E-01	Pulse	0.30	3
Co			2	0.407	ug/l	0.60	3,636.00	2.159E-02	Pulse	0.30	3
Ni			2	5.238	ug/l	3.34	12,701.65	7.543E-02	Pulse	0.30	3
Cu			2	0.696	ug/l	1.80	5,128.63	3.046E-02	Pulse	0.30	3
Zn			2	2.823	ug/l	4.36	2,590.24	1.538E-02	Pulse	0.30	3
As			2	0.087	ug/l	14.62	51.67	3.067E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	-804.24	15.53	1.786E-05	Pulse	0.30	3
Sn			2	0.807	ug/l	1.18	2,201.29	2.532E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.032	ug/l	84.86	20.20	8.829E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,921,383.95	0.42	110.0	Pulse	0.10	3
1	Sc		5,333,821.59	1.05	109.3	Analog	0.10	3
1	Ge		979,755.25	1.38	106.8	Pulse	0.10	3
1	Ge		1,364,744.20	0.97	106.6	Pulse	0.10	3
1	Rh		7,194,003.43	1.63	105.7	Analog	0.10	3
1	In		7,837,358.12	2.05	108.5	Analog	0.10	3
1	Tb		10,481,869.01	0.46	111.4	Analog	0.10	3
1	Ho		965,902.88	0.79	108.7	Pulse	0.10	3
1	Bi		5,911,153.87	0.72	107.3	Analog	0.10	3
2	Sc		168,401.03	0.51	105.2	Pulse	0.30	3
2	Ge		91,060.39	0.93	103.5	Pulse	0.30	3
2	Ge		139,489.86	0.26	102.5	Pulse	0.30	3
2	Rh		2,908,504.05	0.50	103.6	Pulse	0.30	3
2	In		869,469.37	0.35	101.8	Pulse	0.30	3
2	Tb		3,416,268.96	0.07	102.9	Pulse	0.30	3
2	Ho		329,611.23	0.99	102.5	Pulse	0.30	3
2	Bi		2,219,360.67	0.92	100.7	Pulse	0.30	3
3	Sc		257,017.20	0.68	116.6	Pulse	0.30	3
3	Ge		148,254.41	0.26	112.0	Pulse	0.30	3
3	Ge		228,772.79	0.33	112.4	Pulse	0.30	3
3	Rh		2,730,084.13	0.38	110.3	Pulse	0.30	3
3	Tb		4,040,799.42	0.74	109.5	Pulse	0.30	3

Quantitation Report

File Name	063SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 16:14
Sample Name	jc85846-2f
Sample Type	Sample
Comment	wfbf
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	85.34	102.67	3.484E-05	Pulse	0.25	3
B			1	2.368	ug/l	6.46	34,305.93	1.166E-02	Pulse	0.15	3
Ca			1	176.301	ug/l	1.28	184,239.85	3.427E-02	Pulse	0.10	3
Sr			1	0.576	ug/l	3.71	27,687.82	3.831E-03	Pulse	0.10	3
Mo			1	0.049	ug/l	9.90	620.04	8.582E-05	Pulse	0.10	3
Ag			1	0.017	ug/l	19.66	490.03	6.268E-05	Pulse	0.10	3
Sn			1	1.127	ug/l	2.31	9,012.91	1.153E-03	Pulse	0.10	3
Sb			1	0.028	ug/l	36.92	1,996.88	1.939E-04	Pulse	0.10	3
Ba			1	0.886	ug/l	1.64	5,804.60	5.640E-04	Pulse	0.10	3
Tl			1	0.003	ug/l	52.06	836.72	1.419E-04	Pulse	0.10	3
Pb			1	0.041	ug/l	26.21	863.39	1.464E-04	Pulse	0.10	3
Pb			1	0.050	ug/l	9.30	856.72	1.453E-04	Pulse	0.10	3
Pb			1	0.047	ug/l	15.20	3,833.69	6.508E-04	Pulse	0.10	3
Na			2	18.588	ug/l	0.33	27,282.07	1.611E-01	Pulse	0.30	3
Mg			2	16.777	ug/l	0.83	7,632.92	4.506E-02	Pulse	0.30	3
Al			2	2.520	ug/l	13.44	620.02	3.660E-03	Pulse	0.30	3
K			2	8.646	ug/l	15.88	9,888.59	5.838E-02	Pulse	0.30	3
Ca			2	163.806	ug/l	4.96	2,582.45	1.524E-02	Pulse	0.30	3
Ti			2	0.465	ug/l	45.97	53.33	3.147E-04	Pulse	0.30	3
V			2	0.287	ug/l	6.12	1,503.42	8.876E-03	Pulse	0.30	3
Cr			2	0.297	ug/l	7.26	2,003.48	1.183E-02	Pulse	0.30	3
Mn			2	1.013	ug/l	6.38	2,570.23	1.517E-02	Pulse	0.30	3
Fe			2	10.660	ug/l	0.59	56,266.38	3.322E-01	Pulse	0.30	3
Co			2	0.027	ug/l	24.80	341.12	2.014E-03	Pulse	0.30	3
Ni			2	0.220	ug/l	2.01	603.35	3.562E-03	Pulse	0.30	3
Cu			2	0.339	ug/l	0.91	2,884.73	1.703E-02	Pulse	0.30	3
Zn			2	14.396	ug/l	2.11	12,445.91	7.347E-02	Pulse	0.30	3
As			2	0.149	ug/l	14.47	78.33	4.624E-04	Pulse	1.00	3
Cd			2	0.032	ug/l	34.85	54.41	6.259E-05	Pulse	0.30	3
Sn			2	0.454	ug/l	13.34	1,405.63	1.617E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.008	ug/l	296.36	16.93	7.372E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,943,617.50	0.59	110.8	Pulse	0.10	3
1	Sc		5,375,943.88	0.56	110.1	Analog	0.10	3
1	Ge		986,535.17	1.10	107.6	Pulse	0.10	3
1	Ge		1,378,603.15	0.82	107.7	Pulse	0.10	3
1	Rh		7,228,990.52	1.24	106.2	Analog	0.10	3
1	In		7,816,806.63	0.75	108.2	Analog	0.10	3
1	Tb		10,291,730.26	1.02	109.4	Analog	0.10	3
1	Ho		969,239.26	1.68	109.1	Pulse	0.10	3
1	Bi		5,894,661.58	1.26	107.0	Analog	0.10	3
2	Sc		169,394.06	0.25	105.8	Pulse	0.30	3
2	Ge		92,058.29	0.78	104.7	Pulse	0.30	3
2	Ge		140,530.06	0.51	103.3	Pulse	0.30	3
2	Rh		2,929,222.45	0.11	104.3	Pulse	0.30	3
2	In		869,420.15	0.35	101.8	Pulse	0.30	3
2	Tb		3,406,845.35	0.39	102.6	Pulse	0.30	3
2	Ho		329,999.66	0.32	102.6	Pulse	0.30	3
2	Bi		2,201,350.26	0.60	99.9	Pulse	0.30	3
3	Sc		257,150.08	0.40	116.7	Pulse	0.30	3
3	Ge		148,038.28	1.01	111.8	Pulse	0.30	3
3	Ge		229,456.18	0.84	112.7	Pulse	0.30	3
3	Rh		2,708,744.61	0.52	109.4	Pulse	0.30	3
3	Tb		4,020,133.45	0.70	108.9	Pulse	0.30	3

Quantitation Report

File Name	064SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 16:19
Sample Name	jc85846-2a
Sample Type	Sample
Comment	wfb
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.156	ug/l	9.72	1,130.72	3.875E-04	Pulse	0.25	3
B			1	1.790	ug/l	9.02	30,371.96	1.041E-02	Pulse	0.15	3
Ca			1	147.638	ug/l	2.23	155,846.58	2.940E-02	Pulse	0.10	3
Sr			1	11.095	ug/l	1.17	508,424.21	7.135E-02	Pulse	0.10	3
Mo			1	0.025	ug/l	20.84	406.69	5.713E-05	Pulse	0.10	3
Ag			1	0.020	ug/l	15.01	560.03	7.214E-05	Pulse	0.10	3
Sn			1	1.239	ug/l	0.48	10,590.64	1.364E-03	Pulse	0.10	3
Sb			1	-0.029	ug/l	-10.68	1,106.76	1.089E-04	Pulse	0.10	3
Ba			1	7.949	ug/l	1.85	50,536.23	4.972E-03	Pulse	0.10	3
Tl			1	0.008	ug/l	17.96	1,023.41	1.740E-04	Pulse	0.10	3
Pb			1	0.072	ug/l	7.38	1,266.77	2.153E-04	Pulse	0.10	3
Pb			1	0.065	ug/l	13.96	1,033.41	1.756E-04	Pulse	0.10	3
Pb			1	0.063	ug/l	7.95	4,657.13	7.915E-04	Pulse	0.10	3
Na			2	184.894	ug/l	1.48	170,713.26	1.021E+00	Pulse	0.30	3
Mg			2	20.394	ug/l	1.76	8,985.82	5.372E-02	Pulse	0.30	3
Al			2	30.277	ug/l	2.59	4,182.82	2.501E-02	Pulse	0.30	3
K			2	16.955	ug/l	4.48	11,770.93	7.037E-02	Pulse	0.30	3
Ca			2	194.855	ug/l	7.31	2,982.53	1.783E-02	Pulse	0.30	3
Ti			2	0.270	ug/l	25.18	31.11	1.859E-04	Pulse	0.30	3
V			2	0.274	ug/l	4.51	1,434.52	8.575E-03	Pulse	0.30	3
Cr			2	0.372	ug/l	9.44	2,339.09	1.399E-02	Pulse	0.30	3
Mn			2	1.605	ug/l	1.73	3,959.41	2.367E-02	Pulse	0.30	3
Fe			2	5.380	ug/l	6.72	35,055.16	2.096E-01	Pulse	0.30	3
Co			2	0.400	ug/l	1.40	3,549.32	2.122E-02	Pulse	0.30	3
Ni			2	5.249	ug/l	1.55	12,646.09	7.560E-02	Pulse	0.30	3
Cu			2	0.680	ug/l	4.12	4,988.60	2.983E-02	Pulse	0.30	3
Zn			2	2.717	ug/l	3.93	2,483.55	1.485E-02	Pulse	0.30	3
As			2	0.091	ug/l	19.60	53.00	3.167E-04	Pulse	1.00	3
Cd			2	0.006	ug/l	197.49	23.31	2.712E-05	Pulse	0.30	3
Sn			2	0.589	ug/l	13.10	1,690.11	1.968E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	-0.003	ug/l	-346.40	14.93	6.673E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,918,565.51	0.41	109.9	Pulse	0.10	3
1	Sc		5,301,781.07	2.07	108.6	Analog	0.10	3
1	Ge		972,393.29	0.36	106.0	Pulse	0.10	3
1	Ge		1,356,577.07	0.68	106.0	Pulse	0.10	3
1	Rh		7,126,293.22	1.63	104.7	Analog	0.10	3
1	In		7,761,549.17	0.65	107.4	Analog	0.10	3
1	Tb		10,164,390.26	0.93	108.0	Analog	0.10	3
1	Ho		953,920.17	1.42	107.4	Pulse	0.10	3
1	Bi		5,883,545.12	0.91	106.8	Analog	0.10	3
2	Sc		167,272.65	0.78	104.5	Pulse	0.30	3
2	Ge		90,347.50	0.27	102.7	Pulse	0.30	3
2	Ge		138,246.69	0.72	101.6	Pulse	0.30	3
2	Rh		2,883,798.43	0.35	102.7	Pulse	0.30	3
2	In		858,636.96	0.43	100.5	Pulse	0.30	3
2	Tb		3,372,160.84	0.67	101.5	Pulse	0.30	3
2	Ho		326,427.29	0.16	101.5	Pulse	0.30	3
2	Bi		2,192,817.20	0.37	99.5	Pulse	0.30	3
3	Sc		253,537.79	0.40	115.0	Pulse	0.30	3
3	Ge		146,619.86	0.36	110.7	Pulse	0.30	3
3	Ge		223,815.00	0.39	110.0	Pulse	0.30	3
3	Rh		2,697,082.33	0.18	109.0	Pulse	0.30	3
3	Tb		3,984,569.42	0.34	108.0	Pulse	0.30	3

Quantitation Report

File Name	065SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 16:24
Sample Name	jc85846-2fa
Sample Type	Sample
Comment	wfbf
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.004	ug/l	36.66	94.67	3.219E-05	Pulse	0.25	3
B			1	1.430	ug/l	6.60	28,292.94	9.628E-03	Pulse	0.15	3
Ca			1	177.229	ug/l	1.45	186,626.82	3.443E-02	Pulse	0.10	3
Sr			1	0.572	ug/l	2.13	27,527.69	3.805E-03	Pulse	0.10	3
Mo			1	0.209	ug/l	10.44	2,043.55	2.824E-04	Pulse	0.10	3
Ag			1	0.014	ug/l	15.87	430.02	5.487E-05	Pulse	0.10	3
Sn			1	1.045	ug/l	2.76	7,825.53	9.980E-04	Pulse	0.10	3
Sb			1	0.019	ug/l	20.62	1,860.18	1.800E-04	Pulse	0.10	3
Ba			1	0.850	ug/l	2.65	5,597.93	5.417E-04	Pulse	0.10	3
Tl			1	-0.001	ug/l	-132.21	656.71	1.107E-04	Pulse	0.10	3
Pb			1	0.052	ug/l	14.98	1,020.08	1.720E-04	Pulse	0.10	3
Pb			1	0.049	ug/l	32.92	850.06	1.433E-04	Pulse	0.10	3
Pb			1	0.044	ug/l	18.53	3,683.65	6.210E-04	Pulse	0.10	3
Na			2	24.499	ug/l	1.71	32,724.90	1.916E-01	Pulse	0.30	3
Mg			2	16.740	ug/l	3.31	7,680.73	4.497E-02	Pulse	0.30	3
Al			2	2.582	ug/l	7.72	633.36	3.708E-03	Pulse	0.30	3
K			2	9.002	ug/l	4.17	10,058.70	5.889E-02	Pulse	0.30	3
Ca			2	169.831	ug/l	3.26	2,689.14	1.575E-02	Pulse	0.30	3
Ti			2	0.983	ug/l	48.78	112.22	6.580E-04	Pulse	0.30	3
V			2	0.331	ug/l	7.19	1,682.33	9.848E-03	Pulse	0.30	3
Cr			2	0.339	ug/l	7.02	2,225.74	1.303E-02	Pulse	0.30	3
Mn			2	1.179	ug/l	2.95	2,998.09	1.755E-02	Pulse	0.30	3
Fe			2	38.388	ug/l	0.31	166,648.13	9.757E-01	Pulse	0.30	3
Co			2	0.028	ug/l	18.04	345.56	2.024E-03	Pulse	0.30	3
Ni			2	0.231	ug/l	12.23	635.58	3.720E-03	Pulse	0.30	3
Cu			2	0.337	ug/l	5.68	2,892.51	1.694E-02	Pulse	0.30	3
Zn			2	14.878	ug/l	1.44	12,961.89	7.590E-02	Pulse	0.30	3
As			2	0.685	ug/l	24.34	309.67	1.814E-03	Pulse	1.00	3
Cd			2	0.021	ug/l	122.58	41.01	4.709E-05	Pulse	0.30	3
Sn			2	0.404	ug/l	3.98	1,296.74	1.489E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	1.067	ug/l	3.57	167.40	7.267E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,939,057.70	1.01	110.6	Pulse	0.10	3
1	Sc		5,420,107.62	0.86	111.0	Analog	0.10	3
1	Ge		984,723.87	0.83	107.4	Pulse	0.10	3
1	Ge		1,370,539.51	1.00	107.1	Pulse	0.10	3
1	Rh		7,232,885.31	1.18	106.3	Analog	0.10	3
1	In		7,843,736.41	1.14	108.6	Analog	0.10	3
1	Tb		10,332,569.01	0.95	109.8	Analog	0.10	3
1	Ho		963,987.83	0.64	108.5	Pulse	0.10	3
1	Bi		5,932,055.12	0.07	107.7	Analog	0.10	3
2	Sc		170,794.27	0.65	106.7	Pulse	0.30	3
2	Ge		92,644.63	0.48	105.3	Pulse	0.30	3
2	Ge		141,725.68	0.76	104.2	Pulse	0.30	3
2	Rh		2,924,006.07	0.24	104.1	Pulse	0.30	3
2	In		870,714.92	0.36	101.9	Pulse	0.30	3
2	Tb		3,398,721.74	0.22	102.3	Pulse	0.30	3
2	Ho		329,154.77	0.60	102.4	Pulse	0.30	3
2	Bi		2,191,619.57	0.31	99.4	Pulse	0.30	3
3	Sc		257,513.73	0.38	116.8	Pulse	0.30	3
3	Ge		148,466.04	0.24	112.1	Pulse	0.30	3
3	Ge		230,351.40	0.36	113.2	Pulse	0.30	3
3	Rh		2,716,992.39	0.37	109.8	Pulse	0.30	3
3	Tb		4,021,532.20	0.58	109.0	Pulse	0.30	3

Quantitation Report

File Name	066SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 16:29
Sample Name	jc85846-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	4.886	ug/l	0.78	33,622.44	1.148E-02	Pulse	0.25	3
B			1	605.718	ug/l	0.99	3,854,265.82	1.317E+00	Pulse	0.15	3
Ca			1	88665.000	ug/l	0.23	82,425,283.77	1.507E+01	Analog	0.10	3
Sr			1	575.402	ug/l	1.45	25,080,978.79	3.694E+00	Analog	0.10	3
Mo			1	30.328	ug/l	1.75	252,889.11	3.724E-02	Pulse	0.10	3
Ag			1	1.131	ug/l	1.81	25,814.93	3.406E-03	Pulse	0.10	3
Sn			1	1.422	ug/l	1.47	12,955.76	1.709E-03	Pulse	0.10	3
Sb			1	9.206	ug/l	1.42	139,857.67	1.383E-02	Pulse	0.10	3
Ba			1	116.653	ug/l	0.88	736,309.57	7.281E-02	Pulse	0.10	3
Tl			1	5.473	ug/l	1.82	194,086.35	3.650E-02	Pulse	0.10	3
Pb			1	5.582	ug/l	2.37	66,609.94	1.253E-02	Pulse	0.10	3
Pb			1	5.640	ug/l	2.64	60,306.99	1.134E-02	Pulse	0.10	3
Pb			1	5.566	ug/l	1.93	270,559.02	5.088E-02	Pulse	0.10	3
Na			2	18112.478	ug/l	0.41	15,905,533.26	9.368E+01	Analog	0.30	3
Mg			2	34149.449	ug/l	1.03	13,889,391.67	8.182E+01	Analog	0.30	3
Al			2	45.067	ug/l	7.88	6,178.25	3.638E-02	Pulse	0.30	3
K			2	4703.481	ug/l	0.94	1,159,647.94	6.831E+00	Pulse	0.30	3
Ca			2	89417.542	ug/l	0.39	1,265,353.07	7.453E+00	Pulse	0.30	3
Ti			2	1.331	ug/l	30.93	151.12	8.881E-04	Pulse	0.30	3
V			2	5.915	ug/l	0.94	22,520.92	1.327E-01	Pulse	0.30	3
Cr			2	10.982	ug/l	0.96	54,162.43	3.190E-01	Pulse	0.30	3
Mn			2	424.924	ug/l	0.67	1,036,051.90	6.103E+00	Pulse	0.30	3
Fe			2	2364.540	ug/l	1.53	9,330,778.80	5.496E+01	Analog	0.30	3
Co			2	3.178	ug/l	0.79	27,897.00	1.643E-01	Pulse	0.30	3
Ni			2	5.806	ug/l	1.72	14,186.19	8.357E-02	Pulse	0.30	3
Cu			2	10.421	ug/l	0.19	67,186.21	3.957E-01	Pulse	0.30	3
Zn			2	24.739	ug/l	1.69	21,287.22	1.254E-01	Pulse	0.30	3
As			2	8.236	ug/l	1.20	3,538.73	2.084E-02	Pulse	1.00	3
Cd			2	4.712	ug/l	3.84	5,551.26	6.632E-03	Pulse	0.30	3
Sn			2	0.836	ug/l	6.99	2,182.40	2.607E-03	Pulse	0.30	3
Se			3	21.304	ug/l	1.11	2,878.19	1.320E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,927,836.35	1.65	110.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,469,982.83	1.50	112.0	Analog	0.10	3
1	Ge		953,558.27	1.80	104.0	Pulse	0.10	3
1	Ge		1,340,992.01	1.33	104.8	Pulse	0.10	3
1	Rh		6,790,111.98	0.54	99.8	Analog	0.10	3
1	In		7,580,063.10	1.11	104.9	Analog	0.10	3
1	Tb		10,113,495.47	2.28	107.5	Analog	0.10	3
1	Ho		953,995.74	1.57	107.4	Pulse	0.10	3
1	Bi		5,319,361.38	2.58	96.6	Mix	0.10	3
2	Sc		169,777.48	1.12	106.0	Pulse	0.30	3
2	Ge		88,707.49	1.43	100.8	Pulse	0.30	3
2	Ge		135,928.52	0.61	99.9	Pulse	0.30	3
2	Rh		2,709,607.53	0.39	96.5	Pulse	0.30	3
2	In		837,204.38	0.86	98.0	Pulse	0.30	3
2	Tb		3,352,676.95	0.29	101.0	Pulse	0.30	3
2	Ho		327,406.77	0.54	101.8	Pulse	0.30	3
2	Bi		2,026,474.85	0.44	91.9	Pulse	0.30	3
3	Sc		251,338.38	1.08	114.0	Pulse	0.30	3
3	Ge		140,606.60	0.97	106.2	Pulse	0.30	3
3	Ge		217,991.88	0.30	107.1	Pulse	0.30	3
3	Rh		2,477,420.32	0.43	100.1	Pulse	0.30	3
3	Tb		3,836,659.71	1.02	104.0	Pulse	0.30	3

Quantitation Report

File Name	067SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 16:34
Sample Name	jc85846-3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.008	ug/l	96.13	121.33	4.157E-05	Pulse	0.25	3
B			1	20.912	ug/l	1.11	150,944.53	5.176E-02	Pulse	0.15	3
Ca			1	28.567	ug/l	2.76	49,041.44	9.172E-03	Pulse	0.10	3
Sr			1	0.096	ug/l	11.47	5,417.88	7.510E-04	Pulse	0.10	3
Mo			1	0.027	ug/l	67.71	426.69	5.917E-05	Pulse	0.10	3
Ag			1	0.013	ug/l	21.33	396.68	5.115E-05	Pulse	0.10	3
Sn			1	1.224	ug/l	3.15	10,357.11	1.336E-03	Pulse	0.10	3
Sb			1	-0.047	ug/l	-5.45	840.06	8.137E-05	Pulse	0.10	3
Ba			1	0.086	ug/l	11.80	666.71	6.459E-05	Pulse	0.10	3
Tl			1	0.003	ug/l	28.15	836.72	1.419E-04	Pulse	0.10	3
Pb			1	0.042	ug/l	24.35	873.39	1.482E-04	Pulse	0.10	3
Pb			1	0.050	ug/l	19.01	860.06	1.459E-04	Pulse	0.10	3
Pb			1	0.045	ug/l	12.59	3,726.99	6.321E-04	Pulse	0.10	3
Na			2	18.988	ug/l	1.12	27,315.46	1.631E-01	Pulse	0.30	3
Mg			2	2.827	ug/l	4.40	1,949.02	1.164E-02	Pulse	0.30	3
Al			2	2.582	ug/l	27.80	621.13	3.708E-03	Pulse	0.30	3
K			2	6.690	ug/l	17.50	9,301.54	5.556E-02	Pulse	0.30	3
Ca			2	15.040	ug/l	55.81	476.68	2.847E-03	Pulse	0.30	3
Ti			2	0.582	ug/l	101.54	65.56	3.919E-04	Pulse	0.30	3
V			2	0.347	ug/l	6.68	1,707.89	1.020E-02	Pulse	0.30	3
Cr			2	0.342	ug/l	1.95	2,196.84	1.312E-02	Pulse	0.30	3
Mn			2	0.343	ug/l	14.05	928.93	5.546E-03	Pulse	0.30	3
Fe			2	3.242	ug/l	4.37	26,790.70	1.600E-01	Pulse	0.30	3
Co			2	0.015	ug/l	54.11	233.34	1.394E-03	Pulse	0.30	3
Ni			2	0.090	ug/l	24.44	285.56	1.705E-03	Pulse	0.30	3
Cu			2	0.441	ug/l	1.17	3,494.86	2.087E-02	Pulse	0.30	3
Zn			2	1.117	ug/l	5.41	1,141.16	6.815E-03	Pulse	0.30	3
As			2	0.190	ug/l	75.98	94.67	5.659E-04	Pulse	1.00	3
Cd			2	0.031	ug/l	168.57	53.30	6.221E-05	Pulse	0.30	3
Sn			2	0.560	ug/l	14.86	1,624.55	1.893E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.159	ug/l	24.16	37.33	1.666E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,916,043.41	0.31	109.8	Pulse	0.10	3
1	Sc		5,346,938.05	0.99	109.5	Mix	0.10	3
1	Ge		976,055.17	0.75	106.4	Pulse	0.10	3
1	Ge		1,361,446.59	1.44	106.4	Pulse	0.10	3
1	Rh		7,212,930.73	0.89	106.0	Analog	0.10	3
1	In		7,753,865.98	0.79	107.3	Analog	0.10	3
1	Tb		10,321,289.22	1.16	109.7	Analog	0.10	3
1	Ho		960,631.91	2.02	108.1	Pulse	0.10	3
1	Bi		5,895,705.54	0.38	107.0	Analog	0.10	3
2	Sc		167,459.17	1.16	104.6	Pulse	0.30	3
2	Ge		90,630.17	0.43	103.0	Pulse	0.30	3
2	Ge		138,943.26	0.21	102.1	Pulse	0.30	3
2	Rh		2,878,889.89	0.65	102.5	Pulse	0.30	3
2	In		858,294.84	0.29	100.5	Pulse	0.30	3
2	Tb		3,375,155.63	0.44	101.6	Pulse	0.30	3
2	Ho		325,263.03	0.22	101.2	Pulse	0.30	3
2	Bi		2,180,939.98	0.77	99.0	Pulse	0.30	3
3	Sc		249,553.10	0.21	113.2	Pulse	0.30	3
3	Ge		144,975.15	0.23	109.5	Pulse	0.30	3
3	Ge		223,978.04	0.38	110.0	Pulse	0.30	3
3	Rh		2,676,526.35	0.42	108.1	Pulse	0.30	3
3	Tb		3,971,391.92	0.23	107.6	Pulse	0.30	3

Quantitation Report

File Name 068SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File
Method Path
Acq Time 4/12/2019 16:39
Sample Name jc85846-1f
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/12/2019 17:58
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	4.782	ug/l	2.41	31,511.77	1.124E-02	Pulse	0.25	3
B			1	542.559	ug/l	0.82	3,308,420.28	1.180E+00	Pulse	0.15	3
Ca			1	137955.216	ug/l	1.97	122,191,951.51	2.344E+01	Analog	0.10	3
Sr			1	605.964	ug/l	0.88	25,118,106.29	3.890E+00	Analog	0.10	3
Mo			1	30.315	ug/l	1.80	240,351.42	3.723E-02	Pulse	0.10	3
Ag			1	1.347	ug/l	1.38	29,177.53	4.054E-03	Pulse	0.10	3
Sn			1	1.121	ug/l	0.89	8,219.08	1.142E-03	Pulse	0.10	3
Sb			1	9.560	ug/l	2.46	143,122.61	1.436E-02	Pulse	0.10	3
Ba			1	131.306	ug/l	2.22	817,021.55	8.196E-02	Pulse	0.10	3
Tl			1	5.503	ug/l	0.51	187,598.60	3.670E-02	Pulse	0.10	3
Pb			1	5.379	ug/l	2.61	61,719.48	1.207E-02	Pulse	0.10	3
Pb			1	5.328	ug/l	2.47	54,789.28	1.072E-02	Pulse	0.10	3
Pb			1	5.320	ug/l	0.51	248,668.91	4.864E-02	Pulse	0.10	3
Na			2	25398.105	ug/l	1.44	21,531,859.70	1.313E+02	Analog	0.30	3
Mg			2	47647.112	ug/l	0.53	18,713,616.48	1.142E+02	Analog	0.30	3
Al			2	8.815	ug/l	7.17	1,393.41	8.501E-03	Pulse	0.30	3
K			2	5124.988	ug/l	0.51	1,219,520.51	7.439E+00	Pulse	0.30	3
Ca			2	136543.195	ug/l	0.36	1,865,673.89	1.138E+01	Pulse	0.30	3
Ti			2	0.327	ug/l	9.08	36.67	2.236E-04	Pulse	0.30	3
V			2	5.908	ug/l	1.36	21,719.88	1.325E-01	Pulse	0.30	3
Cr			2	10.695	ug/l	0.39	50,947.91	3.108E-01	Pulse	0.30	3
Mn			2	1605.750	ug/l	0.20	3,780,360.68	2.306E+01	Pulse	0.30	3
Fe			2	3027.362	ug/l	0.78	11,532,867.60	7.035E+01	Analog	0.30	3
Co			2	7.525	ug/l	0.45	63,651.86	3.883E-01	Pulse	0.30	3
Ni			2	10.045	ug/l	0.74	23,652.63	1.443E-01	Pulse	0.30	3
Cu			2	9.592	ug/l	0.01	59,765.64	3.646E-01	Pulse	0.30	3
Zn			2	33.598	ug/l	1.68	27,849.32	1.699E-01	Pulse	0.30	3
As			2	8.103	ug/l	1.82	3,362.36	2.051E-02	Pulse	1.00	3
Cd			2	4.757	ug/l	2.73	5,411.81	6.695E-03	Pulse	0.30	3
Sn			2	0.438	ug/l	9.20	1,274.51	1.577E-03	Pulse	0.30	3
Se			3	21.660	ug/l	0.13	2,768.30	1.342E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,803,748.50	0.84	105.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,214,042.42	2.44	106.8	Mix	0.10	3
1	Ge		918,797.95	1.34	100.2	Pulse	0.10	3
1	Ge		1,283,180.16	0.60	100.2	Pulse	0.10	3
1	Rh		6,457,668.86	1.57	94.9	Analog	0.10	3
1	In		7,196,814.72	1.00	99.6	Analog	0.10	3
1	Tb		9,969,176.31	0.91	106.0	Analog	0.10	3
1	Ho		927,247.72	1.49	104.4	Pulse	0.10	3
1	Bi		5,112,219.30	1.10	92.8	Pulse	0.10	3
2	Sc		163,937.83	0.34	102.4	Pulse	0.30	3
2	Ge		84,995.85	0.76	96.6	Pulse	0.30	3
2	Ge		130,226.97	0.36	95.7	Pulse	0.30	3
2	Rh		2,592,269.20	0.91	92.3	Pulse	0.30	3
2	In		808,326.57	0.52	94.6	Pulse	0.30	3
2	Tb		3,261,066.40	0.81	98.2	Pulse	0.30	3
2	Ho		316,850.25	0.31	98.6	Pulse	0.30	3
2	Bi		1,938,785.90	0.39	88.0	Pulse	0.30	3
3	Sc		243,784.29	0.44	110.6	Pulse	0.30	3
3	Ge		134,928.59	0.51	101.9	Pulse	0.30	3
3	Ge		206,241.73	0.11	101.3	Pulse	0.30	3
3	Rh		2,375,012.48	0.20	96.0	Pulse	0.30	3
3	Tb		3,743,799.85	0.41	101.4	Pulse	0.30	3

Quantitation Report

File Name	069_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 16:44
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.195	ug/l	0.87	678,395.08	2.355E-01	Pulse	0.25	3
B			1	104.623	ug/l	0.75	1,322,196.72	4.591E-01	Pulse	0.15	3
Ca			1	5126.922	ug/l	0.74	9,519,559.86	1.746E+00	Analog	0.10	3
Sr			1	52.377	ug/l	1.75	4,762,289.83	6.726E-01	Pulse	0.10	3
Mo			1	51.474	ug/l	1.16	894,670.98	1.264E-01	Pulse	0.10	3
Ag			1	49.321	ug/l	1.46	2,278,597.36	2.960E-01	Pulse	0.10	3
Sn			1	48.174	ug/l	0.92	1,390,248.37	1.806E-01	Pulse	0.10	3
Sb			1	50.051	ug/l	1.85	1,500,661.17	1.489E-01	Pulse	0.10	3
Ba			1	50.493	ug/l	1.31	635,343.95	6.304E-02	Pulse	0.10	3
Tl			1	50.503	ug/l	0.91	3,774,126.09	6.715E-01	Pulse	0.10	3
Pb			1	50.801	ug/l	0.77	1,276,160.50	2.271E-01	Pulse	0.10	3
Pb			1	50.425	ug/l	0.41	1,135,447.54	2.020E-01	Pulse	0.10	3
Pb			1	50.315	ug/l	0.55	5,149,207.79	9.162E-01	Pulse	0.10	3
Na			2	4983.737	ug/l	1.72	9,040,581.31	5.158E+01	Analog	0.30	3
Mg			2	4831.125	ug/l	0.42	4,057,651.51	2.315E+01	Pulse	0.30	3
Al			2	4919.703	ug/l	0.40	1,326,382.62	7.568E+00	Pulse	0.30	3
K			2	5063.899	ug/l	0.48	2,568,531.98	1.466E+01	Pulse	0.30	3
Ca			2	5240.465	ug/l	0.31	153,354.52	8.750E-01	Pulse	0.30	3
Ti			2	49.602	ug/l	1.21	11,511.86	6.569E-02	Pulse	0.30	3
V			2	50.330	ug/l	1.07	388,437.99	2.216E+00	Pulse	0.30	3
Cr			2	49.373	ug/l	0.61	498,154.11	2.842E+00	Pulse	0.30	3
Mn			2	49.577	ug/l	0.04	249,660.52	1.425E+00	Pulse	0.30	3
Fe			2	5033.245	ug/l	0.62	40,961,813.93	2.337E+02	Analog	0.30	3
Co			2	48.964	ug/l	0.46	884,234.65	5.045E+00	Pulse	0.30	3
Ni			2	47.999	ug/l	0.77	241,031.78	1.375E+00	Pulse	0.30	3
Cu			2	47.699	ug/l	0.73	628,736.92	3.587E+00	Pulse	0.30	3
Zn			2	47.087	ug/l	0.97	83,068.52	4.740E-01	Pulse	0.30	3
As			2	48.892	ug/l	0.80	43,205.04	2.465E-01	Pulse	1.00	3
Cd			2	49.013	ug/l	1.67	122,855.34	1.376E-01	Pulse	0.30	3
Sn			2	48.703	ug/l	0.24	225,588.59	2.527E-01	Pulse	0.30	3
Se			3	197.585	ug/l	0.91	53,181.41	2.437E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,880,080.96	0.50	108.4	Pulse	0.10	3
1	Sc		5,450,925.96	0.20	111.7	Analog	0.10	3
1	Ge		1,002,713.99	1.01	109.3	Pulse	0.10	3

Quantitation Report

1	Ge		1,406,274.09	1.27	109.9	Pulse	0.10	3
1	Rh		7,081,451.98	1.54	104.1	Analog	0.10	3
1	In		7,698,357.68	1.40	106.5	Analog	0.10	3
1	Tb		10,079,855.68	0.98	107.1	Analog	0.10	3
1	Ho		941,096.08	1.27	105.9	Pulse	0.10	3
1	Bi		5,620,410.54	0.17	102.0	Analog	0.10	3
2	Sc		175,261.27	0.53	109.5	Pulse	0.30	3
2	Ge		95,269.48	0.67	108.3	Pulse	0.30	3
2	Ge		146,384.84	0.89	107.6	Pulse	0.30	3
2	Rh		2,861,084.95	0.36	101.9	Pulse	0.30	3
2	In		892,818.38	0.35	104.5	Pulse	0.30	3
2	Tb		3,414,993.13	0.32	102.8	Pulse	0.30	3
2	Ho		333,251.34	0.25	103.7	Pulse	0.30	3
2	Bi		2,187,206.92	0.42	99.2	Pulse	0.30	3
3	Sc		240,281.19	0.35	109.0	Pulse	0.30	3
3	Ge		140,109.32	0.94	105.8	Pulse	0.30	3
3	Ge		218,239.56	0.93	107.2	Pulse	0.30	3
3	Rh		2,486,520.87	0.21	100.5	Pulse	0.30	3
3	Tb		3,760,644.71	0.15	101.9	Pulse	0.30	3

Quantitation Report

File Name	070_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 16:49
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.014	ug/l	50.51	241.34	8.520E-05	Pulse	0.25	3
B			1	2.685	ug/l	4.21	51,498.11	1.815E-02	Pulse	0.15	3
Ca			1	1.060	ug/l	39.82	25,109.78	4.679E-03	Pulse	0.10	3
Sr			1	0.022	ug/l	14.67	3,017.08	4.164E-04	Pulse	0.10	3
Mo			1	0.082	ug/l	3.52	1,646.82	2.273E-04	Pulse	0.10	3
Ag			1	0.015	ug/l	24.57	813.38	1.033E-04	Pulse	0.10	3
Sn			1	0.408	ug/l	5.04	4,469.14	5.677E-04	Pulse	0.10	3
Sb			1	0.283	ug/l	6.26	10,020.21	9.934E-04	Pulse	0.10	3
Ba			1	0.020	ug/l	20.34	363.35	3.605E-05	Pulse	0.10	3
Tl			1	0.011	ug/l	6.09	1,583.48	2.715E-04	Pulse	0.10	3
Pb			1	0.019	ug/l	23.87	826.72	1.418E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	3.75	683.38	1.172E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	18.02	3,166.92	5.432E-04	Pulse	0.10	3
Na			2	3.004	ug/l	6.47	16,636.06	9.604E-02	Pulse	0.30	3
Mg			2	0.386	ug/l	29.64	1,163.39	6.716E-03	Pulse	0.30	3
Al			2	-0.027	ug/l	-703.67	291.12	1.681E-03	Pulse	0.30	3
K			2	1.837	ug/l	20.43	8,870.22	5.121E-02	Pulse	0.30	3
Ca			2	-4.022	ug/l	-12.59	160.00	9.237E-04	Pulse	0.30	3
Ti			2	0.077	ug/l	71.39	18.89	1.090E-04	Pulse	0.30	3
V			2	0.000	ug/l	1136.88	446.68	2.579E-03	Pulse	0.30	3
Cr			2	0.009	ug/l	4.07	657.80	3.797E-03	Pulse	0.30	3
Mn			2	0.044	ug/l	3.67	327.79	1.892E-03	Pulse	0.30	3
Fe			2	-0.121	ug/l	-23.90	13,705.88	7.912E-02	Pulse	0.30	3
Co			2	0.007	ug/l	15.75	225.56	1.302E-03	Pulse	0.30	3
Ni			2	0.006	ug/l	20.69	103.33	5.965E-04	Pulse	0.30	3
Cu			2	0.053	ug/l	11.47	1,427.86	8.243E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.001	ug/l	-611.80	206.67	1.193E-03	Pulse	0.30	3
As			2	0.022	ug/l	47.00	34.00	1.963E-04	Pulse	1.00	3
Cd			2	0.010	ug/l	14.89	42.14	4.658E-05	Pulse	0.30	3
Sn			2	0.106	ug/l	14.84	894.48	9.890E-04	Pulse	0.30	3
Se			3	0.146	ug/l	23.41	54.47	2.485E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,837,511.68	0.73	106.8	Pulse	0.10	3
1	Sc		5,366,287.63	0.65	109.9	Analog	0.10	3
1	Ge		993,012.04	0.14	108.3	Pulse	0.10	3
1	Ge		1,392,539.35	0.52	108.8	Pulse	0.10	3
1	Rh		7,244,284.89	0.34	106.4	Analog	0.10	3
1	In		7,873,128.29	0.51	109.0	Analog	0.10	3
1	Tb		10,085,383.60	0.75	107.2	Analog	0.10	3
1	Ho		936,232.12	0.46	105.4	Pulse	0.10	3
1	Bi		5,831,791.58	1.11	105.9	Analog	0.10	3
2	Sc		173,223.37	0.10	108.2	Pulse	0.30	3
2	Ge		95,805.02	0.85	108.9	Pulse	0.30	3
2	Ge		145,355.23	0.47	106.9	Pulse	0.30	3
2	Rh		2,935,353.36	0.34	104.5	Pulse	0.30	3
2	In		904,498.96	0.19	105.9	Pulse	0.30	3
2	Tb		3,429,568.19	0.29	103.3	Pulse	0.30	3
2	Ho		331,477.43	0.28	103.1	Pulse	0.30	3
2	Bi		2,263,256.78	0.41	102.7	Pulse	0.30	3
3	Sc		240,316.89	0.13	109.0	Pulse	0.30	3
3	Ge		142,500.50	0.62	107.6	Pulse	0.30	3
3	Ge		219,097.97	0.65	107.6	Pulse	0.30	3
3	Rh		2,603,371.08	0.34	105.2	Pulse	0.30	3
3	Tb		3,859,740.12	0.58	104.6	Pulse	0.30	3

Quantitation Report

File Name	071SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 16:54
Sample Name	jc85846-3f
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	146.55	81.33	2.918E-05	Pulse	0.25	3
B			1	20.450	ug/l	1.69	141,820.81	5.076E-02	Pulse	0.15	3
Ca			1	18.269	ug/l	1.06	37,870.81	7.423E-03	Pulse	0.10	3
Sr			1	0.061	ug/l	11.04	3,694.03	5.250E-04	Pulse	0.10	3
Mo			1	0.109	ug/l	35.34	1,130.09	1.606E-04	Pulse	0.10	3
Ag			1	0.036	ug/l	9.21	906.73	1.189E-04	Pulse	0.10	3
Sn			1	1.251	ug/l	0.90	10,573.92	1.386E-03	Pulse	0.10	3
Sb			1	0.472	ug/l	2.25	8,599.30	8.532E-04	Pulse	0.10	3
Ba			1	0.135	ug/l	10.31	956.73	9.501E-05	Pulse	0.10	3
Tl			1	0.013	ug/l	7.21	1,206.77	2.060E-04	Pulse	0.10	3
Pb			1	0.073	ug/l	7.77	1,280.10	2.185E-04	Pulse	0.10	3
Pb			1	0.075	ug/l	13.64	1,143.43	1.951E-04	Pulse	0.10	3
Pb			1	0.072	ug/l	6.46	5,140.56	8.773E-04	Pulse	0.10	3
Na			2	15.088	ug/l	3.94	23,212.65	1.430E-01	Pulse	0.30	3
Mg			2	1.725	ug/l	15.32	1,461.20	9.000E-03	Pulse	0.30	3
Al			2	2.610	ug/l	29.62	605.58	3.730E-03	Pulse	0.30	3
K			2	6.347	ug/l	12.19	8,940.26	5.506E-02	Pulse	0.30	3
Ca			2	7.402	ug/l	32.49	358.90	2.211E-03	Pulse	0.30	3
Ti			2	0.300	ug/l	18.18	33.34	2.054E-04	Pulse	0.30	3
V			2	0.289	ug/l	0.90	1,445.64	8.903E-03	Pulse	0.30	3
Cr			2	0.347	ug/l	5.67	2,152.39	1.325E-02	Pulse	0.30	3
Mn			2	0.362	ug/l	13.71	946.76	5.829E-03	Pulse	0.30	3
Fe			2	7.186	ug/l	1.80	40,839.31	2.515E-01	Pulse	0.30	3
Co			2	0.020	ug/l	5.48	265.56	1.636E-03	Pulse	0.30	3
Ni			2	0.074	ug/l	18.54	238.90	1.472E-03	Pulse	0.30	3
Cu			2	0.281	ug/l	10.68	2,413.54	1.487E-02	Pulse	0.30	3
Zn			2	0.876	ug/l	12.71	910.04	5.603E-03	Pulse	0.30	3
As			2	0.123	ug/l	9.56	64.33	3.962E-04	Pulse	1.00	3
Cd			2	0.011	ug/l	37.69	28.81	3.403E-05	Pulse	0.30	3
Sn			2	0.601	ug/l	14.07	1,691.22	1.997E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.065	ug/l	41.68	23.93	1.088E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,794,056.84	0.99	105.2	Pulse	0.10	3
1	Sc		5,101,900.03	1.43	104.5	Pulse	0.10	3
1	Ge		944,666.65	1.12	103.0	Pulse	0.10	3
1	Ge		1,321,261.26	1.47	103.2	Pulse	0.10	3
1	Rh		7,035,971.15	0.35	103.4	Analog	0.10	3
1	In		7,629,066.29	0.43	105.6	Analog	0.10	3
1	Tb		10,077,918.18	1.53	107.1	Analog	0.10	3
1	Ho		942,689.13	1.00	106.1	Pulse	0.10	3
1	Bi		5,859,981.16	0.44	106.4	Analog	0.10	3
2	Sc		162,379.95	0.78	101.4	Pulse	0.30	3
2	Ge		88,314.25	0.46	100.4	Pulse	0.30	3
2	Ge		135,001.62	0.29	99.2	Pulse	0.30	3
2	Rh		2,831,605.72	0.13	100.8	Pulse	0.30	3
2	In		846,779.99	0.15	99.1	Pulse	0.30	3
2	Tb		3,347,183.13	0.19	100.8	Pulse	0.30	3
2	Ho		324,734.36	0.58	101.0	Pulse	0.30	3
2	Bi		2,181,762.49	0.09	99.0	Pulse	0.30	3
3	Sc		245,290.38	0.48	111.3	Pulse	0.30	3
3	Ge		141,712.51	0.82	107.0	Pulse	0.30	3
3	Ge		219,880.63	0.12	108.0	Pulse	0.30	3
3	Rh		2,645,448.64	0.92	106.9	Pulse	0.30	3
3	Tb		3,947,641.92	0.83	107.0	Pulse	0.30	3

Quantitation Report

File Name	072SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 17:03
Sample Name	jc85846-1a
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	4.549	ug/l	3.76	30,626.22	1.069E-02	Pulse	0.25	3
B			1	572.385	ug/l	5.24	3,562,154.16	1.244E+00	Pulse	0.15	3
Ca			1	82022.307	ug/l	8.88	75,619,660.54	1.394E+01	Analog	0.10	3
Sr			1	533.683	ug/l	6.52	23,624,936.32	3.426E+00	Analog	0.10	3
Mo			1	28.160	ug/l	7.14	238,408.09	3.458E-02	Pulse	0.10	3
Ag			1	1.049	ug/l	2.60	24,449.53	3.161E-03	Pulse	0.10	3
Sn			1	1.264	ug/l	3.32	10,900.80	1.411E-03	Pulse	0.10	3
Sb			1	8.581	ug/l	8.31	134,389.02	1.290E-02	Pulse	0.10	3
Ba			1	107.785	ug/l	7.18	701,208.69	6.728E-02	Pulse	0.10	3
Tl			1	5.060	ug/l	6.18	185,782.84	3.375E-02	Pulse	0.10	3
Pb			1	5.327	ug/l	5.98	65,820.54	1.196E-02	Pulse	0.10	3
Pb			1	5.086	ug/l	8.64	56,247.91	1.023E-02	Pulse	0.10	3
Pb			1	5.181	ug/l	6.25	260,754.96	4.738E-02	Pulse	0.10	3
Na			2	17534.529	ug/l	1.27	14,668,088.31	9.070E+01	Analog	0.30	3
Mg			2	33744.496	ug/l	1.64	13,074,829.76	8.085E+01	Analog	0.30	3
Al			2	43.736	ug/l	6.89	5,716.61	3.535E-02	Pulse	0.30	3
K			2	4571.363	ug/l	0.71	1,073,958.81	6.640E+00	Pulse	0.30	3
Ca			2	88466.213	ug/l	0.74	1,192,607.94	7.374E+00	Pulse	0.30	3
Ti			2	1.047	ug/l	9.88	113.34	7.004E-04	Pulse	0.30	3
V			2	5.847	ug/l	0.29	21,213.67	1.312E-01	Pulse	0.30	3
Cr			2	10.810	ug/l	1.21	50,794.10	3.141E-01	Pulse	0.30	3
Mn			2	420.230	ug/l	0.57	976,118.26	6.035E+00	Pulse	0.30	3
Fe			2	2335.480	ug/l	1.68	8,780,283.82	5.429E+01	Analog	0.30	3
Co			2	3.127	ug/l	2.22	26,146.33	1.617E-01	Pulse	0.30	3
Ni			2	5.976	ug/l	0.82	13,910.44	8.600E-02	Pulse	0.30	3
Cu			2	10.219	ug/l	1.00	62,772.38	3.881E-01	Pulse	0.30	3
Zn			2	26.791	ug/l	1.08	21,948.18	1.357E-01	Pulse	0.30	3
As			2	8.232	ug/l	0.43	3,369.69	2.083E-02	Pulse	1.00	3
Cd			2	4.777	ug/l	1.15	5,468.57	6.723E-03	Pulse	0.30	3
Sn			2	0.670	ug/l	7.26	1,771.23	2.177E-03	Pulse	0.30	3
Se			3	20.699	ug/l	0.72	2,684.69	1.283E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,867,394.73	5.03	108.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,450,277.52	7.93	111.6	Mix	0.10	3
1	Ge		950,679.44	5.75	103.7	Pulse	0.10	3
1	Ge		1,336,708.97	6.14	104.4	Pulse	0.10	3
1	Rh		6,915,320.31	6.51	101.6	Analog	0.10	3
1	In		7,743,923.92	6.58	107.2	Analog	0.10	3
1	Tb		10,461,437.76	7.88	111.2	Analog	0.10	3
1	Ho		988,955.01	7.28	111.3	Pulse	0.10	3
1	Bi		5,521,130.44	7.63	100.2	Mix	0.10	3
2	Sc		161,740.02	0.80	101.0	Pulse	0.30	3
2	Ge		85,750.84	0.39	97.5	Pulse	0.30	3
2	Ge		130,042.48	0.12	95.6	Pulse	0.30	3
2	Rh		2,614,357.67	0.57	93.1	Pulse	0.30	3
2	In		813,415.69	0.23	95.2	Pulse	0.30	3
2	Tb		3,280,905.36	0.66	98.8	Pulse	0.30	3
2	Ho		318,629.20	0.64	99.1	Pulse	0.30	3
2	Bi		1,986,903.25	0.21	90.2	Pulse	0.30	3
3	Sc		240,438.43	0.21	109.1	Pulse	0.30	3
3	Ge		135,867.91	0.38	102.6	Pulse	0.30	3
3	Ge		209,260.63	0.73	102.8	Pulse	0.30	3
3	Rh		2,407,825.60	0.56	97.3	Pulse	0.30	3
3	Tb		3,789,539.15	0.66	102.7	Pulse	0.30	3

Quantitation Report

File Name	073SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 17:10
Sample Name	jc85846-3a
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	207.41	69.33	2.491E-05	Pulse	0.25	3
B			1	21.181	ug/l	1.45	145,569.49	5.234E-02	Pulse	0.15	3
Ca			1	24.747	ug/l	5.07	42,804.33	8.523E-03	Pulse	0.10	3
Sr			1	0.064	ug/l	4.25	3,773.93	5.412E-04	Pulse	0.10	3
Mo			1	0.046	ug/l	26.94	573.37	8.233E-05	Pulse	0.10	3
Ag			1	0.013	ug/l	9.61	386.69	5.149E-05	Pulse	0.10	3
Sn			1	1.325	ug/l	0.95	11,461.25	1.526E-03	Pulse	0.10	3
Sb			1	-0.001	ug/l	-1254.47	1,500.12	1.499E-04	Pulse	0.10	3
Ba			1	0.095	ug/l	11.57	700.05	6.998E-05	Pulse	0.10	3
Tl			1	-0.002	ug/l	-66.38	600.03	1.048E-04	Pulse	0.10	3
Pb			1	0.065	ug/l	10.74	1,146.76	2.002E-04	Pulse	0.10	3
Pb			1	0.068	ug/l	7.70	1,043.41	1.821E-04	Pulse	0.10	3
Pb			1	0.069	ug/l	8.35	4,847.17	8.457E-04	Pulse	0.10	3
Na			2	20.046	ug/l	1.93	27,263.09	1.686E-01	Pulse	0.30	3
Mg			2	2.589	ug/l	7.40	1,790.12	1.107E-02	Pulse	0.30	3
Al			2	2.914	ug/l	15.37	641.13	3.963E-03	Pulse	0.30	3
K			2	6.820	ug/l	4.74	9,014.80	5.575E-02	Pulse	0.30	3
Ca			2	10.710	ug/l	14.72	402.23	2.487E-03	Pulse	0.30	3
Ti			2	0.301	ug/l	27.43	33.33	2.061E-04	Pulse	0.30	3
V			2	0.333	ug/l	1.79	1,597.88	9.880E-03	Pulse	0.30	3
Cr			2	0.343	ug/l	5.34	2,123.50	1.313E-02	Pulse	0.30	3
Mn			2	0.313	ug/l	4.59	827.81	5.120E-03	Pulse	0.30	3
Fe			2	5.420	ug/l	2.72	34,045.18	2.105E-01	Pulse	0.30	3
Co			2	0.015	ug/l	31.66	220.00	1.362E-03	Pulse	0.30	3
Ni			2	0.100	ug/l	8.48	297.78	1.841E-03	Pulse	0.30	3
Cu			2	0.577	ug/l	3.77	4,202.81	2.599E-02	Pulse	0.30	3
Zn			2	2.472	ug/l	2.81	2,202.39	1.362E-02	Pulse	0.30	3
As			2	0.071	ug/l	22.49	43.00	2.661E-04	Pulse	1.00	3
Cd			2	-0.005	ug/l	-60.51	8.86	1.056E-05	Pulse	0.30	3
Sn			2	0.734	ug/l	6.15	1,964.59	2.342E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	-0.029	ug/l	-26.73	11.00	5.072E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,780,995.10	0.99	104.7	Pulse	0.10	3
1	Sc		5,021,597.95	0.90	102.9	Pulse	0.10	3
1	Ge		925,287.67	1.29	100.9	Pulse	0.10	3
1	Ge		1,295,302.38	1.20	101.2	Pulse	0.10	3
1	Rh		6,972,193.86	1.00	102.5	Analog	0.10	3
1	In		7,510,505.15	1.40	103.9	Analog	0.10	3
1	Tb		9,996,306.93	1.22	106.2	Analog	0.10	3
1	Ho		932,399.65	0.99	105.0	Pulse	0.10	3
1	Bi		5,729,158.25	1.13	104.0	Analog	0.10	3
2	Sc		161,712.79	0.81	101.0	Pulse	0.30	3
2	Ge		87,097.74	0.33	99.0	Pulse	0.30	3
2	Ge		133,392.18	1.00	98.1	Pulse	0.30	3
2	Rh		2,796,397.88	0.35	99.6	Pulse	0.30	3
2	In		838,781.79	0.25	98.2	Pulse	0.30	3
2	Tb		3,314,145.98	0.46	99.8	Pulse	0.30	3
2	Ho		322,202.65	0.78	100.2	Pulse	0.30	3
2	Bi		2,165,296.65	0.13	98.2	Pulse	0.30	3
3	Sc		241,973.53	0.91	109.8	Pulse	0.30	3
3	Ge		141,419.58	0.56	106.8	Pulse	0.30	3
3	Ge		216,867.79	0.12	106.6	Pulse	0.30	3
3	Rh		2,609,112.12	0.38	105.4	Pulse	0.30	3
3	Tb		3,939,482.90	0.42	106.7	Pulse	0.30	3

Quantitation Report

File Name	074SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 17:15
Sample Name	jc85846-1fa
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	4.915	ug/l	2.76	31,286.03	1.155E-02	Pulse	0.25	3
B			1	544.785	ug/l	1.88	3,208,966.47	1.185E+00	Pulse	0.15	3
Ca			1	139569.869	ug/l	0.62	118,439,441.57	2.372E+01	Analog	0.10	3
Sr			1	604.485	ug/l	0.94	24,588,156.30	3.881E+00	Analog	0.10	3
Mo			1	30.500	ug/l	1.53	237,299.84	3.745E-02	Pulse	0.10	3
Ag			1	1.320	ug/l	0.79	28,392.83	3.971E-03	Pulse	0.10	3
Sn			1	1.398	ug/l	1.26	11,901.57	1.664E-03	Pulse	0.10	3
Sb			1	9.795	ug/l	0.48	144,652.45	1.471E-02	Pulse	0.10	3
Ba			1	131.197	ug/l	0.76	805,484.28	8.189E-02	Pulse	0.10	3
Tl			1	5.568	ug/l	0.52	188,342.69	3.713E-02	Pulse	0.10	3
Pb			1	5.439	ug/l	1.63	61,930.24	1.221E-02	Pulse	0.10	3
Pb			1	5.333	ug/l	3.18	54,407.60	1.073E-02	Pulse	0.10	3
Pb			1	5.352	ug/l	2.07	248,235.75	4.894E-02	Pulse	0.10	3
Na			2	25069.049	ug/l	1.02	20,670,186.40	1.296E+02	Analog	0.30	3
Mg			2	48401.982	ug/l	0.43	18,488,699.82	1.160E+02	Analog	0.30	3
Al			2	10.814	ug/l	10.02	1,600.11	1.004E-02	Pulse	0.30	3
K			2	5100.671	ug/l	0.58	1,180,473.91	7.404E+00	Pulse	0.30	3
Ca			2	137954.493	ug/l	0.58	1,833,230.06	1.150E+01	Pulse	0.30	3
Ti			2	0.705	ug/l	7.23	75.56	4.740E-04	Pulse	0.30	3
V			2	5.896	ug/l	1.52	21,083.51	1.322E-01	Pulse	0.30	3
Cr			2	10.889	ug/l	0.91	50,439.77	3.164E-01	Pulse	0.30	3
Mn			2	1610.217	ug/l	0.50	3,686,893.88	2.312E+01	Pulse	0.30	3
Fe			2	3022.995	ug/l	0.64	11,200,156.78	7.025E+01	Analog	0.30	3
Co			2	7.533	ug/l	1.06	61,971.30	3.887E-01	Pulse	0.30	3
Ni			2	9.900	ug/l	1.61	22,671.24	1.422E-01	Pulse	0.30	3
Cu			2	9.492	ug/l	1.23	57,525.69	3.608E-01	Pulse	0.30	3
Zn			2	34.902	ug/l	2.36	28,127.53	1.764E-01	Pulse	0.30	3
As			2	8.393	ug/l	2.01	3,386.03	2.124E-02	Pulse	1.00	3
Cd			2	4.824	ug/l	3.77	5,407.54	6.789E-03	Pulse	0.30	3
Sn			2	0.793	ug/l	6.46	1,986.81	2.495E-03	Pulse	0.30	3
Se			3	21.826	ug/l	0.41	2,753.83	1.353E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,708,640.62	1.04	102.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,993,853.99	0.74	102.3	Pulse	0.10	3
1	Ge		889,076.47	1.19	96.9	Pulse	0.10	3
1	Ge		1,245,414.04	1.42	97.3	Pulse	0.10	3
1	Rh		6,336,742.62	1.42	93.1	Analog	0.10	3
1	In		7,149,422.98	1.27	98.9	Analog	0.10	3
1	Tb		9,837,046.52	2.25	104.6	Analog	0.10	3
1	Ho		916,284.41	1.54	103.2	Pulse	0.10	3
1	Bi		5,072,075.34	1.42	92.1	Pulse	0.10	3
2	Sc		159,442.53	0.43	99.6	Pulse	0.30	3
2	Ge		83,082.86	0.90	94.5	Pulse	0.30	3
2	Ge		126,423.15	0.65	92.9	Pulse	0.30	3
2	Rh		2,527,703.44	0.43	90.0	Pulse	0.30	3
2	In		796,470.13	0.46	93.2	Pulse	0.30	3
2	Tb		3,207,335.29	0.66	96.6	Pulse	0.30	3
2	Ho		315,298.98	0.67	98.1	Pulse	0.30	3
2	Bi		1,915,727.56	0.52	86.9	Pulse	0.30	3
3	Sc		237,376.30	0.23	107.7	Pulse	0.30	3
3	Ge		131,412.09	0.25	99.2	Pulse	0.30	3
3	Ge		203,613.49	0.60	100.0	Pulse	0.30	3
3	Rh		2,331,968.66	0.35	94.2	Pulse	0.30	3
3	Tb		3,705,933.46	0.55	100.4	Pulse	0.30	3

Quantitation Report

File Name	075SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 17:20
Sample Name	jc85846-3fa
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-1186.89	58.67	2.112E-05	Pulse	0.25	3
B			1	24.350	ug/l	1.77	164,488.53	5.920E-02	Pulse	0.15	3
Ca			1	39.643	ug/l	3.06	55,945.39	1.105E-02	Pulse	0.10	3
Sr			1	0.106	ug/l	4.18	5,618.49	8.102E-04	Pulse	0.10	3
Mo			1	2.217	ug/l	2.23	19,051.99	2.747E-03	Pulse	0.10	3
Ag			1	0.020	ug/l	17.47	550.03	7.269E-05	Pulse	0.10	3
Sn			1	9.525	ug/l	2.47	128,463.98	1.698E-02	Pulse	0.10	3
Sb			1	0.737	ug/l	2.99	12,428.73	1.247E-03	Pulse	0.10	3
Ba			1	0.212	ug/l	16.72	1,430.12	1.433E-04	Pulse	0.10	3
Tl			1	0.934	ug/l	2.83	36,726.45	6.324E-03	Pulse	0.10	3
Pb			1	0.078	ug/l	11.21	1,333.44	2.296E-04	Pulse	0.10	3
Pb			1	0.083	ug/l	7.27	1,233.43	2.124E-04	Pulse	0.10	3
Pb			1	0.075	ug/l	4.40	5,230.56	9.008E-04	Pulse	0.10	3
Na			2	19.682	ug/l	4.00	27,019.44	1.667E-01	Pulse	0.30	3
Mg			2	3.619	ug/l	8.79	2,193.54	1.354E-02	Pulse	0.30	3
Al			2	2.072	ug/l	13.61	537.79	3.315E-03	Pulse	0.30	3
K			2	6.203	ug/l	20.55	8,890.23	5.486E-02	Pulse	0.30	3
Ca			2	23.490	ug/l	30.99	574.46	3.552E-03	Pulse	0.30	3
Ti			2	2.671	ug/l	12.57	287.78	1.775E-03	Pulse	0.30	3
V			2	0.634	ug/l	4.54	2,673.59	1.650E-02	Pulse	0.30	3
Cr			2	0.364	ug/l	8.06	2,225.73	1.374E-02	Pulse	0.30	3
Mn			2	0.431	ug/l	4.65	1,105.61	6.816E-03	Pulse	0.30	3
Fe			2	9.597	ug/l	4.76	49,832.66	3.075E-01	Pulse	0.30	3
Co			2	0.014	ug/l	40.78	216.67	1.333E-03	Pulse	0.30	3
Ni			2	0.104	ug/l	17.00	308.89	1.903E-03	Pulse	0.30	3
Cu			2	0.347	ug/l	5.12	2,809.16	1.734E-02	Pulse	0.30	3
Zn			2	1.075	ug/l	5.49	1,070.05	6.601E-03	Pulse	0.30	3
As			2	1.860	ug/l	6.82	773.35	4.774E-03	Pulse	1.00	3
Cd			2	-0.008	ug/l	-35.88	5.76	6.840E-06	Pulse	0.30	3
Sn			2	8.867	ug/l	0.68	19,720.23	2.340E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.620	ug/l	15.66	97.53	4.509E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,778,578.78	0.22	104.6	Pulse	0.10	3
1	Sc		5,060,857.95	0.89	103.7	Pulse	0.10	3
1	Ge		932,445.59	1.16	101.7	Pulse	0.10	3
1	Ge		1,306,165.60	1.40	102.0	Pulse	0.10	3
1	Rh		6,936,193.44	1.32	101.9	Analog	0.10	3
1	In		7,565,669.32	0.74	104.7	Analog	0.10	3
1	Tb		9,971,699.64	0.71	106.0	Analog	0.10	3
1	Ho		940,892.67	1.39	105.9	Pulse	0.10	3
1	Bi		5,806,949.71	0.25	105.4	Analog	0.10	3
2	Sc		162,128.23	2.14	101.3	Pulse	0.30	3
2	Ge		87,452.93	1.03	99.4	Pulse	0.30	3
2	Ge		133,719.45	1.30	98.3	Pulse	0.30	3
2	Rh		2,824,461.00	2.21	100.6	Pulse	0.30	3
2	In		842,615.94	2.61	98.6	Pulse	0.30	3
2	Tb		3,386,753.34	5.09	102.0	Mix	0.30	3
2	Ho		323,972.17	1.70	100.8	Pulse	0.30	3
2	Bi		2,171,679.01	1.59	98.5	Pulse	0.30	3
3	Sc		243,746.85	0.26	110.6	Pulse	0.30	3
3	Ge		140,420.65	0.20	106.0	Pulse	0.30	3
3	Ge		216,358.38	0.86	106.3	Pulse	0.30	3
3	Rh		2,615,636.84	0.16	105.7	Pulse	0.30	3
3	Tb		3,940,188.87	0.31	106.8	Pulse	0.30	3

Quantitation Report

File Name	076SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 17:25
Sample Name	mp14051-s3 4
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.696	ug/l	1.15	186,741.52	7.012E-02	Pulse	0.25	3
B			1	111.542	ug/l	1.01	274,386.38	1.030E-01	Pulse	0.15	3
Ca			1	106790.799	ug/l	0.56	36,063,286.96	7.262E+00	Analog	0.10	3
Sr			1	577.736	ug/l	1.61	9,759,218.82	1.484E+00	Analog	0.10	3
Mo			1	81.002	ug/l	1.86	261,697.58	3.979E-02	Pulse	0.10	3
Ag			1	74.808	ug/l	0.19	651,975.08	8.981E-02	Pulse	0.10	3
Sn			1	77.443	ug/l	0.45	416,783.70	5.741E-02	Pulse	0.10	3
Sb			1	75.957	ug/l	0.16	444,426.44	4.530E-02	Pulse	0.10	3
Ba			1	119.072	ug/l	0.16	291,754.59	2.974E-02	Pulse	0.10	3
Tl			1	78.491	ug/l	2.32	1,128,651.94	2.088E-01	Pulse	0.10	3
Pb			1	79.309	ug/l	2.34	383,409.51	7.093E-02	Pulse	0.10	3
Pb			1	77.779	ug/l	1.90	337,054.21	6.235E-02	Pulse	0.10	3
Pb			1	78.482	ug/l	2.51	1,545,656.99	2.860E-01	Pulse	0.10	3
Na			2	34588.203	ug/l	0.91	11,347,775.94	7.158E+01	Analog	0.30	3
Mg			2	26579.474	ug/l	0.88	4,038,920.67	2.548E+01	Pulse	0.30	3
Al			2	4238.566	ug/l	0.66	206,981.32	1.305E+00	Pulse	0.30	3
K			2	6820.142	ug/l	0.44	631,210.56	3.981E+00	Pulse	0.30	3
Ca			2	106382.797	ug/l	0.71	562,483.94	3.548E+00	Pulse	0.30	3
Ti			2	81.652	ug/l	2.51	3,429.31	2.163E-02	Pulse	0.30	3
V			2	79.538	ug/l	1.30	111,347.35	7.023E-01	Pulse	0.30	3
Cr			2	78.553	ug/l	0.71	143,747.22	9.067E-01	Pulse	0.30	3
Mn			2	7274.519	ug/l	0.18	6,625,139.74	4.179E+01	Analog	0.30	3
Fe			2	5688.235	ug/l	0.35	8,385,978.55	5.289E+01	Analog	0.30	3
Co			2	331.017	ug/l	0.79	1,081,508.98	6.821E+00	Pulse	0.30	3
Ni			2	201.862	ug/l	0.30	183,414.60	1.157E+00	Pulse	0.30	3
Cu			2	74.772	ug/l	0.21	178,789.89	1.128E+00	Pulse	0.30	3
Zn			2	268.946	ug/l	1.16	85,814.36	5.413E-01	Pulse	0.30	3
As			2	74.055	ug/l	0.98	11,849.64	7.474E-02	Pulse	1.00	3
Cd			2	73.815	ug/l	0.37	33,957.27	4.146E-02	Pulse	0.30	3
Sn			2	76.599	ug/l	1.21	65,339.88	7.978E-02	Pulse	0.30	3
Se			3	352.354	ug/l	0.48	18,259.54	8.696E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,663,130.23	0.93	100.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,966,443.89	1.44	101.7	Pulse	0.10	3
1	Ge		914,185.98	1.86	99.7	Pulse	0.10	3
1	Ge		1,288,593.52	1.39	100.7	Pulse	0.10	3
1	Rh		6,577,580.53	0.86	96.7	Analog	0.10	3
1	In		7,259,816.48	2.09	100.5	Analog	0.10	3
1	Tb		9,811,491.73	1.86	104.3	Analog	0.10	3
1	Ho		934,588.11	1.82	105.2	Pulse	0.10	3
1	Bi		5,405,983.46	0.93	98.2	Mix	0.10	3
2	Sc		158,547.25	0.38	99.0	Pulse	0.30	3
2	Ge		86,505.75	0.78	98.3	Pulse	0.30	3
2	Ge		132,625.13	0.53	97.5	Pulse	0.30	3
2	Rh		2,649,656.70	0.67	94.4	Pulse	0.30	3
2	In		819,027.31	0.87	95.9	Pulse	0.30	3
2	Tb		3,262,270.98	0.51	98.2	Pulse	0.30	3
2	Ho		321,651.11	0.70	100.1	Pulse	0.30	3
2	Bi		2,064,031.93	0.38	93.7	Pulse	0.30	3
3	Sc		233,623.23	0.62	106.0	Pulse	0.30	3
3	Ge		135,211.55	0.56	102.1	Pulse	0.30	3
3	Ge		209,976.65	0.51	103.2	Pulse	0.30	3
3	Rh		2,434,827.26	0.39	98.4	Pulse	0.30	3
3	Tb		3,787,706.38	0.32	102.6	Pulse	0.30	3

Quantitation Report

File Name 077SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File
Method Path
Acq Time 4/12/2019 17:30
Sample Name mp14051-s4
Sample Type Sample
Comment
Prep Dilution 5.000
Auto Dilution N/A
Total Dilution 5.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/12/2019 17:58
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.476	ug/l	0.49	184,510.66	6.991E-02	Pulse	0.25	3
B			1	110.274	ug/l	0.93	269,035.40	1.019E-01	Pulse	0.15	3
Ca			1	108252.824	ug/l	0.62	36,366,645.29	7.361E+00	Analog	0.10	3
Sr			1	589.405	ug/l	0.66	9,952,163.60	1.514E+00	Analog	0.10	3
Mo			1	79.955	ug/l	0.84	258,222.99	3.927E-02	Pulse	0.10	3
Ag			1	74.101	ug/l	0.55	648,579.95	8.896E-02	Pulse	0.10	3
Sn			1	76.217	ug/l	0.62	411,821.61	5.648E-02	Pulse	0.10	3
Sb			1	76.115	ug/l	1.50	446,584.88	4.539E-02	Pulse	0.10	3
Ba			1	120.243	ug/l	2.06	295,438.05	3.003E-02	Pulse	0.10	3
Tl			1	78.652	ug/l	1.57	1,129,570.14	2.092E-01	Pulse	0.10	3
Pb			1	79.691	ug/l	2.07	384,741.19	7.127E-02	Pulse	0.10	3
Pb			1	78.914	ug/l	0.71	341,541.17	6.326E-02	Pulse	0.10	3
Pb			1	78.965	ug/l	1.26	1,553,259.48	2.877E-01	Pulse	0.10	3
Na			2	34933.492	ug/l	1.04	11,390,872.33	7.229E+01	Analog	0.30	3
Mg			2	26598.772	ug/l	0.45	4,017,103.73	2.549E+01	Pulse	0.30	3
Al			2	4168.323	ug/l	1.11	202,304.46	1.284E+00	Pulse	0.30	3
K			2	6858.400	ug/l	0.50	630,817.49	4.003E+00	Pulse	0.30	3
Ca			2	107194.967	ug/l	0.89	563,296.18	3.575E+00	Pulse	0.30	3
Ti			2	77.657	ug/l	2.80	3,241.47	2.057E-02	Pulse	0.30	3
V			2	79.348	ug/l	0.86	110,397.84	7.006E-01	Pulse	0.30	3
Cr			2	78.905	ug/l	0.08	143,506.49	9.107E-01	Pulse	0.30	3
Mn			2	7287.470	ug/l	0.86	6,596,120.15	4.186E+01	Analog	0.30	3
Fe			2	5731.311	ug/l	0.48	8,397,637.16	5.329E+01	Analog	0.30	3
Co			2	331.640	ug/l	0.24	1,076,912.07	6.834E+00	Pulse	0.30	3
Ni			2	202.407	ug/l	1.11	182,777.75	1.160E+00	Pulse	0.30	3
Cu			2	74.688	ug/l	0.38	177,492.09	1.126E+00	Pulse	0.30	3
Zn			2	269.459	ug/l	0.91	85,449.31	5.423E-01	Pulse	0.30	3
As			2	74.257	ug/l	0.74	11,809.28	7.494E-02	Pulse	1.00	3
Cd			2	73.603	ug/l	0.43	33,674.64	4.134E-02	Pulse	0.30	3
Sn			2	76.504	ug/l	0.48	64,905.92	7.968E-02	Pulse	0.30	3
Se			3	354.314	ug/l	0.29	18,156.70	8.744E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,639,226.27	0.54	99.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,940,305.03	0.98	101.2	Pulse	0.10	3
1	Ge		914,596.89	1.20	99.7	Pulse	0.10	3
1	Ge		1,286,077.48	1.31	100.5	Pulse	0.10	3
1	Rh		6,575,260.11	0.98	96.6	Analog	0.10	3
1	In		7,290,838.96	1.07	100.9	Analog	0.10	3
1	Tb		9,838,794.43	0.08	104.6	Analog	0.10	3
1	Ho		934,474.57	1.03	105.2	Pulse	0.10	3
1	Bi		5,399,070.96	1.42	98.0	Mix	0.10	3
2	Sc		157,575.40	0.41	98.4	Pulse	0.30	3
2	Ge		85,591.29	1.03	97.3	Pulse	0.30	3
2	Ge		131,269.90	0.09	96.5	Pulse	0.30	3
2	Rh		2,628,262.67	0.28	93.6	Pulse	0.30	3
2	In		814,554.99	0.49	95.4	Pulse	0.30	3
2	Tb		3,249,621.47	0.89	97.9	Pulse	0.30	3
2	Ho		319,578.03	0.29	99.4	Pulse	0.30	3
2	Bi		2,054,285.68	0.41	93.2	Pulse	0.30	3
3	Sc		229,645.50	0.60	104.2	Pulse	0.30	3
3	Ge		134,086.98	0.61	101.3	Pulse	0.30	3
3	Ge		207,637.25	0.23	102.0	Pulse	0.30	3
3	Rh		2,414,971.36	0.28	97.6	Pulse	0.30	3
3	Tb		3,776,660.82	0.56	102.3	Pulse	0.30	3

Quantitation Report

File Name	078SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 17:35
Sample Name	jc85043-2f
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.135	ug/l	13.23	146.67	5.342E-05	Pulse	0.25	3
B			1	80.698	ug/l	0.45	65,864.62	2.399E-02	Pulse	0.15	3
Ca			1	217089.684	ug/l	1.14	18,927,675.55	3.693E+00	Analog	0.10	3
Sr			1	738.593	ug/l	1.06	3,193,954.01	4.743E-01	Pulse	0.10	3
Mo			1	5.563	ug/l	3.30	4,774.23	7.089E-04	Pulse	0.10	3
Ag			1	0.174	ug/l	29.76	473.36	6.381E-05	Pulse	0.10	3
Sn			1	7.897	ug/l	0.83	3,837.32	5.173E-04	Pulse	0.10	3
Sb			1	-0.212	ug/l	-14.07	1,180.09	1.201E-04	Pulse	0.10	3
Ba			1	957.416	ug/l	0.51	587,155.09	5.976E-02	Pulse	0.10	3
Tl			1	0.140	ug/l	13.44	1,130.09	2.125E-04	Pulse	0.10	3
Pb			1	1.497	ug/l	7.74	2,070.21	3.897E-04	Pulse	0.10	3
Pb			1	1.348	ug/l	7.65	1,680.17	3.158E-04	Pulse	0.10	3
Pb			1	1.366	ug/l	3.29	7,784.43	1.464E-03	Pulse	0.10	3
Na			2	730763.699	ug/l	1.22	62,439,455.30	3.778E+02	Analog	0.30	3
Mg			2	30952.222	ug/l	0.55	1,226,385.30	7.420E+00	Pulse	0.30	3
Al			2	773.986	ug/l	1.00	10,122.03	6.124E-02	Pulse	0.30	3
K			2	2839.767	ug/l	1.13	75,294.78	4.556E-01	Pulse	0.30	3
Ca			2	212633.666	ug/l	0.92	293,141.09	1.774E+00	Pulse	0.30	3
Ti			2	29.562	ug/l	22.04	324.45	1.964E-03	Pulse	0.30	3
V			2	3.520	ug/l	10.49	1,702.33	1.030E-02	Pulse	0.30	3
Cr			2	3.332	ug/l	4.74	2,125.72	1.286E-02	Pulse	0.30	3
Mn			2	4952.387	ug/l	0.75	1,175,564.75	7.112E+00	Pulse	0.30	3
Fe			2	1102.234	ug/l	0.65	436,839.81	2.643E+00	Pulse	0.30	3
Co			2	2.230	ug/l	6.97	1,999.03	1.209E-02	Pulse	0.30	3
Ni			2	3.818	ug/l	7.87	972.26	5.882E-03	Pulse	0.30	3
Cu			2	27.379	ug/l	2.82	17,708.53	1.071E-01	Pulse	0.30	3
Zn			2	26.096	ug/l	1.98	2,364.64	1.431E-02	Pulse	0.30	3
As			2	0.640	ug/l	29.72	41.00	2.480E-04	Pulse	1.00	3
Cd			2	0.302	ug/l	11.46	50.88	6.053E-05	Pulse	0.30	3
Sn			2	0.755	ug/l	39.93	535.57	6.372E-04	Pulse	0.30	3
Se			3	0.236	ug/l	45.31	17.20	8.332E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,745,790.53	1.11	103.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,126,206.48	1.42	105.0	Pulse	0.10	3
1	Ge		938,926.58	1.13	102.4	Pulse	0.10	3
1	Ge		1,313,121.05	1.44	102.6	Pulse	0.10	3
1	Rh		6,734,492.61	0.65	99.0	Analog	0.10	3
1	In		7,417,969.80	0.55	102.7	Analog	0.10	3
1	Tb		9,824,443.19	1.20	104.4	Analog	0.10	3
1	Ho		922,167.85	1.46	103.8	Pulse	0.10	3
1	Bi		5,315,920.13	1.69	96.5	Pulse	0.10	3
2	Sc		165,284.23	0.40	103.2	Pulse	0.30	3
2	Ge		89,560.89	1.06	101.8	Pulse	0.30	3
2	Ge		136,639.78	0.27	100.5	Pulse	0.30	3
2	Rh		2,685,380.73	0.91	95.6	Pulse	0.30	3
2	In		840,752.24	0.44	98.4	Pulse	0.30	3
2	Tb		3,294,974.31	0.48	99.2	Pulse	0.30	3
2	Ho		320,282.42	0.69	99.6	Pulse	0.30	3
2	Bi		2,053,576.10	0.33	93.2	Pulse	0.30	3
3	Sc		231,090.11	0.66	104.8	Pulse	0.30	3
3	Ge		133,662.42	0.15	100.9	Pulse	0.30	3
3	Ge		206,516.67	1.36	101.5	Pulse	0.30	3
3	Rh		2,388,550.74	0.64	96.5	Pulse	0.30	3
3	Tb		3,727,058.60	0.63	101.0	Pulse	0.30	3

Quantitation Report

File Name	079SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 17:40
Sample Name	jc85970-1
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.129	ug/l	6.99	378.68	1.424E-04	Pulse	0.25	3
B			1	35.687	ug/l	1.56	99,434.80	3.741E-02	Pulse	0.15	3
Ca			1	36061.726	ug/l	0.30	12,043,224.40	2.455E+00	Analog	0.10	3
Sr			1	115.449	ug/l	1.04	2,013,084.92	2.966E-01	Pulse	0.10	3
Mo			1	0.949	ug/l	2.35	3,340.47	4.922E-04	Pulse	0.10	3
Ag			1	0.233	ug/l	3.94	2,130.22	2.911E-04	Pulse	0.10	3
Sn			1	3.213	ug/l	2.34	10,620.70	1.451E-03	Pulse	0.10	3
Sb			1	1.183	ug/l	3.89	8,412.58	8.547E-04	Pulse	0.10	3
Ba			1	38.362	ug/l	3.62	94,366.03	9.588E-03	Pulse	0.10	3
Tl			1	0.021	ug/l	53.49	993.40	1.761E-04	Pulse	0.10	3
Pb			1	21.649	ug/l	1.39	109,553.41	1.940E-02	Pulse	0.10	3
Pb			1	20.175	ug/l	2.14	91,496.09	1.621E-02	Pulse	0.10	3
Pb			1	20.832	ug/l	0.47	429,447.29	7.606E-02	Pulse	0.10	3
Na			2	3859.477	ug/l	0.13	1,274,376.41	8.044E+00	Pulse	0.30	3
Mg			2	7113.654	ug/l	0.43	1,080,652.84	6.822E+00	Pulse	0.30	3
Al			2	2201.762	ug/l	0.88	107,565.63	6.790E-01	Pulse	0.30	3
K			2	7786.993	ug/l	0.53	719,069.35	4.539E+00	Pulse	0.30	3
Ca			2	35044.777	ug/l	0.83	185,310.75	1.170E+00	Pulse	0.30	3
Ti			2	40.585	ug/l	4.70	1,703.44	1.075E-02	Pulse	0.30	3
V			2	7.471	ug/l	2.70	10,815.84	6.828E-02	Pulse	0.30	3
Cr			2	16.445	ug/l	1.21	30,480.30	1.924E-01	Pulse	0.30	3
Mn			2	241.739	ug/l	0.34	220,075.42	1.389E+00	Pulse	0.30	3
Fe			2	5992.718	ug/l	1.53	8,826,604.37	5.572E+01	Analog	0.30	3
Co			2	1.654	ug/l	1.48	5,495.42	3.469E-02	Pulse	0.30	3
Ni			2	4.839	ug/l	2.29	4,457.32	2.813E-02	Pulse	0.30	3
Cu			2	67.439	ug/l	0.21	161,191.35	1.018E+00	Pulse	0.30	3
Zn			2	121.338	ug/l	0.42	38,789.08	2.449E-01	Pulse	0.30	3
As			2	4.048	ug/l	6.15	660.02	4.167E-03	Pulse	1.00	3
Cd			2	0.244	ug/l	13.63	128.73	1.551E-04	Pulse	0.30	3
Sn			2	1.475	ug/l	2.49	1,634.55	1.969E-03	Pulse	0.30	3
Se			3	0.204	ug/l	6.84	25.13	1.191E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,658,209.61	0.60	100.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,905,410.66	0.95	100.5	Pulse	0.10	3
1	Ge		918,611.62	1.00	100.2	Pulse	0.10	3
1	Ge		1,284,874.46	1.30	100.4	Pulse	0.10	3
1	Rh		6,788,355.52	1.27	99.7	Analog	0.10	3
1	In		7,320,369.56	1.07	101.3	Analog	0.10	3
1	Tb		9,843,345.89	1.18	104.6	Analog	0.10	3
1	Ho		920,813.48	1.39	103.7	Pulse	0.10	3
1	Bi		5,645,983.67	0.99	102.5	Analog	0.10	3
2	Sc		158,418.47	0.61	98.9	Pulse	0.30	3
2	Ge		87,065.36	0.42	99.0	Pulse	0.30	3
2	Ge		132,566.65	0.75	97.5	Pulse	0.30	3
2	Rh		2,717,597.67	0.40	96.8	Pulse	0.30	3
2	In		830,090.09	0.31	97.2	Pulse	0.30	3
2	Tb		3,256,100.84	0.52	98.0	Pulse	0.30	3
2	Ho		318,095.07	0.28	98.9	Pulse	0.30	3
2	Bi		2,135,426.65	0.14	96.9	Pulse	0.30	3
3	Sc		233,369.18	1.54	105.9	Pulse	0.30	3
3	Ge		137,834.45	1.68	104.1	Pulse	0.30	3
3	Ge		210,970.81	1.47	103.7	Pulse	0.30	3
3	Rh		2,513,847.19	1.12	101.6	Pulse	0.30	3
3	Tb		3,833,436.79	1.23	103.9	Pulse	0.30	3

Quantitation Report

File Name	080SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 17:45
Sample Name	mp14085-s1 1
Sample Type	Sample
Comment	
Prep Dilution	4.000
Auto Dilution	N/A
Total Dilution	4.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	75.511	ug/l	0.79	241,548.30	8.860E-02	Pulse	0.25	3
B			1	103.360	ug/l	0.98	322,545.99	1.183E-01	Pulse	0.15	3
Ca			1	17708.848	ug/l	0.99	7,897,902.59	1.509E+00	Analog	0.10	3
Sr			1	185.559	ug/l	0.51	4,008,311.19	5.957E-01	Pulse	0.10	3
Mo			1	72.820	ug/l	0.39	300,807.26	4.470E-02	Pulse	0.10	3
Ag			1	72.762	ug/l	1.45	812,424.21	1.092E-01	Pulse	0.10	3
Sn			1	70.605	ug/l	1.34	487,797.53	6.556E-02	Pulse	0.10	3
Sb			1	65.399	ug/l	0.86	477,518.85	4.874E-02	Pulse	0.10	3
Ba			1	162.679	ug/l	0.55	497,449.82	5.077E-02	Pulse	0.10	3
Tl			1	76.211	ug/l	1.13	1,367,186.07	2.534E-01	Pulse	0.10	3
Pb			1	119.418	ug/l	1.66	720,002.07	1.335E-01	Pulse	0.10	3
Pb			1	115.571	ug/l	1.47	624,611.07	1.158E-01	Pulse	0.10	3
Pb			1	116.676	ug/l	1.50	2,865,944.68	5.312E-01	Pulse	0.10	3
Na			2	100362.306	ug/l	1.47	43,109,507.18	2.594E+02	Analog	0.30	3
Mg			2	6390.154	ug/l	0.92	1,272,739.43	7.659E+00	Pulse	0.30	3
Al			2	8137.268	ug/l	0.72	520,198.19	3.130E+00	Pulse	0.30	3
K			2	7519.548	ug/l	0.70	908,888.82	5.470E+00	Pulse	0.30	3
Ca			2	18019.848	ug/l	0.58	125,034.36	7.524E-01	Pulse	0.30	3
Ti			2	327.379	ug/l	1.84	18,008.74	1.084E-01	Pulse	0.30	3
V			2	90.357	ug/l	1.48	165,532.95	9.962E-01	Pulse	0.30	3
Cr			2	94.278	ug/l	0.33	225,763.08	1.359E+00	Pulse	0.30	3
Mn			2	506.735	ug/l	0.71	604,718.22	3.639E+00	Pulse	0.30	3
Fe			2	21273.996	ug/l	1.97	41,036,145.04	2.470E+02	Analog	0.30	3
Co			2	75.873	ug/l	0.53	324,853.53	1.955E+00	Pulse	0.30	3
Ni			2	80.457	ug/l	0.96	95,813.53	5.766E-01	Pulse	0.30	3
Cu			2	119.071	ug/l	0.86	372,299.28	2.240E+00	Pulse	0.30	3
Zn			2	288.603	ug/l	0.17	120,581.29	7.256E-01	Pulse	0.30	3
As			2	75.907	ug/l	1.46	15,909.41	9.574E-02	Pulse	1.00	3
Cd			2	74.183	ug/l	1.04	44,138.32	5.208E-02	Pulse	0.30	3
Sn			2	71.380	ug/l	1.05	78,701.34	9.286E-02	Pulse	0.30	3
Se			3	184.530	ug/l	0.72	11,802.78	5.695E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,726,313.79	0.60	102.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,234,978.78	0.17	107.2	Pulse	0.10	3
1	Ge		954,719.98	1.43	104.1	Pulse	0.10	3
1	Ge		1,335,981.54	0.59	104.4	Pulse	0.10	3
1	Rh		6,728,622.61	0.78	98.9	Analog	0.10	3
1	In		7,441,325.67	1.25	103.0	Analog	0.10	3
1	Tb		9,797,155.27	0.60	104.1	Analog	0.10	3
1	Ho		930,359.65	0.73	104.7	Pulse	0.10	3
1	Bi		5,396,129.71	2.10	98.0	Mix	0.10	3
2	Sc		166,179.21	0.77	103.8	Pulse	0.30	3
2	Ge		91,169.89	0.21	103.6	Pulse	0.30	3
2	Ge		138,236.30	1.00	101.6	Pulse	0.30	3
2	Rh		2,700,736.21	0.52	96.2	Pulse	0.30	3
2	In		847,522.65	0.16	99.2	Pulse	0.30	3
2	Tb		3,301,592.02	0.22	99.4	Pulse	0.30	3
2	Ho		321,893.93	0.24	100.1	Pulse	0.30	3
2	Bi		2,079,630.61	0.51	94.4	Pulse	0.30	3
3	Sc		230,342.44	0.65	104.5	Pulse	0.30	3
3	Ge		134,490.66	0.56	101.6	Pulse	0.30	3
3	Ge		207,245.43	0.36	101.8	Pulse	0.30	3
3	Rh		2,395,279.42	0.68	96.8	Pulse	0.30	3
3	Tb		3,702,254.30	0.23	100.3	Pulse	0.30	3

Quantitation Report

File Name	081_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 17:50
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.274	ug/l	1.02	651,750.69	2.359E-01	Pulse	0.25	3
B			1	101.284	ug/l	0.85	1,228,412.17	4.446E-01	Pulse	0.15	3
Ca			1	5134.285	ug/l	1.47	9,240,506.53	1.749E+00	Analog	0.10	3
Sr			1	52.062	ug/l	0.91	4,664,110.24	6.685E-01	Pulse	0.10	3
Mo			1	51.236	ug/l	0.88	877,425.48	1.258E-01	Pulse	0.10	3
Ag			1	49.525	ug/l	0.90	2,244,500.75	2.972E-01	Pulse	0.10	3
Sn			1	48.540	ug/l	0.46	1,374,150.09	1.820E-01	Pulse	0.10	3
Sb			1	50.343	ug/l	0.51	1,484,506.17	1.498E-01	Pulse	0.10	3
Ba			1	50.905	ug/l	0.72	629,961.11	6.355E-02	Pulse	0.10	3
Tl			1	50.791	ug/l	1.32	3,769,528.80	6.753E-01	Pulse	0.10	3
Pb			1	50.686	ug/l	0.99	1,264,535.21	2.265E-01	Pulse	0.10	3
Pb			1	50.050	ug/l	1.25	1,119,265.35	2.005E-01	Pulse	0.10	3
Pb			1	50.347	ug/l	1.22	5,117,116.67	9.167E-01	Pulse	0.10	3
Na			2	5008.150	ug/l	1.22	8,778,476.04	5.184E+01	Analog	0.30	3
Mg			2	4828.832	ug/l	0.47	3,918,957.21	2.314E+01	Pulse	0.30	3
Al			2	4924.552	ug/l	0.82	1,282,887.10	7.576E+00	Pulse	0.30	3
K			2	5075.972	ug/l	0.71	2,487,775.87	1.469E+01	Pulse	0.30	3
Ca			2	5228.624	ug/l	0.46	147,848.43	8.730E-01	Pulse	0.30	3
Ti			2	49.636	ug/l	2.95	11,131.64	6.573E-02	Pulse	0.30	3
V			2	50.471	ug/l	0.89	376,392.04	2.223E+00	Pulse	0.30	3
Cr			2	49.543	ug/l	1.02	482,985.07	2.852E+00	Pulse	0.30	3
Mn			2	49.449	ug/l	0.79	240,611.77	1.421E+00	Pulse	0.30	3
Fe			2	5089.662	ug/l	1.22	40,022,456.19	2.363E+02	Analog	0.30	3
Co			2	49.006	ug/l	1.03	855,111.63	5.050E+00	Pulse	0.30	3
Ni			2	47.947	ug/l	1.64	232,636.46	1.374E+00	Pulse	0.30	3
Cu			2	47.989	ug/l	1.00	611,199.02	3.609E+00	Pulse	0.30	3
Zn			2	47.566	ug/l	1.52	81,075.15	4.788E-01	Pulse	0.30	3
As			2	49.159	ug/l	0.34	41,976.20	2.479E-01	Pulse	1.00	3
Cd			2	49.048	ug/l	0.57	119,976.52	1.377E-01	Pulse	0.30	3
Sn			2	49.227	ug/l	0.55	222,499.20	2.554E-01	Pulse	0.30	3
Se			3	198.535	ug/l	1.17	52,103.71	2.449E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,762,822.48	1.00	104.0	Pulse	0.10	3
1	Sc		5,284,515.24	1.99	108.2	Mix	0.10	3
1	Ge		976,990.22	1.09	106.5	Pulse	0.10	3

Quantitation Report

1	Ge		1,378,871.91	1.02	107.7	Pulse	0.10	3
1	Rh		6,976,889.89	1.21	102.5	Analog	0.10	3
1	In		7,550,893.59	0.50	104.5	Analog	0.10	3
1	Tb		9,913,262.98	1.40	105.4	Analog	0.10	3
1	Ho		928,616.99	1.48	104.5	Pulse	0.10	3
1	Bi		5,581,950.13	0.25	101.3	Analog	0.10	3
2	Sc		169,354.04	0.99	105.8	Pulse	0.30	3
2	Ge		91,853.43	0.51	104.4	Pulse	0.30	3
2	Ge		141,204.70	0.80	103.8	Pulse	0.30	3
2	Rh		2,792,507.04	0.35	99.4	Pulse	0.30	3
2	In		871,239.17	0.33	102.0	Pulse	0.30	3
2	Tb		3,362,687.02	0.31	101.3	Pulse	0.30	3
2	Ho		326,208.90	0.33	101.5	Pulse	0.30	3
2	Bi		2,146,074.64	0.41	97.4	Pulse	0.30	3
3	Sc		234,078.00	0.11	106.2	Pulse	0.30	3
3	Ge		136,196.56	0.02	102.9	Pulse	0.30	3
3	Ge		212,804.93	1.36	104.6	Pulse	0.30	3
3	Rh		2,449,946.02	0.17	99.0	Pulse	0.30	3
3	Tb		3,730,275.96	0.28	101.1	Pulse	0.30	3

Quantitation Report

File Name	082_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 17:55
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/15/2019 9:14
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.017	ug/l	14.45	282.68	1.011E-04	Pulse	0.25	3
B			1	1.745	ug/l	2.58	39,372.46	1.408E-02	Pulse	0.15	3
Ca			1	2.506	ug/l	27.54	27,403.31	5.170E-03	Pulse	0.10	3
Sr			1	0.034	ug/l	2.14	4,070.67	5.660E-04	Pulse	0.10	3
Mo			1	0.096	ug/l	14.69	1,890.19	2.626E-04	Pulse	0.10	3
Ag			1	0.021	ug/l	12.61	1,076.74	1.375E-04	Pulse	0.10	3
Sn			1	0.434	ug/l	1.31	5,221.06	6.658E-04	Pulse	0.10	3
Sb			1	0.291	ug/l	8.52	10,363.80	1.017E-03	Pulse	0.10	3
Ba			1	0.027	ug/l	17.20	453.36	4.456E-05	Pulse	0.10	3
Tl			1	0.020	ug/l	4.67	2,300.26	3.900E-04	Pulse	0.10	3
Pb			1	0.024	ug/l	12.01	953.40	1.616E-04	Pulse	0.10	3
Pb			1	0.032	ug/l	5.32	1,036.74	1.758E-04	Pulse	0.10	3
Pb			1	0.026	ug/l	5.79	4,047.02	6.861E-04	Pulse	0.10	3
Na			2	4.934	ug/l	8.54	19,609.26	1.160E-01	Pulse	0.30	3
Mg			2	0.742	ug/l	18.60	1,423.41	8.421E-03	Pulse	0.30	3
Al			2	0.602	ug/l	30.05	447.79	2.648E-03	Pulse	0.30	3
K			2	2.073	ug/l	21.61	8,773.51	5.189E-02	Pulse	0.30	3
Ca			2	-4.793	ug/l	-13.98	134.45	7.952E-04	Pulse	0.30	3
Ti			2	0.020	ug/l	44.07	5.56	3.287E-05	Pulse	0.30	3
V			2	0.005	ug/l	157.68	468.90	2.773E-03	Pulse	0.30	3
Cr			2	0.030	ug/l	18.20	844.48	4.995E-03	Pulse	0.30	3
Mn			2	0.049	ug/l	29.34	344.45	2.038E-03	Pulse	0.30	3
Fe			2	0.643	ug/l	15.71	19,372.61	1.146E-01	Pulse	0.30	3
Co			2	0.012	ug/l	7.95	315.56	1.866E-03	Pulse	0.30	3
Ni			2	0.016	ug/l	47.81	145.56	8.615E-04	Pulse	0.30	3
Cu			2	0.037	ug/l	15.36	1,198.94	7.091E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.003	ug/l	-377.10	198.89	1.176E-03	Pulse	0.30	3
As			2	0.013	ug/l	23.02	26.00	1.538E-04	Pulse	1.00	3
Cd			2	0.010	ug/l	32.57	42.11	4.723E-05	Pulse	0.30	3
Sn			2	0.114	ug/l	13.73	922.26	1.034E-03	Pulse	0.30	3
Se			3	0.070	ug/l	19.85	33.87	1.545E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,795,894.00	1.17	105.3	Pulse	0.10	3
1	Sc		5,300,253.57	2.12	108.6	Mix	0.10	3
1	Ge		981,132.59	1.21	107.0	Pulse	0.10	3
1	Ge		1,386,255.45	1.79	108.3	Pulse	0.10	3
1	Rh		7,190,577.18	1.12	105.7	Analog	0.10	3
1	In		7,845,409.17	2.27	108.6	Analog	0.10	3
1	Tb		10,184,402.55	2.35	108.2	Analog	0.10	3
1	Ho		940,276.39	1.26	105.9	Pulse	0.10	3
1	Bi		5,897,647.83	0.74	107.1	Analog	0.10	3
2	Sc		169,074.61	0.45	105.6	Pulse	0.30	3
2	Ge		94,485.28	0.60	107.4	Pulse	0.30	3
2	Ge		143,655.74	0.53	105.6	Pulse	0.30	3
2	Rh		2,905,537.11	0.25	103.5	Pulse	0.30	3
2	In		891,870.74	0.15	104.4	Pulse	0.30	3
2	Tb		3,383,877.44	0.58	101.9	Pulse	0.30	3
2	Ho		328,924.80	0.48	102.3	Pulse	0.30	3
2	Bi		2,249,173.66	0.53	102.1	Pulse	0.30	3
3	Sc		236,657.82	0.52	107.4	Pulse	0.30	3
3	Ge		141,951.31	0.28	107.2	Pulse	0.30	3
3	Ge		219,330.29	0.62	107.8	Pulse	0.30	3
3	Rh		2,599,726.77	0.77	105.0	Pulse	0.30	3
3	Tb		3,843,734.71	0.54	104.2	Pulse	0.30	3

Quantitation Report

File Name	083SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 18:00
Sample Name	mp14085-s2
Sample Type	Sample
Comment	
Prep Dilution	4.000
Auto Dilution	N/A
Total Dilution	4.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	76.440	ug/l	0.46	246,175.43	8.969E-02	Pulse	0.25	3
B			1	105.373	ug/l	0.71	330,704.87	1.205E-01	Pulse	0.15	3
Ca			1	17853.861	ug/l	1.09	8,257,006.54	1.521E+00	Analog	0.10	3
Sr			1	190.229	ug/l	1.66	4,145,254.31	6.107E-01	Pulse	0.10	3
Mo			1	73.598	ug/l	2.91	306,643.65	4.518E-02	Pulse	0.10	3
Ag			1	73.806	ug/l	1.05	835,371.99	1.108E-01	Pulse	0.10	3
Sn			1	70.196	ug/l	1.55	491,585.94	6.517E-02	Pulse	0.10	3
Sb			1	65.318	ug/l	0.35	486,839.68	4.868E-02	Pulse	0.10	3
Ba			1	162.293	ug/l	0.46	506,592.81	5.065E-02	Pulse	0.10	3
Tl			1	75.390	ug/l	1.68	1,380,058.00	2.507E-01	Pulse	0.10	3
Pb			1	118.360	ug/l	1.41	728,242.51	1.323E-01	Pulse	0.10	3
Pb			1	115.113	ug/l	1.93	634,838.22	1.153E-01	Pulse	0.10	3
Pb			1	115.956	ug/l	1.84	2,906,444.51	5.279E-01	Pulse	0.10	3
Na			2	101737.968	ug/l	0.67	44,512,641.56	2.630E+02	Analog	0.30	3
Mg			2	6511.900	ug/l	0.80	1,321,030.96	7.805E+00	Pulse	0.30	3
Al			2	8274.253	ug/l	0.58	538,765.55	3.183E+00	Pulse	0.30	3
K			2	7705.378	ug/l	0.65	948,434.58	5.604E+00	Pulse	0.30	3
Ca			2	18314.352	ug/l	0.62	129,432.98	7.647E-01	Pulse	0.30	3
Ti			2	331.587	ug/l	1.84	18,579.44	1.098E-01	Pulse	0.30	3
V			2	91.766	ug/l	1.49	171,227.09	1.012E+00	Pulse	0.30	3
Cr			2	95.003	ug/l	0.91	231,707.73	1.369E+00	Pulse	0.30	3
Mn			2	513.851	ug/l	0.92	624,584.37	3.690E+00	Pulse	0.30	3
Fe			2	21652.623	ug/l	1.05	42,543,090.53	2.514E+02	Analog	0.30	3
Co			2	76.419	ug/l	0.75	333,254.73	1.969E+00	Pulse	0.30	3
Ni			2	82.093	ug/l	0.91	99,568.76	5.883E-01	Pulse	0.30	3
Cu			2	117.131	ug/l	0.08	373,049.57	2.204E+00	Pulse	0.30	3
Zn			2	293.049	ug/l	0.52	124,703.73	7.368E-01	Pulse	0.30	3
As			2	77.027	ug/l	1.83	16,442.27	9.715E-02	Pulse	1.00	3
Cd			2	73.821	ug/l	0.74	44,679.41	5.183E-02	Pulse	0.30	3
Sn			2	70.926	ug/l	0.99	79,548.85	9.227E-02	Pulse	0.30	3
Se			3	187.314	ug/l	0.15	12,169.58	5.781E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,744,826.55	0.19	103.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,429,040.54	0.83	111.2	Analog	0.10	3
1	Ge		971,408.16	0.51	105.9	Pulse	0.10	3
1	Ge		1,357,192.74	0.75	106.0	Pulse	0.10	3
1	Rh		6,788,866.57	1.58	99.8	Analog	0.10	3
1	In		7,542,816.50	0.32	104.4	Analog	0.10	3
1	Tb		10,001,316.10	1.12	106.3	Analog	0.10	3
1	Ho		927,838.19	0.23	104.5	Pulse	0.10	3
1	Bi		5,506,118.46	1.29	100.0	Mix	0.10	3
2	Sc		169,258.91	0.53	105.7	Pulse	0.30	3
2	Ge		92,209.99	0.12	104.8	Pulse	0.30	3
2	Ge		141,244.06	0.17	103.8	Pulse	0.30	3
2	Rh		2,734,933.16	0.20	97.4	Pulse	0.30	3
2	In		862,100.17	0.32	100.9	Pulse	0.30	3
2	Tb		3,347,495.22	0.40	100.8	Pulse	0.30	3
2	Ho		328,798.70	0.46	102.3	Pulse	0.30	3
2	Bi		2,110,496.44	0.08	95.8	Pulse	0.30	3
3	Sc		233,935.16	0.38	106.1	Pulse	0.30	3
3	Ge		136,734.22	0.29	103.3	Pulse	0.30	3
3	Ge		210,510.95	0.07	103.4	Pulse	0.30	3
3	Rh		2,422,957.26	0.57	97.9	Pulse	0.30	3
3	Tb		3,753,295.13	0.62	101.7	Pulse	0.30	3

Quantitation Report

File Name	084SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 18:05
Sample Name	jc85988-1
Sample Type	Sample
Comment	
Prep Dilution	4.000
Auto Dilution	N/A
Total Dilution	4.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.347	ug/l	7.23	1,176.06	4.293E-04	Pulse	0.25	3
B			1	28.219	ug/l	1.77	101,468.80	3.705E-02	Pulse	0.15	3
Ca			1	15690.590	ug/l	0.89	7,193,510.31	1.337E+00	Analog	0.10	3
Sr			1	106.127	ug/l	0.97	2,311,268.04	3.408E-01	Pulse	0.10	3
Mo			1	1.484	ug/l	4.87	6,354.82	9.368E-04	Pulse	0.10	3
Ag			1	0.099	ug/l	5.68	1,206.76	1.595E-04	Pulse	0.10	3
Sn			1	3.954	ug/l	0.91	20,834.46	2.755E-03	Pulse	0.10	3
Sb			1	1.174	ug/l	2.75	10,267.08	1.024E-03	Pulse	0.10	3
Ba			1	84.944	ug/l	2.91	265,804.57	2.652E-02	Pulse	0.10	3
Tl			1	0.156	ug/l	4.33	3,533.88	6.372E-04	Pulse	0.10	3
Pb			1	40.845	ug/l	1.03	253,324.02	4.568E-02	Pulse	0.10	3
Pb			1	38.140	ug/l	1.45	212,030.93	3.824E-02	Pulse	0.10	3
Pb			1	39.172	ug/l	0.36	989,805.89	1.785E-01	Pulse	0.10	3
Na			2	99652.013	ug/l	0.83	43,558,543.82	2.576E+02	Analog	0.30	3
Mg			2	4547.685	ug/l	0.71	921,887.15	5.452E+00	Pulse	0.30	3
Al			2	5925.716	ug/l	0.27	385,538.95	2.280E+00	Pulse	0.30	3
K			2	5687.831	ug/l	0.78	701,415.94	4.148E+00	Pulse	0.30	3
Ca			2	15751.258	ug/l	0.48	111,241.54	6.579E-01	Pulse	0.30	3
Ti			2	239.947	ug/l	1.37	13,431.09	7.944E-02	Pulse	0.30	3
V			2	15.214	ug/l	1.37	28,720.52	1.699E-01	Pulse	0.30	3
Cr			2	20.285	ug/l	1.25	49,862.52	2.949E-01	Pulse	0.30	3
Mn			2	434.085	ug/l	0.33	527,115.26	3.117E+00	Pulse	0.30	3
Fe			2	19690.296	ug/l	0.73	38,650,111.80	2.286E+02	Analog	0.30	3
Co			2	2.798	ug/l	2.17	12,290.25	7.268E-02	Pulse	0.30	3
Ni			2	9.985	ug/l	1.58	12,159.03	7.191E-02	Pulse	0.30	3
Cu			2	48.242	ug/l	0.38	153,915.55	9.103E-01	Pulse	0.30	3
Zn			2	224.435	ug/l	0.31	95,458.24	5.645E-01	Pulse	0.30	3
As			2	6.826	ug/l	0.71	1,469.07	8.688E-03	Pulse	1.00	3
Cd			2	0.215	ug/l	11.89	146.37	1.690E-04	Pulse	0.30	3
Sn			2	2.813	ug/l	6.66	3,537.11	4.084E-03	Pulse	0.30	3
Se			3	0.892	ug/l	10.51	73.20	3.437E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,738,868.05	0.73	103.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,379,553.25	1.12	110.2	Analog	0.10	3
1	Ge		965,408.68	1.02	105.3	Pulse	0.10	3
1	Ge		1,354,366.80	1.06	105.8	Pulse	0.10	3
1	Rh		6,783,015.94	1.00	99.7	Analog	0.10	3
1	In		7,563,083.41	0.76	104.7	Analog	0.10	3
1	Tb		10,025,170.89	0.84	106.6	Analog	0.10	3
1	Ho		932,215.20	0.77	104.9	Pulse	0.10	3
1	Bi		5,545,438.46	1.11	100.7	Analog	0.10	3
2	Sc		169,088.15	0.65	105.6	Pulse	0.30	3
2	Ge		92,274.90	0.44	104.9	Pulse	0.30	3
2	Ge		139,575.16	0.63	102.6	Pulse	0.30	3
2	Rh		2,750,422.18	0.34	97.9	Pulse	0.30	3
2	In		866,223.63	0.21	101.4	Pulse	0.30	3
2	Tb		3,356,401.40	0.26	101.1	Pulse	0.30	3
2	Ho		327,357.29	0.15	101.8	Pulse	0.30	3
2	Bi		2,124,249.43	0.32	96.4	Pulse	0.30	3
3	Sc		236,221.15	0.36	107.2	Pulse	0.30	3
3	Ge		137,797.38	0.17	104.1	Pulse	0.30	3
3	Ge		212,922.90	0.55	104.6	Pulse	0.30	3
3	Rh		2,441,431.09	0.89	98.6	Pulse	0.30	3
3	Tb		3,769,557.77	0.70	102.1	Pulse	0.30	3

Quantitation Report

File Name	085SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 18:10
Sample Name	jc85846-1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	4.911	ug/l	0.78	6,159.87	2.326E-03	Pulse	0.25	3
B			1	588.984	ug/l	0.43	691,974.52	2.613E-01	Pulse	0.15	3
Ca			1	90925.811	ug/l	0.91	15,448,827.69	3.094E+00	Analog	0.10	3
Sr			1	541.378	ug/l	0.67	4,708,064.20	6.952E-01	Pulse	0.10	3
Mo			1	28.993	ug/l	1.61	48,363.60	7.142E-03	Pulse	0.10	3
Ag			1	1.163	ug/l	2.29	5,317.79	7.093E-04	Pulse	0.10	3
Sn			1	4.712	ug/l	2.98	6,038.07	8.050E-04	Pulse	0.10	3
Sb			1	9.744	ug/l	0.62	30,266.84	3.047E-03	Pulse	0.10	3
Ba			1	116.427	ug/l	2.28	144,453.51	1.454E-02	Pulse	0.10	3
Tl			1	5.128	ug/l	2.72	39,430.09	6.936E-03	Pulse	0.10	3
Pb			1	5.372	ug/l	5.09	13,950.34	2.456E-03	Pulse	0.10	3
Pb			1	5.172	ug/l	3.28	12,035.33	2.118E-03	Pulse	0.10	3
Pb			1	5.281	ug/l	1.90	55,886.98	9.834E-03	Pulse	0.10	3
Na			2	17222.630	ug/l	0.62	2,864,206.90	1.787E+01	Pulse	0.30	3
Mg			2	33085.616	ug/l	0.83	2,541,762.26	1.586E+01	Pulse	0.30	3
Al			2	41.900	ug/l	4.59	1,308.96	8.166E-03	Pulse	0.30	3
K			2	4687.830	ug/l	1.00	224,145.05	1.398E+00	Pulse	0.30	3
Ca			2	90020.884	ug/l	0.73	240,749.95	1.502E+00	Pulse	0.30	3
Ti			2	1.149	ug/l	47.19	25.56	1.591E-04	Pulse	0.30	3
V			2	5.983	ug/l	2.12	4,628.48	2.888E-02	Pulse	0.30	3
Cr			2	11.330	ug/l	2.34	10,968.18	6.843E-02	Pulse	0.30	3
Mn			2	436.088	ug/l	1.49	200,852.46	1.253E+00	Pulse	0.30	3
Fe			2	2365.744	ug/l	0.94	1,773,824.93	1.107E+01	Pulse	0.30	3
Co			2	3.247	ug/l	3.69	5,459.86	3.406E-02	Pulse	0.30	3
Ni			2	6.231	ug/l	2.44	2,926.96	1.826E-02	Pulse	0.30	3
Cu			2	15.630	ug/l	0.64	19,509.49	1.217E-01	Pulse	0.30	3
Zn			2	31.467	ug/l	3.44	5,257.56	3.280E-02	Pulse	0.30	3
As			2	9.448	ug/l	1.78	777.35	4.849E-03	Pulse	1.00	3
Cd			2	5.083	ug/l	2.75	1,221.05	1.445E-03	Pulse	0.30	3
Sn			2	1.376	ug/l	11.79	975.60	1.155E-03	Pulse	0.30	3
Se			3	24.020	ug/l	1.27	649.41	3.031E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,648,122.44	0.84	99.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,993,349.61	1.33	102.3	Pulse	0.10	3
1	Ge		942,176.94	1.07	102.7	Pulse	0.10	3
1	Ge		1,318,585.87	1.17	103.0	Pulse	0.10	3
1	Rh		6,772,120.52	1.03	99.5	Analog	0.10	3
1	In		7,496,440.34	1.21	103.7	Analog	0.10	3
1	Tb		9,932,608.60	0.05	105.6	Analog	0.10	3
1	Ho		924,006.50	1.83	104.0	Pulse	0.10	3
1	Bi		5,683,397.63	1.45	103.2	Analog	0.10	3
2	Sc		160,297.11	0.83	100.1	Pulse	0.30	3
2	Ge		89,175.79	1.03	101.4	Pulse	0.30	3
2	Ge		136,361.93	0.48	100.2	Pulse	0.30	3
2	Rh		2,731,883.36	0.66	97.3	Pulse	0.30	3
2	In		844,894.79	0.39	98.9	Pulse	0.30	3
2	Tb		3,305,668.20	0.34	99.5	Pulse	0.30	3
2	Ho		322,035.51	0.36	100.2	Pulse	0.30	3
2	Bi		2,145,486.30	0.14	97.3	Pulse	0.30	3
3	Sc		233,947.16	0.57	106.1	Pulse	0.30	3
3	Ge		138,106.74	0.43	104.3	Pulse	0.30	3
3	Ge		214,294.01	0.65	105.3	Pulse	0.30	3
3	Rh		2,521,542.68	0.47	101.9	Pulse	0.30	3
3	Tb		3,854,883.32	0.44	104.5	Pulse	0.30	3

Quantitation Report

File Name	086SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 18:15
Sample Name	jc85846-1f
Sample Type	Sample
Comment	
Prep Dilution	20.000
Auto Dilution	N/A
Total Dilution	20.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	5.078	ug/l	5.36	3,301.71	1.213E-03	Pulse	0.25	3
B			1	546.896	ug/l	0.51	339,701.93	1.248E-01	Pulse	0.15	3
Ca			1	143813.735	ug/l	1.04	12,547,075.23	2.448E+00	Analog	0.10	3
Sr			1	567.144	ug/l	2.68	2,547,043.24	3.642E-01	Pulse	0.10	3
Mo			1	28.230	ug/l	1.91	24,412.70	3.490E-03	Pulse	0.10	3
Ag			1	1.589	ug/l	5.32	3,737.23	4.882E-04	Pulse	0.10	3
Sn			1	8.107	ug/l	1.16	4,264.10	5.569E-04	Pulse	0.10	3
Sb			1	10.169	ug/l	2.11	16,662.67	1.663E-03	Pulse	0.10	3
Ba			1	133.627	ug/l	1.81	83,699.01	8.351E-03	Pulse	0.10	3
Tl			1	5.090	ug/l	1.20	20,294.45	3.502E-03	Pulse	0.10	3
Pb			1	5.264	ug/l	4.75	7,135.29	1.231E-03	Pulse	0.10	3
Pb			1	5.244	ug/l	4.39	6,351.58	1.096E-03	Pulse	0.10	3
Pb			1	5.311	ug/l	0.56	29,285.84	5.054E-03	Pulse	0.10	3
Na			2	24847.690	ug/l	0.64	2,118,926.10	1.291E+01	Pulse	0.30	3
Mg			2	47995.460	ug/l	0.29	1,888,296.52	1.150E+01	Pulse	0.30	3
Al			2	16.328	ug/l	33.62	488.90	2.978E-03	Pulse	0.30	3
K			2	5286.794	ug/l	0.56	132,728.38	8.085E-01	Pulse	0.30	3
Ca			2	140797.278	ug/l	1.11	192,867.41	1.175E+00	Pulse	0.30	3
Ti			2	1.023	ug/l	142.20	12.22	7.469E-05	Pulse	0.30	3
V			2	5.624	ug/l	2.03	2,450.21	1.493E-02	Pulse	0.30	3
Cr			2	12.125	ug/l	0.51	6,261.25	3.814E-02	Pulse	0.30	3
Mn			2	1678.179	ug/l	0.27	395,712.80	2.411E+00	Pulse	0.30	3
Fe			2	3086.578	ug/l	0.24	1,189,900.68	7.249E+00	Pulse	0.30	3
Co			2	7.969	ug/l	2.78	6,838.16	4.166E-02	Pulse	0.30	3
Ni			2	10.299	ug/l	3.62	2,489.10	1.516E-02	Pulse	0.30	3
Cu			2	11.996	ug/l	1.27	8,102.10	4.936E-02	Pulse	0.30	3
Zn			2	50.832	ug/l	3.07	4,387.30	2.673E-02	Pulse	0.30	3
As			2	9.108	ug/l	9.24	391.01	2.382E-03	Pulse	1.00	3
Cd			2	5.240	ug/l	8.80	648.83	7.536E-04	Pulse	0.30	3
Sn			2	1.343	ug/l	18.96	680.02	7.897E-04	Pulse	0.30	3
Se			3	25.096	ug/l	2.27	348.67	1.616E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,721,715.91	1.04	102.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,125,789.51	1.01	105.0	Pulse	0.10	3
1	Ge		961,571.55	0.60	104.8	Pulse	0.10	3
1	Ge		1,345,326.23	1.17	105.1	Pulse	0.10	3
1	Rh		6,994,960.73	1.17	102.8	Analog	0.10	3
1	In		7,657,421.98	0.66	106.0	Analog	0.10	3
1	Tb		10,023,594.64	0.99	106.5	Analog	0.10	3
1	Ho		928,033.42	1.69	104.5	Pulse	0.10	3
1	Bi		5,794,507.62	0.10	105.2	Analog	0.10	3
2	Sc		164,158.60	0.38	102.5	Pulse	0.30	3
2	Ge		91,443.37	0.54	104.0	Pulse	0.30	3
2	Ge		139,552.81	0.88	102.6	Pulse	0.30	3
2	Rh		2,790,568.50	0.71	99.4	Pulse	0.30	3
2	In		861,139.90	0.36	100.8	Pulse	0.30	3
2	Tb		3,321,887.85	0.55	100.0	Pulse	0.30	3
2	Ho		324,563.24	0.64	101.0	Pulse	0.30	3
2	Bi		2,177,204.29	0.78	98.8	Pulse	0.30	3
3	Sc		233,826.45	0.53	106.1	Pulse	0.30	3
3	Ge		139,384.30	0.12	105.3	Pulse	0.30	3
3	Ge		215,784.13	0.72	106.0	Pulse	0.30	3
3	Rh		2,539,908.51	0.48	102.6	Pulse	0.30	3
3	Tb		3,855,209.01	0.34	104.5	Pulse	0.30	3

Quantitation Report

File Name	087SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 18:20
Sample Name	jc85846-1a
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	4.877	ug/l	18.23	6,393.29	2.310E-03	Pulse	0.25	3
B			1	564.699	ug/l	18.96	693,459.12	2.508E-01	Pulse	0.15	3
Ca			1	86790.355	ug/l	28.31	15,427,144.35	2.953E+00	Analog	0.10	3
Sr			1	507.396	ug/l	27.94	4,625,402.32	6.516E-01	Pulse	0.10	3
Mo			1	27.152	ug/l	26.35	47,661.64	6.690E-03	Pulse	0.10	3
Ag			1	1.126	ug/l	25.31	5,377.75	6.875E-04	Pulse	0.10	3
Sn			1	4.372	ug/l	11.02	5,281.11	6.770E-04	Pulse	0.10	3
Sb			1	8.984	ug/l	27.99	29,031.14	2.821E-03	Pulse	0.10	3
Ba			1	109.099	ug/l	26.36	140,114.41	1.363E-02	Pulse	0.10	3
Tl			1	4.869	ug/l	28.22	38,203.74	6.593E-03	Pulse	0.10	3
Pb			1	5.095	ug/l	23.20	13,613.36	2.332E-03	Pulse	0.10	3
Pb			1	5.070	ug/l	24.41	12,108.65	2.077E-03	Pulse	0.10	3
Pb			1	5.054	ug/l	25.62	54,801.51	9.420E-03	Pulse	0.10	3
Na			2	16843.955	ug/l	0.45	2,828,823.43	1.748E+01	Pulse	0.30	3
Mg			2	32530.959	ug/l	0.65	2,523,591.70	1.559E+01	Pulse	0.30	3
Al			2	49.065	ug/l	4.68	1,500.10	9.268E-03	Pulse	0.30	3
K			2	4608.236	ug/l	0.52	222,622.29	1.375E+00	Pulse	0.30	3
Ca			2	88028.038	ug/l	0.62	237,726.78	1.469E+00	Pulse	0.30	3
Ti			2	0.569	ug/l	72.11	13.33	8.232E-05	Pulse	0.30	3
V			2	5.960	ug/l	2.08	4,657.40	2.878E-02	Pulse	0.30	3
Cr			2	11.355	ug/l	2.91	11,099.39	6.857E-02	Pulse	0.30	3
Mn			2	425.041	ug/l	1.00	197,690.08	1.221E+00	Pulse	0.30	3
Fe			2	2292.221	ug/l	0.44	1,735,942.33	1.072E+01	Pulse	0.30	3
Co			2	2.978	ug/l	2.23	5,063.06	3.128E-02	Pulse	0.30	3
Ni			2	6.245	ug/l	1.08	2,962.54	1.830E-02	Pulse	0.30	3
Cu			2	11.691	ug/l	2.77	14,911.33	9.212E-02	Pulse	0.30	3
Zn			2	32.552	ug/l	1.66	5,485.42	3.389E-02	Pulse	0.30	3
As			2	8.886	ug/l	5.41	739.02	4.566E-03	Pulse	1.00	3
Cd			2	5.041	ug/l	3.91	1,204.49	1.433E-03	Pulse	0.30	3
Sn			2	1.197	ug/l	1.25	892.26	1.062E-03	Pulse	0.30	3
Se			3	23.481	ug/l	2.16	628.61	2.964E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,830,058.62	18.77	106.5	Mix	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,527,424.08	29.47	113.2	Mix	0.10	3
1	Ge		1,007,348.42	21.56	109.8	Pulse	0.10	3
1	Ge		1,411,786.64	20.94	110.3	Pulse	0.10	3
1	Rh		7,489,761.14	28.40	110.1	Analog	0.10	3
1	In		8,190,580.14	27.12	113.4	Analog	0.10	3
1	Tb		10,778,171.50	26.46	114.6	Analog	0.10	3
1	Ho		1,012,153.27	27.76	113.9	Pulse	0.10	3
1	Bi		6,065,073.03	24.85	110.1	Mix	0.10	3
2	Sc		161,859.88	0.40	101.1	Pulse	0.30	3
2	Ge		88,827.11	0.68	101.0	Pulse	0.30	3
2	Ge		135,549.42	0.84	99.7	Pulse	0.30	3
2	Rh		2,718,986.70	0.64	96.8	Pulse	0.30	3
2	In		840,316.24	0.39	98.4	Pulse	0.30	3
2	Tb		3,300,425.56	0.25	99.4	Pulse	0.30	3
2	Ho		319,716.64	0.81	99.4	Pulse	0.30	3
2	Bi		2,145,613.74	0.27	97.4	Pulse	0.30	3
3	Sc		233,292.28	0.60	105.8	Pulse	0.30	3
3	Ge		137,986.87	0.80	104.2	Pulse	0.30	3
3	Ge		212,100.12	0.62	104.2	Pulse	0.30	3
3	Rh		2,501,746.50	0.43	101.1	Pulse	0.30	3
3	Tb		3,844,919.43	0.55	104.2	Pulse	0.30	3

Quantitation Report

File Name 088SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File
Method Path
Acq Time 4/12/2019 18:25
Sample Name jc85846-1fa
Sample Type Sample
Comment
Prep Dilution 20.000
Auto Dilution N/A
Total Dilution 20.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/12/2019 17:58
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	5.251	ug/l	5.77	3,432.39	1.254E-03	Pulse	0.25	3
B			1	540.565	ug/l	0.39	338,006.01	1.234E-01	Pulse	0.15	3
Ca			1	144635.623	ug/l	1.64	12,516,084.40	2.462E+00	Analog	0.10	3
Sr			1	568.564	ug/l	0.22	2,520,586.42	3.651E-01	Pulse	0.10	3
Mo			1	28.861	ug/l	2.15	24,629.64	3.568E-03	Pulse	0.10	3
Ag			1	1.402	ug/l	9.67	3,280.44	4.321E-04	Pulse	0.10	3
Sn			1	9.610	ug/l	3.58	6,381.57	8.401E-04	Pulse	0.10	3
Sb			1	10.283	ug/l	0.90	16,612.61	1.679E-03	Pulse	0.10	3
Ba			1	134.564	ug/l	2.82	83,176.39	8.409E-03	Pulse	0.10	3
Tl			1	5.112	ug/l	2.33	20,124.22	3.517E-03	Pulse	0.10	3
Pb			1	5.442	ug/l	4.30	7,275.38	1.271E-03	Pulse	0.10	3
Pb			1	5.207	ug/l	3.70	6,231.55	1.089E-03	Pulse	0.10	3
Pb			1	5.204	ug/l	2.20	28,371.55	4.957E-03	Pulse	0.10	3
Na			2	24513.906	ug/l	0.76	2,087,572.14	1.274E+01	Pulse	0.30	3
Mg			2	47746.482	ug/l	0.69	1,875,762.77	1.144E+01	Pulse	0.30	3
Al			2	10.132	ug/l	12.87	410.01	2.501E-03	Pulse	0.30	3
K			2	5236.735	ug/l	0.59	131,352.51	8.013E-01	Pulse	0.30	3
Ca			2	139806.240	ug/l	1.02	191,234.54	1.167E+00	Pulse	0.30	3
Ti			2	0.610	ug/l	115.58	7.78	4.730E-05	Pulse	0.30	3
V			2	5.578	ug/l	1.73	2,430.21	1.483E-02	Pulse	0.30	3
Cr			2	12.188	ug/l	2.86	6,281.26	3.832E-02	Pulse	0.30	3
Mn			2	1661.893	ug/l	0.85	391,301.35	2.387E+00	Pulse	0.30	3
Fe			2	3098.422	ug/l	0.83	1,192,676.76	7.276E+00	Pulse	0.30	3
Co			2	7.894	ug/l	0.20	6,764.80	4.127E-02	Pulse	0.30	3
Ni			2	10.915	ug/l	4.52	2,630.24	1.605E-02	Pulse	0.30	3
Cu			2	12.007	ug/l	2.85	8,096.52	4.940E-02	Pulse	0.30	3
Zn			2	48.141	ug/l	3.92	4,159.46	2.537E-02	Pulse	0.30	3
As			2	9.767	ug/l	3.94	417.68	2.548E-03	Pulse	1.00	3
Cd			2	5.172	ug/l	9.60	634.43	7.440E-04	Pulse	0.30	3
Sn			2	3.366	ug/l	14.74	1,120.06	1.314E-03	Pulse	0.30	3
Se			3	25.288	ug/l	1.31	348.00	1.628E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,738,102.69	0.54	103.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,084,306.80	0.97	104.1	Pulse	0.10	3
1	Ge		955,588.19	1.05	104.2	Pulse	0.10	3
1	Ge		1,347,550.09	0.76	105.3	Pulse	0.10	3
1	Rh		6,903,571.56	0.82	101.4	Analog	0.10	3
1	In		7,591,670.84	1.23	105.1	Analog	0.10	3
1	Tb		9,891,141.31	0.95	105.1	Analog	0.10	3
1	Ho		932,524.51	0.95	105.0	Pulse	0.10	3
1	Bi		5,722,790.75	1.25	103.9	Analog	0.10	3
2	Sc		163,921.45	0.45	102.4	Pulse	0.30	3
2	Ge		90,906.39	1.49	103.3	Pulse	0.30	3
2	Ge		137,804.99	0.30	101.3	Pulse	0.30	3
2	Rh		2,763,812.53	0.58	98.4	Pulse	0.30	3
2	In		852,662.23	0.50	99.8	Pulse	0.30	3
2	Tb		3,311,276.46	0.75	99.7	Pulse	0.30	3
2	Ho		319,548.63	0.64	99.4	Pulse	0.30	3
2	Bi		2,173,932.27	0.75	98.6	Pulse	0.30	3
3	Sc		233,158.19	0.55	105.8	Pulse	0.30	3
3	Ge		137,898.19	1.07	104.1	Pulse	0.30	3
3	Ge		213,793.04	0.40	105.0	Pulse	0.30	3
3	Rh		2,510,100.18	0.22	101.4	Pulse	0.30	3
3	Tb		3,814,067.49	0.17	103.3	Pulse	0.30	3

Quantitation Report

File Name	089SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 18:30
Sample Name	MDL-SOIL-MB1CONF
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/15/2019 9:14
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	7895.03	61.33	2.180E-05	Pulse	0.25	3
B			1	4.325	ug/l	3.13	28,922.88	1.028E-02	Pulse	0.15	3
Ca			1	38.002	ug/l	6.77	37,245.97	6.902E-03	Pulse	0.10	3
Sr			1	0.231	ug/l	9.13	5,197.71	7.247E-04	Pulse	0.10	3
Mo			1	0.204	ug/l	3.30	906.73	1.265E-04	Pulse	0.10	3
Ag			1	0.016	ug/l	26.68	236.68	3.031E-05	Pulse	0.10	3
Sn			1	12.011	ug/l	1.68	63,070.27	8.084E-03	Pulse	0.10	3
Sb			1	-0.127	ug/l	-8.30	756.72	7.608E-05	Pulse	0.10	3
Ba			1	0.137	ug/l	9.18	450.03	4.523E-05	Pulse	0.10	3
Tl			1	0.001	ug/l	772.93	713.38	1.211E-04	Pulse	0.10	3
Pb			1	0.332	ug/l	10.89	2,073.56	3.519E-04	Pulse	0.10	3
Pb			1	0.296	ug/l	11.14	1,666.82	2.829E-04	Pulse	0.10	3
Pb			1	0.324	ug/l	4.68	8,254.57	1.401E-03	Pulse	0.10	3
Na			2	56.542	ug/l	3.58	31,428.06	1.819E-01	Pulse	0.30	3
Mg			2	6.531	ug/l	17.04	1,921.25	1.113E-02	Pulse	0.30	3
Al			2	4.395	ug/l	20.94	532.24	3.074E-03	Pulse	0.30	3
K			2	25.036	ug/l	10.15	10,427.79	6.035E-02	Pulse	0.30	3
Ca			2	8.063	ug/l	128.79	321.12	1.863E-03	Pulse	0.30	3
Ti			2	0.391	ug/l	84.96	18.89	1.104E-04	Pulse	0.30	3
V			2	-0.106	ug/l	-6.11	281.12	1.625E-03	Pulse	0.30	3
Cr			2	0.698	ug/l	6.53	1,953.47	1.131E-02	Pulse	0.30	3
Mn			2	0.326	ug/l	9.91	432.23	2.499E-03	Pulse	0.30	3
Fe			2	16.188	ug/l	4.55	40,608.02	2.350E-01	Pulse	0.30	3
Co			2	0.006	ug/l	132.11	124.45	7.225E-04	Pulse	0.30	3
Ni			2	0.193	ug/l	17.08	262.23	1.520E-03	Pulse	0.30	3
Cu			2	0.498	ug/l	4.48	2,035.71	1.177E-02	Pulse	0.30	3
Zn			2	2.450	ug/l	6.52	1,060.05	6.127E-03	Pulse	0.30	3
As			2	0.044	ug/l	121.91	22.67	1.311E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.008	ug/l	-126.16	12.18	1.351E-05	Pulse	0.30	3
Sn			2	10.433	ug/l	3.84	10,181.19	1.125E-02	Pulse	0.30	3
Se			3	-0.130	ug/l	-27.70	7.87	3.663E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,814,451.47	0.67	106.0	Pulse	0.10	3
1	Sc		5,397,530.13	1.21	110.6	Analog	0.10	3
1	Ge		986,889.98	0.40	107.6	Pulse	0.10	3
1	Ge		1,389,067.27	0.75	108.5	Pulse	0.10	3
1	Rh		7,170,914.06	0.92	105.4	Analog	0.10	3
1	In		7,803,312.85	1.37	108.0	Analog	0.10	3
1	Tb		9,944,821.94	1.96	105.7	Analog	0.10	3
1	Ho		919,286.65	1.68	103.5	Pulse	0.10	3
1	Bi		5,890,392.21	0.53	106.9	Analog	0.10	3
2	Sc		172,852.03	2.71	107.9	Pulse	0.30	3
2	Ge		95,913.37	1.51	109.0	Pulse	0.30	3
2	Ge		145,922.32	1.73	107.3	Pulse	0.30	3
2	Rh		2,933,439.82	1.99	104.5	Pulse	0.30	3
2	In		905,416.08	1.70	106.0	Pulse	0.30	3
2	Tb		3,411,885.77	1.82	102.7	Pulse	0.30	3
2	Ho		332,789.48	1.77	103.5	Pulse	0.30	3
2	Bi		2,305,407.76	1.79	104.6	Pulse	0.30	3
3	Sc		232,766.98	0.49	105.6	Pulse	0.30	3
3	Ge		140,284.01	0.59	105.9	Pulse	0.30	3
3	Ge		214,806.29	0.57	105.5	Pulse	0.30	3
3	Rh		2,561,108.44	0.26	103.5	Pulse	0.30	3
3	Tb		3,790,288.88	0.83	102.7	Pulse	0.30	3

Quantitation Report

File Name	090SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 18:35
Sample Name	MDL-SOIL-B1CONF
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/15/2019 9:14
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	188.739	ug/l	0.44	488,349.83	1.771E-01	Pulse	0.25	3
B			1	189.439	ug/l	0.72	469,815.97	1.704E-01	Pulse	0.15	3
Ca			1	9980.264	ug/l	0.06	3,518,600.26	6.826E-01	Pulse	0.10	3
Sr			1	193.482	ug/l	1.04	3,457,147.35	4.969E-01	Pulse	0.10	3
Mo			1	190.277	ug/l	1.18	649,901.63	9.342E-02	Pulse	0.10	3
Ag			1	94.231	ug/l	1.34	860,887.46	1.131E-01	Pulse	0.10	3
Sn			1	199.982	ug/l	1.15	1,139,874.88	1.498E-01	Pulse	0.10	3
Sb			1	193.855	ug/l	0.17	1,155,057.93	1.154E-01	Pulse	0.10	3
Ba			1	186.987	ug/l	0.60	467,461.97	4.669E-02	Pulse	0.10	3
Tl			1	187.379	ug/l	1.28	2,851,201.62	4.983E-01	Pulse	0.10	3
Pb			1	189.203	ug/l	2.50	967,715.51	1.691E-01	Pulse	0.10	3
Pb			1	186.294	ug/l	2.30	854,100.04	1.493E-01	Pulse	0.10	3
Pb			1	187.474	ug/l	2.18	3,906,401.51	6.828E-01	Pulse	0.10	3
Na			2	10021.891	ug/l	18.04	3,224,437.93	2.078E+01	Pulse	0.30	3
Mg			2	9954.731	ug/l	17.99	1,480,635.04	9.544E+00	Pulse	0.30	3
Al			2	10011.800	ug/l	17.98	478,016.25	3.081E+00	Pulse	0.30	3
K			2	10313.599	ug/l	17.86	930,597.60	5.997E+00	Pulse	0.30	3
Ca			2	11446.405	ug/l	18.27	59,425.48	3.831E-01	Pulse	0.30	3
Ti			2	192.986	ug/l	14.88	7,956.42	5.111E-02	Pulse	0.30	3
V			2	199.298	ug/l	18.51	272,240.60	1.756E+00	Pulse	0.30	3
Cr			2	201.377	ug/l	18.50	359,600.42	2.319E+00	Pulse	0.30	3
Mn			2	199.612	ug/l	17.90	177,993.06	1.147E+00	Pulse	0.30	3
Fe			2	10599.462	ug/l	19.20	15,259,349.39	9.849E+01	Analog	0.30	3
Co			2	198.420	ug/l	18.67	633,937.59	4.089E+00	Pulse	0.30	3
Ni			2	197.950	ug/l	18.39	175,913.96	1.134E+00	Pulse	0.30	3
Cu			2	196.627	ug/l	17.92	458,989.13	2.958E+00	Pulse	0.30	3
Zn			2	214.069	ug/l	18.15	66,862.96	4.311E-01	Pulse	0.30	3
As			2	198.993	ug/l	18.57	31,114.12	2.007E-01	Pulse	1.00	3
Cd			2	198.038	ug/l	17.60	89,975.23	1.112E-01	Pulse	0.30	3
Sn			2	216.950	ug/l	17.47	182,191.41	2.252E-01	Pulse	0.30	3
Se			3	480.755	ug/l	0.10	24,912.81	1.186E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,756,873.38	0.49	103.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,154,939.30	0.49	105.6	Pulse	0.10	3
1	Ge		963,265.30	0.20	105.0	Pulse	0.10	3
1	Ge		1,358,562.11	0.33	106.1	Pulse	0.10	3
1	Rh		6,957,083.02	0.99	102.2	Analog	0.10	3
1	In		7,610,312.21	0.08	105.3	Analog	0.10	3
1	Tb		10,012,000.89	1.09	106.4	Analog	0.10	3
1	Ho		930,757.10	0.85	104.8	Pulse	0.10	3
1	Bi		5,722,360.33	1.33	103.9	Analog	0.10	3
2	Sc		158,207.02	16.23	98.8	Pulse	0.30	3
2	Ge		88,130.65	11.25	100.2	Pulse	0.30	3
2	Ge		134,300.98	11.52	98.7	Pulse	0.30	3
2	Rh		2,676,038.85	16.22	95.3	Pulse	0.30	3
2	In		823,971.15	15.47	96.5	Pulse	0.30	3
2	Tb		3,247,333.41	16.87	97.8	Mix	0.30	3
2	Ho		310,836.56	15.49	96.7	Pulse	0.30	3
2	Bi		2,104,423.74	12.95	95.5	Pulse	0.30	3
3	Sc		230,422.56	0.68	104.5	Pulse	0.30	3
3	Ge		135,776.68	0.36	102.5	Pulse	0.30	3
3	Ge		210,012.50	0.54	103.2	Pulse	0.30	3
3	Rh		2,468,722.82	0.39	99.7	Pulse	0.30	3
3	Tb		3,741,521.38	0.49	101.4	Pulse	0.30	3

Quantitation Report

File Name	091SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 18:40
Sample Name	MDL-LOD-SOILCONF
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/15/2019 9:14
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	2.829	ug/l	2.89	7,675.18	2.677E-03	Pulse	0.25	3
B			1	53.635	ug/l	0.68	151,774.24	5.293E-02	Pulse	0.15	3
Ca			1	819.214	ug/l	1.44	329,142.03	5.999E-02	Pulse	0.10	3
Sr			1	34.666	ug/l	1.78	650,212.27	8.915E-02	Pulse	0.10	3
Mo			1	4.867	ug/l	3.20	17,616.99	2.415E-03	Pulse	0.10	3
Ag			1	0.112	ug/l	19.57	1,143.41	1.456E-04	Pulse	0.10	3
Sn			1	156.624	ug/l	0.90	919,614.78	1.171E-01	Pulse	0.10	3
Sb			1	5.772	ug/l	1.63	35,637.90	3.582E-03	Pulse	0.10	3
Ba			1	5.379	ug/l	3.65	13,466.22	1.354E-03	Pulse	0.10	3
Tl			1	2.602	ug/l	0.66	40,974.17	7.037E-03	Pulse	0.10	3
Pb			1	5.310	ug/l	3.23	27,950.66	4.801E-03	Pulse	0.10	3
Pb			1	5.031	ug/l	2.58	23,733.02	4.076E-03	Pulse	0.10	3
Pb			1	5.149	ug/l	2.05	110,437.91	1.897E-02	Pulse	0.10	3
Na			2	785.890	ug/l	0.93	300,952.85	1.690E+00	Pulse	0.30	3
Mg			2	767.072	ug/l	0.42	131,780.75	7.399E-01	Pulse	0.30	3
Al			2	158.671	ug/l	1.82	8,999.16	5.053E-02	Pulse	0.30	3
K			2	794.793	ug/l	1.01	89,854.56	5.045E-01	Pulse	0.30	3
Ca			2	981.755	ug/l	2.50	6,112.30	3.432E-02	Pulse	0.30	3
Ti			2	4.921	ug/l	13.25	233.34	1.310E-03	Pulse	0.30	3
V			2	6.118	ug/l	1.92	10,042.03	5.638E-02	Pulse	0.30	3
Cr			2	15.816	ug/l	1.84	32,979.52	1.852E-01	Pulse	0.30	3
Mn			2	5.358	ug/l	2.43	5,592.11	3.140E-02	Pulse	0.30	3
Fe			2	146.459	ug/l	0.86	257,255.86	1.444E+00	Pulse	0.30	3
Co			2	1.636	ug/l	2.30	6,111.19	3.431E-02	Pulse	0.30	3
Ni			2	15.435	ug/l	0.91	15,822.17	8.884E-02	Pulse	0.30	3
Cu			2	10.726	ug/l	0.43	29,465.31	1.654E-01	Pulse	0.30	3
Zn			2	48.511	ug/l	0.96	17,564.01	9.862E-02	Pulse	0.30	3
As			2	5.462	ug/l	3.25	996.03	5.592E-03	Pulse	1.00	3
Cd			2	5.499	ug/l	3.22	2,870.59	3.105E-03	Pulse	0.30	3
Sn			2	153.378	ug/l	0.77	147,264.42	1.593E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	3.304	ug/l	1.84	191.20	8.836E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,867,289.93	1.07	107.9	Pulse	0.10	3
1	Sc		5,486,481.58	0.14	112.4	Analog	0.10	3
1	Ge		1,008,078.63	0.54	109.9	Pulse	0.10	3
1	Ge		1,421,335.97	0.36	111.0	Pulse	0.10	3
1	Rh		7,293,692.39	0.61	107.2	Analog	0.10	3
1	In		7,853,551.58	0.42	108.7	Analog	0.10	3
1	Tb		9,948,816.52	0.71	105.7	Analog	0.10	3
1	Ho		923,965.69	0.72	104.0	Pulse	0.10	3
1	Bi		5,822,709.08	0.71	105.7	Analog	0.10	3
2	Sc		178,100.41	0.09	111.2	Pulse	0.30	3
2	Ge		98,804.85	0.34	112.3	Pulse	0.30	3
2	Ge		151,125.30	0.29	111.1	Pulse	0.30	3
2	Rh		2,946,509.54	0.22	104.9	Pulse	0.30	3
2	In		924,390.65	0.34	108.2	Pulse	0.30	3
2	Tb		3,441,064.10	0.66	103.6	Pulse	0.30	3
2	Ho		331,087.33	0.39	103.0	Pulse	0.30	3
2	Bi		2,280,625.33	0.97	103.5	Pulse	0.30	3
3	Sc		232,073.47	0.25	105.3	Pulse	0.30	3
3	Ge		140,296.49	0.86	105.9	Pulse	0.30	3
3	Ge		216,378.19	0.06	106.3	Pulse	0.30	3
3	Rh		2,540,478.86	0.16	102.6	Pulse	0.30	3
3	Tb		3,766,092.49	0.23	102.0	Pulse	0.30	3

Quantitation Report

File Name	092SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 18:45
Sample Name	MDL-LOQ-SOILCONF
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/15/2019 9:14
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	5.567	ug/l	3.67	14,667.76	5.246E-03	Pulse	0.25	3
B			1	135.617	ug/l	0.84	346,328.43	1.239E-01	Pulse	0.15	3
Ca			1	1453.439	ug/l	1.23	547,111.26	1.031E-01	Pulse	0.10	3
Sr			1	53.297	ug/l	0.87	987,615.90	1.370E-01	Pulse	0.10	3
Mo			1	10.518	ug/l	1.24	37,411.09	5.189E-03	Pulse	0.10	3
Ag			1	5.472	ug/l	2.88	51,544.56	6.579E-03	Pulse	0.10	3
Sn			1	221.394	ug/l	0.79	1,300,147.77	1.659E-01	Pulse	0.10	3
Sb			1	12.432	ug/l	1.62	75,964.38	7.541E-03	Pulse	0.10	3
Ba			1	12.752	ug/l	2.62	32,174.24	3.194E-03	Pulse	0.10	3
Tl			1	5.413	ug/l	2.51	84,953.90	1.451E-02	Pulse	0.10	3
Pb			1	11.043	ug/l	0.96	58,105.12	9.925E-03	Pulse	0.10	3
Pb			1	10.680	ug/l	0.79	50,359.81	8.601E-03	Pulse	0.10	3
Pb			1	10.763	ug/l	1.08	230,707.15	3.941E-02	Pulse	0.10	3
Na			2	1395.760	ug/l	16.25	482,921.27	2.951E+00	Pulse	0.30	3
Mg			2	1430.204	ug/l	16.44	224,983.82	1.375E+00	Pulse	0.30	3
Al			2	301.193	ug/l	17.83	15,422.74	9.437E-02	Pulse	0.30	3
K			2	1456.610	ug/l	17.80	144,926.94	8.864E-01	Pulse	0.30	3
Ca			2	1773.061	ug/l	15.41	9,943.05	6.070E-02	Pulse	0.30	3
Ti			2	9.308	ug/l	32.17	398.90	2.472E-03	Pulse	0.30	3
V			2	10.421	ug/l	14.96	15,443.96	9.423E-02	Pulse	0.30	3
Cr			2	23.791	ug/l	17.15	45,267.20	2.769E-01	Pulse	0.30	3
Mn			2	12.005	ug/l	16.76	11,380.71	6.958E-02	Pulse	0.30	3
Fe			2	281.377	ug/l	17.27	441,025.93	2.697E+00	Pulse	0.30	3
Co			2	3.093	ug/l	18.81	10,501.22	6.434E-02	Pulse	0.30	3
Ni			2	22.434	ug/l	14.95	21,123.65	1.289E-01	Pulse	0.30	3
Cu			2	22.228	ug/l	18.23	55,238.94	3.382E-01	Pulse	0.30	3
Zn			2	51.052	ug/l	16.99	16,959.99	1.037E-01	Pulse	0.30	3
As			2	9.506	ug/l	17.12	1,581.08	9.670E-03	Pulse	1.00	3
Cd			2	22.714	ug/l	15.17	10,972.12	1.277E-02	Pulse	0.30	3
Sn			2	238.034	ug/l	15.50	212,142.66	2.470E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	3.584	ug/l	4.26	203.33	9.526E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,796,129.32	0.43	105.3	Pulse	0.10	3
1	Sc		5,307,780.55	2.17	108.7	Mix	0.10	3
1	Ge		971,329.86	0.25	105.9	Pulse	0.10	3
1	Ge		1,363,310.24	0.87	106.5	Pulse	0.10	3
1	Rh		7,210,284.47	1.55	105.9	Analog	0.10	3
1	In		7,836,550.60	1.56	108.5	Analog	0.10	3
1	Tb		10,074,318.18	1.44	107.1	Analog	0.10	3
1	Ho		932,723.55	1.50	105.0	Pulse	0.10	3
1	Bi		5,854,568.87	1.65	106.3	Analog	0.10	3
2	Sc		166,323.74	15.11	103.9	Pulse	0.30	3
2	Ge		91,733.79	10.30	104.3	Pulse	0.30	3
2	Ge		140,074.81	10.49	103.0	Pulse	0.30	3
2	Rh		2,816,455.72	14.46	100.3	Pulse	0.30	3
2	In		871,648.31	14.21	102.0	Pulse	0.30	3
2	Tb		3,356,601.81	15.74	101.1	Mix	0.30	3
2	Ho		322,640.64	14.19	100.4	Pulse	0.30	3
2	Bi		2,203,093.18	12.72	100.0	Pulse	0.30	3
3	Sc		233,522.65	0.72	106.0	Pulse	0.30	3
3	Ge		138,668.20	0.91	104.7	Pulse	0.30	3
3	Ge		213,431.15	0.57	104.9	Pulse	0.30	3
3	Rh		2,551,397.19	0.69	103.1	Pulse	0.30	3
3	Tb		3,837,707.76	0.64	104.0	Pulse	0.30	3

Quantitation Report

File Name	093_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 18:50
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.284	ug/l	0.89	659,636.92	2.360E-01	Pulse	0.25	3
B			1	100.860	ug/l	0.58	1,237,884.36	4.428E-01	Pulse	0.15	3
Ca			1	5165.396	ug/l	1.35	9,299,762.15	1.760E+00	Analog	0.10	3
Sr			1	52.203	ug/l	0.93	4,658,848.78	6.704E-01	Pulse	0.10	3
Mo			1	51.464	ug/l	0.78	877,952.30	1.263E-01	Pulse	0.10	3
Ag			1	49.161	ug/l	0.43	2,230,344.34	2.951E-01	Pulse	0.10	3
Sn			1	48.473	ug/l	0.37	1,373,674.77	1.817E-01	Pulse	0.10	3
Sb			1	50.350	ug/l	0.94	1,476,244.35	1.498E-01	Pulse	0.10	3
Ba			1	50.731	ug/l	1.29	624,213.66	6.333E-02	Pulse	0.10	3
Tl			1	50.553	ug/l	1.23	3,756,168.17	6.722E-01	Pulse	0.10	3
Pb			1	50.743	ug/l	1.14	1,267,384.36	2.268E-01	Pulse	0.10	3
Pb			1	50.021	ug/l	0.89	1,119,894.39	2.004E-01	Pulse	0.10	3
Pb			1	50.124	ug/l	0.78	5,100,305.99	9.127E-01	Pulse	0.10	3
Na			2	5034.305	ug/l	0.88	8,747,921.87	5.211E+01	Analog	0.30	3
Mg			2	4880.589	ug/l	0.20	3,926,733.87	2.339E+01	Pulse	0.30	3
Al			2	4984.050	ug/l	0.18	1,287,193.25	7.667E+00	Pulse	0.30	3
K			2	5122.993	ug/l	0.24	2,489,094.62	1.483E+01	Pulse	0.30	3
Ca			2	5314.119	ug/l	0.94	148,965.66	8.873E-01	Pulse	0.30	3
Ti			2	49.311	ug/l	3.34	10,961.48	6.530E-02	Pulse	0.30	3
V			2	50.787	ug/l	0.15	375,477.69	2.237E+00	Pulse	0.30	3
Cr			2	49.915	ug/l	0.23	482,424.30	2.873E+00	Pulse	0.30	3
Mn			2	49.690	ug/l	0.29	239,702.49	1.428E+00	Pulse	0.30	3
Fe			2	5145.606	ug/l	0.62	40,113,537.29	2.389E+02	Analog	0.30	3
Co			2	49.522	ug/l	0.15	856,687.88	5.103E+00	Pulse	0.30	3
Ni			2	48.370	ug/l	0.39	232,677.05	1.386E+00	Pulse	0.30	3
Cu			2	48.180	ug/l	0.48	608,337.23	3.624E+00	Pulse	0.30	3
Zn			2	47.577	ug/l	0.76	80,396.63	4.789E-01	Pulse	0.30	3
As			2	49.361	ug/l	0.77	41,783.68	2.489E-01	Pulse	1.00	3
Cd			2	49.017	ug/l	0.31	118,826.43	1.376E-01	Pulse	0.30	3
Sn			2	49.481	ug/l	0.69	221,643.01	2.567E-01	Pulse	0.30	3
Se			3	199.293	ug/l	0.00	51,764.11	2.458E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,795,486.47	0.65	105.2	Pulse	0.10	3
1	Sc		5,286,398.25	2.51	108.3	Mix	0.10	3
1	Ge		970,060.43	0.66	105.8	Pulse	0.10	3

Quantitation Report

1	Ge		1,374,177.27	1.05	107.4	Pulse	0.10	3
1	Rh		6,949,799.27	0.85	102.1	Analog	0.10	3
1	In		7,559,023.17	1.36	104.6	Analog	0.10	3
1	Tb		9,856,349.44	0.69	104.8	Analog	0.10	3
1	Ho		920,029.60	1.14	103.6	Pulse	0.10	3
1	Bi		5,588,448.88	0.58	101.5	Analog	0.10	3
2	Sc		167,886.76	0.62	104.8	Pulse	0.30	3
2	Ge		91,880.50	0.75	104.5	Pulse	0.30	3
2	Ge		141,335.57	0.31	103.9	Pulse	0.30	3
2	Rh		2,760,961.62	0.38	98.3	Pulse	0.30	3
2	In		863,447.48	0.38	101.1	Pulse	0.30	3
2	Tb		3,337,954.94	0.25	100.5	Pulse	0.30	3
2	Ho		324,594.56	0.37	101.0	Pulse	0.30	3
2	Bi		2,137,452.14	0.32	97.0	Pulse	0.30	3
3	Sc		232,093.27	0.96	105.3	Pulse	0.30	3
3	Ge		136,050.98	0.82	102.7	Pulse	0.30	3
3	Ge		210,591.96	0.54	103.5	Pulse	0.30	3
3	Rh		2,444,695.18	0.48	98.8	Pulse	0.30	3
3	Tb		3,713,816.24	0.37	100.6	Pulse	0.30	3

Quantitation Report

File Name	094_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 18:55
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	31.08	149.33	5.317E-05	Pulse	0.25	3
B			1	1.547	ug/l	0.99	37,125.33	1.323E-02	Pulse	0.15	3
Ca			1	-0.050	ug/l	-1274.30	22,783.02	4.302E-03	Pulse	0.10	3
Sr			1	0.016	ug/l	7.66	2,433.62	3.365E-04	Pulse	0.10	3
Mo			1	0.076	ug/l	15.33	1,543.47	2.134E-04	Pulse	0.10	3
Ag			1	0.017	ug/l	11.43	880.06	1.125E-04	Pulse	0.10	3
Sn			1	0.537	ug/l	3.55	8,242.57	1.053E-03	Pulse	0.10	3
Sb			1	0.282	ug/l	4.24	9,980.16	9.891E-04	Pulse	0.10	3
Ba			1	0.013	ug/l	45.77	280.02	2.773E-05	Pulse	0.10	3
Tl			1	0.013	ug/l	7.85	1,700.16	2.898E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	5.30	836.72	1.427E-04	Pulse	0.10	3
Pb			1	0.017	ug/l	25.83	656.71	1.121E-04	Pulse	0.10	3
Pb			1	0.017	ug/l	12.42	3,096.90	5.283E-04	Pulse	0.10	3
Na			2	2.263	ug/l	2.11	14,907.81	8.838E-02	Pulse	0.30	3
Mg			2	0.168	ug/l	46.25	956.71	5.671E-03	Pulse	0.30	3
Al			2	0.050	ug/l	135.19	303.34	1.798E-03	Pulse	0.30	3
K			2	1.013	ug/l	45.74	8,236.56	4.883E-02	Pulse	0.30	3
Ca			2	-5.847	ug/l	-17.42	104.45	6.195E-04	Pulse	0.30	3
Ti			2	0.025	ug/l	104.94	6.66	3.947E-05	Pulse	0.30	3
V			2	-0.003	ug/l	-180.59	410.01	2.431E-03	Pulse	0.30	3
Cr			2	0.012	ug/l	28.05	673.36	3.992E-03	Pulse	0.30	3
Mn			2	0.030	ug/l	22.26	250.01	1.482E-03	Pulse	0.30	3
Fe			2	-0.123	ug/l	-19.20	13,334.39	7.905E-02	Pulse	0.30	3
Co			2	0.007	ug/l	27.90	223.34	1.324E-03	Pulse	0.30	3
Ni			2	0.007	ug/l	51.91	105.56	6.260E-04	Pulse	0.30	3
Cu			2	0.032	ug/l	7.77	1,128.94	6.693E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.004	ug/l	330.30	210.00	1.245E-03	Pulse	0.30	3
As			2	0.007	ug/l	97.70	21.00	1.244E-04	Pulse	1.00	3
Cd			2	0.004	ug/l	80.86	25.47	2.878E-05	Pulse	0.30	3
Sn			2	0.300	ug/l	14.36	1,764.60	1.995E-03	Pulse	0.30	3
Se			3	0.038	ug/l	19.02	24.93	1.159E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,806,728.21	0.93	105.7	Pulse	0.10	3
1	Sc		5,299,510.24	2.08	108.6	Mix	0.10	3
1	Ge		978,302.09	0.40	106.7	Pulse	0.10	3
1	Ge		1,373,834.51	0.98	107.3	Pulse	0.10	3
1	Rh		7,231,868.64	0.18	106.3	Analog	0.10	3
1	In		7,827,108.52	0.73	108.3	Analog	0.10	3
1	Tb		10,090,674.02	0.32	107.2	Analog	0.10	3
1	Ho		926,537.38	0.87	104.3	Pulse	0.10	3
1	Bi		5,865,417.00	1.54	106.5	Analog	0.10	3
2	Sc		168,680.18	0.28	105.3	Pulse	0.30	3
2	Ge		93,099.22	0.67	105.8	Pulse	0.30	3
2	Ge		142,355.72	0.97	104.7	Pulse	0.30	3
2	Rh		2,881,090.93	0.51	102.6	Pulse	0.30	3
2	In		884,139.88	0.45	103.5	Pulse	0.30	3
2	Tb		3,367,235.91	0.35	101.4	Pulse	0.30	3
2	Ho		327,916.58	0.58	102.0	Pulse	0.30	3
2	Bi		2,235,628.24	0.33	101.4	Pulse	0.30	3
3	Sc		233,797.69	0.45	106.1	Pulse	0.30	3
3	Ge		139,260.95	0.69	105.2	Pulse	0.30	3
3	Ge		215,223.86	0.38	105.7	Pulse	0.30	3
3	Rh		2,573,986.70	0.35	104.0	Pulse	0.30	3
3	Tb		3,808,529.57	0.16	103.2	Pulse	0.30	3

Quantitation Report

File Name	095SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 19:00
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	32.16	96.00	3.567E-05	Pulse	0.25	3
B			1	1.211	ug/l	2.00	31,683.18	1.177E-02	Pulse	0.15	3
Ca			1	12.351	ug/l	6.44	42,060.79	8.516E-03	Pulse	0.10	3
Sr			1	0.022	ug/l	20.97	2,870.36	4.167E-04	Pulse	0.10	3
Mo			1	0.042	ug/l	5.86	886.73	1.287E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	9.62	630.04	8.319E-05	Pulse	0.10	3
Sn			1	0.773	ug/l	4.61	14,704.10	1.942E-03	Pulse	0.10	3
Sb			1	0.192	ug/l	10.13	7,191.96	7.214E-04	Pulse	0.10	3
Ba			1	0.013	ug/l	16.15	266.68	2.677E-05	Pulse	0.10	3
Tl			1	0.007	ug/l	10.71	1,243.44	2.138E-04	Pulse	0.10	3
Pb			1	0.024	ug/l	7.48	950.07	1.633E-04	Pulse	0.10	3
Pb			1	0.021	ug/l	10.07	753.38	1.295E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	10.49	3,646.98	6.268E-04	Pulse	0.10	3
Na			2	4.835	ug/l	16.81	18,002.62	1.150E-01	Pulse	0.30	3
Mg			2	0.388	ug/l	8.23	1,053.38	6.728E-03	Pulse	0.30	3
Al			2	0.468	ug/l	15.34	382.23	2.441E-03	Pulse	0.30	3
K			2	1.223	ug/l	60.57	7,740.75	4.944E-02	Pulse	0.30	3
Ca			2	6.017	ug/l	36.71	406.68	2.597E-03	Pulse	0.30	3
Ti			2	0.118	ug/l	87.27	25.56	1.630E-04	Pulse	0.30	3
V			2	0.103	ug/l	6.96	1,110.05	7.089E-03	Pulse	0.30	3
Cr			2	0.152	ug/l	5.27	1,881.24	1.201E-02	Pulse	0.30	3
Mn			2	0.057	ug/l	10.29	355.57	2.271E-03	Pulse	0.30	3
Fe			2	0.170	ug/l	28.38	14,502.64	9.262E-02	Pulse	0.30	3
Co			2	0.008	ug/l	23.75	226.67	1.447E-03	Pulse	0.30	3
Ni			2	0.021	ug/l	21.43	157.78	1.007E-03	Pulse	0.30	3
Cu			2	0.114	ug/l	7.98	2,014.59	1.287E-02	Pulse	0.30	3
Zn			2	1.430	ug/l	6.23	2,436.88	1.556E-02	Pulse	0.30	3
As			2	0.025	ug/l	10.06	33.67	2.150E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.001	ug/l	195.48	16.60	2.021E-05	Pulse	0.30	3
Sn			2	0.570	ug/l	5.50	2,789.17	3.395E-03	Pulse	0.30	3
Se			3	0.008	ug/l	78.81	16.73	7.876E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,691,539.73	0.41	101.3	Pulse	0.10	3
1	Sc		4,938,443.05	0.75	101.2	Pulse	0.10	3
1	Ge		920,036.37	1.66	100.3	Pulse	0.10	3
1	Ge		1,286,708.63	1.13	100.5	Pulse	0.10	3
1	Rh		6,887,422.60	0.43	101.2	Analog	0.10	3
1	In		7,574,284.96	1.18	104.8	Analog	0.10	3
1	Tb		9,967,971.31	1.14	105.9	Analog	0.10	3
1	Ho		923,977.62	1.07	104.0	Pulse	0.10	3
1	Bi		5,817,470.54	0.32	105.6	Analog	0.10	3
2	Sc		156,569.95	0.44	97.8	Pulse	0.30	3
2	Ge		85,697.09	0.61	97.4	Pulse	0.30	3
2	Ge		130,280.92	0.28	95.8	Pulse	0.30	3
2	Rh		2,746,914.61	0.11	97.8	Pulse	0.30	3
2	In		821,501.84	0.16	96.2	Pulse	0.30	3
2	Tb		3,260,899.32	0.20	98.2	Pulse	0.30	3
2	Ho		317,769.42	0.18	98.8	Pulse	0.30	3
2	Bi		2,162,649.91	0.24	98.1	Pulse	0.30	3
3	Sc		237,072.44	0.22	107.6	Pulse	0.30	3
3	Ge		137,696.58	0.69	104.0	Pulse	0.30	3
3	Ge		212,524.58	0.45	104.4	Pulse	0.30	3
3	Rh		2,584,989.27	0.55	104.4	Pulse	0.30	3
3	Tb		3,905,507.62	0.18	105.8	Pulse	0.30	3

Quantitation Report

File Name	096SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041419w2.b
Method File	
Method Path	
Acq Time	4/14/2019 19:09
Sample Name	jc86161-105
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/14/2019 14:02
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Pb			1	0.450	ug/l	5.68	6,958.57	2.355E-03	Pulse	0.10	3
Pb			1	0.410	ug/l	7.18	5,664.64	1.917E-03	Pulse	0.10	3
Pb			1	0.431	ug/l	3.50	26,660.36	9.024E-03	Pulse	0.10	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		2,954,506.73	0.63	83.6	Pulse	0.10	3

Quantitation Report

File Name	097SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041419w2.b
Method File	
Method Path	
Acq Time	4/14/2019 19:13
Sample Name	jc86161-106
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/14/2019 14:02
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Pb			1	0.398	ug/l	6.17	6,221.57	2.117E-03	Pulse	0.10	3
Pb			1	0.379	ug/l	1.47	5,267.81	1.792E-03	Pulse	0.10	3
Pb			1	0.388	ug/l	2.32	24,168.60	8.223E-03	Pulse	0.10	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		2,939,328.71	0.81	83.2	Pulse	0.10	3

Quantitation Report

File Name	098SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041419w2.b
Method File	
Method Path	
Acq Time	4/14/2019 19:16
Sample Name	jc86161-107
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/14/2019 14:02
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Pb			1	0.919	ug/l	0.82	13,229.74	4.509E-03	Pulse	0.10	3
Pb			1	0.870	ug/l	4.89	11,081.23	3.776E-03	Pulse	0.10	3
Pb			1	0.890	ug/l	1.50	51,296.40	1.748E-02	Pulse	0.10	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		2,934,238.60	0.15	83.1	Pulse	0.10	3

Quantitation Report

File Name	099SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041419w2.b
Method File	
Method Path	
Acq Time	4/14/2019 19:20
Sample Name	CCVA
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/14/2019 14:02
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Pb			1	50.595	ug/l	0.67	678,362.73	2.325E-01	Pulse	0.10	3
Pb			1	50.664	ug/l	0.76	598,998.27	2.053E-01	Pulse	0.10	3
Pb			1	50.971	ug/l	0.51	2,743,712.33	9.403E-01	Pulse	0.10	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		2,918,092.66	0.99	82.6	Pulse	0.10	3

Quantitation Report

File Name	100SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041419w2.b
Method File	
Method Path	
Acq Time	4/14/2019 19:23
Sample Name	CCB
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/14/2019 14:02
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Pb			1	-0.043	ug/l	-12.40	280.01	9.461E-05	Pulse	0.10	3
Pb			1	-0.040	ug/l	-7.39	286.68	9.680E-05	Pulse	0.10	3
Pb			1	-0.038	ug/l	-4.95	1,096.72	3.707E-04	Pulse	0.10	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		2,959,448.60	1.09	83.8	Pulse	0.10	3

Quantitation Report

File Name	101SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041419w2.b
Method File	
Method Path	
Acq Time	4/14/2019 19:26
Sample Name	mp14176-mb1
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/14/2019 14:02
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Pb			1	-0.046	ug/l	-10.31	230.01	7.897E-05	Pulse	0.10	3
Pb			1	-0.045	ug/l	-6.42	213.34	7.350E-05	Pulse	0.10	3
Pb			1	-0.042	ug/l	-3.16	910.04	3.126E-04	Pulse	0.10	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		2,908,288.91	1.86	82.3	Pulse	0.10	3

Quantitation Report

File Name	102SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041419w2.b
Method File	
Method Path	
Acq Time	4/14/2019 19:30
Sample Name	mp14176-b1
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/14/2019 14:02
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Pb			1	80.517	ug/l	0.63	1,119,936.78	3.698E-01	Pulse	0.10	3
Pb			1	80.343	ug/l	0.70	985,575.06	3.254E-01	Pulse	0.10	3
Pb			1	80.933	ug/l	0.15	4,520,134.78	1.492E+00	Pulse	0.10	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		3,028,927.04	2.67	85.7	Pulse	0.10	3

Quantitation Report

File Name	103SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041419w2.b
Method File	
Method Path	
Acq Time	4/14/2019 19:33
Sample Name	mp14176-s1
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/14/2019 14:02
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Pb			1	81.643	ug/l	0.60	1,149,586.68	3.750E-01	Pulse	0.10	3
Pb			1	81.733	ug/l	1.28	1,014,854.78	3.310E-01	Pulse	0.10	3
Pb			1	82.334	ug/l	0.78	4,654,636.26	1.518E+00	Pulse	0.10	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Bi		3,065,943.50	0.51	86.8	Pulse	0.10	3

Quantitation Report

File Name	104SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 19:46
Sample Name	mp14115-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	134.75	62.67	2.329E-05	Pulse	0.25	3
B			1	2.539	ug/l	7.71	32,340.03	1.203E-02	Pulse	0.15	3
Ca			1	6.496	ug/l	11.70	26,865.86	5.423E-03	Pulse	0.10	3
Sr			1	0.028	ug/l	8.96	2,140.23	3.105E-04	Pulse	0.10	3
Mo			1	0.146	ug/l	5.91	1,416.82	2.055E-04	Pulse	0.10	3
Ag			1	0.020	ug/l	15.72	533.37	7.129E-05	Pulse	0.10	3
Sn			1	1.475	ug/l	2.26	13,522.85	1.809E-03	Pulse	0.10	3
Sb			1	-0.006	ug/l	-52.33	1,413.45	1.428E-04	Pulse	0.10	3
Ba			1	0.025	ug/l	37.89	260.01	2.630E-05	Pulse	0.10	3
Tl			1	0.011	ug/l	13.64	1,073.41	1.892E-04	Pulse	0.10	3
Pb			1	0.041	ug/l	21.36	830.05	1.463E-04	Pulse	0.10	3
Pb			1	0.044	ug/l	5.07	763.38	1.345E-04	Pulse	0.10	3
Pb			1	0.040	ug/l	9.76	3,326.93	5.863E-04	Pulse	0.10	3
Na			2	6.085	ug/l	6.50	15,264.79	9.644E-02	Pulse	0.30	3
Mg			2	-0.124	ug/l	-177.89	723.36	4.571E-03	Pulse	0.30	3
Al			2	2.386	ug/l	73.24	562.33	3.557E-03	Pulse	0.30	3
K			2	2.479	ug/l	35.17	7,833.02	4.948E-02	Pulse	0.30	3
Ca			2	-3.042	ug/l	-15.20	212.22	1.341E-03	Pulse	0.30	3
Ti			2	0.159	ug/l	49.91	17.78	1.122E-04	Pulse	0.30	3
V			2	0.290	ug/l	2.89	1,414.52	8.936E-03	Pulse	0.30	3
Cr			2	0.447	ug/l	2.98	2,554.67	1.614E-02	Pulse	0.30	3
Mn			2	0.144	ug/l	8.21	425.57	2.689E-03	Pulse	0.30	3
Fe			2	1.139	ug/l	3.79	17,600.60	1.112E-01	Pulse	0.30	3
Co			2	0.015	ug/l	47.28	217.78	1.377E-03	Pulse	0.30	3
Ni			2	0.058	ug/l	26.53	197.78	1.249E-03	Pulse	0.30	3
Cu			2	0.326	ug/l	3.31	2,618.02	1.654E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.667	ug/l	8.80	721.14	4.556E-03	Pulse	0.30	3
As			2	0.065	ug/l	18.33	39.67	2.505E-04	Pulse	1.00	3
Cd			2	0.004	ug/l	344.61	19.94	2.440E-05	Pulse	0.30	3
Sn			2	0.875	ug/l	6.10	2,215.74	2.707E-03	Pulse	0.30	3
Se			3	-0.004	ug/l	-477.27	14.07	6.621E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,689,946.89	0.95	101.3	Pulse	0.10	3
1	Sc		4,954,091.18	0.59	101.5	Pulse	0.10	3
1	Ge		918,584.75	0.63	100.2	Pulse	0.10	3
1	Ge		1,284,428.08	0.61	100.3	Pulse	0.10	3
1	Rh		6,893,654.48	0.14	101.3	Analog	0.10	3
1	In		7,476,852.56	1.37	103.5	Analog	0.10	3
1	Tb		9,898,040.48	1.28	105.2	Analog	0.10	3
1	Ho		914,027.80	0.54	102.9	Pulse	0.10	3
1	Bi		5,674,687.62	1.01	103.0	Analog	0.10	3
2	Sc		158,300.37	0.52	98.9	Pulse	0.30	3
2	Ge		85,542.06	1.42	97.2	Pulse	0.30	3
2	Ge		130,847.14	0.69	96.2	Pulse	0.30	3
2	Rh		2,734,559.54	0.07	97.4	Pulse	0.30	3
2	In		818,517.61	0.39	95.8	Pulse	0.30	3
2	Tb		3,243,816.33	0.22	97.7	Pulse	0.30	3
2	Ho		316,569.39	0.27	98.5	Pulse	0.30	3
2	Bi		2,125,813.60	0.22	96.5	Pulse	0.30	3
3	Sc		236,451.07	0.19	107.3	Pulse	0.30	3
3	Ge		136,585.27	1.39	103.1	Pulse	0.30	3
3	Ge		212,719.43	1.07	104.5	Pulse	0.30	3
3	Rh		2,571,338.02	0.74	103.9	Pulse	0.30	3
3	Tb		3,862,579.98	0.78	104.7	Pulse	0.30	3

Quantitation Report

File Name	105_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 19:52
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.738	ug/l	0.83	668,349.75	2.381E-01	Pulse	0.25	3
B			1	102.326	ug/l	1.09	1,260,839.25	4.491E-01	Pulse	0.15	3
Ca			1	5117.872	ug/l	1.18	9,431,088.61	1.743E+00	Analog	0.10	3
Sr			1	51.720	ug/l	1.25	4,658,729.93	6.642E-01	Pulse	0.10	3
Mo			1	51.290	ug/l	0.80	883,169.28	1.259E-01	Pulse	0.10	3
Ag			1	48.904	ug/l	0.94	2,252,398.35	2.935E-01	Pulse	0.10	3
Sn			1	47.475	ug/l	1.44	1,365,663.05	1.780E-01	Pulse	0.10	3
Sb			1	50.363	ug/l	1.24	1,483,923.21	1.498E-01	Pulse	0.10	3
Ba			1	50.359	ug/l	1.25	622,709.79	6.287E-02	Pulse	0.10	3
Tl			1	50.314	ug/l	0.41	3,700,672.13	6.690E-01	Pulse	0.10	3
Pb			1	50.586	ug/l	1.16	1,250,714.15	2.261E-01	Pulse	0.10	3
Pb			1	49.922	ug/l	0.93	1,106,378.03	2.000E-01	Pulse	0.10	3
Pb			1	50.102	ug/l	1.19	5,046,548.18	9.123E-01	Pulse	0.10	3
Na			2	5023.985	ug/l	2.51	8,989,467.70	5.200E+01	Analog	0.30	3
Mg			2	4810.819	ug/l	0.67	3,985,906.65	2.306E+01	Pulse	0.30	3
Al			2	4937.666	ug/l	0.98	1,313,188.15	7.596E+00	Pulse	0.30	3
K			2	5067.759	ug/l	0.85	2,535,670.32	1.467E+01	Pulse	0.30	3
Ca			2	5198.817	ug/l	0.05	150,082.78	8.681E-01	Pulse	0.30	3
Ti			2	49.579	ug/l	3.74	11,350.67	6.566E-02	Pulse	0.30	3
V			2	49.984	ug/l	1.26	380,543.22	2.201E+00	Pulse	0.30	3
Cr			2	49.263	ug/l	0.25	490,320.36	2.836E+00	Pulse	0.30	3
Mn			2	49.265	ug/l	0.61	244,731.00	1.416E+00	Pulse	0.30	3
Fe			2	5097.824	ug/l	1.92	40,924,356.15	2.367E+02	Analog	0.30	3
Co			2	48.346	ug/l	0.78	861,250.54	4.982E+00	Pulse	0.30	3
Ni			2	47.524	ug/l	1.48	235,408.85	1.362E+00	Pulse	0.30	3
Cu			2	47.068	ug/l	1.03	612,016.71	3.540E+00	Pulse	0.30	3
Zn			2	46.612	ug/l	0.63	81,118.82	4.692E-01	Pulse	0.30	3
As			2	48.591	ug/l	1.03	42,357.20	2.450E-01	Pulse	1.00	3
Cd			2	49.008	ug/l	0.67	119,798.41	1.376E-01	Pulse	0.30	3
Sn			2	49.082	ug/l	0.48	221,701.05	2.546E-01	Pulse	0.30	3
Se			3	199.848	ug/l	0.91	51,660.24	2.465E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,807,183.28	0.74	105.7	Pulse	0.10	3
1	Sc		5,410,200.34	1.08	110.8	Analog	0.10	3
1	Ge		981,408.03	1.23	107.0	Pulse	0.10	3

Quantitation Report

1	Ge		1,388,371.17	0.81	108.5	Pulse	0.10	3
1	Rh		7,014,813.86	0.56	103.1	Analog	0.10	3
1	In		7,673,656.71	0.33	106.2	Analog	0.10	3
1	Tb		9,905,035.48	0.50	105.3	Analog	0.10	3
1	Ho		921,865.56	0.79	103.8	Pulse	0.10	3
1	Bi		5,531,792.21	0.15	100.4	Analog	0.10	3
2	Sc		172,891.60	0.65	108.0	Pulse	0.30	3
2	Ge		92,459.05	0.68	105.1	Pulse	0.30	3
2	Ge		142,510.82	1.51	104.8	Pulse	0.30	3
2	Rh		2,772,753.78	0.43	98.7	Pulse	0.30	3
2	In		870,669.03	0.22	101.9	Pulse	0.30	3
2	Tb		3,324,788.90	0.31	100.1	Pulse	0.30	3
2	Ho		323,425.21	0.36	100.6	Pulse	0.30	3
2	Bi		2,117,900.75	0.59	96.1	Pulse	0.30	3
3	Sc		232,310.70	1.07	105.4	Pulse	0.30	3
3	Ge		135,342.94	0.23	102.2	Pulse	0.30	3
3	Ge		209,593.00	0.55	103.0	Pulse	0.30	3
3	Rh		2,419,237.06	0.53	97.7	Pulse	0.30	3
3	Tb		3,676,295.13	0.12	99.6	Pulse	0.30	3

Quantitation Report

File Name	106_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 19:56
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.008	ug/l	5.13	162.67	5.844E-05	Pulse	0.25	3
B			1	1.182	ug/l	4.99	32,422.48	1.165E-02	Pulse	0.15	3
Ca			1	-0.607	ug/l	-1.52	22,028.59	4.113E-03	Pulse	0.10	3
Sr			1	0.015	ug/l	9.61	2,376.93	3.280E-04	Pulse	0.10	3
Mo			1	0.067	ug/l	19.99	1,376.78	1.899E-04	Pulse	0.10	3
Ag			1	0.015	ug/l	14.79	786.71	1.013E-04	Pulse	0.10	3
Sn			1	0.431	ug/l	0.92	5,084.38	6.541E-04	Pulse	0.10	3
Sb			1	0.294	ug/l	5.57	10,330.35	1.026E-03	Pulse	0.10	3
Ba			1	0.013	ug/l	43.81	273.35	2.712E-05	Pulse	0.10	3
Tl			1	0.013	ug/l	12.46	1,680.18	2.883E-04	Pulse	0.10	3
Pb			1	0.017	ug/l	33.62	756.71	1.299E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	25.42	726.71	1.246E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	3.35	3,173.58	5.445E-04	Pulse	0.10	3
Na			2	1.794	ug/l	18.23	14,171.58	8.353E-02	Pulse	0.30	3
Mg			2	0.074	ug/l	265.83	885.59	5.221E-03	Pulse	0.30	3
Al			2	0.124	ug/l	77.96	324.45	1.912E-03	Pulse	0.30	3
K			2	1.438	ug/l	5.36	8,493.35	5.006E-02	Pulse	0.30	3
Ca			2	-5.715	ug/l	-22.90	108.89	6.415E-04	Pulse	0.30	3
Ti			2	0.069	ug/l	37.45	16.67	9.828E-05	Pulse	0.30	3
V			2	0.004	ug/l	63.23	461.12	2.718E-03	Pulse	0.30	3
Cr			2	0.012	ug/l	68.78	674.47	3.976E-03	Pulse	0.30	3
Mn			2	0.023	ug/l	26.41	218.89	1.290E-03	Pulse	0.30	3
Fe			2	-0.151	ug/l	-42.49	13,190.97	7.775E-02	Pulse	0.30	3
Co			2	0.008	ug/l	16.54	241.12	1.421E-03	Pulse	0.30	3
Ni			2	0.003	ug/l	163.07	85.56	5.041E-04	Pulse	0.30	3
Cu			2	0.022	ug/l	11.44	1,015.60	5.986E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.002	ug/l	-958.05	202.23	1.192E-03	Pulse	0.30	3
As			2	0.004	ug/l	111.15	18.00	1.061E-04	Pulse	1.00	3
Cd			2	0.004	ug/l	124.93	25.46	2.879E-05	Pulse	0.30	3
Sn			2	0.115	ug/l	8.67	917.82	1.037E-03	Pulse	0.30	3
Se			3	0.047	ug/l	10.03	27.07	1.266E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,783,728.44	0.39	104.8	Pulse	0.10	3
1	Sc		5,356,324.30	0.15	109.7	Analog	0.10	3
1	Ge		979,659.65	1.12	106.8	Pulse	0.10	3
1	Ge		1,372,792.48	0.76	107.2	Pulse	0.10	3
1	Rh		7,246,905.52	0.35	106.5	Analog	0.10	3
1	In		7,771,747.25	1.12	107.6	Analog	0.10	3
1	Tb		10,069,356.73	1.03	107.0	Analog	0.10	3
1	Ho		918,590.64	0.72	103.4	Pulse	0.10	3
1	Bi		5,828,679.50	0.69	105.8	Analog	0.10	3
2	Sc		169,673.97	0.23	106.0	Pulse	0.30	3
2	Ge		94,507.58	0.91	107.4	Pulse	0.30	3
2	Ge		142,714.18	0.50	104.9	Pulse	0.30	3
2	Rh		2,867,818.64	0.21	102.1	Pulse	0.30	3
2	In		885,208.06	0.26	103.6	Pulse	0.30	3
2	Tb		3,334,461.67	0.58	100.4	Pulse	0.30	3
2	Ho		322,885.34	0.17	100.4	Pulse	0.30	3
2	Bi		2,204,538.94	0.41	100.0	Pulse	0.30	3
3	Sc		234,302.90	0.12	106.3	Pulse	0.30	3
3	Ge		138,034.03	0.40	104.2	Pulse	0.30	3
3	Ge		213,915.13	0.96	105.1	Pulse	0.30	3
3	Rh		2,550,910.11	1.03	103.1	Pulse	0.30	3
3	Tb		3,774,224.99	1.16	102.3	Pulse	0.30	3

Quantitation Report

File Name	107SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 20:02
Sample Name	mp14115-b1conf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/15/2019 9:14
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	140.306	ug/l	0.20	864,380.54	3.292E-01	Pulse	0.25	3
B			1	167.598	ug/l	0.76	968,898.40	3.690E-01	Pulse	0.15	3
Ca			1	8223.842	ug/l	0.78	6,559,235.94	1.402E+00	Analog	0.10	3
Sr			1	169.649	ug/l	1.18	6,912,941.77	1.089E+00	Analog	0.10	3
Mo			1	157.030	ug/l	0.85	1,223,168.73	1.927E-01	Pulse	0.10	3
Ag			1	152.558	ug/l	0.49	3,201,251.72	4.578E-01	Pulse	0.10	3
Sn			1	149.714	ug/l	0.11	1,966,149.92	2.812E-01	Pulse	0.10	3
Sb			1	135.422	ug/l	1.80	1,962,043.46	2.014E-01	Pulse	0.10	3
Ba			1	150.203	ug/l	1.56	913,454.52	9.375E-02	Pulse	0.10	3
Tl			1	168.317	ug/l	0.58	5,817,911.16	1.119E+00	Analog	0.10	3
Pb			1	162.987	ug/l	0.64	1,893,802.63	3.642E-01	Pulse	0.10	3
Pb			1	161.837	ug/l	0.42	1,685,513.10	3.242E-01	Pulse	0.10	3
Pb			1	162.933	ug/l	0.50	7,712,587.65	1.483E+00	Pulse	0.10	3
Na			2	8087.195	ug/l	1.39	6,351,245.02	4.187E+01	Analog	0.30	3
Mg			2	7641.370	ug/l	0.19	2,777,893.78	1.831E+01	Pulse	0.30	3
Al			2	7513.027	ug/l	0.22	876,736.91	5.779E+00	Pulse	0.30	3
K			2	7817.908	ug/l	0.31	1,717,847.95	1.132E+01	Pulse	0.30	3
Ca			2	8668.939	ug/l	0.53	109,836.72	7.240E-01	Pulse	0.30	3
Ti			2	150.704	ug/l	2.21	15,137.01	9.978E-02	Pulse	0.30	3
V			2	157.932	ug/l	0.70	527,335.57	3.476E+00	Pulse	0.30	3
Cr			2	158.543	ug/l	0.59	692,014.66	4.562E+00	Pulse	0.30	3
Mn			2	155.304	ug/l	1.00	338,435.22	2.231E+00	Pulse	0.30	3
Fe			2	8092.379	ug/l	0.80	28,506,263.31	1.879E+02	Analog	0.30	3
Co			2	155.505	ug/l	0.48	1,215,369.67	8.011E+00	Pulse	0.30	3
Ni			2	150.783	ug/l	0.48	327,675.07	2.160E+00	Pulse	0.30	3
Cu			2	148.601	ug/l	1.28	847,376.88	5.586E+00	Pulse	0.30	3
Zn			2	121.534	ug/l	0.80	92,739.43	6.113E-01	Pulse	0.30	3
As			2	118.927	ug/l	0.60	45,482.19	2.998E-01	Pulse	1.00	3
Cd			2	137.907	ug/l	0.70	147,906.56	1.936E-01	Pulse	0.30	3
Sn			2	152.106	ug/l	0.47	301,270.74	3.943E-01	Pulse	0.30	3
Se			3	543.265	ug/l	0.73	73,900.52	3.350E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,625,841.02	1.42	98.9	Pulse	0.10	3
1	Sc		4,679,832.74	1.00	95.9	Pulse	0.10	3
1	Ge		890,801.32	0.87	97.1	Pulse	0.10	3

Quantitation Report

1	Ge		1,260,828.50	1.65	98.5	Pulse	0.10	3
1	Rh		6,346,801.78	0.45	93.3	Analog	0.10	3
1	In		6,992,631.97	1.02	96.8	Analog	0.10	3
1	Tb		9,743,717.77	0.47	103.6	Analog	0.10	3
1	Ho		902,912.25	1.06	101.6	Pulse	0.10	3
1	Bi		5,199,654.19	0.95	94.4	Pulse	0.10	3
2	Sc		151,706.87	0.28	94.7	Pulse	0.30	3
2	Ge		82,753.34	0.41	94.1	Pulse	0.30	3
2	Ge		127,514.62	0.76	93.7	Pulse	0.30	3
2	Rh		2,536,805.94	0.16	90.3	Pulse	0.30	3
2	In		764,036.02	0.24	89.4	Pulse	0.30	3
2	Tb		3,124,028.21	0.60	94.1	Pulse	0.30	3
2	Ho		304,634.08	0.76	94.8	Pulse	0.30	3
2	Bi		1,936,963.19	0.43	87.9	Pulse	0.30	3
3	Sc		239,231.07	1.06	108.5	Pulse	0.30	3
3	Ge		141,736.26	1.38	107.0	Pulse	0.30	3
3	Ge		220,605.78	0.72	108.4	Pulse	0.30	3
3	Rh		2,454,327.54	0.32	99.2	Pulse	0.30	3
3	Tb		3,817,468.74	0.21	103.4	Pulse	0.30	3

Quantitation Report

File Name	108SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 20:07
Sample Name	mp14115-s1
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	79.102	ug/l	0.33	197,649.13	7.425E-02	Pulse	0.25	3
B			1	137.668	ug/l	1.11	334,413.12	1.256E-01	Pulse	0.15	3
Ca			1	93794.075	ug/l	1.11	32,033,025.36	6.378E+00	Analog	0.10	3
Sr			1	396.470	ug/l	0.65	6,801,220.94	1.018E+00	Analog	0.10	3
Mo			1	89.301	ug/l	1.66	292,983.20	4.386E-02	Pulse	0.10	3
Ag			1	78.464	ug/l	1.35	695,028.74	9.419E-02	Pulse	0.10	3
Sn			1	79.074	ug/l	0.89	432,642.99	5.864E-02	Pulse	0.10	3
Sb			1	78.735	ug/l	0.79	456,807.01	4.695E-02	Pulse	0.10	3
Ba			1	534.936	ug/l	0.24	1,299,461.49	1.336E-01	Pulse	0.10	3
Tl			1	83.968	ug/l	1.88	1,195,006.00	2.234E-01	Pulse	0.10	3
Pb			1	85.769	ug/l	1.52	410,394.80	7.671E-02	Pulse	0.10	3
Pb			1	84.912	ug/l	2.19	364,164.79	6.807E-02	Pulse	0.10	3
Pb			1	85.170	ug/l	1.86	1,660,141.84	3.103E-01	Pulse	0.10	3
Na			2	29164.521	ug/l	1.55	9,643,269.34	6.036E+01	Analog	0.30	3
Mg			2	25846.125	ug/l	0.38	3,957,704.84	2.477E+01	Pulse	0.30	3
Al			2	4122.031	ug/l	0.30	202,842.30	1.270E+00	Pulse	0.30	3
K			2	6338.105	ug/l	0.62	591,609.49	3.703E+00	Pulse	0.30	3
Ca			2	91817.119	ug/l	0.56	489,221.51	3.062E+00	Pulse	0.30	3
Ti			2	81.066	ug/l	5.20	3,430.40	2.148E-02	Pulse	0.30	3
V			2	88.007	ug/l	0.18	124,101.97	7.768E-01	Pulse	0.30	3
Cr			2	85.862	ug/l	0.61	158,280.88	9.907E-01	Pulse	0.30	3
Mn			2	93.614	ug/l	0.75	86,008.20	5.384E-01	Pulse	0.30	3
Fe			2	4406.635	ug/l	0.99	6,549,344.05	4.099E+01	Analog	0.30	3
Co			2	80.018	ug/l	0.43	263,518.75	1.649E+00	Pulse	0.30	3
Ni			2	79.078	ug/l	0.65	72,441.34	4.534E-01	Pulse	0.30	3
Cu			2	104.464	ug/l	0.26	251,433.02	1.574E+00	Pulse	0.30	3
Zn			2	88.754	ug/l	1.22	28,665.09	1.794E-01	Pulse	0.30	3
As			2	73.475	ug/l	1.35	11,847.30	7.416E-02	Pulse	1.00	3
Cd			2	77.642	ug/l	1.62	35,734.49	4.361E-02	Pulse	0.30	3
Sn			2	80.550	ug/l	1.53	68,732.15	8.387E-02	Pulse	0.30	3
Se			3	366.935	ug/l	0.33	18,722.93	9.056E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,661,821.78	0.44	100.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		5,022,355.97	1.00	102.9	Pulse	0.10	3
1	Ge		918,473.11	1.68	100.1	Pulse	0.10	3
1	Ge		1,303,076.26	1.34	101.8	Pulse	0.10	3
1	Rh		6,679,727.61	0.64	98.2	Analog	0.10	3
1	In		7,378,285.18	0.65	102.1	Analog	0.10	3
1	Tb		9,730,038.40	0.33	103.4	Analog	0.10	3
1	Ho		910,023.63	1.08	102.4	Pulse	0.10	3
1	Bi		5,351,380.76	2.15	97.2	Mix	0.10	3
2	Sc		159,764.26	0.50	99.8	Pulse	0.30	3
2	Ge		85,813.40	1.12	97.6	Pulse	0.30	3
2	Ge		131,737.00	0.88	96.8	Pulse	0.30	3
2	Rh		2,631,253.30	0.13	93.7	Pulse	0.30	3
2	In		819,465.20	0.65	95.9	Pulse	0.30	3
2	Tb		3,223,656.96	0.15	97.1	Pulse	0.30	3
2	Ho		314,561.53	0.61	97.8	Pulse	0.30	3
2	Bi		2,041,358.39	0.30	92.6	Pulse	0.30	3
3	Sc		230,806.11	0.83	104.7	Pulse	0.30	3
3	Ge		133,872.98	0.18	101.1	Pulse	0.30	3
3	Ge		206,751.52	0.26	101.6	Pulse	0.30	3
3	Rh		2,413,046.15	0.29	97.5	Pulse	0.30	3
3	Tb		3,743,790.13	0.34	101.4	Pulse	0.30	3

Quantitation Report

File Name	109SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 20:12
Sample Name	mp14115-s2
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	79.608	ug/l	1.53	197,097.15	7.473E-02	Pulse	0.25	3
B			1	134.515	ug/l	0.76	324,168.44	1.229E-01	Pulse	0.15	3
Ca			1	92310.739	ug/l	0.54	31,189,997.04	6.278E+00	Analog	0.10	3
Sr			1	389.859	ug/l	0.65	6,587,927.61	1.001E+00	Analog	0.10	3
Mo			1	89.179	ug/l	1.36	288,196.17	4.380E-02	Pulse	0.10	3
Ag			1	79.301	ug/l	0.43	689,930.09	9.520E-02	Pulse	0.10	3
Sn			1	79.643	ug/l	0.87	428,037.83	5.907E-02	Pulse	0.10	3
Sb			1	78.578	ug/l	1.22	454,827.39	4.685E-02	Pulse	0.10	3
Ba			1	523.998	ug/l	1.46	1,269,908.84	1.308E-01	Pulse	0.10	3
Tl			1	83.144	ug/l	2.40	1,179,868.55	2.212E-01	Pulse	0.10	3
Pb			1	85.802	ug/l	2.02	409,377.91	7.673E-02	Pulse	0.10	3
Pb			1	84.830	ug/l	1.95	362,794.08	6.800E-02	Pulse	0.10	3
Pb			1	84.926	ug/l	2.30	1,650,637.27	3.094E-01	Pulse	0.10	3
Na			2	28924.018	ug/l	0.92	9,431,113.79	5.986E+01	Analog	0.30	3
Mg			2	25637.777	ug/l	0.52	3,871,008.46	2.457E+01	Pulse	0.30	3
Al			2	4154.432	ug/l	0.45	201,582.98	1.280E+00	Pulse	0.30	3
K			2	6306.712	ug/l	0.67	580,501.83	3.685E+00	Pulse	0.30	3
Ca			2	90966.211	ug/l	1.06	477,915.93	3.034E+00	Pulse	0.30	3
Ti			2	79.520	ug/l	4.19	3,318.15	2.107E-02	Pulse	0.30	3
V			2	87.657	ug/l	0.56	121,884.80	7.737E-01	Pulse	0.30	3
Cr			2	86.228	ug/l	0.71	156,734.56	9.949E-01	Pulse	0.30	3
Mn			2	92.692	ug/l	1.03	83,973.82	5.331E-01	Pulse	0.30	3
Fe			2	4402.269	ug/l	1.07	6,451,483.21	4.095E+01	Analog	0.30	3
Co			2	80.400	ug/l	1.39	261,069.85	1.657E+00	Pulse	0.30	3
Ni			2	79.703	ug/l	1.19	71,996.14	4.570E-01	Pulse	0.30	3
Cu			2	103.994	ug/l	0.54	246,809.10	1.567E+00	Pulse	0.30	3
Zn			2	92.620	ug/l	1.97	29,488.79	1.872E-01	Pulse	0.30	3
As			2	73.831	ug/l	1.07	11,738.22	7.451E-02	Pulse	1.00	3
Cd			2	78.097	ug/l	1.62	35,225.71	4.386E-02	Pulse	0.30	3
Sn			2	81.390	ug/l	0.64	68,050.26	8.474E-02	Pulse	0.30	3
Se			3	371.081	ug/l	0.75	18,689.96	9.158E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,637,571.65	0.32	99.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,968,514.51	0.69	101.8	Pulse	0.10	3
1	Ge		907,899.83	1.05	99.0	Pulse	0.10	3
1	Ge		1,277,298.86	0.86	99.8	Pulse	0.10	3
1	Rh		6,580,153.44	0.25	96.7	Analog	0.10	3
1	In		7,247,405.67	1.64	100.3	Analog	0.10	3
1	Tb		9,707,368.82	0.23	103.2	Analog	0.10	3
1	Ho		897,624.10	1.31	101.1	Pulse	0.10	3
1	Bi		5,336,624.71	2.58	96.9	Mix	0.10	3
2	Sc		157,538.29	0.89	98.4	Pulse	0.30	3
2	Ge		85,049.52	0.03	96.7	Pulse	0.30	3
2	Ge		129,250.37	0.21	95.0	Pulse	0.30	3
2	Rh		2,593,927.95	0.26	92.4	Pulse	0.30	3
2	In		803,002.88	0.63	94.0	Pulse	0.30	3
2	Tb		3,185,404.46	0.27	95.9	Pulse	0.30	3
2	Ho		309,148.89	0.05	96.2	Pulse	0.30	3
2	Bi		2,021,000.34	0.26	91.7	Pulse	0.30	3
3	Sc		226,894.37	0.49	102.9	Pulse	0.30	3
3	Ge		131,130.17	1.09	99.0	Pulse	0.30	3
3	Ge		204,090.64	0.59	100.3	Pulse	0.30	3
3	Rh		2,386,708.24	0.25	96.4	Pulse	0.30	3
3	Tb		3,711,773.19	0.23	100.6	Pulse	0.30	3

Quantitation Report

File Name	110SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 20:17
Sample Name	jc86081-4
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.039	ug/l	33.19	152.00	5.808E-05	Pulse	0.25	3
B			1	48.836	ug/l	2.50	127,626.12	4.878E-02	Pulse	0.15	3
Ca			1	86394.165	ug/l	0.83	28,421,818.74	5.876E+00	Analog	0.10	3
Sr			1	281.274	ug/l	1.85	4,708,350.24	7.224E-01	Pulse	0.10	3
Mo			1	7.265	ug/l	4.64	23,407.81	3.592E-03	Pulse	0.10	3
Ag			1	0.080	ug/l	11.83	770.05	1.081E-04	Pulse	0.10	3
Sn			1	3.275	ug/l	0.31	10,687.38	1.498E-03	Pulse	0.10	3
Sb			1	0.109	ug/l	17.95	2,080.22	2.163E-04	Pulse	0.10	3
Ba			1	426.976	ug/l	0.85	1,025,233.32	1.066E-01	Pulse	0.10	3
Tl			1	0.075	ug/l	21.15	1,686.83	3.192E-04	Pulse	0.10	3
Pb			1	1.920	ug/l	4.65	9,376.65	1.771E-03	Pulse	0.10	3
Pb			1	1.895	ug/l	2.73	8,292.63	1.564E-03	Pulse	0.10	3
Pb			1	1.887	ug/l	1.90	37,566.65	7.090E-03	Pulse	0.10	3
Na			2	24125.629	ug/l	0.71	7,700,516.36	4.994E+01	Analog	0.30	3
Mg			2	21208.287	ug/l	0.76	3,134,232.10	2.033E+01	Pulse	0.30	3
Al			2	115.493	ug/l	6.30	5,743.59	3.725E-02	Pulse	0.30	3
K			2	2094.385	ug/l	0.52	193,408.25	1.254E+00	Pulse	0.30	3
Ca			2	84156.222	ug/l	0.09	432,770.93	2.807E+00	Pulse	0.30	3
Ti			2	3.267	ug/l	7.56	134.45	8.721E-04	Pulse	0.30	3
V			2	5.060	ug/l	1.10	7,258.34	4.707E-02	Pulse	0.30	3
Cr			2	3.894	ug/l	3.39	7,411.75	4.807E-02	Pulse	0.30	3
Mn			2	11.913	ug/l	3.24	10,647.97	6.905E-02	Pulse	0.30	3
Fe			2	89.967	ug/l	0.25	141,847.59	9.200E-01	Pulse	0.30	3
Co			2	0.095	ug/l	5.90	394.45	2.558E-03	Pulse	0.30	3
Ni			2	1.093	ug/l	7.84	1,028.93	6.674E-03	Pulse	0.30	3
Cu			2	25.835	ug/l	0.71	60,508.34	3.924E-01	Pulse	0.30	3
Zn			2	20.801	ug/l	3.30	6,625.86	4.298E-02	Pulse	0.30	3
As			2	0.755	ug/l	3.28	130.67	8.474E-04	Pulse	1.00	3
Cd			2	0.012	ug/l	36.80	20.02	2.509E-05	Pulse	0.30	3
Sn			2	1.663	ug/l	3.70	1,727.89	2.165E-03	Pulse	0.30	3
Se			3	0.220	ug/l	13.56	24.80	1.231E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,616,087.68	0.27	98.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,837,270.24	0.76	99.1	Pulse	0.10	3
1	Ge		897,016.76	1.03	97.8	Pulse	0.10	3
1	Ge		1,251,063.89	0.58	97.7	Pulse	0.10	3
1	Rh		6,518,727.82	1.04	95.8	Analog	0.10	3
1	In		7,134,069.40	1.75	98.7	Analog	0.10	3
1	Tb		9,617,706.53	0.52	102.2	Analog	0.10	3
1	Ho		893,226.26	1.12	100.6	Pulse	0.10	3
1	Bi		5,300,640.55	3.45	96.2	Mix	0.10	3
2	Sc		154,185.12	0.37	96.3	Pulse	0.30	3
2	Ge		83,922.71	0.93	95.4	Pulse	0.30	3
2	Ge		127,793.51	0.10	93.9	Pulse	0.30	3
2	Rh		2,579,528.79	0.72	91.9	Pulse	0.30	3
2	In		798,382.79	0.78	93.5	Pulse	0.30	3
2	Tb		3,137,311.26	0.13	94.5	Pulse	0.30	3
2	Ho		307,043.77	0.74	95.5	Pulse	0.30	3
2	Bi		2,019,376.73	0.27	91.6	Pulse	0.30	3
3	Sc		226,819.96	0.39	102.9	Pulse	0.30	3
3	Ge		131,188.16	1.18	99.1	Pulse	0.30	3
3	Ge		201,332.58	1.02	98.9	Pulse	0.30	3
3	Rh		2,381,732.82	0.28	96.2	Pulse	0.30	3
3	Tb		3,701,000.41	0.22	100.3	Pulse	0.30	3

Quantitation Report

File Name	111SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 20:22
Sample Name	mp14115-sd1
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.009	ug/l	-255.08	53.33	2.002E-05	Pulse	0.25	3
B			1	48.931	ug/l	4.48	39,916.04	1.500E-02	Pulse	0.15	3
Ca			1	86854.407	ug/l	0.08	5,861,364.29	1.185E+00	Analog	0.10	3
Sr			1	274.457	ug/l	1.03	958,408.55	1.411E-01	Pulse	0.10	3
Mo			1	6.885	ug/l	2.91	4,770.89	7.021E-04	Pulse	0.10	3
Ag			1	0.130	ug/l	13.81	316.68	4.262E-05	Pulse	0.10	3
Sn			1	10.672	ug/l	1.59	4,744.21	6.380E-04	Pulse	0.10	3
Sb			1	-0.518	ug/l	-15.65	870.09	9.001E-05	Pulse	0.10	3
Ba			1	435.695	ug/l	0.18	210,471.70	2.176E-02	Pulse	0.10	3
Tl			1	0.021	ug/l	55.41	733.38	1.302E-04	Pulse	0.10	3
Pb			1	1.756	ug/l	5.21	2,080.23	3.692E-04	Pulse	0.10	3
Pb			1	1.963	ug/l	3.55	2,030.22	3.603E-04	Pulse	0.10	3
Pb			1	1.883	ug/l	3.40	8,964.77	1.591E-03	Pulse	0.10	3
Na			2	23094.155	ug/l	0.73	1,539,628.93	9.614E+00	Pulse	0.30	3
Mg			2	21323.989	ug/l	0.74	655,238.13	4.092E+00	Pulse	0.30	3
Al			2	122.176	ug/l	26.51	1,479.15	9.238E-03	Pulse	0.30	3
K			2	2149.352	ug/l	2.05	47,071.50	2.939E-01	Pulse	0.30	3
Ca			2	84382.636	ug/l	0.78	90,343.74	5.642E-01	Pulse	0.30	3
Ti			2	3.665	ug/l	21.70	32.22	2.011E-04	Pulse	0.30	3
V			2	4.675	ug/l	5.68	1,726.77	1.078E-02	Pulse	0.30	3
Cr			2	4.750	ug/l	6.18	2,274.63	1.421E-02	Pulse	0.30	3
Mn			2	14.623	ug/l	1.33	2,790.27	1.742E-02	Pulse	0.30	3
Fe			2	83.869	ug/l	2.57	38,512.08	2.405E-01	Pulse	0.30	3
Co			2	0.071	ug/l	24.11	143.34	8.948E-04	Pulse	0.30	3
Ni			2	1.086	ug/l	32.16	265.56	1.657E-03	Pulse	0.30	3
Cu			2	27.281	ug/l	2.22	13,814.81	8.627E-02	Pulse	0.30	3
Zn			2	23.462	ug/l	4.82	1,702.33	1.063E-02	Pulse	0.30	3
As			2	0.891	ug/l	11.21	42.67	2.665E-04	Pulse	1.00	3
Cd			2	-0.033	ug/l	-272.29	11.98	1.441E-05	Pulse	0.30	3
Sn			2	2.218	ug/l	2.59	751.14	9.013E-04	Pulse	0.30	3
Se			3	-0.087	ug/l	-254.09	13.13	6.446E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,661,335.97	1.03	100.2	Pulse	0.10	3
1	Sc		4,947,016.07	1.04	101.3	Pulse	0.10	3
1	Ge		929,889.07	1.86	101.4	Pulse	0.10	3

Quantitation Report

1	Ge		1,295,797.19	1.25	101.2	Pulse	0.10	3
1	Rh		6,794,252.82	1.82	99.8	Analog	0.10	3
1	In		7,433,200.66	1.18	102.9	Analog	0.10	3
1	Tb		9,670,467.77	1.51	102.8	Analog	0.10	3
1	Ho		896,070.69	1.13	100.9	Pulse	0.10	3
1	Bi		5,634,534.08	0.55	102.3	Analog	0.10	3
2	Sc		160,144.03	0.56	100.0	Pulse	0.30	3
2	Ge		87,699.89	0.76	99.7	Pulse	0.30	3
2	Ge		134,242.46	1.04	98.7	Pulse	0.30	3
2	Rh		2,681,522.33	0.26	95.5	Pulse	0.30	3
2	In		833,362.61	0.50	97.6	Pulse	0.30	3
2	Tb		3,204,631.89	0.37	96.5	Pulse	0.30	3
2	Ho		311,462.45	0.51	96.9	Pulse	0.30	3
2	Bi		2,105,351.79	0.81	95.5	Pulse	0.30	3
3	Sc		224,483.74	0.51	101.8	Pulse	0.30	3
3	Ge		132,762.04	1.21	100.3	Pulse	0.30	3
3	Ge		203,735.72	0.93	100.1	Pulse	0.30	3
3	Rh		2,440,518.10	0.56	98.6	Pulse	0.30	3
3	Tb		3,692,582.22	1.14	100.1	Pulse	0.30	3

Quantitation Report

File Name	112SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 20:27
Sample Name	jc86081-6
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-1011.31	56.00	2.123E-05	Pulse	0.25	3
B			1	1.676	ug/l	10.88	21,035.60	7.984E-03	Pulse	0.15	3
Ca			1	57.239	ug/l	2.92	39,805.19	8.209E-03	Pulse	0.10	3
Sr			1	0.120	ug/l	6.47	2,973.76	4.419E-04	Pulse	0.10	3
Mo			1	0.015	ug/l	61.75	226.68	3.368E-05	Pulse	0.10	3
Ag			1	0.022	ug/l	35.30	280.01	3.792E-05	Pulse	0.10	3
Sn			1	2.834	ug/l	2.10	8,592.66	1.165E-03	Pulse	0.10	3
Sb			1	-0.130	ug/l	-5.08	720.04	7.458E-05	Pulse	0.10	3
Ba			1	0.125	ug/l	40.43	406.69	4.212E-05	Pulse	0.10	3
Tl			1	-0.007	ug/l	-26.71	563.36	1.001E-04	Pulse	0.10	3
Pb			1	0.062	ug/l	18.62	623.37	1.107E-04	Pulse	0.10	3
Pb			1	0.059	ug/l	16.63	523.36	9.288E-05	Pulse	0.10	3
Pb			1	0.065	ug/l	6.82	2,573.53	4.569E-04	Pulse	0.10	3
Na			2	31.054	ug/l	3.62	20,128.69	1.292E-01	Pulse	0.30	3
Mg			2	1.766	ug/l	10.92	1,022.27	6.560E-03	Pulse	0.30	3
Al			2	1.494	ug/l	28.72	340.01	2.182E-03	Pulse	0.30	3
K			2	8.665	ug/l	15.52	7,931.96	5.091E-02	Pulse	0.30	3
Ca			2	24.896	ug/l	22.69	377.79	2.424E-03	Pulse	0.30	3
Ti			2	0.566	ug/l	35.99	24.44	1.569E-04	Pulse	0.30	3
V			2	0.399	ug/l	10.05	945.59	6.067E-03	Pulse	0.30	3
Cr			2	0.952	ug/l	3.03	2,216.84	1.423E-02	Pulse	0.30	3
Mn			2	0.420	ug/l	19.30	473.35	3.036E-03	Pulse	0.30	3
Fe			2	3.218	ug/l	7.05	17,859.94	1.146E-01	Pulse	0.30	3
Co			2	0.019	ug/l	16.22	155.56	9.981E-04	Pulse	0.30	3
Ni			2	0.260	ug/l	8.76	296.68	1.904E-03	Pulse	0.30	3
Cu			2	0.945	ug/l	2.54	2,881.40	1.849E-02	Pulse	0.30	3
Zn			2	2.208	ug/l	5.04	878.93	5.640E-03	Pulse	0.30	3
As			2	0.058	ug/l	17.42	22.67	1.455E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.013	ug/l	-32.33	8.88	1.084E-05	Pulse	0.30	3
Sn			2	1.094	ug/l	12.93	1,291.18	1.575E-03	Pulse	0.30	3
Se			3	-0.060	ug/l	-15.43	11.13	5.384E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,634,757.66	0.71	99.2	Pulse	0.10	3
1	Sc		4,849,322.85	0.99	99.3	Pulse	0.10	3
1	Ge		906,056.10	1.53	98.8	Pulse	0.10	3
1	Ge		1,263,588.44	0.74	98.7	Pulse	0.10	3
1	Rh		6,731,929.48	1.67	98.9	Analog	0.10	3
1	In		7,372,638.11	1.07	102.0	Analog	0.10	3
1	Tb		9,655,055.27	0.67	102.6	Analog	0.10	3
1	Ho		891,152.30	1.06	100.3	Pulse	0.10	3
1	Bi		5,632,713.87	1.26	102.3	Analog	0.10	3
2	Sc		155,820.63	0.63	97.3	Pulse	0.30	3
2	Ge		85,222.59	0.36	96.9	Pulse	0.30	3
2	Ge		130,425.39	0.55	95.9	Pulse	0.30	3
2	Rh		2,695,489.68	0.36	96.0	Pulse	0.30	3
2	In		819,691.68	0.21	96.0	Pulse	0.30	3
2	Tb		3,185,252.79	0.24	95.9	Pulse	0.30	3
2	Ho		309,766.44	0.24	96.4	Pulse	0.30	3
2	Bi		2,103,902.28	0.20	95.5	Pulse	0.30	3
3	Sc		228,442.65	0.39	103.6	Pulse	0.30	3
3	Ge		134,800.59	1.03	101.8	Pulse	0.30	3
3	Ge		206,775.20	0.77	101.6	Pulse	0.30	3
3	Rh		2,503,800.18	0.58	101.2	Pulse	0.30	3
3	Tb		3,756,446.79	0.41	101.8	Pulse	0.30	3

Quantitation Report

File Name	113SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 20:32
Sample Name	jc86089-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.013	ug/l	22.87	134.67	5.231E-05	Pulse	0.25	3
B			1	49.745	ug/l	0.71	293,617.61	1.141E-01	Pulse	0.15	3
Ca			1	33553.643	ug/l	0.61	26,899,838.77	5.705E+00	Analog	0.10	3
Sr			1	71.236	ug/l	0.55	2,947,194.96	4.574E-01	Pulse	0.10	3
Mo			1	5.144	ug/l	1.02	40,839.62	6.338E-03	Pulse	0.10	3
Ag			1	0.051	ug/l	16.16	1,176.75	1.652E-04	Pulse	0.10	3
Sn			1	1.123	ug/l	3.55	8,155.88	1.146E-03	Pulse	0.10	3
Sb			1	0.165	ug/l	3.38	3,807.28	3.972E-04	Pulse	0.10	3
Ba			1	10.600	ug/l	1.23	63,514.43	6.627E-03	Pulse	0.10	3
Tl			1	0.010	ug/l	23.44	993.41	1.836E-04	Pulse	0.10	3
Pb			1	2.096	ug/l	2.72	25,599.54	4.738E-03	Pulse	0.10	3
Pb			1	2.080	ug/l	5.79	22,744.95	4.211E-03	Pulse	0.10	3
Pb			1	2.069	ug/l	2.85	102,956.42	1.906E-02	Pulse	0.10	3
Na			2	1536.987	ug/l	0.36	1,206,143.04	8.009E+00	Pulse	0.30	3
Mg			2	1983.762	ug/l	0.27	716,433.90	4.757E+00	Pulse	0.30	3
Al			2	228.418	ug/l	2.60	26,709.78	1.774E-01	Pulse	0.30	3
K			2	3976.533	ug/l	0.42	870,782.10	5.782E+00	Pulse	0.30	3
Ca			2	32699.573	ug/l	0.55	410,608.53	2.727E+00	Pulse	0.30	3
Ti			2	2.942	ug/l	4.96	294.46	1.955E-03	Pulse	0.30	3
V			2	1.038	ug/l	3.32	3,823.83	2.539E-02	Pulse	0.30	3
Cr			2	1.243	ug/l	0.46	5,877.78	3.903E-02	Pulse	0.30	3
Mn			2	17.291	ug/l	0.82	37,486.94	2.489E-01	Pulse	0.30	3
Fe			2	306.390	ug/l	0.63	1,083,659.19	7.196E+00	Pulse	0.30	3
Co			2	0.190	ug/l	2.13	1,567.87	1.041E-02	Pulse	0.30	3
Ni			2	1.299	ug/l	2.32	2,864.73	1.902E-02	Pulse	0.30	3
Cu			2	3.494	ug/l	2.92	20,411.64	1.355E-01	Pulse	0.30	3
Zn			2	15.120	ug/l	3.13	11,612.00	7.711E-02	Pulse	0.30	3
As			2	0.580	ug/l	7.02	233.33	1.550E-03	Pulse	1.00	3
Cd			2	0.051	ug/l	38.71	70.35	9.030E-05	Pulse	0.30	3
Sn			2	0.521	ug/l	11.62	1,396.75	1.792E-03	Pulse	0.30	3
Se			3	0.360	ug/l	9.10	60.13	2.906E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,572,898.41	0.82	96.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,715,208.16	0.47	96.6	Pulse	0.10	3
1	Ge		874,853.71	0.74	95.4	Pulse	0.10	3
1	Ge		1,220,888.11	1.08	95.4	Pulse	0.10	3
1	Rh		6,443,115.11	0.64	94.7	Analog	0.10	3
1	In		7,117,308.58	1.07	98.5	Analog	0.10	3
1	Tb		9,584,209.65	0.75	101.9	Analog	0.10	3
1	Ho		891,966.21	1.30	100.4	Pulse	0.10	3
1	Bi		5,404,697.42	1.95	98.1	Mix	0.10	3
2	Sc		150,596.89	0.47	94.0	Pulse	0.30	3
2	Ge		81,589.77	0.91	92.8	Pulse	0.30	3
2	Ge		124,908.34	0.23	91.8	Pulse	0.30	3
2	Rh		2,553,368.09	0.64	90.9	Pulse	0.30	3
2	In		779,682.37	0.39	91.3	Pulse	0.30	3
2	Tb		3,109,475.02	0.36	93.6	Pulse	0.30	3
2	Ho		303,358.74	0.20	94.4	Pulse	0.30	3
2	Bi		1,999,633.60	0.35	90.7	Pulse	0.30	3
3	Sc		230,537.43	0.51	104.6	Pulse	0.30	3
3	Ge		133,146.06	0.49	100.5	Pulse	0.30	3
3	Ge		206,960.22	0.81	101.7	Pulse	0.30	3
3	Rh		2,421,801.99	0.29	97.9	Pulse	0.30	3
3	Tb		3,766,522.63	0.22	102.1	Pulse	0.30	3

Quantitation Report

File Name 114SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File
Method Path
Acq Time 4/12/2019 20:38
Sample Name jc86089-2
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/12/2019 17:58
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.030	ug/l	23.18	233.34	9.110E-05	Pulse	0.25	3
B			1	29.727	ug/l	0.85	181,512.87	7.083E-02	Pulse	0.15	3
Ca			1	29500.433	ug/l	0.86	23,468,000.48	5.016E+00	Analog	0.10	3
Sr			1	61.928	ug/l	0.84	2,525,040.17	3.977E-01	Pulse	0.10	3
Mo			1	4.466	ug/l	0.86	34,965.63	5.507E-03	Pulse	0.10	3
Ag			1	0.024	ug/l	14.25	590.04	8.289E-05	Pulse	0.10	3
Sn			1	1.243	ug/l	3.43	9,753.41	1.371E-03	Pulse	0.10	3
Sb			1	0.091	ug/l	4.78	2,773.70	2.868E-04	Pulse	0.10	3
Ba			1	15.844	ug/l	3.22	95,710.60	9.899E-03	Pulse	0.10	3
Tl			1	0.045	ug/l	7.83	2,290.27	4.213E-04	Pulse	0.10	3
Pb			1	31.139	ug/l	2.74	378,416.18	6.963E-02	Pulse	0.10	3
Pb			1	31.145	ug/l	2.17	339,314.25	6.242E-02	Pulse	0.10	3
Pb			1	31.046	ug/l	2.46	1,537,114.69	2.828E-01	Pulse	0.10	3
Na			2	2285.257	ug/l	0.76	1,757,739.86	1.188E+01	Pulse	0.30	3
Mg			2	2547.310	ug/l	0.92	903,865.87	6.107E+00	Pulse	0.30	3
Al			2	848.499	ug/l	2.26	96,814.56	6.542E-01	Pulse	0.30	3
K			2	5298.058	ug/l	0.92	1,137,878.74	7.689E+00	Pulse	0.30	3
Ca			2	28244.971	ug/l	0.77	348,590.80	2.355E+00	Pulse	0.30	3
Ti			2	16.751	ug/l	15.29	1,643.63	1.110E-02	Pulse	0.30	3
V			2	2.024	ug/l	3.46	6,968.27	4.708E-02	Pulse	0.30	3
Cr			2	2.229	ug/l	3.77	9,972.01	6.737E-02	Pulse	0.30	3
Mn			2	44.100	ug/l	1.23	93,815.66	6.339E-01	Pulse	0.30	3
Fe			2	1015.766	ug/l	0.81	3,501,629.44	2.366E+01	Pulse	0.30	3
Co			2	0.458	ug/l	5.08	3,581.54	2.420E-02	Pulse	0.30	3
Ni			2	1.993	ug/l	4.03	4,285.06	2.896E-02	Pulse	0.30	3
Cu			2	3.433	ug/l	1.59	19,720.85	1.333E-01	Pulse	0.30	3
Zn			2	76.262	ug/l	1.45	56,837.87	3.840E-01	Pulse	0.30	3
As			2	0.603	ug/l	10.05	237.67	1.605E-03	Pulse	1.00	3
Cd			2	0.668	ug/l	3.57	735.05	9.556E-04	Pulse	0.30	3
Sn			2	0.632	ug/l	12.73	1,598.99	2.079E-03	Pulse	0.30	3
Se			3	0.360	ug/l	9.98	59.20	2.907E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,562,733.65	0.51	96.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		4,677,863.89	1.52	95.8	Pulse	0.10	3
1	Ge		867,023.40	0.92	94.5	Pulse	0.10	3
1	Ge		1,209,224.10	1.45	94.5	Pulse	0.10	3
1	Rh		6,350,011.15	1.28	93.3	Analog	0.10	3
1	In		7,112,841.45	0.93	98.4	Analog	0.10	3
1	Tb		9,670,925.06	1.47	102.8	Analog	0.10	3
1	Ho		895,521.18	1.91	100.8	Pulse	0.10	3
1	Bi		5,437,055.75	2.34	98.7	Mix	0.10	3
2	Sc		148,003.14	0.75	92.4	Pulse	0.30	3
2	Ge		80,352.48	0.20	91.3	Pulse	0.30	3
2	Ge		122,631.57	1.38	90.2	Pulse	0.30	3
2	Rh		2,518,815.52	0.22	89.7	Pulse	0.30	3
2	In		769,152.62	0.12	90.0	Pulse	0.30	3
2	Tb		3,102,506.82	0.41	93.4	Pulse	0.30	3
2	Ho		303,963.40	0.67	94.5	Pulse	0.30	3
2	Bi		1,997,462.63	0.11	90.6	Pulse	0.30	3
3	Sc		227,124.87	0.26	103.0	Pulse	0.30	3
3	Ge		132,274.75	0.06	99.9	Pulse	0.30	3
3	Ge		203,704.87	0.28	100.1	Pulse	0.30	3
3	Rh		2,419,351.78	0.75	97.8	Pulse	0.30	3
3	Tb		3,786,094.02	0.71	102.6	Pulse	0.30	3

Quantitation Report

File Name	115SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 20:43
Sample Name	mp14114a-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	139.50	64.00	2.448E-05	Pulse	0.25	3
B			1	0.300	ug/l	14.60	18,772.89	7.185E-03	Pulse	0.15	3
Ca			1	13.065	ug/l	1.11	30,886.34	6.539E-03	Pulse	0.10	3
Sr			1	0.037	ug/l	15.66	2,446.96	3.713E-04	Pulse	0.10	3
Mo			1	0.046	ug/l	12.29	543.36	8.245E-05	Pulse	0.10	3
Ag			1	0.032	ug/l	15.85	763.38	1.061E-04	Pulse	0.10	3
Sn			1	1.071	ug/l	1.86	7,532.07	1.047E-03	Pulse	0.10	3
Sb			1	0.032	ug/l	50.99	1,946.87	1.995E-04	Pulse	0.10	3
Ba			1	0.058	ug/l	11.74	460.04	4.709E-05	Pulse	0.10	3
Tl			1	0.016	ug/l	22.24	1,270.10	2.253E-04	Pulse	0.10	3
Pb			1	0.049	ug/l	13.68	923.40	1.638E-04	Pulse	0.10	3
Pb			1	0.044	ug/l	20.12	756.71	1.342E-04	Pulse	0.10	3
Pb			1	0.045	ug/l	11.59	3,570.29	6.332E-04	Pulse	0.10	3
Na			2	9.587	ug/l	9.74	17,427.12	1.145E-01	Pulse	0.30	3
Mg			2	0.044	ug/l	622.22	756.70	4.972E-03	Pulse	0.30	3
Al			2	2.405	ug/l	14.12	543.40	3.572E-03	Pulse	0.30	3
K			2	3.776	ug/l	9.78	7,814.13	5.135E-02	Pulse	0.30	3
Ca			2	2.517	ug/l	55.23	274.45	1.804E-03	Pulse	0.30	3
Ti			2	0.243	ug/l	20.58	25.56	1.679E-04	Pulse	0.30	3
V			2	0.314	ug/l	6.22	1,440.09	9.465E-03	Pulse	0.30	3
Cr			2	0.439	ug/l	4.58	2,420.21	1.590E-02	Pulse	0.30	3
Mn			2	0.161	ug/l	5.15	446.68	2.936E-03	Pulse	0.30	3
Fe			2	1.336	ug/l	13.82	17,612.93	1.157E-01	Pulse	0.30	3
Co			2	0.012	ug/l	14.14	184.45	1.212E-03	Pulse	0.30	3
Ni			2	0.052	ug/l	21.79	176.67	1.161E-03	Pulse	0.30	3
Cu			2	0.252	ug/l	9.05	2,095.71	1.377E-02	Pulse	0.30	3
Zn			2	0.426	ug/l	14.01	508.90	3.344E-03	Pulse	0.30	3
As			2	0.075	ug/l	20.72	42.00	2.760E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.005	ug/l	-92.63	8.86	1.120E-05	Pulse	0.30	3
Sn			2	0.419	ug/l	3.97	1,205.62	1.527E-03	Pulse	0.30	3
Se			3	0.052	ug/l	29.19	21.00	1.009E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,613,061.37	0.60	98.4	Pulse	0.10	3
1	Sc		4,723,691.08	0.83	96.8	Pulse	0.10	3
1	Ge		883,692.85	1.05	96.4	Pulse	0.10	3
1	Ge		1,237,739.59	0.53	96.7	Pulse	0.10	3
1	Rh		6,588,823.03	0.89	96.8	Analog	0.10	3
1	In		7,195,276.42	0.49	99.6	Analog	0.10	3
1	Tb		9,764,481.94	0.99	103.8	Analog	0.10	3
1	Ho		895,868.87	0.26	100.9	Pulse	0.10	3
1	Bi		5,639,394.29	0.36	102.4	Analog	0.10	3
2	Sc		152,161.30	0.27	95.0	Pulse	0.30	3
2	Ge		82,450.76	0.55	93.7	Pulse	0.30	3
2	Ge		125,462.37	0.43	92.2	Pulse	0.30	3
2	Rh		2,631,955.31	0.17	93.7	Pulse	0.30	3
2	In		789,574.90	0.40	92.4	Pulse	0.30	3
2	Tb		3,149,897.03	1.05	94.9	Pulse	0.30	3
2	Ho		305,712.53	1.34	95.1	Pulse	0.30	3
2	Bi		2,064,619.08	0.27	93.7	Pulse	0.30	3
3	Sc		231,512.34	0.15	105.0	Pulse	0.30	3
3	Ge		134,687.38	0.45	101.7	Pulse	0.30	3
3	Ge		208,108.45	0.86	102.3	Pulse	0.30	3
3	Rh		2,523,793.72	0.56	102.0	Pulse	0.30	3
3	Tb		3,810,792.35	0.23	103.3	Pulse	0.30	3

Quantitation Report

File Name	116SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 20:48
Sample Name	mp14114a-b2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	75.874	ug/l	0.48	464,480.66	1.780E-01	Pulse	0.25	3
B			1	84.431	ug/l	0.27	493,465.10	1.891E-01	Pulse	0.15	3
Ca			1	4276.683	ug/l	0.19	3,491,378.59	7.309E-01	Pulse	0.10	3
Sr			1	83.139	ug/l	0.97	3,514,469.32	5.338E-01	Pulse	0.10	3
Mo			1	79.807	ug/l	0.77	644,939.38	9.796E-02	Pulse	0.10	3
Ag			1	79.438	ug/l	1.05	1,716,505.23	2.384E-01	Pulse	0.10	3
Sn			1	76.294	ug/l	0.74	1,028,277.09	1.428E-01	Pulse	0.10	3
Sb			1	75.883	ug/l	1.04	1,084,012.88	1.129E-01	Pulse	0.10	3
Ba			1	79.561	ug/l	0.94	476,829.23	4.966E-02	Pulse	0.10	3
Tl			1	83.724	ug/l	0.35	2,963,054.44	5.566E-01	Pulse	0.10	3
Pb			1	84.047	ug/l	0.58	999,884.23	1.878E-01	Pulse	0.10	3
Pb			1	83.309	ug/l	0.10	888,398.95	1.669E-01	Pulse	0.10	3
Pb			1	83.486	ug/l	0.48	4,046,286.17	7.601E-01	Pulse	0.10	3
Na			2	4072.873	ug/l	0.80	3,200,920.50	2.112E+01	Pulse	0.30	3
Mg			2	4034.186	ug/l	0.76	1,465,737.41	9.669E+00	Pulse	0.30	3
Al			2	3997.464	ug/l	0.84	466,236.14	3.076E+00	Pulse	0.30	3
K			2	4139.160	ug/l	0.88	912,054.58	6.017E+00	Pulse	0.30	3
Ca			2	4523.487	ug/l	1.33	57,381.57	3.786E-01	Pulse	0.30	3
Ti			2	77.729	ug/l	3.35	7,801.92	5.147E-02	Pulse	0.30	3
V			2	82.682	ug/l	1.48	276,028.06	1.821E+00	Pulse	0.30	3
Cr			2	82.849	ug/l	1.53	361,553.90	2.385E+00	Pulse	0.30	3
Mn			2	81.432	ug/l	1.57	177,348.66	1.170E+00	Pulse	0.30	3
Fe			2	4309.118	ug/l	0.89	15,173,111.06	1.001E+02	Analog	0.30	3
Co			2	81.934	ug/l	1.17	639,893.29	4.221E+00	Pulse	0.30	3
Ni			2	80.286	ug/l	1.15	174,361.79	1.150E+00	Pulse	0.30	3
Cu			2	79.841	ug/l	1.24	455,224.22	3.003E+00	Pulse	0.30	3
Zn			2	65.827	ug/l	0.93	50,277.84	3.317E-01	Pulse	0.30	3
As			2	69.082	ug/l	1.06	26,403.90	1.742E-01	Pulse	1.00	3
Cd			2	74.891	ug/l	1.06	82,405.64	1.051E-01	Pulse	0.30	3
Sn			2	78.314	ug/l	0.39	159,302.27	2.032E-01	Pulse	0.30	3
Se			3	336.716	ug/l	0.67	42,755.44	2.077E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,608,998.88	0.56	98.2	Pulse	0.10	3
1	Sc		4,776,716.70	0.91	97.8	Pulse	0.10	3
1	Ge		890,581.00	1.33	97.1	Pulse	0.10	3

Quantitation Report

1	Ge		1,253,099.70	1.10	97.9	Pulse	0.10	3
1	Rh		6,583,755.95	1.12	96.7	Analog	0.10	3
1	In		7,200,113.56	0.55	99.6	Analog	0.10	3
1	Tb		9,601,151.11	0.21	102.0	Analog	0.10	3
1	Ho		904,885.87	0.62	101.9	Pulse	0.10	3
1	Bi		5,323,223.26	0.32	96.6	Pulse	0.10	3
2	Sc		151,591.77	0.87	94.7	Pulse	0.30	3
2	Ge		82,250.70	1.78	93.5	Pulse	0.30	3
2	Ge		125,547.43	0.21	92.3	Pulse	0.30	3
2	Rh		2,582,939.76	0.11	92.0	Pulse	0.30	3
2	In		783,847.46	0.77	91.8	Pulse	0.30	3
2	Tb		3,145,119.04	0.54	94.7	Pulse	0.30	3
2	Ho		304,463.87	0.09	94.7	Pulse	0.30	3
2	Bi		2,002,859.02	0.21	90.9	Pulse	0.30	3
3	Sc		231,438.07	0.64	105.0	Pulse	0.30	3
3	Ge		133,444.01	1.05	100.8	Pulse	0.30	3
3	Ge		205,899.76	0.77	101.2	Pulse	0.30	3
3	Rh		2,450,854.00	0.58	99.0	Pulse	0.30	3
3	Tb		3,776,530.82	0.28	102.3	Pulse	0.30	3

Quantitation Report

File Name	117_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 20:53
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.529	ug/l	0.63	649,204.23	2.371E-01	Pulse	0.25	3
B			1	101.019	ug/l	0.58	1,214,289.33	4.435E-01	Pulse	0.15	3
Ca			1	5246.848	ug/l	1.20	9,240,286.74	1.787E+00	Analog	0.10	3
Sr			1	51.869	ug/l	0.48	4,562,663.58	6.661E-01	Pulse	0.10	3
Mo			1	51.193	ug/l	0.40	860,844.31	1.257E-01	Pulse	0.10	3
Ag			1	48.981	ug/l	0.84	2,189,462.21	2.940E-01	Pulse	0.10	3
Sn			1	47.934	ug/l	0.92	1,338,308.16	1.797E-01	Pulse	0.10	3
Sb			1	49.785	ug/l	1.29	1,451,616.96	1.481E-01	Pulse	0.10	3
Ba			1	50.178	ug/l	0.53	613,994.56	6.264E-02	Pulse	0.10	3
Tl			1	50.416	ug/l	1.57	3,668,576.51	6.703E-01	Pulse	0.10	3
Pb			1	50.801	ug/l	1.51	1,242,598.31	2.271E-01	Pulse	0.10	3
Pb			1	49.810	ug/l	1.68	1,092,106.10	1.996E-01	Pulse	0.10	3
Pb			1	50.228	ug/l	1.35	5,005,252.40	9.146E-01	Pulse	0.10	3
Na			2	4943.487	ug/l	0.97	8,652,351.32	5.117E+01	Analog	0.30	3
Mg			2	4806.155	ug/l	1.18	3,894,689.43	2.303E+01	Pulse	0.30	3
Al			2	4927.678	ug/l	0.94	1,281,818.00	7.580E+00	Pulse	0.30	3
K			2	5029.194	ug/l	1.35	2,461,228.38	1.456E+01	Pulse	0.30	3
Ca			2	5248.359	ug/l	1.29	148,181.12	8.763E-01	Pulse	0.30	3
Ti			2	48.854	ug/l	1.49	10,940.36	6.470E-02	Pulse	0.30	3
V			2	49.513	ug/l	1.14	368,704.38	2.180E+00	Pulse	0.30	3
Cr			2	48.664	ug/l	0.89	473,736.70	2.802E+00	Pulse	0.30	3
Mn			2	48.945	ug/l	0.76	237,815.81	1.406E+00	Pulse	0.30	3
Fe			2	5047.297	ug/l	1.27	39,631,236.20	2.344E+02	Analog	0.30	3
Co			2	48.055	ug/l	1.10	837,301.96	4.952E+00	Pulse	0.30	3
Ni			2	46.891	ug/l	1.17	227,191.61	1.344E+00	Pulse	0.30	3
Cu			2	46.841	ug/l	0.73	595,734.80	3.523E+00	Pulse	0.30	3
Zn			2	46.945	ug/l	0.86	79,906.21	4.725E-01	Pulse	0.30	3
As			2	48.398	ug/l	0.71	41,266.08	2.440E-01	Pulse	1.00	3
Cd			2	48.939	ug/l	0.91	116,982.23	1.374E-01	Pulse	0.30	3
Sn			2	49.057	ug/l	0.33	216,682.41	2.545E-01	Pulse	0.30	3
Se			3	198.829	ug/l	0.18	50,732.55	2.452E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,737,980.11	0.82	103.1	Pulse	0.10	3
1	Sc		5,170,649.09	0.82	105.9	Pulse	0.10	3
1	Ge		962,095.25	0.52	104.9	Pulse	0.10	3

Quantitation Report

1	Ge		1,354,810.97	1.42	105.8	Pulse	0.10	3
1	Rh		6,850,477.40	1.42	100.7	Analog	0.10	3
1	In		7,447,373.06	0.43	103.1	Analog	0.10	3
1	Tb		9,801,655.06	0.69	104.2	Analog	0.10	3
1	Ho		908,653.79	1.23	102.3	Pulse	0.10	3
1	Bi		5,473,476.17	1.59	99.4	Mix	0.10	3
2	Sc		169,106.66	0.96	105.6	Pulse	0.30	3
2	Ge		91,544.20	0.31	104.1	Pulse	0.30	3
2	Ge		139,175.09	0.80	102.3	Pulse	0.30	3
2	Rh		2,708,455.17	0.13	96.5	Pulse	0.30	3
2	In		851,394.87	0.12	99.7	Pulse	0.30	3
2	Tb		3,267,571.40	0.59	98.4	Pulse	0.30	3
2	Ho		317,565.45	0.43	98.8	Pulse	0.30	3
2	Bi		2,085,932.76	0.60	94.6	Pulse	0.30	3
3	Sc		227,511.09	0.97	103.2	Pulse	0.30	3
3	Ge		132,768.45	0.27	100.3	Pulse	0.30	3
3	Ge		206,877.19	0.32	101.6	Pulse	0.30	3
3	Rh		2,379,538.38	0.46	96.1	Pulse	0.30	3
3	Tb		3,620,739.86	0.23	98.1	Pulse	0.30	3

Quantitation Report

File Name	118_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 20:58
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.010	ug/l	21.40	182.67	6.764E-05	Pulse	0.25	3
B			1	0.860	ug/l	1.89	27,687.28	1.025E-02	Pulse	0.15	3
Ca			1	0.301	ug/l	154.92	22,706.31	4.421E-03	Pulse	0.10	3
Sr			1	0.015	ug/l	6.42	2,310.25	3.270E-04	Pulse	0.10	3
Mo			1	0.081	ug/l	10.28	1,596.81	2.262E-04	Pulse	0.10	3
Ag			1	0.018	ug/l	12.10	910.06	1.200E-04	Pulse	0.10	3
Sn			1	0.424	ug/l	3.03	4,754.20	6.268E-04	Pulse	0.10	3
Sb			1	0.275	ug/l	0.69	9,553.24	9.694E-04	Pulse	0.10	3
Ba			1	0.019	ug/l	23.41	336.68	3.415E-05	Pulse	0.10	3
Tl			1	0.017	ug/l	12.94	1,980.20	3.488E-04	Pulse	0.10	3
Pb			1	0.019	ug/l	35.79	790.05	1.392E-04	Pulse	0.10	3
Pb			1	0.021	ug/l	5.22	730.05	1.285E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	6.42	3,356.95	5.911E-04	Pulse	0.10	3
Na			2	2.020	ug/l	7.99	14,357.32	8.587E-02	Pulse	0.30	3
Mg			2	0.212	ug/l	40.08	984.49	5.885E-03	Pulse	0.30	3
Al			2	0.111	ug/l	61.57	316.67	1.893E-03	Pulse	0.30	3
K			2	1.533	ug/l	9.78	8,415.54	5.033E-02	Pulse	0.30	3
Ca			2	-5.299	ug/l	-6.75	118.89	7.110E-04	Pulse	0.30	3
Ti			2	0.065	ug/l	36.23	15.56	9.321E-05	Pulse	0.30	3
V			2	0.009	ug/l	27.33	493.35	2.950E-03	Pulse	0.30	3
Cr			2	0.014	ug/l	28.18	683.36	4.085E-03	Pulse	0.30	3
Mn			2	0.026	ug/l	39.61	228.89	1.370E-03	Pulse	0.30	3
Fe			2	-0.034	ug/l	-114.95	13,911.58	8.319E-02	Pulse	0.30	3
Co			2	0.009	ug/l	16.83	248.89	1.489E-03	Pulse	0.30	3
Ni			2	0.009	ug/l	47.78	111.11	6.644E-04	Pulse	0.30	3
Cu			2	0.024	ug/l	23.37	1,014.49	6.064E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.002	ug/l	-288.03	197.78	1.183E-03	Pulse	0.30	3
As			2	0.006	ug/l	111.73	20.00	1.194E-04	Pulse	1.00	3
Cd			2	0.010	ug/l	28.20	39.91	4.596E-05	Pulse	0.30	3
Sn			2	0.117	ug/l	8.75	912.26	1.050E-03	Pulse	0.30	3
Se			3	0.066	ug/l	16.47	31.40	1.498E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,700,464.76	0.07	101.7	Pulse	0.10	3
1	Sc		5,136,711.90	1.31	105.2	Pulse	0.10	3
1	Ge		953,602.49	0.73	104.0	Pulse	0.10	3
1	Ge		1,344,419.62	0.75	105.0	Pulse	0.10	3
1	Rh		7,062,667.81	1.29	103.8	Analog	0.10	3
1	In		7,586,400.93	0.31	105.0	Analog	0.10	3
1	Tb		9,855,301.94	0.65	104.7	Analog	0.10	3
1	Ho		903,259.54	0.63	101.7	Pulse	0.10	3
1	Bi		5,679,318.67	0.45	103.1	Analog	0.10	3
2	Sc		167,215.42	1.08	104.4	Pulse	0.30	3
2	Ge		92,545.24	0.42	105.2	Pulse	0.30	3
2	Ge		140,104.39	0.79	103.0	Pulse	0.30	3
2	Rh		2,799,747.88	0.16	99.7	Pulse	0.30	3
2	In		868,756.15	0.40	101.7	Pulse	0.30	3
2	Tb		3,271,104.38	0.49	98.5	Pulse	0.30	3
2	Ho		318,194.39	0.81	99.0	Pulse	0.30	3
2	Bi		2,172,914.85	0.29	98.6	Pulse	0.30	3
3	Sc		227,262.46	0.22	103.1	Pulse	0.30	3
3	Ge		135,848.14	0.55	102.6	Pulse	0.30	3
3	Ge		209,565.11	0.34	103.0	Pulse	0.30	3
3	Rh		2,491,432.68	0.31	100.7	Pulse	0.30	3
3	Tb		3,704,424.30	0.16	100.4	Pulse	0.30	3

Quantitation Report

File Name	119SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Method File	
Method Path	
Acq Time	4/12/2019 21:03
Sample Name	mp14114a-s3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/12/2019 17:58
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	83.229	ug/l	0.94	480,260.28	1.953E-01	Pulse	0.25	3
B			1	198.210	ug/l	0.44	1,070,301.31	4.352E-01	Pulse	0.15	3
Ca			1	97298.880	ug/l	0.66	79,145,333.82	1.654E+01	Analog	0.10	3
Sr			1	754.027	ug/l	1.63	27,830,435.42	4.840E+00	Analog	0.10	3
Mo			1	86.746	ug/l	0.93	612,197.52	1.065E-01	Pulse	0.10	3
Ag			1	72.057	ug/l	1.09	1,425,178.21	2.162E-01	Pulse	0.10	3
Sn			1	77.491	ug/l	1.32	956,063.19	1.451E-01	Pulse	0.10	3
Sb			1	71.595	ug/l	1.02	998,285.06	1.065E-01	Pulse	0.10	3
Ba			1	103.001	ug/l	1.50	602,484.09	6.429E-02	Pulse	0.10	3
Tl			1	85.830	ug/l	0.51	2,595,491.89	5.706E-01	Pulse	0.10	3
Pb			1	86.059	ug/l	0.49	874,786.11	1.923E-01	Pulse	0.10	3
Pb			1	84.942	ug/l	0.83	773,994.78	1.702E-01	Pulse	0.10	3
Pb			1	85.417	ug/l	0.49	3,537,271.33	7.777E-01	Pulse	0.10	3
Na			2	256402.503	ug/l	0.43	199,128,320.98	1.325E+03	Analog	0.30	3
Mg			2	29523.846	ug/l	0.96	10,627,214.02	7.073E+01	Analog	0.30	3
Al			2	9044.596	ug/l	0.30	1,045,232.18	6.957E+00	Pulse	0.30	3
K			2	10257.934	ug/l	0.58	2,230,089.91	1.484E+01	Pulse	0.30	3
Ca			2	98115.167	ug/l	0.49	1,228,677.35	8.178E+00	Pulse	0.30	3
Ti			2	101.337	ug/l	17.37	10,072.79	6.710E-02	Pulse	0.30	3
V			2	81.983	ug/l	0.33	271,286.32	1.806E+00	Pulse	0.30	3
Cr			2	80.502	ug/l	0.40	348,231.18	2.318E+00	Pulse	0.30	3
Mn			2	5705.291	ug/l	0.48	12,309,469.51	8.193E+01	Analog	0.30	3
Fe			2	9358.068	ug/l	1.04	32,643,959.82	2.173E+02	Analog	0.30	3
Co			2	395.544	ug/l	0.52	3,061,452.80	2.038E+01	Pulse	0.30	3
Ni			2	294.310	ug/l	0.66	633,346.85	4.216E+00	Pulse	0.30	3
Cu			2	74.198	ug/l	0.65	419,347.43	2.791E+00	Pulse	0.30	3
Zn			2	453.715	ug/l	0.40	342,398.49	2.279E+00	Pulse	0.30	3
As			2	69.101	ug/l	0.31	26,177.88	1.742E-01	Pulse	1.00	3
Cd			2	71.293	ug/l	1.17	73,568.14	1.001E-01	Pulse	0.30	3
Sn			2	78.206	ug/l	0.50	149,182.72	2.030E-01	Pulse	0.30	3
Se			3	330.168	ug/l	0.75	38,579.75	2.036E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,459,247.70	0.42	92.6	Pulse	0.10	3

Current Signal

[1]



Mass	Range	Count	Avg. Count	RSD [%]
7	10000	4997	5081.4	2.34
59	10000	7132	7298.9	3.23
89	20000	12008	11924.4	0.99
140	20000	11796	11709.0	1.05
205	10000	7730	7899.2	3.03
156/140	2	1.306 %	1.380 %	7.62
70/140	10	5.622 %	5.918 %	7.08
9	20	0	0.5	141.42
11	1000	598	583.6	3.51
88	200	124	124.0	0.00
95	20	10	9.0	15.71
107	20	4	4.0	0.00
121	50	22	21.0	6.73
137	100	98	88.0	16.07
208	100	63	64.0	2.21
Integration Time [sec]		0.10		

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.80	V	S/C Temp	2	℃
Smpl Depth	7.8	mm	Gas Switch	Dilution Gas	
Carrier Gas	0.55	L/min	Makeup/Dilution Gas	0.55	L/min
Option Gas	0.0	%			

Lenses Parameters

Extract 1	0.0	V	Cell Entrance	-40	V
Extract 2	-200.0	V	Cell Exit	-60	V
Omega Bias	-100	V	Deflect	15.2	V
Omega Lens	5.2	V	Plate Bias	-45	V

Cell Parameters

Use Gas	false		OctP Bias	-8.0	V
He Flow	0.0	mL/min	OctP RF	200	V
H2 Flow	0.0	mL/min	Energy Discrimination	5.0	V
3rd Gas Flow	0	%			

Meters

IF/BK Press	2.53E+2	Pa	S/C Temp (L)	2.0	℃
Water RF/WC/IF	1.40	L/min	Carrier Gas(BP)	1.47E+2	kPa
Carrier Gas	0.55	L/min			

US EPA Tune Check Sample Report

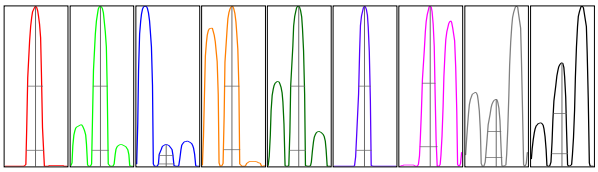
Batch Folder C:\Agilent\ICPMH\1\DATA\xa041219m1.b
Report Comment
Instrument Name G3281A JP10340551

[1]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	165735	1.85	5.00	
24	570564	1.66	5.00	
25	75647	1.64	5.00	
26	89451	1.53	5.00	
59	861421	1.48	5.00	
115	1178297	1.15	5.00	
206	295906	0.95	5.00	
207	270716	1.13	5.00	
208	649641	1.13	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	161018	164370	167182	167545	168559
24	554788	568893	576195	575041	577901
25	73729	75205	76288	76074	76939
26	87360	88976	89778	90168	90972
59	839329	861314	869209	868604	868648
115	1154619	1180366	1183797	1184726	1187975
206	290903	297057	296924	297322	297326
207	265901	269429	272856	272501	272891
208	637634	647682	655874	653914	653098

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	25915	9.00	8.9 - 9.1		0.808	0.900	
24	89925	23.95	23.9 - 24.1		0.774	0.900	
25	12065	24.95	24.9 - 25.1		0.748	0.900	
26	13985	25.95	25.9 - 26.1		0.777	0.900	
59	139759	59.00	58.9 - 59.1		0.766	0.900	
115	209783	115.00	114.9 - 115.1		0.723	0.900	
206	50299	206.00	205.9 - 206.1		0.784	0.900	
207	45612	207.00	206.9 - 207.1		0.761	0.900	
208	109169	208.00	207.9 - 208.1		0.764	0.900	

X% = 10 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1500	W	Carrier Gas	0.55	L/min			
RF Matching	1.80	V	Option Gas	0.0	%			
Smpl Depth	7.8	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	℃						

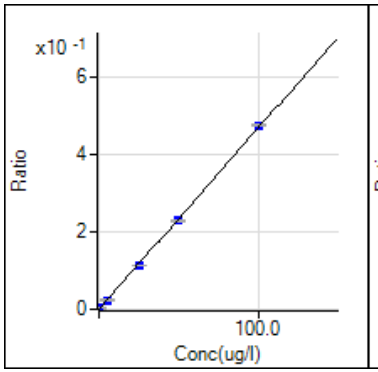
Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	5.2	V			
Extract 2	-200.0	V	Cell Entrance	-40	V			
Omega Bias	-100	V	Cell Exit	-60	V			
Deflect	15.2	V						

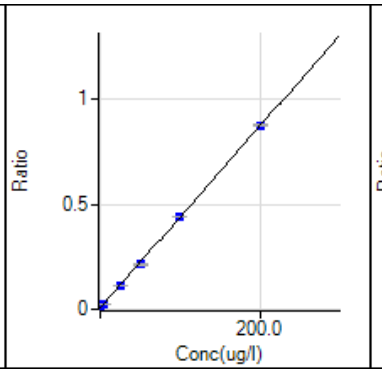
Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			
Energy Discrimination	5.0	V						

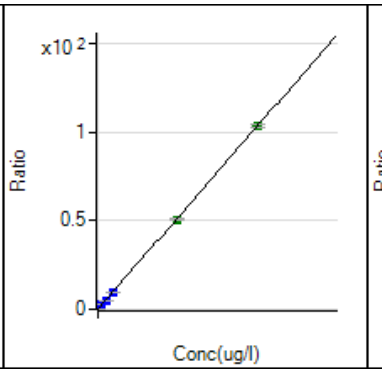
Calibration for C:\Agilent\ICPMH\1\DATA\xa041219m1.b\082_CCB.d



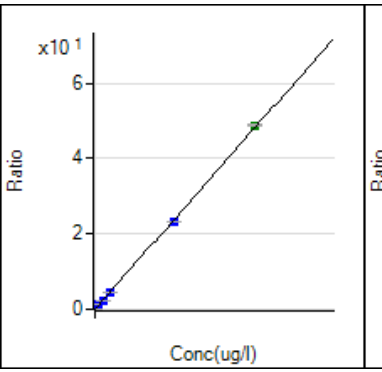
9 Be [1] / ISTD: 6 Li
y = 4.692E-3 x + 2.167E-5
R 0.9998
DL 0.004331
BEC 0.004618



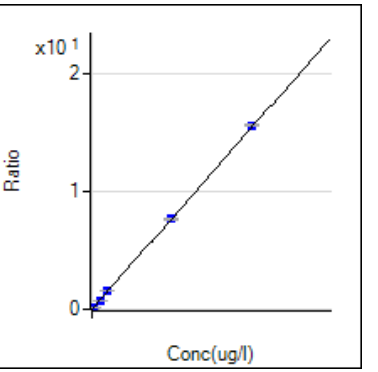
11 B [1] / ISTD: 6 Li
y = 4.326E-3 x + 6.535E-3
R 0.9999
DL 0.05617
BEC 1.511



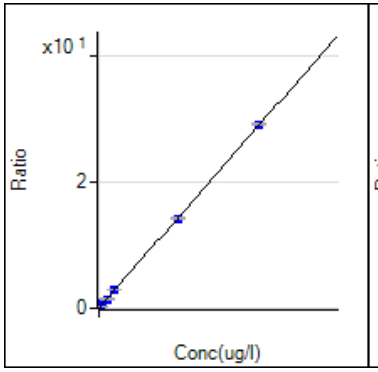
23 Na [2] / ISTD: 45 Sc
y = 1.034E-2 x + 6.498E-2
R 0.9999
DL 0.6523
BEC 6.286



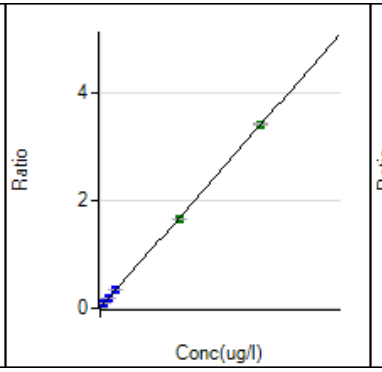
24 Mg [2] / ISTD: 45 Sc
y = 4.791E-3 x + 4.868E-3
R 0.9997
DL 0.3833
BEC 1.016



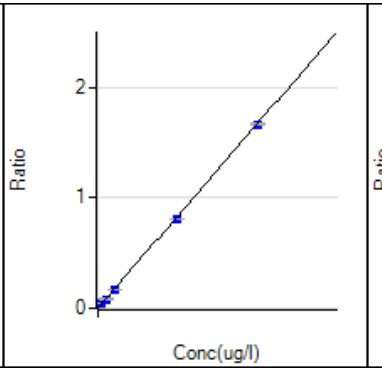
27 Al [2] / ISTD: 45 Sc
y = 1.538E-3 x + 1.722E-3
R 0.9999
DL 0.6654
BEC 1.12



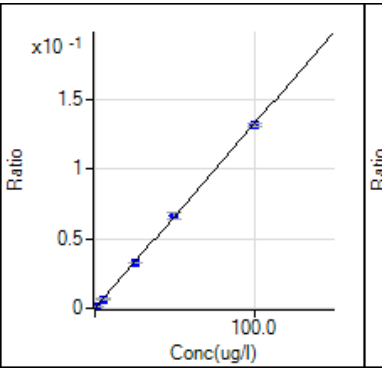
39 K [2] / ISTD: 45 Sc
y = 2.885E-3 x + 4.591E-2
R 0.9999
DL 0.4735
BEC 15.91



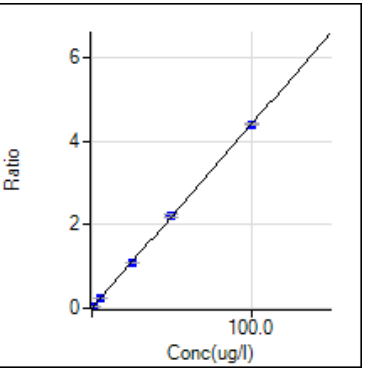
44 Ca [1] / ISTD: 45 Sc
y = 3.398E-4 x + 4.319E-3
R 0.9999
DL 2.003
BEC 12.71



44 Ca [2] / ISTD: 45 Sc
y = 1.667E-4 x + 1.594E-3
R 0.9998
DL 3.402
BEC 9.564

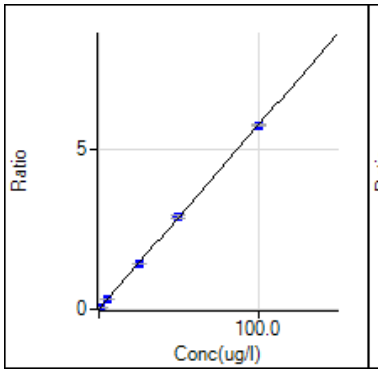


47 Ti [2] / ISTD: 45 Sc
y = 1.324E-3 x + 6.935E-6
R 1.0000
DL 0.02722
BEC 0.005238

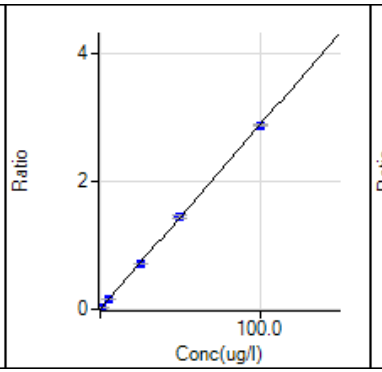


51 V [2] / ISTD: 45 Sc
y = 4.399E-2 x + 2.558E-3
R 1.0000
DL 0.04663
BEC 0.05815

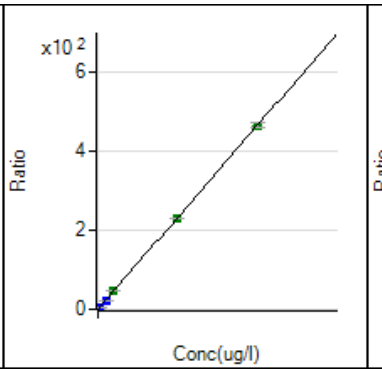
Calibration for C:\Agilent\ICPMH\1\DATA\xa041219m1.b\082_CCB.d



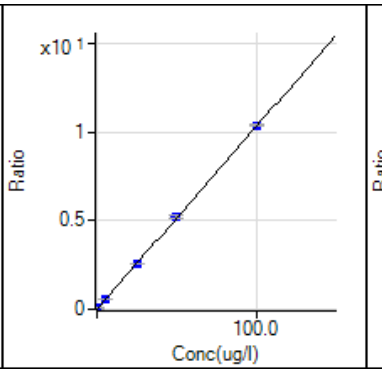
52 Cr [2] / ISTD: 45 Sc
y = 5.750E-2 x + 3.280E-3
R 1.0000
DL 0.01866
BEC 0.05703



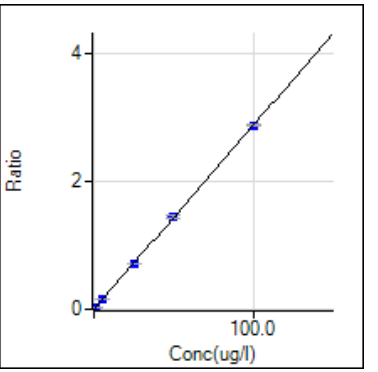
55 Mn [2] / ISTD: 45 Sc
y = 2.872E-2 x + 6.244E-4
R 1.0000
DL 0.007675
BEC 0.02174



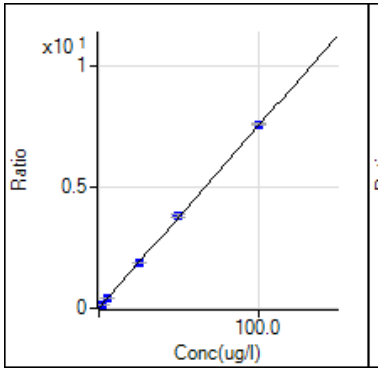
56 Fe [2] / ISTD: 45 Sc
y = 4.642E-2 x + 8.475E-2
R 1.0000
DL 0.3861
BEC 1.826



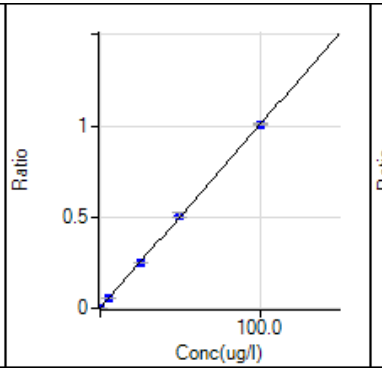
59 Co [2] / ISTD: 45 Sc
y = 1.030E-1 x + 6.038E-4
R 1.0000
DL 0.001679
BEC 0.00586



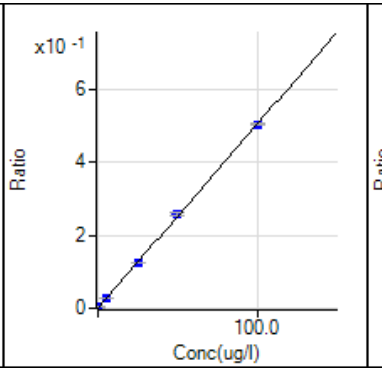
60 Ni [2] / ISTD: 45 Sc
y = 2.864E-2 x + 4.133E-4
R 1.0000
DL 0.001292
BEC 0.01443



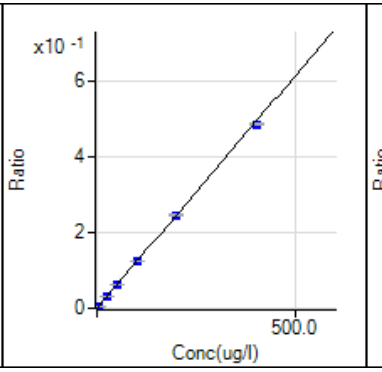
63 Cu [2] / ISTD: 45 Sc
y = 7.512E-2 x + 4.297E-3
R 1.0000
DL 0.01583
BEC 0.05721



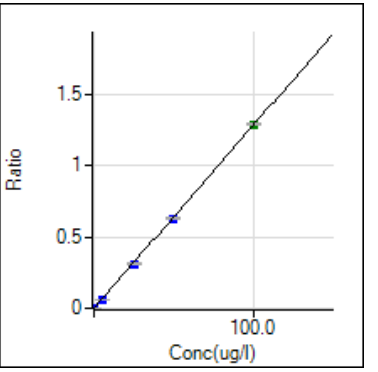
66 Zn [2] / ISTD: 45 Sc
y = 1.004E-2 x + 1.207E-3
R 1.0000
DL 0.05336
BEC 0.1202



75 As [2] / ISTD: 45 Sc
y = 5.040E-3 x + 8.681E-5
R 0.9999
DL 0.01091
BEC 0.01722

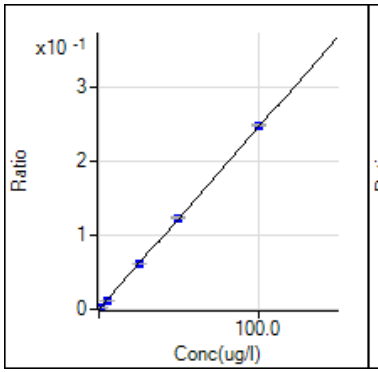


78 Se [3] / ISTD: 74 Ge
y = 1.233E-3 x + 6.875E-5
R 1.0000
DL 0.03464
BEC 0.05576

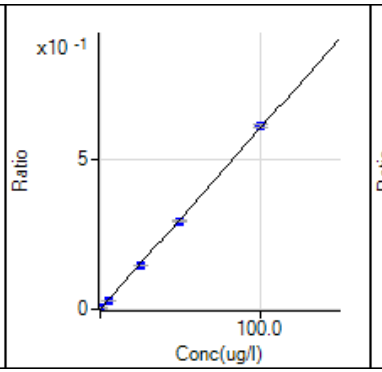


88 Sr [1] / ISTD: 103 Rh
y = 1.284E-2 x + 1.327E-4
R 0.9999
DL 0.002108
BEC 0.01034

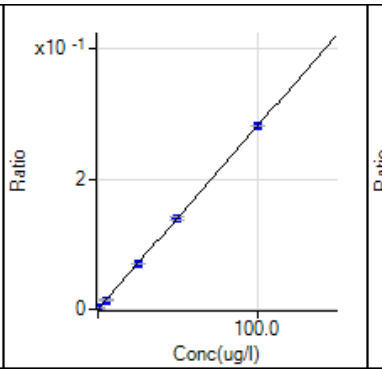
Calibration for C:\Agilent\ICPMH\1\DATA\xa041219m1.b\082_CCB.d



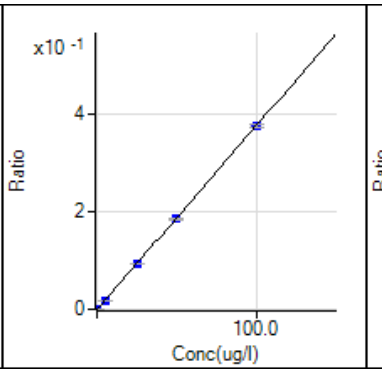
95 Mo [1] / ISTD: 103 Rh
y = 2.454E-3 x + 2.624E-5
R 1.0000
DL 0.004754
BEC 0.01069



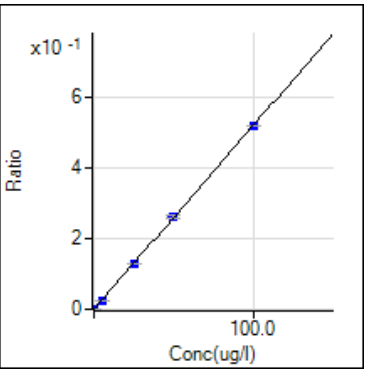
107 Ag [1] / ISTD: 115 In
y = 6.002E-3 x + 1.146E-5
R 0.9998
DL 0.001223
BEC 0.001909



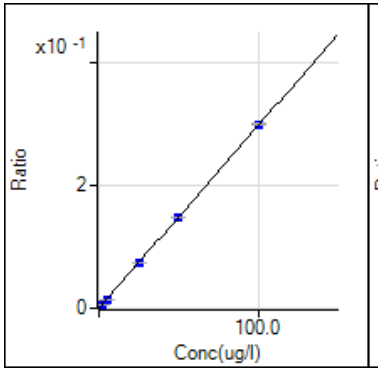
111 Cd [2] / ISTD: 115 In
y = 2.807E-3 x + 1.813E-5
R 1.0000
DL 0.01048
BEC 0.006459



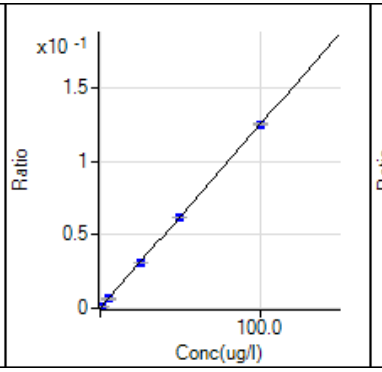
118 Sn [1] / ISTD: 115 In
y = 3.769E-3 x - 9.709E-4
R 1.0000
DL 0.01731
BEC -0.2576



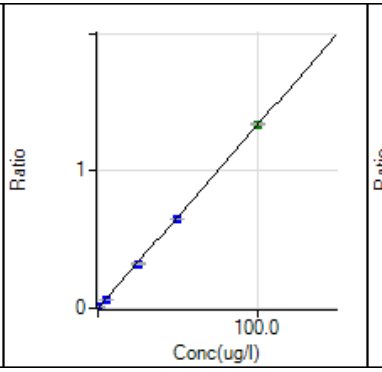
118 Sn [2] / ISTD: 115 In
y = 5.179E-3 x + 4.419E-4
R 1.0000
DL 0.004956
BEC 0.08532



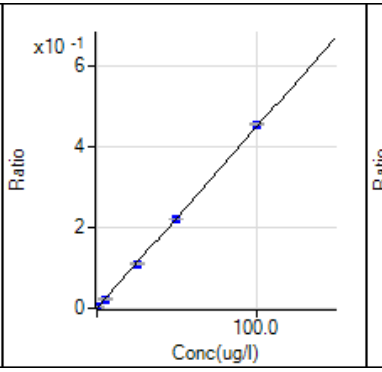
121 Sb [1] / ISTD: 159 Tb
y = 2.972E-3 x + 1.516E-4
R 1.0000
DL 0.01023
BEC 0.05101



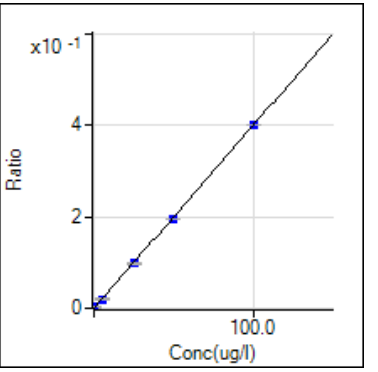
137 Ba [1] / ISTD: 159 Tb
y = 1.248E-3 x + 1.098E-5
R 1.0000
DL 0.00639
BEC 0.008798



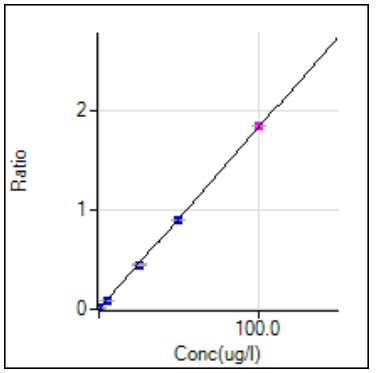
205 Tl [1] / ISTD: 209 Bi
y = 1.329E-2 x + 1.192E-4
R 0.9999
DL 0.00615
BEC 0.008969



206 Pb [1] / ISTD: 209 Bi
y = 4.468E-3 x + 5.523E-5
R 0.9999
DL 0.005749
BEC 0.01236



207 Pb [1] / ISTD: 209 Bi
y = 4.005E-3 x + 4.582E-5
R 0.9999
DL 0.006473
BEC 0.01144



208 Pb [1] / ISTD: 209 Bi

y = 1.820E-2 x + 2.204E-4

R	0.9998
DL	0.004449
BEC	0.01211

MA46511

Method: ACCUTEST Operator: Admin Date of Analysis: 16 Apr 2019 11:14:52

Sample ID	Date	Type	Units	Conc.	µ Abs.	Wt.	Vol.
STDA - 1	16 Apr 2019 11:15:02	Std	ug/l	-	366	1.000	1.000
STDB - 1	16 Apr 2019 11:16:20	Std	ug/l	-	1153	1.000	1.000
STDC - 1	16 Apr 2019 11:17:40	Std	ug/l	-	2561	1.000	1.000
STDD - 1	16 Apr 2019 11:19:03	Std	ug/l	-	5154	1.000	1.000
STDE - 1	16 Apr 2019 11:20:33	Std	ug/l	-	12974	1.000	1.000
STDF - 1	16 Apr 2019 11:22:07	Std	ug/l	-	25262	1.000	1.000
SAMPLECONF - 1	16 Apr 2019 11:28:00	CK STND	ug/l	(H)111.6% 3.3476	17030	1.000	1.000
ICV - 1	16 Apr 2019 11:31:51	CK STND	ug/l	91.9% 2.7571	14062	1.000	1.000
ICB - 1	16 Apr 2019 11:33:06	CK STND	ug/l	-0.0393	8	1.000	1.000
CCV - 1	16 Apr 2019 11:34:59	CK STND	ug/l	103.0% 2.5744	13144	1.000	1.000
CCB - 1	16 Apr 2019 11:36:19	CK STND	ug/l	-0.0321	44	1.000	1.000
CRI - 1	16 Apr 2019 11:38:00	CK STND	ug/l	98.1% 0.1961	1191	1.000	1.000
CCV - 1	16 Apr 2019 12:35:01	CK STND	ug/l	100.9% 2.5227	12884	1.000	1.000
CCB - 1	16 Apr 2019 12:36:19	CK STND	ug/l	-0.0211	99	1.000	1.000
SAMPLECONF - 1	16 Apr 2019 12:38:22	SMPL	ug/l	0.1151	784	1.000	1.000
MP14257-B1 - 1	16 Apr 2019 12:39:38	SMPL	ug/l	2.1351	10936	1.000	1.000
MP14257-S1 - 1	16 Apr 2019 12:40:58	SMPL	ug/l	1.9393	9952	1.000	1.000
MP14257-S2 - 1	16 Apr 2019 12:42:38	SMPL	ug/l	1.8215	9360	1.000	1.000
JC86320-4 - 1	16 Apr 2019 12:44:21	SMPL	ug/l	-0.0140	135	1.000	1.000
JC86320-3 - 1	16 Apr 2019 12:46:05	SMPL	ug/l	0.0083	247	1.000	1.000
JC86089-1 - 1	16 Apr 2019 12:47:24	SMPL	ug/l	0.0262	337	1.000	1.000
JC86089-1F - 1	16 Apr 2019 12:48:43	SMPL	ug/l	0.0314	363	1.000	1.000
JC86089-2 - 1	16 Apr 2019 12:50:02	SMPL	ug/l	0.0415	414	1.000	1.000
CCV - 1	16 Apr 2019 12:51:22	CK STND	ug/l	103.4% 2.5838	13191	1.000	1.000
CCB - 1	16 Apr 2019 12:52:42	CK STND	ug/l	-0.0130	140	1.000	1.000
JC86089-2F - 1	16 Apr 2019 12:54:25	SMPL	ug/l	0.0391	402	1.000	1.000
JC86142-4 - 1	16 Apr 2019 12:55:44	SMPL	ug/l	0.0155	283	1.000	1.000
JC86142-4F - 1	16 Apr 2019 12:57:05	SMPL	ug/l	0.0173	292	1.000	1.000
JC86142-5 - 1	16 Apr 2019 12:58:25	SMPL	ug/l	0.0184	298	1.000	1.000
JC86142-5F - 1	16 Apr 2019 12:59:44	SMPL	ug/l	0.0204	308	1.000	1.000
JC86360-2F - 1	16 Apr 2019 13:01:02	SMPL	ug/l	0.0175	293	1.000	1.000
JC86360-4F - 1	16 Apr 2019 13:02:21	SMPL	ug/l	0.0178	295	1.000	1.000
JC86360-6F - 1	16 Apr 2019 13:03:39	SMPL	ug/l	0.0123	267	1.000	1.000
JC86360-8F - 1	16 Apr 2019 13:04:57	SMPL	ug/l	0.0095	253	1.000	1.000
CCV - 1	16 Apr 2019 13:06:16	CK STND	ug/l	103.3% 2.5818	13181	1.000	1.000
CCB - 1	16 Apr 2019 13:07:35	CK STND	ug/l	-0.0211	99	1.000	1.000
JC86360-10F - 1	16 Apr 2019 13:09:16	SMPL	ug/l	-0.0249	80	1.000	1.000
JC86350-1 - 1	16 Apr 2019 13:10:35	SMPL	ug/l	-0.0204	103	1.000	1.000
JC86350-2 - 1	16 Apr 2019 13:11:54	SMPL	ug/l	-0.0200	105	1.000	1.000
JC86359-2 - 1	16 Apr 2019 13:13:12	SMPL	ug/l	-0.0152	129	1.000	1.000
JC86359-4 - 1	16 Apr 2019 13:14:31	SMPL	ug/l	-0.0152	129	1.000	1.000
JC86359-7 - 1	16 Apr 2019 13:15:51	SMPL	ug/l	-0.0146	132	1.000	1.000
MP14258-MB1 - 1	16 Apr 2019 13:17:09	SMPL	ug/l	-0.0126	142	1.000	1.000
MP14258-B1 - 1	16 Apr 2019 13:18:27	SMPL	ug/l	2.0455	10486	1.000	1.000
MP14258-S1 - 1	16 Apr 2019 13:19:45	SMPL	ug/l	1.9313	9912	1.000	1.000
CCV - 1	16 Apr 2019 13:21:24	CK STND	ug/l	102.9% 2.5714	13129	1.000	1.000
CCB - 1	16 Apr 2019 13:23:04	CK STND	ug/l	-0.0152	129	1.000	1.000
MP14258-S2 - 1	16 Apr 2019 13:24:45	SMPL	ug/l	1.9423	9967	1.000	1.000
JC86308-1F - 1	16 Apr 2019 13:26:04	SMPL	ug/l	-0.0450	-21	1.000	1.000
JC86308-1 - 1	16 Apr 2019 13:27:44	SMPL	ug/l	-0.0174	118	1.000	1.000
JC86308-2 - 1	16 Apr 2019 13:29:02	SMPL	ug/l	-0.0060	175	1.000	1.000
JC86308-2F - 1	16 Apr 2019 13:30:21	SMPL	ug/l	-0.0184	113	1.000	1.000
JC86308-3 - 1	16 Apr 2019 13:31:40	SMPL	ug/l	0.0057	234	1.000	1.000
JC86308-3F - 1	16 Apr 2019 13:32:59	SMPL	ug/l	-0.0192	109	1.000	1.000
JC86308-4 - 1	16 Apr 2019 13:34:18	SMPL	ug/l	-0.0056	177	1.000	1.000
JC86308-4F - 1	16 Apr 2019 13:35:38	SMPL	ug/l	-0.0202	104	1.000	1.000
CCV - 1	16 Apr 2019 13:36:58	CK STND	ug/l	103.1% 2.5770	13157	1.000	1.000
CCB - 1	16 Apr 2019 13:38:17	CK STND	ug/l	-0.0192	109	1.000	1.000
JC86308-5 - 1	16 Apr 2019 13:39:57	SMPL	ug/l	-0.0215	97	1.000	1.000
JC86308-5F - 1	16 Apr 2019 13:41:16	SMPL	ug/l	-0.0174	118	1.000	1.000
JC86308-6 - 1	16 Apr 2019 13:42:35	SMPL	ug/l	-0.0170	120	1.000	1.000
JC86308-6F - 1	16 Apr 2019 13:43:52	SMPL	ug/l	-0.0142	134	1.000	1.000
JC86308-7 - 1	16 Apr 2019 13:45:10	SMPL	ug/l	-0.0042	184	1.000	1.000
JC86308-7F - 1	16 Apr 2019 13:46:28	SMPL	ug/l	-0.0088	161	1.000	1.000
JC86308-8 - 1	16 Apr 2019 13:47:47	SMPL	ug/l	-0.0032	189	1.000	1.000
JC86308-8F - 1	16 Apr 2019 13:49:06	SMPL	ug/l	-0.0116	147	1.000	1.000
JC86308-9 - 1	16 Apr 2019 13:50:25	SMPL	ug/l	-0.0098	156	1.000	1.000
CCV - 1	16 Apr 2019 13:51:44	CK STND	ug/l	102.0% 2.5491	13017	1.000	1.000
CCB - 1	16 Apr 2019 13:53:03	CK STND	ug/l	-0.0198	106	1.000	1.000

MA46511

Method: ACCUTEST Operator: Admin Date of Analysis: 16 Apr 2019 11:14:52

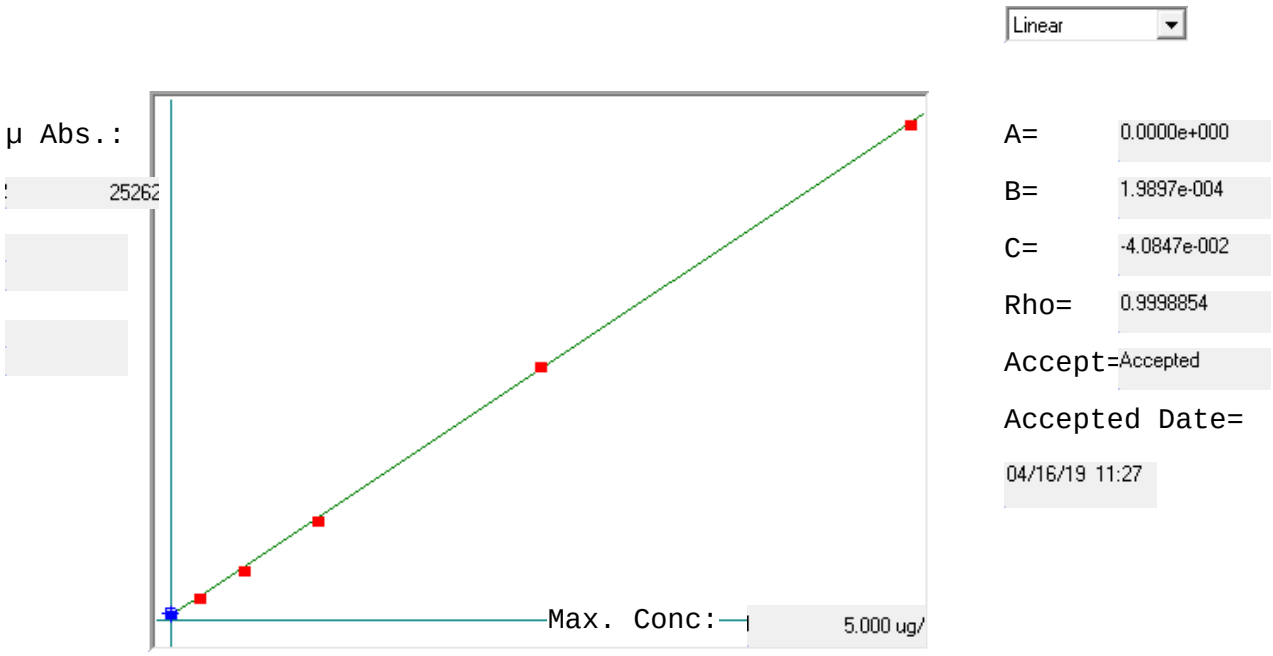
Sample ID	Date	Type	Units	Conc.	µ Abs.	Wt.	Vol.
JC86308-9F - 1	16 Apr 2019 13:54:44	SMPL	ug/l	-0.0265	72	1.000	1.000
JC86241-1 - 1	16 Apr 2019 13:56:04	SMPL	ug/l	-0.0122	144	1.000	1.000
JC86251-1 - 1	16 Apr 2019 13:57:23	SMPL	ug/l	-0.0140	135	1.000	1.000
MP14259-MB1 - 1	16 Apr 2019 13:58:43	SMPL	ug/l	-0.0170	120	1.000	1.000
MP14259-B1 - 1	16 Apr 2019 14:00:02	SMPL	ug/l	2.0601	10559	1.000	1.000
MP14259-S1 - 1	16 Apr 2019 14:01:20	SMPL	ug/l	1.9709	10111	1.000	1.000
MP14259-S2 - 1	16 Apr 2019 14:03:00	SMPL	ug/l	2.0237	10376	1.000	1.000
JC86178-2 - 1	16 Apr 2019 14:04:40	SMPL	ug/l	-0.0430	-11	1.000	1.000
JC86178-1 - 1	16 Apr 2019 14:06:21	SMPL	ug/l	-0.0136	137	1.000	1.000
CCV - 1	16 Apr 2019 14:07:40	CK STND	ug/l	102.4% 2.5599	13071	1.000	1.000
CCB - 1	16 Apr 2019 14:08:59	CK STND	ug/l	-0.0178	116	1.000	1.000
JC86178-4 - 1	16 Apr 2019 14:10:41	SMPL	ug/l	-0.0219	95	1.000	1.000
JC86178-11 - 1	16 Apr 2019 14:12:00	SMPL	ug/l	-0.0146	132	1.000	1.000
JC86341-1 - 1	16 Apr 2019 14:13:19	SMPL	ug/l	-0.0062	174	1.000	1.000
JC86341-2 - 1	16 Apr 2019 14:14:38	SMPL	ug/l	-0.0072	169	1.000	1.000
JC86341-3 - 1	16 Apr 2019 14:15:58	SMPL	ug/l	0.0626	520	1.000	1.000
JC86341-4 - 1	16 Apr 2019 14:17:18	SMPL	ug/l	0.0081	246	1.000	1.000
JC86341-5 - 1	16 Apr 2019 14:18:39	SMPL	ug/l	-0.0186	112	1.000	1.000
JC86341-6 - 1	16 Apr 2019 14:19:58	SMPL	ug/l	0.0238	325	1.000	1.000
JC86341-7 - 1	16 Apr 2019 14:21:17	SMPL	ug/l	-0.0325	42	1.000	1.000
CCV - 1	16 Apr 2019 14:22:37	CK STND	ug/l	99.1% 2.4775	12657	1.000	1.000
CCB - 1	16 Apr 2019 14:23:56	CK STND	ug/l	-0.0213	98	1.000	1.000
JC86341-8 - 1	16 Apr 2019 14:25:39	SMPL	ug/l	-0.0176	117	1.000	1.000
JC86341-9 - 1	16 Apr 2019 14:26:58	SMPL	ug/l	-0.0267	71	1.000	1.000
JC86341-10 - 1	16 Apr 2019 14:28:17	SMPL	ug/l	-0.0114	148	1.000	1.000
JC86341-11 - 1	16 Apr 2019 14:29:35	SMPL	ug/l	-0.0100	155	1.000	1.000
JC86352-1 - 1	16 Apr 2019 14:30:54	SMPL	ug/l	-0.0114	148	1.000	1.000
JC86352-2 - 1	16 Apr 2019 14:32:13	SMPL	ug/l	-0.0126	142	1.000	1.000
JC86352-3 - 1	16 Apr 2019 14:33:32	SMPL	ug/l	-0.0028	191	1.000	1.000
JC86352-4 - 1	16 Apr 2019 14:34:51	SMPL	ug/l	-0.0001	205	1.000	1.000
JC86352-5 - 1	16 Apr 2019 14:36:11	SMPL	ug/l	-0.0080	165	1.000	1.000
CCV - 1	16 Apr 2019 14:37:32	CK STND	ug/l	101.1% 2.5269	12905	1.000	1.000
CCB - 1	16 Apr 2019 14:38:51	CK STND	ug/l	-0.0223	93	1.000	1.000
MP14260-MB1 - 1	16 Apr 2019 14:40:32	SMPL	ug/l	-0.0253	78	1.000	1.000
MP14260-B1 - 1	16 Apr 2019 14:41:52	SMPL	ug/l	2.0865	10692	1.000	1.000
MP14260-S1 - 1	16 Apr 2019 14:43:11	SMPL	ug/l	1.9886	10200	1.000	1.000
MP14260-S2 - 1	16 Apr 2019 14:44:51	SMPL	ug/l	2.0284	10400	1.000	1.000
JC86178-24 - 1	16 Apr 2019 14:46:31	SMPL	ug/l	-0.0438	-15	1.000	1.000
JC85400-3 - 1	16 Apr 2019 14:48:12	SMPL	ug/l	-0.0166	122	1.000	1.000
JC86361-1 - 1	16 Apr 2019 14:49:32	SMPL	ug/l	0.9661	5061	1.000	1.000
JC86361-1F - 1	16 Apr 2019 14:50:51	SMPL	ug/l	0.3545	1987	1.000	1.000
JC86361-2 - 1	16 Apr 2019 14:52:24	SMPL	ug/l	0.0005	208	1.000	1.000
CCV - 1	16 Apr 2019 14:53:51	CK STND	ug/l	102.4% 2.5605	13074	1.000	1.000
CCB - 1	16 Apr 2019 14:55:11	CK STND	ug/l	-0.0249	80	1.000	1.000
JC86361-2F - 1	16 Apr 2019 14:56:52	SMPL	ug/l	-0.0259	75	1.000	1.000
JC86271-2 - 1	16 Apr 2019 14:58:12	SMPL	ug/l	-0.0162	124	1.000	1.000
JC86397-1 - 1	16 Apr 2019 14:59:32	SMPL	ug/l	0.0186	299	1.000	1.000
JC86397-2 - 1	16 Apr 2019 15:00:52	SMPL	ug/l	-0.0237	86	1.000	1.000
JC86397-3 - 1	16 Apr 2019 15:02:11	SMPL	ug/l	-0.0213	98	1.000	1.000
JC86397-4 - 1	16 Apr 2019 15:03:30	SMPL	ug/l	-0.0472	-32	1.000	1.000
JC86397-5 - 1	16 Apr 2019 15:04:48	SMPL	ug/l	-0.0279	65	1.000	1.000
JC86399-1 - 1	16 Apr 2019 15:06:06	SMPL	ug/l	-0.0200	105	1.000	1.000
JC86177-6 - 1	16 Apr 2019 15:07:25	SMPL	ug/l	-0.0186	112	1.000	1.000
CCV - 1	16 Apr 2019 15:08:43	CK STND	ug/l	102.0% 2.5489	13016	1.000	1.000
CCB - 1	16 Apr 2019 15:10:02	CK STND	ug/l	-0.0219	95	1.000	1.000
JC86190-1 - 1	16 Apr 2019 15:11:43	SMPL	ug/l	-0.0385	12	1.000	1.000
JC86190-2 - 1	16 Apr 2019 15:13:03	SMPL	ug/l	-0.0239	85	1.000	1.000
JC86177-7 - 1	16 Apr 2019 15:14:21	SMPL	ug/l	-0.0311	49	1.000	1.000
JC86389-3 - 1	16 Apr 2019 15:15:40	SMPL	ug/l	-0.0170	120	1.000	1.000
MB1CONF - 1	16 Apr 2019 15:16:59	SMPL	ug/l	0.0656	535	1.000	1.000
B1CONF - 1	16 Apr 2019 15:18:19	SMPL	ug/l	2.1110	10815	1.000	1.000
LODCONF - 1	16 Apr 2019 15:19:40	SMPL	ug/l	0.0439	426	1.000	1.000
LOQCONF - 1	16 Apr 2019 15:21:21	SMPL	ug/l	0.1693	1056	1.000	1.000
CCV - 1	16 Apr 2019 15:22:42	CK STND	ug/l	97.7% 2.4415	12476	1.000	1.000
CCB - 1	16 Apr 2019 15:24:05	CK STND	ug/l	-0.0219	95	1.000	1.000
SAMPLECONF - 1	16 Apr 2019 15:26:58	SMPL	ug/l	0.1189	803	1.000	1.000
JC86361-1 - 1	16 Apr 2019 15:28:15	SMPL	ug/l	0.9429	4944	1.000	1.000
JC86361-1F - 1	16 Apr 2019 15:29:35	SMPL	ug/l	0.3487	1958	1.000	1.000
MP14257-MB1 - 1	16 Apr 2019 15:31:08	SMPL	ug/l	-0.0470	-31	1.000	1.000

MA46511

Method: ACCUTEST Operator: Admin Date of Analysis: 16 Apr 2019 11:14:52

Sample ID	Date	Type	Units	Conc.	µ Abs.	Wt.	Vol.
CRI - 1	16 Apr 2019 15:33:14	CK STND	ug/l	110.8% 0.2216	1319	1.000	1.000
CCV - 1	16 Apr 2019 15:34:30	CK STND	ug/l	99.5% 2.4867	12703	1.000	1.000
CCB - 1	16 Apr 2019 15:35:53	CK STND	ug/l	-0.0182	114	1.000	1.000

ACCUTEST



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
STDA	0.000	0.032	0.032	366	0.000	366				
STDB	0.200	0.189	-0.011	1153	0.0 %	1153				
STDC	0.500	0.469	-0.031	2561	0.0 %	2561				
STDD	1.000	0.985	-0.015	5154	0.0 %	5154				
STDE	2.500	2.541	0.041	12974	0.0 %	12974				
STDF	5.000	4.986	-0.014	25262	0.0 %	25262				

Quantitation Report

File Name	001CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 9:52
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	178.20	9.33	5.999E-06	Pulse	0.25	3
B			1	0.025	ug/l	74.08	1,542.35	9.886E-04	Pulse	0.15	3
Ca			1	3.298	ug/l	97.32	20,956.34	1.134E-02	Pulse	0.10	3
Sr			1	-0.004	ug/l	-56.15	266.68	1.671E-04	Pulse	0.10	3
Mo			1	0.004	ug/l	125.83	16.67	1.057E-05	Pulse	0.10	3
Ag			1	-0.002	ug/l	-32.99	6.67	4.320E-06	Pulse	0.10	3
Sn			1	-0.008	ug/l	-24.70	613.37	3.966E-04	Pulse	0.10	3
Sb			1	0.001	ug/l	175.16	23.33	1.307E-05	Pulse	0.10	3
Ba			1	0.002	ug/l	175.29	13.33	7.458E-06	Pulse	0.10	3
Tl			1	0.002	ug/l	217.67	60.00	6.550E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	281.11	36.67	3.996E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-261.91	26.67	2.902E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	43.84	146.67	1.595E-04	Pulse	0.10	3
Na			2	0.350	ug/l	127.40	5,951.31	7.419E-02	Pulse	0.30	3
Mg			2	0.025	ug/l	166.17	36.67	4.578E-04	Pulse	0.30	3
Al			2	-0.032	ug/l	-150.64	17.78	2.215E-04	Pulse	0.30	3
K			2	-0.528	ug/l	-105.12	5,631.18	7.016E-02	Pulse	0.30	3
Ca			2	-2.906	ug/l	-15.50	88.89	1.107E-03	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	0.006	ug/l	284.54	285.56	3.564E-03	Pulse	0.30	3
Cr			2	-0.003	ug/l	-564.31	340.01	4.227E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	2881.84	54.44	6.783E-04	Pulse	0.30	3
Fe			2	0.026	ug/l	116.76	1,513.44	1.887E-02	Pulse	0.30	3
Co			2	-0.004	ug/l	-59.48	20.00	2.498E-04	Pulse	0.30	3
Ni			2	0.007	ug/l	223.81	32.22	3.993E-04	Pulse	0.30	3
Cu			2	-0.006	ug/l	-78.83	228.89	2.849E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.018	ug/l	-89.01	63.33	7.895E-04	Pulse	0.30	3
As			2	0.004	ug/l	346.86	6.00	7.419E-05	Pulse	1.00	3
Cd			2	0.002	ug/l	173.36	1.66	6.146E-06	Pulse	0.30	3
Sn			2	0.339	ug/l	4.98	138.89	5.099E-04	Pulse	0.30	3
Se			3	0.000	ug/l	-62345.94	1.33	2.596E-05	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,559,733.20	0.92	100.0	Pulse	0.10	3
1	Sc		1,851,129.97	2.95	100.0	Pulse	0.10	3
1	Ge		370,523.85	0.56	100.0	Pulse	0.10	3
1	Rh		1,598,941.96	1.68	100.0	Pulse	0.10	3
1	In		1,546,873.80	0.67	100.0	Pulse	0.10	3
1	Tb		1,789,222.27	0.66	100.0	Pulse	0.10	3
1	Ho		167,037.95	1.91	100.0	Pulse	0.10	3
1	Bi		919,416.76	1.13	100.0	Pulse	0.10	3
2	Sc		80,270.86	2.07	100.0	Pulse	0.30	3
2	Ge		50,042.25	0.79	100.0	Pulse	0.30	3
2	Rh		758,648.55	0.87	100.0	Pulse	0.30	3
2	In		272,261.07	1.51	100.0	Pulse	0.30	3
2	Tb		783,769.15	1.50	100.0	Pulse	0.30	3
2	Ho		72,965.83	1.40	100.0	Pulse	0.30	3
2	Bi		430,239.43	1.02	100.0	Pulse	0.30	3
3	Sc		73,147.48	0.36	100.0	Pulse	0.30	3
3	Ge		51,338.26	1.06	100.0	Pulse	0.30	3
3	Rh		487,422.85	0.66	100.0	Pulse	0.30	3
3	Tb		634,670.03	0.70	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 9:57
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.001	ug/l	-58.08	2.67	1.733E-06	Pulse	0.25	3
B			1	0.031	ug/l	18.12	1,537.90	1.005E-03	Pulse	0.15	3
Ca			1	2.841	ug/l	36.04	20,282.06	1.121E-02	Pulse	0.10	3
Sr			1	-0.003	ug/l	-91.91	283.35	1.785E-04	Pulse	0.10	3
Mo			1	0.004	ug/l	34.02	16.67	1.047E-05	Pulse	0.10	3
Ag			1	-0.002	ug/l	-32.27	6.67	4.252E-06	Pulse	0.10	3
Sn			1	0.004	ug/l	906.36	680.04	4.362E-04	Pulse	0.10	3
Sb			1	0.000	ug/l	2088.14	16.67	9.508E-06	Pulse	0.10	3
Ba			1	-0.001	ug/l	-183.85	6.67	3.809E-06	Pulse	0.10	3
Tl			1	0.002	ug/l	202.08	60.00	6.640E-05	Pulse	0.10	3
Pb			1	-0.004	ug/l	-37.48	16.67	1.841E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-506.78	26.67	2.936E-05	Pulse	0.10	3
Pb			1	-0.002	ug/l	-141.36	90.00	9.931E-05	Pulse	0.10	3
Na			2	0.457	ug/l	51.69	5,950.20	7.508E-02	Pulse	0.30	3
Mg			2	0.029	ug/l	153.71	37.78	4.758E-04	Pulse	0.30	3
Al			2	-0.040	ug/l	-212.87	16.67	2.110E-04	Pulse	0.30	3
K			2	-0.070	ug/l	-268.43	5,656.76	7.136E-02	Pulse	0.30	3
Ca			2	-1.384	ug/l	-218.17	104.45	1.319E-03	Pulse	0.30	3
Ti			2	0.013	ug/l	173.21	1.11	1.393E-05	Pulse	0.30	3
V			2	0.012	ug/l	155.22	296.67	3.746E-03	Pulse	0.30	3
Cr			2	0.008	ug/l	277.54	367.79	4.635E-03	Pulse	0.30	3
Mn			2	-0.004	ug/l	-156.01	46.67	5.897E-04	Pulse	0.30	3
Fe			2	-0.096	ug/l	-24.97	1,201.18	1.516E-02	Pulse	0.30	3
Co			2	0.000	ug/l	1446.39	40.00	5.058E-04	Pulse	0.30	3
Ni			2	0.010	ug/l	54.92	35.55	4.483E-04	Pulse	0.30	3
Cu			2	0.001	ug/l	1514.41	247.78	3.126E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.001	ug/l	3796.23	71.11	8.972E-04	Pulse	0.30	3
As			2	-0.008	ug/l	-101.37	3.00	3.769E-05	Pulse	1.00	3
Cd			2	0.000	ug/l	82578.37	0.00	-1.251E-08	Pulse	0.30	3
Sn			2	0.350	ug/l	9.03	148.89	5.531E-04	Pulse	0.30	3
Se			3	0.007	ug/l	657.02	1.67	3.210E-05	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,529,981.68	2.02	100.0	Pulse	0.10	3
1	Sc		1,809,632.16	0.49	100.0	Pulse	0.10	3
1	Ge		360,177.29	1.45	100.0	Pulse	0.10	3
1	Rh		1,588,662.68	1.75	100.0	Pulse	0.10	3
1	In		1,560,249.95	0.87	100.0	Pulse	0.10	3
1	Tb		1,753,055.81	0.32	100.0	Pulse	0.10	3
1	Ho		164,875.20	1.09	100.0	Pulse	0.10	3
1	Bi		904,615.43	0.84	100.0	Pulse	0.10	3
2	Sc		79,264.87	1.22	100.0	Pulse	0.30	3
2	Ge		49,210.41	1.91	100.0	Pulse	0.30	3
2	Rh		755,917.68	1.03	100.0	Pulse	0.30	3
2	In		269,427.09	0.96	100.0	Pulse	0.30	3
2	Tb		775,255.63	1.16	100.0	Pulse	0.30	3
2	Ho		72,380.09	1.69	100.0	Pulse	0.30	3
2	Bi		425,449.77	1.14	100.0	Pulse	0.30	3
3	Sc		71,723.74	0.91	100.0	Pulse	0.30	3
3	Ge		51,257.98	2.33	100.0	Pulse	0.30	3
3	Rh		485,618.16	0.39	100.0	Pulse	0.30	3
3	Tb		629,718.40	0.13	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 10:02
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-5208.28	6.67	4.291E-06	Pulse	0.25	3
B			1	0.000	ug/l	---	1,431.22	9.218E-04	Pulse	0.15	3
Ca			1	0.132	ug/l	323.54	19,123.64	1.044E-02	Pulse	0.10	3
Sr			1	0.000	ug/l	---	333.35	2.147E-04	Pulse	0.10	3
Mo			1	0.000	ug/l	---	0.00		Pulse	0.10	3
Ag			1	0.000	ug/l	-3071.24	23.33	1.517E-05	Pulse	0.10	3
Sn			1	0.000	ug/l	2827.20	653.37	4.238E-04	Pulse	0.10	3
Sb			1	0.000	ug/l	---	16.67	9.350E-06	Pulse	0.10	3
Ba			1	0.000	ug/l	---	10.00	5.603E-06	Pulse	0.10	3
Tl			1	0.000	ug/l	-21336.46	43.33	4.725E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	1504.94	33.33	3.650E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-2500.93	30.00	3.267E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	1756.56	123.33	1.339E-04	Pulse	0.10	3
Na			2	0.336	ug/l	59.89	5,882.38	7.407E-02	Pulse	0.30	3
Mg			2	0.000	ug/l	-18194.60	28.89	3.639E-04	Pulse	0.30	3
Al			2	-0.030	ug/l	-514.26	17.78	2.238E-04	Pulse	0.30	3
K			2	0.000	ug/l	---	5,681.21	7.155E-02	Pulse	0.30	3
Ca			2	-1.395	ug/l	-118.26	104.45	1.318E-03	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00		Pulse	0.30	3
V			2	-0.008	ug/l	-107.46	247.79	3.120E-03	Pulse	0.30	3
Cr			2	0.000	ug/l	-9016.40	344.45	4.334E-03	Pulse	0.30	3
Mn			2	0.001	ug/l	625.13	55.56	6.983E-04	Pulse	0.30	3
Fe			2	-0.099	ug/l	-43.43	1,198.96	1.509E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-596.35	38.89	4.901E-04	Pulse	0.30	3
Ni			2	0.000	ug/l	---	23.33	2.937E-04	Pulse	0.30	3
Cu			2	-0.002	ug/l	-282.27	238.89	3.007E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.002	ug/l	-1131.21	70.00	8.807E-04	Pulse	0.30	3
As			2	-0.001	ug/l	-411.85	4.67	5.879E-05	Pulse	1.00	3
Cd			2	0.000	ug/l	---	0.00	-1.254E-08	Pulse	0.30	3
Sn			2	0.335	ug/l	5.11	132.23	4.906E-04	Pulse	0.30	3
Se			3	0.000	ug/l	---	1.33	2.600E-05	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,552,161.12	0.71	100.0	Pulse	0.10	3
1	Sc		1,832,698.46	1.20	100.0	Pulse	0.10	3
1	Ge		361,578.90	1.25	100.0	Pulse	0.10	3
1	Rh		1,556,377.01	1.78	100.0	Pulse	0.10	3
1	In		1,541,233.21	0.45	100.0	Pulse	0.10	3
1	Tb		1,781,608.31	0.28	100.0	Pulse	0.10	3
1	Ho		165,901.08	2.11	100.0	Pulse	0.10	3
1	Bi		917,320.82	3.00	100.0	Pulse	0.10	3
2	Sc		79,397.11	1.53	100.0	Pulse	0.30	3
2	Ge		49,709.99	2.26	100.0	Pulse	0.30	3
2	Rh		755,515.66	1.08	100.0	Pulse	0.30	3
2	In		269,220.05	1.15	100.0	Pulse	0.30	3
2	Tb		770,055.20	1.35	100.0	Pulse	0.30	3
2	Ho		71,587.21	0.75	100.0	Pulse	0.30	3
2	Bi		425,097.84	1.39	100.0	Pulse	0.30	3
3	Sc		71,899.73	1.31	100.0	Pulse	0.30	3
3	Ge		51,294.74	2.55	100.0	Pulse	0.30	3
3	Rh		481,553.89	0.70	100.0	Pulse	0.30	3
3	Tb		625,970.58	0.98	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 10:06
Sample Name	STDB
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.508	ug/l	3.50	2,318.88	1.504E-03	Pulse	0.25	3
B			1	24.622	ug/l	3.35	103,993.17	6.748E-02	Pulse	0.15	3
Ca			1	247.639	ug/l	2.47	149,798.38	8.103E-02	Pulse	0.10	3
Sr			1	4.967	ug/l	0.84	93,280.85	5.886E-02	Pulse	0.10	3
Mo			1	0.956	ug/l	0.30	3,640.62	2.297E-03	Pulse	0.10	3
Ag			1	0.499	ug/l	7.95	3,827.36	2.520E-03	Pulse	0.10	3
Sn			1	4.967	ug/l	2.54	24,533.52	1.615E-02	Pulse	0.10	3
Sb			1	2.030	ug/l	2.59	10,677.99	6.060E-03	Pulse	0.10	3
Ba			1	1.092	ug/l	6.53	2,316.95	1.315E-03	Pulse	0.10	3
Tl			1	0.502	ug/l	5.74	5,057.86	5.539E-03	Pulse	0.10	3
Pb			1	0.492	ug/l	5.99	1,736.85	1.902E-03	Pulse	0.10	3
Pb			1	0.525	ug/l	1.21	1,623.51	1.777E-03	Pulse	0.10	3
Pb			1	0.496	ug/l	2.93	7,024.37	7.689E-03	Pulse	0.10	3
Na			2	252.842	ug/l	1.51	171,610.81	2.175E+00	Pulse	0.30	3
Mg			2	262.746	ug/l	2.06	78,842.99	9.992E-01	Pulse	0.30	3
Al			2	26.029	ug/l	5.54	2,770.30	3.512E-02	Pulse	0.30	3
K			2	254.286	ug/l	1.83	58,468.06	7.410E-01	Pulse	0.30	3
Ca			2	289.982	ug/l	4.36	3,320.43	4.208E-02	Pulse	0.30	3
Ti			2	1.028	ug/l	4.75	88.89	1.126E-03	Pulse	0.30	3
V			2	1.008	ug/l	2.51	2,713.63	3.438E-02	Pulse	0.30	3
Cr			2	0.999	ug/l	4.57	3,396.01	4.303E-02	Pulse	0.30	3
Mn			2	0.982	ug/l	4.87	1,632.34	2.069E-02	Pulse	0.30	3
Fe			2	26.642	ug/l	3.47	64,853.28	8.220E-01	Pulse	0.30	3
Co			2	0.510	ug/l	4.11	2,321.33	2.942E-02	Pulse	0.30	3
Ni			2	0.968	ug/l	6.65	1,163.40	1.475E-02	Pulse	0.30	3
Cu			2	2.024	ug/l	0.68	6,327.07	8.017E-02	Pulse	0.30	3
Zn			2	5.143	ug/l	1.40	2,288.00	2.899E-02	Pulse	0.30	3
As			2	0.526	ug/l	4.52	132.33	1.676E-03	Pulse	1.00	3
Cd			2	0.478	ug/l	6.75	366.61	1.369E-03	Pulse	0.30	3
Sn			2	5.094	ug/l	4.33	5,287.78	1.974E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.484	ug/l	14.44	22.33	4.384E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,541,582.19	1.25	99.3	Pulse	0.10	3
1	Sc		1,848,867.11	0.93	100.9	Pulse	0.10	3
1	Ge		356,478.86	1.67	98.6	Pulse	0.10	3
1	Rh		1,584,932.47	0.24	101.8	Pulse	0.10	3
1	In		1,519,246.98	0.60	98.6	Pulse	0.10	3
1	Tb		1,762,456.33	1.37	98.9	Pulse	0.10	3
1	Ho		163,490.76	1.84	98.5	Pulse	0.10	3
1	Bi		913,438.01	1.19	99.6	Pulse	0.10	3
2	Sc		78,920.80	1.93	99.4	Pulse	0.30	3
2	Ge		48,762.19	1.39	98.1	Pulse	0.30	3
2	Rh		746,881.10	0.78	98.9	Pulse	0.30	3
2	In		267,844.07	0.36	99.5	Pulse	0.30	3
2	Tb		767,797.70	0.90	99.7	Pulse	0.30	3
2	Ho		71,850.96	1.44	100.4	Pulse	0.30	3
2	Bi		425,590.03	0.84	100.1	Pulse	0.30	3
3	Sc		71,971.48	0.88	100.1	Pulse	0.30	3
3	Ge		50,937.84	1.27	99.3	Pulse	0.30	3
3	Rh		479,182.60	0.49	99.5	Pulse	0.30	3
3	Tb		623,097.01	0.65	99.5	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 10:20
Sample Name	STDC
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	5.049	ug/l	1.11	23,396.70	1.490E-02	Pulse	0.25	3
B			1	4.772	ug/l	0.30	21,699.17	1.382E-02	Pulse	0.15	3
Ca			1	10.419	ug/l	5.07	24,635.70	1.337E-02	Pulse	0.10	3
Sr			1	5.133	ug/l	1.87	94,979.43	6.081E-02	Pulse	0.10	3
Mo			1	4.984	ug/l	1.28	18,713.53	1.198E-02	Pulse	0.10	3
Ag			1	5.093	ug/l	1.57	38,940.93	2.556E-02	Pulse	0.10	3
Sn			1	5.107	ug/l	1.40	25,278.00	1.659E-02	Pulse	0.10	3
Sb			1	5.133	ug/l	2.71	27,412.36	1.531E-02	Pulse	0.10	3
Ba			1	5.016	ug/l	6.00	10,774.87	6.019E-03	Pulse	0.10	3
Tl			1	5.128	ug/l	4.00	51,254.65	5.616E-02	Pulse	0.10	3
Pb			1	5.025	ug/l	4.92	17,442.69	1.912E-02	Pulse	0.10	3
Pb			1	5.064	ug/l	3.59	15,386.59	1.686E-02	Pulse	0.10	3
Pb			1	5.038	ug/l	1.81	70,229.09	7.692E-02	Pulse	0.10	3
Na			2	7.359	ug/l	6.11	10,472.88	1.325E-01	Pulse	0.30	3
Mg			2	5.396	ug/l	5.20	1,650.11	2.088E-02	Pulse	0.30	3
Al			2	5.637	ug/l	10.82	618.91	7.814E-03	Pulse	0.30	3
K			2	5.549	ug/l	6.91	6,812.83	8.616E-02	Pulse	0.30	3
Ca			2	40.149	ug/l	12.33	564.46	7.130E-03	Pulse	0.30	3
Ti			2	4.865	ug/l	9.34	421.12	5.327E-03	Pulse	0.30	3
V			2	5.222	ug/l	0.85	12,961.70	1.639E-01	Pulse	0.30	3
Cr			2	5.119	ug/l	0.92	16,024.92	2.027E-01	Pulse	0.30	3
Mn			2	5.034	ug/l	3.60	8,156.91	1.032E-01	Pulse	0.30	3
Fe			2	6.013	ug/l	1.87	15,772.46	1.995E-01	Pulse	0.30	3
Co			2	5.053	ug/l	1.38	22,682.04	2.869E-01	Pulse	0.30	3
Ni			2	5.077	ug/l	0.72	6,021.38	7.616E-02	Pulse	0.30	3
Cu			2	5.197	ug/l	1.22	15,895.97	2.010E-01	Pulse	0.30	3
Zn			2	5.269	ug/l	5.11	2,348.01	2.968E-02	Pulse	0.30	3
As			2	5.053	ug/l	1.93	1,230.06	1.556E-02	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	5.110	ug/l	3.89	3,909.38	1.464E-02	Pulse	0.30	3
Sn			2	5.241	ug/l	3.54	5,432.28	2.034E-02	Pulse	0.30	3
Se			3	5.031	ug/l	13.51	221.33	4.315E-03	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,570,155.61	0.58	101.2	Pulse	0.10	3
1	Sc		1,842,686.95	0.93	100.5	Pulse	0.10	3
1	Ge		362,781.66	0.81	100.3	Pulse	0.10	3
1	Rh		1,562,379.09	2.27	100.4	Pulse	0.10	3
1	In		1,523,798.33	0.72	98.9	Pulse	0.10	3
1	Tb		1,790,479.56	0.59	100.5	Pulse	0.10	3
1	Ho		166,811.27	1.84	100.5	Pulse	0.10	3
1	Bi		913,267.07	2.63	99.6	Pulse	0.10	3
2	Sc		79,072.06	2.42	99.6	Pulse	0.30	3
2	Ge		48,870.27	2.09	98.3	Pulse	0.30	3
2	Rh		748,695.72	0.76	99.1	Pulse	0.30	3
2	In		267,049.60	0.82	99.2	Pulse	0.30	3
2	Tb		773,597.00	1.15	100.5	Pulse	0.30	3
2	Ho		72,171.54	1.84	100.8	Pulse	0.30	3
2	Bi		423,960.52	1.45	99.7	Pulse	0.30	3
3	Sc		72,003.67	0.19	100.1	Pulse	0.30	3
3	Ge		51,323.70	0.84	100.1	Pulse	0.30	3
3	Rh		483,705.07	0.47	100.4	Pulse	0.30	3
3	Tb		632,257.72	0.49	101.0	Pulse	0.30	3

Quantitation Report

File Name 006CALS.d
File Path C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File
Method Path
Acq Time 4/16/2019 10:25
Sample Name STDD
Sample Type CalStd
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name Metals
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/17/2019 7:05
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	24.426	ug/l	2.31	112,513.26	7.208E-02	Pulse	0.25	3
B			1	23.921	ug/l	1.08	102,404.02	6.558E-02	Pulse	0.15	3
Ca			1	37.531	ug/l	3.97	38,370.46	2.110E-02	Pulse	0.10	3
Sr			1	24.625	ug/l	1.14	459,802.50	2.909E-01	Pulse	0.10	3
Mo			1	24.628	ug/l	1.15	93,570.83	5.920E-02	Pulse	0.10	3
Ag			1	24.235	ug/l	2.11	185,336.29	1.216E-01	Pulse	0.10	3
Sn			1	24.756	ug/l	1.70	120,146.95	7.880E-02	Pulse	0.10	3
Sb			1	24.549	ug/l	0.91	129,420.95	7.319E-02	Pulse	0.10	3
Ba			1	24.472	ug/l	1.77	51,893.47	2.935E-02	Pulse	0.10	3
Tl			1	24.543	ug/l	2.07	246,959.25	2.686E-01	Pulse	0.10	3
Pb			1	24.398	ug/l	1.64	85,218.01	9.268E-02	Pulse	0.10	3
Pb			1	24.543	ug/l	0.25	75,004.04	8.158E-02	Pulse	0.10	3
Pb			1	24.283	ug/l	0.85	340,436.83	3.703E-01	Pulse	0.10	3
Na			2	25.925	ug/l	2.11	22,587.01	2.870E-01	Pulse	0.30	3
Mg			2	26.676	ug/l	1.03	8,011.23	1.018E-01	Pulse	0.30	3
Al			2	44.948	ug/l	2.31	4,758.63	6.046E-02	Pulse	0.30	3
K			2	25.448	ug/l	3.05	10,905.44	1.385E-01	Pulse	0.30	3
Ca			2	180.257	ug/l	2.63	2,104.63	2.673E-02	Pulse	0.30	3
Ti			2	23.874	ug/l	2.25	2,057.95	2.614E-02	Pulse	0.30	3
V			2	24.797	ug/l	0.42	60,281.40	7.658E-01	Pulse	0.30	3
Cr			2	24.668	ug/l	0.66	75,562.14	9.600E-01	Pulse	0.30	3
Mn			2	24.534	ug/l	0.75	39,391.40	5.004E-01	Pulse	0.30	3
Fe			2	27.008	ug/l	1.06	65,577.91	8.331E-01	Pulse	0.30	3
Co			2	24.716	ug/l	1.27	110,329.12	1.402E+00	Pulse	0.30	3
Ni			2	24.266	ug/l	1.34	28,569.69	3.629E-01	Pulse	0.30	3
Cu			2	24.747	ug/l	0.61	74,433.17	9.456E-01	Pulse	0.30	3
Zn			2	24.721	ug/l	0.41	10,703.16	1.360E-01	Pulse	0.30	3
As			2	25.210	ug/l	1.29	6,091.36	7.738E-02	Pulse	1.00	3
Cd			2	24.152	ug/l	0.88	18,501.80	6.919E-02	Pulse	0.30	3
Sn			2	24.501	ug/l	1.20	26,270.49	9.824E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	24.144	ug/l	4.70	1,053.04	2.061E-02	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,561,341.70	1.25	100.6	Pulse	0.10	3
1	Sc		1,818,261.85	1.28	99.2	Pulse	0.10	3
1	Ge		355,923.09	0.82	98.4	Pulse	0.10	3
1	Rh		1,580,593.73	0.80	101.6	Pulse	0.10	3
1	In		1,524,766.87	0.96	98.9	Pulse	0.10	3
1	Tb		1,768,303.41	1.00	99.3	Pulse	0.10	3
1	Ho		165,572.92	0.99	99.8	Pulse	0.10	3
1	Bi		919,425.64	0.36	100.2	Pulse	0.10	3
2	Sc		78,714.07	1.25	99.1	Pulse	0.30	3
2	Ge		49,005.23	1.80	98.6	Pulse	0.30	3
2	Rh		748,232.33	1.64	99.0	Pulse	0.30	3
2	In		267,389.44	1.01	99.3	Pulse	0.30	3
2	Tb		773,995.32	1.86	100.5	Pulse	0.30	3
2	Ho		72,001.67	1.40	100.6	Pulse	0.30	3
2	Bi		423,501.09	1.52	99.6	Pulse	0.30	3
3	Sc		71,236.45	1.00	99.1	Pulse	0.30	3
3	Ge		51,090.63	0.41	99.6	Pulse	0.30	3
3	Rh		479,331.42	0.80	99.5	Pulse	0.30	3
3	Tb		629,262.18	1.72	100.5	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 10:30
Sample Name	STDE
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.904	ug/l	2.02	220,825.49	1.443E-01	Pulse	0.25	3
B			1	47.960	ug/l	2.04	199,793.53	1.306E-01	Pulse	0.15	3
Ca			1	75.093	ug/l	3.82	57,468.80	3.182E-02	Pulse	0.10	3
Sr			1	48.969	ug/l	1.82	899,109.62	5.783E-01	Pulse	0.10	3
Mo			1	49.712	ug/l	2.72	185,770.82	1.195E-01	Pulse	0.10	3
Ag			1	49.117	ug/l	2.48	366,789.63	2.464E-01	Pulse	0.10	3
Sn			1	50.005	ug/l	0.66	236,329.89	1.587E-01	Pulse	0.10	3
Sb			1	49.499	ug/l	1.57	259,496.57	1.476E-01	Pulse	0.10	3
Ba			1	49.031	ug/l	1.66	103,382.17	5.879E-02	Pulse	0.10	3
Tl			1	48.843	ug/l	2.02	480,028.66	5.345E-01	Pulse	0.10	3
Pb			1	49.876	ug/l	2.43	170,124.89	1.894E-01	Pulse	0.10	3
Pb			1	49.176	ug/l	0.72	146,786.26	1.634E-01	Pulse	0.10	3
Pb			1	49.411	ug/l	0.86	676,629.59	7.533E-01	Pulse	0.10	3
Na			2	50.877	ug/l	0.91	38,885.59	4.946E-01	Pulse	0.30	3
Mg			2	52.499	ug/l	0.92	15,721.06	1.999E-01	Pulse	0.30	3
Al			2	51.524	ug/l	2.65	5,446.67	6.927E-02	Pulse	0.30	3
K			2	50.518	ug/l	2.03	16,081.55	2.045E-01	Pulse	0.30	3
Ca			2	359.011	ug/l	0.68	4,068.42	5.174E-02	Pulse	0.30	3
Ti			2	48.964	ug/l	1.22	4,215.13	5.361E-02	Pulse	0.30	3
V			2	49.649	ug/l	0.59	120,295.80	1.530E+00	Pulse	0.30	3
Cr			2	49.072	ug/l	1.92	149,806.38	1.905E+00	Pulse	0.30	3
Mn			2	49.115	ug/l	1.36	78,704.41	1.001E+00	Pulse	0.30	3
Fe			2	53.568	ug/l	1.35	128,507.49	1.635E+00	Pulse	0.30	3
Co			2	48.985	ug/l	0.59	218,352.70	2.777E+00	Pulse	0.30	3
Ni			2	48.974	ug/l	0.30	57,562.83	7.321E-01	Pulse	0.30	3
Cu			2	49.004	ug/l	0.96	146,972.32	1.869E+00	Pulse	0.30	3
Zn			2	49.270	ug/l	0.38	21,238.76	2.701E-01	Pulse	0.30	3
As			2	49.665	ug/l	0.58	11,980.24	1.524E-01	Pulse	1.00	3
Cd			2	48.757	ug/l	1.39	37,022.26	1.397E-01	Pulse	0.30	3
Sn			2	49.899	ug/l	0.86	53,266.17	2.010E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	48.482	ug/l	6.17	2,076.83	4.136E-02	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,530,520.47	1.07	98.6	Pulse	0.10	3
1	Sc		1,806,698.51	1.48	98.6	Pulse	0.10	3
1	Ge		350,083.45	2.00	96.8	Pulse	0.10	3
1	Rh		1,554,928.15	1.26	99.9	Pulse	0.10	3
1	In		1,488,790.49	0.26	96.6	Pulse	0.10	3
1	Tb		1,758,677.11	1.88	98.7	Pulse	0.10	3
1	Ho		160,049.84	1.70	96.5	Pulse	0.10	3
1	Bi		898,286.94	1.61	97.9	Pulse	0.10	3
2	Sc		78,624.61	1.44	99.0	Pulse	0.30	3
2	Ge		48,457.72	0.55	97.5	Pulse	0.30	3
2	Rh		741,994.15	0.56	98.2	Pulse	0.30	3
2	In		265,051.74	0.53	98.5	Pulse	0.30	3
2	Tb		768,655.54	1.37	99.8	Pulse	0.30	3
2	Ho		71,683.06	1.31	100.1	Pulse	0.30	3
2	Bi		421,019.89	1.09	99.0	Pulse	0.30	3
3	Sc		71,327.01	0.32	99.2	Pulse	0.30	3
3	Ge		50,225.18	0.69	97.9	Pulse	0.30	3
3	Rh		478,295.60	0.74	99.3	Pulse	0.30	3
3	Tb		623,247.77	0.59	99.6	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 10:35
Sample Name	STDF
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	100.558	ug/l	2.22	445,819.33	2.967E-01	Pulse	0.25	3
B			1	98.471	ug/l	2.98	401,283.94	2.671E-01	Pulse	0.15	3
Ca			1	147.427	ug/l	0.83	92,966.46	5.245E-02	Pulse	0.10	3
Sr			1	100.611	ug/l	1.49	1,820,363.20	1.188E+00	Pulse	0.10	3
Mo			1	100.238	ug/l	1.55	369,223.15	2.410E-01	Pulse	0.10	3
Ag			1	100.301	ug/l	0.98	749,005.12	5.031E-01	Pulse	0.10	3
Sn			1	100.071	ug/l	0.41	472,383.95	3.172E-01	Pulse	0.10	3
Sb			1	100.356	ug/l	0.47	515,522.35	2.992E-01	Pulse	0.10	3
Ba			1	100.615	ug/l	0.67	207,886.20	1.206E-01	Pulse	0.10	3
Tl			1	101.546	ug/l	1.41	995,500.58	1.111E+00	Pulse	0.10	3
Pb			1	100.730	ug/l	1.95	342,726.30	3.825E-01	Pulse	0.10	3
Pb			1	101.233	ug/l	2.06	301,346.60	3.364E-01	Pulse	0.10	3
Pb			1	101.318	ug/l	1.47	1,383,701.12	1.545E+00	Pulse	0.10	3
Na			2	99.666	ug/l	1.13	69,658.39	9.005E-01	Pulse	0.30	3
Mg			2	101.955	ug/l	2.87	30,009.72	3.880E-01	Pulse	0.30	3
Al			2	100.216	ug/l	3.69	10,403.95	1.345E-01	Pulse	0.30	3
K			2	99.391	ug/l	1.30	25,777.13	3.332E-01	Pulse	0.30	3
Ca			2	739.278	ug/l	1.47	8,118.00	1.049E-01	Pulse	0.30	3
Ti			2	100.806	ug/l	3.00	8,538.25	1.104E-01	Pulse	0.30	3
V			2	101.851	ug/l	1.33	242,542.51	3.135E+00	Pulse	0.30	3
Cr			2	101.181	ug/l	1.87	303,590.41	3.924E+00	Pulse	0.30	3
Mn			2	101.377	ug/l	2.25	159,818.17	2.066E+00	Pulse	0.30	3
Fe			2	106.097	ug/l	1.48	249,089.47	3.220E+00	Pulse	0.30	3
Co			2	101.278	ug/l	1.19	444,185.48	5.741E+00	Pulse	0.30	3
Ni			2	100.693	ug/l	1.09	116,429.86	1.505E+00	Pulse	0.30	3
Cu			2	101.072	ug/l	0.53	298,039.45	3.852E+00	Pulse	0.30	3
Zn			2	100.892	ug/l	1.62	42,720.64	5.522E-01	Pulse	0.30	3
As			2	101.143	ug/l	1.04	24,002.28	3.103E-01	Pulse	1.00	3
Cd			2	100.828	ug/l	0.70	75,321.46	2.888E-01	Pulse	0.30	3
Sn			2	100.170	ug/l	0.49	105,428.20	4.043E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	99.264	ug/l	3.87	4,248.34	8.466E-02	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,502,854.75	1.72	96.8	Pulse	0.10	3
1	Sc		1,772,518.77	0.95	96.7	Pulse	0.10	3
1	Ge		347,012.52	0.77	96.0	Pulse	0.10	3
1	Rh		1,532,428.10	0.65	98.5	Pulse	0.10	3
1	In		1,488,962.65	1.49	96.6	Pulse	0.10	3
1	Tb		1,723,214.04	0.65	96.7	Pulse	0.10	3
1	Ho		160,284.36	0.68	96.6	Pulse	0.10	3
1	Bi		896,006.81	2.19	97.7	Pulse	0.10	3
2	Sc		77,362.05	0.94	97.4	Pulse	0.30	3
2	Ge		48,064.06	2.29	96.7	Pulse	0.30	3
2	Rh		732,187.84	1.41	96.9	Pulse	0.30	3
2	In		260,758.19	1.31	96.9	Pulse	0.30	3
2	Tb		759,057.94	1.46	98.6	Pulse	0.30	3
2	Ho		71,225.97	1.49	99.5	Pulse	0.30	3
2	Bi		416,706.51	1.70	98.0	Pulse	0.30	3
3	Sc		71,169.64	2.27	99.0	Pulse	0.30	3
3	Ge		50,186.08	0.67	97.8	Pulse	0.30	3
3	Rh		474,166.32	1.44	98.5	Pulse	0.30	3
3	Tb		620,649.40	0.99	99.1	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 10:40
Sample Name	STDG
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.014	ug/l	26.88	66.67	4.420E-05	Pulse	0.25	3
B			1	201.462	ug/l	4.07	824,370.23	5.455E-01	Pulse	0.15	3
Ca			1	480.943	ug/l	1.55	263,962.26	1.476E-01	Pulse	0.10	3
Sr			1	0.021	ug/l	18.61	710.05	4.648E-04	Pulse	0.10	3
Mo			1	0.108	ug/l	16.48	396.69	2.596E-04	Pulse	0.10	3
Ag			1	0.015	ug/l	10.08	136.67	9.126E-05	Pulse	0.10	3
Sn			1	0.085	ug/l	18.90	1,036.74	6.923E-04	Pulse	0.10	3
Sb			1	0.659	ug/l	4.67	3,440.58	1.973E-03	Pulse	0.10	3
Ba			1	0.055	ug/l	41.11	123.34	7.098E-05	Pulse	0.10	3
Tl			1	0.029	ug/l	9.16	330.02	3.620E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	20.92	106.67	1.171E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	40.24	100.00	1.100E-04	Pulse	0.10	3
Pb			1	0.025	ug/l	22.10	460.02	5.043E-04	Pulse	0.10	3
Na			2	491.515	ug/l	1.68	322,217.00	4.161E+00	Pulse	0.30	3
Mg			2	502.387	ug/l	0.47	147,963.17	1.910E+00	Pulse	0.30	3
Al			2	498.236	ug/l	1.25	51,706.74	6.675E-01	Pulse	0.30	3
K			2	491.268	ug/l	1.00	105,712.45	1.365E+00	Pulse	0.30	3
Ca			2	510.613	ug/l	3.21	5,648.98	7.295E-02	Pulse	0.30	3
Ti			2	0.026	ug/l	86.66	2.22	2.867E-05	Pulse	0.30	3
V			2	0.006	ug/l	28.81	275.56	3.558E-03	Pulse	0.30	3
Cr			2	0.318	ug/l	8.72	1,287.85	1.664E-02	Pulse	0.30	3
Mn			2	0.107	ug/l	7.95	221.11	2.856E-03	Pulse	0.30	3
Fe			2	511.924	ug/l	0.11	1,198,013.18	1.547E+01	Pulse	0.30	3
Co			2	0.038	ug/l	7.42	206.67	2.666E-03	Pulse	0.30	3
Ni			2	0.295	ug/l	9.98	364.45	4.704E-03	Pulse	0.30	3
Cu			2	0.023	ug/l	69.84	307.79	3.965E-03	Pulse	0.30	3
Zn			2	1.266	ug/l	4.94	604.47	7.805E-03	Pulse	0.30	3
As			2	0.036	ug/l	57.88	13.33	1.721E-04	Pulse	1.00	3
Cd			2	0.013	ug/l	2.19	9.78	3.733E-05	Pulse	0.30	3
Sn			2	0.454	ug/l	4.86	254.45	9.720E-04	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	201.724	ug/l	4.99	8,601.72	1.720E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,511,887.06	1.55	97.4	Pulse	0.10	3
1	Sc		1,788,749.40	0.67	97.6	Pulse	0.10	3
1	Ge		354,205.27	0.98	98.0	Pulse	0.10	3
1	Rh		1,527,896.64	0.15	98.2	Pulse	0.10	3
1	In		1,497,557.24	0.31	97.2	Pulse	0.10	3
1	Tb		1,742,984.09	1.36	97.8	Pulse	0.10	3
1	Ho		160,871.75	0.75	97.0	Pulse	0.10	3
1	Bi		911,094.23	1.31	99.3	Pulse	0.10	3
2	Sc		77,462.76	2.03	97.6	Pulse	0.30	3
2	Ge		48,379.70	0.40	97.3	Pulse	0.30	3
2	Rh		733,043.96	1.40	97.0	Pulse	0.30	3
2	In		261,999.82	1.82	97.3	Pulse	0.30	3
2	Tb		762,031.46	1.10	99.0	Pulse	0.30	3
2	Ho		70,583.76	1.64	98.6	Pulse	0.30	3
2	Bi		416,969.20	0.79	98.1	Pulse	0.30	3
3	Sc		70,433.59	1.17	98.0	Pulse	0.30	3
3	Ge		50,015.49	0.64	97.5	Pulse	0.30	3
3	Rh		469,244.69	0.53	97.4	Pulse	0.30	3
3	Tb		617,849.82	0.81	98.7	Pulse	0.30	3

Quantitation Report

File Name	010CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 10:44
Sample Name	STDH
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	1158.21	6.67	4.451E-06	Pulse	0.25	3
B			1	4.571	ug/l	3.88	19,876.51	1.328E-02	Pulse	0.15	3
Ca			1	958.715	ug/l	1.12	508,410.33	2.839E-01	Pulse	0.10	3
Sr			1	0.024	ug/l	11.56	760.05	4.953E-04	Pulse	0.10	3
Mo			1	0.040	ug/l	35.44	146.68	9.576E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	448.89	26.67	1.796E-05	Pulse	0.10	3
Sn			1	0.104	ug/l	20.95	1,116.75	7.503E-04	Pulse	0.10	3
Sb			1	0.245	ug/l	4.12	1,286.78	7.401E-04	Pulse	0.10	3
Ba			1	0.074	ug/l	55.23	163.34	9.394E-05	Pulse	0.10	3
Tl			1	0.002	ug/l	97.94	60.00	6.735E-05	Pulse	0.10	3
Pb			1	0.010	ug/l	87.33	66.67	7.483E-05	Pulse	0.10	3
Pb			1	0.015	ug/l	58.92	73.33	8.237E-05	Pulse	0.10	3
Pb			1	0.013	ug/l	58.95	286.67	3.215E-04	Pulse	0.10	3
Na			2	982.697	ug/l	1.23	635,125.81	8.247E+00	Pulse	0.30	3
Mg			2	1008.777	ug/l	1.48	295,365.05	3.835E+00	Pulse	0.30	3
Al			2	987.937	ug/l	3.28	101,919.73	1.323E+00	Pulse	0.30	3
K			2	990.520	ug/l	1.40	206,329.59	2.679E+00	Pulse	0.30	3
Ca			2	1013.217	ug/l	2.26	11,033.34	1.433E-01	Pulse	0.30	3
Ti			2	0.026	ug/l	86.61	2.22	2.890E-05	Pulse	0.30	3
V			2	0.003	ug/l	392.42	267.79	3.477E-03	Pulse	0.30	3
Cr			2	-0.021	ug/l	-33.31	272.23	3.535E-03	Pulse	0.30	3
Mn			2	0.046	ug/l	37.92	124.45	1.617E-03	Pulse	0.30	3
Fe			2	1004.237	ug/l	1.09	2,335,149.49	3.032E+01	Pulse	0.30	3
Co			2	0.047	ug/l	2.85	242.23	3.145E-03	Pulse	0.30	3
Ni			2	0.072	ug/l	16.06	105.56	1.371E-03	Pulse	0.30	3
Cu			2	0.048	ug/l	35.95	380.01	4.936E-03	Pulse	0.30	3
Zn			2	1.298	ug/l	14.31	614.47	7.981E-03	Pulse	0.30	3
As			2	0.016	ug/l	103.66	8.67	1.123E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	185.65	1.56	5.912E-06	Pulse	0.30	3
Sn			2	0.424	ug/l	2.24	224.45	8.519E-04	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	399.565	ug/l	5.86	17,239.23	3.407E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,496,662.73	1.17	96.4	Pulse	0.10	3
1	Sc		1,791,317.16	1.74	97.7	Pulse	0.10	3
1	Ge		356,986.66	0.19	98.7	Pulse	0.10	3
1	Rh		1,534,122.63	0.77	98.6	Pulse	0.10	3
1	In		1,487,833.08	0.65	96.5	Pulse	0.10	3
1	Tb		1,738,451.22	0.32	97.6	Pulse	0.10	3
1	Ho		163,120.51	3.43	98.3	Pulse	0.10	3
1	Bi		891,275.80	0.53	97.2	Pulse	0.10	3
2	Sc		77,012.67	0.63	97.0	Pulse	0.30	3
2	Ge		47,754.26	1.65	96.1	Pulse	0.30	3
2	Rh		734,958.44	0.95	97.3	Pulse	0.30	3
2	In		263,417.61	1.34	97.8	Pulse	0.30	3
2	Tb		762,123.36	2.06	99.0	Pulse	0.30	3
2	Ho		71,317.99	1.86	99.6	Pulse	0.30	3
2	Bi		413,473.04	0.97	97.3	Pulse	0.30	3
3	Sc		71,148.40	0.83	99.0	Pulse	0.30	3
3	Ge		50,599.84	0.82	98.6	Pulse	0.30	3
3	Rh		472,146.70	0.94	98.0	Pulse	0.30	3
3	Tb		619,878.93	0.72	99.0	Pulse	0.30	3

Quantitation Report

File Name	011CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 10:49
Sample Name	STDI
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-501.11	5.33	3.519E-06	Pulse	0.25	3
B			1	2.641	ug/l	0.39	12,069.83	8.060E-03	Pulse	0.15	3
Ca			1	4778.902	ug/l	1.77	2,454,187.41	1.373E+00	Pulse	0.10	3
Sr			1	0.042	ug/l	23.25	1,056.74	7.088E-04	Pulse	0.10	3
Mo			1	0.020	ug/l	34.09	73.33	4.917E-05	Pulse	0.10	3
Ag			1	-0.001	ug/l	-94.77	16.67	1.145E-05	Pulse	0.10	3
Sn			1	0.018	ug/l	66.79	696.71	4.781E-04	Pulse	0.10	3
Sb			1	0.138	ug/l	15.32	720.05	4.200E-04	Pulse	0.10	3
Ba			1	0.055	ug/l	36.13	123.34	7.185E-05	Pulse	0.10	3
Tl			1	0.007	ug/l	17.51	110.00	1.276E-04	Pulse	0.10	3
Pb			1	0.004	ug/l	249.66	43.33	5.028E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	374.34	33.33	3.854E-05	Pulse	0.10	3
Pb			1	0.006	ug/l	71.49	193.34	2.240E-04	Pulse	0.10	3
Na			2	4840.117	ug/l	0.73	3,140,128.62	4.034E+01	Pulse	0.30	3
Mg			2	4972.030	ug/l	0.50	1,471,318.90	1.890E+01	Pulse	0.30	3
Al			2	4950.181	ug/l	0.83	516,071.53	6.630E+00	Pulse	0.30	3
K			2	4911.409	ug/l	0.64	1,012,014.93	1.300E+01	Pulse	0.30	3
Ca			2	4878.703	ug/l	0.82	53,250.11	6.841E-01	Pulse	0.30	3
Ti			2	0.300	ug/l	64.10	25.56	3.280E-04	Pulse	0.30	3
V			2	0.028	ug/l	68.84	330.01	4.241E-03	Pulse	0.30	3
Cr			2	0.000	ug/l	-2673.93	336.67	4.320E-03	Pulse	0.30	3
Mn			2	0.085	ug/l	8.98	187.78	2.414E-03	Pulse	0.30	3
Fe			2	4895.679	ug/l	0.83	11,500,844.27	1.477E+02	Analog	0.30	3
Co			2	0.240	ug/l	9.68	1,100.06	1.412E-02	Pulse	0.30	3
Ni			2	0.190	ug/l	13.92	243.34	3.129E-03	Pulse	0.30	3
Cu			2	0.042	ug/l	8.73	365.56	4.697E-03	Pulse	0.30	3
Zn			2	0.731	ug/l	5.31	380.01	4.883E-03	Pulse	0.30	3
As			2	0.030	ug/l	112.87	12.00	1.549E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	-24.27	-0.07	-2.588E-07	Pulse	0.30	3
Sn			2	0.361	ug/l	5.08	153.34	5.959E-04	Pulse	0.30	3
Se			3	0.175	ug/l	63.25	8.67	1.753E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,497,614.96	1.57	96.5	Pulse	0.10	3
1	Sc		1,786,989.19	0.75	97.5	Pulse	0.10	3
1	Ge		343,740.87	1.13	95.1	Pulse	0.10	3

Quantitation Report

1	Rh		1,490,070.03	0.94	95.7	Pulse	0.10	3
1	In		1,456,919.55	0.46	94.5	Pulse	0.10	3
1	Tb		1,714,885.08	0.51	96.3	Pulse	0.10	3
1	Ho		158,659.22	0.99	95.6	Pulse	0.10	3
1	Bi		863,565.25	1.94	94.1	Pulse	0.10	3
2	Sc		77,842.75	1.51	98.0	Pulse	0.30	3
2	Ge		47,618.18	2.28	95.8	Pulse	0.30	3
2	Rh		709,070.30	1.92	93.9	Pulse	0.30	3
2	In		257,583.18	1.67	95.7	Pulse	0.30	3
2	Tb		757,557.35	1.54	98.4	Pulse	0.30	3
2	Ho		70,316.82	1.76	98.2	Pulse	0.30	3
2	Bi		399,794.39	1.21	94.0	Pulse	0.30	3
3	Sc		70,017.15	0.96	97.4	Pulse	0.30	3
3	Ge		49,325.18	0.82	96.2	Pulse	0.30	3
3	Rh		458,184.77	0.63	95.1	Pulse	0.30	3
3	Tb		620,639.45	0.48	99.1	Pulse	0.30	3

Quantitation Report

File Name	012CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 10:54
Sample Name	STDJ
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	1802.41	6.67	4.491E-06	Pulse	0.25	3
B			1	1.865	ug/l	0.94	8,847.37	5.963E-03	Pulse	0.15	3
Ca			1	10333.827	ug/l	0.67	5,196,546.17	2.958E+00	Analog	0.10	3
Sr			1	0.097	ug/l	7.86	2,003.56	1.359E-03	Pulse	0.10	3
Mo			1	0.025	ug/l	48.33	90.00	6.103E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	58.12	40.00	2.760E-05	Pulse	0.10	3
Sn			1	0.869	ug/l	4.18	4,600.98	3.174E-03	Pulse	0.10	3
Sb			1	0.106	ug/l	19.56	560.03	3.257E-04	Pulse	0.10	3
Ba			1	0.036	ug/l	7.31	83.33	4.843E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	159.29	80.00	9.300E-05	Pulse	0.10	3
Pb			1	0.012	ug/l	43.03	70.00	8.130E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	95.11	50.00	5.806E-05	Pulse	0.10	3
Pb			1	0.014	ug/l	19.84	296.68	3.447E-04	Pulse	0.10	3
Na			2	10191.864	ug/l	1.16	6,529,930.85	8.487E+01	Analog	0.30	3
Mg			2	9875.883	ug/l	0.97	2,889,009.47	3.754E+01	Pulse	0.30	3
Al			2	10160.054	ug/l	1.10	1,047,174.37	1.361E+01	Pulse	0.30	3
K			2	10045.579	ug/l	0.59	2,040,509.71	2.652E+01	Pulse	0.30	3
Ca			2	10068.259	ug/l	0.45	108,514.07	1.410E+00	Pulse	0.30	3
Ti			2	0.053	ug/l	44.22	4.44	5.787E-05	Pulse	0.30	3
V			2	0.022	ug/l	92.63	312.23	4.065E-03	Pulse	0.30	3
Cr			2	0.044	ug/l	30.86	464.46	6.033E-03	Pulse	0.30	3
Mn			2	0.180	ug/l	9.00	333.34	4.335E-03	Pulse	0.30	3
Fe			2	10080.819	ug/l	0.42	23,410,124.62	3.042E+02	Analog	0.30	3
Co			2	0.481	ug/l	1.68	2,134.63	2.774E-02	Pulse	0.30	3
Ni			2	0.445	ug/l	6.41	534.46	6.948E-03	Pulse	0.30	3
Cu			2	0.111	ug/l	24.22	565.57	7.336E-03	Pulse	0.30	3
Zn			2	2.846	ug/l	2.83	1,265.63	1.644E-02	Pulse	0.30	3
As			2	0.042	ug/l	27.73	14.67	1.910E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	180.26	1.60	6.385E-06	Pulse	0.30	3
Sn			2	1.217	ug/l	8.69	1,033.39	4.060E-03	Pulse	0.30	3
Se			3	0.080	ug/l	44.36	4.67	9.431E-05	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,483,702.77	0.17	95.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,756,809.45	0.51	95.9	Pulse	0.10	3
1	Ge		344,621.36	1.22	95.3	Pulse	0.10	3
1	Rh		1,474,013.00	0.43	94.7	Pulse	0.10	3
1	In		1,449,178.40	1.38	94.0	Pulse	0.10	3
1	Tb		1,720,388.57	0.59	96.6	Pulse	0.10	3
1	Ho		160,184.72	1.02	96.6	Pulse	0.10	3
1	Bi		860,490.71	0.39	93.8	Pulse	0.10	3
2	Sc		76,955.38	2.03	96.9	Pulse	0.30	3
2	Ge		46,988.19	1.79	94.5	Pulse	0.30	3
2	Rh		702,421.93	2.63	93.0	Pulse	0.30	3
2	In		254,283.26	1.83	94.5	Pulse	0.30	3
2	Tb		750,760.65	1.24	97.5	Pulse	0.30	3
2	Ho		70,477.62	1.52	98.5	Pulse	0.30	3
2	Bi		394,945.26	1.29	92.9	Pulse	0.30	3
3	Sc		69,663.04	0.49	96.9	Pulse	0.30	3
3	Ge		49,401.24	0.80	96.3	Pulse	0.30	3
3	Rh		446,651.79	0.61	92.8	Pulse	0.30	3
3	Tb		605,051.55	0.31	96.7	Pulse	0.30	3

Quantitation Report

File Name	013SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 10:59
Sample Name	STDA
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	267.29	8.00	5.332E-06	Pulse	0.25	3
B			1	1.808	ug/l	1.57	8,756.23	5.810E-03	Pulse	0.15	3
Ca			1	-3.371	ug/l	-33.46	16,967.43	9.437E-03	Pulse	0.10	3
Sr			1	-0.006	ug/l	-64.87	220.01	1.439E-04	Pulse	0.10	3
Mo			1	0.012	ug/l	48.33	43.33	2.838E-05	Pulse	0.10	3
Ag			1	-0.002	ug/l	-74.35	10.00	6.678E-06	Pulse	0.10	3
Sn			1	0.020	ug/l	99.70	733.39	4.869E-04	Pulse	0.10	3
Sb			1	0.050	ug/l	4.02	270.01	1.577E-04	Pulse	0.10	3
Ba			1	0.003	ug/l	162.43	16.67	9.707E-06	Pulse	0.10	3
Tl			1	0.003	ug/l	93.61	73.33	8.145E-05	Pulse	0.10	3
Pb			1	-0.002	ug/l	-293.06	26.67	2.959E-05	Pulse	0.10	3
Pb			1	-0.006	ug/l	-89.84	13.33	1.487E-05	Pulse	0.10	3
Pb			1	-0.003	ug/l	-0.84	70.00	7.779E-05	Pulse	0.10	3
Na			2	1.237	ug/l	23.58	6,358.15	8.157E-02	Pulse	0.30	3
Mg			2	1.114	ug/l	14.49	358.90	4.601E-03	Pulse	0.30	3
Al			2	1.231	ug/l	34.78	148.89	1.913E-03	Pulse	0.30	3
K			2	-0.672	ug/l	-41.11	5,437.78	6.978E-02	Pulse	0.30	3
Ca			2	-0.520	ug/l	-275.98	112.22	1.440E-03	Pulse	0.30	3
Ti			2	0.026	ug/l	86.60	2.22	2.865E-05	Pulse	0.30	3
V			2	-0.003	ug/l	-249.87	255.56	3.279E-03	Pulse	0.30	3
Cr			2	0.002	ug/l	239.18	345.56	4.433E-03	Pulse	0.30	3
Mn			2	0.003	ug/l	73.23	57.78	7.414E-04	Pulse	0.30	3
Fe			2	1.583	ug/l	8.02	5,133.24	6.584E-02	Pulse	0.30	3
Co			2	-0.005	ug/l	-70.19	16.67	2.141E-04	Pulse	0.30	3
Ni			2	0.001	ug/l	445.97	24.45	3.143E-04	Pulse	0.30	3
Cu			2	-0.011	ug/l	-23.87	208.89	2.680E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.024	ug/l	-53.57	58.89	7.560E-04	Pulse	0.30	3
As			2	-0.008	ug/l	-53.51	3.00	3.846E-05	Pulse	1.00	3
Cd			2	0.000	ug/l	-60.49	-0.02	-7.513E-08	Pulse	0.30	3
Sn			2	0.361	ug/l	6.96	160.00	5.987E-04	Pulse	0.30	3
Se			3	0.016	ug/l	144.66	2.00	3.954E-05	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,507,307.35	1.74	97.1	Pulse	0.10	3
1	Sc		1,798,868.93	2.28	98.2	Pulse	0.10	3
1	Ge		349,082.51	0.88	96.5	Pulse	0.10	3
1	Rh		1,529,844.20	0.81	98.3	Pulse	0.10	3
1	In		1,506,831.81	1.06	97.8	Pulse	0.10	3
1	Tb		1,712,545.03	0.55	96.1	Pulse	0.10	3
1	Ho		158,278.65	1.12	95.4	Pulse	0.10	3
1	Bi		899,866.11	0.56	98.1	Pulse	0.10	3
2	Sc		77,933.12	1.08	98.2	Pulse	0.30	3
2	Ge		48,477.78	1.09	97.5	Pulse	0.30	3
2	Rh		743,910.77	1.49	98.5	Pulse	0.30	3
2	In		266,908.07	1.12	99.1	Pulse	0.30	3
2	Tb		766,873.37	0.98	99.6	Pulse	0.30	3
2	Ho		71,408.16	1.16	99.7	Pulse	0.30	3
2	Bi		418,147.58	1.38	98.4	Pulse	0.30	3
3	Sc		71,548.25	0.37	99.5	Pulse	0.30	3
3	Ge		50,471.75	0.80	98.4	Pulse	0.30	3
3	Rh		474,898.69	0.75	98.6	Pulse	0.30	3
3	Tb		622,560.51	0.52	99.5	Pulse	0.30	3

Quantitation Report

File Name	014_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 11:03
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	60.542	ug/l	0.95	268,126.95	1.786E-01	Pulse	0.25	3
B			1	120.857	ug/l	2.09	491,646.41	3.276E-01	Pulse	0.15	3
Ca			1	5337.172	ug/l	0.56	2,776,801.10	1.533E+00	Pulse	0.10	3
Sr			1	60.907	ug/l	0.89	1,071,654.59	7.192E-01	Pulse	0.10	3
Mo			1	58.391	ug/l	0.89	209,135.60	1.404E-01	Pulse	0.10	3
Ag			1	59.622	ug/l	1.32	437,804.20	2.990E-01	Pulse	0.10	3
Sn			1	57.758	ug/l	1.13	268,364.64	1.833E-01	Pulse	0.10	3
Sb			1	62.006	ug/l	0.77	315,512.45	1.848E-01	Pulse	0.10	3
Ba			1	60.675	ug/l	0.56	124,190.05	7.275E-02	Pulse	0.10	3
Tl			1	64.070	ug/l	1.72	596,629.60	7.011E-01	Pulse	0.10	3
Pb			1	63.544	ug/l	1.81	205,374.28	2.413E-01	Pulse	0.10	3
Pb			1	59.768	ug/l	0.65	169,067.97	1.986E-01	Pulse	0.10	3
Pb			1	61.382	ug/l	0.71	796,563.28	9.358E-01	Pulse	0.10	3
Na			2	5472.404	ug/l	0.76	3,557,487.77	4.560E+01	Pulse	0.30	3
Mg			2	5600.824	ug/l	0.71	1,661,129.97	2.129E+01	Pulse	0.30	3
Al			2	5650.615	ug/l	0.85	590,433.24	7.568E+00	Pulse	0.30	3
K			2	5528.617	ug/l	1.47	1,141,142.04	1.463E+01	Pulse	0.30	3
Ca			2	5899.926	ug/l	0.55	64,517.30	8.270E-01	Pulse	0.30	3
Ti			2	56.987	ug/l	2.81	4,867.57	6.239E-02	Pulse	0.30	3
V			2	62.096	ug/l	0.66	149,215.67	1.913E+00	Pulse	0.30	3
Cr			2	59.748	ug/l	0.65	180,917.78	2.319E+00	Pulse	0.30	3
Mn			2	59.898	ug/l	0.87	95,235.92	1.221E+00	Pulse	0.30	3
Fe			2	5589.584	ug/l	1.21	13,160,303.37	1.687E+02	Analog	0.30	3
Co			2	58.589	ug/l	0.40	259,135.99	3.322E+00	Pulse	0.30	3
Ni			2	59.273	ug/l	1.81	69,121.03	8.860E-01	Pulse	0.30	3
Cu			2	58.840	ug/l	1.04	175,073.48	2.244E+00	Pulse	0.30	3
Zn			2	58.426	ug/l	0.41	24,977.14	3.202E-01	Pulse	0.30	3
As			2	60.321	ug/l	0.52	14,437.94	1.851E-01	Pulse	1.00	3
Cd			2	59.851	ug/l	0.83	44,429.44	1.715E-01	Pulse	0.30	3
Sn			2	57.420	ug/l	1.41	59,958.91	2.314E-01	Pulse	0.30	3
Se			3	261.958	ug/l	3.80	11,112.88	2.234E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,500,927.28	0.86	96.7	Pulse	0.10	3
1	Sc		1,811,801.07	1.93	98.9	Pulse	0.10	3
1	Ge		350,504.53	1.97	96.9	Pulse	0.10	3

Quantitation Report

1	Rh		1,489,927.95	0.77	95.7	Pulse	0.10	3
1	In		1,464,265.88	2.21	95.0	Pulse	0.10	3
1	Tb		1,706,994.30	1.34	95.8	Pulse	0.10	3
1	Ho		159,244.22	1.33	96.0	Pulse	0.10	3
1	Bi		851,271.21	2.76	92.8	Pulse	0.10	3
2	Sc		78,014.48	0.96	98.3	Pulse	0.30	3
2	Ge		48,001.70	2.02	96.6	Pulse	0.30	3
2	Rh		714,570.16	1.37	94.6	Pulse	0.30	3
2	In		259,141.91	1.28	96.3	Pulse	0.30	3
2	Tb		757,123.44	0.91	98.3	Pulse	0.30	3
2	Ho		70,254.40	1.72	98.1	Pulse	0.30	3
2	Bi		397,450.27	1.44	93.5	Pulse	0.30	3
3	Sc		70,743.27	1.91	98.4	Pulse	0.30	3
3	Ge		49,749.10	1.75	97.0	Pulse	0.30	3
3	Rh		452,283.68	0.29	93.9	Pulse	0.30	3
3	Tb		604,746.09	1.06	96.6	Pulse	0.30	3

Quantitation Report

File Name	015_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 11:09
Sample Name	ICV
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	11.27	40.00	2.553E-05	Pulse	0.25	3
B			1	2.509	ug/l	5.85	12,060.92	7.703E-03	Pulse	0.15	3
Ca			1	11.110	ug/l	7.23	24,776.01	1.357E-02	Pulse	0.10	3
Sr			1	0.031	ug/l	13.16	903.40	5.808E-04	Pulse	0.10	3
Mo			1	0.050	ug/l	20.53	186.68	1.199E-04	Pulse	0.10	3
Ag			1	0.010	ug/l	46.17	100.00	6.597E-05	Pulse	0.10	3
Sn			1	0.106	ug/l	29.58	1,143.43	7.570E-04	Pulse	0.10	3
Sb			1	0.055	ug/l	23.90	303.35	1.744E-04	Pulse	0.10	3
Ba			1	0.051	ug/l	60.08	116.67	6.716E-05	Pulse	0.10	3
Tl			1	0.014	ug/l	6.87	176.68	1.981E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	38.67	93.33	1.045E-04	Pulse	0.10	3
Pb			1	0.016	ug/l	10.92	76.67	8.598E-05	Pulse	0.10	3
Pb			1	0.017	ug/l	10.81	353.34	3.962E-04	Pulse	0.10	3
Na			2	5.805	ug/l	8.95	9,499.93	1.196E-01	Pulse	0.30	3
Mg			2	2.151	ug/l	4.61	678.91	8.542E-03	Pulse	0.30	3
Al			2	65.181	ug/l	2.00	6,957.34	8.756E-02	Pulse	0.30	3
K			2	1.688	ug/l	17.92	6,038.03	7.599E-02	Pulse	0.30	3
Ca			2	14.279	ug/l	18.89	278.89	3.511E-03	Pulse	0.30	3
Ti			2	0.064	ug/l	91.57	5.56	6.960E-05	Pulse	0.30	3
V			2	0.016	ug/l	54.97	307.78	3.875E-03	Pulse	0.30	3
Cr			2	0.051	ug/l	25.74	503.35	6.333E-03	Pulse	0.30	3
Mn			2	0.091	ug/l	19.32	201.11	2.529E-03	Pulse	0.30	3
Fe			2	2.122	ug/l	3.09	6,523.83	8.211E-02	Pulse	0.30	3
Co			2	0.002	ug/l	150.16	47.78	6.015E-04	Pulse	0.30	3
Ni			2	0.062	ug/l	52.65	96.67	1.218E-03	Pulse	0.30	3
Cu			2	0.052	ug/l	15.68	402.23	5.063E-03	Pulse	0.30	3
Zn			2	1.654	ug/l	0.20	788.92	9.929E-03	Pulse	0.30	3
As			2	0.007	ug/l	120.81	6.67	8.389E-05	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.013	ug/l	1.34	9.90	3.713E-05	Pulse	0.30	3
Sn			2	0.452	ug/l	3.24	257.78	9.668E-04	Pulse	0.30	3
Se			3	0.062	ug/l	99.14	4.00	7.872E-05	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,566,365.13	1.45	100.9	Pulse	0.10	3
1	Sc		1,826,174.14	0.86	99.6	Pulse	0.10	3
1	Ge		355,042.26	0.20	98.2	Pulse	0.10	3
1	Rh		1,554,775.39	1.11	99.9	Pulse	0.10	3
1	In		1,512,457.47	1.66	98.1	Pulse	0.10	3
1	Tb		1,740,795.34	0.97	97.7	Pulse	0.10	3
1	Ho		159,628.92	1.40	96.2	Pulse	0.10	3
1	Bi		891,381.37	1.36	97.2	Pulse	0.10	3
2	Sc		79,458.24	0.79	100.1	Pulse	0.30	3
2	Ge		48,924.82	1.86	98.4	Pulse	0.30	3
2	Rh		744,267.66	1.17	98.5	Pulse	0.30	3
2	In		266,548.21	1.39	99.0	Pulse	0.30	3
2	Tb		763,553.81	1.16	99.2	Pulse	0.30	3
2	Ho		71,324.38	1.11	99.6	Pulse	0.30	3
2	Bi		419,575.69	0.76	98.7	Pulse	0.30	3
3	Sc		72,392.66	0.41	100.7	Pulse	0.30	3
3	Ge		51,023.77	1.06	99.5	Pulse	0.30	3
3	Rh		474,914.91	0.30	98.6	Pulse	0.30	3
3	Tb		615,018.86	0.81	98.3	Pulse	0.30	3

Quantitation Report

File Name	016_ICB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 11:14
Sample Name	ICB
Sample Type	ICB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	237.63	14.67	9.408E-06	Pulse	0.25	3
B			1	1.984	ug/l	3.87	9,763.57	6.284E-03	Pulse	0.15	3
Ca			1	-4.633	ug/l	-7.37	16,657.14	9.076E-03	Pulse	0.10	3
Sr			1	0.001	ug/l	249.80	350.02	2.241E-04	Pulse	0.10	3
Mo			1	0.016	ug/l	33.46	60.00	3.843E-05	Pulse	0.10	3
Ag			1	-0.001	ug/l	-402.00	20.00	1.291E-05	Pulse	0.10	3
Sn			1	0.026	ug/l	56.25	780.05	5.058E-04	Pulse	0.10	3
Sb			1	0.022	ug/l	32.14	130.01	7.538E-05	Pulse	0.10	3
Ba			1	0.003	ug/l	85.29	16.67	9.680E-06	Pulse	0.10	3
Tl			1	0.003	ug/l	45.12	76.67	8.540E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	421.38	36.67	4.087E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	331.03	36.67	4.083E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	68.77	160.00	1.781E-04	Pulse	0.10	3
Na			2	0.082	ug/l	422.39	5,773.46	7.196E-02	Pulse	0.30	3
Mg			2	0.094	ug/l	59.23	57.78	7.200E-04	Pulse	0.30	3
Al			2	0.000	ug/l	50116.42	21.11	2.643E-04	Pulse	0.30	3
K			2	-1.329	ug/l	-37.85	5,460.01	6.805E-02	Pulse	0.30	3
Ca			2	-0.228	ug/l	-149.20	118.89	1.481E-03	Pulse	0.30	3
Ti			2	0.013	ug/l	173.21	1.11	1.397E-05	Pulse	0.30	3
V			2	0.009	ug/l	104.35	293.34	3.656E-03	Pulse	0.30	3
Cr			2	-0.009	ug/l	-105.58	321.12	4.001E-03	Pulse	0.30	3
Mn			2	-0.002	ug/l	-308.54	51.11	6.360E-04	Pulse	0.30	3
Fe			2	0.210	ug/l	13.94	1,956.83	2.439E-02	Pulse	0.30	3
Co			2	-0.002	ug/l	-96.84	32.22	4.021E-04	Pulse	0.30	3
Ni			2	-0.003	ug/l	-258.28	20.00	2.500E-04	Pulse	0.30	3
Cu			2	-0.008	ug/l	-90.25	222.22	2.771E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.001	ug/l	-2297.42	71.11	8.853E-04	Pulse	0.30	3
As			2	-0.004	ug/l	-105.90	4.00	4.996E-05	Pulse	1.00	3
Cd			2	0.004	ug/l	87.61	3.28	1.227E-05	Pulse	0.30	3
Sn			2	0.385	ug/l	4.82	185.56	6.961E-04	Pulse	0.30	3
Se			3	0.055	ug/l	24.49	3.67	7.248E-05	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,553,514.53	0.52	100.1	Pulse	0.10	3
1	Sc		1,835,182.53	0.16	100.1	Pulse	0.10	3
1	Ge		357,892.87	1.02	99.0	Pulse	0.10	3
1	Rh		1,562,035.50	0.49	100.4	Pulse	0.10	3
1	In		1,541,934.76	1.05	100.0	Pulse	0.10	3
1	Tb		1,729,256.80	1.87	97.1	Pulse	0.10	3
1	Ho		162,190.43	1.83	97.8	Pulse	0.10	3
1	Bi		897,929.80	0.24	97.9	Pulse	0.10	3
2	Sc		80,250.54	1.49	101.1	Pulse	0.30	3
2	Ge		49,494.93	1.73	99.6	Pulse	0.30	3
2	Rh		748,961.57	1.34	99.1	Pulse	0.30	3
2	In		266,895.75	1.67	99.1	Pulse	0.30	3
2	Tb		769,564.05	1.31	99.9	Pulse	0.30	3
2	Ho		71,673.09	1.51	100.1	Pulse	0.30	3
2	Bi		420,662.35	1.20	99.0	Pulse	0.30	3
3	Sc		72,458.22	0.78	100.8	Pulse	0.30	3
3	Ge		50,585.30	1.01	98.6	Pulse	0.30	3
3	Rh		475,922.78	1.02	98.8	Pulse	0.30	3
3	Tb		611,645.43	0.32	97.7	Pulse	0.30	3

Quantitation Report

File Name 017_CCV.d
File Path C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File
Method Path
Acq Time 4/16/2019 11:19
Sample Name CCVA
Sample Type CCV
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name Metals
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/17/2019 7:05
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	53.802	ug/l	0.82	243,129.18	1.588E-01	Pulse	0.25	3
B			1	103.194	ug/l	1.89	428,611.76	2.799E-01	Pulse	0.15	3
Ca			1	5035.694	ug/l	1.26	2,645,331.79	1.447E+00	Pulse	0.10	3
Sr			1	54.339	ug/l	1.93	959,285.48	6.417E-01	Pulse	0.10	3
Mo			1	53.475	ug/l	0.83	192,183.25	1.285E-01	Pulse	0.10	3
Ag			1	53.039	ug/l	3.93	387,999.03	2.660E-01	Pulse	0.10	3
Sn			1	51.720	ug/l	1.74	239,489.79	1.642E-01	Pulse	0.10	3
Sb			1	54.872	ug/l	0.40	278,553.61	1.636E-01	Pulse	0.10	3
Ba			1	51.849	ug/l	0.13	105,868.45	6.217E-02	Pulse	0.10	3
Tl			1	53.674	ug/l	3.47	498,305.32	5.873E-01	Pulse	0.10	3
Pb			1	53.585	ug/l	3.34	172,686.01	2.035E-01	Pulse	0.10	3
Pb			1	53.262	ug/l	2.03	150,197.17	1.770E-01	Pulse	0.10	3
Pb			1	53.167	ug/l	2.15	687,850.67	8.106E-01	Pulse	0.10	3
Na			2	5111.992	ug/l	0.78	3,402,111.32	4.260E+01	Pulse	0.30	3
Mg			2	5191.900	ug/l	0.42	1,576,296.85	1.974E+01	Pulse	0.30	3
Al			2	5166.192	ug/l	0.26	552,585.69	6.919E+00	Pulse	0.30	3
K			2	5194.025	ug/l	0.48	1,097,701.69	1.375E+01	Pulse	0.30	3
Ca			2	5514.327	ug/l	0.48	61,737.12	7.730E-01	Pulse	0.30	3
Ti			2	51.730	ug/l	1.77	4,523.00	5.664E-02	Pulse	0.30	3
V			2	53.232	ug/l	0.72	130,978.81	1.640E+00	Pulse	0.30	3
Cr			2	51.643	ug/l	0.29	160,123.95	2.005E+00	Pulse	0.30	3
Mn			2	51.731	ug/l	0.96	84,209.83	1.054E+00	Pulse	0.30	3
Fe			2	5195.007	ug/l	1.49	12,520,247.00	1.568E+02	Analog	0.30	3
Co			2	50.528	ug/l	0.59	228,782.96	2.865E+00	Pulse	0.30	3
Ni			2	50.287	ug/l	1.34	60,035.70	7.518E-01	Pulse	0.30	3
Cu			2	50.673	ug/l	0.79	154,381.53	1.933E+00	Pulse	0.30	3
Zn			2	52.065	ug/l	1.91	22,793.39	2.854E-01	Pulse	0.30	3
As			2	51.209	ug/l	0.45	12,548.09	1.571E-01	Pulse	1.00	3
Cd			2	52.329	ug/l	3.08	38,993.81	1.499E-01	Pulse	0.30	3
Sn			2	51.094	ug/l	0.54	53,538.24	2.058E-01	Pulse	0.30	3
Se			3	205.621	ug/l	5.05	8,757.15	1.753E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,531,522.63	0.41	98.7	Pulse	0.10	3
1	Sc		1,828,381.12	0.82	99.8	Pulse	0.10	3
1	Ge		351,096.97	0.74	97.1	Pulse	0.10	3

Quantitation Report

1	Rh		1,495,217.79	1.74	96.1	Pulse	0.10	3
1	In		1,459,058.25	1.64	94.7	Pulse	0.10	3
1	Tb		1,702,902.53	0.96	95.6	Pulse	0.10	3
1	Ho		159,503.63	1.06	96.1	Pulse	0.10	3
1	Bi		848,756.81	2.02	92.5	Pulse	0.10	3
2	Sc		79,862.80	1.18	100.6	Pulse	0.30	3
2	Ge		48,315.00	0.13	97.2	Pulse	0.30	3
2	Rh		717,776.50	1.07	95.0	Pulse	0.30	3
2	In		260,147.17	1.59	96.6	Pulse	0.30	3
2	Tb		758,012.24	0.79	98.4	Pulse	0.30	3
2	Ho		70,923.22	0.94	99.1	Pulse	0.30	3
2	Bi		403,131.10	0.69	94.8	Pulse	0.30	3
3	Sc		70,985.41	1.00	98.7	Pulse	0.30	3
3	Ge		49,958.62	1.41	97.4	Pulse	0.30	3
3	Rh		456,254.52	0.37	94.7	Pulse	0.30	3
3	Tb		609,496.97	0.55	97.4	Pulse	0.30	3

Quantitation Report

File Name	018_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 11:24
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.012	ug/l	41.05	64.00	4.083E-05	Pulse	0.25	3
B			1	2.832	ug/l	4.80	13,413.25	8.576E-03	Pulse	0.15	3
Ca			1	-3.619	ug/l	-30.81	17,047.71	9.366E-03	Pulse	0.10	3
Sr			1	0.005	ug/l	44.91	416.69	2.682E-04	Pulse	0.10	3
Mo			1	0.070	ug/l	20.91	260.01	1.675E-04	Pulse	0.10	3
Ag			1	0.008	ug/l	48.36	80.00	5.385E-05	Pulse	0.10	3
Sn			1	0.074	ug/l	22.64	976.74	6.563E-04	Pulse	0.10	3
Sb			1	0.054	ug/l	13.50	293.35	1.690E-04	Pulse	0.10	3
Ba			1	0.006	ug/l	110.87	23.33	1.336E-05	Pulse	0.10	3
Tl			1	0.020	ug/l	29.00	233.35	2.621E-04	Pulse	0.10	3
Pb			1	0.003	ug/l	114.74	40.00	4.501E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	260.65	43.33	4.867E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	94.19	203.34	2.297E-04	Pulse	0.10	3
Na			2	0.776	ug/l	21.90	6,188.08	7.773E-02	Pulse	0.30	3
Mg			2	0.649	ug/l	15.13	225.56	2.833E-03	Pulse	0.30	3
Al			2	0.396	ug/l	42.58	63.33	7.940E-04	Pulse	0.30	3
K			2	-1.932	ug/l	-33.95	5,291.06	6.646E-02	Pulse	0.30	3
Ca			2	-0.743	ug/l	-80.42	112.23	1.409E-03	Pulse	0.30	3
Ti			2	0.000	ug/l	---	0.00	0.000E+00	Pulse	0.30	3
V			2	-0.008	ug/l	-153.15	250.00	3.140E-03	Pulse	0.30	3
Cr			2	0.019	ug/l	100.77	403.35	5.062E-03	Pulse	0.30	3
Mn			2	0.005	ug/l	159.34	62.22	7.818E-04	Pulse	0.30	3
Fe			2	0.953	ug/l	4.70	3,728.32	4.683E-02	Pulse	0.30	3
Co			2	0.004	ug/l	13.12	55.56	6.979E-04	Pulse	0.30	3
Ni			2	0.013	ug/l	50.13	38.89	4.886E-04	Pulse	0.30	3
Cu			2	-0.003	ug/l	-115.11	236.67	2.973E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.032	ug/l	302.29	84.45	1.064E-03	Pulse	0.30	3
As			2	0.015	ug/l	108.18	8.67	1.085E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	-10.87	-0.13	-4.987E-07	Pulse	0.30	3
Sn			2	0.392	ug/l	1.57	193.34	7.235E-04	Pulse	0.30	3
Se			3	0.078	ug/l	32.57	4.67	9.248E-05	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,563,535.37	1.16	100.7	Pulse	0.10	3
1	Sc		1,820,798.25	1.50	99.4	Pulse	0.10	3
1	Ge		355,615.20	0.81	98.4	Pulse	0.10	3
1	Rh		1,553,651.70	0.59	99.8	Pulse	0.10	3
1	In		1,489,029.96	1.53	96.6	Pulse	0.10	3
1	Tb		1,733,850.65	2.17	97.3	Pulse	0.10	3
1	Ho		162,474.01	1.15	97.9	Pulse	0.10	3
1	Bi		889,158.95	3.08	96.9	Pulse	0.10	3
2	Sc		79,613.66	1.03	100.3	Pulse	0.30	3
2	Ge		49,443.44	1.71	99.5	Pulse	0.30	3
2	Rh		745,947.33	0.60	98.7	Pulse	0.30	3
2	In		267,215.09	0.94	99.3	Pulse	0.30	3
2	Tb		770,624.29	1.76	100.1	Pulse	0.30	3
2	Ho		71,669.53	1.64	100.1	Pulse	0.30	3
2	Bi		419,216.65	1.83	98.6	Pulse	0.30	3
3	Sc		71,996.92	1.31	100.1	Pulse	0.30	3
3	Ge		50,371.20	1.71	98.2	Pulse	0.30	3
3	Rh		471,659.95	1.14	97.9	Pulse	0.30	3
3	Tb		610,050.29	0.95	97.5	Pulse	0.30	3

Quantitation Report

File Name	019LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 11:28
Sample Name	CRI
Sample Type	LLCCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.533	ug/l	2.35	2,448.24	1.578E-03	Pulse	0.25	3
B			1	27.047	ug/l	0.47	114,847.76	7.403E-02	Pulse	0.15	3
Ca			1	246.714	ug/l	0.59	147,057.30	8.077E-02	Pulse	0.10	3
Sr			1	5.132	ug/l	3.30	94,831.96	6.080E-02	Pulse	0.10	3
Mo			1	1.095	ug/l	10.63	4,107.47	2.633E-03	Pulse	0.10	3
Ag			1	0.483	ug/l	6.31	3,740.66	2.438E-03	Pulse	0.10	3
Sn			1	4.814	ug/l	0.84	24,032.43	1.566E-02	Pulse	0.10	3
Sb			1	2.086	ug/l	3.93	10,718.06	6.227E-03	Pulse	0.10	3
Ba			1	1.003	ug/l	10.89	2,080.24	1.208E-03	Pulse	0.10	3
Tl			1	0.528	ug/l	7.17	5,174.58	5.829E-03	Pulse	0.10	3
Pb			1	0.536	ug/l	14.90	1,836.87	2.069E-03	Pulse	0.10	3
Pb			1	0.530	ug/l	3.59	1,593.50	1.793E-03	Pulse	0.10	3
Pb			1	0.513	ug/l	4.65	7,057.71	7.947E-03	Pulse	0.10	3
Na			2	251.654	ug/l	4.95	175,193.03	2.165E+00	Pulse	0.30	3
Mg			2	262.378	ug/l	5.15	80,738.22	9.978E-01	Pulse	0.30	3
Al			2	25.646	ug/l	0.56	2,804.75	3.461E-02	Pulse	0.30	3
K			2	255.615	ug/l	4.13	60,271.38	7.445E-01	Pulse	0.30	3
Ca			2	287.637	ug/l	4.48	3,379.34	4.176E-02	Pulse	0.30	3
Ti			2	1.239	ug/l	31.35	108.89	1.356E-03	Pulse	0.30	3
V			2	1.061	ug/l	5.51	2,913.67	3.601E-02	Pulse	0.30	3
Cr			2	0.974	ug/l	6.13	3,403.79	4.206E-02	Pulse	0.30	3
Mn			2	0.993	ug/l	4.72	1,692.34	2.090E-02	Pulse	0.30	3
Fe			2	26.632	ug/l	3.59	66,530.26	8.217E-01	Pulse	0.30	3
Co			2	0.517	ug/l	5.06	2,411.35	2.980E-02	Pulse	0.30	3
Ni			2	0.994	ug/l	5.30	1,227.85	1.515E-02	Pulse	0.30	3
Cu			2	2.079	ug/l	5.09	6,656.11	8.226E-02	Pulse	0.30	3
Zn			2	5.009	ug/l	3.11	2,287.99	2.826E-02	Pulse	0.30	3
As			2	0.511	ug/l	7.57	131.67	1.628E-03	Pulse	1.00	3
Cd			2	0.460	ug/l	10.12	358.14	1.316E-03	Pulse	0.30	3
Sn			2	5.066	ug/l	2.83	5,351.13	1.963E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.381	ug/l	5.31	18.00	3.512E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,551,347.31	0.72	99.9	Pulse	0.10	3
1	Sc		1,820,721.22	0.83	99.3	Pulse	0.10	3
1	Ge		356,071.22	0.95	98.5	Pulse	0.10	3
1	Rh		1,559,769.14	0.37	100.2	Pulse	0.10	3
1	In		1,534,315.80	1.82	99.6	Pulse	0.10	3
1	Tb		1,721,182.99	0.49	96.6	Pulse	0.10	3
1	Ho		162,045.73	1.72	97.7	Pulse	0.10	3
1	Bi		888,336.16	1.34	96.8	Pulse	0.10	3
2	Sc		81,043.91	4.85	102.1	Pulse	0.30	3
2	Ge		49,992.50	2.02	100.6	Pulse	0.30	3
2	Rh		758,176.43	3.81	100.4	Pulse	0.30	3
2	In		272,631.09	3.57	101.3	Pulse	0.30	3
2	Tb		774,692.73	3.51	100.6	Pulse	0.30	3
2	Ho		72,225.08	3.90	100.9	Pulse	0.30	3
2	Bi		420,038.44	3.08	98.8	Pulse	0.30	3
3	Sc		72,676.17	1.27	101.1	Pulse	0.30	3
3	Ge		51,246.81	0.80	99.9	Pulse	0.30	3
3	Rh		478,699.11	0.69	99.4	Pulse	0.30	3
3	Tb		620,742.68	0.82	99.2	Pulse	0.30	3

Quantitation Report

File Name	020LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 11:34
Sample Name	CRI
Sample Type	LLCCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.492	ug/l	6.11	2,322.88	1.456E-03	Pulse	0.25	3
B			1	25.593	ug/l	5.35	111,814.10	7.010E-02	Pulse	0.15	3
Ca			1	243.182	ug/l	0.55	151,767.76	7.976E-02	Pulse	0.10	3
Sr			1	4.873	ug/l	2.21	91,492.84	5.774E-02	Pulse	0.10	3
Mo			1	0.970	ug/l	4.53	3,693.97	2.331E-03	Pulse	0.10	3
Ag			1	0.515	ug/l	4.14	3,894.03	2.598E-03	Pulse	0.10	3
Sn			1	5.043	ug/l	1.30	24,570.07	1.639E-02	Pulse	0.10	3
Sb			1	2.106	ug/l	1.79	11,111.75	6.286E-03	Pulse	0.10	3
Ba			1	1.041	ug/l	2.92	2,216.93	1.254E-03	Pulse	0.10	3
Tl			1	0.504	ug/l	3.34	5,091.22	5.562E-03	Pulse	0.10	3
Pb			1	0.535	ug/l	2.72	1,890.22	2.065E-03	Pulse	0.10	3
Pb			1	0.505	ug/l	18.85	1,563.50	1.710E-03	Pulse	0.10	3
Pb			1	0.502	ug/l	5.53	7,117.73	7.779E-03	Pulse	0.10	3
Na			2	252.157	ug/l	1.40	175,511.53	2.169E+00	Pulse	0.30	3
Mg			2	258.860	ug/l	1.67	79,649.71	9.844E-01	Pulse	0.30	3
Al			2	25.961	ug/l	5.21	2,835.87	3.503E-02	Pulse	0.30	3
K			2	253.923	ug/l	2.56	59,883.07	7.400E-01	Pulse	0.30	3
Ca			2	292.253	ug/l	3.95	3,431.57	4.240E-02	Pulse	0.30	3
Ti			2	0.942	ug/l	15.09	83.34	1.031E-03	Pulse	0.30	3
V			2	1.058	ug/l	1.97	2,904.78	3.590E-02	Pulse	0.30	3
Cr			2	0.956	ug/l	0.75	3,348.22	4.138E-02	Pulse	0.30	3
Mn			2	0.976	ug/l	5.50	1,664.57	2.056E-02	Pulse	0.30	3
Fe			2	26.245	ug/l	1.26	65,541.12	8.100E-01	Pulse	0.30	3
Co			2	0.504	ug/l	2.95	2,352.46	2.907E-02	Pulse	0.30	3
Ni			2	0.916	ug/l	5.93	1,132.28	1.399E-02	Pulse	0.30	3
Cu			2	1.953	ug/l	2.65	6,270.36	7.748E-02	Pulse	0.30	3
Zn			2	5.001	ug/l	6.99	2,282.44	2.822E-02	Pulse	0.30	3
As			2	0.485	ug/l	22.16	125.67	1.551E-03	Pulse	1.00	3
Cd			2	0.539	ug/l	9.04	418.15	1.544E-03	Pulse	0.30	3
Sn			2	5.218	ug/l	3.11	5,481.20	2.024E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.458	ug/l	13.57	21.67	4.168E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,595,706.26	1.09	102.8	Pulse	0.10	3
1	Sc		1,902,780.02	0.11	103.8	Pulse	0.10	3
1	Ge		354,085.58	1.27	97.9	Pulse	0.10	3
1	Rh		1,584,645.55	1.06	101.8	Pulse	0.10	3
1	In		1,499,274.82	0.41	97.3	Pulse	0.10	3
1	Tb		1,767,556.17	0.48	99.2	Pulse	0.10	3
1	Ho		161,237.90	1.98	97.2	Pulse	0.10	3
1	Bi		915,283.08	0.89	99.8	Pulse	0.10	3
2	Sc		80,915.43	1.28	101.9	Pulse	0.30	3
2	Ge		49,848.30	1.99	100.3	Pulse	0.30	3
2	Rh		753,776.24	1.76	99.8	Pulse	0.30	3
2	In		270,710.26	1.24	100.6	Pulse	0.30	3
2	Tb		774,379.36	1.82	100.6	Pulse	0.30	3
2	Ho		71,949.07	1.69	100.5	Pulse	0.30	3
2	Bi		422,440.58	1.56	99.4	Pulse	0.30	3
3	Sc		73,546.03	0.57	102.3	Pulse	0.30	3
3	Ge		51,930.37	1.34	101.2	Pulse	0.30	3
3	Rh		477,944.67	0.63	99.3	Pulse	0.30	3
3	Tb		618,820.88	0.43	98.9	Pulse	0.30	3

Quantitation Report

File Name	021ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 11:39
Sample Name	ICSA
Sample Type	ICSA
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-7133.59	5.33	4.217E-06	Pulse	0.25	3
B			1	2.735	ug/l	1.89	10,410.72	8.314E-03	Pulse	0.15	3
Ca			1	99459.059	ug/l	0.71	43,950,874.35	2.838E+01	Analog	0.10	3
Sr			1	2109.113	ug/l	1.10	30,604,661.21	2.490E+01	Analog	0.10	3
Mo			1	2160.427	ug/l	0.98	6,383,319.70	5.193E+00	Analog	0.10	3
Ag			1	0.027	ug/l	41.23	190.01	1.494E-04	Pulse	0.10	3
Sn			1	1955.913	ug/l	0.88	7,879,189.47	6.193E+00	Analog	0.10	3
Sb			1	0.103	ug/l	14.13	486.69	3.155E-04	Pulse	0.10	3
Ba			1	0.224	ug/l	15.48	423.36	2.744E-04	Pulse	0.10	3
Tl			1	0.003	ug/l	132.42	56.67	7.802E-05	Pulse	0.10	3
Pb			1	0.133	ug/l	5.51	393.35	5.399E-04	Pulse	0.10	3
Pb			1	0.107	ug/l	17.65	283.35	3.882E-04	Pulse	0.10	3
Pb			1	0.119	ug/l	12.87	1,420.09	1.948E-03	Pulse	0.10	3
Na			2	96424.067	ug/l	1.64	56,762,091.08	8.023E+02	Analog	0.30	3
Mg			2	97099.171	ug/l	0.70	26,118,485.07	3.691E+02	Analog	0.30	3
Al			2	99755.644	ug/l	0.28	9,453,763.79	1.336E+02	Analog	0.30	3
K			2	101601.503	ug/l	0.81	18,933,605.36	2.675E+02	Analog	0.30	3
Ca			2	107621.969	ug/l	0.31	1,065,541.21	1.506E+01	Pulse	0.30	3
Ti			2	1848.084	ug/l	0.71	143,184.69	2.023E+00	Pulse	0.30	3
V			2	0.033	ug/l	32.28	311.12	4.395E-03	Pulse	0.30	3
Cr			2	0.215	ug/l	13.18	896.70	1.268E-02	Pulse	0.30	3
Mn			2	0.401	ug/l	9.98	625.58	8.842E-03	Pulse	0.30	3
Fe			2	94797.089	ug/l	0.85	202,408,551.96	2.861E+03	Analog	0.30	3
Co			2	0.104	ug/l	10.34	454.46	6.416E-03	Pulse	0.30	3
Ni			2	0.824	ug/l	3.79	892.26	1.260E-02	Pulse	0.30	3
Cu			2	0.463	ug/l	4.70	1,467.87	2.074E-02	Pulse	0.30	3
Zn			2	7.341	ug/l	4.13	2,902.56	4.100E-02	Pulse	0.30	3
As			2	0.073	ug/l	7.30	20.33	2.874E-04	Pulse	1.00	3
Cd			2	0.434	ug/l	9.01	287.56	1.243E-03	Pulse	0.30	3
Sn			2	1886.030	ug/l	1.22	1,766,292.68	7.628E+00	Pulse	0.30	3
Se			3	0.032	ug/l	173.60	2.33	5.358E-05	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,252,313.78	1.75	80.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,548,682.53	0.42	84.5	Pulse	0.10	3
1	Ge		300,127.01	1.06	83.0	Pulse	0.10	3
1	Rh		1,229,155.95	0.14	79.0	Pulse	0.10	3
1	In		1,272,274.69	0.32	82.5	Pulse	0.10	3
1	Tb		1,541,751.38	0.75	86.5	Pulse	0.10	3
1	Ho		143,313.20	1.06	86.4	Pulse	0.10	3
1	Bi		728,951.84	1.34	79.5	Pulse	0.10	3
2	Sc		70,760.49	1.77	89.1	Pulse	0.30	3
2	Ge		43,155.61	0.70	86.8	Pulse	0.30	3
2	Rh		606,418.53	1.13	80.3	Pulse	0.30	3
2	In		231,549.55	1.01	86.0	Pulse	0.30	3
2	Tb		691,655.92	1.41	89.8	Pulse	0.30	3
2	Ho		64,398.35	2.72	90.0	Pulse	0.30	3
2	Bi		344,003.80	1.36	80.9	Pulse	0.30	3
3	Sc		63,583.17	1.22	88.4	Pulse	0.30	3
3	Ge		43,629.39	0.49	85.1	Pulse	0.30	3
3	Rh		381,388.38	0.52	79.2	Pulse	0.30	3
3	Tb		542,289.77	0.49	86.6	Pulse	0.30	3

Quantitation Report

File Name	022ICSB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 11:44
Sample Name	ICSAB
Sample Type	ICSB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	120.86	9.33	7.356E-06	Pulse	0.25	3
B			1	50.475	ug/l	1.11	174,705.56	1.374E-01	Pulse	0.15	3
Ca			1	99434.712	ug/l	0.30	44,410,709.34	2.837E+01	Analog	0.10	3
Sr			1	2188.344	ug/l	1.22	31,877,609.53	2.583E+01	Analog	0.10	3
Mo			1	2176.655	ug/l	1.71	6,456,103.44	5.232E+00	Analog	0.10	3
Ag			1	20.315	ug/l	0.54	131,115.46	1.019E-01	Pulse	0.10	3
Sn			1	1976.331	ug/l	0.94	8,051,549.05	6.258E+00	Analog	0.10	3
Sb			1	0.173	ug/l	11.09	830.06	5.265E-04	Pulse	0.10	3
Ba			1	0.300	ug/l	18.42	576.70	3.656E-04	Pulse	0.10	3
Tl			1	0.003	ug/l	25.77	56.67	7.680E-05	Pulse	0.10	3
Pb			1	0.088	ug/l	9.83	273.34	3.704E-04	Pulse	0.10	3
Pb			1	0.061	ug/l	14.21	173.34	2.350E-04	Pulse	0.10	3
Pb			1	0.085	ug/l	7.66	1,050.06	1.423E-03	Pulse	0.10	3
Na			2	96164.737	ug/l	1.64	56,353,692.21	8.001E+02	Analog	0.30	3
Mg			2	95719.534	ug/l	0.51	25,630,566.76	3.639E+02	Analog	0.30	3
Al			2	98332.483	ug/l	1.89	9,276,447.41	1.317E+02	Analog	0.30	3
K			2	101219.923	ug/l	0.82	18,773,488.70	2.665E+02	Analog	0.30	3
Ca			2	107894.559	ug/l	0.88	1,063,308.43	1.510E+01	Pulse	0.30	3
Ti			2	1825.317	ug/l	2.04	140,761.25	1.999E+00	Pulse	0.30	3
V			2	21.152	ug/l	1.78	46,052.71	6.537E-01	Pulse	0.30	3
Cr			2	20.420	ug/l	0.80	56,023.68	7.954E-01	Pulse	0.30	3
Mn			2	20.188	ug/l	0.80	29,013.77	4.119E-01	Pulse	0.30	3
Fe			2	94088.634	ug/l	0.62	199,986,134.28	2.839E+03	Analog	0.30	3
Co			2	19.680	ug/l	0.51	78,612.11	1.116E+00	Pulse	0.30	3
Ni			2	19.041	ug/l	0.92	20,060.22	2.848E-01	Pulse	0.30	3
Cu			2	19.018	ug/l	0.96	51,229.28	7.274E-01	Pulse	0.30	3
Zn			2	20.673	ug/l	2.25	8,017.96	1.139E-01	Pulse	0.30	3
As			2	19.812	ug/l	2.59	4,284.01	6.083E-02	Pulse	1.00	3
Cd			2	18.680	ug/l	0.62	12,270.77	5.351E-02	Pulse	0.30	3
Sn			2	1896.247	ug/l	1.05	1,758,635.00	7.669E+00	Pulse	0.30	3
Se			3	19.935	ug/l	6.22	760.69	1.702E-02	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,271,981.74	0.76	81.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,565,302.01	0.74	85.4	Pulse	0.10	3
1	Ge		305,059.63	0.33	84.4	Pulse	0.10	3
1	Rh		1,233,944.96	0.48	79.3	Pulse	0.10	3
1	In		1,286,701.59	0.56	83.5	Pulse	0.10	3
1	Tb		1,576,329.77	0.65	88.5	Pulse	0.10	3
1	Ho		147,490.30	0.23	88.9	Pulse	0.10	3
1	Bi		737,730.51	0.34	80.4	Pulse	0.10	3
2	Sc		70,434.66	1.35	88.7	Pulse	0.30	3
2	Ge		43,206.82	0.33	86.9	Pulse	0.30	3
2	Rh		606,328.60	0.89	80.3	Pulse	0.30	3
2	In		229,300.60	0.99	85.2	Pulse	0.30	3
2	Tb		689,640.70	1.63	89.6	Pulse	0.30	3
2	Ho		64,374.80	1.09	89.9	Pulse	0.30	3
2	Bi		345,040.03	1.07	81.2	Pulse	0.30	3
3	Sc		64,938.09	0.83	90.3	Pulse	0.30	3
3	Ge		44,667.17	1.21	87.1	Pulse	0.30	3
3	Rh		384,067.81	0.80	79.8	Pulse	0.30	3
3	Tb		546,094.89	0.40	87.2	Pulse	0.30	3

Quantitation Report

File Name	023ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 11:50
Sample Name	ICSA
Sample Type	ICSA
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-212.14	4.00	2.944E-06	Pulse	0.25	3
B			1	2.058	ug/l	0.95	8,796.23	6.484E-03	Pulse	0.15	3
Ca			1	97778.256	ug/l	1.58	46,846,522.63	2.790E+01	Analog	0.10	3
Sr			1	2149.672	ug/l	0.70	32,895,618.67	2.538E+01	Analog	0.10	3
Mo			1	2164.552	ug/l	0.23	6,744,392.81	5.203E+00	Analog	0.10	3
Ag			1	0.009	ug/l	82.06	83.34	6.211E-05	Pulse	0.10	3
Sn			1	1960.968	ug/l	0.18	8,328,554.67	6.209E+00	Analog	0.10	3
Sb			1	0.196	ug/l	1.92	973.40	5.932E-04	Pulse	0.10	3
Ba			1	0.249	ug/l	7.73	500.03	3.046E-04	Pulse	0.10	3
Tl			1	0.003	ug/l	42.40	63.33	8.307E-05	Pulse	0.10	3
Pb			1	0.067	ug/l	17.65	220.01	2.883E-04	Pulse	0.10	3
Pb			1	0.090	ug/l	10.23	253.34	3.323E-04	Pulse	0.10	3
Pb			1	0.074	ug/l	2.98	963.38	1.263E-03	Pulse	0.10	3
Na			2	94885.936	ug/l	0.79	58,718,904.33	7.895E+02	Analog	0.30	3
Mg			2	94053.299	ug/l	1.57	26,596,345.05	3.576E+02	Analog	0.30	3
Al			2	95673.201	ug/l	0.44	9,530,426.29	1.281E+02	Analog	0.30	3
K			2	100583.024	ug/l	1.81	19,698,562.00	2.649E+02	Analog	0.30	3
Ca			2	105442.161	ug/l	0.64	1,097,413.57	1.475E+01	Pulse	0.30	3
Ti			2	1786.104	ug/l	0.48	145,458.82	1.956E+00	Pulse	0.30	3
V			2	0.016	ug/l	114.37	288.89	3.881E-03	Pulse	0.30	3
Cr			2	0.247	ug/l	9.86	1,035.61	1.392E-02	Pulse	0.30	3
Mn			2	0.253	ug/l	7.45	433.35	5.823E-03	Pulse	0.30	3
Fe			2	90936.569	ug/l	0.48	204,096,649.67	2.744E+03	Analog	0.30	3
Co			2	0.350	ug/l	6.34	1,511.21	2.032E-02	Pulse	0.30	3
Ni			2	0.792	ug/l	4.67	902.26	1.213E-02	Pulse	0.30	3
Cu			2	0.106	ug/l	5.22	530.02	7.127E-03	Pulse	0.30	3
Zn			2	0.453	ug/l	11.59	250.00	3.363E-03	Pulse	0.30	3
As			2	0.064	ug/l	37.95	19.33	2.600E-04	Pulse	1.00	3
Cd			2	0.146	ug/l	296.28	96.81	4.182E-04	Pulse	0.30	3
Sn			2	1875.209	ug/l	1.11	1,789,390.69	7.584E+00	Pulse	0.30	3
Se			3	0.127	ug/l	42.28	6.33	1.342E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,356,665.02	1.50	87.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,679,158.93	0.31	91.6	Pulse	0.10	3
1	Ge		321,270.35	1.14	88.9	Pulse	0.10	3
1	Rh		1,296,206.52	0.43	83.3	Pulse	0.10	3
1	In		1,341,397.43	0.52	87.0	Pulse	0.10	3
1	Tb		1,641,017.11	0.58	92.1	Pulse	0.10	3
1	Ho		155,057.52	1.71	93.5	Pulse	0.10	3
1	Bi		762,458.84	1.00	83.1	Pulse	0.10	3
2	Sc		74,379.38	1.25	93.7	Pulse	0.30	3
2	Ge		45,959.30	2.73	92.5	Pulse	0.30	3
2	Rh		629,012.89	1.46	83.3	Pulse	0.30	3
2	In		235,934.01	1.00	87.6	Pulse	0.30	3
2	Tb		702,664.64	1.31	91.2	Pulse	0.30	3
2	Ho		66,062.28	1.49	92.3	Pulse	0.30	3
2	Bi		349,352.17	2.02	82.2	Pulse	0.30	3
3	Sc		69,149.43	0.80	96.2	Pulse	0.30	3
3	Ge		47,350.58	1.76	92.3	Pulse	0.30	3
3	Rh		403,247.32	0.58	83.7	Pulse	0.30	3
3	Tb		560,809.67	0.86	89.6	Pulse	0.30	3

Quantitation Report

File Name	024SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 11:55
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	35.21	18.67	1.309E-05	Pulse	0.25	3
B			1	1.225	ug/l	3.89	6,025.84	4.234E-03	Pulse	0.15	3
Ca			1	2.514	ug/l	25.32	19,273.88	1.112E-02	Pulse	0.10	3
Sr			1	0.277	ug/l	2.97	5,374.58	3.482E-03	Pulse	0.10	3
Mo			1	0.806	ug/l	7.56	2,993.78	1.939E-03	Pulse	0.10	3
Ag			1	-0.001	ug/l	-247.56	20.00	1.300E-05	Pulse	0.10	3
Sn			1	0.551	ug/l	3.89	3,343.86	2.167E-03	Pulse	0.10	3
Sb			1	0.019	ug/l	46.61	116.67	6.609E-05	Pulse	0.10	3
Ba			1	0.008	ug/l	35.49	26.67	1.515E-05	Pulse	0.10	3
Tl			1	0.001	ug/l	239.07	56.67	6.198E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-397.20	30.00	3.249E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-1304.65	30.00	3.178E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	828.41	123.33	1.328E-04	Pulse	0.10	3
Na			2	13.223	ug/l	8.44	13,141.77	1.813E-01	Pulse	0.30	3
Mg			2	9.707	ug/l	9.09	2,701.40	3.726E-02	Pulse	0.30	3
Al			2	9.382	ug/l	13.17	930.04	1.283E-02	Pulse	0.30	3
K			2	6.745	ug/l	31.33	6,473.79	8.930E-02	Pulse	0.30	3
Ca			2	7.809	ug/l	42.28	188.89	2.606E-03	Pulse	0.30	3
Ti			2	0.308	ug/l	43.84	24.45	3.372E-04	Pulse	0.30	3
V			2	-0.005	ug/l	-294.80	233.34	3.219E-03	Pulse	0.30	3
Cr			2	0.009	ug/l	116.15	340.01	4.690E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	-72388.42	48.89	6.744E-04	Pulse	0.30	3
Fe			2	12.511	ug/l	7.71	28,676.59	3.956E-01	Pulse	0.30	3
Co			2	-0.001	ug/l	-223.91	31.11	4.292E-04	Pulse	0.30	3
Ni			2	0.004	ug/l	119.30	25.56	3.525E-04	Pulse	0.30	3
Cu			2	0.019	ug/l	76.12	275.56	3.801E-03	Pulse	0.30	3
Zn			2	-0.048	ug/l	-53.91	45.56	6.285E-04	Pulse	0.30	3
As			2	0.004	ug/l	430.79	5.33	7.356E-05	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.005	ug/l	144.53	3.47	1.358E-05	Pulse	0.30	3
Sn			2	0.839	ug/l	4.90	652.25	2.530E-03	Pulse	0.30	3
Se			3	0.038	ug/l	60.71	3.00	5.863E-05	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,423,150.51	1.07	91.7	Pulse	0.10	3
1	Sc		1,734,285.50	1.43	94.6	Pulse	0.10	3
1	Ge		346,806.83	1.07	95.9	Pulse	0.10	3
1	Rh		1,543,341.59	1.32	99.2	Pulse	0.10	3
1	In		1,543,154.90	0.91	100.1	Pulse	0.10	3
1	Tb		1,762,545.07	1.21	98.9	Pulse	0.10	3
1	Ho		168,514.68	0.36	101.6	Pulse	0.10	3
1	Bi		925,680.01	3.80	100.9	Pulse	0.10	3
2	Sc		72,490.65	0.04	91.3	Pulse	0.30	3
2	Ge		47,649.35	1.93	95.9	Pulse	0.30	3
2	Rh		730,445.68	1.35	96.7	Pulse	0.30	3
2	In		257,920.59	1.47	95.8	Pulse	0.30	3
2	Tb		759,507.70	1.87	98.6	Pulse	0.30	3
2	Ho		71,504.26	1.87	99.9	Pulse	0.30	3
2	Bi		421,513.23	1.75	99.2	Pulse	0.30	3
3	Sc		71,935.85	0.40	100.1	Pulse	0.30	3
3	Ge		51,251.25	1.14	99.9	Pulse	0.30	3
3	Rh		476,188.98	0.17	98.9	Pulse	0.30	3
3	Tb		624,196.82	0.81	99.7	Pulse	0.30	3

Quantitation Report

File Name	025_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:00
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.392	ug/l	2.23	213,009.95	1.428E-01	Pulse	0.25	3
B			1	95.829	ug/l	4.36	387,684.07	2.599E-01	Pulse	0.15	3
Ca			1	4937.298	ug/l	0.37	2,594,489.34	1.419E+00	Pulse	0.10	3
Sr			1	52.332	ug/l	1.31	955,916.29	6.180E-01	Pulse	0.10	3
Mo			1	52.882	ug/l	0.41	196,626.94	1.271E-01	Pulse	0.10	3
Ag			1	48.031	ug/l	2.15	378,387.21	2.409E-01	Pulse	0.10	3
Sn			1	51.555	ug/l	1.33	257,089.97	1.636E-01	Pulse	0.10	3
Sb			1	51.827	ug/l	2.22	281,661.67	1.545E-01	Pulse	0.10	3
Ba			1	49.371	ug/l	2.61	107,921.79	5.920E-02	Pulse	0.10	3
Tl			1	51.580	ug/l	3.04	506,385.42	5.644E-01	Pulse	0.10	3
Pb			1	51.607	ug/l	1.30	175,916.29	1.960E-01	Pulse	0.10	3
Pb			1	51.162	ug/l	1.02	152,656.57	1.700E-01	Pulse	0.10	3
Pb			1	50.862	ug/l	0.54	696,138.90	7.754E-01	Pulse	0.10	3
Na			2	4900.501	ug/l	1.47	3,108,305.29	4.084E+01	Pulse	0.30	3
Mg			2	4941.025	ug/l	1.11	1,429,646.23	1.878E+01	Pulse	0.30	3
Al			2	4792.086	ug/l	1.32	488,496.37	6.418E+00	Pulse	0.30	3
K			2	4955.550	ug/l	1.20	998,331.63	1.312E+01	Pulse	0.30	3
Ca			2	5205.136	ug/l	0.56	55,545.73	7.298E-01	Pulse	0.30	3
Ti			2	50.294	ug/l	1.98	4,190.67	5.507E-02	Pulse	0.30	3
V			2	52.497	ug/l	0.47	123,124.56	1.618E+00	Pulse	0.30	3
Cr			2	50.281	ug/l	0.35	148,595.34	1.952E+00	Pulse	0.30	3
Mn			2	49.393	ug/l	0.50	76,632.86	1.007E+00	Pulse	0.30	3
Fe			2	5089.021	ug/l	1.50	11,688,714.81	1.536E+02	Analog	0.30	3
Co			2	49.753	ug/l	1.26	214,695.11	2.821E+00	Pulse	0.30	3
Ni			2	49.175	ug/l	1.19	55,949.61	7.352E-01	Pulse	0.30	3
Cu			2	49.583	ug/l	1.33	143,955.56	1.891E+00	Pulse	0.30	3
Zn			2	50.457	ug/l	0.36	21,055.16	2.766E-01	Pulse	0.30	3
As			2	52.633	ug/l	0.85	12,290.52	1.615E-01	Pulse	1.00	3
Cd			2	49.771	ug/l	1.15	36,577.99	1.426E-01	Pulse	0.30	3
Sn			2	52.487	ug/l	0.52	54,245.89	2.114E-01	Pulse	0.30	3
Se			3	200.167	ug/l	4.34	8,942.27	1.707E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,492,152.19	1.76	96.1	Pulse	0.10	3
1	Sc		1,828,857.89	0.74	99.8	Pulse	0.10	3
1	Ge		368,371.06	0.62	101.9	Pulse	0.10	3

Quantitation Report

1	Rh		1,546,750.86	1.37	99.4	Pulse	0.10	3
1	In		1,570,863.20	1.02	101.9	Pulse	0.10	3
1	Tb		1,823,177.52	0.49	102.3	Pulse	0.10	3
1	Ho		170,523.33	1.27	102.8	Pulse	0.10	3
1	Bi		897,696.29	3.29	97.9	Pulse	0.10	3
2	Sc		76,117.77	1.91	95.9	Pulse	0.30	3
2	Ge		48,682.88	1.77	97.9	Pulse	0.30	3
2	Rh		722,126.45	0.91	95.6	Pulse	0.30	3
2	In		256,550.82	1.83	95.3	Pulse	0.30	3
2	Tb		763,393.35	0.98	99.1	Pulse	0.30	3
2	Ho		71,689.90	1.93	100.1	Pulse	0.30	3
2	Bi		403,852.15	1.97	95.0	Pulse	0.30	3
3	Sc		75,735.88	1.23	105.3	Pulse	0.30	3
3	Ge		52,401.00	0.77	102.2	Pulse	0.30	3
3	Rh		476,116.25	0.80	98.9	Pulse	0.30	3
3	Tb		632,532.91	0.08	101.0	Pulse	0.30	3

Quantitation Report

File Name	026_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:05
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	25.66	33.33	2.112E-05	Pulse	0.25	3
B			1	2.343	ug/l	4.13	11,475.92	7.254E-03	Pulse	0.15	3
Ca			1	-8.077	ug/l	-3.23	15,675.96	8.094E-03	Pulse	0.10	3
Sr			1	0.008	ug/l	21.06	506.69	3.095E-04	Pulse	0.10	3
Mo			1	0.138	ug/l	32.21	543.37	3.322E-04	Pulse	0.10	3
Ag			1	0.005	ug/l	11.94	66.67	4.126E-05	Pulse	0.10	3
Sn			1	0.108	ug/l	13.84	1,233.45	7.640E-04	Pulse	0.10	3
Sb			1	0.318	ug/l	2.95	1,790.19	9.575E-04	Pulse	0.10	3
Ba			1	0.006	ug/l	88.12	23.33	1.239E-05	Pulse	0.10	3
Tl			1	0.014	ug/l	12.28	193.34	2.049E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	21.92	63.33	6.724E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	204.47	43.33	4.617E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	38.35	226.67	2.404E-04	Pulse	0.10	3
Na			2	3.314	ug/l	4.04	7,800.00	9.885E-02	Pulse	0.30	3
Mg			2	0.759	ug/l	13.38	256.67	3.251E-03	Pulse	0.30	3
Al			2	0.719	ug/l	24.79	96.67	1.227E-03	Pulse	0.30	3
K			2	-0.881	ug/l	-84.97	5,464.46	6.923E-02	Pulse	0.30	3
Ca			2	-1.848	ug/l	-63.33	98.89	1.255E-03	Pulse	0.30	3
Ti			2	0.103	ug/l	22.81	8.89	1.129E-04	Pulse	0.30	3
V			2	-0.009	ug/l	-76.68	244.45	3.096E-03	Pulse	0.30	3
Cr			2	0.003	ug/l	492.39	350.01	4.440E-03	Pulse	0.30	3
Mn			2	0.006	ug/l	111.91	62.22	7.892E-04	Pulse	0.30	3
Fe			2	1.325	ug/l	4.05	4,580.81	5.804E-02	Pulse	0.30	3
Co			2	0.002	ug/l	122.16	48.89	6.181E-04	Pulse	0.30	3
Ni			2	0.010	ug/l	46.52	34.44	4.366E-04	Pulse	0.30	3
Cu			2	0.013	ug/l	46.06	282.23	3.578E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.071	ug/l	66.92	101.11	1.280E-03	Pulse	0.30	3
As			2	0.009	ug/l	85.64	7.00	8.882E-05	Pulse	1.00	3
Cd			2	0.006	ug/l	1.25	4.70	1.750E-05	Pulse	0.30	3
Sn			2	0.519	ug/l	7.50	332.23	1.238E-03	Pulse	0.30	3
Se			3	0.106	ug/l	51.37	6.33	1.164E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,582,754.47	1.99	102.0	Pulse	0.10	3
1	Sc		1,936,622.05	0.22	105.7	Pulse	0.10	3
1	Ge		378,293.42	1.04	104.6	Pulse	0.10	3
1	Rh		1,637,630.13	0.74	105.2	Pulse	0.10	3
1	In		1,614,777.69	1.60	104.8	Pulse	0.10	3
1	Tb		1,870,522.27	2.59	105.0	Pulse	0.10	3
1	Ho		171,291.45	3.76	103.2	Pulse	0.10	3
1	Bi		942,690.79	1.61	102.8	Pulse	0.10	3
2	Sc		78,914.23	1.42	99.4	Pulse	0.30	3
2	Ge		50,912.28	0.82	102.4	Pulse	0.30	3
2	Rh		768,293.34	1.38	101.7	Pulse	0.30	3
2	In		268,635.80	0.90	99.8	Pulse	0.30	3
2	Tb		770,662.00	2.10	100.1	Pulse	0.30	3
2	Ho		72,273.33	2.30	101.0	Pulse	0.30	3
2	Bi		422,604.04	1.30	99.4	Pulse	0.30	3
3	Sc		77,486.38	0.29	107.8	Pulse	0.30	3
3	Ge		54,419.96	0.50	106.1	Pulse	0.30	3
3	Rh		500,167.90	0.57	103.9	Pulse	0.30	3
3	Tb		635,680.95	0.41	101.6	Pulse	0.30	3

Quantitation Report

File Name	027SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:09
Sample Name	jc86048-10 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.727	ug/l	5.92	1,776.13	1.077E-03	Pulse	0.25	3
B			1	30.435	ug/l	4.57	69,315.62	4.205E-02	Pulse	0.15	3
Ca			1	2925.072	ug/l	1.41	910,522.12	4.276E-01	Pulse	0.10	3
Sr			1	23.008	ug/l	3.95	217,964.67	1.360E-01	Pulse	0.10	3
Mo			1	1.563	ug/l	9.07	3,010.45	1.878E-03	Pulse	0.10	3
Ag			1	0.049	ug/l	17.94	220.01	1.385E-04	Pulse	0.10	3
Sn			1	1.561	ug/l	7.43	4,597.65	2.894E-03	Pulse	0.10	3
Sb			1	0.797	ug/l	1.45	2,310.27	1.197E-03	Pulse	0.10	3
Ba			1	135.626	ug/l	1.58	156,859.25	8.131E-02	Pulse	0.10	3
Tl			1	0.223	ug/l	0.61	1,190.10	1.265E-03	Pulse	0.10	3
Pb			1	14.144	ug/l	1.61	25,299.45	2.689E-02	Pulse	0.10	3
Pb			1	13.366	ug/l	2.52	20,931.42	2.224E-02	Pulse	0.10	3
Pb			1	13.849	ug/l	1.80	99,447.79	1.057E-01	Pulse	0.10	3
Na			2	5154.924	ug/l	0.20	1,770,841.00	2.152E+01	Pulse	0.30	3
Mg			2	5014.327	ug/l	0.64	784,467.14	9.532E+00	Pulse	0.30	3
Al			2	18249.592	ug/l	0.81	1,005,786.84	1.222E+01	Pulse	0.30	3
K			2	4062.796	ug/l	1.23	446,000.80	5.419E+00	Pulse	0.30	3
Ca			2	3074.389	ug/l	0.92	17,827.06	2.166E-01	Pulse	0.30	3
Ti			2	460.710	ug/l	0.32	20,758.96	2.522E-01	Pulse	0.30	3
V			2	32.248	ug/l	0.91	41,086.22	4.991E-01	Pulse	0.30	3
Cr			2	25.894	ug/l	0.58	41,641.27	5.059E-01	Pulse	0.30	3
Mn			2	157.612	ug/l	1.49	132,172.21	1.606E+00	Pulse	0.30	3
Fe			2	20121.885	ug/l	0.74	24,989,330.12	3.036E+02	Analog	0.30	3
Co			2	8.194	ug/l	1.82	19,154.49	2.327E-01	Pulse	0.30	3
Ni			2	19.517	ug/l	2.08	12,024.21	1.461E-01	Pulse	0.30	3
Cu			2	22.363	ug/l	0.99	35,304.07	4.289E-01	Pulse	0.30	3
Zn			2	47.882	ug/l	0.93	10,839.92	1.317E-01	Pulse	0.30	3
As			2	6.416	ug/l	4.30	815.03	9.901E-03	Pulse	1.00	3
Cd			2	0.260	ug/l	37.17	98.27	3.731E-04	Pulse	0.30	3
Sn			2	2.297	ug/l	2.74	993.38	3.783E-03	Pulse	0.30	3
Se			3	2.059	ug/l	10.02	52.33	9.037E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,649,654.44	2.92	106.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,129,405.54	1.19	116.2	Pulse	0.10	3
1	Ge		394,693.02	2.76	109.2	Pulse	0.10	3
1	Rh		1,602,860.29	1.51	103.0	Pulse	0.10	3
1	In		1,588,356.42	0.79	103.1	Pulse	0.10	3
1	Tb		1,929,489.24	1.61	108.3	Pulse	0.10	3
1	Ho		180,954.50	2.26	109.1	Pulse	0.10	3
1	Bi		940,913.89	2.30	102.6	Pulse	0.10	3
2	Sc		82,306.69	1.72	103.7	Pulse	0.30	3
2	Ge		53,011.23	1.50	106.6	Pulse	0.30	3
2	Rh		756,538.43	0.96	100.1	Pulse	0.30	3
2	In		262,591.76	1.27	97.5	Pulse	0.30	3
2	Tb		781,925.73	1.38	101.5	Pulse	0.30	3
2	Ho		75,455.95	1.53	105.4	Pulse	0.30	3
2	Bi		414,006.50	2.09	97.4	Pulse	0.30	3
3	Sc		82,368.71	1.16	114.6	Pulse	0.30	3
3	Ge		57,925.34	1.88	112.9	Pulse	0.30	3
3	Rh		498,158.70	0.83	103.4	Pulse	0.30	3
3	Tb		649,795.03	0.79	103.8	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:14
Sample Name	jc86126-8
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.780	ug/l	1.48	1,942.83	1.155E-03	Pulse	0.25	3
B			1	10.291	ug/l	5.27	24,926.66	1.483E-02	Pulse	0.15	3
Ca			1	2569.244	ug/l	0.72	814,389.28	3.768E-01	Pulse	0.10	3
Sr			1	32.164	ug/l	3.99	315,341.01	1.901E-01	Pulse	0.10	3
Mo			1	2.532	ug/l	1.33	5,051.12	3.043E-03	Pulse	0.10	3
Ag			1	0.064	ug/l	3.32	290.01	1.759E-04	Pulse	0.10	3
Sn			1	1.638	ug/l	7.56	4,967.76	3.016E-03	Pulse	0.10	3
Sb			1	0.472	ug/l	9.16	1,390.13	7.135E-04	Pulse	0.10	3
Ba			1	31.145	ug/l	1.07	36,381.15	1.868E-02	Pulse	0.10	3
Tl			1	0.160	ug/l	10.31	886.73	9.242E-04	Pulse	0.10	3
Pb			1	14.745	ug/l	3.96	26,912.91	2.803E-02	Pulse	0.10	3
Pb			1	13.867	ug/l	4.08	22,170.21	2.307E-02	Pulse	0.10	3
Pb			1	14.264	ug/l	3.08	104,556.61	1.088E-01	Pulse	0.10	3
Na			2	4653.400	ug/l	0.29	1,652,314.52	1.943E+01	Pulse	0.30	3
Mg			2	1493.736	ug/l	0.74	241,493.45	2.840E+00	Pulse	0.30	3
Al			2	8044.513	ug/l	0.54	458,160.68	5.387E+00	Pulse	0.30	3
K			2	1027.244	ug/l	1.65	121,087.32	1.424E+00	Pulse	0.30	3
Ca			2	2740.256	ug/l	1.88	16,429.81	1.932E-01	Pulse	0.30	3
Ti			2	116.341	ug/l	2.69	5,416.70	6.369E-02	Pulse	0.30	3
V			2	37.249	ug/l	0.84	48,989.58	5.760E-01	Pulse	0.30	3
Cr			2	73.576	ug/l	1.34	121,578.60	1.430E+00	Pulse	0.30	3
Mn			2	325.071	ug/l	1.55	281,643.91	3.311E+00	Pulse	0.30	3
Fe			2	13731.878	ug/l	0.79	17,621,850.41	2.072E+02	Analog	0.30	3
Co			2	7.499	ug/l	0.95	18,117.52	2.130E-01	Pulse	0.30	3
Ni			2	29.947	ug/l	0.81	19,054.38	2.240E-01	Pulse	0.30	3
Cu			2	15.560	ug/l	1.01	25,460.32	2.994E-01	Pulse	0.30	3
Zn			2	37.237	ug/l	1.36	8,727.30	1.026E-01	Pulse	0.30	3
As			2	5.334	ug/l	1.81	701.02	8.242E-03	Pulse	1.00	3
Cd			2	0.323	ug/l	7.34	122.62	4.620E-04	Pulse	0.30	3
Sn			2	2.375	ug/l	4.95	1,045.61	3.940E-03	Pulse	0.30	3
Se			3	2.434	ug/l	15.16	62.33	1.064E-03	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,682,236.38	2.71	108.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,161,286.74	0.20	117.9	Pulse	0.10	3
1	Ge		398,710.03	2.84	110.3	Pulse	0.10	3
1	Rh		1,659,587.68	1.96	106.6	Pulse	0.10	3
1	In		1,647,526.26	3.08	106.9	Pulse	0.10	3
1	Tb		1,948,056.12	1.79	109.3	Pulse	0.10	3
1	Ho		189,293.57	2.58	114.1	Pulse	0.10	3
1	Bi		960,371.65	2.71	104.7	Pulse	0.10	3
2	Sc		85,043.03	0.85	107.1	Pulse	0.30	3
2	Ge		53,667.07	1.30	108.0	Pulse	0.30	3
2	Rh		771,401.86	1.04	102.1	Pulse	0.30	3
2	In		265,332.71	1.24	98.6	Pulse	0.30	3
2	Tb		785,351.88	1.27	102.0	Pulse	0.30	3
2	Ho		76,015.44	1.89	106.2	Pulse	0.30	3
2	Bi		418,911.63	2.22	98.5	Pulse	0.30	3
3	Sc		85,457.04	1.05	118.9	Pulse	0.30	3
3	Ge		58,618.35	0.39	114.3	Pulse	0.30	3
3	Rh		509,180.88	1.10	105.7	Pulse	0.30	3
3	Tb		658,612.39	0.87	105.2	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:19
Sample Name	jc86126-10
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.337	ug/l	2.77	853.37	5.010E-04	Pulse	0.25	3
B			1	328.320	ug/l	0.81	757,261.85	4.446E-01	Pulse	0.15	3
Ca			1	23710.493	ug/l	1.39	7,107,177.39	3.392E+00	Analog	0.10	3
Sr			1	141.151	ug/l	0.35	1,367,501.02	8.334E-01	Pulse	0.10	3
Mo			1	2.322	ug/l	7.39	4,580.96	2.791E-03	Pulse	0.10	3
Ag			1	0.043	ug/l	6.48	203.34	1.225E-04	Pulse	0.10	3
Sn			1	1.067	ug/l	15.24	3,502.25	2.111E-03	Pulse	0.10	3
Sb			1	0.977	ug/l	5.83	2,873.74	1.465E-03	Pulse	0.10	3
Ba			1	35.450	ug/l	3.37	41,693.96	2.126E-02	Pulse	0.10	3
Tl			1	0.052	ug/l	6.91	310.02	3.317E-04	Pulse	0.10	3
Pb			1	5.261	ug/l	2.91	9,370.46	1.003E-02	Pulse	0.10	3
Pb			1	5.022	ug/l	0.82	7,829.38	8.377E-03	Pulse	0.10	3
Pb			1	5.030	ug/l	2.42	35,957.77	3.847E-02	Pulse	0.10	3
Na			2	20902.121	ug/l	1.80	7,290,779.71	8.702E+01	Analog	0.30	3
Mg			2	4046.577	ug/l	0.76	644,494.37	7.692E+00	Pulse	0.30	3
Al			2	5509.448	ug/l	0.74	309,175.84	3.690E+00	Pulse	0.30	3
K			2	2023.998	ug/l	0.64	229,242.76	2.736E+00	Pulse	0.30	3
Ca			2	23800.755	ug/l	0.64	139,629.13	1.666E+00	Pulse	0.30	3
Ti			2	39.513	ug/l	3.40	1,812.36	2.163E-02	Pulse	0.30	3
V			2	6.478	ug/l	3.51	8,624.98	1.030E-01	Pulse	0.30	3
Cr			2	4.356	ug/l	3.51	7,432.08	8.872E-02	Pulse	0.30	3
Mn			2	36.389	ug/l	0.38	31,110.63	3.713E-01	Pulse	0.30	3
Fe			2	3192.509	ug/l	0.70	4,037,853.03	4.819E+01	Pulse	0.30	3
Co			2	1.465	ug/l	2.88	3,519.38	4.201E-02	Pulse	0.30	3
Ni			2	2.979	ug/l	2.38	1,889.04	2.255E-02	Pulse	0.30	3
Cu			2	15.756	ug/l	1.22	25,401.28	3.031E-01	Pulse	0.30	3
Zn			2	30.066	ug/l	1.81	6,958.48	8.304E-02	Pulse	0.30	3
As			2	1.594	ug/l	3.34	210.00	2.506E-03	Pulse	1.00	3
Cd			2	0.256	ug/l	23.04	97.71	3.673E-04	Pulse	0.30	3
Sn			2	1.902	ug/l	4.54	793.37	2.984E-03	Pulse	0.30	3
Se			3	1.898	ug/l	14.27	49.67	8.351E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,703,019.81	0.90	109.7	Pulse	0.10	3
1	Sc		2,095,276.48	0.60	114.3	Pulse	0.10	3
1	Ge		405,852.61	0.66	112.2	Pulse	0.10	3

Quantitation Report

1	Rh		1,640,918.78	0.75	105.4	Pulse	0.10	3
1	In		1,659,516.86	0.22	107.7	Pulse	0.10	3
1	Tb		1,961,565.28	0.51	110.1	Pulse	0.10	3
1	Ho		182,826.65	1.50	110.2	Pulse	0.10	3
1	Bi		934,678.92	0.48	101.9	Pulse	0.10	3
2	Sc		83,792.29	1.53	105.5	Pulse	0.30	3
2	Ge		54,043.03	0.95	108.7	Pulse	0.30	3
2	Rh		765,919.45	1.15	101.4	Pulse	0.30	3
2	In		265,894.35	0.75	98.8	Pulse	0.30	3
2	Tb		778,496.79	1.39	101.1	Pulse	0.30	3
2	Ho		74,329.37	1.52	103.8	Pulse	0.30	3
2	Bi		407,719.06	1.30	95.9	Pulse	0.30	3
3	Sc		83,635.75	0.57	116.3	Pulse	0.30	3
3	Ge		59,463.11	0.97	115.9	Pulse	0.30	3
3	Rh		501,091.49	0.21	104.1	Pulse	0.30	3
3	Tb		654,143.17	0.47	104.5	Pulse	0.30	3

Quantitation Report

File Name	030SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:24
Sample Name	mp14115-s1 4
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	77.769	ug/l	1.41	39,667.25	2.295E-02	Pulse	0.25	3
B			1	160.859	ug/l	2.45	76,741.12	4.440E-02	Pulse	0.15	3
Ca			1	90323.444	ug/l	0.79	5,537,182.83	2.587E+00	Analog	0.10	3
Sr			1	374.932	ug/l	0.58	763,199.60	4.428E-01	Pulse	0.10	3
Mo			1	85.446	ug/l	1.45	35,397.22	2.054E-02	Pulse	0.10	3
Ag			1	78.293	ug/l	1.35	67,290.36	3.928E-02	Pulse	0.10	3
Sn			1	78.263	ug/l	1.46	43,164.56	2.520E-02	Pulse	0.10	3
Sb			1	84.141	ug/l	3.13	49,513.45	2.509E-02	Pulse	0.10	3
Ba			1	530.279	ug/l	1.22	125,476.19	6.358E-02	Pulse	0.10	3
Tl			1	81.666	ug/l	0.43	84,731.72	8.940E-02	Pulse	0.10	3
Pb			1	81.996	ug/l	2.36	29,545.51	3.117E-02	Pulse	0.10	3
Pb			1	82.350	ug/l	1.11	25,964.11	2.739E-02	Pulse	0.10	3
Pb			1	82.421	ug/l	0.71	119,198.39	1.258E-01	Pulse	0.10	3
Na			2	27909.091	ug/l	0.43	2,048,135.20	2.329E+01	Pulse	0.30	3
Mg			2	25860.618	ug/l	0.27	864,573.81	9.832E+00	Pulse	0.30	3
Al			2	3901.702	ug/l	0.95	45,973.62	5.228E-01	Pulse	0.30	3
K			2	6081.819	ug/l	0.83	147,092.20	1.673E+00	Pulse	0.30	3
Ca			2	89186.802	ug/l	0.82	109,863.36	1.249E+00	Pulse	0.30	3
Ti			2	79.268	ug/l	3.36	763.36	8.679E-03	Pulse	0.30	3
V			2	89.140	ug/l	0.43	24,399.34	2.775E-01	Pulse	0.30	3
Cr			2	84.381	ug/l	0.98	29,129.55	3.312E-01	Pulse	0.30	3
Mn			2	88.372	ug/l	2.38	15,890.35	1.807E-01	Pulse	0.30	3
Fe			2	4075.009	ug/l	0.70	1,082,941.73	1.231E+01	Pulse	0.30	3
Co			2	79.948	ug/l	1.52	39,894.12	4.537E-01	Pulse	0.30	3
Ni			2	81.249	ug/l	3.03	10,702.03	1.217E-01	Pulse	0.30	3
Cu			2	105.833	ug/l	0.04	35,717.36	4.062E-01	Pulse	0.30	3
Zn			2	100.285	ug/l	2.85	4,897.59	5.569E-02	Pulse	0.30	3
As			2	76.887	ug/l	3.79	2,079.50	2.364E-02	Pulse	1.00	3
Cd			2	81.700	ug/l	1.85	6,539.36	2.340E-02	Pulse	0.30	3
Sn			2	82.293	ug/l	1.76	9,058.75	3.242E-02	Pulse	0.30	3
Se			3	387.712	ug/l	7.54	1,971.48	3.308E-02	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,728,514.23	1.00	111.4	Pulse	0.10	3
1	Sc		2,140,697.83	1.03	116.8	Pulse	0.10	3
1	Ge		413,954.95	1.04	114.5	Pulse	0.10	3

Quantitation Report

1	Rh		1,723,408.98	0.44	110.7	Pulse	0.10	3
1	In		1,712,978.65	1.07	111.1	Pulse	0.10	3
1	Tb		1,973,541.43	0.75	110.8	Pulse	0.10	3
1	Ho		180,652.93	0.62	108.9	Pulse	0.10	3
1	Bi		947,743.63	0.71	103.3	Pulse	0.10	3
2	Sc		87,938.88	0.87	110.8	Pulse	0.30	3
2	Ge		55,682.92	0.87	112.0	Pulse	0.30	3
2	Rh		799,576.74	1.28	105.8	Pulse	0.30	3
2	In		279,394.48	0.97	103.8	Pulse	0.30	3
2	Tb		791,642.44	1.52	102.8	Pulse	0.30	3
2	Ho		74,271.01	0.85	103.7	Pulse	0.30	3
2	Bi		418,410.74	0.73	98.4	Pulse	0.30	3
3	Sc		86,025.26	0.87	119.6	Pulse	0.30	3
3	Ge		59,580.34	1.14	116.2	Pulse	0.30	3
3	Rh		521,757.33	1.30	108.3	Pulse	0.30	3
3	Tb		661,742.13	0.24	105.7	Pulse	0.30	3

Quantitation Report

File Name	031SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:28
Sample Name	mp14115-s2
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	77.061	ug/l	2.86	39,842.43	2.274E-02	Pulse	0.25	3
B			1	142.392	ug/l	1.01	69,050.32	3.941E-02	Pulse	0.15	3
Ca			1	89017.756	ug/l	1.02	5,423,801.38	2.549E+00	Analog	0.10	3
Sr			1	370.353	ug/l	1.61	741,760.46	4.374E-01	Pulse	0.10	3
Mo			1	85.985	ug/l	1.73	35,049.60	2.067E-02	Pulse	0.10	3
Ag			1	78.367	ug/l	1.33	66,412.64	3.932E-02	Pulse	0.10	3
Sn			1	78.011	ug/l	1.47	42,428.87	2.512E-02	Pulse	0.10	3
Sb			1	83.697	ug/l	1.22	47,994.23	2.496E-02	Pulse	0.10	3
Ba			1	516.369	ug/l	1.06	119,077.24	6.192E-02	Pulse	0.10	3
Tl			1	79.362	ug/l	0.53	82,271.57	8.688E-02	Pulse	0.10	3
Pb			1	81.734	ug/l	1.35	29,425.13	3.107E-02	Pulse	0.10	3
Pb			1	80.205	ug/l	1.39	25,266.07	2.668E-02	Pulse	0.10	3
Pb			1	80.903	ug/l	1.41	116,905.83	1.235E-01	Pulse	0.10	3
Na			2	27252.658	ug/l	0.54	1,993,945.20	2.274E+01	Pulse	0.30	3
Mg			2	25302.297	ug/l	0.21	843,324.06	9.619E+00	Pulse	0.30	3
Al			2	3893.072	ug/l	0.70	45,730.67	5.217E-01	Pulse	0.30	3
K			2	6073.494	ug/l	1.41	146,441.39	1.670E+00	Pulse	0.30	3
Ca			2	86234.004	ug/l	1.01	105,913.52	1.208E+00	Pulse	0.30	3
Ti			2	80.689	ug/l	15.28	774.48	8.835E-03	Pulse	0.30	3
V			2	87.224	ug/l	1.45	23,810.55	2.716E-01	Pulse	0.30	3
Cr			2	83.793	ug/l	1.65	28,840.04	3.290E-01	Pulse	0.30	3
Mn			2	88.743	ug/l	1.49	15,908.20	1.814E-01	Pulse	0.30	3
Fe			2	4031.743	ug/l	0.91	1,068,267.18	1.218E+01	Pulse	0.30	3
Co			2	78.392	ug/l	1.08	38,998.35	4.449E-01	Pulse	0.30	3
Ni			2	78.876	ug/l	2.41	10,357.33	1.182E-01	Pulse	0.30	3
Cu			2	102.956	ug/l	1.79	34,644.67	3.952E-01	Pulse	0.30	3
Zn			2	102.719	ug/l	1.49	4,998.74	5.702E-02	Pulse	0.30	3
As			2	77.001	ug/l	3.38	2,075.83	2.368E-02	Pulse	1.00	3
Cd			2	79.035	ug/l	2.26	6,296.36	2.264E-02	Pulse	0.30	3
Sn			2	83.957	ug/l	3.19	9,208.84	3.310E-02	Pulse	0.30	3
Se			3	375.744	ug/l	3.52	1,896.47	3.206E-02	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,752,165.48	0.73	112.9	Pulse	0.10	3
1	Sc		2,127,415.07	0.36	116.1	Pulse	0.10	3
1	Ge		412,144.59	0.95	114.0	Pulse	0.10	3

Quantitation Report

1	Rh		1,695,908.15	1.53	109.0	Pulse	0.10	3
1	In		1,689,040.86	0.40	109.6	Pulse	0.10	3
1	Tb		1,923,068.88	1.17	107.9	Pulse	0.10	3
1	Ho		177,752.58	1.24	107.1	Pulse	0.10	3
1	Bi		946,930.90	0.55	103.2	Pulse	0.10	3
2	Sc		87,669.27	1.45	110.4	Pulse	0.30	3
2	Ge		55,555.59	1.41	111.8	Pulse	0.30	3
2	Rh		798,234.74	1.49	105.7	Pulse	0.30	3
2	In		278,165.64	1.83	103.3	Pulse	0.30	3
2	Tb		787,599.14	0.66	102.3	Pulse	0.30	3
2	Ho		74,272.06	0.75	103.8	Pulse	0.30	3
2	Bi		415,231.30	0.62	97.7	Pulse	0.30	3
3	Sc		86,014.02	1.77	119.6	Pulse	0.30	3
3	Ge		59,127.29	2.24	115.3	Pulse	0.30	3
3	Rh		514,858.58	1.55	106.9	Pulse	0.30	3
3	Tb		647,589.45	1.18	103.5	Pulse	0.30	3

Quantitation Report

File Name	032SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:33
Sample Name	jc85846-3fa
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.010	ug/l	35.97	33.33	1.837E-05	Pulse	0.25	3
B			1	19.858	ug/l	9.74	50,008.82	2.776E-02	Pulse	0.15	3
Ca			1	65.356	ug/l	4.51	42,786.58	1.972E-02	Pulse	0.10	3
Sr			1	0.085	ug/l	6.60	1,246.76	7.183E-04	Pulse	0.10	3
Mo			1	0.120	ug/l	19.31	250.01	1.442E-04	Pulse	0.10	3
Ag			1	0.014	ug/l	22.99	86.67	5.149E-05	Pulse	0.10	3
Sn			1	0.536	ug/l	6.08	2,136.93	1.271E-03	Pulse	0.10	3
Sb			1	0.144	ug/l	12.65	453.36	2.247E-04	Pulse	0.10	3
Ba			1	0.254	ug/l	19.44	316.68	1.581E-04	Pulse	0.10	3
Tl			1	0.018	ug/l	14.42	140.01	1.456E-04	Pulse	0.10	3
Pb			1	0.092	ug/l	23.12	203.34	2.103E-04	Pulse	0.10	3
Pb			1	0.095	ug/l	25.40	183.34	1.912E-04	Pulse	0.10	3
Pb			1	0.083	ug/l	8.94	736.71	7.654E-04	Pulse	0.10	3
Na			2	29.021	ug/l	1.73	16,619.82	1.920E-01	Pulse	0.30	3
Mg			2	6.555	ug/l	3.94	1,110.06	1.282E-02	Pulse	0.30	3
Al			2	6.602	ug/l	13.94	405.57	4.685E-03	Pulse	0.30	3
K			2	11.851	ug/l	5.00	7,543.21	8.715E-02	Pulse	0.30	3
Ca			2	92.680	ug/l	11.73	692.25	7.996E-03	Pulse	0.30	3
Ti			2	0.867	ug/l	8.63	41.11	4.747E-04	Pulse	0.30	3
V			2	0.691	ug/l	10.03	1,212.29	1.400E-02	Pulse	0.30	3
Cr			2	0.298	ug/l	11.98	874.48	1.011E-02	Pulse	0.30	3
Mn			2	4.309	ug/l	5.15	3,857.25	4.456E-02	Pulse	0.30	3
Fe			2	8.472	ug/l	2.97	12,626.98	1.459E-01	Pulse	0.30	3
Co			2	0.016	ug/l	33.76	82.22	9.507E-04	Pulse	0.30	3
Ni			2	0.603	ug/l	5.38	415.56	4.802E-03	Pulse	0.30	3
Cu			2	0.272	ug/l	11.18	715.59	8.266E-03	Pulse	0.30	3
Zn			2	13.784	ug/l	1.52	3,337.11	3.855E-02	Pulse	0.30	3
As			2	0.271	ug/l	6.87	41.33	4.775E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.109	ug/l	17.65	43.12	1.564E-04	Pulse	0.30	3
Sn			2	1.252	ug/l	5.04	460.01	1.669E-03	Pulse	0.30	3
Se			3	1.232	ug/l	17.87	33.67	5.510E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,805,321.90	3.39	116.3	Pulse	0.10	3
1	Sc		2,170,517.52	2.29	118.4	Pulse	0.10	3
1	Ge		420,043.14	3.89	116.2	Pulse	0.10	3
1	Rh		1,737,200.96	2.63	111.6	Pulse	0.10	3
1	In		1,680,080.68	2.69	109.0	Pulse	0.10	3
1	Tb		2,012,388.88	3.70	113.0	Pulse	0.10	3
1	Ho		181,433.89	5.98	109.4	Pulse	0.10	3
1	Bi		963,090.35	3.18	105.0	Pulse	0.10	3
2	Sc		86,557.82	0.77	109.0	Pulse	0.30	3
2	Ge		55,746.44	0.30	112.1	Pulse	0.30	3
2	Rh		808,546.27	0.81	107.0	Pulse	0.30	3
2	In		275,736.24	0.77	102.4	Pulse	0.30	3
2	Tb		790,852.66	1.15	102.7	Pulse	0.30	3
2	Ho		73,805.28	1.25	103.1	Pulse	0.30	3
2	Bi		423,120.81	0.58	99.5	Pulse	0.30	3
3	Sc		87,053.63	1.09	121.1	Pulse	0.30	3
3	Ge		61,141.66	0.75	119.2	Pulse	0.30	3
3	Rh		526,130.01	0.38	109.3	Pulse	0.30	3
3	Tb		659,694.78	0.54	105.4	Pulse	0.30	3

Quantitation Report

File Name	033SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:38
Sample Name	mb1conf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	47.66	25.33	1.432E-05	Pulse	0.25	3
B			1	4.765	ug/l	3.19	13,039.56	7.362E-03	Pulse	0.15	3
Ca			1	-4.569	ug/l	-15.41	21,373.55	9.746E-03	Pulse	0.10	3
Sr			1	0.014	ug/l	96.10	520.03	2.965E-04	Pulse	0.10	3
Mo			1	0.063	ug/l	9.85	133.34	7.630E-05	Pulse	0.10	3
Ag			1	0.009	ug/l	77.66	66.67	3.885E-05	Pulse	0.10	3
Sn			1	0.188	ug/l	13.48	1,236.77	7.197E-04	Pulse	0.10	3
Sb			1	0.078	ug/l	1.97	243.34	1.254E-04	Pulse	0.10	3
Ba			1	0.036	ug/l	58.26	53.33	2.746E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	190.08	66.67	7.003E-05	Pulse	0.10	3
Pb			1	0.015	ug/l	101.51	60.00	6.351E-05	Pulse	0.10	3
Pb			1	0.024	ug/l	53.62	70.00	7.390E-05	Pulse	0.10	3
Pb			1	0.016	ug/l	25.25	236.67	2.500E-04	Pulse	0.10	3
Na			2	8.495	ug/l	5.68	9,537.74	1.066E-01	Pulse	0.30	3
Mg			2	1.114	ug/l	11.80	222.23	2.482E-03	Pulse	0.30	3
Al			2	2.998	ug/l	9.08	203.34	2.271E-03	Pulse	0.30	3
K			2	4.283	ug/l	14.24	6,906.22	7.719E-02	Pulse	0.30	3
Ca			2	11.399	ug/l	19.98	206.67	2.310E-03	Pulse	0.30	3
Ti			2	1.044	ug/l	15.33	51.11	5.715E-04	Pulse	0.30	3
V			2	0.442	ug/l	14.20	908.93	1.017E-02	Pulse	0.30	3
Cr			2	0.370	ug/l	8.54	1,028.94	1.150E-02	Pulse	0.30	3
Mn			2	0.105	ug/l	16.64	155.56	1.739E-03	Pulse	0.30	3
Fe			2	2.304	ug/l	9.82	4,727.55	5.284E-02	Pulse	0.30	3
Co			2	0.022	ug/l	19.38	101.11	1.131E-03	Pulse	0.30	3
Ni			2	0.075	ug/l	54.97	76.67	8.547E-04	Pulse	0.30	3
Cu			2	0.141	ug/l	22.07	516.68	5.777E-03	Pulse	0.30	3
Zn			2	1.470	ug/l	7.21	438.90	4.905E-03	Pulse	0.30	3
As			2	0.251	ug/l	14.27	40.00	4.468E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.107	ug/l	30.22	43.21	1.534E-04	Pulse	0.30	3
Sn			2	0.965	ug/l	6.74	307.78	1.089E-03	Pulse	0.30	3
Se			3	1.159	ug/l	31.07	31.67	5.199E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,771,056.35	0.54	114.1	Pulse	0.10	3
1	Sc		2,193,003.98	0.36	119.7	Pulse	0.10	3
1	Ge		420,879.59	1.60	116.4	Pulse	0.10	3
1	Rh		1,749,183.62	1.51	112.4	Pulse	0.10	3
1	In		1,717,923.16	0.92	111.5	Pulse	0.10	3
1	Tb		1,939,850.54	1.65	108.9	Pulse	0.10	3
1	Ho		182,258.66	0.40	109.9	Pulse	0.10	3
1	Bi		947,752.02	1.79	103.3	Pulse	0.10	3
2	Sc		89,469.47	1.09	112.7	Pulse	0.30	3
2	Ge		57,049.46	2.08	114.8	Pulse	0.30	3
2	Rh		828,579.52	1.07	109.7	Pulse	0.30	3
2	In		282,365.79	1.26	104.9	Pulse	0.30	3
2	Tb		798,457.35	2.15	103.7	Pulse	0.30	3
2	Ho		74,861.18	2.45	104.6	Pulse	0.30	3
2	Bi		425,224.52	0.94	100.0	Pulse	0.30	3
3	Sc		87,024.46	0.87	121.0	Pulse	0.30	3
3	Ge		60,852.31	0.56	118.6	Pulse	0.30	3
3	Rh		531,589.41	1.04	110.4	Pulse	0.30	3
3	Tb		657,516.30	0.63	105.0	Pulse	0.30	3

Quantitation Report

File Name	034SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:43
Sample Name	mp14185a-b2 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	76.761	ug/l	2.01	200,531.58	1.133E-01	Pulse	0.25	3
B			1	86.756	ug/l	5.76	209,134.48	1.182E-01	Pulse	0.15	3
Ca			1	4003.500	ug/l	1.59	1,262,288.47	5.814E-01	Pulse	0.10	3
Sr			1	83.272	ug/l	4.52	842,802.25	4.917E-01	Pulse	0.10	3
Mo			1	79.450	ug/l	4.18	163,705.72	9.549E-02	Pulse	0.10	3
Ag			1	82.018	ug/l	5.35	344,283.60	2.057E-01	Pulse	0.10	3
Sn			1	78.472	ug/l	4.05	208,699.12	1.246E-01	Pulse	0.10	3
Sb			1	80.923	ug/l	3.06	236,634.53	1.206E-01	Pulse	0.10	3
Ba			1	79.249	ug/l	1.15	93,217.10	4.751E-02	Pulse	0.10	3
Tl			1	82.068	ug/l	5.88	418,809.56	4.490E-01	Pulse	0.10	3
Pb			1	81.316	ug/l	4.04	144,099.70	1.544E-01	Pulse	0.10	3
Pb			1	81.844	ug/l	1.77	126,981.11	1.360E-01	Pulse	0.10	3
Pb			1	81.078	ug/l	1.46	577,151.55	6.181E-01	Pulse	0.10	3
Na			2	4053.762	ug/l	1.11	1,479,258.34	1.693E+01	Pulse	0.30	3
Mg			2	4039.089	ug/l	0.70	670,683.17	7.678E+00	Pulse	0.30	3
Al			2	3804.639	ug/l	1.78	222,583.59	2.548E+00	Pulse	0.30	3
K			2	3991.837	ug/l	0.61	465,239.01	5.326E+00	Pulse	0.30	3
Ca			2	4416.445	ug/l	0.54	27,119.76	3.105E-01	Pulse	0.30	3
Ti			2	76.969	ug/l	2.04	3,680.52	4.214E-02	Pulse	0.30	3
V			2	82.905	ug/l	2.24	111,633.43	1.278E+00	Pulse	0.30	3
Cr			2	80.339	ug/l	1.43	136,317.41	1.561E+00	Pulse	0.30	3
Mn			2	77.342	ug/l	1.24	68,869.19	7.884E-01	Pulse	0.30	3
Fe			2	3965.991	ug/l	1.32	5,228,707.29	5.986E+01	Analog	0.30	3
Co			2	78.670	ug/l	1.85	194,821.14	2.230E+00	Pulse	0.30	3
Ni			2	78.704	ug/l	1.51	51,395.36	5.884E-01	Pulse	0.30	3
Cu			2	78.365	ug/l	2.80	130,629.99	1.495E+00	Pulse	0.30	3
Zn			2	70.857	ug/l	2.88	16,989.49	1.945E-01	Pulse	0.30	3
As			2	71.824	ug/l	2.26	9,626.73	1.102E-01	Pulse	1.00	3
Cd			2	78.429	ug/l	0.92	30,433.12	1.123E-01	Pulse	0.30	3
Sn			2	79.527	ug/l	0.18	43,339.37	1.600E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	339.827	ug/l	4.67	8,690.78	1.449E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,771,161.87	2.16	114.1	Pulse	0.10	3
1	Sc		2,171,434.91	1.81	118.5	Pulse	0.10	3
1	Ge		422,647.87	2.29	116.9	Pulse	0.10	3
1	Rh		1,715,277.63	3.03	110.2	Pulse	0.10	3
1	In		1,675,005.41	2.21	108.7	Pulse	0.10	3
1	Tb		1,962,157.68	1.70	110.1	Pulse	0.10	3
1	Ho		178,601.55	2.54	107.7	Pulse	0.10	3
1	Bi		934,119.80	4.27	101.8	Pulse	0.10	3
2	Sc		87,352.09	0.32	110.0	Pulse	0.30	3
2	Ge		55,612.57	2.26	111.9	Pulse	0.30	3
2	Rh		788,430.23	1.26	104.4	Pulse	0.30	3
2	In		270,922.25	1.41	100.6	Pulse	0.30	3
2	Tb		789,791.63	1.63	102.6	Pulse	0.30	3
2	Ho		73,515.84	2.40	102.7	Pulse	0.30	3
2	Bi		411,021.31	0.78	96.7	Pulse	0.30	3
3	Sc		85,992.44	1.09	119.6	Pulse	0.30	3
3	Ge		59,961.93	1.03	116.9	Pulse	0.30	3
3	Rh		515,480.52	0.57	107.0	Pulse	0.30	3
3	Tb		653,340.48	1.39	104.4	Pulse	0.30	3

Quantitation Report

File Name	035SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:48
Sample Name	sampleconf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	77.194	ug/l	1.18	178,885.17	1.139E-01	Pulse	0.25	3
B			1	2240.773	ug/l	1.28	4,758,122.03	3.029E+00	Pulse	0.15	3
Ca			1	47645.839	ug/l	0.87	13,631,735.22	6.805E+00	Analog	0.10	3
Sr			1	723.960	ug/l	0.65	6,388,813.24	4.274E+00	Analog	0.10	3
Mo			1	107.395	ug/l	0.68	192,967.46	1.291E-01	Pulse	0.10	3
Ag			1	74.885	ug/l	1.63	287,936.22	1.878E-01	Pulse	0.10	3
Sn			1	78.133	ug/l	0.93	190,314.63	1.241E-01	Pulse	0.10	3
Sb			1	79.528	ug/l	1.09	216,794.66	1.185E-01	Pulse	0.10	3
Ba			1	289.619	ug/l	1.80	317,528.11	1.736E-01	Pulse	0.10	3
Tl			1	81.827	ug/l	1.11	370,259.94	4.477E-01	Pulse	0.10	3
Pb			1	82.824	ug/l	1.09	130,081.50	1.573E-01	Pulse	0.10	3
Pb			1	80.698	ug/l	1.67	110,900.64	1.341E-01	Pulse	0.10	3
Pb			1	81.783	ug/l	0.66	515,638.53	6.235E-01	Pulse	0.10	3
Na			2	285528.082	ug/l	0.26	97,449,467.24	1.188E+03	Analog	0.30	3
Mg			2	30176.991	ug/l	2.87	4,707,373.42	5.736E+01	Mix	0.30	3
Al			2	3666.225	ug/l	1.77	201,379.69	2.455E+00	Pulse	0.30	3
K			2	117203.646	ug/l	1.20	12,660,744.50	1.543E+02	Analog	0.30	3
Ca			2	48890.555	ug/l	0.20	280,696.04	3.422E+00	Pulse	0.30	3
Ti			2	73.895	ug/l	1.51	3,319.32	4.045E-02	Pulse	0.30	3
V			2	82.476	ug/l	0.39	104,298.33	1.271E+00	Pulse	0.30	3
Cr			2	77.854	ug/l	0.41	124,077.24	1.512E+00	Pulse	0.30	3
Mn			2	98.722	ug/l	0.46	82,536.48	1.006E+00	Pulse	0.30	3
Fe			2	3858.180	ug/l	0.78	4,776,458.28	5.823E+01	Analog	0.30	3
Co			2	74.413	ug/l	0.29	173,064.21	2.110E+00	Pulse	0.30	3
Ni			2	75.718	ug/l	1.20	46,441.20	5.660E-01	Pulse	0.30	3
Cu			2	71.142	ug/l	0.80	111,380.69	1.358E+00	Pulse	0.30	3
Zn			2	66.447	ug/l	1.28	14,963.79	1.824E-01	Pulse	0.30	3
As			2	73.856	ug/l	1.06	9,297.50	1.133E-01	Pulse	1.00	3
Cd			2	72.195	ug/l	0.14	25,983.24	1.034E-01	Pulse	0.30	3
Sn			2	79.702	ug/l	1.61	40,288.72	1.603E-01	Pulse	0.30	3
Se			3	298.061	ug/l	4.80	7,086.52	1.271E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,570,819.76	1.03	101.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,003,188.98	1.00	109.3	Pulse	0.10	3
1	Ge		398,176.17	1.32	110.1	Pulse	0.10	3
1	Rh		1,494,986.59	1.50	96.1	Pulse	0.10	3
1	In		1,533,328.04	1.68	99.5	Pulse	0.10	3
1	Tb		1,828,932.89	1.08	102.7	Pulse	0.10	3
1	Ho		170,585.71	0.14	102.8	Pulse	0.10	3
1	Bi		827,097.80	1.66	90.2	Pulse	0.10	3
2	Sc		82,036.54	2.07	103.3	Pulse	0.30	3
2	Ge		53,165.05	2.37	107.0	Pulse	0.30	3
2	Rh		692,073.03	1.50	91.6	Pulse	0.30	3
2	In		251,266.44	1.59	93.3	Pulse	0.30	3
2	Tb		748,087.97	2.31	97.1	Pulse	0.30	3
2	Ho		70,720.25	2.51	98.8	Pulse	0.30	3
2	Bi		363,407.99	1.89	85.5	Pulse	0.30	3
3	Sc		77,855.22	1.74	108.3	Pulse	0.30	3
3	Ge		55,774.27	0.96	108.7	Pulse	0.30	3
3	Rh		446,401.13	1.21	92.7	Pulse	0.30	3
3	Tb		610,817.06	1.79	97.6	Pulse	0.30	3

Quantitation Report

File Name	036_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:52
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.658	ug/l	2.18	238,735.06	1.436E-01	Pulse	0.25	3
B			1	108.377	ug/l	4.84	488,403.54	2.939E-01	Pulse	0.15	3
Ca			1	4891.936	ug/l	1.27	2,915,443.19	1.406E+00	Pulse	0.10	3
Sr			1	53.356	ug/l	4.36	1,034,757.48	6.301E-01	Pulse	0.10	3
Mo			1	53.445	ug/l	2.79	211,035.01	1.285E-01	Pulse	0.10	3
Ag			1	50.422	ug/l	3.19	411,174.62	2.529E-01	Pulse	0.10	3
Sn			1	51.399	ug/l	2.62	265,268.19	1.632E-01	Pulse	0.10	3
Sb			1	52.485	ug/l	1.81	297,082.07	1.565E-01	Pulse	0.10	3
Ba			1	50.326	ug/l	1.83	114,598.52	6.034E-02	Pulse	0.10	3
Tl			1	50.867	ug/l	5.62	510,076.22	5.566E-01	Pulse	0.10	3
Pb			1	50.552	ug/l	4.59	175,981.88	1.920E-01	Pulse	0.10	3
Pb			1	49.953	ug/l	3.34	152,186.20	1.660E-01	Pulse	0.10	3
Pb			1	50.141	ug/l	2.24	700,993.24	7.644E-01	Pulse	0.10	3
Na			2	4939.275	ug/l	0.98	3,533,759.16	4.116E+01	Pulse	0.30	3
Mg			2	4956.953	ug/l	0.91	1,617,695.74	1.884E+01	Pulse	0.30	3
Al			2	4810.905	ug/l	1.14	553,129.70	6.443E+00	Pulse	0.30	3
K			2	5039.158	ug/l	0.96	1,144,930.79	1.334E+01	Pulse	0.30	3
Ca			2	5234.000	ug/l	0.57	62,991.51	7.338E-01	Pulse	0.30	3
Ti			2	51.922	ug/l	3.20	4,879.79	5.685E-02	Pulse	0.30	3
V			2	51.797	ug/l	1.82	137,002.25	1.596E+00	Pulse	0.30	3
Cr			2	49.667	ug/l	1.88	165,546.91	1.928E+00	Pulse	0.30	3
Mn			2	48.705	ug/l	0.79	85,222.77	9.928E-01	Pulse	0.30	3
Fe			2	4973.422	ug/l	1.02	12,884,510.88	1.501E+02	Analog	0.30	3
Co			2	49.051	ug/l	1.20	238,721.99	2.781E+00	Pulse	0.30	3
Ni			2	48.432	ug/l	0.44	62,153.54	7.240E-01	Pulse	0.30	3
Cu			2	48.656	ug/l	1.68	159,335.92	1.856E+00	Pulse	0.30	3
Zn			2	48.104	ug/l	2.19	22,639.85	2.637E-01	Pulse	0.30	3
As			2	51.804	ug/l	0.50	13,643.80	1.589E-01	Pulse	1.00	3
Cd			2	49.198	ug/l	1.55	38,797.27	1.409E-01	Pulse	0.30	3
Sn			2	52.255	ug/l	0.94	57,953.38	2.105E-01	Pulse	0.30	3
Se			3	198.097	ug/l	4.19	9,569.70	1.689E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,663,375.60	2.57	107.2	Pulse	0.10	3
1	Sc		2,073,853.98	0.94	113.2	Pulse	0.10	3
1	Ge		397,621.54	1.70	110.0	Pulse	0.10	3

Quantitation Report

1	Rh		1,643,398.62	2.57	105.6	Pulse	0.10	3
1	In		1,626,229.77	1.27	105.5	Pulse	0.10	3
1	Tb		1,898,883.31	1.63	106.6	Pulse	0.10	3
1	Ho		176,817.05	1.43	106.6	Pulse	0.10	3
1	Bi		917,375.69	2.96	100.0	Pulse	0.10	3
2	Sc		85,842.12	0.46	108.1	Pulse	0.30	3
2	Ge		53,794.37	1.15	108.2	Pulse	0.30	3
2	Rh		772,009.14	0.82	102.2	Pulse	0.30	3
2	In		275,308.30	1.58	102.3	Pulse	0.30	3
2	Tb		788,395.65	1.28	102.4	Pulse	0.30	3
2	Ho		74,681.22	0.90	104.3	Pulse	0.30	3
2	Bi		415,255.68	1.35	97.7	Pulse	0.30	3
3	Sc		81,964.95	0.19	114.0	Pulse	0.30	3
3	Ge		56,652.26	0.95	110.4	Pulse	0.30	3
3	Rh		499,711.51	0.46	103.8	Pulse	0.30	3
3	Tb		647,139.54	0.75	103.4	Pulse	0.30	3

Quantitation Report

File Name	037_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 12:57
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.014	ug/l	22.52	77.33	4.465E-05	Pulse	0.25	3
B			1	8.776	ug/l	5.65	42,720.42	2.464E-02	Pulse	0.15	3
Ca			1	-6.636	ug/l	-18.92	17,958.69	8.505E-03	Pulse	0.10	3
Sr			1	0.013	ug/l	48.31	626.71	3.631E-04	Pulse	0.10	3
Mo			1	0.063	ug/l	30.03	260.01	1.512E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	11.67	123.34	7.349E-05	Pulse	0.10	3
Sn			1	0.100	ug/l	18.79	1,240.10	7.393E-04	Pulse	0.10	3
Sb			1	0.315	ug/l	6.53	1,843.52	9.494E-04	Pulse	0.10	3
Ba			1	0.011	ug/l	59.01	36.67	1.886E-05	Pulse	0.10	3
Tl			1	0.019	ug/l	53.15	240.01	2.521E-04	Pulse	0.10	3
Pb			1	0.016	ug/l	105.93	90.00	9.488E-05	Pulse	0.10	3
Pb			1	0.018	ug/l	61.43	90.00	9.501E-05	Pulse	0.10	3
Pb			1	0.015	ug/l	31.64	340.02	3.585E-04	Pulse	0.10	3
Na			2	3.835	ug/l	7.53	9,030.73	1.032E-01	Pulse	0.30	3
Mg			2	1.059	ug/l	21.38	384.45	4.392E-03	Pulse	0.30	3
Al			2	0.874	ug/l	13.94	125.56	1.435E-03	Pulse	0.30	3
K			2	0.190	ug/l	275.36	6,304.81	7.205E-02	Pulse	0.30	3
Ca			2	2.065	ug/l	88.95	157.78	1.802E-03	Pulse	0.30	3
Ti			2	0.360	ug/l	5.70	34.44	3.936E-04	Pulse	0.30	3
V			2	0.017	ug/l	96.94	342.23	3.914E-03	Pulse	0.30	3
Cr			2	0.000	ug/l	-1665.45	378.90	4.330E-03	Pulse	0.30	3
Mn			2	0.018	ug/l	69.13	91.11	1.041E-03	Pulse	0.30	3
Fe			2	1.050	ug/l	11.50	4,357.40	4.977E-02	Pulse	0.30	3
Co			2	0.009	ug/l	2.02	90.00	1.029E-03	Pulse	0.30	3
Ni			2	0.034	ug/l	37.98	70.00	7.988E-04	Pulse	0.30	3
Cu			2	0.005	ug/l	270.29	286.67	3.276E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.142	ug/l	15.86	145.56	1.664E-03	Pulse	0.30	3
As			2	0.096	ug/l	1.27	31.33	3.580E-04	Pulse	1.00	3
Cd			2	0.069	ug/l	5.47	56.46	1.968E-04	Pulse	0.30	3
Sn			2	0.447	ug/l	7.04	271.12	9.449E-04	Pulse	0.30	3
Se			3	0.828	ug/l	12.00	41.67	7.317E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,734,073.85	1.28	111.7	Pulse	0.10	3
1	Sc		2,111,143.36	0.57	115.2	Pulse	0.10	3
1	Ge		399,353.89	1.15	110.4	Pulse	0.10	3
1	Rh		1,723,053.67	1.33	110.7	Pulse	0.10	3
1	In		1,678,126.24	1.81	108.9	Pulse	0.10	3
1	Tb		1,941,880.08	0.56	109.0	Pulse	0.10	3
1	Ho		172,819.10	3.06	104.2	Pulse	0.10	3
1	Bi		949,635.01	0.97	103.5	Pulse	0.10	3
2	Sc		87,509.41	1.05	110.2	Pulse	0.30	3
2	Ge		54,932.01	1.55	110.5	Pulse	0.30	3
2	Rh		806,960.18	2.06	106.8	Pulse	0.30	3
2	In		287,063.07	2.49	106.6	Pulse	0.30	3
2	Tb		798,662.69	0.95	103.7	Pulse	0.30	3
2	Ho		74,884.35	1.33	104.6	Pulse	0.30	3
2	Bi		429,955.43	1.26	101.1	Pulse	0.30	3
3	Sc		81,645.47	1.84	113.6	Pulse	0.30	3
3	Ge		56,914.59	0.80	111.0	Pulse	0.30	3
3	Rh		515,716.01	1.29	107.1	Pulse	0.30	3
3	Tb		643,507.81	0.37	102.8	Pulse	0.30	3

Quantitation Report

File Name	038_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 13:02
Sample Name	ccvtestconf
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	51.744	ug/l	1.06	245,078.28	1.527E-01	Pulse	0.25	3
B			1	116.218	ug/l	1.43	505,672.98	3.151E-01	Pulse	0.15	3
Ca			1	5023.317	ug/l	1.33	2,952,098.39	1.443E+00	Pulse	0.10	3
Sr			1	51.566	ug/l	2.97	1,037,102.12	6.090E-01	Pulse	0.10	3
Mo			1	53.531	ug/l	3.05	219,142.37	1.287E-01	Pulse	0.10	3
Ag			1	47.007	ug/l	3.23	398,624.37	2.358E-01	Pulse	0.10	3
Sn			1	52.104	ug/l	0.92	279,650.63	1.654E-01	Pulse	0.10	3
Sb			1	56.340	ug/l	0.41	305,155.72	1.679E-01	Pulse	0.10	3
Ba			1	51.369	ug/l	0.73	111,915.35	6.159E-02	Pulse	0.10	3
Tl			1	50.709	ug/l	4.23	515,894.98	5.549E-01	Pulse	0.10	3
Pb			1	52.011	ug/l	5.14	183,623.08	1.975E-01	Pulse	0.10	3
Pb			1	51.887	ug/l	2.76	160,356.60	1.724E-01	Pulse	0.10	3
Pb			1	51.720	ug/l	2.67	733,315.69	7.885E-01	Pulse	0.10	3
Na			2	4934.271	ug/l	0.90	3,558,575.14	4.112E+01	Pulse	0.30	3
Mg			2	4961.755	ug/l	0.70	1,632,320.35	1.886E+01	Pulse	0.30	3
Al			2	4807.521	ug/l	0.57	557,189.02	6.439E+00	Pulse	0.30	3
K			2	4983.790	ug/l	0.45	1,141,566.48	1.319E+01	Pulse	0.30	3
Ca			2	5262.288	ug/l	0.74	63,844.21	7.378E-01	Pulse	0.30	3
Ti			2	50.572	ug/l	1.89	4,791.99	5.537E-02	Pulse	0.30	3
V			2	51.028	ug/l	0.44	136,072.88	1.572E+00	Pulse	0.30	3
Cr			2	48.939	ug/l	0.67	164,456.48	1.900E+00	Pulse	0.30	3
Mn			2	48.237	ug/l	0.72	85,086.45	9.833E-01	Pulse	0.30	3
Fe			2	4941.480	ug/l	0.57	12,906,241.15	1.491E+02	Analog	0.30	3
Co			2	48.123	ug/l	0.57	236,097.85	2.728E+00	Pulse	0.30	3
Ni			2	47.856	ug/l	0.30	61,913.82	7.154E-01	Pulse	0.30	3
Cu			2	47.656	ug/l	0.56	157,329.96	1.818E+00	Pulse	0.30	3
Zn			2	48.103	ug/l	1.58	22,824.62	2.637E-01	Pulse	0.30	3
As			2	51.081	ug/l	0.36	13,562.73	1.567E-01	Pulse	1.00	3
Cd			2	49.068	ug/l	0.16	38,537.59	1.406E-01	Pulse	0.30	3
Sn			2	52.012	ug/l	0.83	57,434.60	2.095E-01	Pulse	0.30	3
Se			3	201.166	ug/l	3.60	9,584.04	1.715E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,605,203.43	1.76	103.4	Pulse	0.10	3
1	Sc		2,045,116.84	2.28	111.6	Pulse	0.10	3
1	Ge		389,500.20	0.32	107.7	Pulse	0.10	3

Quantitation Report

1	Rh		1,703,654.92	1.89	109.5	Pulse	0.10	3
1	In		1,690,883.91	0.90	109.7	Pulse	0.10	3
1	Tb		1,816,944.66	0.87	102.0	Pulse	0.10	3
1	Ho		172,193.69	0.96	103.8	Pulse	0.10	3
1	Bi		930,514.38	3.09	101.4	Pulse	0.10	3
2	Sc		86,539.03	1.44	109.0	Pulse	0.30	3
2	Ge		53,807.56	2.46	108.2	Pulse	0.30	3
2	Rh		764,971.33	1.67	101.3	Pulse	0.30	3
2	In		274,152.32	1.37	101.8	Pulse	0.30	3
2	Tb		791,898.35	0.55	102.8	Pulse	0.30	3
2	Ho		73,863.19	1.26	103.2	Pulse	0.30	3
2	Bi		411,857.18	0.71	96.9	Pulse	0.30	3
3	Sc		80,932.60	1.01	112.6	Pulse	0.30	3
3	Ge		55,870.33	0.43	108.9	Pulse	0.30	3
3	Rh		494,846.30	0.76	102.8	Pulse	0.30	3
3	Tb		639,131.45	0.29	102.1	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 13:07
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.015	ug/l	19.32	82.67	4.795E-05	Pulse	0.25	3
B			1	6.346	ug/l	2.27	31,143.59	1.808E-02	Pulse	0.15	3
Ca			1	-6.516	ug/l	-19.12	17,615.06	8.539E-03	Pulse	0.10	3
Sr			1	0.013	ug/l	41.93	623.37	3.703E-04	Pulse	0.10	3
Mo			1	0.083	ug/l	17.61	336.68	1.999E-04	Pulse	0.10	3
Ag			1	0.011	ug/l	5.26	116.67	7.123E-05	Pulse	0.10	3
Sn			1	0.082	ug/l	42.22	1,116.76	6.836E-04	Pulse	0.10	3
Sb			1	0.361	ug/l	2.99	2,053.57	1.086E-03	Pulse	0.10	3
Ba			1	0.013	ug/l	0.64	40.00	2.115E-05	Pulse	0.10	3
Tl			1	0.015	ug/l	50.83	193.34	2.075E-04	Pulse	0.10	3
Pb			1	0.014	ug/l	41.01	83.33	8.946E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	26.51	53.33	5.728E-05	Pulse	0.10	3
Pb			1	0.013	ug/l	34.95	303.34	3.256E-04	Pulse	0.10	3
Na			2	2.179	ug/l	10.51	7,715.52	8.941E-02	Pulse	0.30	3
Mg			2	0.908	ug/l	12.33	328.90	3.815E-03	Pulse	0.30	3
Al			2	1.005	ug/l	14.23	138.89	1.610E-03	Pulse	0.30	3
K			2	-0.067	ug/l	-1024.36	6,160.31	7.137E-02	Pulse	0.30	3
Ca			2	2.711	ug/l	10.33	163.33	1.892E-03	Pulse	0.30	3
Ti			2	0.351	ug/l	50.35	33.33	3.844E-04	Pulse	0.30	3
V			2	0.018	ug/l	124.41	340.01	3.940E-03	Pulse	0.30	3
Cr			2	0.014	ug/l	105.45	422.23	4.888E-03	Pulse	0.30	3
Mn			2	0.015	ug/l	43.91	84.45	9.795E-04	Pulse	0.30	3
Fe			2	1.033	ug/l	5.50	4,250.70	4.924E-02	Pulse	0.30	3
Co			2	0.011	ug/l	16.84	97.78	1.132E-03	Pulse	0.30	3
Ni			2	0.030	ug/l	79.04	63.33	7.349E-04	Pulse	0.30	3
Cu			2	0.015	ug/l	86.13	315.56	3.656E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.109	ug/l	48.73	127.78	1.483E-03	Pulse	0.30	3
As			2	0.107	ug/l	14.22	33.67	3.904E-04	Pulse	1.00	3
Cd			2	0.068	ug/l	2.16	54.79	1.954E-04	Pulse	0.30	3
Sn			2	0.454	ug/l	3.14	272.23	9.716E-04	Pulse	0.30	3
Se			3	0.600	ug/l	6.01	30.33	5.372E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,722,779.79	0.76	111.0	Pulse	0.10	3
1	Sc		2,062,943.20	1.38	112.6	Pulse	0.10	3
1	Ge		399,318.60	1.51	110.4	Pulse	0.10	3
1	Rh		1,684,772.27	1.44	108.2	Pulse	0.10	3
1	In		1,637,709.90	2.43	106.3	Pulse	0.10	3
1	Tb		1,890,980.70	0.47	106.1	Pulse	0.10	3
1	Ho		174,034.73	1.88	104.9	Pulse	0.10	3
1	Bi		931,181.05	0.34	101.5	Pulse	0.10	3
2	Sc		86,294.09	1.45	108.7	Pulse	0.30	3
2	Ge		54,117.83	2.33	108.9	Pulse	0.30	3
2	Rh		794,031.11	0.73	105.1	Pulse	0.30	3
2	In		280,430.17	2.20	104.2	Pulse	0.30	3
2	Tb		785,753.34	2.05	102.0	Pulse	0.30	3
2	Ho		73,702.34	0.89	103.0	Pulse	0.30	3
2	Bi		426,521.26	1.80	100.3	Pulse	0.30	3
3	Sc		81,451.19	1.33	113.3	Pulse	0.30	3
3	Ge		56,514.19	2.23	110.2	Pulse	0.30	3
3	Rh		507,800.62	1.37	105.5	Pulse	0.30	3
3	Tb		640,464.61	1.43	102.3	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 13:11
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	41.76	44.00	2.578E-05	Pulse	0.25	3
B			1	4.981	ug/l	3.92	24,659.58	1.438E-02	Pulse	0.15	3
Ca			1	-6.774	ug/l	-22.50	17,571.59	8.466E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	-2137.21	360.02	2.119E-04	Pulse	0.10	3
Mo			1	0.033	ug/l	22.63	136.67	8.038E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	70.97	40.00	2.432E-05	Pulse	0.10	3
Sn			1	0.038	ug/l	28.93	890.06	5.418E-04	Pulse	0.10	3
Sb			1	0.118	ug/l	5.15	680.04	3.622E-04	Pulse	0.10	3
Ba			1	0.012	ug/l	82.81	36.67	1.971E-05	Pulse	0.10	3
Tl			1	0.009	ug/l	46.81	130.00	1.410E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	97.93	73.34	7.830E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	99.19	53.33	5.790E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	78.18	216.67	2.336E-04	Pulse	0.10	3
Na			2	1.590	ug/l	22.12	7,304.17	8.451E-02	Pulse	0.30	3
Mg			2	0.425	ug/l	5.47	171.12	1.980E-03	Pulse	0.30	3
Al			2	0.542	ug/l	3.39	85.56	9.900E-04	Pulse	0.30	3
K			2	-0.337	ug/l	-179.57	6,106.95	7.066E-02	Pulse	0.30	3
Ca			2	1.586	ug/l	118.58	150.00	1.735E-03	Pulse	0.30	3
Ti			2	0.400	ug/l	27.34	37.78	4.374E-04	Pulse	0.30	3
V			2	0.009	ug/l	110.06	315.56	3.653E-03	Pulse	0.30	3
Cr			2	0.012	ug/l	134.20	415.56	4.811E-03	Pulse	0.30	3
Mn			2	0.017	ug/l	54.85	88.89	1.029E-03	Pulse	0.30	3
Fe			2	0.339	ug/l	5.11	2,444.76	2.829E-02	Pulse	0.30	3
Co			2	0.001	ug/l	196.40	47.78	5.532E-04	Pulse	0.30	3
Ni			2	0.031	ug/l	33.74	65.55	7.587E-04	Pulse	0.30	3
Cu			2	-0.001	ug/l	-460.63	263.34	3.048E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.077	ug/l	16.38	113.34	1.312E-03	Pulse	0.30	3
As			2	0.114	ug/l	7.69	35.67	4.128E-04	Pulse	1.00	3
Cd			2	0.063	ug/l	11.94	51.53	1.814E-04	Pulse	0.30	3
Sn			2	0.429	ug/l	3.21	247.78	8.714E-04	Pulse	0.30	3
Se			3	0.571	ug/l	14.03	29.00	5.126E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,715,446.72	2.81	110.5	Pulse	0.10	3
1	Sc		2,077,524.87	2.73	113.4	Pulse	0.10	3
1	Ge		394,782.17	1.28	109.2	Pulse	0.10	3
1	Rh		1,703,965.55	1.51	109.5	Pulse	0.10	3
1	In		1,644,780.26	3.07	106.7	Pulse	0.10	3
1	Tb		1,879,193.88	2.52	105.5	Pulse	0.10	3
1	Ho		174,020.40	2.33	104.9	Pulse	0.10	3
1	Bi		927,717.30	3.12	101.1	Pulse	0.10	3
2	Sc		86,422.66	0.68	108.8	Pulse	0.30	3
2	Ge		53,783.10	1.13	108.2	Pulse	0.30	3
2	Rh		799,952.99	1.30	105.9	Pulse	0.30	3
2	In		284,324.39	1.05	105.6	Pulse	0.30	3
2	Tb		793,716.46	1.25	103.1	Pulse	0.30	3
2	Ho		74,000.37	2.61	103.4	Pulse	0.30	3
2	Bi		428,335.95	0.96	100.8	Pulse	0.30	3
3	Sc		81,228.26	0.31	113.0	Pulse	0.30	3
3	Ge		56,652.29	1.68	110.4	Pulse	0.30	3
3	Rh		509,759.95	0.54	105.9	Pulse	0.30	3
3	Tb		638,722.41	0.24	102.0	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 13:19
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	14.22	42.67	2.505E-05	Pulse	0.25	3
B			1	4.175	ug/l	8.26	20,784.46	1.221E-02	Pulse	0.15	3
Ca			1	-7.596	ug/l	-18.41	17,194.49	8.231E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	-1021.62	360.02	2.124E-04	Pulse	0.10	3
Mo			1	0.016	ug/l	24.23	63.33	3.738E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	68.66	46.67	2.852E-05	Pulse	0.10	3
Sn			1	0.030	ug/l	50.96	840.06	5.162E-04	Pulse	0.10	3
Sb			1	0.057	ug/l	30.56	336.68	1.784E-04	Pulse	0.10	3
Ba			1	0.008	ug/l	137.67	30.00	1.573E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	27.54	83.33	8.843E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	93.08	56.67	6.054E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	50.63	56.67	6.035E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	9.30	186.67	1.983E-04	Pulse	0.10	3
Na			2	1.355	ug/l	18.14	7,145.20	8.255E-02	Pulse	0.30	3
Mg			2	0.444	ug/l	13.32	177.78	2.054E-03	Pulse	0.30	3
Al			2	0.264	ug/l	86.79	53.33	6.177E-04	Pulse	0.30	3
K			2	0.324	ug/l	258.91	6,268.13	7.240E-02	Pulse	0.30	3
Ca			2	2.759	ug/l	74.19	164.45	1.899E-03	Pulse	0.30	3
Ti			2	0.364	ug/l	39.90	34.45	3.990E-04	Pulse	0.30	3
V			2	0.014	ug/l	78.09	330.01	3.814E-03	Pulse	0.30	3
Cr			2	0.003	ug/l	198.06	386.68	4.469E-03	Pulse	0.30	3
Mn			2	0.016	ug/l	70.00	86.67	1.001E-03	Pulse	0.30	3
Fe			2	0.171	ug/l	10.82	2,010.18	2.323E-02	Pulse	0.30	3
Co			2	0.003	ug/l	48.19	57.78	6.670E-04	Pulse	0.30	3
Ni			2	0.029	ug/l	47.38	63.33	7.303E-04	Pulse	0.30	3
Cu			2	0.000	ug/l	33318.78	267.78	3.094E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.109	ug/l	58.88	128.89	1.487E-03	Pulse	0.30	3
As			2	0.100	ug/l	2.60	32.00	3.696E-04	Pulse	1.00	3
Cd			2	0.053	ug/l	29.77	43.25	1.529E-04	Pulse	0.30	3
Sn			2	0.409	ug/l	8.61	224.45	7.931E-04	Pulse	0.30	3
Se			3	0.595	ug/l	16.25	30.00	5.335E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,704,913.64	2.81	109.8	Pulse	0.10	3
1	Sc		2,090,031.43	2.06	114.0	Pulse	0.10	3
1	Ge		395,532.34	2.36	109.4	Pulse	0.10	3
1	Rh		1,694,488.62	1.76	108.9	Pulse	0.10	3
1	In		1,629,605.90	2.17	105.7	Pulse	0.10	3
1	Tb		1,901,213.77	3.93	106.7	Pulse	0.10	3
1	Ho		175,550.45	3.56	105.8	Pulse	0.10	3
1	Bi		941,646.60	3.20	102.7	Pulse	0.10	3
2	Sc		86,562.39	0.97	109.0	Pulse	0.30	3
2	Ge		54,568.31	1.36	109.8	Pulse	0.30	3
2	Rh		799,160.07	1.75	105.8	Pulse	0.30	3
2	In		283,293.10	0.86	105.2	Pulse	0.30	3
2	Tb		791,669.99	1.36	102.8	Pulse	0.30	3
2	Ho		73,980.45	1.31	103.3	Pulse	0.30	3
2	Bi		428,711.28	1.68	100.9	Pulse	0.30	3
3	Sc		80,542.34	1.14	112.0	Pulse	0.30	3
3	Ge		56,284.27	1.05	109.7	Pulse	0.30	3
3	Rh		508,372.84	1.12	105.6	Pulse	0.30	3
3	Tb		640,805.30	1.14	102.4	Pulse	0.30	3

Quantitation Report

File Name	042_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 13:24
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.714	ug/l	2.57	245,258.15	1.496E-01	Pulse	0.25	3
B			1	103.669	ug/l	1.87	460,805.29	2.811E-01	Pulse	0.15	3
Ca			1	4957.085	ug/l	0.15	2,888,783.60	1.424E+00	Pulse	0.10	3
Sr			1	51.988	ug/l	1.88	1,010,794.51	6.140E-01	Pulse	0.10	3
Mo			1	52.898	ug/l	0.46	209,329.31	1.272E-01	Pulse	0.10	3
Ag			1	49.279	ug/l	0.41	396,419.67	2.472E-01	Pulse	0.10	3
Sn			1	51.765	ug/l	0.95	263,562.08	1.643E-01	Pulse	0.10	3
Sb			1	53.482	ug/l	0.67	294,214.56	1.594E-01	Pulse	0.10	3
Ba			1	50.308	ug/l	1.21	111,320.44	6.032E-02	Pulse	0.10	3
Tl			1	50.472	ug/l	2.45	501,512.00	5.523E-01	Pulse	0.10	3
Pb			1	50.097	ug/l	3.00	172,753.88	1.903E-01	Pulse	0.10	3
Pb			1	49.971	ug/l	0.92	150,830.27	1.661E-01	Pulse	0.10	3
Pb			1	49.863	ug/l	0.81	690,469.27	7.602E-01	Pulse	0.10	3
Na			2	4947.949	ug/l	0.70	3,535,785.00	4.124E+01	Pulse	0.30	3
Mg			2	4955.353	ug/l	0.61	1,615,291.08	1.884E+01	Pulse	0.30	3
Al			2	4844.823	ug/l	1.21	556,350.48	6.489E+00	Pulse	0.30	3
K			2	5010.992	ug/l	1.06	1,137,225.72	1.326E+01	Pulse	0.30	3
Ca			2	5270.848	ug/l	0.34	63,365.52	7.390E-01	Pulse	0.30	3
Ti			2	49.725	ug/l	0.32	4,668.61	5.444E-02	Pulse	0.30	3
V			2	51.190	ug/l	1.16	135,251.89	1.577E+00	Pulse	0.30	3
Cr			2	49.229	ug/l	0.72	163,917.13	1.911E+00	Pulse	0.30	3
Mn			2	48.273	ug/l	1.40	84,374.14	9.840E-01	Pulse	0.30	3
Fe			2	4997.051	ug/l	1.37	12,929,608.93	1.508E+02	Analog	0.30	3
Co			2	48.304	ug/l	1.09	234,805.94	2.739E+00	Pulse	0.30	3
Ni			2	47.811	ug/l	0.97	61,284.26	7.148E-01	Pulse	0.30	3
Cu			2	47.661	ug/l	1.67	155,901.90	1.818E+00	Pulse	0.30	3
Zn			2	47.957	ug/l	2.40	22,545.25	2.629E-01	Pulse	0.30	3
As			2	51.323	ug/l	1.43	13,501.66	1.575E-01	Pulse	1.00	3
Cd			2	48.899	ug/l	2.68	38,055.49	1.401E-01	Pulse	0.30	3
Sn			2	52.027	ug/l	0.52	56,941.52	2.096E-01	Pulse	0.30	3
Se			3	205.218	ug/l	3.38	9,580.04	1.750E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,639,255.82	1.03	105.6	Pulse	0.10	3
1	Sc		2,028,218.83	1.00	110.7	Pulse	0.10	3
1	Ge		386,794.90	1.33	107.0	Pulse	0.10	3

Quantitation Report

1	Rh		1,646,253.36	0.80	105.8	Pulse	0.10	3
1	In		1,603,889.46	1.78	104.1	Pulse	0.10	3
1	Tb		1,845,361.90	0.68	103.6	Pulse	0.10	3
1	Ho		172,485.68	0.71	104.0	Pulse	0.10	3
1	Bi		908,405.51	2.75	99.0	Pulse	0.10	3
2	Sc		85,749.70	1.77	108.0	Pulse	0.30	3
2	Ge		52,982.12	1.07	106.6	Pulse	0.30	3
2	Rh		757,888.84	1.23	100.3	Pulse	0.30	3
2	In		271,721.20	2.39	100.9	Pulse	0.30	3
2	Tb		781,676.27	1.80	101.5	Pulse	0.30	3
2	Ho		73,505.56	1.12	102.7	Pulse	0.30	3
2	Bi		407,010.69	2.03	95.7	Pulse	0.30	3
3	Sc		79,480.80	1.28	110.5	Pulse	0.30	3
3	Ge		54,744.45	0.11	106.7	Pulse	0.30	3
3	Rh		486,571.80	1.42	101.0	Pulse	0.30	3
3	Tb		627,855.31	0.71	100.3	Pulse	0.30	3

Quantitation Report

File Name	043_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 13:29
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	25.11	41.33	2.451E-05	Pulse	0.25	3
B			1	5.295	ug/l	1.66	25,701.48	1.523E-02	Pulse	0.15	3
Ca			1	-9.617	ug/l	-9.09	15,545.79	7.655E-03	Pulse	0.10	3
Sr			1	0.005	ug/l	61.72	466.69	2.764E-04	Pulse	0.10	3
Mo			1	0.062	ug/l	4.35	250.01	1.480E-04	Pulse	0.10	3
Ag			1	0.009	ug/l	27.64	100.00	6.130E-05	Pulse	0.10	3
Sn			1	0.038	ug/l	31.98	886.73	5.429E-04	Pulse	0.10	3
Sb			1	0.344	ug/l	14.20	1,926.88	1.035E-03	Pulse	0.10	3
Ba			1	0.016	ug/l	59.24	46.67	2.513E-05	Pulse	0.10	3
Tl			1	0.013	ug/l	15.05	180.01	1.930E-04	Pulse	0.10	3
Pb			1	0.007	ug/l	171.51	56.67	6.102E-05	Pulse	0.10	3
Pb			1	0.009	ug/l	60.40	60.00	6.428E-05	Pulse	0.10	3
Pb			1	0.006	ug/l	89.78	200.00	2.147E-04	Pulse	0.10	3
Na			2	1.492	ug/l	5.09	7,121.86	8.369E-02	Pulse	0.30	3
Mg			2	0.643	ug/l	8.00	238.89	2.807E-03	Pulse	0.30	3
Al			2	1.224	ug/l	35.34	162.23	1.903E-03	Pulse	0.30	3
K			2	-0.146	ug/l	-636.56	6,056.93	7.116E-02	Pulse	0.30	3
Ca			2	1.245	ug/l	231.04	143.34	1.687E-03	Pulse	0.30	3
Ti			2	0.406	ug/l	11.39	37.78	4.444E-04	Pulse	0.30	3
V			2	0.011	ug/l	98.59	316.67	3.719E-03	Pulse	0.30	3
Cr			2	0.015	ug/l	21.38	418.90	4.923E-03	Pulse	0.30	3
Mn			2	0.010	ug/l	87.98	75.56	8.870E-04	Pulse	0.30	3
Fe			2	0.756	ug/l	13.12	3,479.39	4.087E-02	Pulse	0.30	3
Co			2	0.004	ug/l	83.57	60.00	7.060E-04	Pulse	0.30	3
Ni			2	0.022	ug/l	19.51	53.34	6.266E-04	Pulse	0.30	3
Cu			2	-0.006	ug/l	-82.72	244.45	2.873E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.007	ug/l	-296.19	72.22	8.493E-04	Pulse	0.30	3
As			2	0.138	ug/l	26.41	41.33	4.867E-04	Pulse	1.00	3
Cd			2	0.073	ug/l	18.75	58.16	2.093E-04	Pulse	0.30	3
Sn			2	0.449	ug/l	7.06	265.56	9.547E-04	Pulse	0.30	3
Se			3	0.595	ug/l	20.99	29.67	5.335E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,687,490.26	1.79	108.7	Pulse	0.10	3
1	Sc		2,031,150.08	0.88	110.8	Pulse	0.10	3
1	Ge		386,109.68	1.94	106.8	Pulse	0.10	3
1	Rh		1,689,656.38	0.85	108.6	Pulse	0.10	3
1	In		1,632,737.39	0.61	105.9	Pulse	0.10	3
1	Tb		1,864,112.16	1.41	104.6	Pulse	0.10	3
1	Ho		169,723.11	1.95	102.3	Pulse	0.10	3
1	Bi		933,046.06	1.00	101.7	Pulse	0.10	3
2	Sc		85,088.73	1.29	107.2	Pulse	0.30	3
2	Ge		52,953.06	0.97	106.5	Pulse	0.30	3
2	Rh		790,584.95	1.97	104.6	Pulse	0.30	3
2	In		278,167.80	1.48	103.3	Pulse	0.30	3
2	Tb		787,023.94	0.87	102.2	Pulse	0.30	3
2	Ho		74,286.52	1.03	103.8	Pulse	0.30	3
2	Bi		428,741.49	1.57	100.9	Pulse	0.30	3
3	Sc		80,442.89	0.82	111.9	Pulse	0.30	3
3	Ge		55,621.55	0.72	108.4	Pulse	0.30	3
3	Rh		504,675.86	0.92	104.8	Pulse	0.30	3
3	Tb		631,449.61	0.57	100.9	Pulse	0.30	3

Quantitation Report

File Name	044SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 13:34
Sample Name	mp14185a-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.008	ug/l	83.46	26.67	1.592E-05	Pulse	0.25	3
B			1	10.145	ug/l	1.02	24,532.66	1.463E-02	Pulse	0.15	3
Ca			1	27.730	ug/l	7.45	29,047.64	1.435E-02	Pulse	0.10	3
Sr			1	0.047	ug/l	13.44	826.72	4.946E-04	Pulse	0.10	3
Mo			1	0.134	ug/l	19.88	270.01	1.616E-04	Pulse	0.10	3
Ag			1	0.028	ug/l	32.44	140.00	8.530E-05	Pulse	0.10	3
Sn			1	0.504	ug/l	20.11	2,003.56	1.221E-03	Pulse	0.10	3
Sb			1	0.647	ug/l	4.71	1,816.85	9.741E-04	Pulse	0.10	3
Ba			1	0.134	ug/l	14.42	160.01	8.588E-05	Pulse	0.10	3
Tl			1	0.015	ug/l	82.96	123.34	1.309E-04	Pulse	0.10	3
Pb			1	0.072	ug/l	10.59	163.34	1.728E-04	Pulse	0.10	3
Pb			1	0.056	ug/l	47.13	120.01	1.274E-04	Pulse	0.10	3
Pb			1	0.069	ug/l	9.14	616.70	6.532E-04	Pulse	0.10	3
Na			2	13.653	ug/l	3.99	10,585.14	1.281E-01	Pulse	0.30	3
Mg			2	3.046	ug/l	9.90	508.90	6.153E-03	Pulse	0.30	3
Al			2	8.596	ug/l	3.82	497.79	6.020E-03	Pulse	0.30	3
K			2	4.925	ug/l	41.95	6,451.55	7.803E-02	Pulse	0.30	3
Ca			2	48.932	ug/l	8.88	407.79	4.936E-03	Pulse	0.30	3
Ti			2	0.615	ug/l	19.33	27.78	3.364E-04	Pulse	0.30	3
V			2	0.692	ug/l	6.80	1,158.95	1.402E-02	Pulse	0.30	3
Cr			2	0.463	ug/l	8.55	1,100.06	1.330E-02	Pulse	0.30	3
Mn			2	0.170	ug/l	21.21	198.89	2.405E-03	Pulse	0.30	3
Fe			2	4.229	ug/l	2.63	6,766.16	8.187E-02	Pulse	0.30	3
Co			2	0.011	ug/l	93.17	67.78	8.192E-04	Pulse	0.30	3
Ni			2	0.162	ug/l	7.35	124.45	1.506E-03	Pulse	0.30	3
Cu			2	0.322	ug/l	9.85	762.25	9.222E-03	Pulse	0.30	3
Zn			2	3.943	ug/l	5.45	964.49	1.166E-02	Pulse	0.30	3
As			2	0.333	ug/l	34.61	47.33	5.736E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.091	ug/l	63.46	34.82	1.301E-04	Pulse	0.30	3
Sn			2	1.218	ug/l	8.29	432.24	1.600E-03	Pulse	0.30	3
Se			3	1.363	ug/l	22.20	35.00	6.071E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,676,565.40	0.28	108.0	Pulse	0.10	3
1	Sc		2,023,793.67	0.26	110.4	Pulse	0.10	3
1	Ge		394,713.83	0.82	109.2	Pulse	0.10	3
1	Rh		1,671,087.32	0.49	107.4	Pulse	0.10	3
1	In		1,644,199.71	2.05	106.7	Pulse	0.10	3
1	Tb		1,865,237.05	2.14	104.7	Pulse	0.10	3
1	Ho		176,300.75	2.61	106.3	Pulse	0.10	3
1	Bi		944,717.36	1.39	103.0	Pulse	0.10	3
2	Sc		82,661.12	1.62	104.1	Pulse	0.30	3
2	Ge		53,286.82	1.15	107.2	Pulse	0.30	3
2	Rh		781,711.15	0.93	103.5	Pulse	0.30	3
2	In		269,747.55	1.98	100.2	Pulse	0.30	3
2	Tb		786,275.75	1.30	102.1	Pulse	0.30	3
2	Ho		74,098.92	2.11	103.5	Pulse	0.30	3
2	Bi		416,010.27	1.16	97.9	Pulse	0.30	3
3	Sc		81,108.97	1.41	112.8	Pulse	0.30	3
3	Ge		57,709.00	0.73	112.5	Pulse	0.30	3
3	Rh		505,221.44	1.46	104.9	Pulse	0.30	3
3	Tb		638,987.54	0.81	102.1	Pulse	0.30	3

Quantitation Report

File Name	045SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 13:39
Sample Name	mp14185a-s3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	76.373	ug/l	0.56	183,440.47	1.127E-01	Pulse	0.25	3
B			1	180.347	ug/l	0.40	398,301.00	2.447E-01	Pulse	0.15	3
Ca			1	28685.805	ug/l	0.35	8,014,990.51	4.101E+00	Analog	0.10	3
Sr			1	177.427	ug/l	0.31	1,596,494.92	1.048E+00	Pulse	0.10	3
Mo			1	84.421	ug/l	0.58	154,639.32	1.015E-01	Pulse	0.10	3
Ag			1	78.660	ug/l	0.60	300,022.40	1.973E-01	Pulse	0.10	3
Sn			1	78.608	ug/l	0.69	189,896.35	1.249E-01	Pulse	0.10	3
Sb			1	79.699	ug/l	0.61	218,050.51	1.188E-01	Pulse	0.10	3
Ba			1	159.585	ug/l	0.30	175,617.83	9.567E-02	Pulse	0.10	3
Tl			1	82.436	ug/l	1.22	377,175.32	4.510E-01	Pulse	0.10	3
Pb			1	83.466	ug/l	0.85	132,570.15	1.585E-01	Pulse	0.10	3
Pb			1	82.714	ug/l	0.61	114,940.04	1.374E-01	Pulse	0.10	3
Pb			1	82.474	ug/l	0.51	525,763.25	6.287E-01	Pulse	0.10	3
Na			2	205450.340	ug/l	2.05	68,946,521.71	8.547E+02	Analog	0.30	3
Mg			2	8635.198	ug/l	1.39	1,324,023.94	1.641E+01	Pulse	0.30	3
Al			2	4408.613	ug/l	1.19	238,161.79	2.952E+00	Pulse	0.30	3
K			2	7901.013	ug/l	1.16	844,691.22	1.047E+01	Pulse	0.30	3
Ca			2	28165.191	ug/l	1.18	159,055.96	1.972E+00	Pulse	0.30	3
Ti			2	95.602	ug/l	1.80	4,221.82	5.234E-02	Pulse	0.30	3
V			2	84.829	ug/l	1.14	105,469.06	1.308E+00	Pulse	0.30	3
Cr			2	80.678	ug/l	0.71	126,401.85	1.567E+00	Pulse	0.30	3
Mn			2	113.310	ug/l	0.26	93,138.78	1.155E+00	Pulse	0.30	3
Fe			2	4528.285	ug/l	1.64	5,512,216.31	6.834E+01	Analog	0.30	3
Co			2	76.989	ug/l	2.07	176,066.26	2.183E+00	Pulse	0.30	3
Ni			2	75.351	ug/l	1.58	45,440.16	5.633E-01	Pulse	0.30	3
Cu			2	75.814	ug/l	1.47	116,707.18	1.447E+00	Pulse	0.30	3
Zn			2	68.575	ug/l	1.44	15,185.14	1.882E-01	Pulse	0.30	3
As			2	71.041	ug/l	0.51	8,792.16	1.090E-01	Pulse	1.00	3
Cd			2	76.279	ug/l	1.04	27,390.97	1.093E-01	Pulse	0.30	3
Sn			2	80.012	ug/l	1.63	40,354.52	1.610E-01	Pulse	0.30	3
Se			3	334.335	ug/l	3.40	7,706.19	1.426E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,627,968.82	0.64	104.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,954,223.04	0.87	106.6	Pulse	0.10	3
1	Ge		382,327.17	1.37	105.7	Pulse	0.10	3
1	Rh		1,524,108.73	1.21	97.9	Pulse	0.10	3
1	In		1,520,859.06	0.71	98.7	Pulse	0.10	3
1	Tb		1,835,582.00	1.25	103.0	Pulse	0.10	3
1	Ho		169,432.04	1.04	102.1	Pulse	0.10	3
1	Bi		836,282.72	1.40	91.2	Pulse	0.10	3
2	Sc		80,659.31	1.07	101.6	Pulse	0.30	3
2	Ge		50,542.99	1.55	101.7	Pulse	0.30	3
2	Rh		699,247.20	1.44	92.6	Pulse	0.30	3
2	In		250,693.97	1.39	93.1	Pulse	0.30	3
2	Tb		751,128.70	2.14	97.5	Pulse	0.30	3
2	Ho		70,683.24	1.31	98.7	Pulse	0.30	3
2	Bi		368,989.60	1.42	86.8	Pulse	0.30	3
3	Sc		77,634.94	2.28	108.0	Pulse	0.30	3
3	Ge		54,060.92	1.03	105.4	Pulse	0.30	3
3	Rh		449,399.07	0.66	93.3	Pulse	0.30	3
3	Tb		609,176.09	0.93	97.3	Pulse	0.30	3

Quantitation Report

File Name	046SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 13:43
Sample Name	mp14185a-s4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.719	ug/l	0.50	172,926.30	1.102E-01	Pulse	0.25	3
B			1	178.585	ug/l	0.76	380,053.54	2.423E-01	Pulse	0.15	3
Ca			1	28645.681	ug/l	0.65	7,768,730.09	4.096E+00	Analog	0.10	3
Sr			1	178.634	ug/l	1.04	1,553,772.27	1.055E+00	Pulse	0.10	3
Mo			1	83.973	ug/l	0.78	148,707.66	1.009E-01	Pulse	0.10	3
Ag			1	76.170	ug/l	0.86	287,735.00	1.910E-01	Pulse	0.10	3
Sn			1	76.781	ug/l	1.66	183,697.93	1.220E-01	Pulse	0.10	3
Sb			1	79.443	ug/l	0.50	211,878.08	1.184E-01	Pulse	0.10	3
Ba			1	159.090	ug/l	0.84	170,657.19	9.538E-02	Pulse	0.10	3
Tl			1	80.856	ug/l	1.23	365,532.48	4.424E-01	Pulse	0.10	3
Pb			1	81.299	ug/l	2.63	127,559.20	1.544E-01	Pulse	0.10	3
Pb			1	81.238	ug/l	1.18	111,534.79	1.350E-01	Pulse	0.10	3
Pb			1	81.360	ug/l	0.87	512,459.57	6.202E-01	Pulse	0.10	3
Na			2	207841.919	ug/l	1.62	68,036,357.30	8.647E+02	Analog	0.30	3
Mg			2	8551.079	ug/l	0.92	1,278,982.28	1.625E+01	Pulse	0.30	3
Al			2	4362.226	ug/l	1.59	229,879.39	2.921E+00	Pulse	0.30	3
K			2	7842.643	ug/l	1.69	817,928.09	1.039E+01	Pulse	0.30	3
Ca			2	28470.610	ug/l	1.39	156,838.61	1.993E+00	Pulse	0.30	3
Ti			2	89.978	ug/l	2.51	3,876.16	4.926E-02	Pulse	0.30	3
V			2	84.061	ug/l	1.33	101,949.91	1.296E+00	Pulse	0.30	3
Cr			2	79.583	ug/l	1.14	121,638.73	1.546E+00	Pulse	0.30	3
Mn			2	111.599	ug/l	0.67	89,490.52	1.137E+00	Pulse	0.30	3
Fe			2	4446.660	ug/l	1.94	5,280,651.04	6.711E+01	Analog	0.30	3
Co			2	75.159	ug/l	0.82	167,652.62	2.131E+00	Pulse	0.30	3
Ni			2	74.245	ug/l	0.54	43,673.49	5.550E-01	Pulse	0.30	3
Cu			2	74.532	ug/l	0.84	111,922.69	1.422E+00	Pulse	0.30	3
Zn			2	67.215	ug/l	1.45	14,521.09	1.845E-01	Pulse	0.30	3
As			2	71.917	ug/l	2.22	8,682.76	1.103E-01	Pulse	1.00	3
Cd			2	74.160	ug/l	0.68	26,416.93	1.062E-01	Pulse	0.30	3
Sn			2	79.600	ug/l	1.50	39,821.69	1.601E-01	Pulse	0.30	3
Se			3	332.968	ug/l	3.73	7,655.16	1.420E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,568,656.31	0.18	101.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,896,766.95	0.47	103.5	Pulse	0.10	3
1	Ge		375,535.35	0.35	103.9	Pulse	0.10	3
1	Rh		1,473,409.20	1.32	94.7	Pulse	0.10	3
1	In		1,506,200.69	0.68	97.7	Pulse	0.10	3
1	Tb		1,789,264.97	1.26	100.4	Pulse	0.10	3
1	Ho		167,335.48	1.30	100.9	Pulse	0.10	3
1	Bi		826,285.15	0.86	90.1	Pulse	0.10	3
2	Sc		78,686.26	0.62	99.1	Pulse	0.30	3
2	Ge		49,445.77	1.49	99.5	Pulse	0.30	3
2	Rh		688,091.14	1.72	91.1	Pulse	0.30	3
2	In		248,677.92	1.08	92.4	Pulse	0.30	3
2	Tb		751,334.80	1.42	97.6	Pulse	0.30	3
2	Ho		71,306.75	1.28	99.6	Pulse	0.30	3
2	Bi		373,720.76	1.12	87.9	Pulse	0.30	3
3	Sc		77,209.28	1.35	107.4	Pulse	0.30	3
3	Ge		53,921.32	1.77	105.1	Pulse	0.30	3
3	Rh		446,594.22	0.84	92.7	Pulse	0.30	3
3	Tb		614,618.92	0.45	98.2	Pulse	0.30	3

Quantitation Report

File Name	047SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 13:48
Sample Name	mp14114a-mb1conf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.021	ug/l	29.74	57.33	3.466E-05	Pulse	0.25	3
B			1	9.549	ug/l	0.97	22,858.76	1.383E-02	Pulse	0.15	3
Ca			1	52.493	ug/l	2.12	35,475.99	1.788E-02	Pulse	0.10	3
Sr			1	0.125	ug/l	9.20	1,576.81	9.530E-04	Pulse	0.10	3
Mo			1	0.114	ug/l	20.85	226.68	1.367E-04	Pulse	0.10	3
Ag			1	0.022	ug/l	40.40	113.34	7.026E-05	Pulse	0.10	3
Sn			1	0.460	ug/l	10.76	1,856.87	1.151E-03	Pulse	0.10	3
Sb			1	0.149	ug/l	2.17	430.02	2.307E-04	Pulse	0.10	3
Ba			1	0.304	ug/l	7.31	350.02	1.877E-04	Pulse	0.10	3
Tl			1	0.040	ug/l	2.38	246.68	2.637E-04	Pulse	0.10	3
Pb			1	0.215	ug/l	15.47	413.36	4.428E-04	Pulse	0.10	3
Pb			1	0.158	ug/l	19.78	276.68	2.960E-04	Pulse	0.10	3
Pb			1	0.180	ug/l	6.18	1,406.75	1.505E-03	Pulse	0.10	3
Na			2	40.979	ug/l	5.83	19,602.58	2.417E-01	Pulse	0.30	3
Mg			2	5.108	ug/l	9.20	816.70	1.007E-02	Pulse	0.30	3
Al			2	22.557	ug/l	6.22	1,245.63	1.537E-02	Pulse	0.30	3
K			2	5.522	ug/l	16.90	6,389.30	7.882E-02	Pulse	0.30	3
Ca			2	79.109	ug/l	3.67	571.13	7.047E-03	Pulse	0.30	3
Ti			2	0.978	ug/l	57.94	43.33	5.354E-04	Pulse	0.30	3
V			2	0.616	ug/l	4.68	1,041.16	1.284E-02	Pulse	0.30	3
Cr			2	0.445	ug/l	19.34	1,052.28	1.296E-02	Pulse	0.30	3
Mn			2	0.700	ug/l	6.32	632.24	7.804E-03	Pulse	0.30	3
Fe			2	11.396	ug/l	2.01	15,404.33	1.900E-01	Pulse	0.30	3
Co			2	0.034	ug/l	29.97	118.89	1.464E-03	Pulse	0.30	3
Ni			2	0.689	ug/l	1.79	441.12	5.441E-03	Pulse	0.30	3
Cu			2	2.651	ug/l	1.67	4,342.95	5.357E-02	Pulse	0.30	3
Zn			2	6.923	ug/l	1.50	1,605.67	1.981E-02	Pulse	0.30	3
As			2	0.316	ug/l	9.40	44.33	5.473E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.153	ug/l	17.48	58.17	2.192E-04	Pulse	0.30	3
Sn			2	1.275	ug/l	8.72	455.57	1.716E-03	Pulse	0.30	3
Se			3	1.597	ug/l	28.07	40.33	7.066E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,653,192.95	1.14	106.5	Pulse	0.10	3
1	Sc		1,983,819.92	1.63	108.2	Pulse	0.10	3
1	Ge		389,607.65	0.95	107.8	Pulse	0.10	3
1	Rh		1,655,280.55	1.77	106.4	Pulse	0.10	3
1	In		1,614,031.27	0.82	104.7	Pulse	0.10	3
1	Tb		1,864,681.28	2.07	104.7	Pulse	0.10	3
1	Ho		173,000.35	1.27	104.3	Pulse	0.10	3
1	Bi		935,752.20	2.90	102.0	Pulse	0.10	3
2	Sc		81,065.27	1.53	102.1	Pulse	0.30	3
2	Ge		52,638.63	1.18	105.9	Pulse	0.30	3
2	Rh		770,627.54	0.83	102.0	Pulse	0.30	3
2	In		265,283.60	0.73	98.5	Pulse	0.30	3
2	Tb		775,596.13	0.59	100.7	Pulse	0.30	3
2	Ho		72,905.47	2.32	101.8	Pulse	0.30	3
2	Bi		416,150.51	1.31	97.9	Pulse	0.30	3
3	Sc		79,215.02	1.59	110.2	Pulse	0.30	3
3	Ge		57,193.48	1.18	111.5	Pulse	0.30	3
3	Rh		502,282.15	0.12	104.3	Pulse	0.30	3
3	Tb		633,771.82	0.56	101.2	Pulse	0.30	3

Quantitation Report

File Name 048SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File
Method Path
Acq Time 4/16/2019 13:53
Sample Name jc85901-2
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name Metals
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/17/2019 7:05
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.033	ug/l	7.86	82.67	5.282E-05	Pulse	0.25	3
B			1	101.684	ug/l	0.69	216,514.42	1.383E-01	Pulse	0.15	3
Ca			1	25169.305	ug/l	0.20	6,888,546.15	3.600E+00	Analog	0.10	3
Sr			1	93.312	ug/l	0.84	822,374.80	5.510E-01	Pulse	0.10	3
Mo			1	1.139	ug/l	4.46	2,043.56	1.369E-03	Pulse	0.10	3
Ag			1	0.011	ug/l	58.06	66.67	4.409E-05	Pulse	0.10	3
Sn			1	0.374	ug/l	14.68	1,533.47	1.015E-03	Pulse	0.10	3
Sb			1	0.497	ug/l	6.45	1,360.12	7.500E-04	Pulse	0.10	3
Ba			1	81.842	ug/l	1.29	89,008.30	4.907E-02	Pulse	0.10	3
Tl			1	0.034	ug/l	13.12	196.68	2.360E-04	Pulse	0.10	3
Pb			1	0.380	ug/l	16.60	630.04	7.571E-04	Pulse	0.10	3
Pb			1	0.362	ug/l	17.61	530.03	6.360E-04	Pulse	0.10	3
Pb			1	0.393	ug/l	6.53	2,606.89	3.129E-03	Pulse	0.10	3
Na			2	207385.962	ug/l	0.88	68,273,106.18	8.628E+02	Analog	0.30	3
Mg			2	4929.646	ug/l	0.91	741,528.04	9.371E+00	Pulse	0.30	3
Al			2	697.490	ug/l	2.43	36,981.27	4.673E-01	Pulse	0.30	3
K			2	4057.979	ug/l	1.21	428,354.42	5.413E+00	Pulse	0.30	3
Ca			2	24498.651	ug/l	0.90	135,736.94	1.715E+00	Pulse	0.30	3
Ti			2	19.600	ug/l	10.45	848.96	1.073E-02	Pulse	0.30	3
V			2	2.922	ug/l	4.39	3,821.73	4.830E-02	Pulse	0.30	3
Cr			2	2.877	ug/l	1.52	4,753.10	6.007E-02	Pulse	0.30	3
Mn			2	39.033	ug/l	0.67	31,512.54	3.982E-01	Pulse	0.30	3
Fe			2	620.664	ug/l	1.51	742,467.96	9.383E+00	Pulse	0.30	3
Co			2	0.410	ug/l	3.12	957.82	1.211E-02	Pulse	0.30	3
Ni			2	1.013	ug/l	7.93	622.25	7.863E-03	Pulse	0.30	3
Cu			2	1.742	ug/l	2.77	2,869.22	3.626E-02	Pulse	0.30	3
Zn			2	5.003	ug/l	6.90	1,152.29	1.456E-02	Pulse	0.30	3
As			2	0.973	ug/l	3.90	123.00	1.554E-03	Pulse	1.00	3
Cd			2	0.110	ug/l	0.63	39.06	1.577E-04	Pulse	0.30	3
Sn			2	1.196	ug/l	2.04	385.57	1.556E-03	Pulse	0.30	3
Se			3	1.865	ug/l	15.97	44.33	8.210E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,565,012.09	0.22	100.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,913,555.18	1.38	104.4	Pulse	0.10	3
1	Ge		378,423.37	0.61	104.7	Pulse	0.10	3
1	Rh		1,492,554.93	0.81	95.9	Pulse	0.10	3
1	In		1,510,988.75	0.42	98.0	Pulse	0.10	3
1	Tb		1,813,948.83	0.56	101.8	Pulse	0.10	3
1	Ho		168,639.36	1.96	101.7	Pulse	0.10	3
1	Bi		833,281.70	1.24	90.8	Pulse	0.10	3
2	Sc		79,130.82	0.49	99.7	Pulse	0.30	3
2	Ge		49,857.23	0.29	100.3	Pulse	0.30	3
2	Rh		696,258.20	0.85	92.2	Pulse	0.30	3
2	In		247,789.71	0.57	92.0	Pulse	0.30	3
2	Tb		740,309.33	0.59	96.1	Pulse	0.30	3
2	Ho		69,815.23	0.98	97.5	Pulse	0.30	3
2	Bi		371,839.35	1.40	87.5	Pulse	0.30	3
3	Sc		76,116.60	1.32	105.9	Pulse	0.30	3
3	Ge		53,953.66	2.54	105.2	Pulse	0.30	3
3	Rh		449,269.82	0.94	93.3	Pulse	0.30	3
3	Tb		601,522.62	1.69	96.1	Pulse	0.30	3

Quantitation Report

File Name 049SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File
Method Path
Acq Time 4/16/2019 13:58
Sample Name mp14185a-sd1
Sample Type Sample
Comment
Prep Dilution 10.000
Auto Dilution N/A
Total Dilution 10.000
Operator Name Metals
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/17/2019 7:05
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.076	ug/l	19.42	44.00	2.674E-05	Pulse	0.25	3
B			1	120.742	ug/l	0.94	55,256.72	3.356E-02	Pulse	0.15	3
Ca			1	23860.127	ug/l	1.15	1,395,849.09	6.910E-01	Pulse	0.10	3
Sr			1	90.920	ug/l	2.52	171,833.79	1.075E-01	Pulse	0.10	3
Mo			1	1.267	ug/l	23.13	486.69	3.045E-04	Pulse	0.10	3
Ag			1	0.040	ug/l	82.15	56.67	3.594E-05	Pulse	0.10	3
Sn			1	0.073	ug/l	239.62	706.71	4.456E-04	Pulse	0.10	3
Sb			1	0.681	ug/l	6.50	393.35	2.124E-04	Pulse	0.10	3
Ba			1	86.070	ug/l	2.68	19,101.22	1.032E-02	Pulse	0.10	3
Tl			1	0.172	ug/l	29.36	213.34	2.350E-04	Pulse	0.10	3
Pb			1	0.918	ug/l	16.17	346.69	3.838E-04	Pulse	0.10	3
Pb			1	0.743	ug/l	16.20	253.34	2.807E-04	Pulse	0.10	3
Pb			1	0.836	ug/l	17.63	1,266.74	1.404E-03	Pulse	0.10	3
Na			2	211255.325	ug/l	0.21	14,739,526.64	1.758E+02	Analog	0.30	3
Mg			2	5046.602	ug/l	0.48	160,853.00	1.919E+00	Pulse	0.30	3
Al			2	765.084	ug/l	2.53	8,612.64	1.027E-01	Pulse	0.30	3
K			2	4191.011	ug/l	1.03	98,480.20	1.175E+00	Pulse	0.30	3
Ca			2	24564.194	ug/l	1.13	28,935.65	3.452E-01	Pulse	0.30	3
Ti			2	26.508	ug/l	21.90	243.34	2.902E-03	Pulse	0.30	3
V			2	2.518	ug/l	2.53	932.26	1.112E-02	Pulse	0.30	3
Cr			2	2.353	ug/l	6.07	1,127.84	1.345E-02	Pulse	0.30	3
Mn			2	41.140	ug/l	1.77	7,080.76	8.448E-02	Pulse	0.30	3
Fe			2	636.616	ug/l	2.59	162,574.91	1.939E+00	Pulse	0.30	3
Co			2	0.452	ug/l	19.55	256.67	3.058E-03	Pulse	0.30	3
Ni			2	1.746	ug/l	3.99	243.34	2.904E-03	Pulse	0.30	3
Cu			2	3.525	ug/l	4.13	1,384.53	1.652E-02	Pulse	0.30	3
Zn			2	18.388	ug/l	8.30	916.71	1.094E-02	Pulse	0.30	3
As			2	1.754	ug/l	3.96	50.33	6.003E-04	Pulse	1.00	3
Cd			2	0.653	ug/l	36.19	51.40	1.870E-04	Pulse	0.30	3
Sn			2	3.925	ug/l	3.53	198.89	7.247E-04	Pulse	0.30	3
Se			3	7.043	ug/l	17.05	35.00	6.265E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,646,608.40	0.59	106.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,020,143.09	0.22	110.2	Pulse	0.10	3
1	Ge		385,629.23	0.83	106.7	Pulse	0.10	3
1	Rh		1,598,052.48	1.54	102.7	Pulse	0.10	3
1	In		1,588,186.68	2.37	103.0	Pulse	0.10	3
1	Tb		1,850,353.31	1.60	103.9	Pulse	0.10	3
1	Ho		173,783.64	1.97	104.8	Pulse	0.10	3
1	Bi		904,675.56	2.55	98.6	Pulse	0.10	3
2	Sc		83,826.84	1.04	105.6	Pulse	0.30	3
2	Ge		52,747.89	2.46	106.1	Pulse	0.30	3
2	Rh		764,400.40	0.99	101.2	Pulse	0.30	3
2	In		274,366.83	1.09	101.9	Pulse	0.30	3
2	Tb		784,736.15	1.51	101.9	Pulse	0.30	3
2	Ho		72,714.29	1.14	101.6	Pulse	0.30	3
2	Bi		415,328.14	0.75	97.7	Pulse	0.30	3
3	Sc		79,030.37	0.61	109.9	Pulse	0.30	3
3	Ge		55,766.55	1.71	108.7	Pulse	0.30	3
3	Rh		485,549.88	0.61	100.8	Pulse	0.30	3
3	Tb		635,026.00	0.24	101.4	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 14:03
Sample Name	jc86089-1f
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	24.85	25.33	1.529E-05	Pulse	0.25	3
B			1	54.181	ug/l	2.09	122,773.15	7.415E-02	Pulse	0.15	3
Ca			1	33816.441	ug/l	0.52	9,395,553.61	4.833E+00	Analog	0.10	3
Sr			1	72.100	ug/l	1.07	677,372.70	4.258E-01	Pulse	0.10	3
Mo			1	5.169	ug/l	2.00	9,883.96	6.213E-03	Pulse	0.10	3
Ag			1	0.012	ug/l	25.37	73.33	4.587E-05	Pulse	0.10	3
Sn			1	0.514	ug/l	13.57	1,976.90	1.236E-03	Pulse	0.10	3
Sb			1	0.345	ug/l	2.75	976.74	5.231E-04	Pulse	0.10	3
Ba			1	9.377	ug/l	2.65	10,507.92	5.627E-03	Pulse	0.10	3
Tl			1	0.026	ug/l	21.51	170.01	1.873E-04	Pulse	0.10	3
Pb			1	0.448	ug/l	10.79	803.39	8.850E-04	Pulse	0.10	3
Pb			1	0.344	ug/l	13.80	550.04	6.058E-04	Pulse	0.10	3
Pb			1	0.412	ug/l	6.37	2,970.25	3.271E-03	Pulse	0.10	3
Na			2	1543.841	ug/l	1.17	531,621.54	6.493E+00	Pulse	0.30	3
Mg			2	1934.538	ug/l	0.83	301,095.42	3.678E+00	Pulse	0.30	3
Al			2	11.253	ug/l	10.18	638.91	7.800E-03	Pulse	0.30	3
K			2	3722.947	ug/l	0.73	407,084.25	4.972E+00	Pulse	0.30	3
Ca			2	31860.843	ug/l	2.02	182,609.64	2.230E+00	Pulse	0.30	3
Ti			2	1.209	ug/l	41.63	54.44	6.616E-04	Pulse	0.30	3
V			2	0.759	ug/l	7.36	1,232.29	1.505E-02	Pulse	0.30	3
Cr			2	0.799	ug/l	3.71	1,622.34	1.982E-02	Pulse	0.30	3
Mn			2	10.352	ug/l	2.50	8,690.61	1.061E-01	Pulse	0.30	3
Fe			2	28.008	ug/l	1.07	36,077.10	4.406E-01	Pulse	0.30	3
Co			2	0.102	ug/l	15.34	276.67	3.381E-03	Pulse	0.30	3
Ni			2	0.910	ug/l	12.51	581.13	7.094E-03	Pulse	0.30	3
Cu			2	3.081	ug/l	1.71	5,057.64	6.176E-02	Pulse	0.30	3
Zn			2	17.141	ug/l	2.48	3,908.38	4.772E-02	Pulse	0.30	3
As			2	0.711	ug/l	7.87	94.33	1.153E-03	Pulse	1.00	3
Cd			2	0.185	ug/l	8.46	70.22	2.644E-04	Pulse	0.30	3
Sn			2	1.215	ug/l	2.30	423.35	1.593E-03	Pulse	0.30	3
Se			3	1.703	ug/l	6.37	43.00	7.521E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,655,945.98	0.61	106.7	Pulse	0.10	3
1	Sc		1,943,986.74	0.24	106.1	Pulse	0.10	3
1	Ge		387,871.57	0.29	107.3	Pulse	0.10	3

Quantitation Report

1	Rh		1,590,861.59	0.57	102.2	Pulse	0.10	3
1	In		1,600,547.08	1.09	103.8	Pulse	0.10	3
1	Tb		1,867,178.82	0.67	104.8	Pulse	0.10	3
1	Ho		175,799.74	1.38	106.0	Pulse	0.10	3
1	Bi		908,195.92	0.88	99.0	Pulse	0.10	3
2	Sc		81,881.39	1.80	103.1	Pulse	0.30	3
2	Ge		53,281.07	1.73	107.2	Pulse	0.30	3
2	Rh		751,882.77	0.51	99.5	Pulse	0.30	3
2	In		265,742.62	1.16	98.7	Pulse	0.30	3
2	Tb		778,570.61	1.72	101.1	Pulse	0.30	3
2	Ho		72,618.36	1.82	101.4	Pulse	0.30	3
2	Bi		410,425.99	0.88	96.5	Pulse	0.30	3
3	Sc		80,019.24	1.23	111.3	Pulse	0.30	3
3	Ge		57,156.64	0.94	111.4	Pulse	0.30	3
3	Rh		490,718.90	1.13	101.9	Pulse	0.30	3
3	Tb		639,272.42	0.99	102.1	Pulse	0.30	3

Quantitation Report

File Name	051SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 14:08
Sample Name	jc86089-2f
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.009	ug/l	27.53	29.33	1.762E-05	Pulse	0.25	3
B			1	34.831	ug/l	1.99	79,870.92	4.800E-02	Pulse	0.15	3
Ca			1	29702.044	ug/l	0.51	8,391,434.67	4.246E+00	Analog	0.10	3
Sr			1	62.168	ug/l	0.65	592,609.05	3.672E-01	Pulse	0.10	3
Mo			1	4.538	ug/l	1.87	8,803.17	5.454E-03	Pulse	0.10	3
Ag			1	0.017	ug/l	16.93	93.33	5.835E-05	Pulse	0.10	3
Sn			1	0.438	ug/l	10.62	1,783.52	1.115E-03	Pulse	0.10	3
Sb			1	0.236	ug/l	3.27	676.71	3.611E-04	Pulse	0.10	3
Ba			1	12.359	ug/l	0.99	13,901.18	7.415E-03	Pulse	0.10	3
Tl			1	0.010	ug/l	37.94	93.34	1.021E-04	Pulse	0.10	3
Pb			1	2.236	ug/l	0.93	3,900.76	4.281E-03	Pulse	0.10	3
Pb			1	2.295	ug/l	3.59	3,503.98	3.846E-03	Pulse	0.10	3
Pb			1	2.250	ug/l	1.94	15,741.14	1.728E-02	Pulse	0.10	3
Na			2	2351.484	ug/l	1.09	807,220.19	9.853E+00	Pulse	0.30	3
Mg			2	2510.013	ug/l	1.60	390,886.89	4.771E+00	Pulse	0.30	3
Al			2	12.631	ug/l	4.36	714.47	8.722E-03	Pulse	0.30	3
K			2	5006.715	ug/l	1.18	545,760.03	6.662E+00	Pulse	0.30	3
Ca			2	28791.493	ug/l	1.27	165,120.41	2.016E+00	Pulse	0.30	3
Ti			2	1.486	ug/l	12.71	66.67	8.134E-04	Pulse	0.30	3
V			2	0.681	ug/l	14.05	1,134.50	1.385E-02	Pulse	0.30	3
Cr			2	0.873	ug/l	8.62	1,741.24	2.125E-02	Pulse	0.30	3
Mn			2	35.022	ug/l	1.68	29,276.59	3.574E-01	Pulse	0.30	3
Fe			2	46.452	ug/l	2.07	58,892.54	7.189E-01	Pulse	0.30	3
Co			2	0.225	ug/l	3.67	563.35	6.875E-03	Pulse	0.30	3
Ni			2	1.239	ug/l	0.64	782.25	9.548E-03	Pulse	0.30	3
Cu			2	2.284	ug/l	2.19	3,816.12	4.658E-02	Pulse	0.30	3
Zn			2	63.292	ug/l	2.60	14,239.70	1.738E-01	Pulse	0.30	3
As			2	0.620	ug/l	11.46	83.00	1.013E-03	Pulse	1.00	3
Cd			2	0.623	ug/l	10.70	237.59	8.919E-04	Pulse	0.30	3
Sn			2	1.239	ug/l	3.15	437.79	1.643E-03	Pulse	0.30	3
Se			3	1.348	ug/l	30.52	34.67	6.007E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,664,133.85	0.57	107.2	Pulse	0.10	3
1	Sc		1,976,127.84	0.68	107.8	Pulse	0.10	3
1	Ge		396,715.13	0.58	109.7	Pulse	0.10	3

Quantitation Report

1	Rh		1,614,014.92	0.51	103.7	Pulse	0.10	3
1	In		1,599,649.86	1.17	103.8	Pulse	0.10	3
1	Tb		1,874,651.12	1.58	105.2	Pulse	0.10	3
1	Ho		174,684.85	0.90	105.3	Pulse	0.10	3
1	Bi		911,360.25	2.33	99.4	Pulse	0.10	3
2	Sc		81,925.91	0.79	103.2	Pulse	0.30	3
2	Ge		53,461.74	1.19	107.5	Pulse	0.30	3
2	Rh		757,281.72	1.34	100.2	Pulse	0.30	3
2	In		266,425.09	1.37	99.0	Pulse	0.30	3
2	Tb		782,195.99	1.86	101.6	Pulse	0.30	3
2	Ho		73,130.08	0.70	102.2	Pulse	0.30	3
2	Bi		409,111.77	1.33	96.2	Pulse	0.30	3
3	Sc		81,368.23	1.15	113.2	Pulse	0.30	3
3	Ge		57,709.95	1.09	112.5	Pulse	0.30	3
3	Rh		495,671.34	0.65	102.9	Pulse	0.30	3
3	Tb		641,332.91	0.63	102.5	Pulse	0.30	3

Quantitation Report

File Name	052SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 14:12
Sample Name	mp14051-s3 4
Sample Type	Sample
Comment	
Prep Dilution	100.000
Auto Dilution	N/A
Total Dilution	100.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	78.284	ug/l	3.64	3,979.28	2.314E-03	Pulse	0.25	3
B			1	386.763	ug/l	2.44	19,562.67	1.138E-02	Pulse	0.15	3
Ca			1	106728.669	ug/l	0.35	653,274.29	3.148E-01	Pulse	0.10	3
Sr			1	592.528	ug/l	3.24	117,502.10	7.016E-02	Pulse	0.10	3
Mo			1	82.994	ug/l	11.19	3,340.55	1.995E-03	Pulse	0.10	3
Ag			1	79.544	ug/l	5.29	6,588.54	4.005E-03	Pulse	0.10	3
Sn			1	95.021	ug/l	2.02	5,644.70	3.431E-03	Pulse	0.10	3
Sb			1	89.074	ug/l	4.24	5,067.82	2.665E-03	Pulse	0.10	3
Ba			1	131.133	ug/l	5.86	3,000.45	1.578E-03	Pulse	0.10	3
Tl			1	81.607	ug/l	2.96	8,269.67	8.977E-03	Pulse	0.10	3
Pb			1	78.483	ug/l	6.36	2,780.41	3.016E-03	Pulse	0.10	3
Pb			1	80.103	ug/l	0.43	2,483.67	2.695E-03	Pulse	0.10	3
Pb			1	79.888	ug/l	3.06	11,342.45	1.231E-02	Pulse	0.10	3
Na			2	36013.964	ug/l	0.88	261,273.48	3.068E+00	Pulse	0.30	3
Mg			2	28914.108	ug/l	0.41	93,654.79	1.100E+00	Pulse	0.30	3
Al			2	5162.615	ug/l	6.21	5,911.64	6.941E-02	Pulse	0.30	3
K			2	7141.164	ug/l	0.60	22,107.58	2.595E-01	Pulse	0.30	3
Ca			2	114312.928	ug/l	1.91	13,751.37	1.614E-01	Pulse	0.30	3
Ti			2	231.525	ug/l	90.93	214.56	2.535E-03	Pulse	0.30	3
V			2	91.726	ug/l	4.31	2,689.18	3.158E-02	Pulse	0.30	3
Cr			2	84.150	ug/l	4.80	3,147.05	3.694E-02	Pulse	0.30	3
Mn			2	7394.976	ug/l	1.31	128,353.59	1.507E+00	Pulse	0.30	3
Fe			2	6128.139	ug/l	0.78	159,049.93	1.867E+00	Pulse	0.30	3
Co			2	361.547	ug/l	0.51	17,497.88	2.054E-01	Pulse	0.30	3
Ni			2	226.393	ug/l	3.58	2,905.89	3.412E-02	Pulse	0.30	3
Cu			2	112.273	ug/l	2.49	3,906.15	4.585E-02	Pulse	0.30	3
Zn			2	370.045	ug/l	7.09	1,797.92	2.111E-02	Pulse	0.30	3
As			2	94.575	ug/l	2.06	252.33	2.963E-03	Pulse	1.00	3
Cd			2	85.167	ug/l	7.32	679.99	2.440E-03	Pulse	0.30	3
Sn			2	135.585	ug/l	3.23	1,287.85	4.621E-03	Pulse	0.30	3
Se			3	538.409	ug/l	2.59	259.00	4.616E-03	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,719,589.96	0.19	110.8	Pulse	0.10	3
1	Sc		2,075,047.31	1.43	113.2	Pulse	0.10	3
1	Ge		398,296.24	0.93	110.2	Pulse	0.10	3

Quantitation Report

1	Rh		1,674,743.78	0.30	107.6	Pulse	0.10	3
1	In		1,645,602.33	2.07	106.8	Pulse	0.10	3
1	Tb		1,901,935.91	0.39	106.8	Pulse	0.10	3
1	Ho		175,874.50	0.72	106.0	Pulse	0.10	3
1	Bi		921,524.13	1.67	100.5	Pulse	0.10	3
2	Sc		85,176.17	1.25	107.3	Pulse	0.30	3
2	Ge		54,150.07	1.59	108.9	Pulse	0.30	3
2	Rh		788,012.90	0.81	104.3	Pulse	0.30	3
2	In		278,652.32	0.80	103.5	Pulse	0.30	3
2	Tb		796,677.29	1.25	103.5	Pulse	0.30	3
2	Ho		74,146.23	1.08	103.6	Pulse	0.30	3
2	Bi		425,187.17	1.21	100.0	Pulse	0.30	3
3	Sc		80,935.66	0.65	112.6	Pulse	0.30	3
3	Ge		56,100.18	0.49	109.4	Pulse	0.30	3
3	Rh		502,813.75	0.12	104.4	Pulse	0.30	3
3	Tb		636,207.75	0.58	101.6	Pulse	0.30	3

Quantitation Report

File Name	053_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 14:17
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	50.873	ug/l	3.07	239,102.21	1.501E-01	Pulse	0.25	3
B			1	106.916	ug/l	2.07	461,850.28	2.899E-01	Pulse	0.15	3
Ca			1	4949.731	ug/l	0.79	2,832,516.31	1.422E+00	Pulse	0.10	3
Sr			1	53.275	ug/l	3.88	1,016,301.10	6.291E-01	Pulse	0.10	3
Mo			1	53.637	ug/l	1.77	208,322.07	1.289E-01	Pulse	0.10	3
Ag			1	48.666	ug/l	1.64	396,910.49	2.441E-01	Pulse	0.10	3
Sn			1	50.984	ug/l	2.09	263,156.07	1.618E-01	Pulse	0.10	3
Sb			1	53.209	ug/l	2.19	287,749.38	1.586E-01	Pulse	0.10	3
Ba			1	50.211	ug/l	1.24	109,219.68	6.021E-02	Pulse	0.10	3
Tl			1	51.406	ug/l	3.38	499,133.63	5.625E-01	Pulse	0.10	3
Pb			1	52.049	ug/l	4.61	175,366.84	1.977E-01	Pulse	0.10	3
Pb			1	51.880	ug/l	4.14	152,942.22	1.724E-01	Pulse	0.10	3
Pb			1	51.529	ug/l	2.65	697,067.64	7.856E-01	Pulse	0.10	3
Na			2	4929.359	ug/l	0.81	3,437,186.04	4.108E+01	Pulse	0.30	3
Mg			2	4951.704	ug/l	0.31	1,575,154.77	1.882E+01	Pulse	0.30	3
Al			2	4843.860	ug/l	0.29	542,857.24	6.488E+00	Pulse	0.30	3
K			2	5021.832	ug/l	0.81	1,112,114.95	1.329E+01	Pulse	0.30	3
Ca			2	5260.405	ug/l	1.00	61,716.02	7.375E-01	Pulse	0.30	3
Ti			2	50.339	ug/l	5.09	4,614.15	5.512E-02	Pulse	0.30	3
V			2	51.499	ug/l	0.75	132,788.37	1.587E+00	Pulse	0.30	3
Cr			2	49.872	ug/l	0.39	162,019.22	1.936E+00	Pulse	0.30	3
Mn			2	48.735	ug/l	0.66	83,115.75	9.934E-01	Pulse	0.30	3
Fe			2	5111.026	ug/l	1.42	12,904,221.99	1.542E+02	Analog	0.30	3
Co			2	48.926	ug/l	0.68	232,084.03	2.774E+00	Pulse	0.30	3
Ni			2	48.460	ug/l	0.77	60,612.48	7.245E-01	Pulse	0.30	3
Cu			2	48.415	ug/l	0.48	154,551.97	1.847E+00	Pulse	0.30	3
Zn			2	47.794	ug/l	1.06	21,924.27	2.621E-01	Pulse	0.30	3
As			2	51.710	ug/l	0.41	13,276.11	1.587E-01	Pulse	1.00	3
Cd			2	50.185	ug/l	0.36	38,807.21	1.438E-01	Pulse	0.30	3
Sn			2	51.659	ug/l	1.50	56,174.77	2.081E-01	Pulse	0.30	3
Se			3	203.403	ug/l	3.00	9,505.32	1.734E-01	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,593,258.28	1.37	102.6	Pulse	0.10	3
1	Sc		1,991,714.55	1.09	108.7	Pulse	0.10	3
1	Ge		386,661.00	2.03	106.9	Pulse	0.10	3

Quantitation Report

1	Rh		1,616,024.51	1.59	103.8	Pulse	0.10	3
1	In		1,626,358.74	1.99	105.5	Pulse	0.10	3
1	Tb		1,814,274.35	1.35	101.8	Pulse	0.10	3
1	Ho		168,294.12	3.20	101.4	Pulse	0.10	3
1	Bi		887,640.04	2.31	96.8	Pulse	0.10	3
2	Sc		83,674.79	2.05	105.4	Pulse	0.30	3
2	Ge		52,113.30	1.99	104.8	Pulse	0.30	3
2	Rh		753,583.25	1.40	99.7	Pulse	0.30	3
2	In		269,940.32	1.53	100.3	Pulse	0.30	3
2	Tb		774,722.99	2.48	100.6	Pulse	0.30	3
2	Ho		73,370.25	1.32	102.5	Pulse	0.30	3
2	Bi		407,399.94	2.26	95.8	Pulse	0.30	3
3	Sc		79,530.94	0.68	110.6	Pulse	0.30	3
3	Ge		54,799.27	0.95	106.8	Pulse	0.30	3
3	Rh		480,898.12	0.60	99.9	Pulse	0.30	3
3	Tb		628,199.40	1.15	100.4	Pulse	0.30	3

Quantitation Report

File Name	054_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 14:22
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.009	ug/l	36.50	50.67	3.030E-05	Pulse	0.25	3
B			1	3.778	ug/l	6.23	18,572.43	1.113E-02	Pulse	0.15	3
Ca			1	-8.042	ug/l	-11.29	16,343.38	8.104E-03	Pulse	0.10	3
Sr			1	0.010	ug/l	14.25	543.36	3.344E-04	Pulse	0.10	3
Mo			1	0.066	ug/l	42.06	260.01	1.595E-04	Pulse	0.10	3
Ag			1	0.007	ug/l	55.46	83.33	5.218E-05	Pulse	0.10	3
Sn			1	0.043	ug/l	17.81	896.73	5.577E-04	Pulse	0.10	3
Sb			1	0.298	ug/l	12.63	1,686.84	8.973E-04	Pulse	0.10	3
Ba			1	0.016	ug/l	62.48	46.67	2.463E-05	Pulse	0.10	3
Tl			1	0.014	ug/l	34.50	176.68	1.970E-04	Pulse	0.10	3
Pb			1	-0.003	ug/l	-88.49	20.00	2.239E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	102.87	40.00	4.452E-05	Pulse	0.10	3
Pb			1	0.005	ug/l	59.60	180.01	2.009E-04	Pulse	0.10	3
Na			2	1.800	ug/l	3.40	7,406.46	8.625E-02	Pulse	0.30	3
Mg			2	0.605	ug/l	6.37	228.89	2.665E-03	Pulse	0.30	3
Al			2	1.057	ug/l	34.92	144.45	1.680E-03	Pulse	0.30	3
K			2	-1.326	ug/l	-49.33	5,843.50	6.806E-02	Pulse	0.30	3
Ca			2	1.215	ug/l	241.94	144.45	1.683E-03	Pulse	0.30	3
Ti			2	0.201	ug/l	37.47	18.89	2.204E-04	Pulse	0.30	3
V			2	0.004	ug/l	281.86	301.12	3.508E-03	Pulse	0.30	3
Cr			2	0.002	ug/l	749.19	378.90	4.414E-03	Pulse	0.30	3
Mn			2	0.020	ug/l	51.80	93.33	1.087E-03	Pulse	0.30	3
Fe			2	0.633	ug/l	5.39	3,190.41	3.716E-02	Pulse	0.30	3
Co			2	0.008	ug/l	37.53	81.11	9.439E-04	Pulse	0.30	3
Ni			2	0.025	ug/l	64.70	56.67	6.601E-04	Pulse	0.30	3
Cu			2	-0.014	ug/l	-32.75	220.00	2.563E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.029	ug/l	109.63	90.00	1.048E-03	Pulse	0.30	3
As			2	0.114	ug/l	10.80	35.33	4.115E-04	Pulse	1.00	3
Cd			2	0.077	ug/l	37.10	61.51	2.193E-04	Pulse	0.30	3
Sn			2	0.418	ug/l	3.56	232.23	8.296E-04	Pulse	0.30	3
Se			3	0.822	ug/l	25.14	40.00	7.266E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,669,247.05	1.94	107.5	Pulse	0.10	3
1	Sc		2,017,694.50	2.45	110.1	Pulse	0.10	3
1	Ge		397,845.52	0.38	110.0	Pulse	0.10	3
1	Rh		1,625,566.49	1.32	104.4	Pulse	0.10	3
1	In		1,608,825.47	2.83	104.4	Pulse	0.10	3
1	Tb		1,881,864.19	2.27	105.6	Pulse	0.10	3
1	Ho		175,205.50	2.17	105.6	Pulse	0.10	3
1	Bi		897,671.89	1.49	97.9	Pulse	0.10	3
2	Sc		85,866.06	0.71	108.1	Pulse	0.30	3
2	Ge		53,635.80	1.14	107.9	Pulse	0.30	3
2	Rh		785,182.73	0.56	103.9	Pulse	0.30	3
2	In		279,954.94	0.75	104.0	Pulse	0.30	3
2	Tb		787,675.11	1.94	102.3	Pulse	0.30	3
2	Ho		73,358.06	1.89	102.5	Pulse	0.30	3
2	Bi		425,559.24	1.58	100.1	Pulse	0.30	3
3	Sc		79,973.55	1.07	111.2	Pulse	0.30	3
3	Ge		55,006.81	0.49	107.2	Pulse	0.30	3
3	Rh		500,649.70	0.18	104.0	Pulse	0.30	3
3	Tb		629,129.33	0.27	100.5	Pulse	0.30	3

Quantitation Report

File Name	055SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b041619m3.b
Method File	
Method Path	
Acq Time	4/16/2019 14:27
Sample Name	jc86039-11
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 7:05
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

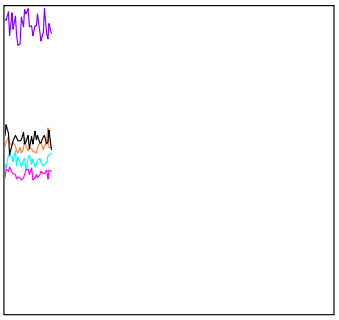
Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.175	ug/l	32.80	168.00	1.074E-04	Pulse	0.25	3
B			1	134.771	ug/l	0.80	115,568.59	7.378E-02	Pulse	0.15	3
Ca			1	102927.657	ug/l	1.50	11,467,138.58	5.882E+00	Analog	0.10	3
Sr			1	601.579	ug/l	0.60	2,181,154.86	1.421E+00	Pulse	0.10	3
Mo			1	0.303	ug/l	16.19	223.34	1.455E-04	Pulse	0.10	3
Ag			1	0.021	ug/l	89.19	56.67	3.685E-05	Pulse	0.10	3
Sn			1	0.557	ug/l	0.75	1,193.44	7.753E-04	Pulse	0.10	3
Sb			1	0.983	ug/l	10.48	1,076.76	5.952E-04	Pulse	0.10	3
Ba			1	86.565	ug/l	1.64	37,551.22	2.076E-02	Pulse	0.10	3
Tl			1	1.881	ug/l	0.41	3,497.27	4.163E-03	Pulse	0.10	3
Pb			1	0.304	ug/l	20.00	223.35	2.660E-04	Pulse	0.10	3
Pb			1	0.236	ug/l	20.50	160.01	1.906E-04	Pulse	0.10	3
Pb			1	0.270	ug/l	11.04	800.05	9.522E-04	Pulse	0.10	3
Na			2	298340.468	ug/l	0.56	40,766,493.94	4.965E+02	Analog	0.30	3
Mg			2	24490.627	ug/l	0.53	1,528,905.49	1.862E+01	Pulse	0.30	3
Al			2	141.544	ug/l	16.81	3,135.82	3.818E-02	Pulse	0.30	3
K			2	6363.514	ug/l	0.68	280,949.73	3.422E+00	Pulse	0.30	3
Ca			2	99267.178	ug/l	0.61	228,191.64	2.779E+00	Pulse	0.30	3
Ti			2	4.279	ug/l	33.96	76.67	9.370E-04	Pulse	0.30	3
V			2	1.127	ug/l	7.94	845.59	1.031E-02	Pulse	0.30	3
Cr			2	0.796	ug/l	5.65	862.26	1.050E-02	Pulse	0.30	3
Mn			2	5082.693	ug/l	1.09	1,700,090.17	2.071E+01	Pulse	0.30	3
Fe			2	1627.644	ug/l	0.88	807,968.08	9.841E+00	Pulse	0.30	3
Co			2	609.112	ug/l	0.53	566,980.19	6.906E+00	Pulse	0.30	3
Ni			2	100.887	ug/l	1.87	24,777.89	3.018E-01	Pulse	0.30	3
Cu			2	1.433	ug/l	6.60	1,150.06	1.401E-02	Pulse	0.30	3
Zn			2	114.719	ug/l	2.52	10,366.21	1.263E-01	Pulse	0.30	3
As			2	3.685	ug/l	6.46	190.67	2.322E-03	Pulse	1.00	3
Cd			2	1.287	ug/l	17.06	191.55	7.371E-04	Pulse	0.30	3
Sn			2	2.490	ug/l	6.68	300.01	1.151E-03	Pulse	0.30	3
Se			3	4.000	ug/l	15.28	38.00	7.081E-04	Pulse	1.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,566,476.69	0.72	100.9	Pulse	0.10	3

Current Signal

[1]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	2608	2487.2	3.25
59	2000	1826	1874.2	3.78
89	5000	2697	2725.8	3.28
140	5000	2321	2271.2	2.62
205	2000	1065	1132.7	3.66
156/140	2	0.776 %	0.965 %	19.28
70/140	10	6.894 %	8.040 %	7.20
9	20	0	1.0	110.19
11	500	300	288.8	5.50
88	50	16	13.9	26.81
95	20	9	8.0	30.29
107	20	0	1.9	70.94
121	20	3	5.6	43.46
137	20	4	4.6	50.31
208	20	7	7.7	41.50
Integration Time [sec]		0.10		

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.75	V	S/C Temp	2	℃
Smpl Depth	7.8	mm	Gas Switch	Dilution Gas	
Carrier Gas	0.55	L/min	Makeup/Dilution Gas	0.55	L/min
Option Gas	0.0	%			

Lenses Parameters

Extract 1	0.0	V	Cell Entrance	-38	V
Extract 2	-135.0	V	Cell Exit	-60	V
Omega Bias	-85	V	Deflect	16.0	V
Omega Lens	7.1	V	Plate Bias	-50	V

Cell Parameters

Use Gas	false		OctP Bias	-8.0	V
He Flow	0.0	mL/min	OctP RF	200	V
H2 Flow	0.0	mL/min	Energy Discrimination	5.0	V
3rd Gas Flow	0	%			

Meters

IF/BK Press	2.66E+2	Pa	Water RF/WC/IF	1.30	L/min
TMP Revolution	100.0	%	Carrier Gas(BP)	1.46E+2	kPa
Carrier Gas	0.55	L/min			

US EPA Tune Check Sample Report

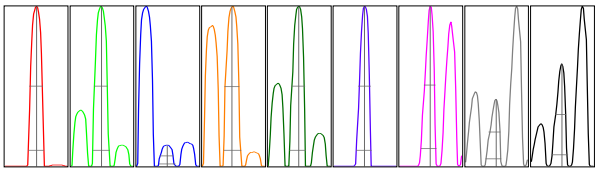
Batch Folder C:\Agilent\ICPMH\1\DATA\.b041619m1.b
Report Comment
Instrument Name G3281A JP12412081

[1]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	59751	0.57	5.00	
24	210545	0.63	5.00	
25	27644	0.55	5.00	
26	32094	0.96	5.00	
59	220312	0.81	5.00	
115	207570	0.65	5.00	
206	35707	0.56	5.00	
207	32751	1.96	5.00	
208	77070	0.96	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	59637	59556	59349	60158	60052
24	211244	211992	210571	210507	208413
25	27656	27647	27440	27870	27608
26	32588	31983	31788	31934	32175
59	222724	219546	221582	219406	218300
115	209328	205908	207674	208302	206637
206	35957	35879	35630	35572	35496
207	33871	32437	32615	32253	32580
208	78361	76987	76697	76569	76734

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	10260	9.05	8.9 - 9.1		0.725	0.900	
24	34858	24.00	23.9 - 24.1		0.763	0.900	
25	4566	25.00	24.9 - 25.1		0.747	0.900	
26	5164	25.95	25.9 - 26.1		0.796	0.900	
59	38012	59.00	58.9 - 59.1		0.755	0.900	
115	40813	115.00	114.9 - 115.1		0.699	0.900	
206	7361	206.00	205.9 - 206.1		0.707	0.900	
207	6638	207.00	206.9 - 207.1		0.695	0.900	
208	15822	208.00	207.9 - 208.1		0.713	0.900	

X% = 10 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

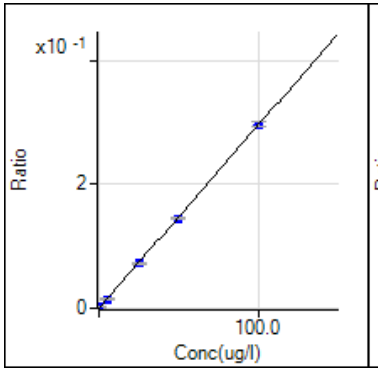
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1500	W	Carrier Gas	0.55	L/min			
RF Matching	1.75	V	Option Gas	0.0	%			
Smpl Depth	7.8	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	℃						

Lenses Parameters

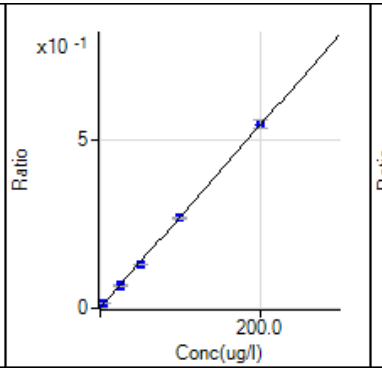
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.1	V			
Extract 2	-135.0	V	Cell Entrance	-38	V			
Omega Bias	-85	V	Cell Exit	-60	V			
Deflect	16.0	V						

Cell Parameters

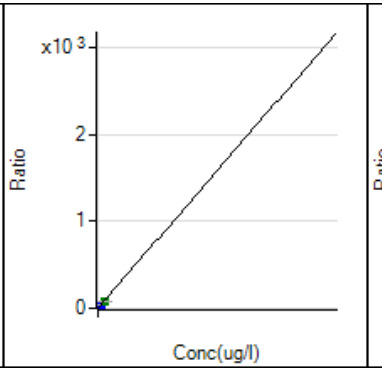
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			
Energy Discrimination	5.0	V						



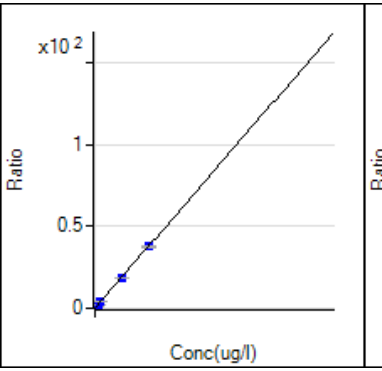
9 Be [1] / ISTD: 6 Li
y = 2.951E-3 x + 4.319E-6
R 0.9999
DL 0.001497
BEC 0.001464



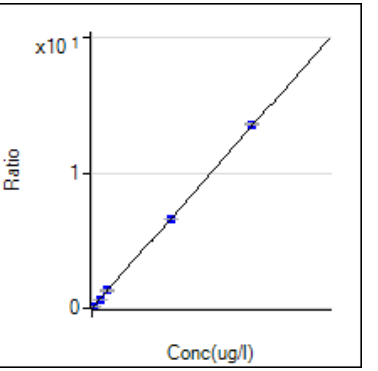
11 B [1] / ISTD: 6 Li
y = 2.703E-3 x + 9.218E-4
R 0.9999
DL 0.06034
BEC 0.341



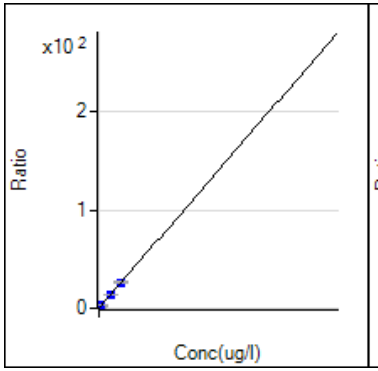
23 Na [2] / ISTD: 45 Sc
y = 8.320E-3 x + 7.128E-2
R 0.9997
DL 0.6033
BEC 8.567



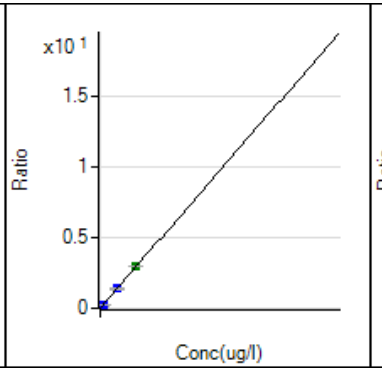
24 Mg [2] / ISTD: 45 Sc
y = 3.802E-3 x + 3.641E-4
R 1.0000
DL 0.01965
BEC 0.09577



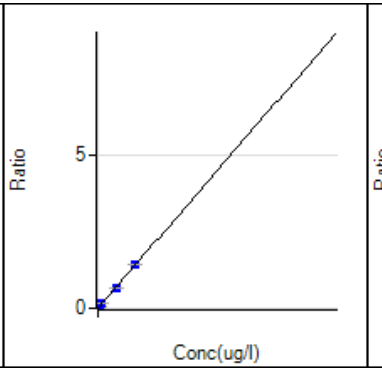
27 Al [2] / ISTD: 45 Sc
y = 1.339E-3 x + 2.640E-4
R 0.9999
DL 0.4641
BEC 0.1972



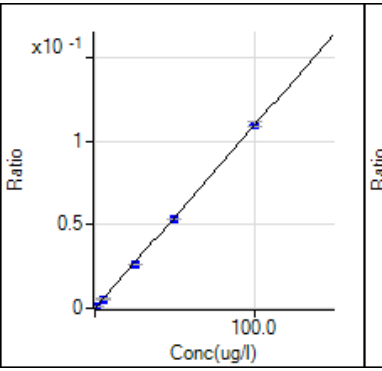
39 K [2] / ISTD: 45 Sc
y = 2.633E-3 x + 7.155E-2
R 0.9999
DL 3.451
BEC 27.18



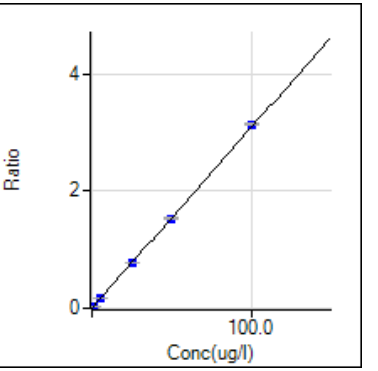
44 Ca [1] / ISTD: 45 Sc
y = 2.852E-4 x + 1.040E-2
R 0.9993
DL 1.277
BEC 36.45



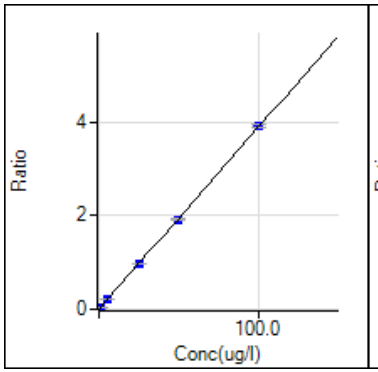
44 Ca [2] / ISTD: 45 Sc
y = 1.399E-4 x + 1.513E-3
R 0.9999
DL 4.951
BEC 10.81



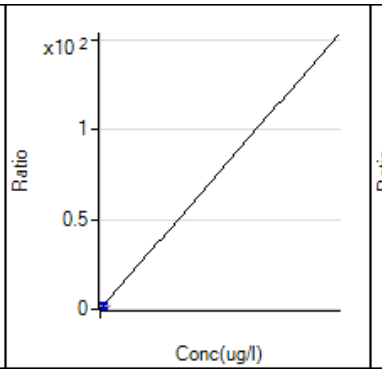
47 Ti [2] / ISTD: 45 Sc
y = 1.095E-3 x
R 0.9998
DL 0
BEC 0



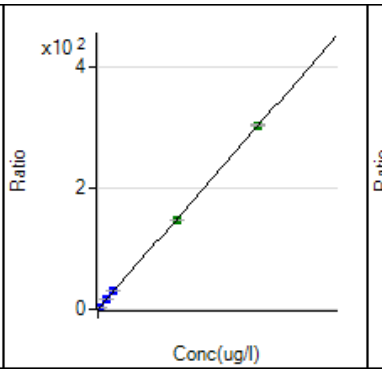
51 V [2] / ISTD: 45 Sc
y = 3.075E-2 x + 3.377E-3
R 0.9999
DL 0.02695
BEC 0.1098



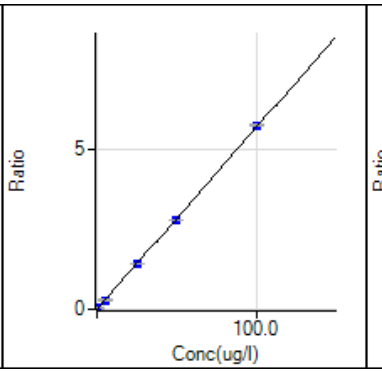
52 Cr [2] / ISTD: 45 Sc
y = 3.874E-2 x + 4.339E-3
R 0.9999
DL 0.035
BEC 0.112



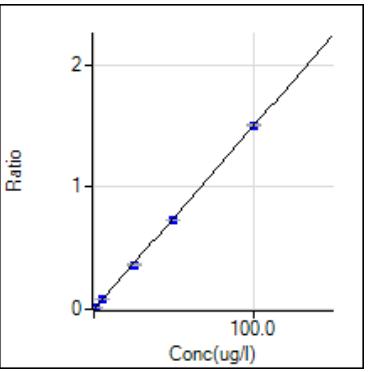
55 Mn [2] / ISTD: 45 Sc
y = 2.037E-2 x + 6.747E-4
R 0.9999
DL 0.02182
BEC 0.03312



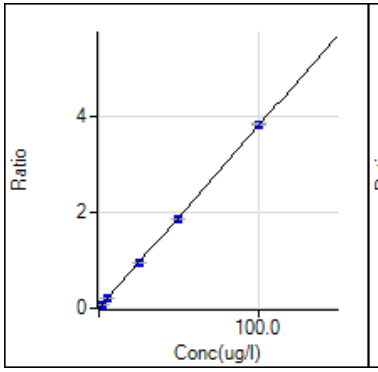
56 Fe [2] / ISTD: 45 Sc
y = 3.018E-2 x + 1.807E-2
R 0.9999
DL 0.1287
BEC 0.5988



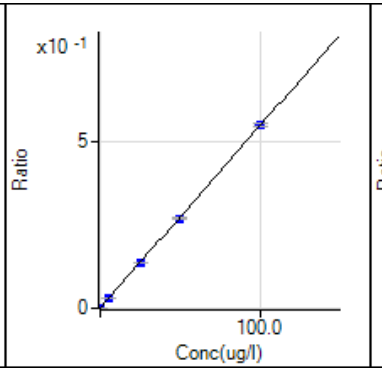
59 Co [2] / ISTD: 45 Sc
y = 5.669E-2 x + 4.953E-4
R 0.9999
DL 0.001627
BEC 0.008737



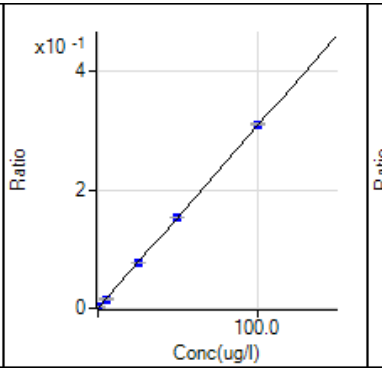
60 Ni [2] / ISTD: 45 Sc
y = 1.494E-2 x + 2.937E-4
R 0.9999
DL 0.03658
BEC 0.01965



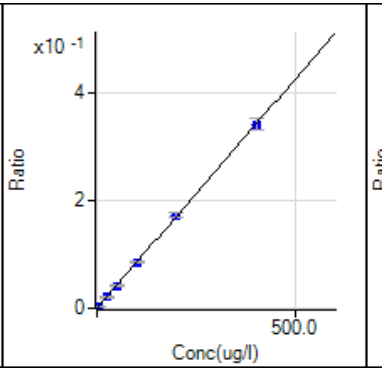
63 Cu [2] / ISTD: 45 Sc
y = 3.809E-2 x + 3.093E-3
R 0.9999
DL 0.01921
BEC 0.08121



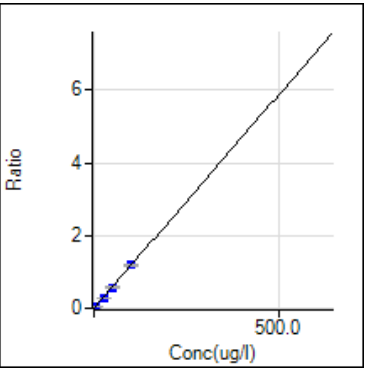
66 Zn [2] / ISTD: 45 Sc
y = 5.464E-3 x + 8.894E-4
R 0.9999
DL 0.05372
BEC 0.1628



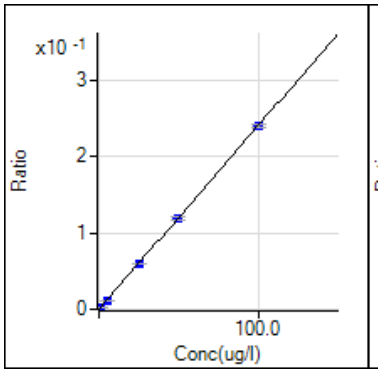
75 As [2] / ISTD: 45 Sc
y = 3.067E-3 x + 6.232E-5
R 1.0000
DL 0.01425
BEC 0.02032



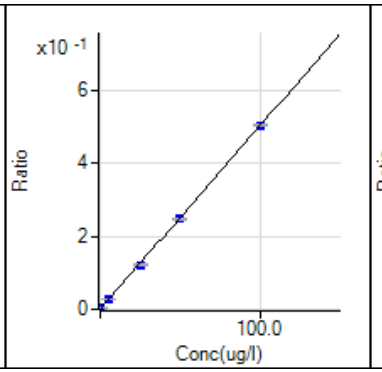
78 Se [3] / ISTD: 74 Ge
y = 8.526E-4 x + 2.600E-5
R 1.0000
DL 0.1584
BEC 0.03049



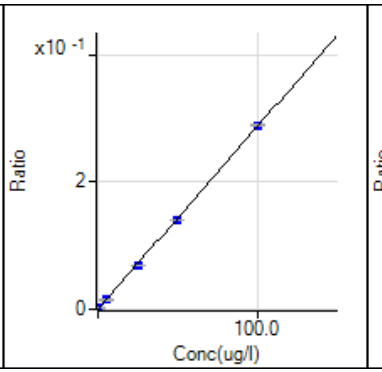
88 Sr [1] / ISTD: 103 Rh
y = 1.181E-2 x + 2.147E-4
R 0.9999
DL 0.01695
BEC 0.01819



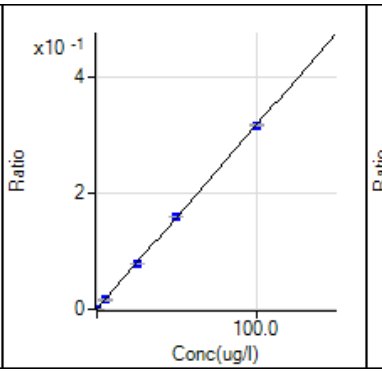
95 Mo [1] / ISTD: 103 Rh
y = 2.404E-3 x
R 1.0000
DL 0
BEC 0



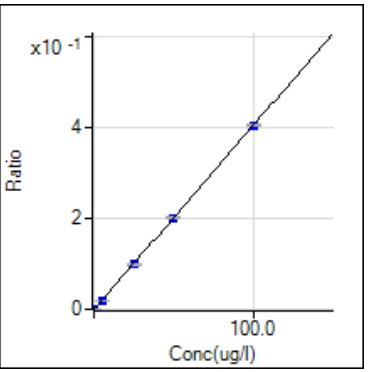
107 Ag [1] / ISTD: 115 In
y = 5.015E-3 x + 1.566E-5
R 0.9999
DL 0.009006
BEC 0.003122



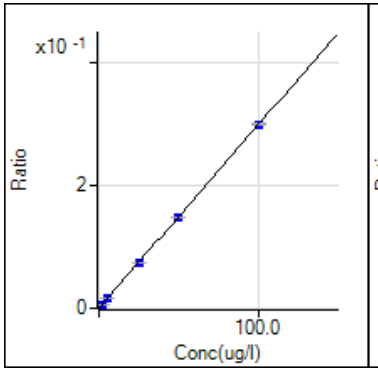
111 Cd [2] / ISTD: 115 In
y = 2.865E-3 x - 1.254E-8
R 0.9998
DL 2.274E-05
BEC -4.376E-06



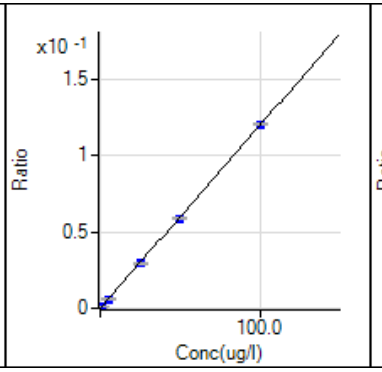
118 Sn [1] / ISTD: 115 In
y = 3.166E-3 x + 4.225E-4
R 1.0000
DL 0.03572
BEC 0.1334



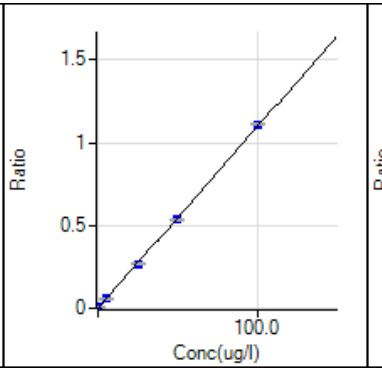
118 Sn [2] / ISTD: 115 In
y = 4.045E-3 x - 8.630E-4
R 1.0000
DL 0.05131
BEC -0.2134



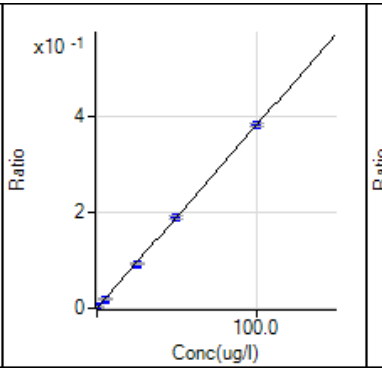
121 Sb [1] / ISTD: 159 Tb
y = 2.981E-3 x + 9.350E-6
R 1.0000
DL 0.003245
BEC 0.003137



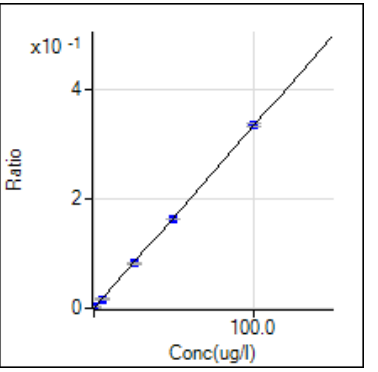
137 Ba [1] / ISTD: 159 Tb
y = 1.199E-3 x + 5.603E-6
R 0.9999
DL 0.014
BEC 0.004673



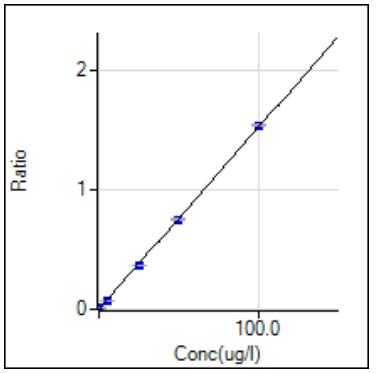
205 Tl [1] / ISTD: 209 Bi
y = 1.094E-2 x + 4.733E-5
R 0.9998
DL 0.004622
BEC 0.004325



206 Pb [1] / ISTD: 209 Bi
y = 3.797E-3 x + 3.534E-5
R 1.0000
DL 0.01377
BEC 0.009307



207 Pb [1] / ISTD: 209 Bi
y = 3.322E-3 x + 3.384E-5
R 0.9999
DL 0.02628
BEC 0.01018



208 Pb [1] / ISTD: 209 Bi

y = 1.524E-2 x + 1.300E-4

R	0.9999
DL	0.0135
BEC	0.008531

Quantitation Report

File Name	001CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 15:48
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.001	ug/l	-32.76	2.67	1.701E-06	Pulse	0.25	3
B			1	-1.480	ug/l	-3.67	5,407.65	3.444E-03	Pulse	0.15	3
Ca			1	1.519	ug/l	69.93	17,022.57	7.280E-03	Pulse	0.10	3
Sr			1	-0.006	ug/l	-19.20	253.34	9.029E-05	Pulse	0.10	3
Mo			1	-0.002	ug/l	-41.20	23.33	8.295E-06	Pulse	0.10	3
Ag			1	0.000	ug/l	840.06	43.33	1.528E-05	Pulse	0.10	3
Sn			1	0.397	ug/l	0.60	2,030.22	7.152E-04	Pulse	0.10	3
Sb			1	-0.065	ug/l	-3.80	573.36	1.558E-04	Pulse	0.10	3
Ba			1	-0.008	ug/l	-110.39	70.00	1.900E-05	Pulse	0.10	3
Tl			1	-0.007	ug/l	-42.83	470.02	2.211E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	73.24	206.68	9.725E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-488.04	173.34	8.161E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	69.30	806.70	3.794E-04	Pulse	0.10	3
Na			2	2.597	ug/l	15.17	15,229.16	1.976E-01	Pulse	0.30	3
Mg			2	-0.920	ug/l	-5.50	92.22	1.198E-03	Pulse	0.30	3
Al			2	-0.010	ug/l	-2335.45	108.89	1.412E-03	Pulse	0.30	3
K			2	1.344	ug/l	9.10	6,257.90	8.121E-02	Pulse	0.30	3
Ca			2	-1.394	ug/l	-76.73	76.67	9.940E-04	Pulse	0.30	3
Ti			2	-0.069	ug/l	-52.86	3.33	4.339E-05	Pulse	0.30	3
V			2	-0.002	ug/l	-101.74	86.67	1.124E-03	Pulse	0.30	3
Cr			2	0.019	ug/l	39.73	730.03	9.473E-03	Pulse	0.30	3
Mn			2	-0.003	ug/l	-340.67	96.67	1.255E-03	Pulse	0.30	3
Fe			2	-1.259	ug/l	-1.86	2,081.27	2.701E-02	Pulse	0.30	3
Co			2	0.003	ug/l	55.79	62.22	8.082E-04	Pulse	0.30	3
Ni			2	0.010	ug/l	22.04	54.45	7.066E-04	Pulse	0.30	3
Cu			2	0.037	ug/l	50.12	1,495.64	1.941E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.040	ug/l	-92.23	215.56	2.796E-03	Pulse	0.30	3
As			2	-0.010	ug/l	-53.80	6.00	7.787E-05	Pulse	1.00	3
Cd			2	0.001	ug/l	248.24	5.56	1.493E-05	Pulse	0.30	3
Sn			2	0.026	ug/l	82.18	393.34	1.059E-03	Pulse	0.30	3
Se			3	-0.017	ug/l	-116.96	4.93	6.280E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,570,292.19	0.87	100.0	Pulse	0.10	3
1	Sc		2,338,217.15	0.45	100.0	Pulse	0.10	3
1	Ge		426,661.41	1.06	100.0	Pulse	0.10	3
1	Ge		587,943.35	0.84	100.0	Pulse	0.10	3
1	Rh		2,808,389.54	1.29	100.0	Pulse	0.10	3
1	In		2,839,040.12	1.16	100.0	Pulse	0.10	3
1	Tb		3,680,804.22	0.90	100.0	Pulse	0.10	3
1	Ho		350,332.56	0.24	100.0	Pulse	0.10	3
1	Bi		2,128,158.98	1.21	100.0	Pulse	0.10	3
2	Sc		77,059.01	0.92	100.0	Pulse	0.30	3
2	Ge		41,864.59	1.21	100.0	Pulse	0.30	3
2	Ge		62,275.93	0.97	100.0	Pulse	0.30	3
2	Rh		1,258,983.98	0.76	100.0	Pulse	0.30	3
2	In		371,559.92	0.87	100.0	Pulse	0.30	3
2	Tb		1,449,661.92	0.23	100.0	Pulse	0.30	3
2	Ho		138,252.65	1.37	100.0	Pulse	0.30	3
2	Bi		953,517.29	0.89	100.0	Pulse	0.30	3
3	Sc		79,427.81	0.78	100.0	Pulse	0.30	3
3	Ge		51,304.83	0.58	100.0	Pulse	0.30	3
3	Ge		78,466.39	0.80	100.0	Pulse	0.30	3
3	Rh		998,412.77	0.31	100.0	Pulse	0.30	3
3	Tb		1,529,007.09	0.70	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 15:52
Sample Name	STDA
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	-642.81	8.00	5.142E-06	Pulse	0.25	3
B			1	-1.477	ug/l	-2.55	5,360.97	3.453E-03	Pulse	0.15	3
Ca			1	1.737	ug/l	9.86	17,075.91	7.342E-03	Pulse	0.10	3
Sr			1	-0.004	ug/l	-34.10	326.68	1.174E-04	Pulse	0.10	3
Mo			1	-0.001	ug/l	-510.32	30.00	1.090E-05	Pulse	0.10	3
Ag			1	-0.001	ug/l	-172.42	33.33	1.181E-05	Pulse	0.10	3
Sn			1	0.398	ug/l	1.87	2,030.20	7.172E-04	Pulse	0.10	3
Sb			1	-0.068	ug/l	-9.80	543.36	1.476E-04	Pulse	0.10	3
Ba			1	-0.015	ug/l	-38.73	43.33	1.176E-05	Pulse	0.10	3
Tl			1	-0.006	ug/l	-97.91	506.69	2.394E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	76.96	206.68	9.753E-05	Pulse	0.10	3
Pb			1	-0.004	ug/l	-229.29	156.67	7.396E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	28.76	770.04	3.635E-04	Pulse	0.10	3
Na			2	1.688	ug/l	11.19	14,924.44	1.895E-01	Pulse	0.30	3
Mg			2	-0.909	ug/l	-7.96	97.78	1.243E-03	Pulse	0.30	3
Al			2	-0.432	ug/l	-23.51	68.89	8.747E-04	Pulse	0.30	3
K			2	0.872	ug/l	131.76	6,303.47	8.005E-02	Pulse	0.30	3
Ca			2	-1.438	ug/l	-91.55	77.78	9.881E-04	Pulse	0.30	3
Ti			2	-0.082	ug/l	-49.68	2.22	2.809E-05	Pulse	0.30	3
V			2	-0.007	ug/l	-89.05	74.45	9.460E-04	Pulse	0.30	3
Cr			2	0.016	ug/l	54.05	735.58	9.341E-03	Pulse	0.30	3
Mn			2	0.005	ug/l	155.43	112.23	1.425E-03	Pulse	0.30	3
Fe			2	-1.329	ug/l	-1.87	1,904.57	2.419E-02	Pulse	0.30	3
Co			2	0.005	ug/l	23.66	75.56	9.594E-04	Pulse	0.30	3
Ni			2	0.003	ug/l	310.99	43.33	5.505E-04	Pulse	0.30	3
Cu			2	0.035	ug/l	50.09	1,516.76	1.926E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.055	ug/l	-62.07	211.11	2.681E-03	Pulse	0.30	3
As			2	-0.014	ug/l	-22.19	5.00	6.347E-05	Pulse	1.00	3
Cd			2	0.012	ug/l	71.67	14.45	3.857E-05	Pulse	0.30	3
Sn			2	0.026	ug/l	120.36	396.68	1.061E-03	Pulse	0.30	3
Se			3	-0.011	ug/l	-78.09	5.20	6.743E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,552,426.34	1.00	100.0	Pulse	0.10	3
1	Sc		2,325,823.51	0.89	100.0	Pulse	0.10	3
1	Ge		425,469.34	0.81	100.0	Pulse	0.10	3
1	Ge		587,966.96	1.24	100.0	Pulse	0.10	3
1	Rh		2,780,473.50	1.57	100.0	Pulse	0.10	3
1	In		2,831,109.50	1.26	100.0	Pulse	0.10	3
1	Tb		3,683,815.26	1.28	100.0	Pulse	0.10	3
1	Ho		352,188.50	1.10	100.0	Pulse	0.10	3
1	Bi		2,118,093.04	0.48	100.0	Pulse	0.10	3
2	Sc		78,751.30	0.46	100.0	Pulse	0.30	3
2	Ge		42,148.65	1.18	100.0	Pulse	0.30	3
2	Ge		64,231.44	1.14	100.0	Pulse	0.30	3
2	Rh		1,260,245.09	0.28	100.0	Pulse	0.30	3
2	In		374,463.64	1.30	100.0	Pulse	0.30	3
2	Tb		1,470,950.46	0.15	100.0	Pulse	0.30	3
2	Ho		139,216.82	1.18	100.0	Pulse	0.30	3
2	Bi		967,700.24	0.69	100.0	Pulse	0.30	3
3	Sc		79,069.47	1.05	100.0	Pulse	0.30	3
3	Ge		51,167.50	0.58	100.0	Pulse	0.30	3
3	Ge		77,088.78	0.54	100.0	Pulse	0.30	3
3	Rh		1,009,486.91	0.83	100.0	Pulse	0.30	3
3	Tb		1,540,929.21	0.90	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 15:58
Sample Name	STDA
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	592.74	10.67	6.855E-06	Pulse	0.25	3
B			1	-1.518	ug/l	-2.92	5,185.35	3.336E-03	Pulse	0.15	3
Ca			1	2.130	ug/l	8.57	17,326.20	7.454E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	105.01	456.69	1.645E-04	Pulse	0.10	3
Mo			1	0.001	ug/l	160.71	43.33	1.559E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	-997.16	40.00	1.397E-05	Pulse	0.10	3
Sn			1	0.419	ug/l	4.21	2,246.90	7.881E-04	Pulse	0.10	3
Sb			1	-0.054	ug/l	-19.33	700.04	1.880E-04	Pulse	0.10	3
Ba			1	-0.016	ug/l	-30.58	40.00	1.070E-05	Pulse	0.10	3
Tl			1	-0.007	ug/l	-38.37	466.69	2.202E-04	Pulse	0.10	3
Pb			1	0.003	ug/l	143.35	183.34	8.652E-05	Pulse	0.10	3
Pb			1	-0.002	ug/l	-153.56	170.01	8.028E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	142.97	740.04	3.492E-04	Pulse	0.10	3
Na			2	2.272	ug/l	20.87	15,319.24	1.947E-01	Pulse	0.30	3
Mg			2	-0.846	ug/l	-12.36	118.89	1.509E-03	Pulse	0.30	3
Al			2	-0.265	ug/l	-107.34	85.56	1.087E-03	Pulse	0.30	3
K			2	1.119	ug/l	127.83	6,346.82	8.066E-02	Pulse	0.30	3
Ca			2	-3.170	ug/l	-84.34	58.89	7.506E-04	Pulse	0.30	3
Ti			2	-0.047	ug/l	-155.96	5.55	7.007E-05	Pulse	0.30	3
V			2	-0.005	ug/l	-192.47	77.78	9.876E-04	Pulse	0.30	3
Cr			2	0.003	ug/l	554.96	683.35	8.682E-03	Pulse	0.30	3
Mn			2	0.009	ug/l	91.54	120.00	1.526E-03	Pulse	0.30	3
Fe			2	-1.296	ug/l	-2.07	2,007.92	2.552E-02	Pulse	0.30	3
Co			2	0.001	ug/l	80.38	52.22	6.641E-04	Pulse	0.30	3
Ni			2	0.007	ug/l	143.83	50.00	6.367E-04	Pulse	0.30	3
Cu			2	0.025	ug/l	68.83	1,470.08	1.868E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.098	ug/l	66.41	302.23	3.844E-03	Pulse	0.30	3
As			2	-0.006	ug/l	-144.18	7.33	9.310E-05	Pulse	1.00	3
Cd			2	0.006	ug/l	130.68	10.00	2.632E-05	Pulse	0.30	3
Sn			2	0.011	ug/l	147.97	376.68	9.920E-04	Pulse	0.30	3
Se			3	0.005	ug/l	94.10	6.20	8.000E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,554,409.97	0.73	100.0	Pulse	0.10	3
1	Sc		2,324,305.02	0.45	100.0	Pulse	0.10	3
1	Ge		425,828.69	0.74	100.0	Pulse	0.10	3
1	Ge		587,247.84	0.43	100.0	Pulse	0.10	3
1	Rh		2,776,741.52	0.52	100.0	Pulse	0.10	3
1	In		2,849,922.42	1.09	100.0	Pulse	0.10	3
1	Tb		3,723,857.65	1.28	100.0	Pulse	0.10	3
1	Ho		351,862.16	1.30	100.0	Pulse	0.10	3
1	Bi		2,117,646.38	1.16	100.0	Pulse	0.10	3
2	Sc		78,675.39	0.88	100.0	Pulse	0.30	3
2	Ge		42,455.02	1.02	100.0	Pulse	0.30	3
2	Ge		63,856.53	0.91	100.0	Pulse	0.30	3
2	Rh		1,265,588.77	0.31	100.0	Pulse	0.30	3
2	In		379,756.32	0.38	100.0	Pulse	0.30	3
2	Tb		1,490,525.15	0.47	100.0	Pulse	0.30	3
2	Ho		140,509.99	0.27	100.0	Pulse	0.30	3
2	Bi		977,240.55	0.46	100.0	Pulse	0.30	3
3	Sc		78,846.41	0.18	100.0	Pulse	0.30	3
3	Ge		50,588.11	1.95	100.0	Pulse	0.30	3
3	Ge		77,486.10	0.95	100.0	Pulse	0.30	3
3	Rh		1,001,958.40	0.75	100.0	Pulse	0.30	3
3	Tb		1,532,203.20	0.42	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 16:03
Sample Name	STDB
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.501	ug/l	2.11	2,928.29	1.902E-03	Pulse	0.25	3
B			1	23.314	ug/l	1.45	112,838.11	7.327E-02	Pulse	0.15	3
Ca			1	257.111	ug/l	0.62	185,992.61	8.024E-02	Pulse	0.10	3
Sr			1	4.956	ug/l	0.14	152,139.85	5.460E-02	Pulse	0.10	3
Mo			1	0.933	ug/l	3.26	6,051.31	2.172E-03	Pulse	0.10	3
Ag			1	0.487	ug/l	4.35	7,138.50	2.517E-03	Pulse	0.10	3
Sn			1	4.980	ug/l	1.37	45,286.12	1.597E-02	Pulse	0.10	3
Sb			1	1.841	ug/l	2.68	20,767.56	5.596E-03	Pulse	0.10	3
Ba			1	0.988	ug/l	5.25	4,160.70	1.121E-03	Pulse	0.10	3
Tl			1	0.503	ug/l	2.10	12,805.93	6.040E-03	Pulse	0.10	3
Pb			1	0.472	ug/l	9.70	4,057.35	1.914E-03	Pulse	0.10	3
Pb			1	0.517	ug/l	8.39	3,950.67	1.863E-03	Pulse	0.10	3
Pb			1	0.498	ug/l	3.59	17,314.61	8.166E-03	Pulse	0.10	3
Na			2	264.454	ug/l	0.29	198,219.49	2.540E+00	Pulse	0.30	3
Mg			2	259.610	ug/l	0.48	86,006.41	1.102E+00	Pulse	0.30	3
Al			2	25.792	ug/l	9.45	2,669.13	3.420E-02	Pulse	0.30	3
K			2	258.089	ug/l	0.49	55,626.26	7.128E-01	Pulse	0.30	3
Ca			2	272.335	ug/l	1.39	3,004.75	3.850E-02	Pulse	0.30	3
Ti			2	1.087	ug/l	20.78	111.12	1.424E-03	Pulse	0.30	3
V			2	1.050	ug/l	1.45	3,163.67	4.054E-02	Pulse	0.30	3
Cr			2	0.978	ug/l	4.19	4,472.88	5.732E-02	Pulse	0.30	3
Mn			2	0.962	ug/l	7.05	1,830.12	2.345E-02	Pulse	0.30	3
Fe			2	25.098	ug/l	0.70	84,337.71	1.081E+00	Pulse	0.30	3
Co			2	0.521	ug/l	4.18	3,427.06	4.391E-02	Pulse	0.30	3
Ni			2	1.019	ug/l	2.05	1,849.01	2.369E-02	Pulse	0.30	3
Cu			2	2.107	ug/l	1.35	11,690.90	1.498E-01	Pulse	0.30	3
Zn			2	4.866	ug/l	5.05	3,121.44	4.000E-02	Pulse	0.30	3
As			2	0.452	ug/l	6.43	156.00	1.999E-03	Pulse	1.00	3
Cd			2	0.483	ug/l	6.57	402.06	1.070E-03	Pulse	0.30	3
Sn			2	4.659	ug/l	1.73	8,014.35	2.133E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.492	ug/l	7.85	35.73	4.614E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,540,240.71	1.40	99.1	Pulse	0.10	3
1	Sc		2,318,059.39	0.48	99.7	Pulse	0.10	3
1	Ge		422,538.41	0.45	99.2	Pulse	0.10	3
1	Ge		588,584.25	0.69	100.2	Pulse	0.10	3
1	Rh		2,786,299.86	0.38	100.3	Pulse	0.10	3
1	In		2,835,842.17	0.90	99.5	Pulse	0.10	3
1	Tb		3,711,500.78	0.58	99.7	Pulse	0.10	3
1	Ho		353,836.52	0.88	100.6	Pulse	0.10	3
1	Bi		2,120,256.01	0.56	100.1	Pulse	0.10	3
2	Sc		78,037.78	0.27	99.2	Pulse	0.30	3
2	Ge		42,520.69	0.69	100.2	Pulse	0.30	3
2	Ge		63,520.71	0.53	99.5	Pulse	0.30	3
2	Rh		1,265,487.35	0.25	100.0	Pulse	0.30	3
2	In		375,747.57	0.79	98.9	Pulse	0.30	3
2	Tb		1,485,829.77	0.37	99.7	Pulse	0.30	3
2	Ho		141,624.66	0.45	100.8	Pulse	0.30	3
2	Bi		978,111.94	0.59	100.1	Pulse	0.30	3
3	Sc		79,120.86	0.78	100.3	Pulse	0.30	3
3	Ge		51,661.38	0.95	102.1	Pulse	0.30	3
3	Ge		77,433.55	0.37	99.9	Pulse	0.30	3
3	Rh		994,407.05	0.62	99.2	Pulse	0.30	3
3	Tb		1,529,031.88	0.65	99.8	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 16:08
Sample Name	STDC
Sample Type	CalStd
Comment	5
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	4.992	ug/l	1.41	29,192.97	1.891E-02	Pulse	0.25	3
B			1	4.185	ug/l	2.93	29,946.76	1.940E-02	Pulse	0.15	3
Ca			1	8.456	ug/l	9.19	21,437.69	9.260E-03	Pulse	0.10	3
Sr			1	5.021	ug/l	2.04	152,618.60	5.532E-02	Pulse	0.10	3
Mo			1	5.212	ug/l	1.62	33,305.60	1.207E-02	Pulse	0.10	3
Ag			1	5.047	ug/l	1.45	72,764.06	2.595E-02	Pulse	0.10	3
Sn			1	5.569	ug/l	0.93	50,290.97	1.793E-02	Pulse	0.10	3
Sb			1	4.818	ug/l	1.44	51,809.25	1.409E-02	Pulse	0.10	3
Ba			1	5.085	ug/l	3.69	20,801.14	5.658E-03	Pulse	0.10	3
Tl			1	4.954	ug/l	1.77	119,960.01	5.683E-02	Pulse	0.10	3
Pb			1	4.993	ug/l	0.86	41,224.87	1.953E-02	Pulse	0.10	3
Pb			1	5.002	ug/l	0.95	36,462.22	1.727E-02	Pulse	0.10	3
Pb			1	5.040	ug/l	0.66	168,421.76	7.979E-02	Pulse	0.10	3
Na			2	8.524	ug/l	1.82	19,783.84	2.507E-01	Pulse	0.30	3
Mg			2	4.051	ug/l	1.87	1,752.33	2.220E-02	Pulse	0.30	3
Al			2	4.797	ug/l	4.31	593.35	7.520E-03	Pulse	0.30	3
K			2	7.218	ug/l	22.26	7,548.45	9.566E-02	Pulse	0.30	3
Ca			2	26.088	ug/l	15.81	375.56	4.760E-03	Pulse	0.30	3
Ti			2	5.181	ug/l	5.11	497.79	6.309E-03	Pulse	0.30	3
V			2	5.000	ug/l	2.10	14,879.03	1.885E-01	Pulse	0.30	3
Cr			2	5.073	ug/l	1.00	20,642.99	2.616E-01	Pulse	0.30	3
Mn			2	5.025	ug/l	1.57	9,223.75	1.169E-01	Pulse	0.30	3
Fe			2	3.722	ug/l	3.20	17,844.16	2.261E-01	Pulse	0.30	3
Co			2	5.020	ug/l	1.86	33,024.19	4.185E-01	Pulse	0.30	3
Ni			2	4.984	ug/l	0.44	9,000.31	1.140E-01	Pulse	0.30	3
Cu			2	5.180	ug/l	2.51	27,094.60	3.433E-01	Pulse	0.30	3
Zn			2	5.024	ug/l	6.44	3,251.47	4.120E-02	Pulse	0.30	3
As			2	5.014	ug/l	2.11	1,655.09	2.097E-02	Pulse	1.00	3
Cd			2	4.891	ug/l	1.48	4,058.53	1.073E-02	Pulse	0.30	3
Sn			2	5.168	ug/l	3.42	8,913.71	2.356E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	4.843	ug/l	1.91	299.27	3.869E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,543,806.17	0.37	99.3	Pulse	0.10	3
1	Sc		2,314,962.73	0.41	99.6	Pulse	0.10	3
1	Ge		423,783.08	0.67	99.5	Pulse	0.10	3
1	Ge		586,330.97	1.15	99.8	Pulse	0.10	3
1	Rh		2,759,522.56	1.55	99.4	Pulse	0.10	3
1	In		2,804,354.48	0.24	98.4	Pulse	0.10	3
1	Tb		3,677,343.90	1.27	98.8	Pulse	0.10	3
1	Ho		350,475.29	0.44	99.6	Pulse	0.10	3
1	Bi		2,110,893.66	1.16	99.7	Pulse	0.10	3
2	Sc		78,926.44	1.10	100.3	Pulse	0.30	3
2	Ge		42,629.98	0.60	100.4	Pulse	0.30	3
2	Ge		64,265.85	1.77	100.6	Pulse	0.30	3
2	Rh		1,257,853.11	0.21	99.4	Pulse	0.30	3
2	In		378,375.32	1.12	99.6	Pulse	0.30	3
2	Tb		1,490,270.05	0.50	100.0	Pulse	0.30	3
2	Ho		140,843.09	0.91	100.2	Pulse	0.30	3
2	Bi		974,355.65	0.50	99.7	Pulse	0.30	3
3	Sc		77,307.91	1.27	98.0	Pulse	0.30	3
3	Ge		51,071.85	0.77	101.0	Pulse	0.30	3
3	Ge		77,350.01	0.77	99.8	Pulse	0.30	3
3	Rh		992,194.20	0.21	99.0	Pulse	0.30	3
3	Tb		1,526,598.97	0.63	99.6	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 16:13
Sample Name	STDD
Sample Type	CalStd
Comment	25
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	24.778	ug/l	0.73	144,005.53	9.383E-02	Pulse	0.25	3
B			1	23.048	ug/l	1.29	111,290.23	7.252E-02	Pulse	0.15	3
Ca			1	35.187	ug/l	2.68	39,016.49	1.689E-02	Pulse	0.10	3
Sr			1	24.717	ug/l	0.18	749,663.74	2.717E-01	Pulse	0.10	3
Mo			1	24.701	ug/l	1.05	157,703.49	5.715E-02	Pulse	0.10	3
Ag			1	24.795	ug/l	0.82	355,984.01	1.274E-01	Pulse	0.10	3
Sn			1	25.043	ug/l	0.77	231,240.36	8.276E-02	Pulse	0.10	3
Sb			1	24.582	ug/l	0.60	260,272.11	7.048E-02	Pulse	0.10	3
Ba			1	24.631	ug/l	1.52	100,806.50	2.730E-02	Pulse	0.10	3
Tl			1	24.573	ug/l	1.10	594,273.58	2.807E-01	Pulse	0.10	3
Pb			1	24.882	ug/l	0.87	205,449.10	9.704E-02	Pulse	0.10	3
Pb			1	24.699	ug/l	0.51	179,852.58	8.494E-02	Pulse	0.10	3
Pb			1	24.778	ug/l	0.87	827,813.59	3.910E-01	Pulse	0.10	3
Na			2	28.389	ug/l	3.13	33,670.05	4.284E-01	Pulse	0.30	3
Mg			2	23.822	ug/l	3.59	8,311.01	1.057E-01	Pulse	0.30	3
Al			2	31.521	ug/l	5.60	3,259.25	4.148E-02	Pulse	0.30	3
K			2	26.133	ug/l	3.63	11,177.15	1.422E-01	Pulse	0.30	3
Ca			2	163.412	ug/l	13.44	1,852.35	2.358E-02	Pulse	0.30	3
Ti			2	25.597	ug/l	3.63	2,411.31	3.067E-02	Pulse	0.30	3
V			2	25.095	ug/l	1.72	74,010.29	9.416E-01	Pulse	0.30	3
Cr			2	24.989	ug/l	1.76	98,640.54	1.255E+00	Pulse	0.30	3
Mn			2	24.577	ug/l	2.12	44,535.27	5.666E-01	Pulse	0.30	3
Fe			2	23.709	ug/l	2.05	80,580.23	1.025E+00	Pulse	0.30	3
Co			2	24.954	ug/l	1.93	163,320.93	2.078E+00	Pulse	0.30	3
Ni			2	25.092	ug/l	2.19	44,971.17	5.721E-01	Pulse	0.30	3
Cu			2	25.150	ug/l	2.70	125,857.98	1.601E+00	Pulse	0.30	3
Zn			2	25.317	ug/l	3.94	15,331.70	1.951E-01	Pulse	0.30	3
As			2	24.980	ug/l	1.40	8,175.39	1.040E-01	Pulse	1.00	3
Cd			2	24.979	ug/l	0.29	20,487.75	5.472E-02	Pulse	0.30	3
Sn			2	24.951	ug/l	0.66	41,227.09	1.101E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	24.974	ug/l	1.47	1,527.07	1.963E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,534,732.59	1.15	98.7	Pulse	0.10	3
1	Sc		2,309,923.20	0.50	99.4	Pulse	0.10	3
1	Ge		423,431.89	1.39	99.4	Pulse	0.10	3
1	Ge		585,021.16	0.54	99.6	Pulse	0.10	3
1	Rh		2,759,529.23	0.86	99.4	Pulse	0.10	3
1	In		2,794,158.23	1.29	98.0	Pulse	0.10	3
1	Tb		3,692,614.73	1.01	99.2	Pulse	0.10	3
1	Ho		352,772.13	1.23	100.3	Pulse	0.10	3
1	Bi		2,117,385.49	1.30	100.0	Pulse	0.10	3
2	Sc		78,613.79	1.37	99.9	Pulse	0.30	3
2	Ge		42,132.01	1.07	99.2	Pulse	0.30	3
2	Ge		63,751.60	0.53	99.8	Pulse	0.30	3
2	Rh		1,266,834.26	0.86	100.1	Pulse	0.30	3
2	In		374,408.90	0.58	98.6	Pulse	0.30	3
2	Tb		1,482,226.89	0.45	99.4	Pulse	0.30	3
2	Ho		141,193.06	1.00	100.5	Pulse	0.30	3
2	Bi		971,376.28	0.43	99.4	Pulse	0.30	3
3	Sc		78,673.24	0.24	99.8	Pulse	0.30	3
3	Ge		51,072.92	1.04	101.0	Pulse	0.30	3
3	Ge		77,783.16	0.88	100.4	Pulse	0.30	3
3	Rh		996,458.75	0.40	99.5	Pulse	0.30	3
3	Tb		1,543,142.75	0.91	100.7	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 16:18
Sample Name	STDE
Sample Type	CalStd
Comment	50
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	49.618	ug/l	0.61	287,370.77	1.879E-01	Pulse	0.25	3
B			1	47.936	ug/l	0.47	218,086.90	1.426E-01	Pulse	0.15	3
Ca			1	70.079	ug/l	0.98	61,755.24	2.685E-02	Pulse	0.10	3
Sr			1	49.584	ug/l	0.31	1,500,526.33	5.448E-01	Pulse	0.10	3
Mo			1	49.779	ug/l	0.61	317,189.04	1.152E-01	Pulse	0.10	3
Ag			1	49.474	ug/l	0.83	715,567.59	2.542E-01	Pulse	0.10	3
Sn			1	49.130	ug/l	0.43	458,657.94	1.629E-01	Pulse	0.10	3
Sb			1	48.973	ug/l	0.53	519,381.48	1.401E-01	Pulse	0.10	3
Ba			1	49.469	ug/l	0.88	203,158.07	5.479E-02	Pulse	0.10	3
Tl			1	49.670	ug/l	0.96	1,206,097.90	5.671E-01	Pulse	0.10	3
Pb			1	50.119	ug/l	0.71	415,592.02	1.954E-01	Pulse	0.10	3
Pb			1	49.809	ug/l	0.46	364,167.22	1.712E-01	Pulse	0.10	3
Pb			1	49.649	ug/l	0.50	1,665,686.41	7.831E-01	Pulse	0.10	3
Na			2	53.946	ug/l	2.07	51,661.67	6.570E-01	Pulse	0.30	3
Mg			2	49.232	ug/l	1.56	16,759.54	2.131E-01	Pulse	0.30	3
Al			2	50.084	ug/l	1.24	5,116.38	6.506E-02	Pulse	0.30	3
K			2	51.858	ug/l	3.62	16,160.15	2.055E-01	Pulse	0.30	3
Ca			2	324.523	ug/l	1.05	3,590.43	4.565E-02	Pulse	0.30	3
Ti			2	49.419	ug/l	1.30	4,647.37	5.910E-02	Pulse	0.30	3
V			2	50.155	ug/l	0.42	147,889.79	1.881E+00	Pulse	0.30	3
Cr			2	50.274	ug/l	0.09	197,866.24	2.516E+00	Pulse	0.30	3
Mn			2	50.616	ug/l	0.47	91,650.89	1.165E+00	Pulse	0.30	3
Fe			2	49.252	ug/l	0.71	160,922.10	2.046E+00	Pulse	0.30	3
Co			2	49.957	ug/l	0.77	327,064.08	4.159E+00	Pulse	0.30	3
Ni			2	50.473	ug/l	1.15	90,464.10	1.150E+00	Pulse	0.30	3
Cu			2	50.477	ug/l	1.10	251,380.45	3.197E+00	Pulse	0.30	3
Zn			2	50.580	ug/l	1.49	30,406.01	3.867E-01	Pulse	0.30	3
As			2	50.124	ug/l	1.02	16,401.90	2.086E-01	Pulse	1.00	3
Cd			2	50.122	ug/l	1.60	41,633.26	1.098E-01	Pulse	0.30	3
Sn			2	49.347	ug/l	0.66	82,239.46	2.169E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	50.023	ug/l	0.33	3,055.62	3.925E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,529,388.23	0.75	98.4	Pulse	0.10	3
1	Sc		2,300,108.82	0.55	99.0	Pulse	0.10	3
1	Ge		419,361.84	0.91	98.5	Pulse	0.10	3
1	Ge		584,526.57	0.52	99.5	Pulse	0.10	3
1	Rh		2,754,255.27	1.15	99.2	Pulse	0.10	3
1	In		2,814,843.77	0.48	98.8	Pulse	0.10	3
1	Tb		3,707,768.38	1.32	99.6	Pulse	0.10	3
1	Ho		355,399.33	0.35	101.0	Pulse	0.10	3
1	Bi		2,126,972.26	0.87	100.4	Pulse	0.10	3
2	Sc		78,639.57	0.72	100.0	Pulse	0.30	3
2	Ge		42,505.19	0.28	100.1	Pulse	0.30	3
2	Ge		63,510.73	0.05	99.5	Pulse	0.30	3
2	Rh		1,276,241.47	0.52	100.8	Pulse	0.30	3
2	In		379,241.82	0.50	99.9	Pulse	0.30	3
2	Tb		1,490,757.41	0.70	100.0	Pulse	0.30	3
2	Ho		141,011.02	0.78	100.4	Pulse	0.30	3
2	Bi		979,692.60	0.55	100.3	Pulse	0.30	3
3	Sc		78,340.54	0.28	99.4	Pulse	0.30	3
3	Ge		51,236.79	0.22	101.3	Pulse	0.30	3
3	Ge		77,851.18	0.92	100.5	Pulse	0.30	3
3	Rh		998,312.77	0.79	99.6	Pulse	0.30	3
3	Tb		1,533,014.35	0.88	100.1	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 16:23
Sample Name	STDF
Sample Type	CalStd
Comment	100
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	100.620	ug/l	0.52	577,948.54	3.810E-01	Pulse	0.25	3
B			1	98.628	ug/l	1.00	432,816.18	2.854E-01	Pulse	0.15	3
Ca			1	143.710	ug/l	0.53	110,109.50	4.787E-02	Pulse	0.10	3
Sr			1	100.281	ug/l	1.06	3,024,426.83	1.102E+00	Pulse	0.10	3
Mo			1	103.078	ug/l	1.37	654,607.60	2.385E-01	Pulse	0.10	3
Ag			1	100.710	ug/l	0.32	1,458,351.54	5.175E-01	Pulse	0.10	3
Sn			1	100.425	ug/l	0.57	940,467.90	3.337E-01	Pulse	0.10	3
Sb			1	101.851	ug/l	0.55	1,074,962.14	2.910E-01	Pulse	0.10	3
Ba			1	100.353	ug/l	0.50	410,562.41	1.111E-01	Pulse	0.10	3
Tl			1	100.274	ug/l	1.32	2,435,622.72	1.144E+00	Pulse	0.10	3
Pb			1	100.510	ug/l	1.11	833,726.60	3.918E-01	Pulse	0.10	3
Pb			1	101.054	ug/l	0.40	739,022.83	3.473E-01	Pulse	0.10	3
Pb			1	100.543	ug/l	0.09	3,374,172.47	1.586E+00	Pulse	0.10	3
Na			2	102.841	ug/l	3.44	87,109.51	1.094E+00	Pulse	0.30	3
Mg			2	97.998	ug/l	1.94	33,370.69	4.192E-01	Pulse	0.30	3
Al			2	98.458	ug/l	0.97	10,075.31	1.265E-01	Pulse	0.30	3
K			2	98.851	ug/l	2.19	25,560.70	3.211E-01	Pulse	0.30	3
Ca			2	646.268	ug/l	2.25	7,143.83	8.974E-02	Pulse	0.30	3
Ti			2	100.131	ug/l	1.12	9,522.82	1.196E-01	Pulse	0.30	3
V			2	99.706	ug/l	1.90	297,518.10	3.737E+00	Pulse	0.30	3
Cr			2	99.689	ug/l	2.15	396,488.02	4.981E+00	Pulse	0.30	3
Mn			2	99.797	ug/l	2.71	182,806.60	2.297E+00	Pulse	0.30	3
Fe			2	98.972	ug/l	1.97	321,133.02	4.034E+00	Pulse	0.30	3
Co			2	99.436	ug/l	2.01	658,961.09	8.278E+00	Pulse	0.30	3
Ni			2	100.703	ug/l	1.34	182,685.89	2.295E+00	Pulse	0.30	3
Cu			2	99.713	ug/l	1.73	501,369.01	6.298E+00	Pulse	0.30	3
Zn			2	99.637	ug/l	1.77	60,397.13	7.587E-01	Pulse	0.30	3
As			2	100.121	ug/l	2.08	33,155.46	4.165E-01	Pulse	1.00	3
Cd			2	100.267	ug/l	0.36	82,768.37	2.196E-01	Pulse	0.30	3
Sn			2	101.071	ug/l	1.28	167,016.15	4.432E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	100.232	ug/l	0.67	6,048.98	7.857E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,516,796.99	0.42	97.6	Pulse	0.10	3
1	Sc		2,300,382.83	0.34	99.0	Pulse	0.10	3
1	Ge		422,957.90	0.83	99.3	Pulse	0.10	3
1	Ge		583,966.67	0.25	99.4	Pulse	0.10	3
1	Rh		2,745,478.60	1.11	98.9	Pulse	0.10	3
1	In		2,818,367.92	0.69	98.9	Pulse	0.10	3
1	Tb		3,694,545.78	0.56	99.2	Pulse	0.10	3
1	Ho		351,484.03	0.90	99.9	Pulse	0.10	3
1	Bi		2,128,112.99	0.65	100.5	Pulse	0.10	3
2	Sc		79,618.70	1.43	101.2	Pulse	0.30	3
2	Ge		42,574.27	1.28	100.3	Pulse	0.30	3
2	Ge		64,055.04	0.41	100.3	Pulse	0.30	3
2	Rh		1,253,153.94	0.54	99.0	Pulse	0.30	3
2	In		376,888.20	0.22	99.2	Pulse	0.30	3
2	Tb		1,483,253.45	0.29	99.5	Pulse	0.30	3
2	Ho		140,882.94	0.93	100.3	Pulse	0.30	3
2	Bi		974,842.84	0.67	99.8	Pulse	0.30	3
3	Sc		78,129.44	1.27	99.1	Pulse	0.30	3
3	Ge		50,560.14	1.23	99.9	Pulse	0.30	3
3	Ge		76,990.44	0.15	99.4	Pulse	0.30	3
3	Rh		989,293.50	0.30	98.7	Pulse	0.30	3
3	Tb		1,524,496.78	0.44	99.5	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 16:28
Sample Name	STDG
Sample Type	CalStd
Comment	500MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.013	ug/l	11.12	84.00	5.574E-05	Pulse	0.25	3
B			1	201.677	ug/l	1.51	867,490.56	5.755E-01	Pulse	0.15	3
Ca			1	501.144	ug/l	1.13	342,098.26	1.499E-01	Pulse	0.10	3
Sr			1	0.022	ug/l	30.46	1,106.80	4.052E-04	Pulse	0.10	3
Mo			1	0.149	ug/l	21.84	973.40	3.566E-04	Pulse	0.10	3
Ag			1	0.019	ug/l	13.59	313.35	1.115E-04	Pulse	0.10	3
Sn			1	0.518	ug/l	5.51	3,140.42	1.118E-03	Pulse	0.10	3
Sb			1	1.343	ug/l	4.95	15,484.82	4.174E-03	Pulse	0.10	3
Ba			1	0.020	ug/l	16.40	186.68	5.034E-05	Pulse	0.10	3
Tl			1	0.033	ug/l	14.11	1,450.12	6.855E-04	Pulse	0.10	3
Pb			1	0.031	ug/l	36.79	406.68	1.922E-04	Pulse	0.10	3
Pb			1	0.037	ug/l	10.04	453.36	2.143E-04	Pulse	0.10	3
Pb			1	0.035	ug/l	15.86	1,856.78	8.775E-04	Pulse	0.10	3
Na			2	516.352	ug/l	1.15	376,756.12	4.793E+00	Pulse	0.30	3
Mg			2	499.084	ug/l	0.54	166,166.76	2.114E+00	Pulse	0.30	3
Al			2	502.739	ug/l	0.78	50,324.70	6.402E-01	Pulse	0.30	3
K			2	496.366	ug/l	0.87	102,101.42	1.299E+00	Pulse	0.30	3
Ca			2	478.465	ug/l	2.17	5,246.43	6.675E-02	Pulse	0.30	3
Ti			2	-0.023	ug/l	-398.45	7.78	9.911E-05	Pulse	0.30	3
V			2	0.012	ug/l	55.75	130.00	1.653E-03	Pulse	0.30	3
Cr			2	0.341	ug/l	5.08	2,006.81	2.553E-02	Pulse	0.30	3
Mn			2	0.075	ug/l	20.18	238.89	3.040E-03	Pulse	0.30	3
Fe			2	492.872	ug/l	0.50	1,554,913.86	1.978E+01	Pulse	0.30	3
Co			2	0.046	ug/l	11.49	342.23	4.355E-03	Pulse	0.30	3
Ni			2	0.301	ug/l	8.96	576.68	7.338E-03	Pulse	0.30	3
Cu			2	0.035	ug/l	76.63	1,514.53	1.926E-02	Pulse	0.30	3
Zn			2	1.111	ug/l	7.71	905.59	1.152E-02	Pulse	0.30	3
As			2	0.011	ug/l	128.05	13.00	1.655E-04	Pulse	1.00	3
Cd			2	0.013	ug/l	72.29	15.53	4.084E-05	Pulse	0.30	3
Sn			2	0.161	ug/l	8.34	626.69	1.649E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	200.213	ug/l	0.56	12,188.92	1.569E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,507,339.98	0.62	97.0	Pulse	0.10	3
1	Sc		2,282,349.55	0.71	98.2	Pulse	0.10	3
1	Ge		421,867.42	0.50	99.1	Pulse	0.10	3
1	Ge		580,786.94	1.23	98.9	Pulse	0.10	3
1	Rh		2,729,687.98	1.37	98.3	Pulse	0.10	3
1	In		2,809,762.23	0.36	98.6	Pulse	0.10	3
1	Tb		3,710,456.61	1.17	99.6	Pulse	0.10	3
1	Ho		353,523.35	2.05	100.5	Pulse	0.10	3
1	Bi		2,115,448.67	0.46	99.9	Pulse	0.10	3
2	Sc		78,602.66	0.47	99.9	Pulse	0.30	3
2	Ge		42,746.99	1.05	100.7	Pulse	0.30	3
2	Ge		64,745.52	0.69	101.4	Pulse	0.30	3
2	Rh		1,263,012.24	0.09	99.8	Pulse	0.30	3
2	In		380,100.50	0.34	100.1	Pulse	0.30	3
2	Tb		1,494,381.30	0.46	100.3	Pulse	0.30	3
2	Ho		140,152.97	0.36	99.7	Pulse	0.30	3
2	Bi		975,020.20	0.28	99.8	Pulse	0.30	3
3	Sc		78,020.10	1.07	99.0	Pulse	0.30	3
3	Ge		50,272.56	1.38	99.4	Pulse	0.30	3
3	Ge		77,705.05	0.33	100.3	Pulse	0.30	3
3	Rh		993,185.62	0.74	99.1	Pulse	0.30	3
3	Tb		1,537,956.36	0.74	100.4	Pulse	0.30	3

Quantitation Report

File Name	010CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 16:33
Sample Name	STDH
Sample Type	CalStd
Comment	1000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	40.88	14.67	9.660E-06	Pulse	0.25	3
B			1	7.444	ug/l	1.69	43,330.69	2.857E-02	Pulse	0.15	3
Ca			1	986.797	ug/l	1.25	660,835.68	2.885E-01	Pulse	0.10	3
Sr			1	0.024	ug/l	32.83	1,170.08	4.274E-04	Pulse	0.10	3
Mo			1	0.039	ug/l	42.03	280.01	1.022E-04	Pulse	0.10	3
Ag			1	0.003	ug/l	67.48	86.67	3.094E-05	Pulse	0.10	3
Sn			1	0.459	ug/l	3.37	2,580.29	9.224E-04	Pulse	0.10	3
Sb			1	0.433	ug/l	9.49	5,861.27	1.576E-03	Pulse	0.10	3
Ba			1	0.048	ug/l	19.61	303.35	8.155E-05	Pulse	0.10	3
Tl			1	0.003	ug/l	65.97	726.71	3.401E-04	Pulse	0.10	3
Pb			1	0.021	ug/l	28.34	326.68	1.531E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	63.64	276.68	1.294E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	29.54	1,343.41	6.298E-04	Pulse	0.10	3
Na			2	1004.625	ug/l	0.96	726,600.54	9.161E+00	Pulse	0.30	3
Mg			2	981.163	ug/l	0.70	329,244.80	4.151E+00	Pulse	0.30	3
Al			2	980.927	ug/l	0.93	98,974.18	1.248E+00	Pulse	0.30	3
K			2	973.381	ug/l	0.74	196,103.00	2.472E+00	Pulse	0.30	3
Ca			2	963.934	ug/l	2.23	10,570.11	1.333E-01	Pulse	0.30	3
Ti			2	-0.047	ug/l	-114.67	5.56	7.010E-05	Pulse	0.30	3
V			2	0.000	ug/l	-1433.34	93.33	1.177E-03	Pulse	0.30	3
Cr			2	-0.018	ug/l	-72.71	603.35	7.609E-03	Pulse	0.30	3
Mn			2	0.042	ug/l	43.80	180.00	2.268E-03	Pulse	0.30	3
Fe			2	958.433	ug/l	1.07	3,045,211.27	3.839E+01	Pulse	0.30	3
Co			2	0.051	ug/l	15.22	377.79	4.764E-03	Pulse	0.30	3
Ni			2	0.059	ug/l	43.59	144.45	1.821E-03	Pulse	0.30	3
Cu			2	0.056	ug/l	27.89	1,634.55	2.061E-02	Pulse	0.30	3
Zn			2	0.855	ug/l	8.12	760.03	9.581E-03	Pulse	0.30	3
As			2	0.002	ug/l	1036.45	10.00	1.260E-04	Pulse	1.00	3
Cd			2	0.003	ug/l	179.07	7.77	2.021E-05	Pulse	0.30	3
Sn			2	0.107	ug/l	40.86	542.24	1.412E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	398.625	ug/l	1.08	24,427.89	3.122E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,516,478.32	1.23	97.6	Pulse	0.10	3
1	Sc		2,290,343.61	0.77	98.5	Pulse	0.10	3
1	Ge		419,762.09	1.07	98.6	Pulse	0.10	3
1	Ge		588,206.61	1.06	100.2	Pulse	0.10	3
1	Rh		2,735,986.42	0.53	98.5	Pulse	0.10	3
1	In		2,797,821.72	0.50	98.2	Pulse	0.10	3
1	Tb		3,717,168.70	0.96	99.8	Pulse	0.10	3
1	Ho		354,325.07	0.53	100.7	Pulse	0.10	3
1	Bi		2,135,738.67	1.42	100.9	Pulse	0.10	3
2	Sc		79,316.07	0.43	100.8	Pulse	0.30	3
2	Ge		43,180.30	1.36	101.7	Pulse	0.30	3
2	Ge		65,189.51	0.51	102.1	Pulse	0.30	3
2	Rh		1,267,100.68	0.52	100.1	Pulse	0.30	3
2	In		383,917.16	0.68	101.1	Pulse	0.30	3
2	Tb		1,492,282.16	1.12	100.1	Pulse	0.30	3
2	Ho		141,231.36	0.91	100.5	Pulse	0.30	3
2	Bi		980,709.65	0.15	100.4	Pulse	0.30	3
3	Sc		78,312.83	1.04	99.3	Pulse	0.30	3
3	Ge		50,917.99	0.21	100.7	Pulse	0.30	3
3	Ge		78,239.67	0.97	101.0	Pulse	0.30	3
3	Rh		994,679.86	0.13	99.3	Pulse	0.30	3
3	Tb		1,552,915.43	0.45	101.4	Pulse	0.30	3

Quantitation Report

File Name	011CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 16:38
Sample Name	STDI
Sample Type	CalStd
Comment	5000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	173.68	17.33	1.157E-05	Pulse	0.25	3
B			1	2.250	ug/l	3.34	20,846.40	1.395E-02	Pulse	0.15	3
Ca			1	4952.533	ug/l	0.35	3,249,298.18	1.420E+00	Pulse	0.10	3
Sr			1	0.044	ug/l	6.67	1,726.82	6.458E-04	Pulse	0.10	3
Mo			1	0.028	ug/l	29.22	206.68	7.720E-05	Pulse	0.10	3
Ag			1	0.001	ug/l	106.54	60.00	2.177E-05	Pulse	0.10	3
Sn			1	0.373	ug/l	5.97	1,750.16	6.352E-04	Pulse	0.10	3
Sb			1	0.222	ug/l	15.01	3,620.53	9.745E-04	Pulse	0.10	3
Ba			1	0.018	ug/l	91.71	176.67	4.740E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	1963.12	643.36	3.078E-04	Pulse	0.10	3
Pb			1	0.021	ug/l	56.39	320.01	1.531E-04	Pulse	0.10	3
Pb			1	0.007	ug/l	119.28	230.01	1.099E-04	Pulse	0.10	3
Pb			1	0.014	ug/l	40.70	1,146.72	5.484E-04	Pulse	0.10	3
Na			2	5071.976	ug/l	1.01	3,546,010.41	4.554E+01	Pulse	0.30	3
Mg			2	4982.179	ug/l	1.01	1,639,498.96	2.106E+01	Pulse	0.30	3
Al			2	5050.976	ug/l	1.22	499,783.68	6.420E+00	Pulse	0.30	3
K			2	4934.755	ug/l	1.40	951,159.96	1.222E+01	Pulse	0.30	3
Ca			2	4837.800	ug/l	1.19	51,703.24	6.641E-01	Pulse	0.30	3
Ti			2	0.015	ug/l	755.40	11.11	1.436E-04	Pulse	0.30	3
V			2	0.001	ug/l	19.94	95.56	1.227E-03	Pulse	0.30	3
Cr			2	0.008	ug/l	146.41	692.25	8.896E-03	Pulse	0.30	3
Mn			2	0.117	ug/l	23.62	311.12	3.998E-03	Pulse	0.30	3
Fe			2	4963.201	ug/l	1.55	15,453,487.16	1.985E+02	Analog	0.30	3
Co			2	0.229	ug/l	4.10	1,528.98	1.964E-02	Pulse	0.30	3
Ni			2	0.225	ug/l	8.61	435.57	5.598E-03	Pulse	0.30	3
Cu			2	0.031	ug/l	70.09	1,480.09	1.901E-02	Pulse	0.30	3
Zn			2	0.631	ug/l	4.65	613.35	7.879E-03	Pulse	0.30	3
As			2	0.046	ug/l	34.76	24.33	3.119E-04	Pulse	1.00	3
Cd			2	0.009	ug/l	24.99	12.21	3.250E-05	Pulse	0.30	3
Sn			2	0.002	ug/l	1312.38	357.79	9.527E-04	Pulse	0.30	3
Se			3	0.188	ug/l	2.72	16.93	2.228E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,494,513.77	0.52	96.1	Pulse	0.10	3
1	Sc		2,287,481.37	0.23	98.4	Pulse	0.10	3
1	Ge		419,612.13	0.06	98.5	Pulse	0.10	3

Quantitation Report

1	Ge		576,519.20	0.68	98.2	Pulse	0.10	3
1	Rh		2,674,363.61	0.66	96.3	Pulse	0.10	3
1	In		2,754,601.90	0.43	96.7	Pulse	0.10	3
1	Tb		3,717,155.88	1.09	99.8	Pulse	0.10	3
1	Ho		351,606.52	0.42	99.9	Pulse	0.10	3
1	Bi		2,089,129.03	1.07	98.7	Pulse	0.10	3
2	Sc		77,861.64	1.45	99.0	Pulse	0.30	3
2	Ge		42,114.15	1.98	99.2	Pulse	0.30	3
2	Ge		63,721.56	1.44	99.8	Pulse	0.30	3
2	Rh		1,231,842.97	0.62	97.3	Pulse	0.30	3
2	In		375,471.13	1.01	98.9	Pulse	0.30	3
2	Tb		1,491,221.47	0.42	100.0	Pulse	0.30	3
2	Ho		141,496.63	0.68	100.7	Pulse	0.30	3
2	Bi		956,381.60	0.58	97.9	Pulse	0.30	3
3	Sc		76,586.95	1.35	97.1	Pulse	0.30	3
3	Ge		50,178.98	0.09	99.2	Pulse	0.30	3
3	Ge		75,998.03	0.83	98.1	Pulse	0.30	3
3	Rh		962,173.64	0.68	96.0	Pulse	0.30	3
3	Tb		1,524,832.34	0.30	99.5	Pulse	0.30	3

Quantitation Report

File Name	012CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 16:43
Sample Name	STDJ
Sample Type	CalStd
Comment	10000MIN
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	23.52	18.67	1.273E-05	Pulse	0.25	3
B			1	0.903	ug/l	12.39	14,891.26	1.015E-02	Pulse	0.15	3
Ca			1	10024.819	ug/l	0.69	6,348,943.45	2.868E+00	Analog	0.10	3
Sr			1	0.096	ug/l	1.41	3,163.76	1.217E-03	Pulse	0.10	3
Mo			1	0.023	ug/l	25.83	170.01	6.533E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	206.21	63.33	2.319E-05	Pulse	0.10	3
Sn			1	1.208	ug/l	5.31	9,279.71	3.415E-03	Pulse	0.10	3
Sb			1	0.146	ug/l	13.25	2,780.34	7.593E-04	Pulse	0.10	3
Ba			1	0.018	ug/l	93.82	173.34	4.742E-05	Pulse	0.10	3
Tl			1	-0.002	ug/l	-286.60	596.70	2.883E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	107.92	213.35	1.029E-04	Pulse	0.10	3
Pb			1	0.014	ug/l	40.69	276.68	1.335E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	30.66	1,156.73	5.582E-04	Pulse	0.10	3
Na			2	9962.371	ug/l	1.16	6,994,013.75	8.929E+01	Analog	0.30	3
Mg			2	10028.847	ug/l	0.81	3,319,938.20	4.238E+01	Pulse	0.30	3
Al			2	10235.673	ug/l	0.99	1,018,895.10	1.301E+01	Pulse	0.30	3
K			2	10090.608	ug/l	0.57	1,950,588.19	2.490E+01	Pulse	0.30	3
Ca			2	10029.787	ug/l	0.93	107,750.27	1.376E+00	Pulse	0.30	3
Ti			2	-0.010	ug/l	-1097.58	8.89	1.141E-04	Pulse	0.30	3
V			2	-0.007	ug/l	-40.93	72.22	9.221E-04	Pulse	0.30	3
Cr			2	0.069	ug/l	10.88	937.82	1.197E-02	Pulse	0.30	3
Mn			2	0.164	ug/l	5.03	398.90	5.092E-03	Pulse	0.30	3
Fe			2	10022.926	ug/l	1.29	31,392,517.64	4.008E+02	Analog	0.30	3
Co			2	0.487	ug/l	1.74	3,217.01	4.106E-02	Pulse	0.30	3
Ni			2	0.491	ug/l	5.44	913.37	1.166E-02	Pulse	0.30	3
Cu			2	0.083	ug/l	10.96	1,745.67	2.228E-02	Pulse	0.30	3
Zn			2	2.283	ug/l	0.29	1,598.98	2.041E-02	Pulse	0.30	3
As			2	0.048	ug/l	31.19	25.00	3.186E-04	Pulse	1.00	3
Cd			2	0.022	ug/l	71.98	23.32	6.205E-05	Pulse	0.30	3
Sn			2	0.890	ug/l	4.38	1,819.01	4.840E-03	Pulse	0.30	3
Se			3	0.078	ug/l	66.70	10.27	1.369E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,466,494.93	0.33	94.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,213,453.66	0.44	95.2	Pulse	0.10	3
1	Ge		410,365.33	0.97	96.4	Pulse	0.10	3
1	Ge		565,776.91	0.91	96.3	Pulse	0.10	3
1	Rh		2,599,749.49	1.04	93.6	Pulse	0.10	3
1	In		2,715,761.17	1.25	95.3	Pulse	0.10	3
1	Tb		3,663,741.51	1.64	98.4	Pulse	0.10	3
1	Ho		344,910.87	0.91	98.0	Pulse	0.10	3
1	Bi		2,070,518.04	0.87	97.8	Pulse	0.10	3
2	Sc		78,336.20	1.23	99.6	Pulse	0.30	3
2	Ge		42,119.69	0.34	99.2	Pulse	0.30	3
2	Ge		63,230.85	2.29	99.0	Pulse	0.30	3
2	Rh		1,214,979.57	0.64	96.0	Pulse	0.30	3
2	In		375,861.44	0.39	99.0	Pulse	0.30	3
2	Tb		1,483,292.44	0.23	99.5	Pulse	0.30	3
2	Ho		141,697.56	0.82	100.8	Pulse	0.30	3
2	Bi		953,960.83	0.34	97.6	Pulse	0.30	3
3	Sc		75,532.13	1.01	95.8	Pulse	0.30	3
3	Ge		49,525.93	0.72	97.9	Pulse	0.30	3
3	Ge		74,911.90	0.97	96.7	Pulse	0.30	3
3	Rh		944,299.82	0.34	94.2	Pulse	0.30	3
3	Tb		1,510,161.19	0.46	98.6	Pulse	0.30	3

Quantitation Report

File Name	013CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 16:48
Sample Name	STDA
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	8075.03	9.33	6.266E-06	Pulse	0.25	3
B			1	0.000	ug/l	---	11,308.45	7.612E-03	Pulse	0.15	3
Ca			1	0.000	ug/l	---	15,457.71	6.846E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	---	436.69	1.598E-04	Pulse	0.10	3
Mo			1	0.000	ug/l	1104.43	36.67	1.344E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	1233.54	43.33	1.547E-05	Pulse	0.10	3
Sn			1	0.422	ug/l	3.73	2,243.56	7.993E-04	Pulse	0.10	3
Sb			1	0.019	ug/l	88.73	1,470.12	3.963E-04	Pulse	0.10	3
Ba			1	0.000	ug/l	---	103.33	2.788E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	---	656.70	3.056E-04	Pulse	0.10	3
Pb			1	0.000	ug/l	1285.35	160.01	7.448E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	2962.01	186.68	8.697E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	1496.18	696.70	3.245E-04	Pulse	0.10	3
Na			2	0.000	ug/l	---	13,695.63	1.744E-01	Pulse	0.30	3
Mg			2	-0.018	ug/l	-717.73	393.34	5.009E-03	Pulse	0.30	3
Al			2	0.218	ug/l	182.73	133.33	1.701E-03	Pulse	0.30	3
K			2	0.595	ug/l	213.81	6,230.12	7.937E-02	Pulse	0.30	3
Ca			2	-0.286	ug/l	-168.17	90.00	1.146E-03	Pulse	0.30	3
Ti			2	0.000	ug/l	---	10.00	1.260E-04	Pulse	0.30	3
V			2	-0.002	ug/l	-684.60	88.89	1.133E-03	Pulse	0.30	3
Cr			2	0.001	ug/l	2351.10	671.13	8.543E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	---	103.33	1.313E-03	Pulse	0.30	3
Fe			2	0.000	ug/l	---	6,072.28	7.733E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-1225.42	42.22	5.374E-04	Pulse	0.30	3
Ni			2	-0.001	ug/l	-798.02	35.56	4.515E-04	Pulse	0.30	3
Cu			2	0.000	ug/l	---	1,341.18	1.708E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.000	ug/l	---	243.34	3.098E-03	Pulse	0.30	3
As			2	0.007	ug/l	162.11	11.67	1.483E-04	Pulse	1.00	3
Cd			2	0.003	ug/l	267.50	7.77	2.054E-05	Pulse	0.30	3
Sn			2	0.017	ug/l	88.66	388.90	1.022E-03	Pulse	0.30	3
Se			3	0.037	ug/l	110.45	8.13	1.050E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,485,735.95	0.68	100.0	Pulse	0.10	3
1	Sc		2,258,023.82	1.18	100.0	Pulse	0.10	3
1	Ge		416,537.32	0.71	100.0	Pulse	0.10	3
1	Ge		579,911.28	1.22	100.0	Pulse	0.10	3
1	Rh		2,734,464.02	0.94	100.0	Pulse	0.10	3
1	In		2,806,174.76	0.72	100.0	Pulse	0.10	3
1	Tb		3,708,694.84	0.46	100.0	Pulse	0.10	3
1	Ho		349,778.30	0.61	100.0	Pulse	0.10	3
1	Bi		2,148,057.62	0.65	100.0	Pulse	0.10	3
2	Sc		78,518.01	1.16	100.0	Pulse	0.30	3
2	Ge		42,740.21	0.67	100.0	Pulse	0.30	3
2	Ge		63,791.90	1.01	100.0	Pulse	0.30	3
2	Rh		1,258,177.38	0.65	100.0	Pulse	0.30	3
2	In		380,648.27	0.87	100.0	Pulse	0.30	3
2	Tb		1,479,197.13	0.76	100.0	Pulse	0.30	3
2	Ho		140,931.69	0.97	100.0	Pulse	0.30	3
2	Bi		988,701.59	0.39	100.0	Pulse	0.30	3
3	Sc		77,363.87	0.73	100.0	Pulse	0.30	3
3	Ge		51,169.82	0.52	100.0	Pulse	0.30	3
3	Ge		77,222.70	1.91	100.0	Pulse	0.30	3
3	Rh		987,142.50	0.80	100.0	Pulse	0.30	3
3	Tb		1,532,477.30	0.61	100.0	Pulse	0.30	3

Quantitation Report

File Name 014_ICV.d
File Path C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File
Method Path
Acq Time 4/17/2019 16:53
Sample Name ICVA
Sample Type ICV
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/17/2019 20:23
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	59.043	ug/l	0.84	335,483.73	2.236E-01	Pulse	0.25	3
B			1	118.331	ug/l	1.20	511,399.75	3.408E-01	Pulse	0.15	3
Ca			1	5604.567	ug/l	0.64	3,659,300.57	1.607E+00	Pulse	0.10	3
Sr			1	61.058	ug/l	0.53	1,799,984.66	6.708E-01	Pulse	0.10	3
Mo			1	57.928	ug/l	0.45	359,575.98	1.340E-01	Pulse	0.10	3
Ag			1	59.726	ug/l	0.57	851,643.11	3.069E-01	Pulse	0.10	3
Sn			1	56.078	ug/l	0.29	516,377.97	1.861E-01	Pulse	0.10	3
Sb			1	59.870	ug/l	1.19	633,517.11	1.712E-01	Pulse	0.10	3
Ba			1	61.732	ug/l	1.27	253,045.54	6.837E-02	Pulse	0.10	3
Tl			1	62.487	ug/l	0.65	1,497,783.42	7.133E-01	Pulse	0.10	3
Pb			1	62.140	ug/l	0.91	508,637.77	2.422E-01	Pulse	0.10	3
Pb			1	59.282	ug/l	0.08	427,853.74	2.038E-01	Pulse	0.10	3
Pb			1	60.540	ug/l	0.22	2,004,938.32	9.548E-01	Pulse	0.10	3
Na			2	5708.405	ug/l	1.46	4,034,509.42	5.124E+01	Pulse	0.30	3
Mg			2	5578.499	ug/l	0.91	1,856,589.51	2.358E+01	Pulse	0.30	3
Al			2	5696.357	ug/l	1.08	570,048.90	7.240E+00	Pulse	0.30	3
K			2	5567.954	ug/l	1.47	1,084,605.96	1.378E+01	Pulse	0.30	3
Ca			2	5892.937	ug/l	0.77	63,679.63	8.087E-01	Pulse	0.30	3
Ti			2	55.912	ug/l	2.27	5,263.12	6.685E-02	Pulse	0.30	3
V			2	61.609	ug/l	1.04	181,890.10	2.310E+00	Pulse	0.30	3
Cr			2	60.230	ug/l	1.03	237,211.59	3.013E+00	Pulse	0.30	3
Mn			2	61.446	ug/l	1.73	111,374.38	1.415E+00	Pulse	0.30	3
Fe			2	5542.561	ug/l	3.30	17,450,950.97	2.217E+02	Analog	0.30	3
Co			2	60.006	ug/l	1.24	393,351.82	4.996E+00	Pulse	0.30	3
Ni			2	60.574	ug/l	1.35	108,698.32	1.381E+00	Pulse	0.30	3
Cu			2	59.904	ug/l	0.56	298,472.50	3.791E+00	Pulse	0.30	3
Zn			2	59.901	ug/l	0.60	36,012.84	4.574E-01	Pulse	0.30	3
As			2	59.715	ug/l	0.32	19,565.68	2.485E-01	Pulse	1.00	3
Cd			2	60.412	ug/l	0.59	50,135.63	1.323E-01	Pulse	0.30	3
Sn			2	56.582	ug/l	0.33	94,159.58	2.485E-01	Pulse	0.30	3
Se			3	263.177	ug/l	0.64	15,709.51	2.062E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,500,452.87	0.48	101.0	Pulse	0.10	3
1	Sc		2,277,737.26	0.95	100.9	Pulse	0.10	3
1	Ge		419,700.40	1.02	100.8	Pulse	0.10	3

Quantitation Report

1	Ge		583,881.19	0.65	100.7	Pulse	0.10	3
1	Rh		2,683,174.13	0.34	98.1	Pulse	0.10	3
1	In		2,775,223.94	0.93	98.9	Pulse	0.10	3
1	Tb		3,701,213.70	0.84	99.8	Pulse	0.10	3
1	Ho		351,686.95	0.84	100.5	Pulse	0.10	3
1	Bi		2,099,801.06	0.24	97.8	Pulse	0.10	3
2	Sc		78,743.52	1.08	100.3	Pulse	0.30	3
2	Ge		42,846.00	0.58	100.2	Pulse	0.30	3
2	Ge		65,588.92	0.52	102.8	Pulse	0.30	3
2	Rh		1,244,485.26	0.44	98.9	Pulse	0.30	3
2	In		378,901.72	0.87	99.5	Pulse	0.30	3
2	Tb		1,486,993.55	0.36	100.5	Pulse	0.30	3
2	Ho		142,763.76	1.27	101.3	Pulse	0.30	3
2	Bi		979,315.00	0.36	99.1	Pulse	0.30	3
3	Sc		77,277.85	1.89	99.9	Pulse	0.30	3
3	Ge		50,029.60	1.78	97.8	Pulse	0.30	3
3	Ge		76,197.71	0.52	98.7	Pulse	0.30	3
3	Rh		958,801.97	0.79	97.1	Pulse	0.30	3
3	Tb		1,518,974.69	0.49	99.1	Pulse	0.30	3

Quantitation Report

File Name	015_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 16:58
Sample Name	ICV
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.009	ug/l	75.74	60.00	4.015E-05	Pulse	0.25	3
B			1	3.441	ug/l	3.84	25,997.92	1.730E-02	Pulse	0.15	3
Ca			1	19.902	ug/l	5.02	28,551.81	1.253E-02	Pulse	0.10	3
Sr			1	0.038	ug/l	9.44	1,610.14	5.822E-04	Pulse	0.10	3
Mo			1	0.083	ug/l	10.73	566.69	2.049E-04	Pulse	0.10	3
Ag			1	0.013	ug/l	18.46	230.01	8.121E-05	Pulse	0.10	3
Sn			1	0.498	ug/l	3.10	2,977.05	1.052E-03	Pulse	0.10	3
Sb			1	0.057	ug/l	9.29	1,883.51	5.034E-04	Pulse	0.10	3
Ba			1	0.067	ug/l	25.18	380.02	1.015E-04	Pulse	0.10	3
Tl			1	0.027	ug/l	7.79	1,316.77	6.082E-04	Pulse	0.10	3
Pb			1	0.035	ug/l	34.04	456.69	2.112E-04	Pulse	0.10	3
Pb			1	0.032	ug/l	28.79	426.69	1.976E-04	Pulse	0.10	3
Pb			1	0.035	ug/l	16.09	1,880.12	8.698E-04	Pulse	0.10	3
Na			2	6.366	ug/l	10.08	18,574.73	2.314E-01	Pulse	0.30	3
Mg			2	2.037	ug/l	6.89	1,098.94	1.369E-02	Pulse	0.30	3
Al			2	67.677	ug/l	2.37	7,018.19	8.742E-02	Pulse	0.30	3
K			2	3.138	ug/l	22.01	6,873.70	8.562E-02	Pulse	0.30	3
Ca			2	16.719	ug/l	16.18	278.89	3.476E-03	Pulse	0.30	3
Ti			2	-0.002	ug/l	-5693.68	10.00	1.234E-04	Pulse	0.30	3
V			2	-0.002	ug/l	-58.17	90.00	1.121E-03	Pulse	0.30	3
Cr			2	0.071	ug/l	21.93	968.93	1.207E-02	Pulse	0.30	3
Mn			2	0.089	ug/l	24.44	270.01	3.366E-03	Pulse	0.30	3
Fe			2	1.871	ug/l	4.82	12,212.39	1.521E-01	Pulse	0.30	3
Co			2	0.010	ug/l	36.56	108.89	1.355E-03	Pulse	0.30	3
Ni			2	0.102	ug/l	17.22	224.45	2.793E-03	Pulse	0.30	3
Cu			2	0.292	ug/l	8.51	2,848.05	3.547E-02	Pulse	0.30	3
Zn			2	1.657	ug/l	2.80	1,257.84	1.567E-02	Pulse	0.30	3
As			2	0.016	ug/l	127.71	15.00	1.866E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.014	ug/l	56.92	16.65	4.282E-05	Pulse	0.30	3
Sn			2	0.103	ug/l	31.93	542.24	1.395E-03	Pulse	0.30	3
Se			3	0.097	ug/l	39.07	12.00	1.517E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,502,892.24	1.32	101.2	Pulse	0.10	3
1	Sc		2,278,818.87	1.39	100.9	Pulse	0.10	3
1	Ge		421,159.07	0.85	101.1	Pulse	0.10	3
1	Ge		585,538.85	0.66	101.0	Pulse	0.10	3
1	Rh		2,766,976.94	1.34	101.2	Pulse	0.10	3
1	In		2,831,006.02	1.61	100.9	Pulse	0.10	3
1	Tb		3,742,969.53	1.90	100.9	Pulse	0.10	3
1	Ho		355,242.99	1.99	101.6	Pulse	0.10	3
1	Bi		2,164,699.13	2.20	100.8	Pulse	0.10	3
2	Sc		80,290.83	1.30	102.3	Pulse	0.30	3
2	Ge		43,101.15	0.75	100.8	Pulse	0.30	3
2	Ge		65,522.99	1.03	102.7	Pulse	0.30	3
2	Rh		1,285,531.79	0.62	102.2	Pulse	0.30	3
2	In		388,567.32	0.27	102.1	Pulse	0.30	3
2	Tb		1,509,069.25	0.54	102.0	Pulse	0.30	3
2	Ho		143,836.42	1.73	102.1	Pulse	0.30	3
2	Bi		997,093.15	0.26	100.8	Pulse	0.30	3
3	Sc		78,926.51	1.41	102.0	Pulse	0.30	3
3	Ge		52,337.97	0.44	102.3	Pulse	0.30	3
3	Ge		79,160.54	0.58	102.5	Pulse	0.30	3
3	Rh		1,004,397.53	0.42	101.7	Pulse	0.30	3
3	Tb		1,559,850.67	0.44	101.8	Pulse	0.30	3

Quantitation Report

File Name	016_ICB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 17:03
Sample Name	ICB
Sample Type	ICB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.000	ug/l	345.40	12.00	7.678E-06	Pulse	0.25	3
B			1	0.799	ug/l	5.49	15,418.35	9.862E-03	Pulse	0.15	3
Ca			1	-0.574	ug/l	-57.00	15,701.22	6.682E-03	Pulse	0.10	3
Sr			1	0.002	ug/l	169.34	513.36	1.827E-04	Pulse	0.10	3
Mo			1	0.014	ug/l	46.20	130.00	4.621E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	43.59	90.00	3.108E-05	Pulse	0.10	3
Sn			1	0.436	ug/l	6.70	2,446.96	8.445E-04	Pulse	0.10	3
Sb			1	-0.005	ug/l	-105.55	1,240.09	3.271E-04	Pulse	0.10	3
Ba			1	0.027	ug/l	38.13	220.01	5.802E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	570.49	680.04	3.100E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	53.39	233.34	1.063E-04	Pulse	0.10	3
Pb			1	-0.001	ug/l	-307.47	180.01	8.202E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	39.62	936.71	4.269E-04	Pulse	0.10	3
Na			2	0.562	ug/l	39.27	14,570.82	1.794E-01	Pulse	0.30	3
Mg			2	-0.708	ug/l	-5.87	170.00	2.094E-03	Pulse	0.30	3
Al			2	-0.206	ug/l	-22.69	94.44	1.163E-03	Pulse	0.30	3
K			2	0.036	ug/l	3799.75	6,332.38	7.799E-02	Pulse	0.30	3
Ca			2	-2.662	ug/l	-61.43	66.67	8.204E-04	Pulse	0.30	3
Ti			2	-0.060	ug/l	-66.04	4.45	5.452E-05	Pulse	0.30	3
V			2	-0.005	ug/l	-71.04	81.11	9.981E-04	Pulse	0.30	3
Cr			2	-0.003	ug/l	-448.31	681.13	8.391E-03	Pulse	0.30	3
Mn			2	-0.001	ug/l	-565.19	104.45	1.286E-03	Pulse	0.30	3
Fe			2	-0.969	ug/l	-2.51	3,134.78	3.861E-02	Pulse	0.30	3
Co			2	0.002	ug/l	61.93	57.78	7.120E-04	Pulse	0.30	3
Ni			2	0.005	ug/l	182.23	48.89	6.020E-04	Pulse	0.30	3
Cu			2	0.006	ug/l	137.38	1,415.63	1.743E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.023	ug/l	177.12	265.56	3.271E-03	Pulse	0.30	3
As			2	0.000	ug/l	-21255.30	9.67	1.192E-04	Pulse	1.00	3
Cd			2	0.003	ug/l	257.13	7.77	1.972E-05	Pulse	0.30	3
Sn			2	0.041	ug/l	48.45	444.46	1.123E-03	Pulse	0.30	3
Se			3	0.048	ug/l	48.44	9.07	1.135E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,563,410.15	0.19	105.2	Pulse	0.10	3
1	Sc		2,349,651.01	0.22	104.1	Pulse	0.10	3
1	Ge		432,769.09	0.45	103.9	Pulse	0.10	3
1	Ge		596,910.84	1.15	102.9	Pulse	0.10	3
1	Rh		2,811,085.38	0.78	102.8	Pulse	0.10	3
1	In		2,897,145.68	0.43	103.2	Pulse	0.10	3
1	Tb		3,791,930.05	0.53	102.2	Pulse	0.10	3
1	Ho		360,126.95	0.84	103.0	Pulse	0.10	3
1	Bi		2,193,457.67	0.77	102.1	Pulse	0.10	3
2	Sc		81,205.01	0.81	103.4	Pulse	0.30	3
2	Ge		44,665.34	2.34	104.5	Pulse	0.30	3
2	Ge		66,609.75	0.42	104.4	Pulse	0.30	3
2	Rh		1,312,296.30	0.90	104.3	Pulse	0.30	3
2	In		395,511.76	0.65	103.9	Pulse	0.30	3
2	Tb		1,529,021.85	0.41	103.4	Pulse	0.30	3
2	Ho		145,427.19	0.28	103.2	Pulse	0.30	3
2	Bi		1,008,803.92	0.46	102.0	Pulse	0.30	3
3	Sc		79,612.13	0.67	102.9	Pulse	0.30	3
3	Ge		52,155.05	0.40	101.9	Pulse	0.30	3
3	Ge		79,848.65	0.23	103.4	Pulse	0.30	3
3	Rh		1,016,348.29	0.50	103.0	Pulse	0.30	3
3	Tb		1,558,161.08	0.90	101.7	Pulse	0.30	3

Quantitation Report

File Name 017_CCV.d
File Path C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File
Method Path
Acq Time 4/17/2019 17:08
Sample Name CCVA
Sample Type CCV
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/17/2019 20:23
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	49.968	ug/l	1.66	287,571.99	1.892E-01	Pulse	0.25	3
B			1	97.245	ug/l	1.38	427,749.60	2.815E-01	Pulse	0.15	3
Ca			1	5049.859	ug/l	0.19	3,369,049.95	1.448E+00	Pulse	0.10	3
Sr			1	50.006	ug/l	0.85	1,517,859.66	5.494E-01	Pulse	0.10	3
Mo			1	51.091	ug/l	1.36	326,510.86	1.182E-01	Pulse	0.10	3
Ag			1	49.612	ug/l	1.42	721,540.38	2.549E-01	Pulse	0.10	3
Sn			1	49.094	ug/l	0.16	460,885.06	1.628E-01	Pulse	0.10	3
Sb			1	51.094	ug/l	1.56	549,866.20	1.461E-01	Pulse	0.10	3
Ba			1	49.837	ug/l	1.63	207,708.93	5.520E-02	Pulse	0.10	3
Tl			1	49.828	ug/l	1.23	1,216,384.09	5.689E-01	Pulse	0.10	3
Pb			1	49.298	ug/l	0.50	410,975.32	1.922E-01	Pulse	0.10	3
Pb			1	49.551	ug/l	0.80	364,252.43	1.703E-01	Pulse	0.10	3
Pb			1	49.417	ug/l	0.18	1,666,850.86	7.794E-01	Pulse	0.10	3
Na			2	5000.285	ug/l	0.67	3,634,715.96	4.490E+01	Pulse	0.30	3
Mg			2	4921.940	ug/l	0.81	1,683,918.20	2.080E+01	Pulse	0.30	3
Al			2	4962.925	ug/l	1.11	510,562.39	6.308E+00	Pulse	0.30	3
K			2	4888.356	ug/l	0.15	979,765.03	1.210E+01	Pulse	0.30	3
Ca			2	5124.553	ug/l	0.17	56,941.28	7.034E-01	Pulse	0.30	3
Ti			2	49.722	ug/l	1.66	4,812.97	5.946E-02	Pulse	0.30	3
V			2	49.779	ug/l	0.62	151,089.84	1.867E+00	Pulse	0.30	3
Cr			2	48.896	ug/l	0.23	198,111.15	2.447E+00	Pulse	0.30	3
Mn			2	49.408	ug/l	1.10	92,092.81	1.138E+00	Pulse	0.30	3
Fe			2	4853.751	ug/l	2.00	15,712,237.71	1.941E+02	Analog	0.30	3
Co			2	48.165	ug/l	1.10	324,582.30	4.010E+00	Pulse	0.30	3
Ni			2	48.771	ug/l	1.52	89,979.12	1.112E+00	Pulse	0.30	3
Cu			2	48.674	ug/l	1.60	249,545.94	3.083E+00	Pulse	0.30	3
Zn			2	48.635	ug/l	0.83	30,105.46	3.719E-01	Pulse	0.30	3
As			2	49.663	ug/l	0.66	16,730.23	2.067E-01	Pulse	1.00	3
Cd			2	48.829	ug/l	1.35	41,246.64	1.070E-01	Pulse	0.30	3
Sn			2	49.443	ug/l	0.73	83,789.83	2.173E-01	Pulse	0.30	3
Se			3	195.770	ug/l	0.77	11,968.56	1.534E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,519,822.58	0.40	102.3	Pulse	0.10	3
1	Sc		2,326,268.09	0.51	103.0	Pulse	0.10	3
1	Ge		428,893.64	0.45	103.0	Pulse	0.10	3

Quantitation Report

1	Ge		592,417.94	0.57	102.2	Pulse	0.10	3
1	Rh		2,762,741.52	1.31	101.0	Pulse	0.10	3
1	In		2,830,622.67	0.62	100.9	Pulse	0.10	3
1	Tb		3,763,186.19	1.14	101.5	Pulse	0.10	3
1	Ho		359,533.35	1.24	102.8	Pulse	0.10	3
1	Bi		2,138,485.75	1.00	99.6	Pulse	0.10	3
2	Sc		80,949.55	1.23	103.1	Pulse	0.30	3
2	Ge		43,789.68	2.06	102.5	Pulse	0.30	3
2	Ge		66,109.83	1.14	103.6	Pulse	0.30	3
2	Rh		1,256,944.53	1.22	99.9	Pulse	0.30	3
2	In		385,666.11	0.75	101.3	Pulse	0.30	3
2	Tb		1,504,554.35	0.71	101.7	Pulse	0.30	3
2	Ho		143,940.90	0.98	102.1	Pulse	0.30	3
2	Bi		983,019.13	0.70	99.4	Pulse	0.30	3
3	Sc		79,370.89	0.19	102.6	Pulse	0.30	3
3	Ge		50,944.67	0.91	99.6	Pulse	0.30	3
3	Ge		78,034.05	1.05	101.1	Pulse	0.30	3
3	Rh		976,037.50	0.06	98.9	Pulse	0.30	3
3	Tb		1,535,820.42	0.76	100.2	Pulse	0.30	3

Quantitation Report

File Name	018_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 17:13
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.004	ug/l	47.21	34.67	2.279E-05	Pulse	0.25	3
B			1	2.947	ug/l	4.27	24,155.19	1.591E-02	Pulse	0.15	3
Ca			1	0.013	ug/l	2342.00	15,848.13	6.850E-03	Pulse	0.10	3
Sr			1	0.007	ug/l	30.84	673.37	2.407E-04	Pulse	0.10	3
Mo			1	0.077	ug/l	37.15	536.69	1.915E-04	Pulse	0.10	3
Ag			1	0.008	ug/l	21.03	166.67	5.769E-05	Pulse	0.10	3
Sn			1	0.509	ug/l	2.08	3,147.09	1.089E-03	Pulse	0.10	3
Sb			1	0.174	ug/l	9.92	3,127.08	8.380E-04	Pulse	0.10	3
Ba			1	0.028	ug/l	52.60	220.01	5.889E-05	Pulse	0.10	3
Tl			1	0.016	ug/l	34.91	1,043.41	4.836E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	17.24	330.02	1.530E-04	Pulse	0.10	3
Pb			1	0.014	ug/l	38.66	290.01	1.343E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	17.55	1,300.07	6.022E-04	Pulse	0.10	3
Na			2	0.269	ug/l	223.07	14,323.94	1.768E-01	Pulse	0.30	3
Mg			2	-0.395	ug/l	-23.26	276.67	3.414E-03	Pulse	0.30	3
Al			2	3.209	ug/l	13.46	445.57	5.502E-03	Pulse	0.30	3
K			2	0.328	ug/l	212.93	6,376.84	7.871E-02	Pulse	0.30	3
Ca			2	-1.043	ug/l	-185.50	84.44	1.042E-03	Pulse	0.30	3
Ti			2	-0.060	ug/l	-87.97	4.44	5.470E-05	Pulse	0.30	3
V			2	-0.005	ug/l	-72.20	82.22	1.014E-03	Pulse	0.30	3
Cr			2	-0.007	ug/l	-178.18	660.02	8.150E-03	Pulse	0.30	3
Mn			2	-0.008	ug/l	-106.05	91.11	1.124E-03	Pulse	0.30	3
Fe			2	-0.533	ug/l	-1.38	4,539.57	5.604E-02	Pulse	0.30	3
Co			2	0.008	ug/l	23.07	97.78	1.208E-03	Pulse	0.30	3
Ni			2	0.004	ug/l	167.18	46.67	5.759E-04	Pulse	0.30	3
Cu			2	-0.007	ug/l	-103.88	1,350.07	1.667E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.018	ug/l	-123.96	240.00	2.963E-03	Pulse	0.30	3
As			2	0.001	ug/l	1651.33	10.00	1.237E-04	Pulse	1.00	3
Cd			2	0.011	ug/l	41.40	14.42	3.693E-05	Pulse	0.30	3
Sn			2	0.151	ug/l	27.43	627.80	1.607E-03	Pulse	0.30	3
Se			3	0.087	ug/l	11.72	11.33	1.438E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,518,373.82	0.87	102.2	Pulse	0.10	3
1	Sc		2,313,611.48	0.81	102.5	Pulse	0.10	3
1	Ge		425,353.31	0.70	102.1	Pulse	0.10	3
1	Ge		586,031.63	0.41	101.1	Pulse	0.10	3
1	Rh		2,796,466.94	1.04	102.3	Pulse	0.10	3
1	In		2,890,463.79	0.70	103.0	Pulse	0.10	3
1	Tb		3,731,643.90	0.72	100.6	Pulse	0.10	3
1	Ho		355,537.47	1.12	101.6	Pulse	0.10	3
1	Bi		2,157,692.47	1.16	100.4	Pulse	0.10	3
2	Sc		81,010.71	0.60	103.2	Pulse	0.30	3
2	Ge		43,796.46	2.04	102.5	Pulse	0.30	3
2	Ge		66,688.90	1.24	104.5	Pulse	0.30	3
2	Rh		1,290,926.69	0.60	102.6	Pulse	0.30	3
2	In		390,836.62	0.40	102.7	Pulse	0.30	3
2	Tb		1,510,718.59	0.73	102.1	Pulse	0.30	3
2	Ho		144,303.95	0.75	102.4	Pulse	0.30	3
2	Bi		1,000,250.93	0.40	101.2	Pulse	0.30	3
3	Sc		78,894.19	0.02	102.0	Pulse	0.30	3
3	Ge		51,328.20	1.55	100.3	Pulse	0.30	3
3	Ge		78,819.15	1.42	102.1	Pulse	0.30	3
3	Rh		1,003,399.23	0.58	101.6	Pulse	0.30	3
3	Tb		1,542,667.65	0.57	100.7	Pulse	0.30	3

Quantitation Report

File Name	019LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 17:18
Sample Name	CRI
Sample Type	LLCCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.518	ug/l	6.60	3,024.31	1.967E-03	Pulse	0.25	3
B			1	24.963	ug/l	0.47	119,781.82	7.791E-02	Pulse	0.15	3
Ca			1	255.419	ug/l	0.67	186,936.18	7.975E-02	Pulse	0.10	3
Sr			1	5.019	ug/l	2.54	156,610.43	5.529E-02	Pulse	0.10	3
Mo			1	0.963	ug/l	4.56	6,344.79	2.241E-03	Pulse	0.10	3
Ag			1	0.496	ug/l	2.95	7,371.96	2.563E-03	Pulse	0.10	3
Sn			1	5.117	ug/l	3.18	47,241.65	1.643E-02	Pulse	0.10	3
Sb			1	2.022	ug/l	1.57	23,070.96	6.110E-03	Pulse	0.10	3
Ba			1	0.989	ug/l	3.29	4,240.72	1.123E-03	Pulse	0.10	3
Tl			1	0.496	ug/l	4.22	12,986.05	5.963E-03	Pulse	0.10	3
Pb			1	0.495	ug/l	5.68	4,357.46	2.001E-03	Pulse	0.10	3
Pb			1	0.556	ug/l	7.51	4,344.12	1.995E-03	Pulse	0.10	3
Pb			1	0.504	ug/l	2.79	18,021.45	8.275E-03	Pulse	0.10	3
Na			2	259.715	ug/l	1.82	201,664.15	2.498E+00	Pulse	0.30	3
Mg			2	256.187	ug/l	2.05	87,815.57	1.088E+00	Pulse	0.30	3
Al			2	26.583	ug/l	2.96	2,842.49	3.520E-02	Pulse	0.30	3
K			2	260.706	ug/l	1.92	58,073.61	7.193E-01	Pulse	0.30	3
Ca			2	279.991	ug/l	2.39	3,193.68	3.955E-02	Pulse	0.30	3
Ti			2	0.956	ug/l	22.04	102.22	1.267E-03	Pulse	0.30	3
V			2	1.015	ug/l	3.22	3,165.89	3.921E-02	Pulse	0.30	3
Cr			2	0.974	ug/l	5.30	4,608.47	5.709E-02	Pulse	0.30	3
Mn			2	0.999	ug/l	4.82	1,962.37	2.430E-02	Pulse	0.30	3
Fe			2	25.038	ug/l	0.47	87,075.34	1.078E+00	Pulse	0.30	3
Co			2	0.512	ug/l	2.63	3,484.84	4.316E-02	Pulse	0.30	3
Ni			2	1.039	ug/l	4.16	1,950.14	2.415E-02	Pulse	0.30	3
Cu			2	1.997	ug/l	3.37	11,534.14	1.428E-01	Pulse	0.30	3
Zn			2	5.015	ug/l	2.36	3,321.48	4.113E-02	Pulse	0.30	3
As			2	0.539	ug/l	8.70	190.67	2.361E-03	Pulse	1.00	3
Cd			2	0.461	ug/l	2.05	406.50	1.022E-03	Pulse	0.30	3
Sn			2	4.716	ug/l	0.96	8,580.20	2.158E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.585	ug/l	7.87	42.13	5.338E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,537,539.38	0.96	103.5	Pulse	0.10	3
1	Sc		2,343,882.99	1.13	103.8	Pulse	0.10	3
1	Ge		429,830.18	0.91	103.2	Pulse	0.10	3
1	Ge		597,967.84	1.21	103.1	Pulse	0.10	3
1	Rh		2,832,152.35	1.23	103.6	Pulse	0.10	3
1	In		2,876,208.14	0.78	102.5	Pulse	0.10	3
1	Tb		3,775,658.90	0.66	101.8	Pulse	0.10	3
1	Ho		358,315.00	0.46	102.4	Pulse	0.10	3
1	Bi		2,178,477.47	1.65	101.4	Pulse	0.10	3
2	Sc		80,751.78	1.12	102.8	Pulse	0.30	3
2	Ge		44,405.75	1.09	103.9	Pulse	0.30	3
2	Ge		66,693.26	0.55	104.5	Pulse	0.30	3
2	Rh		1,295,315.30	0.54	103.0	Pulse	0.30	3
2	In		397,644.20	0.32	104.5	Pulse	0.30	3
2	Tb		1,522,001.82	0.29	102.9	Pulse	0.30	3
2	Ho		144,819.17	1.28	102.8	Pulse	0.30	3
2	Bi		1,007,614.44	0.50	101.9	Pulse	0.30	3
3	Sc		79,221.57	0.68	102.4	Pulse	0.30	3
3	Ge		52,095.00	0.49	101.8	Pulse	0.30	3
3	Ge		78,928.54	1.37	102.2	Pulse	0.30	3
3	Rh		1,014,711.28	0.33	102.8	Pulse	0.30	3
3	Tb		1,546,847.61	0.78	100.9	Pulse	0.30	3

Quantitation Report

File Name	020ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 17:23
Sample Name	ICSA
Sample Type	ICSA
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	221.10	13.33	1.019E-05	Pulse	0.25	3
B			1	1.139	ug/l	1.91	14,128.34	1.082E-02	Pulse	0.15	3
Ca			1	94796.042	ug/l	1.35	55,470,162.51	2.707E+01	Analog	0.10	3
Sr			1	2016.722	ug/l	1.53	51,369,639.24	2.215E+01	Analog	0.10	3
Mo			1	2044.429	ug/l	0.21	10,967,900.67	4.729E+00	Analog	0.10	3
Ag			1	0.019	ug/l	10.60	280.01	1.124E-04	Pulse	0.10	3
Sn			1	1867.074	ug/l	0.70	15,469,078.52	6.215E+00	Analog	0.10	3
Sb			1	0.159	ug/l	4.45	2,737.00	7.947E-04	Pulse	0.10	3
Ba			1	0.216	ug/l	9.08	920.05	2.669E-04	Pulse	0.10	3
Tl			1	0.000	ug/l	716.89	583.36	3.113E-04	Pulse	0.10	3
Pb			1	0.078	ug/l	5.78	706.71	3.774E-04	Pulse	0.10	3
Pb			1	0.088	ug/l	25.45	723.38	3.869E-04	Pulse	0.10	3
Pb			1	0.089	ug/l	8.92	3,220.26	1.721E-03	Pulse	0.10	3
Na			2	88584.155	ug/l	1.59	57,823,971.04	7.926E+02	Analog	0.30	3
Mg			2	88817.929	ug/l	0.99	27,383,245.02	3.753E+02	Analog	0.30	3
Al			2	94545.824	ug/l	0.94	8,765,525.49	1.201E+02	Analog	0.30	3
K			2	95656.551	ug/l	0.34	17,175,852.65	2.354E+02	Analog	0.30	3
Ca			2	104187.365	ug/l	1.01	1,041,774.02	1.428E+01	Pulse	0.30	3
Ti			2	1750.864	ug/l	1.24	152,447.74	2.089E+00	Pulse	0.30	3
V			2	-0.006	ug/l	-86.02	70.00	9.593E-04	Pulse	0.30	3
Cr			2	0.278	ug/l	18.27	1,631.21	2.237E-02	Pulse	0.30	3
Mn			2	0.380	ug/l	8.82	733.36	1.004E-02	Pulse	0.30	3
Fe			2	89577.314	ug/l	1.31	261,283,536.28	3.581E+03	Analog	0.30	3
Co			2	0.331	ug/l	2.85	2,050.15	2.810E-02	Pulse	0.30	3
Ni			2	0.663	ug/l	3.36	1,136.72	1.557E-02	Pulse	0.30	3
Cu			2	0.171	ug/l	9.80	2,031.26	2.783E-02	Pulse	0.30	3
Zn			2	0.509	ug/l	7.02	507.79	6.961E-03	Pulse	0.30	3
As			2	0.067	ug/l	32.84	29.00	3.978E-04	Pulse	1.00	3
Cd			2	-0.063	ug/l	-76.27	-42.20	-1.242E-04	Pulse	0.30	3
Sn			2	1878.109	ug/l	0.21	2,802,468.71	8.218E+00	Pulse	0.30	3
Se			3	0.172	ug/l	7.34	14.47	2.102E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,305,937.40	0.40	87.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,049,682.52	1.22	90.8	Pulse	0.10	3
1	Ge		386,632.94	1.68	92.8	Pulse	0.10	3
1	Ge		516,276.14	0.64	89.0	Pulse	0.10	3
1	Rh		2,319,140.28	1.10	84.8	Pulse	0.10	3
1	In		2,488,921.73	1.71	88.7	Pulse	0.10	3
1	Tb		3,443,686.82	1.89	92.9	Pulse	0.10	3
1	Ho		328,783.93	1.92	94.0	Pulse	0.10	3
1	Bi		1,871,964.14	1.23	87.1	Pulse	0.10	3
2	Sc		72,966.28	1.31	92.9	Pulse	0.30	3
2	Ge		39,895.35	1.17	93.3	Pulse	0.30	3
2	Ge		58,754.20	0.99	92.1	Pulse	0.30	3
2	Rh		1,072,756.94	0.69	85.3	Pulse	0.30	3
2	In		341,009.40	0.81	89.6	Pulse	0.30	3
2	Tb		1,394,652.37	0.84	94.3	Pulse	0.30	3
2	Ho		133,232.98	0.39	94.5	Pulse	0.30	3
2	Bi		860,455.47	0.20	87.0	Pulse	0.30	3
3	Sc		70,998.02	1.12	91.8	Pulse	0.30	3
3	Ge		46,216.27	1.33	90.3	Pulse	0.30	3
3	Ge		68,824.34	0.56	89.1	Pulse	0.30	3
3	Rh		825,638.58	0.70	83.6	Pulse	0.30	3
3	Tb		1,380,527.27	0.65	90.1	Pulse	0.30	3

Quantitation Report

File Name	021ICSB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 17:28
Sample Name	ICSAB
Sample Type	ICSB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.001	ug/l	65.07	14.67	1.161E-05	Pulse	0.25	3
B			1	50.105	ug/l	1.25	187,510.81	1.487E-01	Pulse	0.15	3
Ca			1	96146.266	ug/l	0.68	56,947,522.48	2.745E+01	Analog	0.10	3
Sr			1	2107.645	ug/l	0.71	54,667,830.85	2.315E+01	Analog	0.10	3
Mo			1	2079.634	ug/l	0.61	11,359,569.00	4.811E+00	Analog	0.10	3
Ag			1	20.469	ug/l	1.61	268,779.29	1.052E-01	Pulse	0.10	3
Sn			1	1893.640	ug/l	1.68	16,107,051.84	6.303E+00	Analog	0.10	3
Sb			1	0.194	ug/l	2.37	3,175.43	8.951E-04	Pulse	0.10	3
Ba			1	0.295	ug/l	4.85	1,256.76	3.544E-04	Pulse	0.10	3
Tl			1	0.004	ug/l	67.48	673.37	3.486E-04	Pulse	0.10	3
Pb			1	0.092	ug/l	28.88	833.39	4.306E-04	Pulse	0.10	3
Pb			1	0.098	ug/l	1.87	816.71	4.226E-04	Pulse	0.10	3
Pb			1	0.096	ug/l	7.17	3,550.29	1.836E-03	Pulse	0.10	3
Na			2	91350.499	ug/l	1.31	58,348,068.79	8.173E+02	Analog	0.30	3
Mg			2	89345.036	ug/l	0.56	26,952,973.37	3.775E+02	Analog	0.30	3
Al			2	94908.847	ug/l	1.79	8,609,321.60	1.206E+02	Analog	0.30	3
K			2	96884.173	ug/l	0.65	17,020,576.54	2.384E+02	Analog	0.30	3
Ca			2	106369.928	ug/l	0.40	1,040,672.88	1.458E+01	Pulse	0.30	3
Ti			2	1777.652	ug/l	0.67	151,451.01	2.121E+00	Pulse	0.30	3
V			2	21.173	ug/l	1.16	56,729.89	7.946E-01	Pulse	0.30	3
Cr			2	20.700	ug/l	0.51	74,320.87	1.041E+00	Pulse	0.30	3
Mn			2	20.894	ug/l	2.12	34,399.08	4.819E-01	Pulse	0.30	3
Fe			2	92481.080	ug/l	1.49	263,944,167.29	3.697E+03	Analog	0.30	3
Co			2	20.198	ug/l	0.79	120,071.11	1.682E+00	Pulse	0.30	3
Ni			2	20.090	ug/l	0.82	32,710.22	4.582E-01	Pulse	0.30	3
Cu			2	20.001	ug/l	1.92	91,155.91	1.277E+00	Pulse	0.30	3
Zn			2	20.864	ug/l	1.02	11,516.37	1.613E-01	Pulse	0.30	3
As			2	20.098	ug/l	0.56	5,975.77	8.370E-02	Pulse	1.00	3
Cd			2	18.958	ug/l	2.39	14,099.78	4.153E-02	Pulse	0.30	3
Sn			2	1902.814	ug/l	0.59	2,826,529.47	8.326E+00	Pulse	0.30	3
Se			3	19.091	ug/l	3.20	1,057.50	1.503E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,261,013.26	1.12	84.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,074,642.42	0.90	91.9	Pulse	0.10	3
1	Ge		395,942.40	1.30	95.1	Pulse	0.10	3
1	Ge		529,854.34	1.36	91.4	Pulse	0.10	3
1	Rh		2,361,446.32	1.30	86.4	Pulse	0.10	3
1	In		2,555,683.74	1.34	91.1	Pulse	0.10	3
1	Tb		3,547,878.70	1.43	95.7	Pulse	0.10	3
1	Ho		338,379.25	1.85	96.7	Pulse	0.10	3
1	Bi		1,932,791.48	0.98	90.0	Pulse	0.10	3
2	Sc		71,391.90	0.71	90.9	Pulse	0.30	3
2	Ge		40,310.74	0.17	94.3	Pulse	0.30	3
2	Ge		59,518.03	1.89	93.3	Pulse	0.30	3
2	Rh		1,078,759.92	0.77	85.7	Pulse	0.30	3
2	In		339,479.20	0.36	89.2	Pulse	0.30	3
2	Tb		1,390,495.71	0.62	94.0	Pulse	0.30	3
2	Ho		134,236.29	0.74	95.2	Pulse	0.30	3
2	Bi		861,198.91	0.54	87.1	Pulse	0.30	3
3	Sc		71,624.04	1.46	92.6	Pulse	0.30	3
3	Ge		46,776.72	0.49	91.4	Pulse	0.30	3
3	Ge		70,366.22	0.91	91.1	Pulse	0.30	3
3	Rh		840,787.52	0.31	85.2	Pulse	0.30	3
3	Tb		1,403,732.89	0.37	91.6	Pulse	0.30	3

Quantitation Report

File Name 022_CCV.d
File Path C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File
Method Path
Acq Time 4/17/2019 17:34
Sample Name CCVA
Sample Type CCV
Comment
Prep Dilution 1.000
Auto Dilution N/A
Total Dilution 1.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/17/2019 20:23
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	47.898	ug/l	1.17	226,827.44	1.814E-01	Pulse	0.25	3
B			1	91.716	ug/l	0.98	332,499.21	2.659E-01	Pulse	0.15	3
Ca			1	5029.129	ug/l	0.44	2,958,023.71	1.442E+00	Pulse	0.10	3
Sr			1	50.397	ug/l	0.17	1,445,962.38	5.537E-01	Pulse	0.10	3
Mo			1	51.737	ug/l	0.33	312,547.13	1.197E-01	Pulse	0.10	3
Ag			1	48.444	ug/l	1.12	689,250.85	2.489E-01	Pulse	0.10	3
Sn			1	49.792	ug/l	0.76	457,253.84	1.651E-01	Pulse	0.10	3
Sb			1	49.994	ug/l	0.28	542,819.26	1.430E-01	Pulse	0.10	3
Ba			1	48.964	ug/l	0.42	205,885.71	5.424E-02	Pulse	0.10	3
Tl			1	49.429	ug/l	0.70	1,230,271.73	5.643E-01	Pulse	0.10	3
Pb			1	49.414	ug/l	0.72	419,985.48	1.926E-01	Pulse	0.10	3
Pb			1	49.802	ug/l	0.19	373,217.54	1.712E-01	Pulse	0.10	3
Pb			1	49.369	ug/l	0.39	1,697,697.90	7.787E-01	Pulse	0.10	3
Na			2	4861.088	ug/l	0.42	3,049,061.55	4.366E+01	Pulse	0.30	3
Mg			2	4790.505	ug/l	0.97	1,414,128.87	2.025E+01	Pulse	0.30	3
Al			2	4800.175	ug/l	0.47	426,091.16	6.101E+00	Pulse	0.30	3
K			2	4842.354	ug/l	0.77	837,408.35	1.199E+01	Pulse	0.30	3
Ca			2	5098.587	ug/l	1.05	48,875.72	6.999E-01	Pulse	0.30	3
Ti			2	49.123	ug/l	1.04	4,102.77	5.875E-02	Pulse	0.30	3
V			2	51.133	ug/l	0.86	133,899.38	1.917E+00	Pulse	0.30	3
Cr			2	49.993	ug/l	1.63	174,732.64	2.502E+00	Pulse	0.30	3
Mn			2	50.468	ug/l	0.72	81,156.40	1.162E+00	Pulse	0.30	3
Fe			2	5018.202	ug/l	1.09	14,016,307.50	2.007E+02	Analog	0.30	3
Co			2	50.521	ug/l	0.36	293,755.69	4.206E+00	Pulse	0.30	3
Ni			2	50.634	ug/l	0.11	80,602.08	1.154E+00	Pulse	0.30	3
Cu			2	50.203	ug/l	1.05	222,042.55	3.179E+00	Pulse	0.30	3
Zn			2	50.828	ug/l	0.73	27,135.84	3.886E-01	Pulse	0.30	3
As			2	52.118	ug/l	1.91	15,145.02	2.169E-01	Pulse	1.00	3
Cd			2	49.572	ug/l	0.36	39,178.70	1.086E-01	Pulse	0.30	3
Sn			2	50.275	ug/l	1.58	79,714.15	2.209E-01	Pulse	0.30	3
Se			3	194.739	ug/l	2.15	11,368.53	1.526E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,250,519.65	0.27	84.2	Pulse	0.10	3
1	Sc		2,050,848.15	1.01	90.8	Pulse	0.10	3
1	Ge		396,853.21	0.90	95.3	Pulse	0.10	3

Quantitation Report

1	Ge		552,932.71	0.48	95.3	Pulse	0.10	3
1	Rh		2,611,276.32	0.90	95.5	Pulse	0.10	3
1	In		2,768,808.23	0.89	98.7	Pulse	0.10	3
1	Tb		3,796,105.78	0.91	102.4	Pulse	0.10	3
1	Ho		359,234.80	1.70	102.7	Pulse	0.10	3
1	Bi		2,180,165.91	0.13	101.5	Pulse	0.10	3
2	Sc		69,840.89	0.89	88.9	Pulse	0.30	3
2	Ge		39,828.46	0.67	93.2	Pulse	0.30	3
2	Ge		60,879.73	1.53	95.4	Pulse	0.30	3
2	Rh		1,188,003.46	0.61	94.4	Pulse	0.30	3
2	In		360,822.23	0.59	94.8	Pulse	0.30	3
2	Tb		1,447,443.73	0.59	97.9	Pulse	0.30	3
2	Ho		139,416.42	0.44	98.9	Pulse	0.30	3
2	Bi		966,803.09	0.46	97.8	Pulse	0.30	3
3	Sc		73,280.07	0.87	94.7	Pulse	0.30	3
3	Ge		49,007.70	1.99	95.8	Pulse	0.30	3
3	Ge		74,523.79	1.28	96.5	Pulse	0.30	3
3	Rh		957,888.68	0.70	97.0	Pulse	0.30	3
3	Tb		1,547,698.17	0.71	101.0	Pulse	0.30	3

Quantitation Report

File Name	023_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 17:39
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.006	ug/l	7.28	34.67	2.723E-05	Pulse	0.25	3
B			1	2.333	ug/l	6.63	18,047.61	1.418E-02	Pulse	0.15	3
Ca			1	-0.795	ug/l	-223.82	13,882.93	6.620E-03	Pulse	0.10	3
Sr			1	0.042	ug/l	3.39	1,676.80	6.161E-04	Pulse	0.10	3
Mo			1	0.220	ug/l	10.04	1,423.44	5.231E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	32.50	210.01	7.451E-05	Pulse	0.10	3
Sn			1	0.617	ug/l	8.01	4,087.40	1.449E-03	Pulse	0.10	3
Sb			1	0.190	ug/l	8.49	3,353.81	8.829E-04	Pulse	0.10	3
Ba			1	0.016	ug/l	28.47	173.34	4.558E-05	Pulse	0.10	3
Tl			1	0.008	ug/l	46.54	896.72	3.992E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	40.56	320.01	1.424E-04	Pulse	0.10	3
Pb			1	0.010	ug/l	84.96	273.35	1.217E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	20.67	1,250.07	5.561E-04	Pulse	0.10	3
Na			2	5.592	ug/l	11.26	15,988.76	2.244E-01	Pulse	0.30	3
Mg			2	1.008	ug/l	3.36	665.58	9.345E-03	Pulse	0.30	3
Al			2	2.232	ug/l	16.25	303.34	4.260E-03	Pulse	0.30	3
K			2	3.810	ug/l	14.12	6,216.78	8.728E-02	Pulse	0.30	3
Ca			2	-1.223	ug/l	-331.62	72.22	1.018E-03	Pulse	0.30	3
Ti			2	-0.054	ug/l	-84.07	4.45	6.207E-05	Pulse	0.30	3
V			2	-0.006	ug/l	-121.51	67.78	9.531E-04	Pulse	0.30	3
Cr			2	-0.009	ug/l	-116.16	573.35	8.048E-03	Pulse	0.30	3
Mn			2	0.014	ug/l	108.74	116.67	1.636E-03	Pulse	0.30	3
Fe			2	1.382	ug/l	3.66	9,442.79	1.326E-01	Pulse	0.30	3
Co			2	0.007	ug/l	17.99	83.33	1.169E-03	Pulse	0.30	3
Ni			2	0.010	ug/l	109.83	51.11	7.157E-04	Pulse	0.30	3
Cu			2	0.072	ug/l	10.51	1,537.86	2.159E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.114	ug/l	76.84	282.23	3.959E-03	Pulse	0.30	3
As			2	0.008	ug/l	292.35	11.00	1.550E-04	Pulse	1.00	3
Cd			2	0.015	ug/l	49.04	16.58	4.479E-05	Pulse	0.30	3
Sn			2	0.227	ug/l	11.29	717.80	1.939E-03	Pulse	0.30	3
Se			3	0.083	ug/l	12.82	10.80	1.409E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,272,660.47	1.09	85.7	Pulse	0.10	3
1	Sc		2,098,559.24	1.32	92.9	Pulse	0.10	3
1	Ge		404,765.07	1.12	97.2	Pulse	0.10	3
1	Ge		560,603.16	1.52	96.7	Pulse	0.10	3
1	Rh		2,721,314.33	0.58	99.5	Pulse	0.10	3
1	In		2,821,766.25	0.69	100.6	Pulse	0.10	3
1	Tb		3,799,896.30	1.14	102.5	Pulse	0.10	3
1	Ho		359,842.40	1.23	102.9	Pulse	0.10	3
1	Bi		2,247,719.66	0.96	104.6	Pulse	0.10	3
2	Sc		71,224.40	1.21	90.7	Pulse	0.30	3
2	Ge		41,653.03	0.89	97.5	Pulse	0.30	3
2	Ge		62,399.74	1.37	97.8	Pulse	0.30	3
2	Rh		1,234,427.73	0.36	98.1	Pulse	0.30	3
2	In		370,260.71	0.28	97.3	Pulse	0.30	3
2	Tb		1,467,095.91	0.21	99.2	Pulse	0.30	3
2	Ho		141,340.19	0.74	100.3	Pulse	0.30	3
2	Bi		986,727.95	0.38	99.8	Pulse	0.30	3
3	Sc		74,258.76	0.80	96.0	Pulse	0.30	3
3	Ge		50,881.10	0.73	99.4	Pulse	0.30	3
3	Ge		76,664.47	1.25	99.3	Pulse	0.30	3
3	Rh		998,981.11	0.76	101.2	Pulse	0.30	3
3	Tb		1,575,265.80	0.39	102.8	Pulse	0.30	3

Quantitation Report

File Name	024SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 17:44
Sample Name	mp14142a-b2conf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.668	ug/l	0.28	177,983.90	1.414E-01	Pulse	0.25	3
B			1	84.583	ug/l	0.17	159,509.20	1.267E-01	Pulse	0.15	3
Ca			1	4001.657	ug/l	1.26	1,189,238.60	5.780E-01	Pulse	0.10	3
Sr			1	79.147	ug/l	0.29	1,139,068.03	4.349E-01	Pulse	0.10	3
Mo			1	76.088	ug/l	1.65	230,572.30	8.802E-02	Pulse	0.10	3
Ag			1	76.332	ug/l	0.85	543,876.50	1.961E-01	Pulse	0.10	3
Sn			1	75.033	ug/l	0.50	344,689.58	1.243E-01	Pulse	0.10	3
Sb			1	74.408	ug/l	0.48	403,230.33	1.065E-01	Pulse	0.10	3
Ba			1	77.641	ug/l	0.50	162,827.39	4.301E-02	Pulse	0.10	3
Tl			1	69.175	ug/l	1.15	969,318.81	3.950E-01	Pulse	0.10	3
Pb			1	69.164	ug/l	1.91	330,915.59	1.348E-01	Pulse	0.10	3
Pb			1	69.459	ug/l	1.55	293,046.85	1.194E-01	Pulse	0.10	3
Pb			1	69.342	ug/l	1.25	1,342,389.54	5.470E-01	Pulse	0.10	3
Na			2	3957.181	ug/l	1.14	1,240,215.33	1.787E+01	Pulse	0.30	3
Mg			2	3836.387	ug/l	1.32	562,777.76	8.111E+00	Pulse	0.30	3
Al			2	3770.343	ug/l	2.16	166,298.91	2.397E+00	Pulse	0.30	3
K			2	3844.253	ug/l	1.80	333,494.45	4.806E+00	Pulse	0.30	3
Ca			2	4243.879	ug/l	2.04	20,259.11	2.920E-01	Pulse	0.30	3
Ti			2	72.682	ug/l	3.75	3,019.20	4.349E-02	Pulse	0.30	3
V			2	81.772	ug/l	0.92	106,397.84	1.533E+00	Pulse	0.30	3
Cr			2	81.662	ug/l	1.39	141,904.73	2.045E+00	Pulse	0.30	3
Mn			2	79.717	ug/l	1.55	63,699.79	9.181E-01	Pulse	0.30	3
Fe			2	3995.717	ug/l	1.78	5,547,503.67	7.995E+01	Analog	0.30	3
Co			2	81.869	ug/l	1.61	236,472.63	3.408E+00	Pulse	0.30	3
Ni			2	81.729	ug/l	0.83	64,638.18	9.315E-01	Pulse	0.30	3
Cu			2	82.260	ug/l	1.32	180,957.18	2.608E+00	Pulse	0.30	3
Zn			2	77.287	ug/l	1.31	20,550.78	2.962E-01	Pulse	0.30	3
As			2	72.888	ug/l	1.48	10,526.07	1.517E-01	Pulse	1.00	3
Cd			2	75.724	ug/l	1.28	29,123.74	8.293E-02	Pulse	0.30	3
Sn			2	77.297	ug/l	1.01	59,713.56	1.700E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	350.877	ug/l	0.93	10,536.71	1.375E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,258,890.22	0.70	84.7	Pulse	0.10	3
1	Sc		2,057,862.68	1.23	91.1	Pulse	0.10	3
1	Ge		395,195.54	1.20	94.9	Pulse	0.10	3
1	Ge		547,844.55	0.99	94.5	Pulse	0.10	3
1	Rh		2,619,446.89	0.62	95.8	Pulse	0.10	3
1	In		2,773,457.11	0.86	98.8	Pulse	0.10	3
1	Tb		3,786,177.13	0.24	102.1	Pulse	0.10	3
1	Ho		361,054.21	1.36	103.2	Pulse	0.10	3
1	Bi		2,454,374.13	0.80	114.3	Pulse	0.10	3
2	Sc		69,396.75	1.57	88.4	Pulse	0.30	3
2	Ge		39,563.42	2.16	92.6	Pulse	0.30	3
2	Ge		59,774.63	0.47	93.7	Pulse	0.30	3
2	Rh		1,188,671.13	0.22	94.5	Pulse	0.30	3
2	In		351,169.17	0.19	92.3	Pulse	0.30	3
2	Tb		1,445,428.56	0.06	97.7	Pulse	0.30	3
2	Ho		140,364.95	0.68	99.6	Pulse	0.30	3
2	Bi		1,032,095.58	0.99	104.4	Pulse	0.30	3
3	Sc		77,132.70	0.87	99.7	Pulse	0.30	3
3	Ge		50,289.33	0.37	98.3	Pulse	0.30	3
3	Ge		76,655.41	0.84	99.3	Pulse	0.30	3
3	Rh		995,990.90	0.41	100.9	Pulse	0.30	3
3	Tb		1,593,720.35	0.42	104.0	Pulse	0.30	3

Quantitation Report

File Name 025SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File
Method Path
Acq Time 4/17/2019 17:49
Sample Name jc86215-15
Sample Type Sample
Comment
Prep Dilution 2.000
Auto Dilution N/A
Total Dilution 2.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/17/2019 20:23
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	1.287	ug/l	0.58	3,120.33	2.442E-03	Pulse	0.25	3
B			1	17.754	ug/l	3.36	41,658.12	3.261E-02	Pulse	0.15	3
Ca			1	23016.648	ug/l	0.22	7,054,057.81	3.292E+00	Analog	0.10	3
Sr			1	1633.196	ug/l	0.65	23,466,992.98	8.970E+00	Analog	0.10	3
Mo			1	3.955	ug/l	1.34	12,001.50	4.588E-03	Pulse	0.10	3
Ag			1	0.091	ug/l	8.64	693.37	2.497E-04	Pulse	0.10	3
Sn			1	3.137	ug/l	1.57	12,818.90	4.615E-03	Pulse	0.10	3
Sb			1	0.707	ug/l	5.39	5,160.99	1.351E-03	Pulse	0.10	3
Ba			1	69.127	ug/l	1.75	146,338.70	3.829E-02	Pulse	0.10	3
Tl			1	0.218	ug/l	8.02	3,540.55	1.550E-03	Pulse	0.10	3
Pb			1	8.357	ug/l	0.45	37,367.79	1.636E-02	Pulse	0.10	3
Pb			1	7.740	ug/l	2.59	30,569.19	1.338E-02	Pulse	0.10	3
Pb			1	7.971	ug/l	0.70	144,287.72	6.316E-02	Pulse	0.10	3
Na			2	4918.549	ug/l	0.36	1,596,456.92	2.217E+01	Pulse	0.30	3
Mg			2	2118.221	ug/l	1.31	322,580.92	4.481E+00	Pulse	0.30	3
Al			2	9234.596	ug/l	1.26	422,516.98	5.869E+00	Pulse	0.30	3
K			2	7377.136	ug/l	1.27	658,912.28	9.152E+00	Pulse	0.30	3
Ca			2	30939.663	ug/l	0.60	152,712.74	2.121E+00	Pulse	0.30	3
Ti			2	78.862	ug/l	2.29	3,397.07	4.718E-02	Pulse	0.30	3
V			2	20.787	ug/l	1.94	28,126.13	3.907E-01	Pulse	0.30	3
Cr			2	79.030	ug/l	0.26	142,521.77	1.979E+00	Pulse	0.30	3
Mn			2	125.267	ug/l	1.04	103,811.57	1.442E+00	Pulse	0.30	3
Fe			2	16948.816	ug/l	1.44	24,397,765.70	3.389E+02	Analog	0.30	3
Co			2	8.374	ug/l	3.45	25,134.81	3.491E-01	Pulse	0.30	3
Ni			2	37.633	ug/l	0.47	30,900.15	4.292E-01	Pulse	0.30	3
Cu			2	18.325	ug/l	0.76	42,785.55	5.942E-01	Pulse	0.30	3
Zn			2	132.219	ug/l	0.62	36,319.07	5.044E-01	Pulse	0.30	3
As			2	6.010	ug/l	3.43	908.36	1.262E-02	Pulse	1.00	3
Cd			2	0.235	ug/l	34.41	94.89	2.698E-04	Pulse	0.30	3
Sn			2	2.496	ug/l	8.48	2,256.85	6.407E-03	Pulse	0.30	3
Se			3	1.891	ug/l	4.24	64.67	8.161E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,277,494.66	1.24	86.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,142,942.52	1.26	94.9	Pulse	0.10	3
1	Ge		401,513.26	0.89	96.4	Pulse	0.10	3
1	Ge		556,298.66	1.92	95.9	Pulse	0.10	3
1	Rh		2,616,108.03	0.80	95.7	Pulse	0.10	3
1	In		2,777,626.67	0.89	99.0	Pulse	0.10	3
1	Tb		3,822,358.17	1.77	103.1	Pulse	0.10	3
1	Ho		387,948.29	1.58	110.9	Pulse	0.10	3
1	Bi		2,284,766.84	1.23	106.4	Pulse	0.10	3
2	Sc		71,999.93	0.55	91.7	Pulse	0.30	3
2	Ge		41,189.57	0.26	96.4	Pulse	0.30	3
2	Ge		61,584.53	1.69	96.5	Pulse	0.30	3
2	Rh		1,193,655.13	0.83	94.9	Pulse	0.30	3
2	In		352,409.00	0.92	92.6	Pulse	0.30	3
2	Tb		1,439,863.73	0.16	97.3	Pulse	0.30	3
2	Ho		146,904.21	0.80	104.2	Pulse	0.30	3
2	Bi		982,973.71	0.44	99.4	Pulse	0.30	3
3	Sc		80,196.12	1.11	103.7	Pulse	0.30	3
3	Ge		53,051.44	1.11	103.7	Pulse	0.30	3
3	Ge		79,239.04	0.10	102.6	Pulse	0.30	3
3	Rh		999,777.88	1.13	101.3	Pulse	0.30	3
3	Tb		1,605,997.68	0.46	104.8	Pulse	0.30	3

Quantitation Report

File Name	026SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 17:54
Sample Name	jc86215-16
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	13.635	ug/l	2.54	13,688.27	1.033E-02	Pulse	0.25	3
B			1	19.415	ug/l	2.73	24,569.19	1.855E-02	Pulse	0.15	3
Ca			1	73382.838	ug/l	0.78	9,547,207.98	4.196E+00	Analog	0.10	3
Sr			1	472.003	ug/l	0.55	2,808,193.61	1.037E+00	Pulse	0.10	3
Mo			1	0.310	ug/l	4.74	423.35	1.563E-04	Pulse	0.10	3
Ag			1	0.032	ug/l	11.01	136.68	4.761E-05	Pulse	0.10	3
Sn			1	4.002	ug/l	3.89	5,904.64	2.058E-03	Pulse	0.10	3
Sb			1	0.263	ug/l	18.13	1,960.18	4.921E-04	Pulse	0.10	3
Ba			1	22.701	ug/l	1.93	20,136.96	5.054E-03	Pulse	0.10	3
Tl			1	1.310	ug/l	3.28	7,412.15	3.296E-03	Pulse	0.10	3
Pb			1	1.074	ug/l	5.02	2,046.88	9.101E-04	Pulse	0.10	3
Pb			1	1.033	ug/l	6.75	1,790.18	7.959E-04	Pulse	0.10	3
Pb			1	1.026	ug/l	0.46	7,997.78	3.556E-03	Pulse	0.10	3
Na			2	27974.330	ug/l	1.08	3,859,047.21	5.022E+01	Pulse	0.30	3
Mg			2	24581.861	ug/l	1.15	1,596,721.15	2.078E+01	Pulse	0.30	3
Al			2	34178.049	ug/l	1.44	667,514.90	8.687E+00	Pulse	0.30	3
K			2	2345.143	ug/l	1.96	94,642.90	1.232E+00	Pulse	0.30	3
Ca			2	74898.536	ug/l	2.04	157,807.46	2.054E+00	Pulse	0.30	3
Ti			2	2.497	ug/l	24.27	55.56	7.219E-04	Pulse	0.30	3
V			2	0.736	ug/l	10.39	515.57	6.709E-03	Pulse	0.30	3
Cr			2	6.143	ug/l	4.57	5,362.04	6.980E-02	Pulse	0.30	3
Mn			2	10540.832	ug/l	1.26	3,725,836.10	4.849E+01	Pulse	0.30	3
Fe			2	856.042	ug/l	1.44	531,875.88	6.922E+00	Pulse	0.30	3
Co			2	362.223	ug/l	2.46	463,384.44	6.031E+00	Pulse	0.30	3
Ni			2	341.197	ug/l	1.92	119,492.18	1.555E+00	Pulse	0.30	3
Cu			2	13.072	ug/l	1.37	13,968.23	1.818E-01	Pulse	0.30	3
Zn			2	704.819	ug/l	1.31	82,378.72	1.072E+00	Pulse	0.30	3
As			2	14.412	ug/l	2.14	930.36	1.211E-02	Pulse	1.00	3
Cd			2	1.247	ug/l	11.75	206.65	5.593E-04	Pulse	0.30	3
Sn			2	2.191	ug/l	15.72	1,056.72	2.863E-03	Pulse	0.30	3
Se			3	16.738	ug/l	4.63	224.53	2.697E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,324,836.73	0.94	89.2	Pulse	0.10	3
1	Sc		2,275,346.27	0.65	100.8	Pulse	0.10	3
1	Ge		427,629.98	1.13	102.7	Pulse	0.10	3

Quantitation Report

1	Ge		584,188.01	0.74	100.7	Pulse	0.10	3
1	Rh		2,707,722.46	0.63	99.0	Pulse	0.10	3
1	In		2,869,514.17	0.95	102.3	Pulse	0.10	3
1	Tb		3,984,288.90	0.71	107.4	Pulse	0.10	3
1	Ho		469,792.53	1.30	134.3	Pulse	0.10	3
1	Bi		2,249,084.45	0.31	104.7	Pulse	0.10	3
2	Sc		76,846.04	1.14	97.9	Pulse	0.30	3
2	Ge		45,427.38	0.78	106.3	Pulse	0.30	3
2	Ge		65,429.34	0.82	102.6	Pulse	0.30	3
2	Rh		1,236,248.77	0.60	98.3	Pulse	0.30	3
2	In		369,283.00	0.69	97.0	Pulse	0.30	3
2	Tb		1,510,123.62	0.33	102.1	Pulse	0.30	3
2	Ho		180,232.60	0.46	127.9	Pulse	0.30	3
2	Bi		982,853.23	1.10	99.4	Pulse	0.30	3
3	Sc		82,852.09	0.76	107.1	Pulse	0.30	3
3	Ge		55,842.80	1.27	109.1	Pulse	0.30	3
3	Ge		83,245.27	0.84	107.8	Pulse	0.30	3
3	Rh		1,010,290.03	0.64	102.3	Pulse	0.30	3
3	Tb		1,661,977.85	0.82	108.5	Pulse	0.30	3

Quantitation Report

File Name	027SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 17:59
Sample Name	mp14185a-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.001	ug/l	-492.92	6.67	4.944E-06	Pulse	0.25	3
B			1	1.639	ug/l	12.64	13,356.62	9.920E-03	Pulse	0.15	3
Ca			1	8.930	ug/l	18.11	18,100.39	8.121E-03	Pulse	0.10	3
Sr			1	0.070	ug/l	13.09	1,520.12	5.453E-04	Pulse	0.10	3
Mo			1	0.107	ug/l	32.93	380.02	1.363E-04	Pulse	0.10	3
Ag			1	0.006	ug/l	132.51	86.67	2.971E-05	Pulse	0.10	3
Sn			1	1.736	ug/l	2.07	6,648.26	2.283E-03	Pulse	0.10	3
Sb			1	0.075	ug/l	33.92	1,753.49	4.489E-04	Pulse	0.10	3
Ba			1	0.027	ug/l	49.43	166.68	4.264E-05	Pulse	0.10	3
Tl			1	0.024	ug/l	18.96	1,023.40	4.436E-04	Pulse	0.10	3
Pb			1	0.033	ug/l	37.98	316.68	1.371E-04	Pulse	0.10	3
Pb			1	0.035	ug/l	33.67	336.68	1.459E-04	Pulse	0.10	3
Pb			1	0.041	ug/l	12.91	1,486.76	6.444E-04	Pulse	0.10	3
Na			2	14.828	ug/l	4.40	18,262.16	2.407E-01	Pulse	0.30	3
Mg			2	0.313	ug/l	100.14	435.56	5.745E-03	Pulse	0.30	3
Al			2	47.121	ug/l	1.17	2,379.09	3.136E-02	Pulse	0.30	3
K			2	9.082	ug/l	24.73	6,755.87	8.908E-02	Pulse	0.30	3
Ca			2	7.735	ug/l	66.66	130.00	1.715E-03	Pulse	0.30	3
Ti			2	0.181	ug/l	84.09	17.78	2.341E-04	Pulse	0.30	3
V			2	0.098	ug/l	13.57	230.00	3.032E-03	Pulse	0.30	3
Cr			2	0.800	ug/l	5.85	2,159.05	2.847E-02	Pulse	0.30	3
Mn			2	0.431	ug/l	10.66	475.57	6.267E-03	Pulse	0.30	3
Fe			2	0.666	ug/l	49.01	6,875.94	9.065E-02	Pulse	0.30	3
Co			2	0.039	ug/l	19.85	165.56	2.182E-03	Pulse	0.30	3
Ni			2	0.044	ug/l	67.08	74.45	9.817E-04	Pulse	0.30	3
Cu			2	1.085	ug/l	2.14	3,888.28	5.126E-02	Pulse	0.30	3
Zn			2	1.853	ug/l	1.04	767.80	1.012E-02	Pulse	0.30	3
As			2	0.107	ug/l	12.91	26.00	3.429E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.009	ug/l	-51.79	1.08	2.912E-06	Pulse	0.30	3
Sn			2	1.065	ug/l	13.75	1,220.06	3.275E-03	Pulse	0.30	3
Se			3	0.179	ug/l	48.69	12.40	1.458E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,346,466.18	0.30	90.6	Pulse	0.10	3
1	Sc		2,229,283.19	1.28	98.7	Pulse	0.10	3
1	Ge		430,663.51	1.07	103.4	Pulse	0.10	3
1	Ge		590,929.50	0.48	101.9	Pulse	0.10	3
1	Rh		2,787,763.81	1.07	101.9	Pulse	0.10	3
1	In		2,911,370.27	1.61	103.7	Pulse	0.10	3
1	Tb		3,907,772.96	0.84	105.4	Pulse	0.10	3
1	Ho		371,489.60	1.33	106.2	Pulse	0.10	3
1	Bi		2,307,555.75	0.60	107.4	Pulse	0.10	3
2	Sc		75,854.73	0.74	96.6	Pulse	0.30	3
2	Ge		43,456.57	1.40	101.7	Pulse	0.30	3
2	Ge		65,794.21	0.28	103.1	Pulse	0.30	3
2	Rh		1,286,171.37	0.32	102.2	Pulse	0.30	3
2	In		372,342.93	0.60	97.8	Pulse	0.30	3
2	Tb		1,467,424.63	0.24	99.2	Pulse	0.30	3
2	Ho		140,895.94	0.34	100.0	Pulse	0.30	3
2	Bi		1,007,770.62	0.74	101.9	Pulse	0.30	3
3	Sc		84,913.46	0.28	109.8	Pulse	0.30	3
3	Ge		56,144.86	0.56	109.7	Pulse	0.30	3
3	Ge		85,271.04	1.60	110.4	Pulse	0.30	3
3	Rh		1,072,804.47	0.40	108.7	Pulse	0.30	3
3	Tb		1,645,743.44	0.65	107.4	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 18:04
Sample Name	mp14185a-b2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	72.610	ug/l	1.04	193,093.41	1.375E-01	Pulse	0.25	3
B			1	81.696	ug/l	0.61	172,244.96	1.226E-01	Pulse	0.15	3
Ca			1	3964.862	ug/l	1.30	1,327,920.81	5.727E-01	Pulse	0.10	3
Sr			1	79.145	ug/l	0.87	1,223,849.28	4.348E-01	Pulse	0.10	3
Mo			1	75.327	ug/l	0.94	245,244.06	8.714E-02	Pulse	0.10	3
Ag			1	77.677	ug/l	0.76	591,782.53	1.996E-01	Pulse	0.10	3
Sn			1	74.453	ug/l	0.49	365,682.10	1.233E-01	Pulse	0.10	3
Sb			1	75.570	ug/l	0.25	428,045.24	1.082E-01	Pulse	0.10	3
Ba			1	76.994	ug/l	1.56	168,782.19	4.265E-02	Pulse	0.10	3
Tl			1	76.298	ug/l	0.97	986,339.46	4.356E-01	Pulse	0.10	3
Pb			1	76.048	ug/l	1.30	335,665.35	1.483E-01	Pulse	0.10	3
Pb			1	76.297	ug/l	1.02	296,966.84	1.312E-01	Pulse	0.10	3
Pb			1	76.089	ug/l	0.88	1,358,903.48	6.002E-01	Pulse	0.10	3
Na			2	3936.624	ug/l	0.99	1,406,681.12	1.778E+01	Pulse	0.30	3
Mg			2	3749.455	ug/l	1.24	627,094.26	7.927E+00	Pulse	0.30	3
Al			2	3637.076	ug/l	0.82	182,919.18	2.312E+00	Pulse	0.30	3
K			2	3839.831	ug/l	0.66	379,808.85	4.801E+00	Pulse	0.30	3
Ca			2	4175.035	ug/l	1.01	22,723.34	2.872E-01	Pulse	0.30	3
Ti			2	71.318	ug/l	4.83	3,377.05	4.268E-02	Pulse	0.30	3
V			2	81.654	ug/l	0.87	121,125.35	1.531E+00	Pulse	0.30	3
Cr			2	79.937	ug/l	0.27	158,389.16	2.002E+00	Pulse	0.30	3
Mn			2	76.255	ug/l	1.09	69,483.99	8.782E-01	Pulse	0.30	3
Fe			2	3817.701	ug/l	1.09	6,043,283.09	7.639E+01	Analog	0.30	3
Co			2	79.472	ug/l	0.91	261,729.39	3.308E+00	Pulse	0.30	3
Ni			2	79.575	ug/l	1.52	71,749.73	9.070E-01	Pulse	0.30	3
Cu			2	78.856	ug/l	0.94	197,829.51	2.501E+00	Pulse	0.30	3
Zn			2	72.558	ug/l	1.09	22,010.38	2.782E-01	Pulse	0.30	3
As			2	71.297	ug/l	0.21	11,738.56	1.484E-01	Pulse	1.00	3
Cd			2	74.837	ug/l	1.99	30,679.12	8.196E-02	Pulse	0.30	3
Sn			2	76.984	ug/l	0.92	63,387.78	1.694E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	343.205	ug/l	0.36	11,411.23	1.345E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,404,469.20	0.10	94.5	Pulse	0.10	3
1	Sc		2,318,948.92	1.32	102.7	Pulse	0.10	3
1	Ge		436,481.70	1.03	104.8	Pulse	0.10	3
1	Ge		604,134.08	0.53	104.2	Pulse	0.10	3
1	Rh		2,814,449.33	0.06	102.9	Pulse	0.10	3
1	In		2,965,354.73	0.12	105.7	Pulse	0.10	3
1	Tb		3,957,622.13	0.37	106.7	Pulse	0.10	3
1	Ho		378,758.82	0.81	108.3	Pulse	0.10	3
1	Bi		2,264,380.54	1.15	105.4	Pulse	0.10	3
2	Sc		79,112.97	0.71	100.8	Pulse	0.30	3
2	Ge		44,405.75	1.05	103.9	Pulse	0.30	3
2	Ge		66,877.32	1.17	104.8	Pulse	0.30	3
2	Rh		1,282,845.71	0.12	102.0	Pulse	0.30	3
2	In		374,301.51	0.81	98.3	Pulse	0.30	3
2	Tb		1,487,127.20	0.30	100.5	Pulse	0.30	3
2	Ho		142,376.00	1.31	101.0	Pulse	0.30	3
2	Bi		978,539.13	0.65	99.0	Pulse	0.30	3
3	Sc		86,007.78	0.67	111.2	Pulse	0.30	3
3	Ge		55,755.77	0.26	109.0	Pulse	0.30	3
3	Ge		84,869.44	0.67	109.9	Pulse	0.30	3
3	Rh		1,058,268.99	0.22	107.2	Pulse	0.30	3
3	Tb		1,641,481.78	0.23	107.1	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 18:09
Sample Name	jc86089-1f
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.007	ug/l	75.68	28.00	1.984E-05	Pulse	0.25	3
B			1	51.373	ug/l	1.09	113,107.51	7.995E-02	Pulse	0.15	3
Ca			1	31187.489	ug/l	0.54	10,392,082.14	4.458E+00	Analog	0.10	3
Sr			1	69.408	ug/l	0.89	1,081,490.58	3.814E-01	Pulse	0.10	3
Mo			1	5.236	ug/l	2.48	17,213.07	6.070E-03	Pulse	0.10	3
Ag			1	0.017	ug/l	40.27	180.01	5.995E-05	Pulse	0.10	3
Sn			1	1.828	ug/l	1.57	7,328.65	2.436E-03	Pulse	0.10	3
Sb			1	0.368	ug/l	11.05	3,450.48	8.667E-04	Pulse	0.10	3
Ba			1	9.294	ug/l	2.23	20,607.60	5.172E-03	Pulse	0.10	3
Tl			1	0.076	ug/l	2.01	1,700.15	7.412E-04	Pulse	0.10	3
Pb			1	0.268	ug/l	12.23	1,363.44	5.945E-04	Pulse	0.10	3
Pb			1	0.244	ug/l	7.13	1,160.09	5.057E-04	Pulse	0.10	3
Pb			1	0.242	ug/l	9.38	5,113.86	2.230E-03	Pulse	0.10	3
Na			2	1559.615	ug/l	1.19	569,398.87	7.150E+00	Pulse	0.30	3
Mg			2	1846.967	ug/l	1.18	311,170.15	3.907E+00	Pulse	0.30	3
Al			2	10.459	ug/l	8.78	642.24	8.069E-03	Pulse	0.30	3
K			2	3674.376	ug/l	2.19	366,089.05	4.597E+00	Pulse	0.30	3
Ca			2	31292.554	ug/l	1.16	170,836.52	2.145E+00	Pulse	0.30	3
Ti			2	0.185	ug/l	85.24	18.89	2.362E-04	Pulse	0.30	3
V			2	0.349	ug/l	10.73	615.58	7.725E-03	Pulse	0.30	3
Cr			2	1.085	ug/l	7.62	2,833.61	3.559E-02	Pulse	0.30	3
Mn			2	10.408	ug/l	1.92	9,636.25	1.210E-01	Pulse	0.30	3
Fe			2	24.889	ug/l	1.97	45,776.64	5.748E-01	Pulse	0.30	3
Co			2	0.126	ug/l	0.74	461.12	5.789E-03	Pulse	0.30	3
Ni			2	0.882	ug/l	5.68	837.81	1.052E-02	Pulse	0.30	3
Cu			2	3.900	ug/l	1.85	11,142.74	1.399E-01	Pulse	0.30	3
Zn			2	17.016	ug/l	4.56	5,383.16	6.762E-02	Pulse	0.30	3
As			2	0.525	ug/l	16.90	96.33	1.211E-03	Pulse	1.00	3
Cd			2	0.053	ug/l	32.13	26.88	7.046E-05	Pulse	0.30	3
Sn			2	1.146	ug/l	0.97	1,317.85	3.452E-03	Pulse	0.30	3
Se			3	0.539	ug/l	9.87	25.13	2.870E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,414,908.21	1.06	95.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,331,250.59	0.98	103.2	Pulse	0.10	3
1	Ge		443,652.88	1.59	106.5	Pulse	0.10	3
1	Ge		616,468.56	1.07	106.3	Pulse	0.10	3
1	Rh		2,835,837.04	0.34	103.7	Pulse	0.10	3
1	In		3,008,971.91	1.28	107.2	Pulse	0.10	3
1	Tb		3,983,704.83	1.37	107.4	Pulse	0.10	3
1	Ho		376,952.64	0.79	107.8	Pulse	0.10	3
1	Bi		2,293,768.98	0.63	106.8	Pulse	0.10	3
2	Sc		79,645.56	1.53	101.4	Pulse	0.30	3
2	Ge		45,483.20	0.47	106.4	Pulse	0.30	3
2	Ge		68,499.82	1.05	107.4	Pulse	0.30	3
2	Rh		1,294,192.21	0.93	102.9	Pulse	0.30	3
2	In		381,816.26	0.55	100.3	Pulse	0.30	3
2	Tb		1,481,374.21	0.66	100.1	Pulse	0.30	3
2	Ho		143,513.59	1.24	101.8	Pulse	0.30	3
2	Bi		995,624.79	1.12	100.7	Pulse	0.30	3
3	Sc		86,731.88	0.55	112.1	Pulse	0.30	3
3	Ge		56,963.39	0.51	111.3	Pulse	0.30	3
3	Ge		87,588.87	0.37	113.4	Pulse	0.30	3
3	Rh		1,064,375.86	0.31	107.8	Pulse	0.30	3
3	Tb		1,653,852.96	0.45	107.9	Pulse	0.30	3

Quantitation Report

File Name	030SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 18:14
Sample Name	jc86089-2f
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.002	ug/l	105.94	14.67	1.032E-05	Pulse	0.25	3
B			1	31.333	ug/l	1.03	73,676.78	5.173E-02	Pulse	0.15	3
Ca			1	27960.971	ug/l	1.69	9,408,366.94	3.997E+00	Analog	0.10	3
Sr			1	60.718	ug/l	0.40	939,553.58	3.336E-01	Pulse	0.10	3
Mo			1	4.294	ug/l	1.81	14,026.57	4.980E-03	Pulse	0.10	3
Ag			1	0.007	ug/l	66.78	100.00	3.339E-05	Pulse	0.10	3
Sn			1	1.819	ug/l	1.85	7,265.22	2.421E-03	Pulse	0.10	3
Sb			1	0.184	ug/l	21.39	2,416.94	6.050E-04	Pulse	0.10	3
Ba			1	12.176	ug/l	1.22	27,024.19	6.768E-03	Pulse	0.10	3
Tl			1	0.051	ug/l	17.98	1,346.77	5.969E-04	Pulse	0.10	3
Pb			1	2.049	ug/l	2.79	9,176.49	4.065E-03	Pulse	0.10	3
Pb			1	2.085	ug/l	6.86	8,275.93	3.667E-03	Pulse	0.10	3
Pb			1	2.098	ug/l	2.42	38,050.74	1.686E-02	Pulse	0.10	3
Na			2	2335.959	ug/l	0.94	852,861.25	1.062E+01	Pulse	0.30	3
Mg			2	2377.169	ug/l	0.79	403,662.08	5.028E+00	Pulse	0.30	3
Al			2	8.387	ug/l	22.04	542.24	6.753E-03	Pulse	0.30	3
K			2	4900.681	ug/l	0.52	490,238.76	6.106E+00	Pulse	0.30	3
Ca			2	27475.094	ug/l	0.10	151,240.00	1.884E+00	Pulse	0.30	3
Ti			2	0.043	ug/l	368.13	12.22	1.520E-04	Pulse	0.30	3
V			2	0.201	ug/l	10.93	397.79	4.955E-03	Pulse	0.30	3
Cr			2	1.484	ug/l	4.87	3,654.88	4.552E-02	Pulse	0.30	3
Mn			2	35.177	ug/l	0.38	32,585.47	4.058E-01	Pulse	0.30	3
Fe			2	42.505	ug/l	1.64	74,425.39	9.270E-01	Pulse	0.30	3
Co			2	0.248	ug/l	5.46	872.25	1.086E-02	Pulse	0.30	3
Ni			2	1.096	ug/l	7.99	1,041.16	1.297E-02	Pulse	0.30	3
Cu			2	2.969	ug/l	3.69	8,879.16	1.106E-01	Pulse	0.30	3
Zn			2	62.909	ug/l	1.50	19,400.44	2.416E-01	Pulse	0.30	3
As			2	0.322	ug/l	12.20	63.33	7.889E-04	Pulse	1.00	3
Cd			2	0.496	ug/l	12.54	211.48	5.563E-04	Pulse	0.30	3
Sn			2	1.080	ug/l	7.66	1,257.84	3.308E-03	Pulse	0.30	3
Se			3	0.507	ug/l	9.57	24.07	2.742E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,424,293.05	0.88	95.9	Pulse	0.10	3
1	Sc		2,353,944.29	1.17	104.2	Pulse	0.10	3
1	Ge		447,172.61	1.30	107.4	Pulse	0.10	3

Quantitation Report

1	Ge		612,723.96	2.02	105.7	Pulse	0.10	3
1	Rh		2,816,169.02	1.26	103.0	Pulse	0.10	3
1	In		3,001,059.93	1.43	106.9	Pulse	0.10	3
1	Tb		3,992,758.80	1.45	107.7	Pulse	0.10	3
1	Ho		373,404.62	1.86	106.8	Pulse	0.10	3
1	Bi		2,257,120.23	0.62	105.1	Pulse	0.10	3
2	Sc		80,290.72	0.43	102.3	Pulse	0.30	3
2	Ge		45,958.99	1.15	107.5	Pulse	0.30	3
2	Ge		69,407.91	0.37	108.8	Pulse	0.30	3
2	Rh		1,297,390.51	0.05	103.1	Pulse	0.30	3
2	In		380,255.79	0.33	99.9	Pulse	0.30	3
2	Tb		1,481,719.98	0.46	100.2	Pulse	0.30	3
2	Ho		142,931.89	1.38	101.4	Pulse	0.30	3
2	Bi		987,688.29	0.39	99.9	Pulse	0.30	3
3	Sc		87,878.45	0.78	113.6	Pulse	0.30	3
3	Ge		57,653.44	0.63	112.7	Pulse	0.30	3
3	Ge		87,755.35	0.14	113.6	Pulse	0.30	3
3	Rh		1,066,306.38	0.85	108.0	Pulse	0.30	3
3	Tb		1,659,328.30	0.19	108.3	Pulse	0.30	3

Quantitation Report

File Name	031SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 18:19
Sample Name	mp14185a-s3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.891	ug/l	0.47	192,545.61	1.418E-01	Pulse	0.25	3
B			1	182.230	ug/l	1.83	358,745.52	2.642E-01	Pulse	0.15	3
Ca			1	27148.753	ug/l	1.02	8,858,050.29	3.881E+00	Analog	0.10	3
Sr			1	175.146	ug/l	0.57	2,534,217.20	9.621E-01	Pulse	0.10	3
Mo			1	81.973	ug/l	0.60	249,791.06	9.482E-02	Pulse	0.10	3
Ag			1	76.366	ug/l	0.84	558,130.26	1.962E-01	Pulse	0.10	3
Sn			1	77.322	ug/l	0.79	364,389.99	1.281E-01	Pulse	0.10	3
Sb			1	77.005	ug/l	0.20	428,401.23	1.102E-01	Pulse	0.10	3
Ba			1	159.789	ug/l	0.76	343,915.41	8.848E-02	Pulse	0.10	3
Tl			1	79.610	ug/l	0.37	960,718.27	4.545E-01	Pulse	0.10	3
Pb			1	79.737	ug/l	0.64	328,565.09	1.554E-01	Pulse	0.10	3
Pb			1	80.108	ug/l	0.24	291,066.95	1.377E-01	Pulse	0.10	3
Pb			1	79.667	ug/l	0.81	1,328,250.63	6.284E-01	Pulse	0.10	3
Na			2	191451.100	ug/l	0.36	65,774,535.16	8.565E+02	Analog	0.30	3
Mg			2	8537.690	ug/l	0.51	1,385,707.55	1.804E+01	Pulse	0.30	3
Al			2	4229.331	ug/l	0.20	206,471.16	2.689E+00	Pulse	0.30	3
K			2	7767.485	ug/l	1.32	739,688.22	9.632E+00	Pulse	0.30	3
Ca			2	27580.669	ug/l	0.91	145,212.75	1.891E+00	Pulse	0.30	3
Ti			2	89.609	ug/l	7.12	4,115.06	5.359E-02	Pulse	0.30	3
V			2	85.506	ug/l	0.55	123,126.03	1.603E+00	Pulse	0.30	3
Cr			2	83.007	ug/l	1.33	159,628.34	2.079E+00	Pulse	0.30	3
Mn			2	114.453	ug/l	1.13	101,178.96	1.318E+00	Pulse	0.30	3
Fe			2	4395.758	ug/l	1.17	6,753,748.62	8.795E+01	Analog	0.30	3
Co			2	79.950	ug/l	1.67	255,584.24	3.328E+00	Pulse	0.30	3
Ni			2	79.897	ug/l	1.17	69,930.59	9.106E-01	Pulse	0.30	3
Cu			2	79.302	ug/l	0.81	193,120.85	2.515E+00	Pulse	0.30	3
Zn			2	74.000	ug/l	0.40	21,786.77	2.837E-01	Pulse	0.30	3
As			2	73.301	ug/l	0.77	11,714.87	1.525E-01	Pulse	1.00	3
Cd			2	75.735	ug/l	1.70	29,900.68	8.295E-02	Pulse	0.30	3
Sn			2	78.475	ug/l	0.70	62,224.22	1.726E-01	Pulse	0.30	3
Se			3	338.379	ug/l	1.08	10,752.39	1.326E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,357,816.11	0.44	91.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,282,131.01	1.12	101.1	Pulse	0.10	3
1	Ge		428,719.83	0.91	102.9	Pulse	0.10	3
1	Ge		595,838.76	0.66	102.7	Pulse	0.10	3
1	Rh		2,634,209.39	1.56	96.3	Pulse	0.10	3
1	In		2,844,989.51	1.66	101.4	Pulse	0.10	3
1	Tb		3,887,285.57	1.37	104.8	Pulse	0.10	3
1	Ho		368,930.40	2.32	105.5	Pulse	0.10	3
1	Bi		2,113,804.71	0.85	98.4	Pulse	0.10	3
2	Sc		76,797.82	0.63	97.8	Pulse	0.30	3
2	Ge		43,569.02	1.40	101.9	Pulse	0.30	3
2	Ge		64,981.02	0.28	101.9	Pulse	0.30	3
2	Rh		1,201,063.91	0.17	95.5	Pulse	0.30	3
2	In		360,474.00	0.17	94.7	Pulse	0.30	3
2	Tb		1,435,925.36	0.63	97.1	Pulse	0.30	3
2	Ho		138,845.91	0.68	98.5	Pulse	0.30	3
2	Bi		918,121.11	0.22	92.9	Pulse	0.30	3
3	Sc		82,368.81	1.11	106.5	Pulse	0.30	3
3	Ge		53,867.35	1.66	105.3	Pulse	0.30	3
3	Ge		81,115.85	1.31	105.0	Pulse	0.30	3
3	Rh		974,486.70	0.96	98.7	Pulse	0.30	3
3	Tb		1,593,734.28	1.14	104.0	Pulse	0.30	3

Quantitation Report

File Name	032SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 18:24
Sample Name	mp14185a-s4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	72.491	ug/l	1.08	184,280.40	1.373E-01	Pulse	0.25	3
B			1	177.939	ug/l	1.13	346,583.21	2.582E-01	Pulse	0.15	3
Ca			1	26536.933	ug/l	0.72	8,503,359.46	3.794E+00	Analog	0.10	3
Sr			1	172.445	ug/l	0.69	2,456,447.00	9.473E-01	Pulse	0.10	3
Mo			1	81.351	ug/l	1.13	244,018.21	9.410E-02	Pulse	0.10	3
Ag			1	75.656	ug/l	0.71	544,198.91	1.944E-01	Pulse	0.10	3
Sn			1	76.324	ug/l	1.10	353,929.71	1.264E-01	Pulse	0.10	3
Sb			1	74.466	ug/l	1.61	414,637.66	1.066E-01	Pulse	0.10	3
Ba			1	155.156	ug/l	1.09	334,202.73	8.591E-02	Pulse	0.10	3
Tl			1	77.652	ug/l	0.61	933,891.99	4.433E-01	Pulse	0.10	3
Pb			1	78.321	ug/l	0.91	321,633.46	1.527E-01	Pulse	0.10	3
Pb			1	78.151	ug/l	0.35	282,997.34	1.343E-01	Pulse	0.10	3
Pb			1	77.974	ug/l	0.37	1,295,589.72	6.150E-01	Pulse	0.10	3
Na			2	188923.260	ug/l	0.75	64,055,446.34	8.452E+02	Analog	0.30	3
Mg			2	8341.655	ug/l	1.47	1,336,086.68	1.763E+01	Pulse	0.30	3
Al			2	4119.006	ug/l	0.98	198,447.04	2.618E+00	Pulse	0.30	3
K			2	7570.527	ug/l	1.31	711,643.83	9.390E+00	Pulse	0.30	3
Ca			2	27105.859	ug/l	1.17	140,844.40	1.858E+00	Pulse	0.30	3
Ti			2	87.172	ug/l	1.33	3,951.65	5.214E-02	Pulse	0.30	3
V			2	83.812	ug/l	1.19	119,102.85	1.572E+00	Pulse	0.30	3
Cr			2	80.582	ug/l	0.64	152,962.45	2.018E+00	Pulse	0.30	3
Mn			2	113.057	ug/l	1.36	98,633.61	1.301E+00	Pulse	0.30	3
Fe			2	4334.760	ug/l	1.68	6,572,734.32	8.673E+01	Analog	0.30	3
Co			2	77.946	ug/l	0.74	245,926.63	3.245E+00	Pulse	0.30	3
Ni			2	76.315	ug/l	1.69	65,918.80	8.698E-01	Pulse	0.30	3
Cu			2	76.649	ug/l	1.39	184,253.07	2.431E+00	Pulse	0.30	3
Zn			2	71.299	ug/l	1.94	20,723.20	2.734E-01	Pulse	0.30	3
As			2	73.134	ug/l	0.97	11,535.07	1.522E-01	Pulse	1.00	3
Cd			2	73.126	ug/l	0.23	28,732.11	8.009E-02	Pulse	0.30	3
Sn			2	77.048	ug/l	0.49	60,806.57	1.695E-01	Pulse	0.30	3
Se			3	329.022	ug/l	0.23	10,405.84	1.289E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,342,651.81	1.66	90.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,241,061.95	1.20	99.2	Pulse	0.10	3
1	Ge		419,255.44	1.75	100.7	Pulse	0.10	3
1	Ge		581,291.37	0.75	100.2	Pulse	0.10	3
1	Rh		2,593,349.02	1.49	94.8	Pulse	0.10	3
1	In		2,799,781.93	1.96	99.8	Pulse	0.10	3
1	Tb		3,890,016.19	0.71	104.9	Pulse	0.10	3
1	Ho		368,525.92	1.47	105.4	Pulse	0.10	3
1	Bi		2,106,670.96	1.15	98.1	Pulse	0.10	3
2	Sc		75,795.48	1.27	96.5	Pulse	0.30	3
2	Ge		42,599.81	1.35	99.7	Pulse	0.30	3
2	Ge		63,970.26	0.88	100.3	Pulse	0.30	3
2	Rh		1,183,250.51	0.50	94.0	Pulse	0.30	3
2	In		358,748.86	0.36	94.2	Pulse	0.30	3
2	Tb		1,445,443.76	0.91	97.7	Pulse	0.30	3
2	Ho		139,116.77	0.70	98.7	Pulse	0.30	3
2	Bi		914,493.23	0.36	92.5	Pulse	0.30	3
3	Sc		81,117.98	0.74	104.9	Pulse	0.30	3
3	Ge		52,712.45	0.55	103.0	Pulse	0.30	3
3	Ge		80,725.24	0.30	104.5	Pulse	0.30	3
3	Rh		969,160.24	0.46	98.2	Pulse	0.30	3
3	Tb		1,589,829.21	0.38	103.7	Pulse	0.30	3

Quantitation Report

File Name	033_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 18:29
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.057	ug/l	0.11	259,891.84	1.820E-01	Pulse	0.25	3
B			1	99.396	ug/l	1.08	410,586.33	2.875E-01	Pulse	0.15	3
Ca			1	5052.761	ug/l	0.35	3,435,973.70	1.449E+00	Pulse	0.10	3
Sr			1	51.279	ug/l	0.61	1,612,539.45	5.634E-01	Pulse	0.10	3
Mo			1	51.425	ug/l	0.39	340,491.35	1.190E-01	Pulse	0.10	3
Ag			1	49.302	ug/l	0.77	757,604.21	2.533E-01	Pulse	0.10	3
Sn			1	49.920	ug/l	0.72	495,164.12	1.656E-01	Pulse	0.10	3
Sb			1	52.400	ug/l	0.16	595,383.16	1.499E-01	Pulse	0.10	3
Ba			1	50.268	ug/l	1.59	221,220.21	5.568E-02	Pulse	0.10	3
Tl			1	49.722	ug/l	0.87	1,268,367.30	5.676E-01	Pulse	0.10	3
Pb			1	50.048	ug/l	0.63	435,957.30	1.951E-01	Pulse	0.10	3
Pb			1	50.086	ug/l	1.32	384,691.34	1.722E-01	Pulse	0.10	3
Pb			1	49.910	ug/l	0.33	1,759,045.10	7.872E-01	Pulse	0.10	3
Na			2	5021.508	ug/l	0.95	3,628,016.94	4.509E+01	Pulse	0.30	3
Mg			2	4832.943	ug/l	1.28	1,643,482.71	2.043E+01	Pulse	0.30	3
Al			2	4738.480	ug/l	0.97	484,548.00	6.023E+00	Pulse	0.30	3
K			2	4928.666	ug/l	0.55	981,787.67	1.220E+01	Pulse	0.30	3
Ca			2	5063.654	ug/l	0.86	55,922.28	6.951E-01	Pulse	0.30	3
Ti			2	47.483	ug/l	2.39	4,569.56	5.679E-02	Pulse	0.30	3
V			2	52.136	ug/l	0.97	157,279.80	1.955E+00	Pulse	0.30	3
Cr			2	50.912	ug/l	1.92	204,989.63	2.548E+00	Pulse	0.30	3
Mn			2	49.191	ug/l	0.39	91,133.59	1.133E+00	Pulse	0.30	3
Fe			2	4883.341	ug/l	0.91	15,713,782.16	1.953E+02	Analog	0.30	3
Co			2	50.450	ug/l	0.23	337,942.71	4.200E+00	Pulse	0.30	3
Ni			2	50.614	ug/l	0.34	92,818.13	1.154E+00	Pulse	0.30	3
Cu			2	50.324	ug/l	0.90	256,420.16	3.187E+00	Pulse	0.30	3
Zn			2	50.993	ug/l	0.71	31,362.26	3.898E-01	Pulse	0.30	3
As			2	52.445	ug/l	1.02	17,558.09	2.182E-01	Pulse	1.00	3
Cd			2	49.482	ug/l	1.39	41,951.84	1.084E-01	Pulse	0.30	3
Sn			2	51.445	ug/l	0.52	87,489.62	2.260E-01	Pulse	0.30	3
Se			3	192.804	ug/l	0.29	12,800.72	1.511E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,428,080.43	0.96	96.1	Pulse	0.10	3
1	Sc		2,371,180.64	0.98	105.0	Pulse	0.10	3
1	Ge		444,460.57	1.03	106.7	Pulse	0.10	3

Quantitation Report

1	Ge		622,060.65	1.12	107.3	Pulse	0.10	3
1	Rh		2,862,029.02	0.78	104.7	Pulse	0.10	3
1	In		2,990,593.36	0.44	106.6	Pulse	0.10	3
1	Tb		3,972,952.23	0.63	107.1	Pulse	0.10	3
1	Ho		376,669.85	0.65	107.7	Pulse	0.10	3
1	Bi		2,234,556.69	1.23	104.0	Pulse	0.10	3
2	Sc		80,458.41	0.53	102.5	Pulse	0.30	3
2	Ge		46,064.73	0.28	107.8	Pulse	0.30	3
2	Ge		69,029.60	0.43	108.2	Pulse	0.30	3
2	Rh		1,293,854.91	0.24	102.8	Pulse	0.30	3
2	In		387,079.42	0.42	101.7	Pulse	0.30	3
2	Tb		1,512,721.33	0.65	102.3	Pulse	0.30	3
2	Ho		145,527.55	0.78	103.3	Pulse	0.30	3
2	Bi		984,715.24	0.58	99.6	Pulse	0.30	3
3	Sc		85,859.47	0.26	111.0	Pulse	0.30	3
3	Ge		55,940.89	0.15	109.3	Pulse	0.30	3
3	Ge		84,739.62	0.55	109.7	Pulse	0.30	3
3	Rh		1,042,471.28	0.42	105.6	Pulse	0.30	3
3	Tb		1,626,485.39	0.23	106.1	Pulse	0.30	3

Quantitation Report

File Name	034_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 18:34
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.008	ug/l	39.85	50.67	3.500E-05	Pulse	0.25	3
B			1	3.606	ug/l	5.95	25,719.77	1.777E-02	Pulse	0.15	3
Ca			1	-0.513	ug/l	-178.41	15,771.37	6.700E-03	Pulse	0.10	3
Sr			1	0.011	ug/l	7.65	833.38	2.860E-04	Pulse	0.10	3
Mo			1	0.088	ug/l	29.15	630.04	2.161E-04	Pulse	0.10	3
Ag			1	0.013	ug/l	36.47	250.01	8.268E-05	Pulse	0.10	3
Sn			1	0.531	ug/l	4.64	3,513.86	1.163E-03	Pulse	0.10	3
Sb			1	0.199	ug/l	4.10	3,588.86	9.090E-04	Pulse	0.10	3
Ba			1	0.021	ug/l	78.70	203.34	5.150E-05	Pulse	0.10	3
Tl			1	0.020	ug/l	34.54	1,213.42	5.315E-04	Pulse	0.10	3
Pb			1	0.025	ug/l	22.66	386.68	1.693E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	23.29	336.68	1.475E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	17.78	1,463.41	6.411E-04	Pulse	0.10	3
Na			2	8.441	ug/l	5.81	20,268.90	2.499E-01	Pulse	0.30	3
Mg			2	-0.195	ug/l	-76.13	345.56	4.259E-03	Pulse	0.30	3
Al			2	1.447	ug/l	29.00	264.45	3.262E-03	Pulse	0.30	3
K			2	2.739	ug/l	15.56	6,864.82	8.464E-02	Pulse	0.30	3
Ca			2	-1.055	ug/l	-210.64	84.44	1.041E-03	Pulse	0.30	3
Ti			2	-0.037	ug/l	-248.43	6.67	8.227E-05	Pulse	0.30	3
V			2	-0.003	ug/l	-149.60	87.78	1.083E-03	Pulse	0.30	3
Cr			2	0.018	ug/l	57.95	764.47	9.424E-03	Pulse	0.30	3
Mn			2	0.010	ug/l	134.94	124.45	1.535E-03	Pulse	0.30	3
Fe			2	-0.348	ug/l	-26.41	5,144.19	6.342E-02	Pulse	0.30	3
Co			2	0.009	ug/l	64.15	105.56	1.303E-03	Pulse	0.30	3
Ni			2	0.011	ug/l	51.89	58.89	7.256E-04	Pulse	0.30	3
Cu			2	0.036	ug/l	27.31	1,571.20	1.937E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.097	ug/l	51.40	311.12	3.836E-03	Pulse	0.30	3
As			2	0.013	ug/l	108.36	14.00	1.728E-04	Pulse	1.00	3
Cd			2	0.015	ug/l	60.37	17.73	4.478E-05	Pulse	0.30	3
Sn			2	0.175	ug/l	19.32	676.69	1.711E-03	Pulse	0.30	3
Se			3	0.072	ug/l	28.54	11.20	1.323E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,447,530.70	0.42	97.4	Pulse	0.10	3
1	Sc		2,353,585.33	0.70	104.2	Pulse	0.10	3
1	Ge		447,095.63	1.34	107.3	Pulse	0.10	3
1	Ge		616,841.62	0.70	106.4	Pulse	0.10	3
1	Rh		2,914,103.81	0.54	106.6	Pulse	0.10	3
1	In		3,021,637.60	0.45	107.7	Pulse	0.10	3
1	Tb		3,947,900.25	1.04	106.4	Pulse	0.10	3
1	Ho		373,129.88	0.49	106.7	Pulse	0.10	3
1	Bi		2,283,674.08	0.82	106.3	Pulse	0.10	3
2	Sc		81,104.73	0.59	103.3	Pulse	0.30	3
2	Ge		46,492.54	0.96	108.8	Pulse	0.30	3
2	Ge		68,862.11	0.30	107.9	Pulse	0.30	3
2	Rh		1,329,971.23	0.67	105.7	Pulse	0.30	3
2	In		395,543.20	0.41	103.9	Pulse	0.30	3
2	Tb		1,511,363.45	0.71	102.2	Pulse	0.30	3
2	Ho		145,659.45	0.26	103.4	Pulse	0.30	3
2	Bi		1,017,061.35	0.14	102.9	Pulse	0.30	3
3	Sc		84,703.62	1.09	109.5	Pulse	0.30	3
3	Ge		55,963.19	0.90	109.4	Pulse	0.30	3
3	Ge		84,667.20	0.21	109.6	Pulse	0.30	3
3	Rh		1,071,067.42	0.36	108.5	Pulse	0.30	3
3	Tb		1,629,007.05	0.28	106.3	Pulse	0.30	3

Quantitation Report

File Name	035SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 18:39
Sample Name	jc85901-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.032	ug/l	29.45	88.00	6.613E-05	Pulse	0.25	3
B			1	100.041	ug/l	2.21	197,293.71	1.485E-01	Pulse	0.15	3
Ca			1	23115.406	ug/l	1.04	7,250,453.85	3.306E+00	Analog	0.10	3
Sr			1	89.314	ug/l	0.44	1,268,842.12	4.907E-01	Pulse	0.10	3
Mo			1	1.020	ug/l	3.91	3,083.74	1.192E-03	Pulse	0.10	3
Ag			1	0.036	ug/l	39.81	296.68	1.069E-04	Pulse	0.10	3
Sn			1	1.929	ug/l	1.08	7,205.23	2.605E-03	Pulse	0.10	3
Sb			1	0.801	ug/l	9.76	5,647.89	1.484E-03	Pulse	0.10	3
Ba			1	81.217	ug/l	0.51	171,335.61	4.499E-02	Pulse	0.10	3
Tl			1	0.049	ug/l	14.35	1,236.76	5.826E-04	Pulse	0.10	3
Pb			1	0.394	ug/l	6.19	1,786.83	8.418E-04	Pulse	0.10	3
Pb			1	0.403	ug/l	6.95	1,653.48	7.787E-04	Pulse	0.10	3
Pb			1	0.380	ug/l	6.47	7,047.54	3.320E-03	Pulse	0.10	3
Na			2	190892.107	ug/l	0.32	63,908,930.79	8.540E+02	Analog	0.30	3
Mg			2	4841.500	ug/l	0.57	765,909.55	1.023E+01	Pulse	0.30	3
Al			2	543.674	ug/l	2.27	25,955.11	3.468E-01	Pulse	0.30	3
K			2	3905.777	ug/l	1.15	365,355.97	4.882E+00	Pulse	0.30	3
Ca			2	23829.894	ug/l	0.11	122,279.09	1.634E+00	Pulse	0.30	3
Ti			2	15.089	ug/l	17.94	683.37	9.129E-03	Pulse	0.30	3
V			2	2.200	ug/l	1.79	3,173.68	4.240E-02	Pulse	0.30	3
Cr			2	2.988	ug/l	1.54	6,214.57	8.303E-02	Pulse	0.30	3
Mn			2	39.752	ug/l	3.04	34,304.49	4.585E-01	Pulse	0.30	3
Fe			2	584.472	ug/l	1.29	880,119.79	1.176E+01	Pulse	0.30	3
Co			2	0.432	ug/l	6.06	1,387.85	1.855E-02	Pulse	0.30	3
Ni			2	1.022	ug/l	7.70	906.70	1.212E-02	Pulse	0.30	3
Cu			2	2.190	ug/l	4.48	6,442.44	8.607E-02	Pulse	0.30	3
Zn			2	3.298	ug/l	5.44	1,167.83	1.560E-02	Pulse	0.30	3
As			2	0.696	ug/l	3.58	117.33	1.568E-03	Pulse	1.00	3
Cd			2	0.039	ug/l	37.89	19.82	5.514E-05	Pulse	0.30	3
Sn			2	1.147	ug/l	5.87	1,241.17	3.454E-03	Pulse	0.30	3
Se			3	0.536	ug/l	14.00	22.73	2.857E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,328,705.02	0.88	89.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,193,438.20	1.36	97.1	Pulse	0.10	3
1	Ge		415,517.53	1.70	99.8	Pulse	0.10	3
1	Ge		570,568.35	1.17	98.4	Pulse	0.10	3
1	Rh		2,585,751.78	1.86	94.6	Pulse	0.10	3
1	In		2,766,360.73	1.81	98.6	Pulse	0.10	3
1	Tb		3,808,543.69	1.60	102.7	Pulse	0.10	3
1	Ho		363,417.81	0.74	103.9	Pulse	0.10	3
1	Bi		2,122,787.94	0.99	98.8	Pulse	0.10	3
2	Sc		74,839.05	0.84	95.3	Pulse	0.30	3
2	Ge		42,359.28	0.68	99.1	Pulse	0.30	3
2	Ge		63,599.96	1.48	99.7	Pulse	0.30	3
2	Rh		1,181,040.68	0.15	93.9	Pulse	0.30	3
2	In		359,368.04	0.02	94.4	Pulse	0.30	3
2	Tb		1,432,802.44	0.63	96.9	Pulse	0.30	3
2	Ho		139,340.77	0.17	98.9	Pulse	0.30	3
2	Bi		928,655.42	0.75	93.9	Pulse	0.30	3
3	Sc		79,836.35	0.21	103.2	Pulse	0.30	3
3	Ge		52,421.52	0.47	102.4	Pulse	0.30	3
3	Ge		79,562.73	0.17	103.0	Pulse	0.30	3
3	Rh		966,139.86	0.44	97.9	Pulse	0.30	3
3	Tb		1,577,917.71	0.85	103.0	Pulse	0.30	3

Quantitation Report

File Name 036SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File
Method Path
Acq Time 4/17/2019 18:44
Sample Name mp14185a-sd1
Sample Type Sample
Comment
Prep Dilution 10.000
Auto Dilution N/A
Total Dilution 10.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/17/2019 20:23
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.050	ug/l	52.90	36.00	2.498E-05	Pulse	0.25	3
B			1	96.510	ug/l	0.21	50,294.68	3.479E-02	Pulse	0.15	3
Ca			1	24071.088	ug/l	0.70	1,644,312.22	6.939E-01	Pulse	0.10	3
Sr			1	85.835	ug/l	0.97	269,182.19	9.444E-02	Pulse	0.10	3
Mo			1	1.051	ug/l	13.63	730.04	2.562E-04	Pulse	0.10	3
Ag			1	0.020	ug/l	90.88	76.67	2.544E-05	Pulse	0.10	3
Sn			1	3.105	ug/l	2.24	1,286.76	4.274E-04	Pulse	0.10	3
Sb			1	-0.117	ug/l	-78.00	1,230.09	3.086E-04	Pulse	0.10	3
Ba			1	82.155	ug/l	0.14	36,363.59	9.123E-03	Pulse	0.10	3
Tl			1	-0.047	ug/l	-40.87	570.03	2.521E-04	Pulse	0.10	3
Pb			1	0.414	ug/l	12.43	530.03	2.345E-04	Pulse	0.10	3
Pb			1	0.337	ug/l	19.23	456.69	2.022E-04	Pulse	0.10	3
Pb			1	0.374	ug/l	9.53	2,060.14	9.117E-04	Pulse	0.10	3
Na			2	192357.666	ug/l	1.28	14,023,201.11	1.722E+02	Analog	0.30	3
Mg			2	4880.116	ug/l	0.43	168,301.37	2.067E+00	Pulse	0.30	3
Al			2	578.238	ug/l	3.63	6,098.00	7.490E-02	Pulse	0.30	3
K			2	3967.833	ug/l	0.87	85,808.12	1.054E+00	Pulse	0.30	3
Ca			2	23629.270	ug/l	0.58	26,457.72	3.250E-01	Pulse	0.30	3
Ti			2	15.860	ug/l	28.80	164.45	2.019E-03	Pulse	0.30	3
V			2	2.061	ug/l	3.52	725.58	8.913E-03	Pulse	0.30	3
Cr			2	1.866	ug/l	5.31	1,451.19	1.783E-02	Pulse	0.30	3
Mn			2	40.414	ug/l	1.69	7,674.09	9.426E-02	Pulse	0.30	3
Fe			2	570.192	ug/l	0.51	191,880.30	2.357E+00	Pulse	0.30	3
Co			2	0.447	ug/l	15.96	347.78	4.273E-03	Pulse	0.30	3
Ni			2	0.839	ug/l	9.31	194.45	2.389E-03	Pulse	0.30	3
Cu			2	1.961	ug/l	10.30	2,395.76	2.943E-02	Pulse	0.30	3
Zn			2	2.755	ug/l	18.66	422.23	5.187E-03	Pulse	0.30	3
As			2	0.736	ug/l	12.82	34.67	4.258E-04	Pulse	1.00	3
Cd			2	0.158	ug/l	51.15	18.84	4.745E-05	Pulse	0.30	3
Sn			2	-0.704	ug/l	-16.53	253.34	6.373E-04	Pulse	0.30	3
Se			3	0.439	ug/l	36.15	9.27	1.101E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,445,702.88	1.34	97.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,369,652.78	0.75	104.9	Pulse	0.10	3
1	Ge		445,323.12	0.82	106.9	Pulse	0.10	3
1	Ge		620,973.27	1.01	107.1	Pulse	0.10	3
1	Rh		2,850,224.96	0.41	104.2	Pulse	0.10	3
1	In		3,010,402.45	0.57	107.3	Pulse	0.10	3
1	Tb		3,985,861.29	0.10	107.5	Pulse	0.10	3
1	Ho		374,953.59	1.27	107.2	Pulse	0.10	3
1	Bi		2,260,621.58	1.07	105.2	Pulse	0.10	3
2	Sc		81,412.74	0.38	103.7	Pulse	0.30	3
2	Ge		46,640.91	1.23	109.1	Pulse	0.30	3
2	Ge		69,965.75	1.16	109.7	Pulse	0.30	3
2	Rh		1,310,820.23	0.37	104.2	Pulse	0.30	3
2	In		397,544.72	0.59	104.4	Pulse	0.30	3
2	Tb		1,523,110.88	0.43	103.0	Pulse	0.30	3
2	Ho		147,149.56	1.85	104.4	Pulse	0.30	3
2	Bi		1,007,653.09	0.77	101.9	Pulse	0.30	3
3	Sc		83,736.45	0.43	108.2	Pulse	0.30	3
3	Ge		55,443.52	0.21	108.4	Pulse	0.30	3
3	Ge		84,169.81	0.44	109.0	Pulse	0.30	3
3	Rh		1,045,681.14	0.70	105.9	Pulse	0.30	3
3	Tb		1,629,076.50	0.67	106.3	Pulse	0.30	3

Quantitation Report

File Name	037SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 18:49
Sample Name	mp14239-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.003	ug/l	95.79	16.00	1.130E-05	Pulse	0.25	3
B			1	4.371	ug/l	1.33	19,489.25	1.377E-02	Pulse	0.15	3
Ca			1	2.075	ug/l	135.08	16,271.88	7.142E-03	Pulse	0.10	3
Sr			1	0.011	ug/l	65.16	613.37	2.185E-04	Pulse	0.10	3
Mo			1	0.046	ug/l	21.86	186.68	6.662E-05	Pulse	0.10	3
Ag			1	0.010	ug/l	40.39	120.00	4.080E-05	Pulse	0.10	3
Sn			1	1.243	ug/l	3.15	4,304.06	1.463E-03	Pulse	0.10	3
Sb			1	0.231	ug/l	9.33	2,623.65	6.714E-04	Pulse	0.10	3
Ba			1	-0.003	ug/l	-1168.31	103.34	2.646E-05	Pulse	0.10	3
Tl			1	0.017	ug/l	15.54	913.39	4.013E-04	Pulse	0.10	3
Pb			1	0.050	ug/l	40.48	390.02	1.713E-04	Pulse	0.10	3
Pb			1	0.033	ug/l	37.27	326.68	1.436E-04	Pulse	0.10	3
Pb			1	0.036	ug/l	15.27	1,383.41	6.079E-04	Pulse	0.10	3
Na			2	23.167	ug/l	11.53	21,554.88	2.780E-01	Pulse	0.30	3
Mg			2	-0.717	ug/l	-10.14	276.67	3.569E-03	Pulse	0.30	3
Al			2	1.367	ug/l	9.12	177.78	2.292E-03	Pulse	0.30	3
K			2	5.240	ug/l	22.93	6,540.23	8.435E-02	Pulse	0.30	3
Ca			2	3.868	ug/l	190.45	112.22	1.450E-03	Pulse	0.30	3
Ti			2	0.340	ug/l	22.49	25.55	3.292E-04	Pulse	0.30	3
V			2	0.075	ug/l	36.80	201.12	2.595E-03	Pulse	0.30	3
Cr			2	0.555	ug/l	2.48	1,734.55	2.237E-02	Pulse	0.30	3
Mn			2	0.069	ug/l	55.91	163.34	2.110E-03	Pulse	0.30	3
Fe			2	0.794	ug/l	109.34	7,223.19	9.320E-02	Pulse	0.30	3
Co			2	0.039	ug/l	11.55	170.01	2.192E-03	Pulse	0.30	3
Ni			2	0.064	ug/l	77.65	93.34	1.205E-03	Pulse	0.30	3
Cu			2	0.575	ug/l	6.62	2,728.03	3.519E-02	Pulse	0.30	3
Zn			2	1.493	ug/l	9.35	678.91	8.759E-03	Pulse	0.30	3
As			2	0.039	ug/l	71.38	15.67	2.016E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.031	ug/l	107.82	17.76	4.683E-05	Pulse	0.30	3
Sn			2	0.574	ug/l	2.88	835.59	2.202E-03	Pulse	0.30	3
Se			3	0.101	ug/l	25.35	9.67	1.155E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,415,752.48	0.65	95.3	Pulse	0.10	3
1	Sc		2,278,365.54	0.36	100.9	Pulse	0.10	3
1	Ge		434,042.90	1.52	104.2	Pulse	0.10	3
1	Ge		597,229.05	0.82	103.0	Pulse	0.10	3
1	Rh		2,805,809.75	1.17	102.6	Pulse	0.10	3
1	In		2,943,047.49	1.42	104.9	Pulse	0.10	3
1	Tb		3,908,992.23	0.96	105.4	Pulse	0.10	3
1	Ho		369,851.69	1.84	105.7	Pulse	0.10	3
1	Bi		2,275,965.59	0.41	106.0	Pulse	0.10	3
2	Sc		77,547.77	1.14	98.8	Pulse	0.30	3
2	Ge		43,943.36	0.40	102.8	Pulse	0.30	3
2	Ge		65,679.31	0.52	103.0	Pulse	0.30	3
2	Rh		1,284,815.02	0.48	102.1	Pulse	0.30	3
2	In		379,459.23	0.18	99.7	Pulse	0.30	3
2	Tb		1,472,432.13	0.79	99.5	Pulse	0.30	3
2	Ho		141,036.79	0.95	100.1	Pulse	0.30	3
2	Bi		996,603.74	0.76	100.8	Pulse	0.30	3
3	Sc		83,867.32	1.53	108.4	Pulse	0.30	3
3	Ge		55,522.78	1.21	108.5	Pulse	0.30	3
3	Ge		83,691.03	0.69	108.4	Pulse	0.30	3
3	Rh		1,054,076.07	0.40	106.8	Pulse	0.30	3
3	Tb		1,625,459.62	1.04	106.1	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 18:54
Sample Name	mp14239-b1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	74.821	ug/l	0.53	194,929.67	1.417E-01	Pulse	0.25	3
B			1	86.196	ug/l	0.71	177,461.24	1.290E-01	Pulse	0.15	3
Ca			1	4050.591	ug/l	0.81	1,315,000.89	5.849E-01	Pulse	0.10	3
Sr			1	81.770	ug/l	0.36	1,232,628.89	4.493E-01	Pulse	0.10	3
Mo			1	77.374	ug/l	2.27	245,573.04	8.950E-02	Pulse	0.10	3
Ag			1	80.032	ug/l	0.90	584,271.45	2.056E-01	Pulse	0.10	3
Sn			1	77.663	ug/l	0.28	365,614.17	1.287E-01	Pulse	0.10	3
Sb			1	76.758	ug/l	1.30	427,058.30	1.099E-01	Pulse	0.10	3
Ba			1	78.068	ug/l	0.19	168,102.79	4.324E-02	Pulse	0.10	3
Tl			1	78.923	ug/l	1.23	998,930.66	4.506E-01	Pulse	0.10	3
Pb			1	78.630	ug/l	1.53	339,798.42	1.533E-01	Pulse	0.10	3
Pb			1	78.817	ug/l	0.31	300,392.03	1.355E-01	Pulse	0.10	3
Pb			1	78.542	ug/l	0.96	1,373,420.94	6.195E-01	Pulse	0.10	3
Na			2	4084.439	ug/l	1.04	1,400,448.24	1.844E+01	Pulse	0.30	3
Mg			2	3910.489	ug/l	0.94	627,784.87	8.267E+00	Pulse	0.30	3
Al			2	3746.477	ug/l	0.89	180,860.19	2.382E+00	Pulse	0.30	3
K			2	3897.983	ug/l	1.59	369,974.32	4.873E+00	Pulse	0.30	3
Ca			2	4322.989	ug/l	3.45	22,575.38	2.974E-01	Pulse	0.30	3
Ti			2	72.964	ug/l	4.83	3,315.92	4.366E-02	Pulse	0.30	3
V			2	83.019	ug/l	1.72	118,197.55	1.557E+00	Pulse	0.30	3
Cr			2	82.207	ug/l	1.79	156,316.36	2.059E+00	Pulse	0.30	3
Mn			2	79.359	ug/l	2.06	69,392.30	9.139E-01	Pulse	0.30	3
Fe			2	3924.262	ug/l	2.23	5,962,018.38	7.852E+01	Analog	0.30	3
Co			2	81.588	ug/l	2.12	257,877.81	3.396E+00	Pulse	0.30	3
Ni			2	80.716	ug/l	2.53	69,845.89	9.200E-01	Pulse	0.30	3
Cu			2	81.352	ug/l	1.37	195,857.43	2.579E+00	Pulse	0.30	3
Zn			2	77.507	ug/l	1.39	22,551.17	2.970E-01	Pulse	0.30	3
As			2	73.669	ug/l	2.61	11,639.82	1.533E-01	Pulse	1.00	3
Cd			2	77.117	ug/l	1.39	30,616.63	8.446E-02	Pulse	0.30	3
Sn			2	78.616	ug/l	0.82	62,686.96	1.729E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	353.232	ug/l	0.58	11,288.75	1.384E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,375,920.77	0.12	92.6	Pulse	0.10	3
1	Sc		2,248,158.46	0.46	99.6	Pulse	0.10	3
1	Ge		420,284.33	0.59	100.9	Pulse	0.10	3
1	Ge		585,826.01	0.38	101.0	Pulse	0.10	3
1	Rh		2,743,732.35	0.59	100.3	Pulse	0.10	3
1	In		2,841,743.55	1.19	101.3	Pulse	0.10	3
1	Tb		3,887,513.90	0.24	104.8	Pulse	0.10	3
1	Ho		368,755.33	1.10	105.4	Pulse	0.10	3
1	Bi		2,217,201.79	1.79	103.2	Pulse	0.10	3
2	Sc		75,944.14	1.68	96.7	Pulse	0.30	3
2	Ge		42,192.31	1.20	98.7	Pulse	0.30	3
2	Ge		64,240.10	0.21	100.7	Pulse	0.30	3
2	Rh		1,241,918.60	0.61	98.7	Pulse	0.30	3
2	In		362,510.47	0.44	95.2	Pulse	0.30	3
2	Tb		1,452,823.45	0.81	98.2	Pulse	0.30	3
2	Ho		140,184.47	0.23	99.5	Pulse	0.30	3
2	Bi		971,210.31	0.09	98.2	Pulse	0.30	3
3	Sc		82,987.11	0.93	107.3	Pulse	0.30	3
3	Ge		54,032.37	2.47	105.6	Pulse	0.30	3
3	Ge		81,577.09	0.54	105.6	Pulse	0.30	3
3	Rh		1,026,234.44	0.63	104.0	Pulse	0.30	3
3	Tb		1,621,796.74	0.25	105.8	Pulse	0.30	3

Quantitation Report

File Name 039SMPL.d
File Path C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File
Method Path
Acq Time 4/17/2019 18:59
Sample Name jc86359-2
Sample Type Sample
Comment
Prep Dilution 5.000
Auto Dilution N/A
Total Dilution 5.000
Operator Name admin
Acq Mode Spectrum
Cal Title
Cal Type External Calibration
Last Calib 4/17/2019 20:23
Bkg File
Bkg Mode Count Subtraction except for ISTD
Interference File
FQ Blank File
VIS Fit Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.018	ug/l	72.81	28.00	2.018E-05	Pulse	0.25	3
B			1	185.475	ug/l	0.73	155,983.43	1.121E-01	Pulse	0.15	3
Ca			1	56596.120	ug/l	0.61	7,410,135.30	3.238E+00	Analog	0.10	3
Sr			1	1637.630	ug/l	1.20	9,765,909.85	3.598E+00	Analog	0.10	3
Mo			1	2.864	ug/l	13.15	3,633.87	1.338E-03	Pulse	0.10	3
Ag			1	0.059	ug/l	14.54	220.01	7.589E-05	Pulse	0.10	3
Sn			1	3.370	ug/l	2.59	4,744.19	1.637E-03	Pulse	0.10	3
Sb			1	0.327	ug/l	14.45	2,046.87	5.287E-04	Pulse	0.10	3
Ba			1	114.828	ug/l	1.46	98,508.58	2.545E-02	Pulse	0.10	3
Tl			1	0.057	ug/l	55.08	943.40	4.366E-04	Pulse	0.10	3
Pb			1	0.407	ug/l	13.56	843.39	3.903E-04	Pulse	0.10	3
Pb			1	0.310	ug/l	17.91	646.70	2.991E-04	Pulse	0.10	3
Pb			1	0.388	ug/l	4.51	3,340.26	1.545E-03	Pulse	0.10	3
Na			2	145911.775	ug/l	1.36	20,374,139.19	2.612E+02	Analog	0.30	3
Mg			2	18520.653	ug/l	0.30	1,221,237.38	1.566E+01	Pulse	0.30	3
Al			2	29.993	ug/l	4.43	705.58	9.047E-03	Pulse	0.30	3
K			2	993.792	ug/l	0.56	44,213.34	5.669E-01	Pulse	0.30	3
Ca			2	64100.531	ug/l	0.75	137,113.13	1.758E+00	Pulse	0.30	3
Ti			2	2.336	ug/l	27.35	53.33	6.835E-04	Pulse	0.30	3
V			2	8.259	ug/l	2.00	4,920.78	6.309E-02	Pulse	0.30	3
Cr			2	2.651	ug/l	8.97	2,726.92	3.496E-02	Pulse	0.30	3
Mn			2	1361.293	ug/l	0.11	488,518.02	6.263E+00	Pulse	0.30	3
Fe			2	80.429	ug/l	2.49	56,193.00	7.204E-01	Pulse	0.30	3
Co			2	1.094	ug/l	2.19	1,463.41	1.876E-02	Pulse	0.30	3
Ni			2	2.259	ug/l	2.40	840.03	1.077E-02	Pulse	0.30	3
Cu			2	9.775	ug/l	0.65	10,937.06	1.402E-01	Pulse	0.30	3
Zn			2	26.233	ug/l	2.73	3,344.82	4.289E-02	Pulse	0.30	3
As			2	1.794	ug/l	17.54	125.67	1.612E-03	Pulse	1.00	3
Cd			2	0.131	ug/l	55.55	26.47	7.043E-05	Pulse	0.30	3
Sn			2	1.589	ug/l	6.05	877.81	2.336E-03	Pulse	0.30	3
Se			3	0.739	ug/l	20.90	15.73	1.915E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,391,783.81	1.05	93.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,288,760.59	1.07	101.4	Pulse	0.10	3
1	Ge		429,927.78	0.70	103.2	Pulse	0.10	3
1	Ge		592,744.57	1.85	102.2	Pulse	0.10	3
1	Rh		2,714,584.44	0.97	99.3	Pulse	0.10	3
1	In		2,898,204.37	0.96	103.3	Pulse	0.10	3
1	Tb		3,870,435.57	0.83	104.4	Pulse	0.10	3
1	Ho		367,138.54	0.62	105.0	Pulse	0.10	3
1	Bi		2,162,169.13	0.90	100.7	Pulse	0.10	3
2	Sc		77,997.85	0.35	99.3	Pulse	0.30	3
2	Ge		44,301.01	1.43	103.7	Pulse	0.30	3
2	Ge		66,143.29	0.70	103.7	Pulse	0.30	3
2	Rh		1,241,752.73	0.34	98.7	Pulse	0.30	3
2	In		375,759.79	0.30	98.7	Pulse	0.30	3
2	Tb		1,472,780.22	0.49	99.6	Pulse	0.30	3
2	Ho		142,092.32	1.12	100.8	Pulse	0.30	3
2	Bi		952,835.80	0.49	96.4	Pulse	0.30	3
3	Sc		82,595.33	1.68	106.8	Pulse	0.30	3
3	Ge		54,044.61	0.17	105.6	Pulse	0.30	3
3	Ge		82,097.14	0.91	106.3	Pulse	0.30	3
3	Rh		1,006,930.59	0.38	102.0	Pulse	0.30	3
3	Tb		1,607,738.51	0.32	104.9	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 19:04
Sample Name	jc86359-4
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.012	ug/l	161.87	21.33	1.522E-05	Pulse	0.25	3
B			1	177.954	ug/l	0.99	150,623.39	1.078E-01	Pulse	0.15	3
Ca			1	61323.471	ug/l	0.45	7,934,069.67	3.508E+00	Analog	0.10	3
Sr			1	564.674	ug/l	0.33	3,397,009.84	1.241E+00	Pulse	0.10	3
Mo			1	12.648	ug/l	0.85	16,058.53	5.865E-03	Pulse	0.10	3
Ag			1	0.016	ug/l	36.83	90.00	3.123E-05	Pulse	0.10	3
Sn			1	3.540	ug/l	2.64	5,044.30	1.751E-03	Pulse	0.10	3
Sb			1	0.255	ug/l	43.35	1,883.51	4.873E-04	Pulse	0.10	3
Ba			1	87.381	ug/l	0.62	74,847.21	1.938E-02	Pulse	0.10	3
Tl			1	0.027	ug/l	45.58	800.05	3.666E-04	Pulse	0.10	3
Pb			1	0.284	ug/l	24.22	643.37	2.945E-04	Pulse	0.10	3
Pb			1	0.248	ug/l	25.08	560.03	2.568E-04	Pulse	0.10	3
Pb			1	0.252	ug/l	5.96	2,440.16	1.118E-03	Pulse	0.10	3
Na			2	24860.924	ug/l	1.47	3,496,192.71	4.465E+01	Pulse	0.30	3
Mg			2	29376.953	ug/l	0.99	1,944,404.16	2.483E+01	Pulse	0.30	3
Al			2	15.805	ug/l	24.98	425.57	5.441E-03	Pulse	0.30	3
K			2	809.260	ug/l	1.47	37,277.00	4.761E-01	Pulse	0.30	3
Ca			2	63886.459	ug/l	0.93	137,191.22	1.752E+00	Pulse	0.30	3
Ti			2	0.422	ug/l	62.41	17.78	2.266E-04	Pulse	0.30	3
V			2	0.441	ug/l	9.96	352.23	4.499E-03	Pulse	0.30	3
Cr			2	1.301	ug/l	4.38	1,683.43	2.150E-02	Pulse	0.30	3
Mn			2	10081.401	ug/l	1.22	3,631,195.13	4.638E+01	Pulse	0.30	3
Fe			2	1007.512	ug/l	1.15	636,842.72	8.133E+00	Pulse	0.30	3
Co			2	1.708	ug/l	5.54	2,269.07	2.898E-02	Pulse	0.30	3
Ni			2	2.119	ug/l	0.83	793.36	1.013E-02	Pulse	0.30	3
Cu			2	2.976	ug/l	4.24	4,272.82	5.458E-02	Pulse	0.30	3
Zn			2	99.433	ug/l	1.31	12,051.19	1.539E-01	Pulse	0.30	3
As			2	1.187	ug/l	9.08	86.67	1.107E-03	Pulse	1.00	3
Cd			2	0.359	ug/l	40.47	63.58	1.701E-04	Pulse	0.30	3
Sn			2	1.694	ug/l	11.26	907.82	2.427E-03	Pulse	0.30	3
Se			3	0.277	ug/l	20.35	9.80	1.191E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,396,750.37	0.64	94.0	Pulse	0.10	3
1	Sc		2,261,855.43	1.69	100.2	Pulse	0.10	3
1	Ge		432,047.58	2.25	103.7	Pulse	0.10	3

Quantitation Report

1	Ge		594,032.30	1.39	102.4	Pulse	0.10	3
1	Rh		2,738,014.13	0.82	100.1	Pulse	0.10	3
1	In		2,881,452.72	1.04	102.7	Pulse	0.10	3
1	Tb		3,862,900.88	1.24	104.2	Pulse	0.10	3
1	Ho		365,637.34	0.79	104.5	Pulse	0.10	3
1	Bi		2,183,542.26	1.82	101.7	Pulse	0.10	3
2	Sc		78,305.90	0.93	99.7	Pulse	0.30	3
2	Ge		43,971.28	0.65	102.9	Pulse	0.30	3
2	Ge		65,604.51	0.74	102.8	Pulse	0.30	3
2	Rh		1,251,583.91	0.13	99.5	Pulse	0.30	3
2	In		374,013.89	0.24	98.3	Pulse	0.30	3
2	Tb		1,468,039.38	0.73	99.2	Pulse	0.30	3
2	Ho		142,289.93	0.83	101.0	Pulse	0.30	3
2	Bi		968,268.78	0.61	97.9	Pulse	0.30	3
3	Sc		82,903.65	1.52	107.2	Pulse	0.30	3
3	Ge		54,888.57	0.32	107.3	Pulse	0.30	3
3	Ge		82,316.15	0.44	106.6	Pulse	0.30	3
3	Rh		1,021,551.49	0.21	103.5	Pulse	0.30	3
3	Tb		1,611,681.05	0.43	105.2	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 19:09
Sample Name	jc86359-7
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	-0.003	ug/l	-176.19	5.33	3.757E-06	Pulse	0.25	3
B			1	10.311	ug/l	5.42	19,193.42	1.342E-02	Pulse	0.15	3
Ca			1	135.007	ug/l	1.12	33,825.34	1.455E-02	Pulse	0.10	3
Sr			1	0.163	ug/l	6.18	1,480.13	5.180E-04	Pulse	0.10	3
Mo			1	2.034	ug/l	4.03	2,726.98	9.541E-04	Pulse	0.10	3
Ag			1	0.017	ug/l	20.55	96.67	3.269E-05	Pulse	0.10	3
Sn			1	6.804	ug/l	0.80	11,597.98	3.924E-03	Pulse	0.10	3
Sb			1	0.900	ug/l	4.93	3,343.80	8.554E-04	Pulse	0.10	3
Ba			1	0.144	ug/l	27.60	233.34	5.973E-05	Pulse	0.10	3
Tl			1	0.023	ug/l	52.64	800.05	3.570E-04	Pulse	0.10	3
Pb			1	0.294	ug/l	14.76	676.70	3.020E-04	Pulse	0.10	3
Pb			1	0.218	ug/l	30.49	530.03	2.361E-04	Pulse	0.10	3
Pb			1	0.253	ug/l	10.81	2,510.16	1.120E-03	Pulse	0.10	3
Na			2	66.209	ug/l	6.47	23,377.31	2.929E-01	Pulse	0.30	3
Mg			2	5.766	ug/l	16.47	794.47	9.958E-03	Pulse	0.30	3
Al			2	6.013	ug/l	21.44	235.56	2.952E-03	Pulse	0.30	3
K			2	22.318	ug/l	34.09	7,092.68	8.888E-02	Pulse	0.30	3
Ca			2	111.174	ug/l	13.56	337.78	4.232E-03	Pulse	0.30	3
Ti			2	0.989	ug/l	71.22	28.89	3.620E-04	Pulse	0.30	3
V			2	0.092	ug/l	39.16	150.00	1.879E-03	Pulse	0.30	3
Cr			2	1.185	ug/l	8.10	1,623.43	2.034E-02	Pulse	0.30	3
Mn			2	1.148	ug/l	17.43	526.68	6.596E-03	Pulse	0.30	3
Fe			2	12.012	ug/l	3.63	13,837.01	1.734E-01	Pulse	0.30	3
Co			2	0.058	ug/l	58.92	121.12	1.516E-03	Pulse	0.30	3
Ni			2	0.280	ug/l	39.16	140.00	1.753E-03	Pulse	0.30	3
Cu			2	2.103	ug/l	3.06	3,477.07	4.357E-02	Pulse	0.30	3
Zn			2	6.741	ug/l	3.53	1,063.38	1.332E-02	Pulse	0.30	3
As			2	2.603	ug/l	5.55	182.33	2.285E-03	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.004	ug/l	-296.74	4.29	1.119E-05	Pulse	0.30	3
Sn			2	4.951	ug/l	1.87	2,021.26	5.278E-03	Pulse	0.30	3
Se			3	0.812	ug/l	8.63	17.07	2.029E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,430,597.13	1.52	96.3	Pulse	0.10	3
1	Sc		2,324,216.43	1.71	102.9	Pulse	0.10	3
1	Ge		440,024.08	1.64	105.6	Pulse	0.10	3
1	Ge		605,870.30	1.72	104.5	Pulse	0.10	3
1	Rh		2,858,026.83	1.01	104.5	Pulse	0.10	3
1	In		2,955,921.42	1.61	105.3	Pulse	0.10	3
1	Tb		3,909,945.25	0.89	105.4	Pulse	0.10	3
1	Ho		368,083.65	0.62	105.2	Pulse	0.10	3
1	Bi		2,243,007.67	2.01	104.4	Pulse	0.10	3
2	Sc		79,811.96	0.71	101.6	Pulse	0.30	3
2	Ge		44,401.36	1.01	103.9	Pulse	0.30	3
2	Ge		67,281.29	0.13	105.5	Pulse	0.30	3
2	Rh		1,305,556.48	0.44	103.8	Pulse	0.30	3
2	In		382,990.97	1.12	100.6	Pulse	0.30	3
2	Tb		1,491,634.00	0.47	100.8	Pulse	0.30	3
2	Ho		142,658.71	0.86	101.2	Pulse	0.30	3
2	Bi		997,033.22	0.29	100.8	Pulse	0.30	3
3	Sc		83,596.95	0.95	108.1	Pulse	0.30	3
3	Ge		54,972.15	1.12	107.4	Pulse	0.30	3
3	Ge		84,117.65	0.54	108.9	Pulse	0.30	3
3	Rh		1,060,173.92	0.30	107.4	Pulse	0.30	3
3	Tb		1,624,683.79	0.79	106.0	Pulse	0.30	3

Quantitation Report

File Name	042SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 19:14
Sample Name	mp14118-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.094	ug/l	29.47	116.00	7.754E-05	Pulse	0.25	3
B			1	1.347	ug/l	12.98	12,527.08	8.371E-03	Pulse	0.15	3
Ca			1	94.707	ug/l	1.06	29,513.60	1.225E-02	Pulse	0.10	3
Sr			1	0.486	ug/l	8.09	3,603.86	1.227E-03	Pulse	0.10	3
Mo			1	0.997	ug/l	12.29	1,393.45	4.743E-04	Pulse	0.10	3
Ag			1	0.030	ug/l	39.12	136.67	4.536E-05	Pulse	0.10	3
Sn			1	25.538	ug/l	2.56	49,435.50	1.640E-02	Pulse	0.10	3
Sb			1	-0.170	ug/l	-19.33	973.40	2.448E-04	Pulse	0.10	3
Ba			1	0.423	ug/l	7.87	483.36	1.215E-04	Pulse	0.10	3
Tl			1	0.055	ug/l	12.58	1,003.40	4.310E-04	Pulse	0.10	3
Pb			1	0.213	ug/l	3.84	556.70	2.391E-04	Pulse	0.10	3
Pb			1	0.177	ug/l	38.47	483.36	2.078E-04	Pulse	0.10	3
Pb			1	0.199	ug/l	13.18	2,210.15	9.490E-04	Pulse	0.10	3
Na			2	101.649	ug/l	2.44	29,399.97	3.563E-01	Pulse	0.30	3
Mg			2	20.892	ug/l	2.22	1,876.79	2.274E-02	Pulse	0.30	3
Al			2	30.628	ug/l	5.20	760.02	9.208E-03	Pulse	0.30	3
K			2	43.494	ug/l	8.82	8,196.53	9.930E-02	Pulse	0.30	3
Ca			2	72.177	ug/l	8.77	261.12	3.163E-03	Pulse	0.30	3
Ti			2	1.953	ug/l	17.50	48.89	5.922E-04	Pulse	0.30	3
V			2	0.242	ug/l	9.84	247.78	3.004E-03	Pulse	0.30	3
Cr			2	1.203	ug/l	6.84	1,693.44	2.052E-02	Pulse	0.30	3
Mn			2	0.997	ug/l	9.41	486.68	5.898E-03	Pulse	0.30	3
Fe			2	53.998	ug/l	1.74	42,012.26	5.091E-01	Pulse	0.30	3
Co			2	0.105	ug/l	23.27	188.89	2.292E-03	Pulse	0.30	3
Ni			2	0.516	ug/l	3.23	233.34	2.827E-03	Pulse	0.30	3
Cu			2	0.992	ug/l	3.76	2,441.32	2.958E-02	Pulse	0.30	3
Zn			2	7.723	ug/l	4.98	1,222.28	1.481E-02	Pulse	0.30	3
As			2	0.080	ug/l	102.17	15.33	1.862E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.595	ug/l	29.30	108.82	2.735E-04	Pulse	0.30	3
Sn			2	23.737	ug/l	2.75	8,642.47	2.172E-02	Pulse	0.30	3
Se			3	0.272	ug/l	10.67	10.13	1.183E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,496,580.60	0.97	100.7	Pulse	0.10	3
1	Sc		2,408,687.05	0.18	106.7	Pulse	0.10	3
1	Ge		451,933.06	0.31	108.5	Pulse	0.10	3
1	Ge		621,017.96	0.56	107.1	Pulse	0.10	3
1	Rh		2,936,160.48	0.92	107.4	Pulse	0.10	3
1	In		3,015,252.95	0.64	107.5	Pulse	0.10	3
1	Tb		3,976,073.28	1.22	107.2	Pulse	0.10	3
1	Ho		375,942.12	0.76	107.5	Pulse	0.10	3
1	Bi		2,327,818.98	1.09	108.4	Pulse	0.10	3
2	Sc		82,528.09	1.21	105.1	Pulse	0.30	3
2	Ge		46,028.06	1.54	107.7	Pulse	0.30	3
2	Ge		69,530.50	1.63	109.0	Pulse	0.30	3
2	Rh		1,345,325.02	0.43	106.9	Pulse	0.30	3
2	In		397,982.42	0.15	104.6	Pulse	0.30	3
2	Tb		1,520,361.37	0.37	102.8	Pulse	0.30	3
2	Ho		145,873.00	0.58	103.5	Pulse	0.30	3
2	Bi		1,031,312.25	0.29	104.3	Pulse	0.30	3
3	Sc		84,907.89	1.20	109.8	Pulse	0.30	3
3	Ge		56,212.89	0.92	109.9	Pulse	0.30	3
3	Ge		85,628.40	0.33	110.9	Pulse	0.30	3
3	Rh		1,089,012.66	0.48	110.3	Pulse	0.30	3
3	Tb		1,650,939.00	0.99	107.7	Pulse	0.30	3

Quantitation Report

File Name	043SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 19:19
Sample Name	mp14118-b2
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	187.712	ug/l	0.49	206,324.59	1.422E-01	Pulse	0.25	3
B			1	189.022	ug/l	1.51	165,559.20	1.141E-01	Pulse	0.15	3
Ca			1	10047.823	ug/l	0.07	1,370,371.39	5.804E-01	Pulse	0.10	3
Sr			1	199.521	ug/l	0.79	1,234,461.00	4.385E-01	Pulse	0.10	3
Mo			1	188.418	ug/l	1.11	245,442.24	8.718E-02	Pulse	0.10	3
Ag			1	97.726	ug/l	0.92	294,815.55	1.004E-01	Pulse	0.10	3
Sn			1	208.921	ug/l	0.35	406,533.51	1.385E-01	Pulse	0.10	3
Sb			1	191.066	ug/l	0.28	430,849.43	1.094E-01	Pulse	0.10	3
Ba			1	197.030	ug/l	1.26	171,936.10	4.365E-02	Pulse	0.10	3
Tl			1	193.883	ug/l	1.03	981,554.13	4.428E-01	Pulse	0.10	3
Pb			1	196.024	ug/l	0.66	338,870.85	1.529E-01	Pulse	0.10	3
Pb			1	194.465	ug/l	0.51	296,432.59	1.337E-01	Pulse	0.10	3
Pb			1	194.332	ug/l	0.34	1,359,279.24	6.131E-01	Pulse	0.10	3
Na			2	9945.125	ug/l	0.64	1,462,698.31	1.797E+01	Pulse	0.30	3
Mg			2	9509.105	ug/l	0.80	654,671.83	8.042E+00	Pulse	0.30	3
Al			2	9332.644	ug/l	0.35	193,204.83	2.373E+00	Pulse	0.30	3
K			2	9665.160	ug/l	0.63	393,476.97	4.833E+00	Pulse	0.30	3
Ca			2	10697.883	ug/l	2.86	23,964.02	2.944E-01	Pulse	0.30	3
Ti			2	181.057	ug/l	0.75	3,528.19	4.334E-02	Pulse	0.30	3
V			2	199.598	ug/l	0.51	121,880.71	1.497E+00	Pulse	0.30	3
Cr			2	199.667	ug/l	0.35	162,847.28	2.000E+00	Pulse	0.30	3
Mn			2	196.536	ug/l	0.27	73,706.55	9.054E-01	Pulse	0.30	3
Fe			2	9654.287	ug/l	0.49	6,290,619.06	7.727E+01	Analog	0.30	3
Co			2	197.720	ug/l	0.48	268,032.01	3.292E+00	Pulse	0.30	3
Ni			2	198.318	ug/l	1.09	73,604.35	9.041E-01	Pulse	0.30	3
Cu			2	201.038	ug/l	0.33	207,582.81	2.550E+00	Pulse	0.30	3
Zn			2	202.938	ug/l	0.98	25,309.65	3.109E-01	Pulse	0.30	3
As			2	185.623	ug/l	0.82	12,579.53	1.545E-01	Pulse	1.00	3
Cd			2	195.049	ug/l	1.21	32,799.91	8.545E-02	Pulse	0.30	3
Sn			2	212.088	ug/l	1.27	71,602.55	1.865E-01	Pulse	0.30	3
Se			3	475.141	ug/l	1.10	6,248.46	7.449E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,451,284.60	0.99	97.7	Pulse	0.10	3
1	Sc		2,360,878.14	0.75	104.6	Pulse	0.10	3
1	Ge		437,231.30	0.42	105.0	Pulse	0.10	3

Quantitation Report

1	Ge		610,555.97	0.31	105.3	Pulse	0.10	3
1	Rh		2,815,439.44	1.09	103.0	Pulse	0.10	3
1	In		2,935,462.61	1.32	104.6	Pulse	0.10	3
1	Tb		3,939,145.67	1.72	106.2	Pulse	0.10	3
1	Ho		373,418.90	1.74	106.8	Pulse	0.10	3
1	Bi		2,217,103.93	1.61	103.2	Pulse	0.10	3
2	Sc		81,410.67	0.34	103.7	Pulse	0.30	3
2	Ge		45,328.30	1.04	106.1	Pulse	0.30	3
2	Ge		68,667.20	1.95	107.6	Pulse	0.30	3
2	Rh		1,299,117.20	0.38	103.3	Pulse	0.30	3
2	In		383,865.79	0.35	100.8	Pulse	0.30	3
2	Tb		1,494,961.50	0.89	101.1	Pulse	0.30	3
2	Ho		144,411.40	0.75	102.5	Pulse	0.30	3
2	Bi		998,017.98	0.34	100.9	Pulse	0.30	3
3	Sc		84,188.64	1.03	108.8	Pulse	0.30	3
3	Ge		54,837.44	1.41	107.2	Pulse	0.30	3
3	Ge		83,885.30	0.82	108.6	Pulse	0.30	3
3	Rh		1,042,213.08	0.45	105.6	Pulse	0.30	3
3	Tb		1,618,878.54	0.75	105.6	Pulse	0.30	3

Quantitation Report

File Name	044_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 19:24
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	48.236	ug/l	1.21	263,495.99	1.827E-01	Pulse	0.25	3
B			1	97.434	ug/l	0.83	406,778.28	2.820E-01	Pulse	0.15	3
Ca			1	5024.577	ug/l	0.12	3,407,826.30	1.441E+00	Pulse	0.10	3
Sr			1	51.000	ug/l	0.69	1,574,278.52	5.604E-01	Pulse	0.10	3
Mo			1	51.688	ug/l	0.75	335,930.14	1.196E-01	Pulse	0.10	3
Ag			1	49.072	ug/l	0.85	736,399.65	2.521E-01	Pulse	0.10	3
Sn			1	50.319	ug/l	0.22	487,427.96	1.669E-01	Pulse	0.10	3
Sb			1	51.450	ug/l	1.22	574,984.51	1.472E-01	Pulse	0.10	3
Ba			1	49.686	ug/l	1.91	215,035.86	5.503E-02	Pulse	0.10	3
Tl			1	49.554	ug/l	1.63	1,246,962.87	5.657E-01	Pulse	0.10	3
Pb			1	49.749	ug/l	2.02	427,486.32	1.939E-01	Pulse	0.10	3
Pb			1	49.854	ug/l	0.35	377,777.16	1.714E-01	Pulse	0.10	3
Pb			1	49.747	ug/l	0.59	1,729,761.20	7.847E-01	Pulse	0.10	3
Na			2	4955.339	ug/l	1.29	3,622,244.72	4.450E+01	Pulse	0.30	3
Mg			2	4808.894	ug/l	1.15	1,654,451.29	2.033E+01	Pulse	0.30	3
Al			2	4759.160	ug/l	1.25	492,351.75	6.049E+00	Pulse	0.30	3
K			2	4890.824	ug/l	1.01	985,688.75	1.211E+01	Pulse	0.30	3
Ca			2	5104.503	ug/l	0.20	57,034.90	7.007E-01	Pulse	0.30	3
Ti			2	48.860	ug/l	3.40	4,756.29	5.843E-02	Pulse	0.30	3
V			2	51.264	ug/l	1.75	156,454.15	1.922E+00	Pulse	0.30	3
Cr			2	49.649	ug/l	1.39	202,261.69	2.485E+00	Pulse	0.30	3
Mn			2	49.341	ug/l	1.13	92,478.57	1.136E+00	Pulse	0.30	3
Fe			2	4850.234	ug/l	1.29	15,789,691.60	1.940E+02	Analog	0.30	3
Co			2	49.977	ug/l	1.56	338,671.62	4.161E+00	Pulse	0.30	3
Ni			2	49.728	ug/l	0.83	92,260.37	1.133E+00	Pulse	0.30	3
Cu			2	49.523	ug/l	1.55	255,308.62	3.137E+00	Pulse	0.30	3
Zn			2	49.853	ug/l	1.14	31,027.10	3.812E-01	Pulse	0.30	3
As			2	51.090	ug/l	1.86	17,304.15	2.126E-01	Pulse	1.00	3
Cd			2	49.239	ug/l	1.36	41,928.76	1.079E-01	Pulse	0.30	3
Sn			2	50.207	ug/l	1.07	85,770.30	2.206E-01	Pulse	0.30	3
Se			3	191.938	ug/l	1.10	12,564.08	1.504E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,442,549.57	0.42	97.1	Pulse	0.10	3
1	Sc		2,364,850.96	0.68	104.7	Pulse	0.10	3
1	Ge		441,008.39	0.67	105.9	Pulse	0.10	3

Quantitation Report

1	Ge		609,104.01	1.90	105.0	Pulse	0.10	3
1	Rh		2,809,274.65	0.83	102.7	Pulse	0.10	3
1	In		2,920,424.15	0.86	104.1	Pulse	0.10	3
1	Tb		3,907,866.61	1.51	105.4	Pulse	0.10	3
1	Ho		367,327.21	0.74	105.0	Pulse	0.10	3
1	Bi		2,204,549.13	1.73	102.6	Pulse	0.10	3
2	Sc		81,402.54	0.92	103.7	Pulse	0.30	3
2	Ge		44,803.49	1.03	104.8	Pulse	0.30	3
2	Ge		68,087.74	1.22	106.7	Pulse	0.30	3
2	Rh		1,289,294.95	0.13	102.5	Pulse	0.30	3
2	In		388,775.11	0.34	102.1	Pulse	0.30	3
2	Tb		1,508,258.59	1.21	102.0	Pulse	0.30	3
2	Ho		145,433.17	1.02	103.2	Pulse	0.30	3
2	Bi		995,853.19	0.69	100.7	Pulse	0.30	3
3	Sc		82,722.81	0.51	106.9	Pulse	0.30	3
3	Ge		53,667.63	0.35	104.9	Pulse	0.30	3
3	Ge		83,552.60	0.88	108.2	Pulse	0.30	3
3	Rh		1,021,388.92	0.76	103.5	Pulse	0.30	3
3	Tb		1,598,574.93	0.23	104.3	Pulse	0.30	3

Quantitation Report

File Name	045_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 19:29
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	0.009	ug/l	44.81	58.67	4.039E-05	Pulse	0.25	3
B			1	2.774	ug/l	2.68	22,426.15	1.542E-02	Pulse	0.15	3
Ca			1	-2.559	ug/l	-46.11	14,296.66	6.116E-03	Pulse	0.10	3
Sr			1	0.008	ug/l	7.33	716.71	2.498E-04	Pulse	0.10	3
Mo			1	0.085	ug/l	9.48	600.03	2.090E-04	Pulse	0.10	3
Ag			1	0.010	ug/l	41.77	203.34	6.800E-05	Pulse	0.10	3
Sn			1	0.512	ug/l	3.48	3,280.45	1.097E-03	Pulse	0.10	3
Sb			1	0.206	ug/l	7.22	3,613.87	9.293E-04	Pulse	0.10	3
Ba			1	0.029	ug/l	9.73	233.34	6.002E-05	Pulse	0.10	3
Tl			1	0.014	ug/l	4.36	1,046.73	4.652E-04	Pulse	0.10	3
Pb			1	0.014	ug/l	19.50	283.34	1.259E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	19.59	293.35	1.304E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	21.08	1,356.75	6.029E-04	Pulse	0.10	3
Na			2	4.864	ug/l	6.15	17,699.34	2.179E-01	Pulse	0.30	3
Mg			2	-0.316	ug/l	-40.55	304.45	3.747E-03	Pulse	0.30	3
Al			2	1.150	ug/l	20.50	234.45	2.886E-03	Pulse	0.30	3
K			2	0.892	ug/l	61.34	6,504.65	8.010E-02	Pulse	0.30	3
Ca			2	-2.063	ug/l	-75.36	73.33	9.024E-04	Pulse	0.30	3
Ti			2	0.009	ug/l	583.72	11.11	1.367E-04	Pulse	0.30	3
V			2	-0.003	ug/l	-376.13	87.78	1.080E-03	Pulse	0.30	3
Cr			2	0.008	ug/l	114.06	723.36	8.907E-03	Pulse	0.30	3
Mn			2	0.015	ug/l	90.17	134.45	1.655E-03	Pulse	0.30	3
Fe			2	-0.456	ug/l	-20.05	4,800.84	5.911E-02	Pulse	0.30	3
Co			2	0.008	ug/l	41.00	100.00	1.231E-03	Pulse	0.30	3
Ni			2	0.010	ug/l	28.16	57.78	7.116E-04	Pulse	0.30	3
Cu			2	-0.015	ug/l	-28.18	1,308.96	1.612E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.003	ug/l	2020.49	253.34	3.119E-03	Pulse	0.30	3
As			2	0.009	ug/l	109.08	12.67	1.560E-04	Pulse	1.00	3
Cd			2	0.010	ug/l	79.82	13.29	3.386E-05	Pulse	0.30	3
Sn			2	0.171	ug/l	22.92	662.24	1.692E-03	Pulse	0.30	3
Se			3	0.089	ug/l	46.91	12.07	1.455E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,453,985.07	0.49	97.9	Pulse	0.10	3
1	Sc		2,337,562.15	0.89	103.5	Pulse	0.10	3
1	Ge		439,543.00	1.11	105.5	Pulse	0.10	3
1	Ge		611,411.72	0.98	105.4	Pulse	0.10	3
1	Rh		2,869,438.92	1.23	104.9	Pulse	0.10	3
1	In		2,989,213.68	1.50	106.5	Pulse	0.10	3
1	Tb		3,888,195.36	1.18	104.8	Pulse	0.10	3
1	Ho		369,864.89	0.78	105.7	Pulse	0.10	3
1	Bi		2,249,909.08	0.52	104.7	Pulse	0.10	3
2	Sc		81,213.00	0.50	103.4	Pulse	0.30	3
2	Ge		45,448.68	2.11	106.3	Pulse	0.30	3
2	Ge		68,268.62	0.55	107.0	Pulse	0.30	3
2	Rh		1,310,202.45	0.23	104.1	Pulse	0.30	3
2	In		391,438.63	0.83	102.8	Pulse	0.30	3
2	Tb		1,503,559.63	0.96	101.6	Pulse	0.30	3
2	Ho		143,830.01	1.45	102.1	Pulse	0.30	3
2	Bi		1,007,184.92	0.60	101.9	Pulse	0.30	3
3	Sc		83,325.42	0.36	107.7	Pulse	0.30	3
3	Ge		54,540.60	0.85	106.6	Pulse	0.30	3
3	Ge		82,935.96	0.19	107.4	Pulse	0.30	3
3	Rh		1,055,536.59	1.12	106.9	Pulse	0.30	3
3	Tb		1,620,931.39	0.41	105.8	Pulse	0.30	3

Quantitation Report

File Name	046SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Method File	
Method Path	
Acq Time	4/17/2019 19:34
Sample Name	mp14118-s3
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	4/17/2019 20:23
Bkg File	
Bkg Mode	Count Subtraction except for ISTD
Interference File	
FQ Blank File	
VIS Fit	Point to Point

Tune Step	Tune File
1	
2	
3	

FullQuant Table

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Be			1	206.776	ug/l	0.77	216,201.69	1.566E-01	Pulse	0.25	3
B			1	198.677	ug/l	1.34	164,971.76	1.195E-01	Pulse	0.15	3
Ca			1	179434.926	ug/l	0.86	27,268,989.60	1.025E+01	Analog	0.10	3
Sr			1	607.613	ug/l	0.06	3,611,609.11	1.335E+00	Pulse	0.10	3
Mo			1	184.020	ug/l	0.92	230,343.84	8.515E-02	Pulse	0.10	3
Ag			1	93.864	ug/l	1.62	276,668.76	9.647E-02	Pulse	0.10	3
Sn			1	182.275	ug/l	0.35	346,313.21	1.207E-01	Pulse	0.10	3
Sb			1	61.220	ug/l	1.84	137,914.26	3.528E-02	Pulse	0.10	3
Ba			1	1940.668	ug/l	0.22	1,680,117.63	4.297E-01	Pulse	0.10	3
Tl			1	194.735	ug/l	1.16	952,944.96	4.447E-01	Pulse	0.10	3
Pb			1	609.922	ug/l	0.38	1,018,753.86	4.754E-01	Pulse	0.10	3
Pb			1	588.382	ug/l	0.21	866,498.74	4.044E-01	Pulse	0.10	3
Pb			1	597.650	ug/l	0.19	4,038,988.87	1.885E+00	Pulse	0.10	3
Na			2	9198.883	ug/l	1.47	1,519,274.01	1.663E+01	Pulse	0.30	3
Mg			2	40539.506	ug/l	1.35	3,130,160.99	3.427E+01	Pulse	0.30	3
Al			2	224751.810	ug/l	0.76	5,217,885.62	5.712E+01	Mix	0.30	3
K			2	35776.633	ug/l	0.44	1,615,146.47	1.768E+01	Pulse	0.30	3
Ca			2	183238.519	ug/l	0.43	458,870.10	5.023E+00	Pulse	0.30	3
Ti			2	737.857	ug/l	20.49	16,106.73	1.762E-01	Pulse	0.30	3
V			2	486.299	ug/l	0.86	333,047.11	3.646E+00	Pulse	0.30	3
Cr			2	492.055	ug/l	0.75	449,194.64	4.917E+00	Pulse	0.30	3
Mn			2	16459.786	ug/l	0.92	6,916,642.22	7.572E+01	Analog	0.30	3
Fe			2	284005.188	ug/l	2.14	207,438,209.54	2.271E+03	Analog	0.30	3
Co			2	419.614	ug/l	0.85	638,232.82	6.987E+00	Pulse	0.30	3
Ni			2	419.870	ug/l	0.87	174,813.57	1.914E+00	Pulse	0.30	3
Cu			2	290.873	ug/l	1.28	336,308.64	3.682E+00	Pulse	0.30	3
Zn			2	710.196	ug/l	2.15	98,677.42	1.080E+00	Pulse	0.30	3
As			2	220.521	ug/l	0.75	16,766.93	1.835E-01	Pulse	1.00	3
Cd			2	188.261	ug/l	1.22	31,089.45	8.248E-02	Pulse	0.30	3
Sn			2	184.247	ug/l	1.31	61,128.85	1.622E-01	Pulse	0.30	3
Se			3	453.488	ug/l	1.43	5,616.90	7.110E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,380,547.15	1.44	92.9	Pulse	0.10	3

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Current Signal

[1]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	2679	2608.6	2.32
59	5000	2719	2747.3	1.21
89	5000	4193	4193.4	2.01
140	5000	4141	4045.5	3.51
205	5000	2465	2573.4	3.05
156/140	1	0.555 %	0.488 %	22.94
70/140	5	4.105 %	4.113 %	8.27
9	20	0	0.3	244.95
11	1000	644	631.8	2.47
88	50	24	25.3	35.89
95	20	1	3.7	70.42
107	20	1	1.3	38.73
121	100	70	68.8	15.25
137	20	14	15.0	11.93
208	50	46	41.2	11.23
Integration Time [sec]		0.10		

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.80	V	S/C Temp	2	℃
Smpl Depth	7.8	mm	Gas Switch	Dilution Gas	
Carrier Gas	0.55	L/min	Makeup/Dilution Gas	0.55	L/min
Option Gas	0.0	%			

Lenses Parameters

Extract 1	0.0	V	Cell Entrance	-34	V
Extract 2	-195.0	V	Cell Exit	-60	V
Omega Bias	-110	V	Deflect	14.8	V
Omega Lens	8.5	V	Plate Bias	-40	V

Cell Parameters

Use Gas	false		OctP Bias	-8.0	V
He Flow	0.0	mL/min	OctP RF	200	V
H2 Flow	0.0	mL/min	Energy Discrimination	5.0	V
3rd Gas Flow	0	%			

Meters

IF/BK Press	2.59E+2	Pa	S/C Temp (L)	1.9	℃
TMP Revolution	100.0	%	Carrier Gas(BP)	1.39E+2	kPa
Carrier Gas	0.55	L/min			

US EPA Tune Check Sample Report

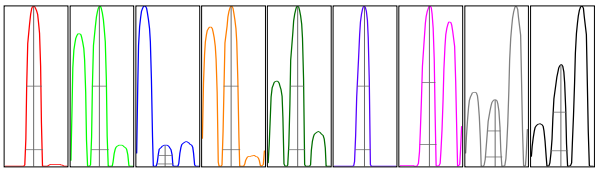
Batch Folder C:\Agilent\ICPMH\1\DATA\xa041519m1.b
Report Comment
Instrument Name G3281A JP10340551

[1]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	80632	0.45	5.00	
24	267654	0.36	5.00	
25	36142	0.58	5.00	
26	40929	0.65	5.00	
59	341619	0.35	5.00	
115	419724	0.30	5.00	
206	99621	0.66	5.00	
207	91470	0.56	5.00	
208	214687	0.44	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	81148	80200	80727	80401	80683
24	268646	268063	267211	268172	266180
25	36033	36228	35847	36396	36206
26	40786	41309	40703	41110	40735
59	343009	342545	341578	340845	340117
115	421055	417839	419493	419639	420596
206	99584	100723	99205	99536	99059
207	92165	90896	91455	91751	91081
208	214672	216021	214872	214465	213406

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	12549	8.90	8.9 - 9.1		0.802	0.900	
24	42968	23.90	23.9 - 24.1		0.795	0.900	
25	5668	24.90	24.9 - 25.1		0.767	0.900	
26	6529	25.90	25.9 - 26.1		0.799	0.900	
59	56110	58.95	58.9 - 59.1		0.753	0.900	
115	73856	115.00	114.9 - 115.1		0.718	0.900	
206	16803	205.95	205.9 - 206.1		0.761	0.900	
207	15168	206.95	206.9 - 207.1		0.758	0.900	
208	36394	207.95	207.9 - 208.1		0.757	0.900	

X% = 10 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1500	W	Carrier Gas	0.55	L/min			
RF Matching	1.80	V	Option Gas	0.0	%			
Smpl Depth	7.8	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	℃						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.5	V			
Extract 2	-195.0	V	Cell Entrance	-34	V			
Omega Bias	-110	V	Cell Exit	-60	V			
Deflect	14.8	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			
Energy Discrimination	5.0	V						

SGS

Mercury Hot Block Digestion Log

Product **HG / HGTCLP**
Matrix: Aq / Liq / DW

Methods (Circle as appropriate)
EPA 245.1 **SW846 7470A**
Required corrected Temp. Range is 90-95 C.

MA Batch #: MA46511
Analyst: EAL/CH
Date: 4/16/2019
Balance ID: N/A
Reagents: See attached sheet
Auto pipet ID: M72

Hot Block # 7 Start Time: 7:00 End Time: 9:00 Tube # 1-24
Start Temp: 94 Corrected Start Temp: 93 Correction: -1 Thermometer ID: 6805236
End Temp: 94 Corrected Start Temp: 93 Correction: -1 Thermometer ID: 6805236
Hot Block # 8 Start Time: 9:00 End Time: 11:00 Tube # 25-72
Start Temp: 96 Corrected Start Temp: 94 Correction: -2 Thermometer ID: 3106989
End Temp: 97 Corrected Start Temp: 95 Correction: -2 Thermometer ID: 3106989

Bot #	Sample ID	pH <2 Y/N	Initial Sample Vol ml	Final Samp Vol ml	Spiked Used Amount Spiked	Spiked Used Added- Y or N	Spikelot and Conc (mg/L)	MP Number	Comments/Lot # and Vendor
1	MP14257-MB1	N	30	30				MP14257	
2	MP14257-B1	N	30	30	2.0 ml	Y	0.03		HG-19-145-190-HGA3, IN. V.
3	MP14257-S1	Y	30	30	2.0 ml	Y	0.03		JC86320-4, HG-19-145-190-HGA3, IN. V.
4	MP14257-S2	Y	30	30	2.0 ml	Y	0.03		JC86320-4, HG-19-145-190-HGA3, IN. V.
5	JC86320-4	Y	30	30					
6	JC86320-3	Y	30	30					
7	JC86089-1	Y	30	30					
8	JC86089-1F	Y	30	30					
9	JC86089-2	Y	30	30					
10	JC86089-2F	Y	30	30					
11	JC86142-4	Y	30	30					ORANGE, SEDIMENT
12	JC86142-4F	Y	30	30					
13	JC86142-5	Y	30	30					
14	JC86142-5F	Y	30	30					
15	JC86360-2F	Y	30	30					
16	JC86360-4F	Y	30	30					
17	JC86360-6F	Y	30	30					
18	JC86360-8F	Y	30	30					
19	JC86360-10F	Y	30	30					
20	JC86350-1	Y	30	30					
21	JC86350-2	Y	30	30					
22	JC86359-2	Y	30	30					
23	JC86359-4	Y	30	30					
24	JC86359-7	Y	30	30					
25	MP14258-MB1	N	30	30				MP14258	
26	MP14258-B1	N	30	30	2.0 ml	Y	0.03		HG-19-145-190-HGA3, IN. V.
27	MP14258-S1	Y	30	30	2.0 ml	Y	0.03		JC86308-1F, HG-19-145-190-HGA3, I. V.
28	MP14258-S2	Y	30	30	2.0 ml	Y	0.03		JC86308-1F, HG-19-145-190-HGA3, I. V.
29	JC86308-1F	Y	30	30					
30	JC86308-1	Y	30	30					
31	JC86308-2	Y	30	30					
32	JC86308-2F	Y	30	30					
33	JC86308-3	Y	30	30					SEDIMENT
34	JC86308-3F	Y	30	30					
35	JC86308-4	Y	30	30					SEDMIENT

ANALYST: EAL
Spike witness: CH
QC: REVIEWER:

DATE: 4/16/19
DATE: 4/16/19
DATE: 4/16/19

DAYT-MET-0113-01-FORM-HGWATERPREP
Revision Date: 8/28/18

13.5.1 13

SGS

Mercury Hot Block Digestion Log

Product **HG / HGTCLP**
Matrix: Aq / Liq / DW

Methods (Circle as appropriate)
EPA 245.1 **SW846 7470A**
Required corrected Temp. Range is 90-95 C.

MA Batch #: MA46511
Analyst: EAL/CH
Date: 4/16/2019
Balance ID: N/A
Reagents: See attached sheet
Auto pipet ID: M72

Hot Block # 8 Start Time: 11:00 End Time: 1:00 Tube # 73-98
Start Temp: 96 Corrected Start Temp: 94 Correction: -2 Thermometer ID: 3106989
End Temp: 97 Corrected Start Temp: 95 Correction: -2 Thermometer ID: 3106989
Hot Block # 8 Start Time: 9:00 End Time: 11:00 Tube # 25-72
Start Temp: 96 Corrected Start Temp: 94 Correction: -2 Thermometer ID: 3106989
End Temp: 97 Corrected Start Temp: 95 Correction: -2 Thermometer ID: 3106989

Bot #	Sample ID	pH <2 Y/N	Initial Sample Vol ml	Final Samp Vol ml	Spiked Used Amount Spiked	Spiked Used Added- Y or N	Spikelot and Conc (mg/L)	MP Number	Comments/Lot # and Vendor
36	JC86308-4F	Y	30	30					
37	JC86308-5	Y	30	30					
38	JC86308-5F	Y	30	30					
39	JC86308-6	Y	30	30					
40	JC86308-6F	Y	30	30					
41	JC86308-7	Y	30	30					
42	JC86308-7F	Y	30	30					
43	JC86308-8	Y	30	30					
44	JC86308-8F	Y	30	30					
45	JC86308-9	Y	30	30					SEDIMENT
46	JC86308-9F	Y	30	30					
47	JC86241-1	Y	30	30					
48	JC86251-1	Y	30	30					
49	MP14259-MB1	N	30	30				MP14259	
50	MP14259-B1	N	30	30	2.0 ml	Y	0.03		HG-19-145-190-HGA3, IN. V.
51	MP14259-S1	Y	30	30	2.0 ml	Y	0.03		JC86178-2, HG-19-145-190-HGA3, IN. V.
52	MP14259-S2	Y	30	30	2.0 ml	Y	0.03		JC86178-2, HG-19-145-190-HGA3, IN. V.
53	JC86178-2	Y	30	30					
54	JC86178-1	Y	30	30					
55	JC86178-4	Y	30	30					
56	JC86178-11	Y	30	30					
57	JC86341-1	Y	30	30					
58	JC86341-2	Y	30	30					
59	JC86341-3	Y	30	30					SEDIMENT
60	JC86341-4	Y	30	30					SEDIMENT
61	JC86341-5	Y	30	30					SEDIMENT
62	JC86341-6	Y	30	30					SEDIMENT
63	JC86341-7	Y	30	30					SEDIMENT
64	JC86341-8	Y	30	30					
65	JC86341-9	Y	30	30					
66	JC86341-10	Y	30	30					
67	JC86341-11	Y	30	30					
68	JC86352-1	Y	30	30					
69	JC86352-2	Y	30	30					
70	JC86352-3	Y	30	30					

ANALYST: EAL
Spike witness: CH
QC: REVIEWER:

DATE: 4/16/19
DATE: 4/16/19
DATE:

DAYT-MET-0113-01-FORM-HGWATERPREP
Revision Date: 8/28/18

13.5.1 13

SGS

Mercury Hot Block Digestion Log

Product **HG / HGTCLP**
Matrix: Aq / Liq / DW

Methods (Circle as appropriate)
EPA 245.1 **SW846 7470A**
Required corrected Temp. Range is 90-95 C.

MA Batch #: MA46511
Analyst: EAL/CH
Date: 4/16/2019
Balance ID: N/A
Reagents: See attached sheet
Auto pipet ID: M72

Hot Block # 8 Start Time: 11:00 End Time: 1:00 Tube # 73-98
Start Temp: 96 Corrected Start Temp: 94 Correction: -2 Thermometer ID: 3106989 .
End Temp: 97 Corrected Start Temp: 95 Correction: -2 Thermometer ID: 3106989 .
Hot Block # 8 Start Time: 9:00 End Time: 11:00 Tube # 25-72
Start Temp: 96 Corrected Start Temp: 94 Correction: -2 Thermometer ID: 3106989 .
End Temp: 97 Corrected Start Temp: 95 Correction: -2 Thermometer ID: 3106989 .

Bot #	Sample ID	pH <2 Y/N	Initial Sample Vol ml	Final Samp Vol ml	Spiked Used Amount Spiked	Spiked Used Added- Y or N	Spikelot and Conc (mg/L)	MP Number	Comments/Lot # and Vendor
71	JC86352-4	Y	30	30					
72	JC86352-5	Y	30	30					
73	MP14260-MB1	N	30	30				MP14260	
74	MP14260-B1	N	30	30	2.0 ml	Y	0.03		HG-19-145-190-HGA3, IN. V.
75	MP14260-S1	Y	30	30	2.0 ml	Y	0.03		JC86178-24, HG-19-145-190-HGA3, I. V.
76	MP14260-S2	Y	30	30	2.0 ml	Y	0.03		JC86178-24, HG-19-145-190-HGA3, I. V.
77	JC86178-24	Y	30	30					
78	JC85400-3	Y	30	30					
79	JC86361-1	Y	30	30					YELLOW, SEDIMENT
80	JC86361-1F	Y	30	30					YELLOW
81	JC86361-2	Y	30	30					SEDIMENT
82	JC86361-2F	Y	30	30					
83	JC86271-2	Y	30	30					SEDIMENT, PINK
84	JC86397-1	Y	30	30					
85	JC86397-2	Y	30	30					
86	JC86397-3	Y	30	30					
87	JC86397-4	Y	30	30					
88	JC86397-5	Y	30	30					
89	JC86399-1	Y	30	30					
90	JC86177-6	Y	30	30					
91	JC86177-7	Y	30	30					
92	JC86389-3	Y	30	30					
93	JC86190-1	Y	5	30					LIQ
94	JC86190-2	Y	5	30					LIQ
95	MB1CONF	N	30	30					
96	B1CONF	N	30	30	2.0 ml	Y	0.03		HG-19-145-190-HGA3, IN. V.
97	LODCONF	N	30	30	1.5 ml	Y	0.003		HG-19-145-191-HGA4, IN. V.
98	LOQCONF	N	30	30	2.0 ml	Y	0.003		HG-19-145-191-HGA4, IN. V.
99									
100									
101									
102									
103									
104									
105									

ANALYST: EAL
Spike witness: CH
QC: REVIEWER:

DATE: 4/16/19
DATE: 4/16/19
DATE:

DAYT-MET-0113-01-FORM-HGWATERPREP
Revision Date: 8/28/18

13.5.1 13

SGS

Mercury Hot Block Digestion Log

Product HG / EHG / HGTCLP
Matrix: Aq / Liq / DW

MA Batch #: MA46511
Analyst: EAL/CH
Date: 4/16/2019
Balance ID: B-24
Reagents: See attached sheet
Auto pipet ID M-72

Methods (Circle as appropriate)
EPA 245.1 **SW846 7470A**

Required corrected Temp. Range is 90-95 C.

Hot Block # 7 Start Time: 7:00 End Time: 9:00 Tube # S1-CRI

Start Temp: 94 Corrected Start Temp: 93 Correction: -1 Thermometer ID: 6805236

End Temp: 94 Corrected Start Temp: 93 Correction: -1 Thermometer ID: 6805236

Bot #	Sample ID	pH <2 Y/N	Initial Sample Vol ml	Final Samp Vol ml	Spiked Used Amount Spiked	Spiked Used Added-Y or N	Spikelot and Conc (mg/L)	MP Number	Comments/Lot # and Vendor
S-1	Calibration Blank	N	30 ml	30 ml	0.0 ml	N			
S-2	0.2 ug/l Standard	N	30 ml	30 ml	2.0 ml	Y	0.003		HG-19-145-191-HGA4, IN. V.
S-3	0.5 ug/l Standard	N	30 ml	30 ml	5.0 ml	Y	0.003		HG-19-145-191-HGA4, IN. V.
S-4	1.0 ug/l Standard	N	30 ml	30 ml	1.0 ml	Y	0.030		HG-19-145-190-HGA3, IN. V.
S-5	2.5 ug/l Standard	N	30 ml	30 ml	2.5 ml	Y	0.030		HG-19-145-190-HGA3, IN. V.
S-6	5.0 ug/l Standard	N	30 ml	30 ml	5.0 ml	Y	0.030		HG-19-145-190-HGA3, IN. V.
ICV	ICV (External)	N	30 ml	30 ml	3.0 ml	Y	0.03		HG-19-145-192-HGB3, ULTRA
ICB	ICB	N	30 ml	30 ml	0.0 ml	N			
CCV	CCV	N	30 ml	30 ml	2.5 ml	Y	0.03		HG-19-145-190-HGA3, IN. V.
CCB	CCB	N	30 ml	30 ml	0.0 ml	N			
CRI	CRI	N	30 ml	30 ml	2.0 ml	Y	0.003		HG-19-145-191-HGA4, IN. V.

Form HG022-03
Revision Date: 8/24/15

ANALYST: EAL DATE: 4/16/19
QC: REVIEWER: _____ DATE: _____

13.5.1
13

SGS

Reagent Information Log- Hg Waters

MA # 46511

Reagents	Exp. Date	Reagent # or manufacturer lot #
Conc. Sulfuric Acid	3/20/2024	Fisher -188014
Conc. Nitric Acid	4/2/2021	Baker -213500
Sodium Chloride-Hydroxylamine Hydrochloride	10/8/2019	HG-19-144-. 288 -HGHCL
Potassium Permanganate 5%	10/8/2019	HG-19-144-. 286 -HGKM2
Potassium Persulfate	10/8/2019	HG-19-144-. 287 -HGKS
Stannous Chloride	4/17/2019	HG-18-140 193 -HGS
STD Hg standard solution 1000 ppm	3/1/2020	Inorganic Ventures K2-HG669550
STD Hg standard solu tion 30 ppb	4/17/2019	HG-19-145- 190 -HGA3
STD Hg standard solu tion 3ppb	4/17/2019	HG-19-145- 191 -HGA4
ICV Hg standard solution 1000 ppm	6/30/2021	Ultra T00601
ICV Hg standard solution 30ppb	4/17/2019	HG-19-145- 192 -HGB3
Dilution Acid	10/8/2019	HG-19-145- 165 HGD2
Digestion Tubes Lot	N/A	Environmental Express 1808354
ph Paper	N/A	Hydrion: 206717

Form:GN087A79-03
Rev. Date: 6/6/17

SGS North America Inc.

Accutest Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP14115	4/12/2019	7:30	4/12/2019	12:00	JC86081-4	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	8	4156601	94	0	94
1	End	8	4156601	95	0	95
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-74	1812117	

Sample ID	Bottle Number	Pres (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP14115-MB1	N/A	N	50	50	AB		
MP14115-B1	N/A	N	50	50	AB	ABCDE	
MP14115-S1	1	Y	50	50	AB	ABCDE	
MP14115-S2	1	Y	50	50	AB	ABCDE	
MP14115-SD1	1	Y	50	50	AB		
JC86081-4	1	Y	50	50	AB		
JC86081-6	1	Y	50	50	AB		
JC86089-1	6	Y	50	50	AB		
JC86089-2	6	Y	50	50	AB		

Reagents Groups

Group	Description	MLs Used
A	CONC HNO3	3
B	1:1 HCL	5
C		
D		
E		
F		
G		
H		

Spike Groups

Group	Description	MLs Used
A	ACCUTEST 13A B REV-1	0.2
B	ACCUTEST 14B REV-1	0.2
C	AG 20PPM	0.2
D	MINERALS 1000PPM	0.2
E	SE 20PPM	0.8
F	MINERALS 1000PPM	0.2
G		
H		

Comments:

Analyst BHOOMAP **Approved by** RAKESHP **Approved on** 4/12/2019

Note: Reagent traceability for batch Start Date can be seen on the reagent traceability page for this batch.
Serial Dilution samples shown for QC purposes only.
Acceptable Temperature range is 90-95 degrees C unless otherwise noted

13.5.2 13

SGS

Metals Digestion Reagents Information Log

Digestion Batch ID: MP 14115 **Date:** 4/12/19

Matrix: ALL

Standard/Reagent Type	Exp. Date	Standard/Reagent ID
Spiking Solution - (ACCUTEST-13A REV1)	9/27/2019	MP-015-1150
Spiking Solution - (ACCUTEST-14A REV1)	9/27/2019	MP-015-1151
Spiking Solution - 5000 mg/l Minerals	2/15/2020	N2-MEB674932 MFG: INO. VENT.
Spiking Solution - Sulfur 1000ppm	4/11/2021	LOT: 041118 MFG: ABS. GRADE
Spiking Solution - Si 1000ppm	10/31/2019	N2-SI668066 MFG: INO. VENT.
Spiking Solution - Bi 1000ppm	1/16/2020	N2-BI669548 MFG: INO. VENT.
Spiking Solution - Se 20ppm	9/27/2019	MP-015-1149
Spiking Solution - Li 1000ppm	1/24/2020	N2-LI665824 MFG: INO. VENT.
Spiking Solution- Ag 20 ppm	10/9/2019	MP-015-1155
Spiking Solution - (ACCUTEST-13B REV1)	9/27/2019	MP-015-1147
Spiking Solution - (ACCUTEST-14B REV1)	7/3/2019	MP-015-1126
Spiking Solution - 1000ppm Minerals	6/4/2019	MP-015-1117
Spiking Solution- P		
Nitric Acid	4/11/2021	LOT: 205793 MFG: J.T. BAKER
Nitric Acid (1:1)	10/9/2019	MP-018-42-174 1:1 HNO3
Hydrochloric Acid	4/11/2021	LOT: 201226 MFG: J.T. BAKER
Hydrochloric Acid (1:1)	10/8/2019	MP-018-42-173 1:1 HCL
Hydrogen Peroxide	4/11/2021	LOT: 188006 MFG: FISHER
Soil Lab Control/Soil LC	3/31/2020	LOT: D094-540 MFG: ERA
Teflon Chips(For Soil MB and Blank Spike)	N/A	LOT: 24242815 MFG: SAINT-GOBAIN
Digestion Tubes	N/A	LOT: 1812114 MFG: ENV. EXPRESS
pH Paper	6/15/2021	LOT: 217518 MFG: HYDRION
Filter paper Q8	N/A	LOT: 16917460 MFG: FISHER
Filter paper 0.45µm	N/A	LOT: F8MA26136E MFG: FISHER

Spike witnessed By: [signature]

Validated By:

Validated On:

Metals Prep Reagent
1/17/18

13.5.2 13

Accutest Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP14185	4/15/2019	8:00	4/15/2019	13:30	JC85901-2	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	3	2106305	94	-2	92
1	End	3	2106305	94	-2	92
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-74	1812114	

Sample ID	Bottle Number	Pres (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP14185-MB1	N/A	N	50	50	AB		
MP14185-B1	N/A	N	50	50	AB	ABCD	
MP14185-S1	3	Y	50	50	AB	ABCD	
MP14185-S2	3	Y	50	50	AB	ABCD	
MP14185-SD1	3	Y	50	50	AB		
JC85901-1	1	Y	50	50	AB		
JC85901-10	1	Y	50	50	AB		
JC85901-11	1	Y	50	50	AB		
JC85901-12	1	Y	50	50	AB		
JC85901-13	1	Y	50	50	AB		
JC85901-2	3	Y	50	50	AB		
JC85901-3	1	Y	50	50	AB		
JC85901-4	1	Y	50	50	AB		
JC85901-5	1	Y	50	50	AB		
JC85901-6	1	Y	50	50	AB		
JC85901-7	1	Y	50	50	AB		
JC85901-8	1	Y	50	50	AB		
JC85901-9	1	Y	50	50	AB		
JC86030-1	3	Y	50	50	AB		
JC86030-4	3	Y	50	50	AB		
JC86030-8	3	Y	50	50	AB		
JC86089-1F	14	Y	50	50	AB		
JC86089-2F	14	Y	50	50	AB		
MP14185-B2	N/A	N	50	50	AB	EFGHI	
MP14185-S3	3	Y	50	50	AB	EFGHI	
MP14185-S4	3	Y	50	50	AB	EFGHI	

Reagents Groups

Group	Description	MLs Used
A	CONC. HNO3	3
B	1:1 HCL	5
C		
D		
E		
F		
G		
H		

Spike Groups

Group	Description	MLs Used
A	ACCUTEST 13A REV1	0.5
B	ACCUTEST 14A REV1	0.5
C	MINERALS 5000PPM	0.25
D	AG 20PPM	
E	MINERALS 1000PPM	0.2
F	AG 20PPM	
G	ACCUTEST 13B REV1	0.2
H	ACCUTEST 14B REV1	0.2

Comments:

Analyst TAYLORG **Approved by** Wendyz **Approved on** 4/15/2019

Note: Reagent traceability for batch Start Date can be seen on the reagent traceability page for this batch.
Serial Dilution samples shown for QC purposes only.
Acceptable Temperature range is 90-95 degrees C unless otherwise noted

Accutest Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP14185	4/15/2019	8:00	4/15/2019	13:30	JC85901-2	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	3	2106305	94	-2	92
1	End	3	2106305	94	-2	92
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-74	1812114	

Sample ID	Bottle Number	Pres (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP14185-MB1	N/A	N	50	50	AB		
MP14185-B1	N/A	N	50	50	AB	ABCD	
MP14185-S1	3	Y	50	50	AB	ABCD	
MP14185-S2	3	Y	50	50	AB	ABCD	
MP14185-SD1	3	Y	50	50	AB		
JC85901-1	1	Y	50	50	AB		
JC85901-10	1	Y	50	50	AB		
JC85901-11	1	Y	50	50	AB		
JC85901-12	1	Y	50	50	AB		
JC85901-13	1	Y	50	50	AB		
JC85901-2	3	Y	50	50	AB		
JC85901-3	1	Y	50	50	AB		
JC85901-4	1	Y	50	50	AB		
JC85901-5	1	Y	50	50	AB		
JC85901-6	1	Y	50	50	AB		
JC85901-7	1	Y	50	50	AB		
JC85901-8	1	Y	50	50	AB		
JC85901-9	1	Y	50	50	AB		
JC86030-1	3	Y	50	50	AB		
JC86030-4	3	Y	50	50	AB		
JC86030-8	3	Y	50	50	AB		
JC86089-1F	14	Y	50	50	AB		
JC86089-2F	14	Y	50	50	AB		
MP14185-B2	N/A	N	50	50	AB	EFGHI	
MP14185-S3	3	Y	50	50	AB	EFGHI	
MP14185-S4	3	Y	50	50	AB	EFGHI	

Reagents Groups		
Group	Description	MLs Used
A	CONC HNO3	3
B	1:1 HCL	5
C		
D		
E		
F		
G		
H		

Spike Groups		
Group	Description	MLs Used
A	ACCUTEST 13A REV1	0.5
B	ACCUTEST 14A REV1	0.5
C	MINERALS 5000PPM	0.25
D	AG 20PPM	
E	MINERALS 1000PPM	0.2
F	AG 20PPM	
G	ACCUTEST 13B REV1	0.2
H	ACCUTEST 14B REV1	0.2

Comments: _____

Analyst TAYLORG Approved by _____ Approved on _____

Note: Reagent traceability for batch Start Date can be seen on the reagent traceability page for this batch.
Serial Dilution samples shown for QC purposes only.
Acceptable Temperature range is 90-95 degrees C unless otherwise noted

SGS

Metals Digestion Reagents Information Log

Digestion Batch ID: MP 14185 **Date:** 4/15/19

Matrix: ALL

Standard/Reagent Type	Exp. Date	Standard/Reagent ID
Spiking Solution - (ACCUTEST-13A REV1)	9/27/2019	MP-015-1150
Spiking Solution - (ACCUTEST-14A REV1)	9/27/2019	MP-015-1151
Spiking Solution - 5000 mg/l Minerals	2/15/2020	N2-MEB674932 MFG: INO. VENT.
Spiking Solution - Sulfur 1000ppm	4/11/2021	LOT: 041118 MFG: ABS. GRADE
Spiking Solution - Si 1000ppm	10/31/2019	N2-SI668066 MFG: INO. VENT.
Spiking Solution - Bi 1000ppm	1/16/2020	N2-BI669548 MFG: INO. VENT.
Spiking Solution - Se 20ppm	9/27/2019	MP-015-1149
Spiking Solution - Li 1000ppm	1/24/2020	N2-LI665824 MFG: INO. VENT.
Spiking Solution- Ag 20 ppm	10/9/2019	MP-015-1155
Spiking Solution - (ACCUTEST-13B REV1)	10/10/2019	MP-015-1157
Spiking Solution - (ACCUTEST-14B REV1)	7/3/2019	MP-015-1126
Spiking Solution - 1000ppm Minerals	6/4/2019	MP-015-1117
Spiking Solution- P		
Nitric Acid	4/11/2021	LOT: 205793 MFG: J.T. BAKER
Nitric Acid (1:1)	10/9/2019	MP-018-42-174 1:1 HNO3
Hydrochloric Acid	4/11/2021	LOT: 201226 MFG: J.T. BAKER
Hydrochloric Acid (1:1)	10/8/2019	MP-018-42-173 1:1 HCL
Hydrogen Peroxide	4/11/2021	LOT: 188006 MFG: FISHER
Soil Lab Control/Soil LC	3/31/2020	LOT: D094-540 MFG: ERA
Teflon Chips(For Soil MB and Blank Spike)	N/A	LOT: 24242815 MFG: SAINT-GOBAIN
Digestion Tubes	N/A	LOT: 1812114 MFG: ENV. EXPRESS
pH Paper	6/15/2021	LOT: 217518 MFG: HYDRION
Filter paper Q8	N/A	LOT: 16917460 MFG: FISHER
Filter paper 0.45µm	N/A	LOT: F8MA26136E MFG: FISHER

Spike witnessed By: BP

Validated By:

Validated On:

Metals Prep Reagent
1/17/18

13.5.3
13

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chemical Oxygen Demand	GP20663/GN94211	20	0.0	mg/l	50	51.3	102.6	90-110%
Chemical Oxygen Demand	GP20663/GN94211	20	0.0	mg/l				
HEM Oil and Grease	GP20614/GN94107	5.0	0.0	mg/l	40.05	34.3	85.6	78-114%
Solids, Total Suspended	GN94111	4.0	0.0	mg/l				
Total Organic Carbon	GP20570/GN94012	1.0	0.0	mg/l	10	10.9	109.0	90-110%

Associated Samples:
Batch GN94111: JC86089-1, JC86089-2
Batch GP20570: JC86089-1, JC86089-2
Batch GP20614: JC86089-1, JC86089-2
Batch GP20663: JC86089-1, JC86089-2
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chemical Oxygen Demand	GP20663/GN94211	JC85706-2	mg/l	37.8	37.8	0.0	0-25%
HEM Oil and Grease	GP20614/GN94107	JC85762-6	mg/l	0.10	0.0	0.0	0-18%
Solids, Total Suspended	GN94111	JC86036-5	mg/l	0.0	0.0	0.0	0-17%

Associated Samples:
Batch GN94111: JC86089-1, JC86089-2
Batch GP20614: JC86089-1, JC86089-2
Batch GP20663: JC86089-1, JC86089-2
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chemical Oxygen Demand	GP20663/GN94211	JC85706-2	mg/l	37.8	50	86.5	97.4	55-133%
HEM Oil and Grease	GP20614/GN94107	JC85624-2	mg/l	0.0	40.05	35.1	87.6	78-114%
Total Organic Carbon	GP20570/GN94012	JC85602-1	mg/l	1.4	10	12.4	110.0	71-132%

Associated Samples:
Batch GP20570: JC86089-1, JC86089-2
Batch GP20614: JC86089-1, JC86089-2
Batch GP20663: JC86089-1, JC86089-2
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Total Organic Carbon	GP20570/GN94012	JC85602-1	mg/l	1.4	10	12.5	0.8	10%

Associated Samples:
Batch GP20570: JC86089-1, JC86089-2
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: E90411W1.TXT Date Analyzed: 04/11/19 Methods: SM5310 B-11
Analyst: JO Run ID: GN94012
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:03	GN94012-STD1	1		STDA
13:17	GN94012-STD2	1		STDB
13:28	GN94012-STD3	1		STDC
13:42	GN94012-STD4	1		STDD
13:54	GN94012-STD5	1		STDE
14:06	GN94012-STD6	1		STDF
14:18	GN94012-STD7	1		STDG
14:31	GN94012-STD8	1		STDH
17:16	ZZZZZZ	1		
17:28	GN94012-CRI1	1		
17:39	GN94012-HSTD1	1		
18:26	GN94012-ICV1	1		
18:38	GN94012-ICB1	1		
18:48	GN94012-CCV1	1		
19:00	GN94012-CCB1	1		
19:12	ZZZZZZ	1		
19:21	GP20535-MB2	1		
19:32	GP20535-B2	1		
19:58	JC85380-1F	1		(sample used for QC only; not part of login JC86089)
20:09	JC85380-2F	1		(sample used for QC only; not part of login JC86089)
20:21	GP20535-S2	1		
20:32	GP20535-MSD2	1		
20:45	ZZZZZZ	1		
20:54	ZZZZZZ	1		
21:05	ZZZZZZ	1		
21:17	GN94012-CCVA1	1		
21:29	GN94012-CCB2	1		
21:38	ZZZZZZ	1		
21:50	ZZZZZZ	1		
22:01	ZZZZZZ	1		
22:12	ZZZZZZ	1		
22:23	ZZZZZZ	1		
22:34	GP20569-MB1	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: E90411W1.TXT Date Analyzed: 04/11/19 Methods: SM5310 B-11
Analyst: JO Run ID: GN94012
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:46	GP20569-B1	1		
22:57	JC85453-1	1		(sample used for QC only; not part of login JC86089)
23:08	GP20569-S1	1		
23:19	GP20569-MSD1	1		
23:31	GN94012-CCV2	1		
23:52	GN94012-CCB3	1		
00:13	ZZZZZZ	1		
00:25	ZZZZZZ	1		
00:36	ZZZZZZ	1		
00:47	ZZZZZZ	1		
00:58	ZZZZZZ	1		
01:09	ZZZZZZ	1		
01:20	ZZZZZZ	1		
01:31	ZZZZZZ	5		
01:43	ZZZZZZ	5		
01:54	GN94012-CCVA2	1		
02:07	GN94012-CCB4	1		
02:16	GP20570-MB1	1		
02:27	GP20570-B1	1		
02:39	ZZZZZZ	1		
02:50	ZZZZZZ	1		
03:03	ZZZZZZ	1		
03:12	JC85602-1	1		(sample used for QC only; not part of login JC86089)
03:23	GP20570-S1	1		
03:35	GP20570-MSD1	1		
03:46	ZZZZZZ	1		
03:57	JC86089-1	1		average of 3 injections
04:08	GN94012-CCV3	1		
04:19	GN94012-CCB5	1		
04:37	JC86089-2	1		
04:49	ZZZZZZ	1		
05:01	ZZZZZZ	1		
05:11	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: E90411W1.TXT Date Analyzed: 04/11/19 Methods: SM5310 B-11
Analyst: JO Run ID: GN94012
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
05:23	GN94012-CCVA3	1		
05:33	GN94012-CCB6	1		
05:44	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JC86089
Account: TCMAW - Tantara Corporation
Project: USACE Buffalo Nike Missle UST, East Aurora, NY

File ID: E90411W1.TXT Date Analyzed: 04/11/19 Methods: SM5310 B-11
Run ID: GN94012 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN94012-CRI1	Total Organic Carbon	1.16	1.0	0.72	1	116.0	70-130
GN94012-HSTD1	Total Organic Carbon	49.8	1.0	0.72	50	99.6	90-110
GN94012-ICV1	Total Organic Carbon	19.0	1.0	0.72	20	95.0	90-110
GN94012-ICB1	Total Organic Carbon	0.72 U	1.0	0.72			
GN94012-CCV1	Total Organic Carbon	24.6	1.0	0.72	25	98.4	90-110
GN94012-CCB1	Total Organic Carbon	0.72 U	1.0	0.72			
GN94012-CCVA1	Total Organic Carbon	48.8	1.0	0.72	50	97.6	
GN94012-CCB2	Total Organic Carbon	0.72 U	1.0	0.72			
GN94012-CCV2	Total Organic Carbon	24.5	1.0	0.72	25	98.0	90-110
GN94012-CCB3	Total Organic Carbon	0.72 U	1.0	0.72			
GN94012-CCVA2	Total Organic Carbon	49.4	1.0	0.72	50	98.8	
GN94012-CCB4	Total Organic Carbon	0.72 U	1.0	0.72			
GN94012-CCV3	Total Organic Carbon	24.3	1.0	0.72	25	97.2	90-110
GN94012-CCB5	Total Organic Carbon	0.72 U	1.0	0.72			
GN94012-CCVA3	Total Organic Carbon	49.8	1.0	0.72	50	99.6	
GN94012-CCB6	Total Organic Carbon	0.72 U	1.0	0.72			

(!) Outside of QC limits

General Chemistry

Raw Data

LABORATORY REVIEW SIGNATURE FORM
(To be stored with the raw data)

File ID: E90411W1.TXT Date Analyzed: 04/11/19 Methods: SM5310 B-11
Analyst: JO Run ID: GN94012

The following analyst(s) have reviewd this run and attest that, to the best of their knowledge, this documentation is complete and correct:

Analyst: John Date 4/12/19

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

The following supervisor or their designee has reviewed this run and attests that, to the best of their knowledge, this documentation is complete and correct:

Supervisor (or designee): _____ Date 4/12/19

C:\TOC-L\Data\e90411w1.toc.tlx

	Type	Sample Name	Sample ID	Origin	Manual Diluti	Result	Comment	Status
1	Unknown	WASHCONF		TOCAQ.met	1.000	NPOC:0.11		Completed
2	Unknown	CRI		TOCAQ.met	1.000	NPOC:1.16		Completed
3	Unknown	HSTD		TOCAQ.met	1.000	NPOC:49.8		Completed
4	Unknown	ICV		TOCAQ.met	1.000	NPOC:19.0		Completed
5	Unknown	ICB		TOCAQ.met	1.000	NPOC:0.17		Completed
6	Unknown	CCV		TOCAQ.met	1.000	NPOC:24.6		Completed
7	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.10		Completed
8	Unknown	SPARGERCHK		TOCAQ.met	1.000	NPOC:0.06		Completed
9	Unknown	GP20535-MB2	DOC	TOCAQ.met	1.000	NPOC:0.07		Completed
10	Unknown	GP20535-B2		TOCAQ.met	1.000	NPOC:10.6		Completed
11	Unknown	JC85380-1F		TOCAQ.met	1.000	NPOC:2.56		Completed
12	Unknown	JC85380-2F		TOCAQ.met	1.000	NPOC:1.70		Completed
13	Unknown	GP20535-S2	JC85380-2F	TOCAQ.met	1.000	NPOC:11.2		Completed
14	Unknown	GP20535-MSD2	JC85380-2F	TOCAQ.met	1.000	NPOC:11.4		Completed
15	Unknown	JC85380-3F		TOCAQ.met	1.000	NPOC:0.57		Completed
16	Unknown	JC85380-4F		TOCAQ.met	1.000	NPOC:1.61		Completed
17	Unknown	JC85380-5F		TOCAQ.met	1.000	NPOC:1.92		Completed
18	Unknown	CCVA		TOCAQ.met	1.000	NPOC:48.8		Completed
19	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.19		Completed
20	Unknown	JC85380-6F		TOCAQ.met	1.000	NPOC:1.43		Completed
21	Unknown	JC85380-7F		TOCAQ.met	1.000	NPOC:2.28		Completed
22	Unknown	JC85380-8F		TOCAQ.met	1.000	NPOC:3.53		Completed
23	Unknown	JC85380-9F		TOCAQ.met	1.000	NPOC:5.76		Completed
24	Unknown	JC85380-10F		TOCAQ.met	1.000	NPOC:7.72		Completed
25	Unknown	GP20569-MB1		TOCAQ.met	1.000	NPOC:0.03		Completed
26	Unknown	GP20569-B1		TOCAQ.met	1.000	NPOC:10.6		Completed
27	Unknown	JC85453-1		TOCAQ.met	1.000	NPOC:4.35		Completed
28	Unknown	GP20569-S1	JC85453-1	TOCAQ.met	1.000	NPOC:14.6		Completed
29	Unknown	GP20569-MSD1	JC85453-1	TOCAQ.met	1.000	NPOC:14.6		Completed
30	Unknown	CCV		TOCAQ.met	1.000	NPOC:24.4		Completed
31	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.17		Completed
32	Unknown	JC85453-2		TOCAQ.met	1.000	NPOC:12.7		Completed
33	Unknown	JC85453-3		TOCAQ.met	1.000	NPOC:8.60		Completed
34	Unknown	JC85453-4		TOCAQ.met	1.000	NPOC:7.84		Completed
35	Unknown	JC85453-5		TOCAQ.met	1.000	NPOC:9.64		Completed
36	Unknown	JC85453-6		TOCAQ.met	1.000	NPOC:9.59		Completed
37	Unknown	JC85453-7		TOCAQ.met	1.000	NPOC:0.46		Completed
38	Unknown	JC85282-6		TOCAQ.met	1.000	NPOC:4.28		Completed
39	Unknown	JC85346-1CONF		TOCAQ.met	5.000	NPOC:27.5		Completed
40	Unknown	JC85346-9CONF		TOCAQ.met	5.000	NPOC:92.9		Completed
41	Unknown	CCVA		TOCAQ.met	1.000	NPOC:49.4		Completed
42	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.19		Completed
43	Unknown	GP20570-MB1		TOCAQ.met	1.000	NPOC:0.00		Completed
44	Unknown	GP20570-B1		TOCAQ.met	1.000	NPOC:10.8		Completed
45	Unknown	JC85850-1		TOCAQ.met	1.000	NPOC:28.6		Completed
46	Unknown	JC85850-2		TOCAQ.met	1.000	NPOC:131.	over	Completed
47	Unknown	JC85850-3		TOCAQ.met	1.000	NPOC:0.88		Completed
48	Unknown	JC85602-1		TOCAQ.met	1.000	NPOC:1.40		Completed
49	Unknown	GP20570-S1	JC85602-1	TOCAQ.met	1.000	NPOC:12.4		Completed
50	Unknown	GP20570-MSD1	JC85602-1	TOCAQ.met	1.000	NPOC:12.4		Completed
51	Unknown	JC85626-1		TOCAQ.met	1.000	NPOC:5.74		Completed

C:\TOC-L\Data\e90411w1.toc.tlx

	Type	Sample Name	Sample ID	Origin	Manual Diluti	Result	Comment	Status
52	Unknown	JC86089-1	A	TOCAQ.met	1.000	NPOC:2.84	Average	Completed
53	Unknown	CCV		TOCAQ.met	1.000	NPOC:24.2		Completed
54	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.15		Completed
55	Unknown	JC86089-2	A	TOCAQ.met	1.000	NPOC:2.74		Completed
56	Unknown	JC85718-1		TOCAQ.met	1.000	NPOC:2.45		Completed
57	Unknown	JC85778-2		TOCAQ.met	1.000	NPOC:103.	over	Completed
58	Unknown	JC85794-3	A	TOCAQ.met	1.000	NPOC:5.88		Completed
59	Unknown	CCVA		TOCAQ.met	1.000	NPOC:49.7		Completed
60	Unknown	CCB		TOCAQ.met	1.000	NPOC:0.25		Completed
61	Unknown	SPARGERCHK		TOCAQ.met	1.000	NPOC:0.01		Completed

GN94012
e90411w1.toc

John
4/12/19

SGS

GN Batch ID: GN94012
Date: 4/11/19

Test: Total Organic Carbon
Product: TOC or DOC
Method: SM5310 B, C, or D-11, SW846 9060M

e96411w1.toc

Note: Refer to raw data and LIMS for information not shown below.

Autosampler Position #	Sample ID	pH	Dilution Factor	Bottle #	Comments
1	WASHCONF	<2			
2	CRI				
3	HSTD				
4	ICV				
5	ICB				
6	CCV				
7	CCB				
8	SPARGERCHK				
9	GP20535-MB2	DOC			
10	GP20535-B2				
11	JC85380-1F				lab filtered with 0.45um frit
12	JC85380-2F			12	
13	GP20535-S2			10	
14	GP20535-MSD2			10	JC85380-2F
15	JC85380-3F			10	JC85380-2F
16	JC85380-4F			10	
17	JC85380-5F			10	
18	CCVA			10	
19	CCB				
20	JC85380-6F				
21	JC85380-7F			10	
22	JC85380-8F			10	lab filtered with 0.45um frit
23	JC85380-9F			10	
24	JC85380-10F			10	
25	GP20569-MB1	TOC		10	
26	GP20569-B1				
27	JC85453-1				
				6	

Analyst: JoHW Date: 4/11/19 QCReviewer: _____ Date: _____

Comments: BSP: 500ul of 1000ppm KHP → 50ml of DI H_2O TV = 10 mg/L
MS/MSD: 200ul of 1000ppm KHP → 20ml of sample TV = 10 mg/L
ICV: 5ml of 100ppm sucrose → 25ml of DI H_2O TV = 20 mg/L

Form: GN054-04
Rev. Date: 2/27/18

SGS

GN Batch ID: GN94012
Date: 4/11/19

Test: Total Organic Carbon
Product: TOC or DOC
Method: SM5310 B, C, or D-11, SW846 9060M
Note: Refer to raw data and LIMS for information not shown below.

Autosampler Position #	Sample ID	pH	Dilution Factor	Bottle #	Comments
28	GP20569-S1	<2		6	JC85453-1
29	GP20569-MSD1			6	JC85453-1
30	CCV				
31	CCB				
32	JC85453-2			6	
33	JC85453-3			6	
34	JC85453-4			6	
35	JC85453-5			6	
36	JC85453-6			6	
37	JC85453-7			5	
38	JC85282-6			9	
39	JC85346-1 Conf		1:5	6	Dark yellow, oily
40	JC85346-9 Conf		1:5	6	Dark brown, strong smell
41	CCVA				
42	CCB				
43	GP20570-MB1	TOC			
44	GP20570-B1				
45	JC85850-1			6	
46	JC85850-2			6	
47	JC85850-3			5	
48	JC85602-1			3	
49	GP20570-S1			3	JC85602-1
50	GP20570-MSD1			3	JC85602-1
51	JC85626-1			5	
52	JC86089-1			10	
53	CCV				
54	CCB				

Analyst: JAW Date: 4/11/19 QCReviewer: _____ Date: _____
Comments:

Form: GN054-04
Rev. Date: 2/27/18

SGS

GN Batch ID: GN94012
Date: 4/11/19

Test: Total Organic Carbon
Product: TOC or DOC
Method: SM5310 B, C, or D-11, SW846 9060M
Note: Refer to raw data and LIMS for information not shown below.

Autosampler Position #	Sample ID	pH	Dilution Factor	Bottle #	Comments
55	JC86089-2	<2		10	
56	JC85718-1			5	
57	JC85778-2			1	
58	JC85794-3			4	
59	CCVA				
60	CCB				
61	SPARGEBLANK				

Analyst: JCW Date: 4/11/19 QCReviewer: [signature] Date: 4/12/19
Comments:

Form: GN054-04
Rev. Date: 2/27/18

SGS

Analyst JorW Product TOC Autopipette #

Date 4/11/19 Batch ID GN94012 Class A Vol. Flask

Sample Dilution Prep Log

Sample ID	Dilution	Initial Volume	Final Volume	Comments
JC85346-1	1:5	10	50	
JC85346-9	1:5	10	50	

QC Reviewer:________ Date:________

Form: GN165-01
Rev. Date: 2/25/03

SGS

GN94012

Reagent Information Log - TOC/DOC - Water

Reagent	Reagent # or Manufacturer/Lot	Exp. Date
Potassium Hydrogen Phthlate (KHP), Stock Solution 1000 mg/L	GNE3-57653-TOC	6/28/19
Carbonate/Bicarbonate Stock Solution	GNE3-57650-TOC	6/28/19
Sparger Check Solution	GNE3-57651-TOC	4/25/19
CCV Solution	GNE3-57655-TOC	4/25/19
CCVA Solution (50 ppm)	GNE3-57656-TOC	4/25/19
Spiking Solution	GNE3-57653-TOC	6/28/19
CRI Check	GNE3-57658-TOC	4/25/19
HCl	JT Baker 0000217157	3/20/21
pH Hydron paper	hydrion 232516	11/30/19
Sucrose solution	GNE3-57654-TOC	4/25/19
DOC Filter	IC Millex lot #R8BA17691	n/a

All standards and stocks were made as described in the SOP for this method (circle one): Y or N
If no (N), see attached page for standards prep.

15.1 15

Form: GN087A67-04
Rev. Date: 4/6/18

SGS

GENERAL CHEMISTRY STANDARD PREPARATION LOG

PRODUCT: Toc
GN or GP NUMBER: GN940k

Intermediate Standard Description	Stock used to prepare standard	Stock concentration (mg/L)	Stock volume or weight used with units	Balance/ Autopipet ID (*)	Diluent	Final Volume (ml)	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
GNE3-57653-Toc	acros A0376652	KHP	2.125g	B-39	DI H_2O	1000mL	1000 ppm	6/28/19	CZD	3/28/19
GNE3-57657 Toc	GNE3-57653-Toc	1000ppm	20mL	class A pipet	↓	200mL	100 ppm	4/25/19	↓	↓
GNE3-57654 Toc	Fisher 173322	sucrose	0.0474g	B-39	↓	200mL	100 ppm	↓	↓	↓

Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration (mg/L)	Intermediate or Stock volume used in ml	Balance/ Autopipet ID (*)	Diluent	Final Volume (ml)	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
KHP STDs										
GNE3-57658 Toc	GNE3-57657Toc	100ppm	1.0	class A pipet	DI H_2O	100mL	1.0	4/25/19	CZD	3/28/19
GNE3-57659 Toc	↓	↓	2.0	↓	↓	↓	2.0	↓	↓	↓
GNE3-57660 Toc			5.0				5.0			
GNE3-57661 Toc			10.0				10.0			
GNE3-57662 Toc			20.0				20.0			
GNE3-57663 Toc			30.0				30.0			
GNE3-57664 Toc			50.0				50.0			
KHP STDs										
GNE3-57652 Toc	acros A0383564	KHP	0.2125g	B-39	DI H_2O	100mL	100ppm	4/25/19	CZD	3/28/19
GNE3-57655 Toc	GNE3-57652 Toc	100ppm	50mL	class A pipet	↓	↓	25 ppm	↓	↓	↓
GNE3-57656 Toc	↓	↓	100mL	↓			50 ppm			

* If Class A glass pipets are used, enter an A. For balances or autopipets, then enter the appropriate Accutest ID number.

DAYT-WET-0166-05-FORM-STD PREP
REV: 9/17/18

TOC-Control L Report

e90328w1.toc tlx

Instr.Information

Instrument Options	TOC/ASI/Sparge Kit/
Catalyst	Regular Sensitivity

Cal. Curve

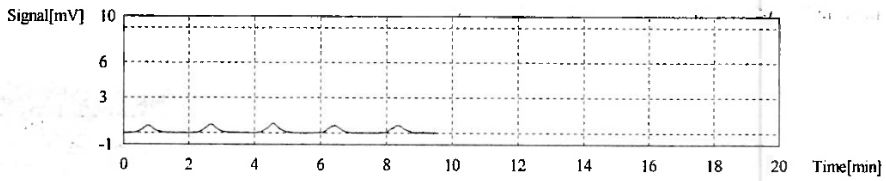
Sample Name:	Untitled
Sample ID:	Untitled
Cal. Curve:	e90328w1.2019_03_28_12_56_48.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1.515	100uL	1.000	*******		3/28/2019 1:03:40 PM
2	1.654	100uL	1.000	*******		3/28/2019 1:05:55 PM
3	1.912	100uL	1.000	*******	E	3/28/2019 1:08:10 PM
4	1.508	100uL	1.000	*******		3/28/2019 1:10:25 PM
5	1.487	100uL	1.000	*******		3/28/2019 1:12:40 PM

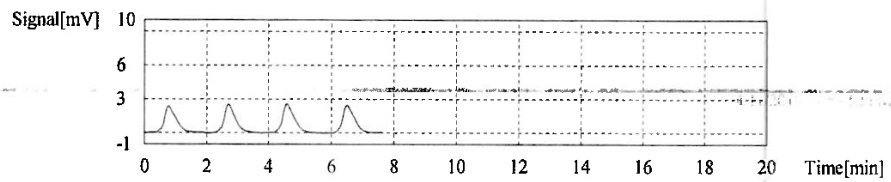
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 1.541



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	6.009	100uL	1.000	*******		3/28/2019 1:17:03 PM
2	6.479	100uL	1.000	*******		3/28/2019 1:19:18 PM
3	6.308	100uL	1.000	*******		3/28/2019 1:21:33 PM
4	6.206	100uL	1.000	*******		3/28/2019 1:23:48 PM

Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 6.250



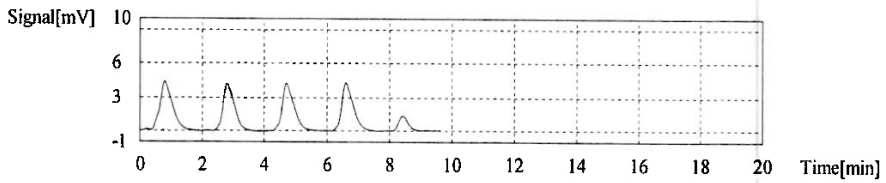
Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil	Rem.	Ex.	Date / Time
1	12.85	100uL	1.000	*******		3/28/2019 1:28:31 PM
2	10.98	100uL	1.000	*******		3/28/2019 1:30:46 PM
3	10.96	100uL	1.000	*******		3/28/2019 1:33:01 PM
4	11.04	100uL	1.000	*******		3/28/2019 1:35:17 PM
5	2.692	100uL	1.000	*******	E	3/28/2019 1:37:32 PM

TOC-Control L Report

e90328w1.toc.tlx

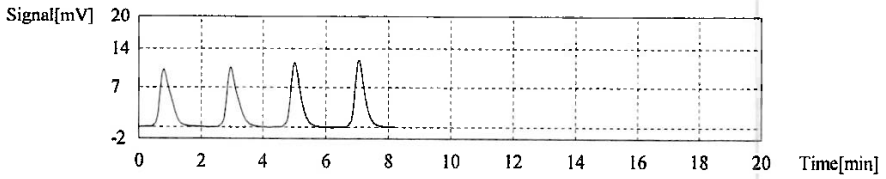
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 11.46



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	25.54	100uL	1.000	*******		3/28/2019 1:42:10 PM
2	26.15	100uL	1.000	*******		3/28/2019 1:44:32 PM
3	25.63	100uL	1.000	*******		3/28/2019 1:46:56 PM
4	25.79	100uL	1.000	*******		3/28/2019 1:49:16 PM

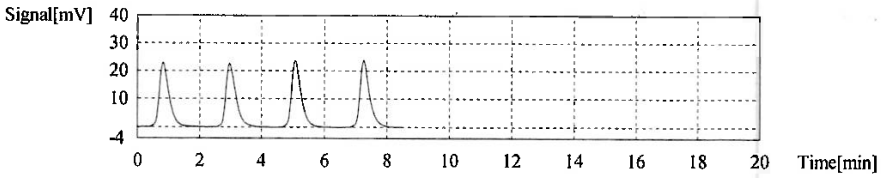
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 25.78



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	50.01	100uL	1.000	*******		3/28/2019 1:54:08 PM
2	50.45	100uL	1.000	*******		3/28/2019 1:56:35 PM
3	50.31	100uL	1.000	*******		3/28/2019 1:59:06 PM
4	50.28	100uL	1.000	*******		3/28/2019 2:01:30 PM

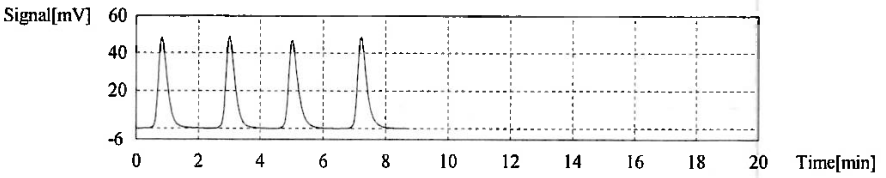
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 50.26



Conc: 20.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	99.66	100uL	1.000	*******		3/28/2019 2:06:23 PM
2	101.0	100uL	1.000	*******		3/28/2019 2:08:46 PM
3	100.2	100uL	1.000	*******		3/28/2019 2:11:19 PM
4	100.5	100uL	1.000	*******		3/28/2019 2:13:56 PM

Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 100.3



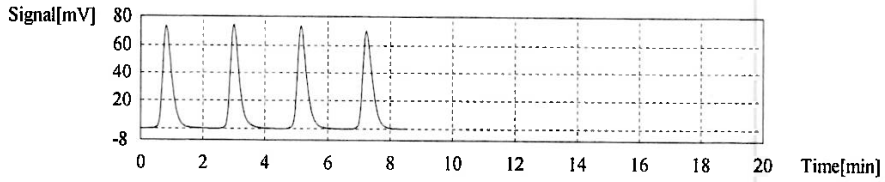
Conc: 30.00mg/L

TOC-Control L Report

e90328w1.toc tlx

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	152.7	100uL	1.000	*******		3/28/2019 2:18:49 PM
2	151.3	100uL	1.000	*******		3/28/2019 2:21:19 PM
3	152.0	100uL	1.000	*******		3/28/2019 2:23:45 PM
4	151.9	100uL	1.000	*******		3/28/2019 2:26:15 PM

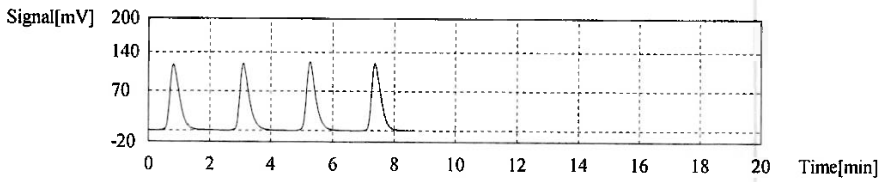
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 152.0



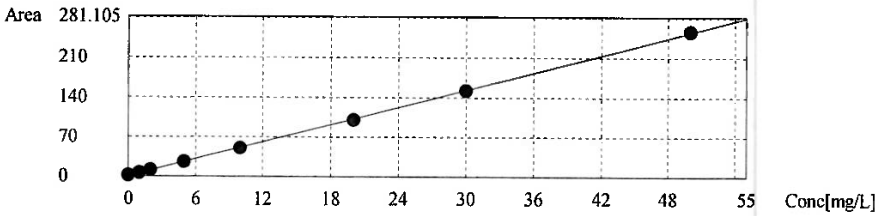
Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	258.0	100uL	1.000	*******		3/28/2019 2:31:15 PM
2	255.7	100uL	1.000	*******		3/28/2019 2:33:46 PM
3	253.7	100uL	1.000	*******		3/28/2019 2:36:13 PM
4	254.8	100uL	1.000	*******		3/28/2019 2:38:40 PM

Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 255.6



Slope: 5.073
Intercept 0.5650
r^2 0.9999
r 0.9999
Zero Shift No



TOC-Control L Report

e90411w1 toc tlx

Instr.Information

Instrument Options: TOC/ASI/Sparge Kit/
Catalyst: Regular Sensitivity

Sample

Sample Name: WASHCONF
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result

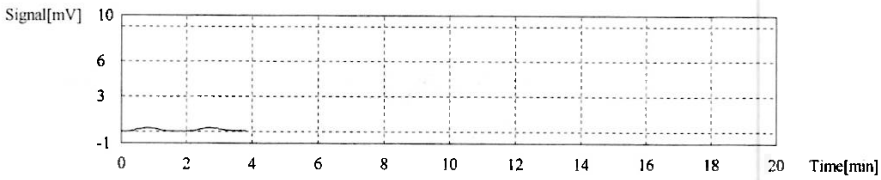
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.1125mg/L

1. Det

Anal.. NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.155	0.1163mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 5:16:55 PM
2	1.116	0.1086mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 5:19:00 PM

Mean Conc. 0.1125mg/L
CV Conc 4.83%



Sample

Sample Name: CRI
Sample ID:
Origin: TOCAQ.met
Status: Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 1.164mg/L

1. Det

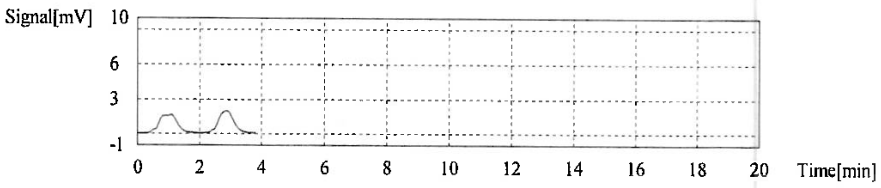
Anal.. NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.314	1.133mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 5:28:04 PM
2	6.625	1.195mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 5:30:09 PM

TOC-Control L Report

e90411w1.toc tlx

Mean Conc. 1.164mg/L
CV Conc 3.72%



Sample

Sample Name: HSTD
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

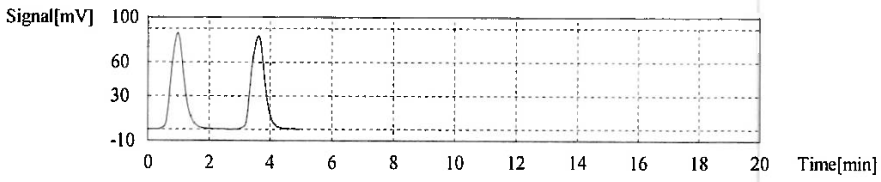
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 49.84mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	253.2	49.80mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 5:39:57 PM
2	253.6	49.88mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 5:42:37 PM

Mean Conc. 49.84mg/L
CV Conc 0.11%



Sample

Sample Name: ICV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 19.00mg/L

1. Det

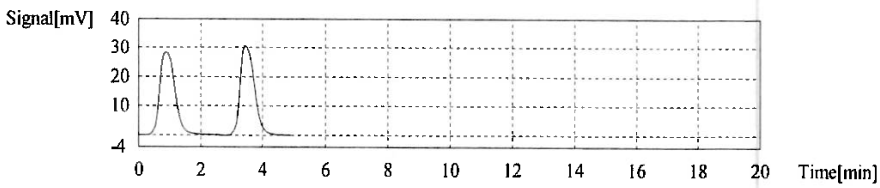
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	96.62	18.93mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 6:26:06 PM
2	97.28	19.06mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 6:28:38 PM

TOC-Control L Report

e90411w1.toc.tlx

Mean Conc. 19.00mg/L
CV Conc 0.48%



Sample

Sample Name: ICB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

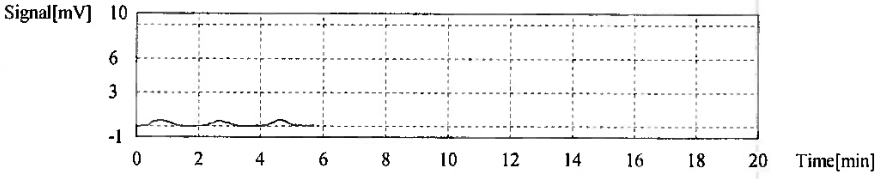
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.1794mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.944	0.2718mg/L	100uL	1.000	E	e90328w1 2019_03_28_12_56_48 cal	4/11/2019 6:36:33 PM
2	1.478	0.1800mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 6:38:43 PM
3	1.472	0.1788mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 6:40:48 PM

Mean Conc. 0.1794mg/L
CV Conc 0.47%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 24.64mg/L

1. Det

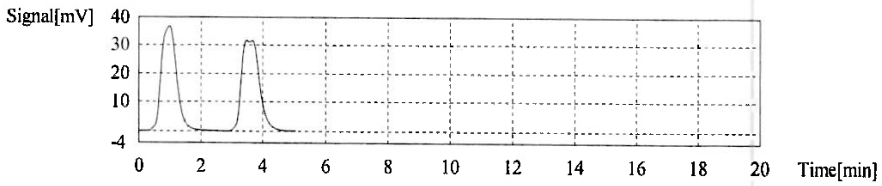
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	125.5	24.63mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 6:48:25 PM
2	125.6	24.65mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 6:51:06 PM

TOC-Control L Report

e90411wl toc tlx

Mean Conc. 24.64mg/L
CV Conc 0.06%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

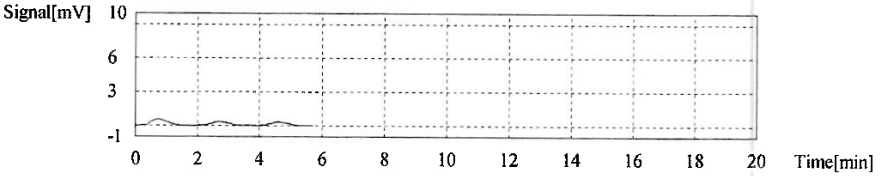
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.1082mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.873	0.2578mg/L	100uL	1.000	E	e90328w1 2019_03_28_12_56_48 cal	4/11/2019 6:58:52 PM
2	1.166	0.1185mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 7:00:57 PM
3	1.062	0.09797mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 7:03:02 PM

Mean Conc. 0.1082mg/L
CV Conc 13.39%



Sample

Sample Name: SPARGERCHK
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.06177mg/L

1. Det

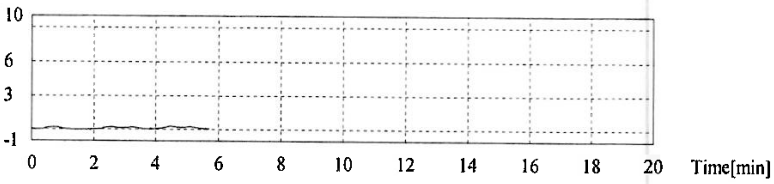
Anal.: NPOC

TOC-Control L Report

e90411wl.toc.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5350	-0.00591mg/L	100uL	1.000	E	e90328wl 2019_03_28_12_56_48 cal	4/11/2019 7:10:01 PM
2	0.8886	0.06379mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/11/2019 7:12:09 PM
3	0.8681	0.05975mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/11/2019 7:14:15 PM

Mean Conc. 0.06177mg/L
CV Conc 4.63%



Sample

Sample Name: GP20535-MB2
Sample ID: DOC
Origin: TOCAQ.met
Status Completed
Chk. Result

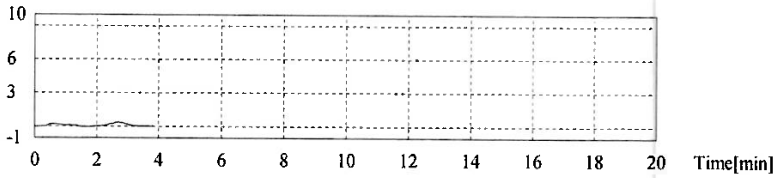
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.07032mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9065	0.06732mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/11/2019 7:21:11 PM
2	0.9370	0.07333mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/11/2019 7:23:21 PM

Mean Conc. 0.07032mg/L
CV Conc 6.05%



Sample

Sample Name: GP20535-B2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 10.68mg/L

1. Det

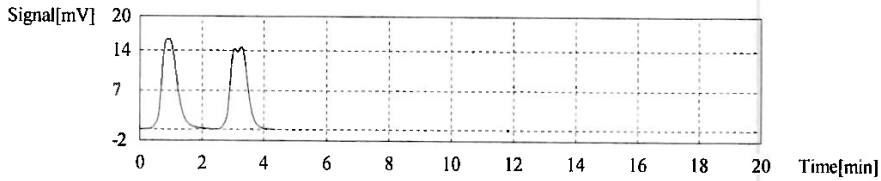
Anal.: NPOC

TOC-Control L Report

e90411w1.toc tlx

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	54.42	10.62mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/11/2019 7:32:40 PM
2	55.10	10.75mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/11/2019 7:35:04 PM

Mean Conc. 10.68mg/L
CV Conc 0.89%



Sample

Sample Name: JC85380-1F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

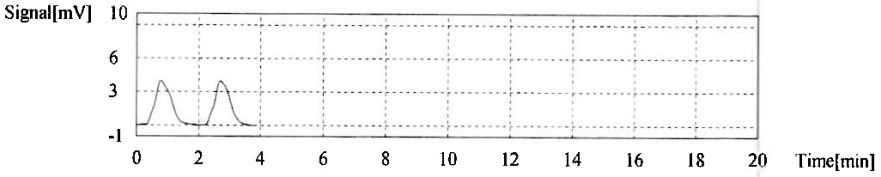
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 2.562mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.49	2.548mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/11/2019 7:58:25 PM
2	13.63	2.575mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/11/2019 8:00:38 PM

Mean Conc. 2.562mg/L
CV Conc 0.76%



Sample

Sample Name: JC85380-2F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 1.702mg/L

1. Det

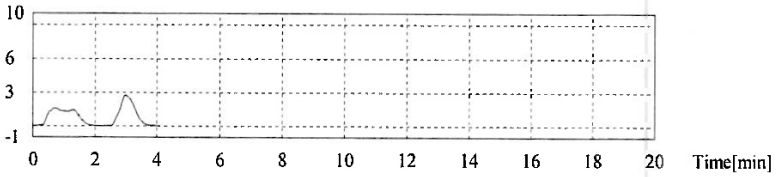
Anal.: NPOC

TOC-Control L Report

e90411w1.toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9189	1.700mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 8:09:51 PM
2	9206	1.703mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 8:11:56 PM

Mean Conc. 1.702mg/L
CV Conc 0.14%



Sample

Sample Name: GP20535-S2
Sample ID: JC85380-2F
Origin: TOCAQ.met
Status Completed
Chk. Result

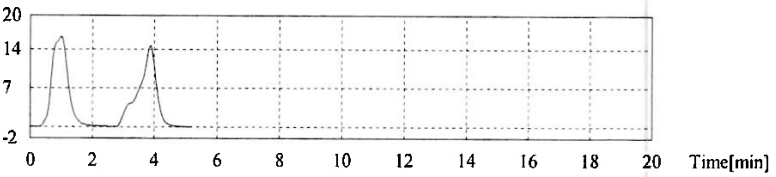
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 11.26mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	58.26	11.37mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 8:21:19 PM
2	57.12	11.15mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 8:24:15 PM

Mean Conc. 11.26mg/L
CV Conc 1.41%



Sample

Sample Name: GP20535-MSD2
Sample ID: JC85380-2F
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 11.46mg/L

1. Det

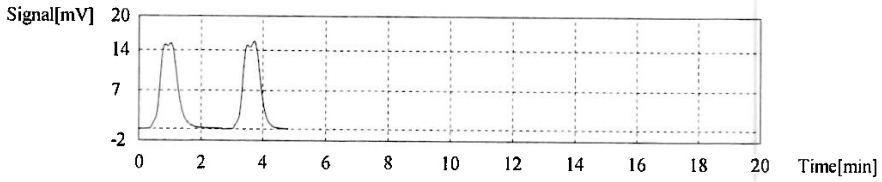
Anal.: NPOC

TOC-Control L Report

e90411w1 toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	58.84	11.49mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 8:32:39 PM
2	58.60	11.44mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 8:35:02 PM

Mean Conc. 11.46mg/L
CV Conc 0.29%



Sample

Sample Name: JC85380-3F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

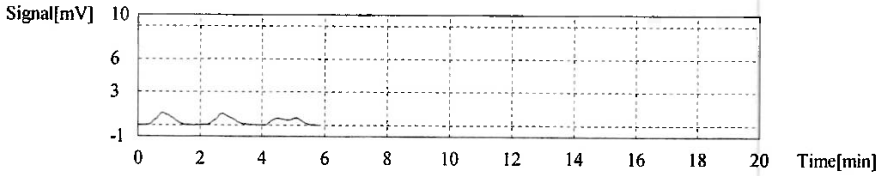
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.5732mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.783	0.6343mg/L	100uL	1.000	E	e90328w1 2019_03_28_12_56_48 cal	4/11/2019 8:43:02 PM
2	3.438	0.5663mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 8:45:07 PM
3	3.508	0.5801mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 8:47:17 PM

Mean Conc. 0.5732mg/L
CV Conc 1.70%



Sample

Sample Name: JC85380-4F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 1.614mg/L

1. Det

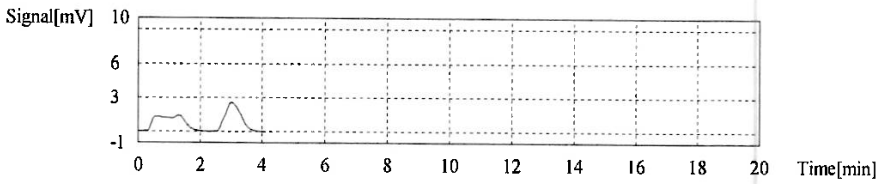
Anal.: NPOC

TOC-Control L Report

e90411w1.toc.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.527	1.569mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/11/2019 8:54:31 PM
2	8.978	1.658mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/11/2019 8:56:36 PM

Mean Conc. 1.614mg/L
CV Conc 3.90%



Sample

Sample Name: JC85380-5F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

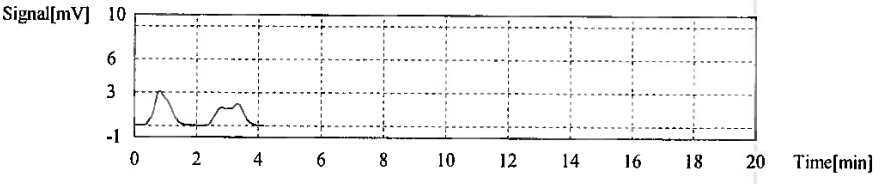
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 1.924mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.52	1.962mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/11/2019 9:05:29 PM
2	10.13	1.885mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/11/2019 9:07:48 PM

Mean Conc. 1.924mg/L
CV Conc 2.83%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 48.83mg/L

1. Det

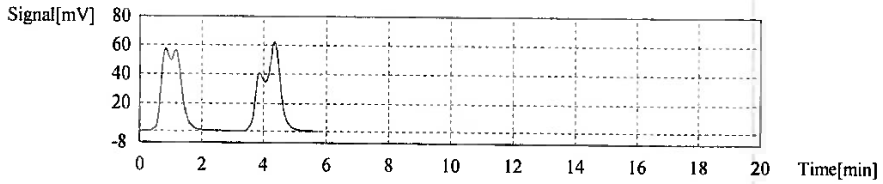
Anal.: NPOC

TOC-Control L Report

e90411wl toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	247.2	48.62mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 9:17:41 PM
2	249.4	49.05mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 9:20:36 PM

Mean Conc. 48.83mg/L
CV Conc 0.63%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

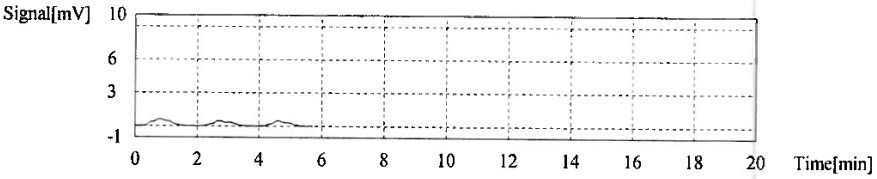
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.1983mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.328	0.3475mg/L	100uL	1.000	E	e90328w1 2019_03_28_12_56_48 cal	4/11/2019 9:27:40 PM
2	1.656	0.2151mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 9:29:45 PM
3	1.486	0.1815mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 9:31:50 PM

Mean Conc. 0.1983mg/L
CV Conc 11.95%



Sample

Sample Name: JC85380-6F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 1.430mg/L

1. Det

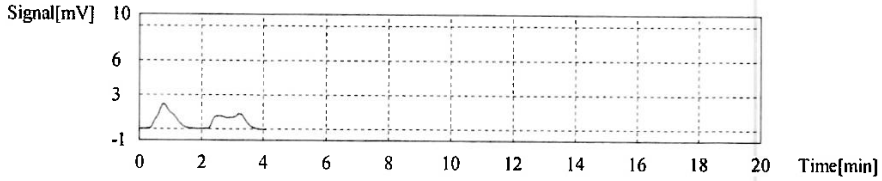
Anal.: NPOC

TOC-Control L Report

e90411w1.toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.696	1.406mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 9:38:49 PM
2	7.946	1.455mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 9:41:11 PM

Mean Conc. 1.430mg/L
CV Conc 2.44%



Sample

Sample Name: JC85380-7F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

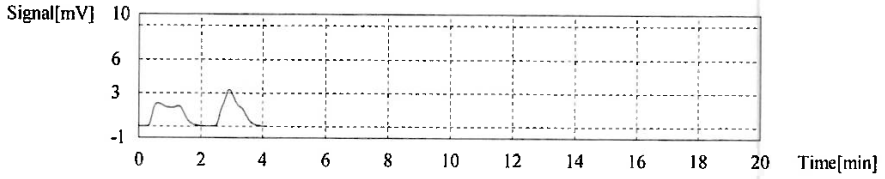
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 2.289mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.06	2.266mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 9:50:14 PM
2	12.30	2.313mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 9:52:24 PM

Mean Conc. 2.289mg/L
CV Conc 1.46%



Sample

Sample Name: JC85380-8F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 3.538mg/L

1. Det

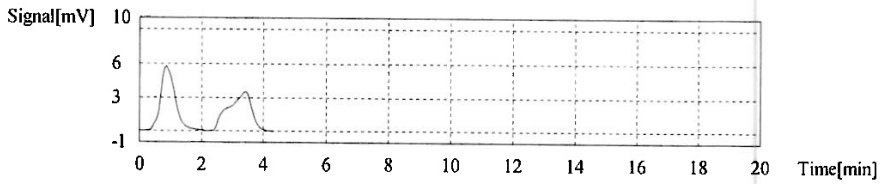
Anal.: NPOC

TOC-Control L Report

e90411wl.toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18 39	3 514mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/11/2019 10:01 17 PM
2	18 64	3.563mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/11/2019 10:03 45 PM

Mean Conc. 3.538mg/L
CV Conc 0.98%



Sample

Sample Name: JC85380-9F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

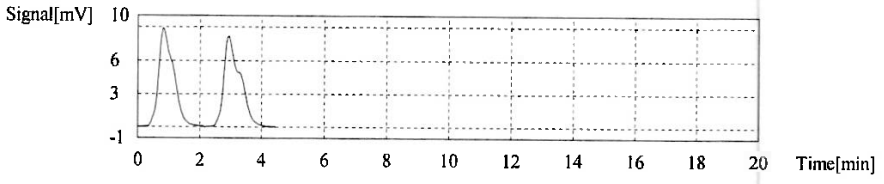
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 5.761mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29 75	5.753mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/11/2019 10:12 30 PM
2	29 83	5.769mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/11/2019 10:15 01 PM

Mean Conc. 5.761mg/L
CV Conc 0.19%



Sample

Sample Name: JC85380-10F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 7.721mg/L

1. Det

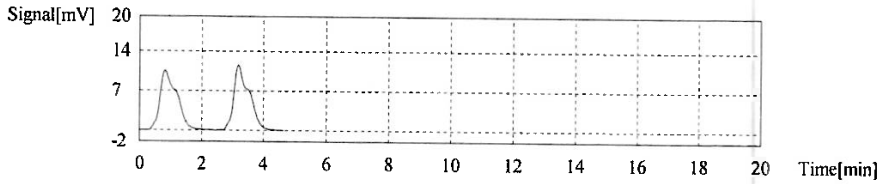
Anal.: NPOC

TOC-Control L Report

e90411wl.toc.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	39.78	7.730mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 10:23:55 PM
2	39.69	7.712mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 10:26:21 PM

Mean Conc. 7.721mg/L
CV Conc 0.16%



Sample

Sample Name: GP20569-MB1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

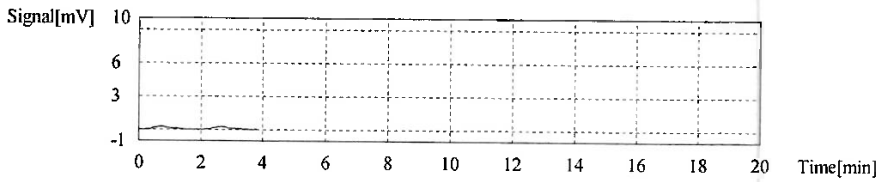
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.03964mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7627	0.03897mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 10:34:36 PM
2	0.7695	0.04031mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 10:36:41 PM

Mean Conc. 0.03964mg/L
CV Conc 2.39%



Sample

Sample Name: GP20569-B1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 10.61mg/L

1. Det

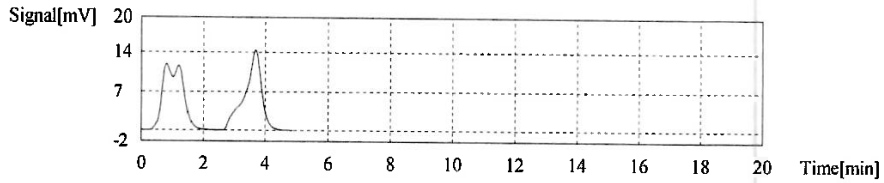
Anal.: NPOC

TOC-Control L Report

e90411w1.toc.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.00	10.73mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 10:46:12 PM
2	53.82	10.50mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 10:48:54 PM

Mean Conc. 10.61mg/L
CV Conc 1.55%



Sample

Sample Name: JC85453-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

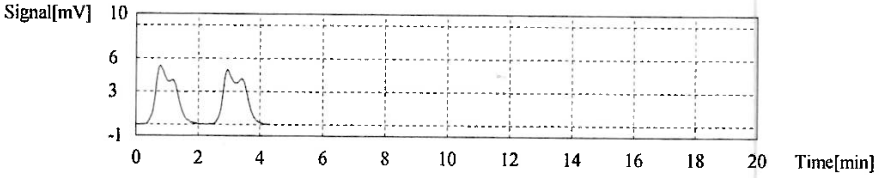
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 4.359mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.56	4.336mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 10:57:11 PM
2	22.80	4.383mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 10:59:31 PM

Mean Conc. 4.359mg/L
CV Conc 0.77%



Sample

Sample Name: GP20569-S1
Sample ID: JC85453-1
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 14.61mg/L

1. Det

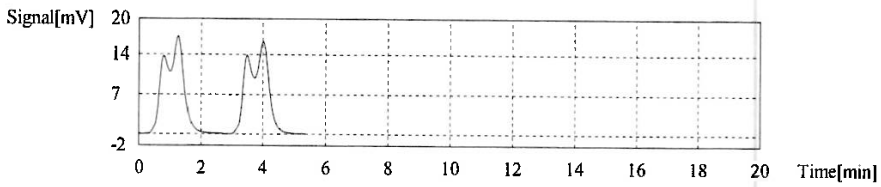
Anal.: NPOC

TOC-Control L Report

e90411wl.toc.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.80	14.63mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/11/2019 11:08:52 PM
2	74.61	14.60mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/11/2019 11:11:46 PM

Mean Conc. 14.61mg/L
CV Conc 0.18%



Sample

Sample Name: GP20569-MSD1
Sample ID: JC85453-1
Origin: TOCAQ.met
Status Completed
Chk. Result

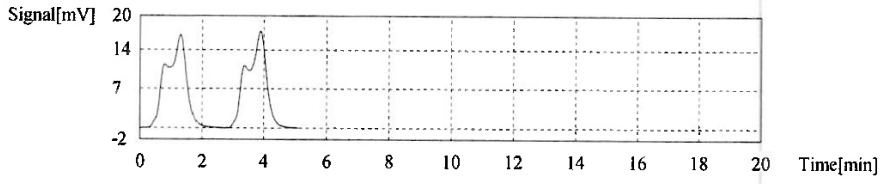
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 14.62mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.50	14.57mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/11/2019 11:19:54 PM
2	74.93	14.66mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/11/2019 11:22:36 PM

Mean Conc. 14.62mg/L
CV Conc 0.41%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 24.49mg/L

1. Det

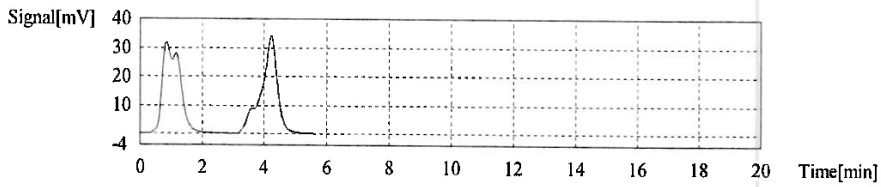
Anal.: NPOC

TOC-Control L Report

e90411w1.toc.tlx

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	126.3	24.78mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 11:31:19 PM
2	123.3	24.19mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 11:34:18 PM

Mean Conc. 24.49mg/L
CV Conc 1.71%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

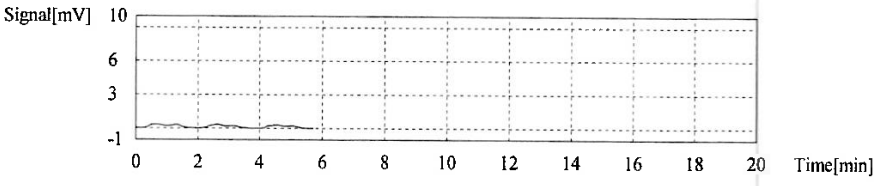
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.1730mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.825	0.2484mg/L	100uL	1.000	E	e90328w1 2019_03_28_12_56_48 cal	4/11/2019 11:50:30 PM
2	1.544	0.1930mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 11:52:35 PM
3	1.341	0.1530mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/11/2019 11:54:40 PM

Mean Conc. 0.1730mg/L
CV Conc 16.36%



Sample

Sample Name: JC85453-2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 12.71mg/L

1. Det

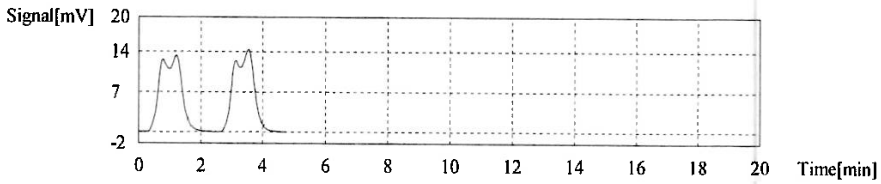
Anal.: NPOC

TOC-Control L Report

e90411wl.toc.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.98	12.70mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 12:13:46 AM
2	65.13	12.73mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 12:16:23 AM

Mean Conc. 12.71mg/L
CV Conc 0.16%



Sample

Sample Name: JC85453-3
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

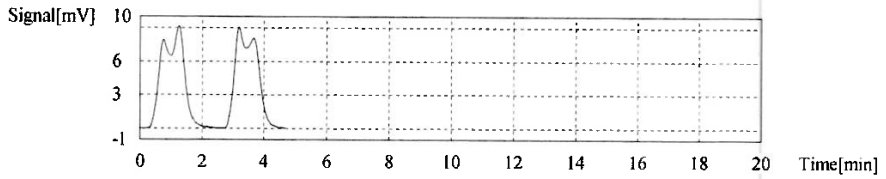
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 8.603mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	44.41	8.643mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 12:25:02 AM
2	44.01	8.564mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 12:27:30 AM

Mean Conc. 8.603mg/L
CV Conc 0.65%



Sample

Sample Name: JC85453-4
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 7.847mg/L

1. Det

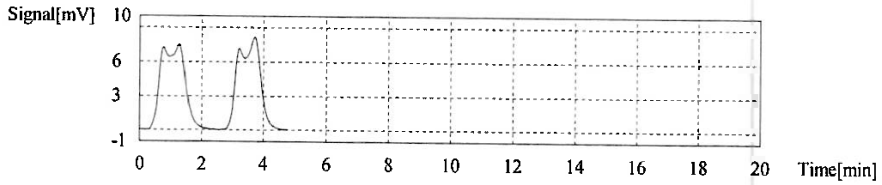
Anal.: NPOC

TOC-Control L Report

e90411wl toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	40.32	7.836mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 12:36:12 AM
2	40.43	7.858mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 12:38:42 AM

Mean Conc. 7.847mg/L
CV Conc 0.20%



Sample

Sample Name: JC85453-5
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

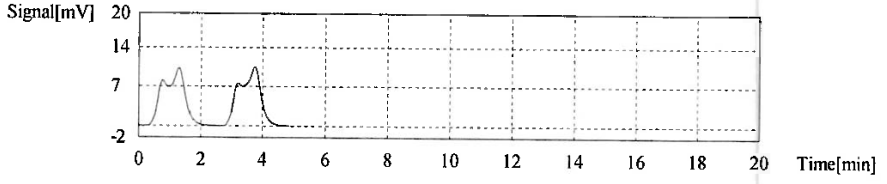
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 9.648mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	49.34	9.614mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 12:47:22 AM
2	49.68	9.681mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 12:49:56 AM

Mean Conc. 9.648mg/L
CV Conc 0.49%



Sample

Sample Name: JC85453-6
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 9.598mg/L

1. Det

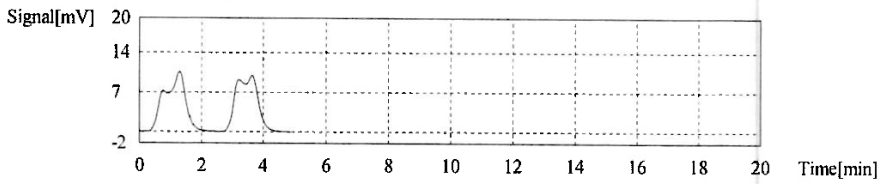
Anal.: NPOC

TOC-Control L Report

e90411w1.toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	49.19	9.585mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/12/2019 12:58:30 AM
2	49.32	9.610mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/12/2019 1:01:07 AM

Mean Conc. 9.598mg/L
CV Conc 0.19%



Sample

Sample Name: JC85453-7
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

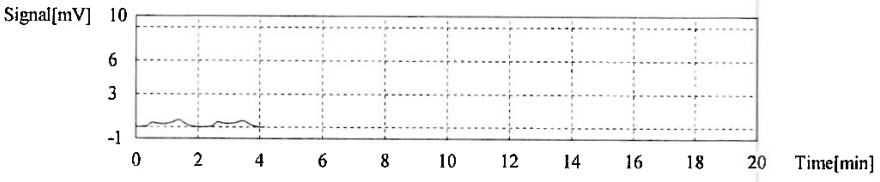
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.4641mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.988	0.4776mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/12/2019 1:09:22 AM
2	2.851	0.4506mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/12/2019 1:11:35 AM

Mean Conc. 0.4641mg/L
CV Conc 4.11%



Sample

Sample Name: JC85282-6
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 4.287mg/L

1. Det

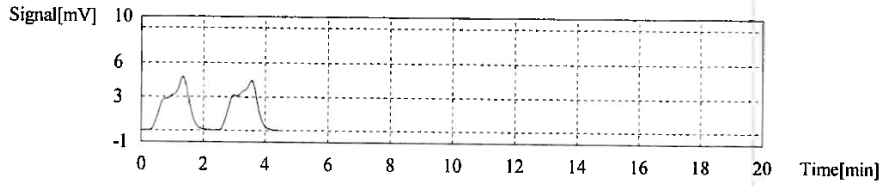
Anal.: NPOC

TOC-Control L Report

e90411w1 toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.31	4.286mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 1:20:39 AM
2	22.32	4.288mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 1:23:02 AM

Mean Conc. 4.287mg/L
CV Conc 0.03%



Sample

Sample Name: JC85346-1CONF
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

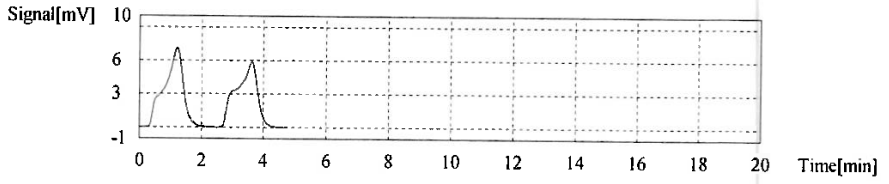
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC 27.59mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29.48	28.50mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 1:31:57 AM
2	27.64	26.68mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 1:34:27 AM

Mean Conc. 27.59mg/L
CV Conc 4.65%



Sample

Sample Name: JC85346-9CONF
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC 92.95mg/L

1. Det

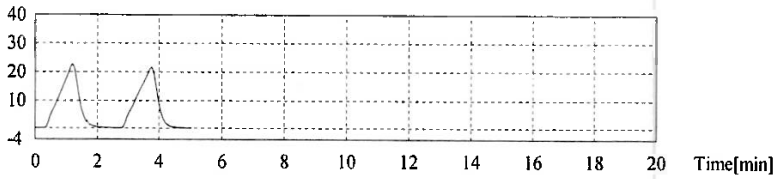
Anal.: NPOC

TOC-Control L Report

e90411wl toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	94.91	92.98mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48.cal	4/12/2019 1:43:15 AM
2	94.84	92.92mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48.cal	4/12/2019 1:46:03 AM

Mean Conc. 92.95mg/L
CV Conc 0.05%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

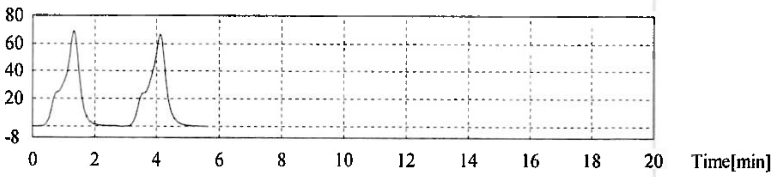
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 49.41mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	251.5	49.46mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48.cal	4/12/2019 1:54:43 AM
2	251.0	49.36mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48.cal	4/12/2019 1:57:44 AM

Mean Conc. 49.41mg/L
CV Conc 0.14%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.1983mg/L

1. Det

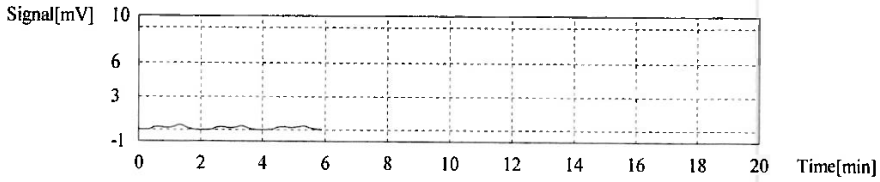
Anal.: NPOC

TOC-Control L Report

e90411wl toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.019	0.2866mg/L	100uL	1.000	E	e90328wl 2019_03_28_12_56_48.cal	4/12/2019 2:05:07 AM
2	1.683	0.2204mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48.cal	4/12/2019 2:07:16 AM
3	1.459	0.1762mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48.cal	4/12/2019 2:09:21 AM

Mean Conc. 0.1983mg/L
CV Conc 15.74%



Sample

Sample Name: GP20570-MB1
Sample ID: TOC
Origin: TOCAQ.met
Status Completed
Chk. Result

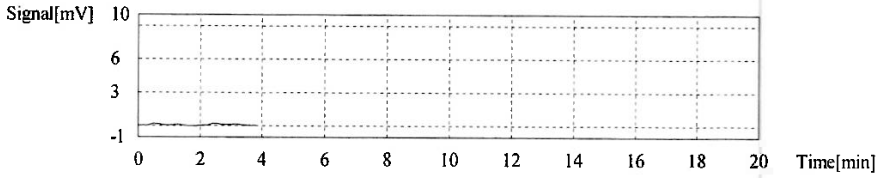
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.00601mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6236	0.01155mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48.cal	4/12/2019 2:16:11 AM
2	0.5674	0.00048mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48.cal	4/12/2019 2:18:20 AM

Mean Conc. 0.00601mg/L
CV Conc 130.24%



Sample

Sample Name: GP20570-B1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 10.85mg/L

1. Det

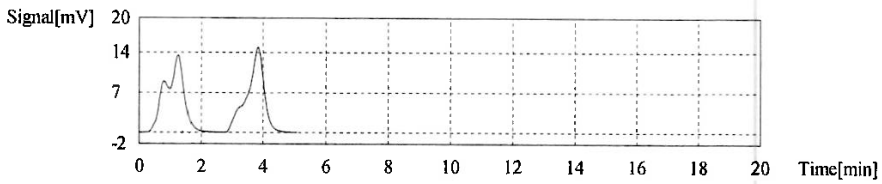
Anal.: NPOC

TOC-Control L Report

e90411w1 toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.45	10.82mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/12/2019 2:27:57 AM
2	55.77	10.88mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/12/2019 2:30:42 AM

Mean Conc. 10.85mg/L
CV Conc 0.41%



Sample

Sample Name: JC85850-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

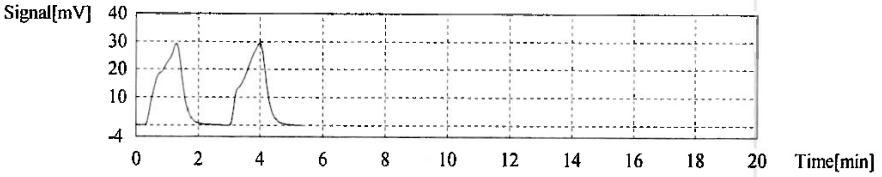
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 28.67mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	146.4	28.75mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/12/2019 2:39:21 AM
2	145.6	28.59mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/12/2019 2:42:12 AM

Mean Conc. 28.67mg/L
CV Conc 0.39%



Sample

Sample Name: JC85850-2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 131.3mg/L

1. Det

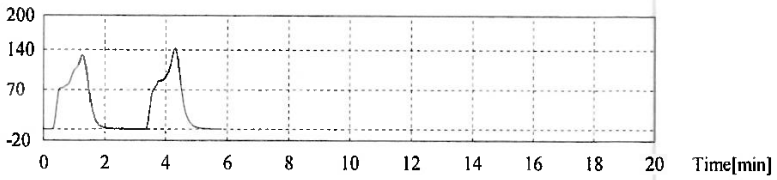
Anal.: NPOC

TOC-Control L Report

e90411wl.toc.tlx

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	666.8	131.3mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 2:50:50 AM
2	666.3	131.2mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 2:53:51 AM

Mean Conc. 131.3mg/L
CV Conc 0.05%



Sample

Sample Name: JC85850-3
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

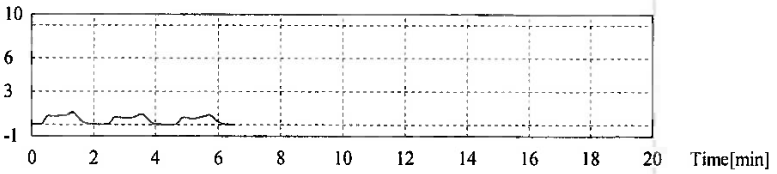
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.8885mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.785	1.029mg/L	100uL	1.000	E	e90328wl 2019_03_28_12_56_48 cal	4/12/2019 3:01:06 AM
2	5.237	0.9209mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 3:03:29 AM
3	4.908	0.8561mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 3:05:46 AM

Mean Conc. 0.8885mg/L
CV Conc 5.16%



Sample

Sample Name: JC85602-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 1.403mg/L

1. Det

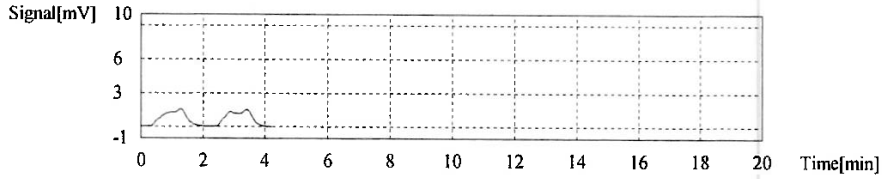
Anal.: NPOC

TOC-Control L Report

e90411w1.toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.589	1.385mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 3:12:15 AM
2	7.778	1.422mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 3:14:30 AM

Mean Conc. 1.403mg/L
CV Conc 1.88%



Sample

Sample Name: GP20570-S1
Sample ID: JC85602-1
Origin: TOCAQ.met
Status Completed
Chk. Result

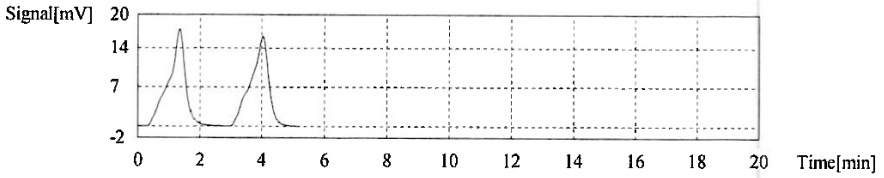
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 12.40mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.57	12.42mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 3:23:59 AM
2	63.42	12.39mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 3:26:41 AM

Mean Conc. 12.40mg/L
CV Conc 0.17%



Sample

Sample Name: GP20570-MSD1
Sample ID: JC85602-1
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 12.46mg/L

1. Det

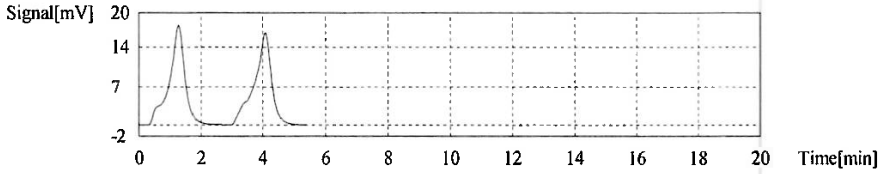
Anal.: NPOC

TOC-Control L Report

e90411w1.toc.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.20	12.35mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/12/2019 3:35:08 AM
2	64.38	12.58mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/12/2019 3:38:05 AM

Mean Conc. 12.46mg/L
CV Conc 1.32%



Sample

Sample Name: JC85626-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

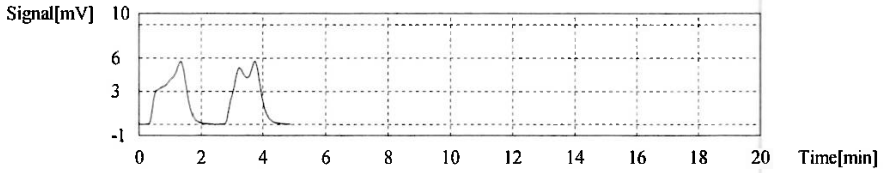
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 5.743mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29.61	5.725mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/12/2019 3:46:05 AM
2	29.79	5.761mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48.cal	4/12/2019 3:48:40 AM

Mean Conc. 5.743mg/L
CV Conc 0.44%



Sample

Sample Name: JC86089-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 2.844mg/L

1. Det

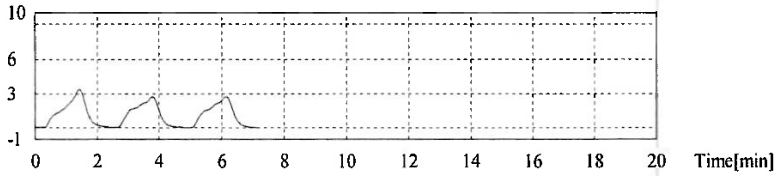
Anal.: NPOC

TOC-Control L Report

e90411wl.toc tlx

No.	Area	Conc.	Inj. Vol	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15 77	2 997mg/L	100uL	1 000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 3 57 10 AM
2	14 61	2 768mg/L	100uL	1 000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 3 59 47 AM
3	14 60	2 767mg/L	100uL	1 000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 4 02 24 AM

Mean Conc. 2.844mg/L
CV Conc 4.66%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

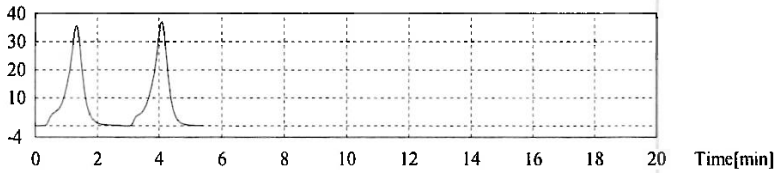
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1 000	NPOC 24 28mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	122 3	24 00mg/L	100uL	1 000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 4 08 44 AM
2	125 2	24 57mg/L	100uL	1 000		e90328wl 2019_03_28_12_56_48 cal	4/12/2019 4 11 38 AM

Mean Conc. 24.28mg/L
CV Conc 1 66%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1 000	NPOC 0 1550mg/L

1. Det

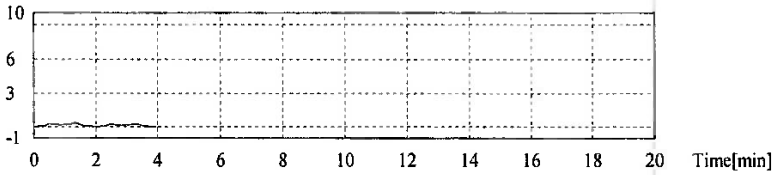
Anal.: NPOC

TOC-Control L Report

e90411wl.toc.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.356	0.1559mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48.cal	4/12/2019 4:19:05 AM
2	1.347	0.1541mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48.cal	4/12/2019 4:21:16 AM

Mean Conc. 0.1550mg/L
CV Conc 0.81%



Sample

Sample Name: JC86089-2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

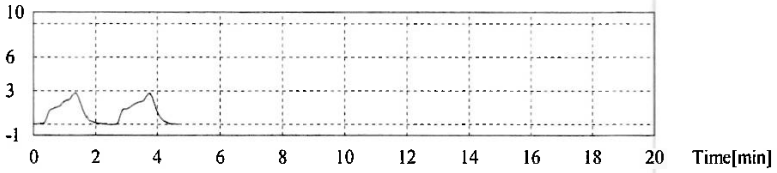
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 2.746mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.20	2.688mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48.cal	4/12/2019 4:37:56 AM
2	14.79	2.804mg/L	100uL	1.000		e90328wl 2019_03_28_12_56_48.cal	4/12/2019 4:40:25 AM

Mean Conc. 2.746mg/L
CV Conc 2.99%



Sample

Sample Name: JC85718-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 2.459mg/L

1. Det

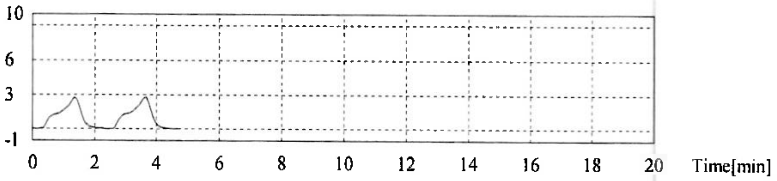
Anal.: NPOC

TOC-Control L Report

e90411wl toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.85	2.422mg/L	100uL	1.000		e90328wl.2019_03_28_12_56_48.cal	4/12/2019 4:49:01 AM
2	13.23	2.496mg/L	100uL	1.000		e90328wl.2019_03_28_12_56_48.cal	4/12/2019 4:51:38 AM

Mean Conc. 2.459mg/L
CV Conc 2.15%



Sample

Sample Name: JC85778-2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

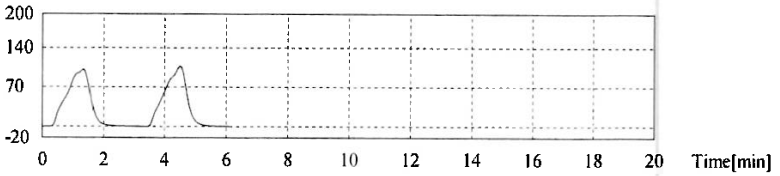
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 103.7mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	527.9	103.9mg/L	100uL	1.000		e90328wl.2019_03_28_12_56_48.cal	4/12/2019 5:01:07 AM
2	525.1	103.4mg/L	100uL	1.000		e90328wl.2019_03_28_12_56_48.cal	4/12/2019 5:04:17 AM

Mean Conc. 103.7mg/L
CV Conc 0.38%



Sample

Sample Name: JC85794-3
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 5.888mg/L

1. Det

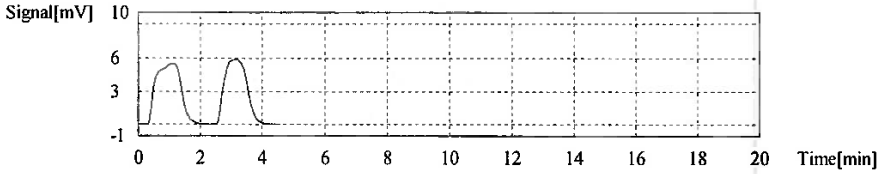
Anal.: NPOC

TOC-Control L Report

e90411w1.toc.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.10	6.019mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 5:11:21 AM
2	29.77	5.757mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 5:13:44 AM

Mean Conc. 5.888mg/L
CV Conc 3.15%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

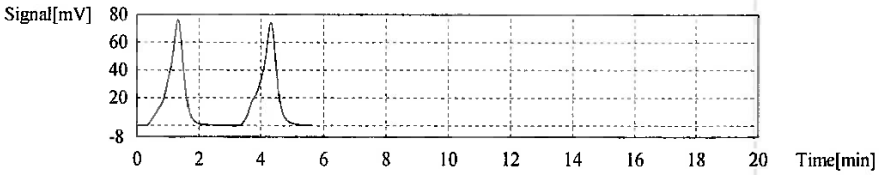
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 49.77mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	252.8	49.72mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 5:23:19 AM
2	253.3	49.82mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 5:26:11 AM

Mean Conc. 49.77mg/L
CV Conc 0.14%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.2521mg/L

1. Det

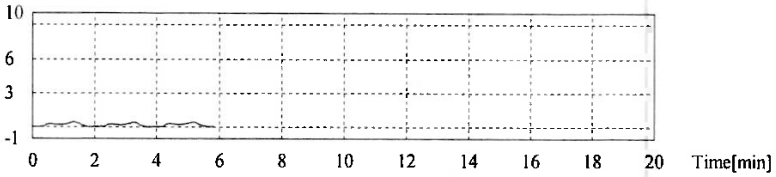
Anal.: NPOC

TOC-Control L Report

e90411w1 toc tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.874	0.2580mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 5:33:26 AM
2	1.580	0.2001mg/L	100uL	1.000	E	e90328w1 2019_03_28_12_56_48 cal	4/12/2019 5:35:32 AM
3	1.814	0.2462mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 5:37:44 AM

Mean Conc. 0.2521mg/L
CV Conc 3.32%



Sample

Sample Name: SPARGERCHK
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

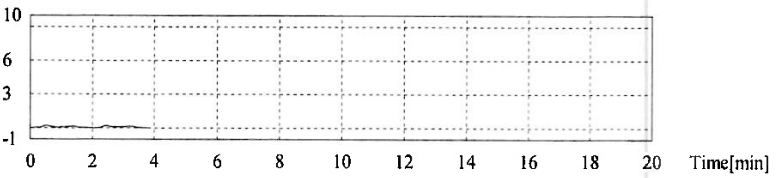
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.01575mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6154	0.00994mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 5:44:35 AM
2	0.6744	0.02157mg/L	100uL	1.000		e90328w1 2019_03_28_12_56_48 cal	4/12/2019 5:46:40 AM

Mean Conc. 0.01575mg/L
CV Conc 52.21%



SGS

TEST: HEM Oil and Grease		OG1664		GN Group:	GN94107
Method: EPA 1664A		Reporting Date:	4/14/2019	GP Group:	GP20614
Date Extracted:	4/14/2019	Final Date Weighed:	4/14/2019	Analyst:	TM
Balance # Used:	B16	(Refer to balance log for balance calibration)		Units:	mg/L

QC Summary — Units: mg/l

Dup Sample ID:	JC85762-6	Samp Res:	<5	Dup Result:	<5	% RPD:	0%
MS Sample ID:	JC85624-2	Samp Res:	<5	Spike:	40.05	MS Res:	35.1
Method Blank Date:	4/14/2019	Result:	<5	RL:	5		
Blank Spike Date:	4/14/2019	Result:	34.3	Spk Amt.	40.05		
External:	NA	Control Limit:	NA	Result:	NA		

% Rec.	87.64
<RL:	yes
% Rec.	85.64
% Rec.	NA

Speed Vap Temperature During Evaporation: 40 deg. C

Speed: Vap III
Vap ID:

(c) refer to Determination of Constant weights page for balance check weight results.

Flask #	Sample ID	Sample pH	Sample Volume (ml)	Total Weight (g)	Tare Weight (g)	Sample Weight (g)	Calc Result	Final Result	RL	Analysis Time
	0.002 g check (c)	na	na	0.0020	0.0020	na	na	na	na	9:00
	1.000 g check (c)	na	na	1.0000	1.0000	na	na	na	na	
	5.000 g check (c)	na	na	5.0001	5.0002	na	na	na	na	
	100 g check (c)	na	na	100.0020	100.0023	na	na	na	na	
MB	GP20614-MB1	≤2	1000	2.5135	2.5134	0.0001	0.100	<5	5.00	9:00
BSP	GP20614-B1	<2	1000	2.5524	2.5181	0.0343	34.300	34.300	5.00	
MS	GP20614-S1	<2	1000	2.5018	2.4667	0.0351	35.100	35.100	5.00	
DUP	GP20614-D1	<2	1000	2.4630	2.4627	0.0003	0.300	<5	5.00	
1	JC85548-1	<2	1000	2.4675	2.4674	0.0001	0.100	<5	5.00	
2	JC85548-2	<2	1000	2.4562	2.4560	0.0002	0.200	<5	5.00	
3	JC85548-3	<2	1000	2.4755	2.4754	0.0001	0.100	<5	5.00	
4	JC85624-2	<2	1000	2.4698	2.4682	0.0016	1.600	<5	5.00	
5	JC85624-3	<2	1000	2.4606	2.4605	0.0001	0.100	<5	5.00	
6	JC85624-4	<2	1000	2.4492	2.4489	0.0003	0.300	<5	5.00	
7	JC85687-1	<2	1000	2.4520	2.4519	0.0001	0.100	<5	5.00	
8	JC86089-1	<2	1000	2.4625	2.4620	0.0005	0.500	<5	5.00	
9	JC86089-2	<2	1000	2.4611	2.4606	0.0005	0.500	<5	5.00	
10	JC85762-6	<2	1000	2.4647	2.4646	0.0001	0.100	<5	5.00	17:20
	0.002 g check (c)	na	na	0.0020	0.0020	na	na	na	na	
	1.000g check(b)	na	na	1.0000	1.0000	na	na	na	na	

SGS

DETERMINATION OF CONSTANT WEIGHT

Test: HEM Oil and Grease
Method: EPA 1664A
Test Code: OG1664 10A

GN Group: GN94107
GP Group: GP20614
Analyst: TM
Units: mg/l

Balance ID#: B-16
Thermometer ID#: 73133
Thermometer correction factc 0

Definition of Constant Weight: Weight loss is less than 0.5 mg (0.0005 g).

Date:		4/14/2019	4/14/2019					
Start Time, End Time, Temp (Corrected, Uncorrected)	NA	16:00-16:30	17:00-17:30					
Sample ID	Flask #	Initial Weight (g)	Second Weight (g)	Re-Weigh ?	Third Weight (g)	Re-Weigh ?	Fourth Weight (g)	Description
0.002 g check (c)		0.0020	0.0020	N				
1.000 g check (c)		1.0000	1.0000	N				
5.000 g check (c)		5.0003	5.0001					
100 g check (c)		100.0020	100.0019	N				
GP20614-MB1	MB	2.5135	2.5135	N				
GP20614-B1	BSP	2.5524	2.5524	N				
GP20614-S1	MS	2.5018	2.5018	N				
GP20614-D1	DUP	2.4630	2.4630	N				
JC85548-1	1	2.4675	2.4675	N				
JC85548-2	2	2.4562	2.4562	N				
JC85548-3	3	2.4755	2.4755	N				
JC85624-2	4	2.4698	2.4698	N				
JC85624-3	5	2.4606	2.4606	N				
JC85624-4	6	2.4492	2.4492	N				
JC85687-1	7	2.4520	2.4520	N				
JC86089-1	8	2.4625	2.4625	N				
JC86089-2	9	2.4611	2.4611	N				
JC85762-6	10	2.4647	2.4647	N				
1.000g check(b)		1.0000	1.0000	N				
5.000 g check (c)		5.0003	5.0001	N				

Note: Samples must be dried at 70 +/- 2 deg. For a minimum of 30 minutes for each drying cycle.

SGS

GP20614- OG1664

TRAY B

	Accutest Sample ID	Bottle #	Volume (mL)	Appearance (clarity, color, etc.)	Odor
MB	GP20614-MB1	NA	1000	CLEAR	NONE
BSP	GP20614-B1	NA	1000	CLEAR	NONE
MS	GP20614-S1	1	1000	CLEAR	NONE
DUP	GP20614-D1	2	1000	CLEAR	NONE
1	JC85548-1	1	1000	CLEAR	NONE
2	JC85548-2	1	1000	CLEAR	NONE
3	JC85548-3	1	1000	CLEAR	NONE
4	JC85624-2	2	1000	CLEAR	NONE
5	JC85624-3	1	1000	CLEAR	NONE
6	JC85624-4	1	1000	CLEAR	NONE
7	JC85687-1	1	1000	CLEAR	NONE
8	JC86089-1	1	1000	CLEAR	NONE
9	JC86089-2	1	1000	CLEAR	NONE
10	JC85762-6	1	1000	CLEAR	NONE
				HEM SPIKE	
				GNE3-57640-OG1664	
				4/27/2019	
				HEM: 8.01 mg/L HEX: 4.01 mg/L	

Form: GN-110
Rev. Date:4/14/2019

SGS

Reagent Information Log - OG1664 Water by EPA 1664A

Reagent	Expiration Date	Reagent # or Manufacturer/Lot
Hexane	12/12/2022	FISHER Lot #173528
HEM Spike	4/27/2019	GNE3-57640-OG1664
Methanol	4/4/2021	FISHER LOT #180813
Disk Filter	NA	LABORATORYSALES&SER.#103522
1:1 HCL	7/25/2019	GNE1-57044-PHC/OG1664
Sodium Sulfate	4/13/2019	GNE3-57487-PHC/OG1664
Filter 47mm	NA	LABORATORYSALES&SER.#150125
Pre-Filter 47mm	NA	LABORATORYSALES&SER.#141347
Filter 90/100mm	NA	LABORATORYSALES&SER.#140294
Pre-Filter 90/100mm	NA	LABORATORYSALES&SER.#141272
pH paper	6/1/2019	HYDRON LOT#215316
HEM Spike (ICV)	NA	NA

B1/S1= 5.0ml of 8.01 mg/L HEM SPIKE
HEX= 4.01 mg/L

Form: GN-087 1-44
Rev. Date: 11/4/08

Test: **Total Suspended Solids** Product: **TSS**
Method: **SM2540 D-11** Units: mg/l
RL: 4.0

GN Batch ID: GN94111
Analyst: RC
Date: 4/15/2019
Balance ID: B53

SGS

QC Summary		Filtration Date: 4/15/19	OVEN ID: INC-21	Filtration Time: 10:17
MB ID: GN94111-MB1	Result: <RDL	RDL: 4	< RDL	YES
Dup ID: GN94111-D1	Samp Resu 0.36	Dup Result: 0.36	% RPD:	0
Dup ID: GN94111-D2	Samp Mass 19.4	Dup Mass: 19.6	% RPD:	1.03

Acceptable Temp. Range = 103 to 105 deg. C.

Therm ID: 5624416
Corr Factor: 0
FILTER LOT# 111301

Date:						4/15/2019	4/15/2019									
Time (Start/Finish):						11:41/13:45	14:04/14:52									
UnCorr Temp (Start/Finish):						104/104	104/104									
Corr Temp (Start/Finish):						104/104	104/104									
Bot #	Dish #	Sample ID	Filter Size*	Volume Filtered (ml)	Filter Tare Weight in g*	Weight after drying at 104 deg. C in g	Redry #1 Weight in g (a)	Redry ?	Redry # 2 Weight in g (a)	Redry ?	Redry # 3 Weight in g (a)	Constant Weight in g (a)	TSS in mg/l (Calculated)	Final TSS in mg/l**	Mass %RPD	Mass %RPD > 5%
	R1	GN94111-MB1	42	1000.0	0.0974	0.0974	0.0974	NO				0.0974		0.00		1000
	R2	GN94111-D1	42	550.0	0.0968	0.0970	0.0970	NO				0.0970		0.36	0.00%	550
2	R3	JC86036-5	42	550.0	0.0956	0.0958	0.0958	NO				0.0958		0.36		550
	R4	GN94111-D2	42	500.0	0.0950	0.1048	0.1048	NO				0.1048		19.60	1.03%	500
3	R5	JC86276-4	42	500.0	0.0963	0.1060	0.1060	NO				0.1060		19.40		500
2	R6	JC86276-5	42	500.0	0.0967	0.1763	0.1763	NO				0.1763		159.20		500
2	R7	JC86276-6	42	150.0	0.0965	0.1127	0.1127	NO				0.1127		108.00		150
2	R8	JC86276-3	42	10.0	0.0966	0.2065	0.2064	NO				0.2064		10980.00		10
2	R9	JC86276-2	42	700.0	0.0962	0.1274	0.1273	NO				0.1273		44.43		700
3	R10	JC86276-1	42	200.0	0.0963	0.1089	0.1088	NO				0.1088		62.50		200
2	R11	JC86131-1	42	50.0	0.0954	0.1138	0.1137	NO				0.1137		366.00		50
3	R12	JC86130-2	42	1000.0	0.0964	0.1034	0.1034	NO				0.1034		7.00		1000
2	R13	JC86114-4	42	5.0	0.0962	0.1408	0.1408	NO				0.1408		8920.00		5
1	R14	JC86114-2	42	1000.0	0.0956	0.1033	0.1031	NO				0.1031		7.50		1000
4	R15	JC86106-1	42	770.0	0.0962	0.1215	0.1215	NO				0.1215		32.86		770
8	R16	JC86089-2	42	800.0	0.0963	0.1130	0.1128	NO				0.1128		20.63		800
8	R17	JC86089-1	42	750.0	0.0963	0.1022	0.1022	NO				0.1022		7.87		750
3	R18	JC86141-1	42	100.0	0.0969	0.1093	0.1093	NO				0.1093		124.00		100
1	R19	JC86282-1	42	1000.0	0.0954	0.0980	0.0980	NO				0.0980		2.60		1000
4	R20	JC86019-1	42	1000.0	0.0957	0.1055	0.1052	NO				0.1052		9.50		1000
4	R21	JC86019-2	42	1000.0	0.0965	0.0995	0.0995	NO				0.0995		3.00		1000
2	R22	JC86019-3	42	1000.0	0.0955	0.0977	0.0977	NO				0.0977		2.20		1000
3	R23	JC86075-1	42	20.0	0.0956	0.1208	0.1206	NO				0.1206		1250.00		20

(a) Redries when result is <DL after the initial weighing. Note: Constant weight is a change of <4% of the sample mass or 0.0005 g, whichever is
*Filters are dried and dessicated for a minimum of 12 hours ensure constant tare weight.
**Final TSS, mg/L = [(constant weight - filter tare mass, g) × 1000] ÷ (initial volume, mL ÷ 1000)
Comments:

4/15/19

DAYT-WET-0196-10-FORM-TSS
REV DATE 10/17/18

TSS Worksheet

SGS ACCUTEST

Acceptable Temp. Range = 103 to 105 deg. C.

** Note - Filters are dried for a minimum of 1.5 h and dessicated for a minimum of 12 h. Constant mass is determined prior to filtering.

Date:	4/13-15/19	4/15/2019					
Time (Start/Finish):	12:00/08:00	9:00/10:02					
Uncorr Temp Deg C (Start/Finish):	104/104	104/104					
Corr Temp Deg C (Start/Finish):	104/104	104/104					

Dish #	Filter size	Initial weight after drying** (mg)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Constant Weight
R1	42.00000	**0.0970**	**0.0974**	NO		***FALSE***		0.0974
R2	42.00000	**0.0968**	**0.0968**	NO		***FALSE***		0.0968
R3	42.00000	**0.0956**	**0.0956**	NO		***FALSE***		0.0956
R4	42.00000	**0.0950**	**0.0950**	NO		***FALSE***		0.0950
R5	42.00000	**0.0966**	**0.0963**	NO		***FALSE***		0.0963
R6	42.00000	**0.0968**	**0.0967**	NO		***FALSE***		0.0967
R7	42.00000	**0.0966**	**0.0965**	NO		***FALSE***		0.0965
R8	42.00000	**0.0967**	**0.0966**	NO		***FALSE***		0.0966
R9	42.00000	**0.0962**	**0.0962**	NO		***FALSE***		0.0962
R10	42.00000	**0.0963**	**0.0963**	NO		***FALSE***		0.0963
R11	42.00000	**0.0954**	**0.0954**	NO		***FALSE***		0.0954
R12	42.00000	**0.0964**	**0.0964**	NO		***FALSE***		0.0964
R13	42.00000	**0.0962**	**0.0962**	NO		***FALSE***		0.0962
R14	42.00000	**0.0956**	**0.0956**	NO		***FALSE***		0.0956
R15	42.00000	**0.0962**	**0.0962**	NO		***FALSE***		0.0962
R16	42.00000	**0.0964**	**0.0963**	NO		***FALSE***		0.0963
R17	42.00000	**0.0963**	**0.0963**	NO		***FALSE***		0.0963
R18	42.00000	**0.0969**	**0.0969**	NO		***FALSE***		0.0969
R19	42.00000	**0.0954**	**0.0954**	NO		***FALSE***		0.0954
R20	42.00000	**0.0957**	**0.0957**	NO		***FALSE***		0.0957
R21	42.00000	**0.0965**	**0.0965**	NO		***FALSE***		0.0965
R22	42.00000	**0.0956**	**0.0955**	NO		***FALSE***		0.0955
R23	42.00000	**0.0956**	**0.0956**	NO		***FALSE***		0.0956
				FALSE		FALSE		
				FALSE		FALSE		
				FALSE		FALSE		
				YES		FALSE		0.0955
				FALSE		FALSE		
				FALSE		FALSE		
				FALSE		FALSE		
				FALSE		FALSE		
				FALSE		FALSE		
				FALSE		FALSE		

X

JJY

SGS

GN94111
TSS SAMPLE DESCRIPTION SHEET

	SGS Sample ID		Filter size used	Non-standard volumes. Comment with reason as shown below.	Limited Volume
2	JC86036-5	clear	42	550	L
3	JC86276-4	foamy & clear		500	L
2	JC86276-5	Cloudy Pale		500	
2	JC86276-6	foamy cloudy white		150 a	
2	JC86276-3	Cloudy thick Black		10 a	
2	JC86276-2	Slight cloudy		700 a	
3	JC86276-1	cloudy		200 a	
2	JC86131-1	foamy Brite Red		50 a	
3	JC86130-2	Pale & Particles		1000	
2	JC86114-4	thick Brown, Particles		5 a	
1	JC86114-2	foamy Hazy pale		1000	
4	JC86106-1	foamy cloudy Black		770	L
8	JC86089-2	Cloudy & Particles		800	L
8	JC86089-1	Pale & Particles		750	L
3	JC86141-1	Cloudy light Brown foamy & Particles		100 a	
1	JC86282-1	Pale		1000	
4	JC86019-1	Cloudy & Particles		1000	
4	JC86019-2	Cloudy, Particles		1000	
2	JC86019-3	↓		1000	
3	JC86075-1	foamy cloudy Brown	↓	20 a	

QC07 QC12

Reason (a). Sample contains heavy particulates and it can be assessed by appearance that it will clog the filter at higher volumes.
Reason (b). Initial analysis of the sample at a higher volume produced clogging. Rerunning at reduced volume.

JC86114-4 → 10 ml T 100 ml of DI water → used 50 ml of Diluted

Form: GN215-02
Rev. Date: 3/2/18

SGS

Test: Chemical Oxygen Demand (Low Level)
Product: COD AQ Methods: SM5220 C-11/ Hach 8000
Method: See above for AQ / Hach 8000 /SM5220M — Units: mg/l / mg/kg

Analyst: MRP
GN Batch ID: GN94211
GP Batch ID: GP20663
Date: 4/17/2019

Ave ml of FAS for Blank (A) = 3.90 Molarity of FAS: 0.0135

COD = { (A-B) x M x 8000 } / (sample amount in ml or g)

QC Summary:

Method Blank ID:	GP20663-MB1	Date:	4/17/2019	Result:	0.0	DL:	20	<DL	Y
Spike Blank ID (± 10%):	BSLCONF	Date:	4/17/2019	Result:	21.6	Spike:	20	% Rec:	108.1
Standard Check Low (±30%):	GP20663-B2	Date:	4/17/2019	Result:	51.3	Spike:	50	% Rec:	102.7
Standard Check Mid (±10%):		Date:		Result:		Spike:		% Rec:	
Duplicate ID:	JC85706-2	Samp Result:	37.83	Dup Result:	37.8	% RPD:	0.0		
MS ID:	JC85706-2	Samp Result:	37.8	MS Result:	86.5	Spike:	50	% Rec:	97.4
External:		Result:		Known:		% Rec:			

Bottle #	Sample ID	Sample Volume (ml)	Dilution	Initial ml of FAS (C)	Final ml of FAS (D)	Total Vol FAS used in ml (D - C) = B	Blank FAS - Total FAS (A - B)	Calculated Result	Final Result	Detection Limit
MB1	GP20663-MB1	2.0000	1	0.00	3.90	3.90	0.00	0.0	0.00	20
MB2	GP20663-MB2	2.0000	1	0.00	3.90	3.90	0.00	0.0	0.00	20
BSP	BSLCONF	2.0000	1	0.00	3.50	3.50	0.40	21.6	21.62	20
BSP	GP20663-B2	2.0000	1	0.00	2.95	2.95	0.95	51.3	51.34	20
	GP20663-S1	2.0000	1	0.00	2.30	2.30	1.60	86.5	86.46	20
	GP20663-D1	2.0000	1	0.00	3.20	3.20	0.70	37.8	37.83	20
	JC85706-2	2.0000	1	0.00	3.20	3.20	0.70	37.8	37.83	20
	JC85763-4	2.0000	1	0.00	3.70	3.70	0.20	10.8	10.81	20
	JC85776-2	2.0000	1	0.00	3.25	3.25	0.65	35.1	35.13	20
	JC86089-1	2.0000	1	0.00	3.80	3.80	0.10	5.4	5.40	20
	JC86089-2	2.0000	1	0.00	3.80	3.80	0.10	5.4	5.40	20
	JC86399-1	2.0000	1	0.00	3.20	3.20	0.70	37.8	37.83	20
	JC86401-1A	2.0000	1	0.00	3.35	3.35	0.55	29.7	29.72	20
	JC80482-2A	2.0000	1	0.00	3.65	3.65	0.25	13.5	13.51	20
	JC80482-2	2.0000	1	0.00	3.50	3.50	0.40	21.6	21.62	20
	JC85413-71	2.0000	1	0.00	3.50	3.50	0.40	21.6	21.62	20

Comments:

Validated By: Nancy Cole Validated Date: 4/14/2017
Analyst: Date: QC Reviewer: Date: 4/17/19
Document Control #: ~~ACN-COD-28RL-03~~

SGS

gn 94211

Reagent Information Log - COD LOW (20 ppm)

Reagent	Reagent # or Manufacturer/Lot
Digestion Solution Tubes Low	GREEN WOOD #180723A XP07/2022
Ferroin Indicator Solution Low	GNE12-56780-COD XP5/15/19
Potassium Hydrogen Phthalate (KHP) Source	GNE3-57680-COD XP6/30/19
Standard Ferrous Ammonium Sulfate (FAS) Titrant 0.0124N/0.125N	GNE3-57670-COD XP9/29/19
H_2SO_4, Conc.	FISHER# 178261 XP:07/20/2023
Standard Potassium Dichromate Solution 0.025N	GNE12-56779-CODXP6/24/19
Potassium Hydrogen Phthalate ext source	GNE3-57681-COD XP6/30/19

Form: GN087-COD-01 Low 20 ppm
Rev Date:3/28/17

15.4
15

GENERAL CHEMISTRY STANDARD PREPARATION LOG FOR FE2

Product: COD

GN or GP Number: GN 94211

Description	standard	concentration	Stock vol used	Autopipet ID	al	Diluent	Volume	of	(a)	Analyst	Date
1000 ppm(STD)	GNE3-57680-COD	10,000 MG/L	10ML	A		DI water	100 ml	1000.00	6/30/2019	mrp	4/17/2019
1000PPM[EXT}	GNE3-57681-COD	10,000MG/L	10ML	A		DI water	100ml	1000	6/30/2019	mrp	4/17/2019
100ppm9STD)	GNE4-57695-COD	1000mg/l	10ML	A		DI water	100ML	100	5/2/2019	mrp	4/17/2019
100PPM[EXT}	GNE4-57696-COD	1000mg/l	10ML	A		DI water	100ml	100	5/2/2019	mrp	4/17/2019
Standard Description	used to prepare	Stock	Stock volume	Autopipet ID	al	Diluent	Volume	of Standard	(a)		
20	100PPM	20.00	10.00	A		DI water	50 ml	20.00	4/17/2019	eb	4/17/2019
50	100PPM	100.00	10.00	A		DI water	100ML	100.00	4/17/2019	eb	4/17/2019
150	1000PPM	150.00	7.5 ml	A		DI water	50 ml	150.00	4/17/2019	eb	4/17/2019
500	1000PPM	500.00	25 ml	A		DI water	50 ml	500.00	6/30/2019	eb	4/17/2019
10	100PPM	10.00	1.00	A		DI water	10 ml	10.00		eb	4/17/2019
[EXT]50	100PPM	50.00	25.00	A		DI water	50 ml	50.00	4/17/2019	eb	4/17/2019
[EXT]750	1000PPM	750.00	37.50	A		DI water	50 ml	750.00	4/17/2019	eb	4/17/2019

Form: GN121-02 FE2
Rev. Date: 11/14/11

SGS

LOD and LOQ Scheduling

LOD Sample ID: JC 80482-2A

Product:	COD	**Matrix:**	AQ
LOD Concentration:	15	**Units:**	mg/L
LOD Prep:	1.5 ML @ 20 PPM → F.V. 2ML		
Manufacturer/Lot:		**Expiration Date:**	4/17/19
GN ID:	CRM64-5249-COD	**Analysis Date:**	4/17/19
Result/Units:	13.51 mg/L	**Recovery:**	90.07 %
Within range of 50 to 150%? **	Y		

LOQ (RL) Sample ID: JC 80482-2

Product:	COD	**Matrix:**	AQ
LOQ Concentration:	20	**Units:**	mg/L
LOQ Prep:	2 ML @ 20 PPM → 2ML F.V.		
Manufacturer/Lot:		**Expiration Date:**	4/17/19
GN ID:	CRM64-5249-COD	**Analysis Date:**	4/17/19
Result/Units:	21.62 mg/L	**Recovery:**	108 %
Within range of 70 to 130%? **	Y		

** if outside of range, notify supervisory team immediately to reschedule

Analyst: MRP Date: 4/17/19

QC Review: Date:

Form: GN271-02
Rev. Date: 3/2/18

15.4 15

SGS

MDL Schedule Log

Day 1

+ MB

Product: COD

Matrix: AQ

Instrument: _____

Sample #: JC85413-17 MDL or (MDLVER) x 1

Concentration: 20 (mg/L) or mg/kg or _____

Prep: ~~2ml of 20 ppm~~ Fill: 2ml

_____

Sample #: _____ MDL or MDLVER x _____

Concentration: _____ mg/L or mg/kg or _____

Prep: _____

_____

Date: 4/10/19

Analyst: _____

Batch #: _____

Form: GN278-04
Revised: 3/2/18

15.4
15

GN 94211

SGS

Test: Chemical Oxygen Demand Digestion Log	Product: COD	GPBatch ID: GP20663	
Method: SM5220 C-11, Hach 8000	Analyst MRP	Date: 4/17/2019	
SM5220 C-11 Mod, Hach 8000 Mod	**Hach Low Level (20 to 150 mg/l)**	Lot no	#180723AXP7/2022
	Hach High Level (50 to 1500 mg/l)	_LOT NO_	
Balance ID: NA	Pipet ID: CLASS A GLASS PIPETTE		

Standardization of FAS with Potassium Dichromate
Potassium Dichromate reagent number: see attached
Potassium Dichromate normality (N): 0.025N

mL of FAS for Standardization Blank 1: 3.70
ml of FAS for Standardization Blank 2: 3.70

Molarity of FAS = (N x vol. of dichromate digestion solution)/(ml of FAS for Standardization Blank)
Average molarity (Blank 1 and Blank 2) = 0.01351

Digestion START Time: 9:00 Digestion Temperature (deg. C): 150 C
Digestion ENDTime: 11:00 Digestion Block ID: COD-3

Sample ID	Digestion Tube #	Initial Wt. (g) or Vol. (ml)	Final Vol. (ml)	Comments	BO NO
GP20663-MB1	MB1	2 ML	2 ML		
GP20663-MB2	MB2	2 ML	2 ML		
GP20663-B1	1	2 ML	2 ML	2ML OF20 PPM	
GP20663-B2	2	2 ML	2 ML	2ML OF 50 PPM	
GP20663-S1	3	2 ML	2 ML	1ML OF 100PPM	1
GP20663-D1	4	2 ML	2 ML		1
JC85706-2	5	2 ML	2 ML	Q.C	1
JC85763-4	6	2 ML	2 ML		3
JC85776-2	7	2 ML	2 ML		3
JC86089-1	8	2 ML	2 ML		9
JC86089-2	9	2 ML	2 ML		9
JC86399-1	10	2 ML	2 ML		17
JC86401-1A	11	2 ML	2 ML		4
JC86482-2A	12	2 ML	2 ML	1.5 ML OF 20PPM-	LOD
JC86482-2	13	2 ML	2 ML	2ML OF 20PPM	LOQ
JC85413-71	14	2 ML	2 ML	2ML OF 20PPM	MDL

Form: GN018-04
Revised: 06/15/17

Misc. Raw Data

Raw Data

SGS

Filtermet MP Batch ID: ____MP14101_____
Method Referenc: EPA 200.7
Filter Date _____4/11/2019_____
Filter Start Time____15:10_____ Filter End Time_____16:00_____

Sample ID	Pres Y / N	Initial Sample Volume	Final Volume in ML	Acids Used: Amount of Conc. HNO3(Preservative)	Acids Used: Added - Y or N	Spike Group Added	Comments
MP14101 -MB__	N	200	200	2% CONC. HNO3	Y		
MP14101 -MB__	N	200	200	2% CONC. HNO3	Y		
MP14101 -B__(ICP)	N	200	200	2% CONC. HNO3	Y	ABCE	
MP14101 -LC__(HG)__	N	200	200	2% CONC. HNO3	Y	D	
1 JC86142-3F	N	500	150	1ML	Y		FINISHED @ 15:45
2 JC86142-4F	N	500	500	2ML	Y		FINISHED @ 15:45
3 JC86142-5F	N	500	500	2ML	Y		FINISHED @ 15:45
4 JC86089-1F	N	200	200	1ML	Y		
5 JC86089-2F	N	200	200	1ML	Y		
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

4/12/19.

	Spike Grups		
Group	Description	MLs used	
A	ACCUTEST-13A REV1	2	
B	ACCUTEST-14A REV1	2	
C	MINERALS 5000PPM	1	
D	30 ppb Hg standard	2	HG-19-177-140-HGA3
E	AG 20PPM	2.5	
F			
G			

Analyst: COLLEENH QC Reviewer:

MP14101
1/19/18

16.1 16

SGS

Metals Digestion Reagents Information Log

Digestion Batch ID: MP 14101 **Date:** 4/11/19

Matrix: ALL

Standard/Reagent Type	Exp. Date	Standard/Reagent ID
Spiking Solution - (ACCUTEST-13A REV1)	9/27/2019	MP-015-1150
Spiking Solution - (ACCUTEST-14A REV1)	9/27/2019	MP-015-1151
Spiking Solution - 5000 mg/l Minerals	2/15/2020	N2-MEB674932 MFG: INO. VENT.
Spiking Solution - Sulfur 1000ppm	4/11/2021	LOT: 041118 MFG: ABS. GRADE
Spiking Solution - Si 1000ppm	10/31/2019	N2-SI668066 MFG: INO. VENT.
Spiking Solution - Bi 1000ppm	1/16/2020	N2-BI669548 MFG: INO. VENT.
Spiking Solution - Se 20ppm	9/27/2019	MP-015-1149
Spiking Solution - Li 1000ppm	1/24/2020	N2-LI665824 MFG: INO. VENT.
Spiking Solution- Ag 20 ppm	10/9/2019	MP-015-1155
Spiking Solution - (ACCUTEST-13B REV1)	9/27/2019	MP-015-1147
Spiking Solution - (ACCUTEST-14B REV1)	7/3/2019	MP-015-1126
Spiking Solution - 1000ppm Minerals	6/4/2019	MP-015-1117
Spiking Solution- P		
Nitric Acid	4/10/2021	LOT: 213500 MFG: J.T. BAKER
Nitric Acid (1:1)	10/9/2019	MP-018-42-174 1:1 HNO3
Hydrochloric Acid	4/8/2021	LOT: 217157 MFG: J.T. BAKER
Hydrochloric Acid (1:1)	10/8/2019	MP-018-42-173 1:1 HCL
Hydrogen Peroxide	4/4/2021	LOT: 188006 MFG: FISHER
Soil Lab Control/Soil LC	3/31/2020	LOT: D094-540 MFG: ERA
Teflon Chips(For Soil MB and Blank Spike)	N/A	LOT: 24242815 MFG: SAINT-GOBAIN
Digestion Tubes	N/A	LOT: 1812117 MFG: ENV. EXPRESS
pH Paper	6/15/2021	LOT: 217518 MFG: HYDRION
Filter paper Q8	N/A	LOT: 16917460 MFG: FISHER
Filter paper 0.45µm	N/A	LOT: F8MA26136E MFG: FISHER

Spike witnessed By: TG

Validated By: _____

Validated On: _____

Metals Prep Reagent
1/17/18

16.1 16

April 12, 2019 Service Request No:R1902767

Mark Lovejoy
Tantara Corporation
54 Mason Street
Worcester, MA 01610

Laboratory Results for: Underground Nike Missile Silos-Def Bat BU-34/35

Dear Mark,

Enclosed are the results of the sample(s) submitted to our laboratory April 01, 2019
For your reference, these analyses have been assigned our service request number **R1902767.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental



Janice Jaeger
Project Manager

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | FAX +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Environmental

Client: Tantara Corporation **Service Request:** R1902767
Project: Underground Nike Missile Silos-Def Bat BU-34/35 **Date Received:** 04/01/2019
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Four water samples were received for analysis at ALS Environmental on 04/01/2019. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatiles by GC/MS:

Method 8270D, 04/03/2019: The lower control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). Since there were no detections of the analyte(s) in the associated field samples, the quantitation is not affected. Meets regular laboratory limits. The data quality was not significantly affected and no further corrective action was taken.
Method 8270D, 04/03/2019: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). Precision is also outside limits. There were no detections of the analyte(s) in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.
Method 8270D, 04/03/2019: The lower control limit for the spike recovery of the Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) was exceeded for one or more analyte. There were no detections of the analyte(s) in the associated field samples. The discrepancy associated with reduced recovery equates to a potential low bias. Meets regular laboratory limits. Samples were not re-extracted because sample would have been out of holding time. The analytes affected are flagged in the LCS Summary.
Method 8270D, ICAL: The upper control limit was exceeded for one or more analytes in the Initial Calibration Verification (ICV). The field samples analyzed in this sequence did not contain the analyte(s) in question. Since the exceedance equates to a potential high bias, the data quality is not affected. The analytes affected are flagged in the ICV Summary Report.

Semivoa GC:

No significant anomalies were noted with this analysis.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

Volatiles by GC/MS:

Method 8260C, 04/03/2019: The upper control limit was exceeded for one or more analytes in the Continuing Calibration Verification (CCV). The field samples analyzed in this sequence did not contain the analyte(s) in question above the Method Reporting Limit (MRL). Since the exceedance equates to a potential high bias, the data quality was not significantly affected and no further corrective action was taken.

Approved by _____ Date 04/09/2019

SAMPLE DETECTION SUMMARY

CLIENT ID: Silo #6			Lab ID: R1902767-001			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic (TOC)	6.9		0.5	1.0	mg/L	SM 5310 C-2000 (2011)
Chemical Oxygen Demand, Total	22		4	10	mg/L	410.4
pH	8.37				pH Units	SM 4500-H+ B
Solids, Total Suspended (TSS)	173			7.1	mg/L	SM 2540 D-1997 (2011)
Temperature of pH Analysis	20.6				deg C	SM 4500-H+ B
Aluminum, Total	6580		30	400	ug/L	6010C
Arsenic, Total	8	J	4	10	ug/L	6010C
Barium, Total	59		3	40	ug/L	6010C
Chromium, Total	9	J	0.6	10	ug/L	6010C
Copper, Total	14	J	4	20	ug/L	6010C
Iron, Total	6810		20	200	ug/L	6010C
Lead, Total	8	J	3	10	ug/L	6010C
Acetone	3.6	J	2.1	10	ug/L	8260C

CLIENT ID: Silo #4			Lab ID: R1902767-002			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic (TOC)	4.1		0.5	1.0	mg/L	SM 5310 C-2000 (2011)
Chemical Oxygen Demand, Total	14		4	10	mg/L	410.4
pH	7.80				pH Units	SM 4500-H+ B
Solids, Total Suspended (TSS)	586			14	mg/L	SM 2540 D-1997 (2011)
Temperature of pH Analysis	20.5				deg C	SM 4500-H+ B
Aluminum, Total	18500		30	400	ug/L	6010C
Arsenic, Total	10		4	10	ug/L	6010C
Barium, Total	117		3	40	ug/L	6010C
Cadmium, Total	0.6	J	0.4	5.0	ug/L	6010C
Chromium, Total	25		0.6	10	ug/L	6010C
Copper, Total	35		4	20	ug/L	6010C
Iron, Total	21300		20	200	ug/L	6010C
Lead, Total	17		3	10	ug/L	6010C
Acetone	3.4	J	2.1	10	ug/L	8260C

CLIENT ID: Silo #1			Lab ID: R1902767-003			
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Carbon, Total Organic (TOC)	3.1		0.5	1.0	mg/L	SM 5310 C-2000 (2011)
Chemical Oxygen Demand, Total	9	J	4	10	mg/L	410.4
pH	7.84				pH Units	SM 4500-H+ B
Solids, Total Suspended (TSS)	81.7			3.3	mg/L	SM 2540 D-1997 (2011)
Temperature of pH Analysis	20.7				deg C	SM 4500-H+ B
Aluminum, Total	3290		30	400	ug/L	6010C

SAMPLE DETECTION SUMMARY

CLIENT ID: Silo #1	Lab ID: R1902767-003					
Analyte	**Results**	**Flag**	**MDL**	**MRL**	**Units**	**Method**
Barium, Total	39	J	3	40	ug/L	6010C
Chromium, Total	4	J	0.6	10	ug/L	6010C
Copper, Total	9	J	4	20	ug/L	6010C
Iron, Total	3870		20	200	ug/L	6010C

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Tantara Corporation **Service Request:**R1902767

Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ -16-C-0023

SAMPLE CROSS-REFERENCE

R1902767-001	Silo #6	3/29/2019	1240
R1902767-002	Silo #4	3/29/2019	1150
R1902767-003	Silo #1	3/29/2019	1100
R1902767-004	Trip Blank	3/29/2019	1100

ALS Environmental

1565 Jefferson Rd, Bldg 300 Ste 360, Rochester, NY 14623 585-288-5380 FAX 585-288-8475

SR# _____

PAGE _____ OF _____

Project Name: Underground Nike Missile Silos- Defense Battery BU-34/35
Project Number: USACE- W912WJ-16-C-0023

Project Manager: Mark Lovejoy **Company:** Tantara Corp

Company/Address: 54 Mason Street **Phone:** 508-752-5599

City, State, Zip: Worcester, MA 01610 **Email:** _mlovejoy@tantaracorp.com___

Sampler's Signature: _____

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	Analysis Requested: TSS	Oil and Grease	8082 PCB	8270 SVOA	TOC	COD	Metals	Hg	pH
Silo #6	3/29/2019	12:40 AM		H2O	16	1	1	2	2	3	1	1	1	1

TURNAROUND REQUIREMENTS

____ 24 hr ____ 48 hr __X__ 5 BD

____ Standard (15 BD)

____ Provide FAX Preliminary Results

Requested Report Date: _____

REPORT REQUIREMENTS

_____ I. Routine Report: Results and Method Blank (Surrogate, as required)

_____ II. Results w/ QC (Dup., MS, MSD as req)

_____ III. Results (with QC and Calibration Summaries)

_____ IV. ASP-B

_____ V. CLP

_____ EDD?: _____

Comments/Special Instructions:

analyze all samples for 8260 & the trip blank as per Mark Lovejoy KMS 4/1/19

Invoice Information

P.O. # _____

Bill to: _____Tantara Corp_____

_____

RELINQUISHED BY:

Signature: _____

Printed Name: _____Sean Fitzgerald_____

Firm: _____Sienna Environmental_____

Date/Time: 3/29/19 15:30

RECEIVED BY:

Signature: _____

Printed Name: Daniel Ward

Firm: ALS

Date/Time: 3/30/19 0845

RELINQUISHED BY:

Signature: _____

Printed Name: _____

Firm: _____

Date/Time: _____

RECEIVED BY:

Signature: _____

Printed Name: _____

Firm: _____

Date/Time: _____

R1902767 5
Tantara Corporation
Underground Nike Missile Silos-Def Bat BU-34/35

ALS Environmental

1565 Jefferson Rd, Bldg 300 Ste 360, Rochester, NY 14623 585-288-5380 FAX 585-288-8475

SR# _____

PAGE _____ OF _____

Project Name: Underground Nike Missile Silos- Defense Battery BU-34/35
Project Number: USACE- W912WJ-16-C-0023

Project Manager: Mark Lovejoy **Company:** Tantara Corp

Company/Address: 54 Mason Street **Phone:** 508-752-5599

City, State, Zip: Worcester, MA 01610 **Email:** mlovejoy@tantaracorp.com

Sampler's Signature: _____

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	Analysis Requested: TSS	Oil and Grease	8082 PCB	8270 SVOA	TOC	COD	Metals	Hg	pH
Silo #4	3/29/2019	11:50 AM		H2O	16	1	1	2	2	3	1	1	1	1

TURNAROUND REQUIREMENTS

_____ 24 hr _____ 48 hr __X__ 5 BD

_____ Standard (15 BD)

_____ Provide FAX Preliminary Results

Requested Report Date: _____

Invoice Information

P.O. # _____

Bill to: _____Tantara Corp_____

REPORT REQUIREMENTS

_____ I. Routine Report: Results and Method Blank (Surrogate, as required)

_____ II. Results w/ QC (Dup., MS, MSD as req)

_____ III. Results (with QC and Calibration Summaries)

_____ IV. ASP-B

_____ V. CLP

_____ EDD?: _____

Comments/Special Instructions:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Printed Name: Sean Fitzgerald	Printed Name:	Printed Name:	Printed Name:
Firm: Sienna Environmental	Firm: HLS	Firm:	Firm:
Date/Time: 3/29/19 15:30	Date/Time: 3/29/19 / 0845	Date/Time:	Date/Time:

R1902767
Tantara Corporation
Underground Nike Missile Silos-Def Bat BU-34/35
5

ALS Environmental

1565 Jefferson Rd, Bldg 300 Ste 360, Rochester, NY 14623 585-288-5380 FAX 585-288-8475

SR# _____

PAGE _____ OF _____

Project Name: Underground Nike Missile Silos- Defense Battery BU-34/35
Project Number: USACE- W912WJ-16-C-0023

Project Manager: Mark Lovejoy **Company:** Tantara Corp

Company/Address: 54 Mason Street **Phone:** 508-752-5599

City, State, Zip: Worcester, MA 01610 **Email:** mlovejoy@tantaracorp.com

Sampler's Signature: _____

Sample I.D.	Date	Time	LAB ID	Matrix	Number of Containers	Analysis Requested: TSS	Oil and Grease	8082 PCB	8270 SVOA	TOC	COD	Metals	Hg	pH
Silo #1	3/29/2019	11:00 AM		H2O	16	1	1	2	2	3	1	1	1	1

TURNAROUND REQUIREMENTS

____ 24 hr ____ 48 hr __X__ 5 BD

____ Standard (15 BD)

____ Provide FAX Preliminary Results

Requested Report Date: _____

Invoice Information

P.O. # _____

Bill to: _____Tantara Corp_____

REPORT REQUIREMENTS

_____ I. Routine Report: Results and Method Blank (Surrogate, as required)

_____ II. Results w/ QC (Dup., MS, MSD as req)

_____ III. Results (with QC and Calibration Summaries)

_____ IV. ASP-B

_____ V. CLP

_____ EDD?: _____

Comments/Special Instructions:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature:	Signature:	Signature:	Signature:
Printed Name: Sean Fitzgerald	Printed Name: Daniel Ward	Printed Name:	Printed Name:
Firm: Sienna Environmental	Firm: ALS	Firm:	Firm:
Date/Time: 3/29/19 1530	Date/Time: 3/30/19 / 0845	Date/Time:	Date/Time:

R1902767 5
Tantara Corporation
Underground Nike Missile Silos-Def Bat BU-34/35

Cooler Receipt and Preservation Check Form

R1902767 5
Tantara Corporation
Underground Nike Missile Silos-Def Bat BU-34/35

Project/Client Tantara Group Folder Number

Cooler received on 3/30/19 by: DM

COURIER: ALS UPS ~~FEDEX~~ VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y (N)	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: **Wet Ice Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 3/30/19 Time: 1005 ID: IR#7 ~~IR#10~~ From: Temp Blank Sample Bottle

Observed Temp (°C)	0.8	0.6	1.8				
Correction Factor (°C)	+0.0	+0.0	+0.0				
Corrected Temp (°C)	0.8	0.6	1.8				
Temp from:Type of bottle							
Within 0-6°C?	(Y) N	(Y) N	(Y) N	Y N	Y N	Y N	Y N
If<0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by DM on 3/30/19 at 1005
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown/Preservation Check**: Date: 4/1/19 Time: 1203 by: @

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
10. Did all bottle labels and tags agree with custody papers? YES (NO)
11. Were correct containers used for the tests indicated? (YES) NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO (NA)
13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized Tedlar® Bags Inflated (NA)

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2	220617	HNO_3	✓		1117101					
≤2	↓	H_2SO_4	✓		195877 / 245085	3/20				
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-			**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).			
		HCl	**	**	4117090	3/20				

Bottle lot numbers: F-333-002, F-333-003, K-11-05, 121718-DK, 8118-01

Explain all Discrepancies/ Other Comments:
* 3 vials for Silo 1, 4, 6

Reid 8260 not on COC.

Reid TB not on COC

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
~~PH~~	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: _____
PC Secondary Review: _____ 4/1/19

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the ñNotesò column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an ñimmediateò hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (Ó100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	Pennsylvania ID# 68-786
Delaware Approved	New Hampshire ID # 2941	Rhode Island ID # 158
DoD ELAP #65817	New York ID # 10145	Virginia #460167
Florida ID # E87674	North Carolina #676	

[1] Analyses were performed according to our laboratoryôs NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023		

Sample Name:	Silo #6	**Date Collected:**	03/29/19
Lab Code:	R1902767-001	**Date Received:**	04/1/19
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
410.4		NSMITH
6010C	KMCLAEN	LHERRING
7470A	KMCLAEN	KMCLAEN
8082A	VSTAUFFER	AMOSES
8260C		FNAEGLER
8270D	JMISIUREWICZ	JMISIUREWICZ
SM 2540 D-1997(2011)		KAWONG
SM 4500-H+ B		KWONG
SM 5310 C-2000(2011)		AFELSER

Sample Name:	Silo #4	**Date Collected:**	03/29/19
Lab Code:	R1902767-002	**Date Received:**	04/1/19
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
410.4		NSMITH
6010C	KMCLAEN	LHERRING
7470A	KMCLAEN	KMCLAEN
8082A	VSTAUFFER	AMOSES
8260C		FNAEGLER
8270D	JMISIUREWICZ	JMISIUREWICZ
SM 2540 D-1997(2011)		KAWONG
SM 4500-H+ B		KWONG
SM 5310 C-2000(2011)		AFELSER

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023		

Sample Name:	Silo #1	**Date Collected:**	03/29/19
Lab Code:	R1902767-003	**Date Received:**	04/1/19
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
1664A		AFELSER
410.4		NSMITH
6010C	KMCLAEN	LHERRING
7470A	KMCLAEN	KMCLAEN
8082A	VSTAUFFER	AMOSES
8260C		FNAEGLER
8270D	JMISIUREWICZ	JMISIUREWICZ
SM 2540 D-1997(2011)		KAWONG
SM 4500-H+ B		KWONG
SM 5310 C-2000(2011)		AFELSER

Sample Name:	Trip Blank	**Date Collected:**	03/29/19
Lab Code:	R1902767-004	**Date Received:**	04/1/19
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
8260C		FNAEGLER

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

Sample Results

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 12:40
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #6	**Units:**	ug/L
Lab Code:	R1902767-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.21	1	04/03/19 13:09	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.25	1	04/03/19 13:09	
1,2,3-Trichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
1,2,4-Trichlorobenzene	ND U	5.0	1.0	0.25	1	04/03/19 13:09	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/03/19 13:09	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
1,3-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
1,4-Dioxane	ND U	100	-	13	1	04/03/19 13:09	
2-Butanone (MEK)	ND U	10	-	0.78	1	04/03/19 13:09	
2-Hexanone	ND U	10	-	0.20	1	04/03/19 13:09	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	04/03/19 13:09	
Acetone	**3.6 J**	10	5.0	2.1	1	04/03/19 13:09	
Benzene	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
Bromochloromethane	ND U	5.0	1.0	0.24	1	04/03/19 13:09	
Bromodichloromethane	ND U	5.0	1.0	0.22	1	04/03/19 13:09	
Bromoform	ND U	5.0	1.0	0.25	1	04/03/19 13:09	
Bromomethane	ND U	5.0	1.0	0.70	1	04/03/19 13:09	
Carbon Disulfide	ND U	10	1.0	0.25	1	04/03/19 13:09	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/03/19 13:09	
Chlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
Chloroethane	ND U	5.0	1.0	0.23	1	04/03/19 13:09	
Chloroform	ND U	5.0	1.0	0.24	1	04/03/19 13:09	
Chloromethane	ND U	5.0	1.0	0.28	1	04/03/19 13:09	
Cyclohexane	ND U	10	1.0	0.26	1	04/03/19 13:09	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
Dichlorodifluoromethane (CFC 12)	ND U	5.0	1.0	0.21	1	04/03/19 13:09	
Dichloromethane	ND U	5.0	1.0	0.36	1	04/03/19 13:09	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
Isopropylbenzene (Cumene)	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
Methyl Acetate	ND U	10	1.0	0.33	1	04/03/19 13:09	
Methyl tert-Butyl Ether	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
Methylcyclohexane	ND U	10	1.0	0.20	1	04/03/19 13:09	
Styrene	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
Tetrachloroethene (PCE)	ND U	5.0	1.0	0.21	1	04/03/19 13:09	
Toluene	ND U	5.0	1.0	0.20	1	04/03/19 13:09	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 12:40
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #6	**Units:**	ug/L
Lab Code:	R1902767-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/03/19 13:09	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	04/03/19 13:09	
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	04/03/19 13:09	
o-Xylene	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/03/19 13:09	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/03/19 13:09	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 114	04/03/19 13:09	
Dibromofluoromethane	100	80 - 119	04/03/19 13:09	
Toluene-d8	99	89 - 112	04/03/19 13:09	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:50
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #4	**Units:**	ug/L
Lab Code:	R1902767-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.21	1	04/03/19 13:31	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.25	1	04/03/19 13:31	
1,2,3-Trichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
1,2,4-Trichlorobenzene	ND U	5.0	1.0	0.25	1	04/03/19 13:31	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/03/19 13:31	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
1,3-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
1,4-Dioxane	ND U	100	-	13	1	04/03/19 13:31	
2-Butanone (MEK)	ND U	10	-	0.78	1	04/03/19 13:31	
2-Hexanone	ND U	10	-	0.20	1	04/03/19 13:31	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	04/03/19 13:31	
Acetone	**3.4 J**	10	5.0	2.1	1	04/03/19 13:31	
Benzene	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
Bromochloromethane	ND U	5.0	1.0	0.24	1	04/03/19 13:31	
Bromodichloromethane	ND U	5.0	1.0	0.22	1	04/03/19 13:31	
Bromoform	ND U	5.0	1.0	0.25	1	04/03/19 13:31	
Bromomethane	ND U	5.0	1.0	0.70	1	04/03/19 13:31	
Carbon Disulfide	ND U	10	1.0	0.25	1	04/03/19 13:31	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/03/19 13:31	
Chlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
Chloroethane	ND U	5.0	1.0	0.23	1	04/03/19 13:31	
Chloroform	ND U	5.0	1.0	0.24	1	04/03/19 13:31	
Chloromethane	ND U	5.0	1.0	0.28	1	04/03/19 13:31	
Cyclohexane	ND U	10	1.0	0.26	1	04/03/19 13:31	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
Dichlorodifluoromethane (CFC 12)	ND U	5.0	1.0	0.21	1	04/03/19 13:31	
Dichloromethane	ND U	5.0	1.0	0.36	1	04/03/19 13:31	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
Isopropylbenzene (Cumene)	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
Methyl Acetate	ND U	10	1.0	0.33	1	04/03/19 13:31	
Methyl tert-Butyl Ether	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
Methylcyclohexane	ND U	10	1.0	0.20	1	04/03/19 13:31	
Styrene	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
Tetrachloroethene (PCE)	ND U	5.0	1.0	0.21	1	04/03/19 13:31	
Toluene	ND U	5.0	1.0	0.20	1	04/03/19 13:31	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:50
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #4	**Units:**	ug/L
Lab Code:	R1902767-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/03/19 13:31	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	04/03/19 13:31	
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	04/03/19 13:31	
o-Xylene	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/03/19 13:31	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/03/19 13:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 114	04/03/19 13:31	
Dibromofluoromethane	100	80 - 119	04/03/19 13:31	
Toluene-d8	99	89 - 112	04/03/19 13:31	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:00
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #1	**Units:**	ug/L
Lab Code:	R1902767-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.21	1	04/03/19 13:53	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.25	1	04/03/19 13:53	
1,2,3-Trichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
1,2,4-Trichlorobenzene	ND U	5.0	1.0	0.25	1	04/03/19 13:53	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/03/19 13:53	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
1,3-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
1,4-Dioxane	ND U	100	-	13	1	04/03/19 13:53	
2-Butanone (MEK)	ND U	10	-	0.78	1	04/03/19 13:53	
2-Hexanone	ND U	10	-	0.20	1	04/03/19 13:53	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	04/03/19 13:53	
Acetone	ND U	10	5.0	2.1	1	04/03/19 13:53	
Benzene	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
Bromochloromethane	ND U	5.0	1.0	0.24	1	04/03/19 13:53	
Bromodichloromethane	ND U	5.0	1.0	0.22	1	04/03/19 13:53	
Bromoform	ND U	5.0	1.0	0.25	1	04/03/19 13:53	
Bromomethane	ND U	5.0	1.0	0.70	1	04/03/19 13:53	
Carbon Disulfide	ND U	10	1.0	0.25	1	04/03/19 13:53	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/03/19 13:53	
Chlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
Chloroethane	ND U	5.0	1.0	0.23	1	04/03/19 13:53	
Chloroform	ND U	5.0	1.0	0.24	1	04/03/19 13:53	
Chloromethane	ND U	5.0	1.0	0.28	1	04/03/19 13:53	
Cyclohexane	ND U	10	1.0	0.26	1	04/03/19 13:53	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
Dichlorodifluoromethane (CFC 12)	ND U	5.0	1.0	0.21	1	04/03/19 13:53	
Dichloromethane	ND U	5.0	1.0	0.36	1	04/03/19 13:53	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
Isopropylbenzene (Cumene)	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
Methyl Acetate	ND U	10	1.0	0.33	1	04/03/19 13:53	
Methyl tert-Butyl Ether	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
Methylcyclohexane	ND U	10	1.0	0.20	1	04/03/19 13:53	
Styrene	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
Tetrachloroethene (PCE)	ND U	5.0	1.0	0.21	1	04/03/19 13:53	
Toluene	ND U	5.0	1.0	0.20	1	04/03/19 13:53	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:00
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #1	**Units:**	ug/L
Lab Code:	R1902767-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/03/19 13:53	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	04/03/19 13:53	
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	04/03/19 13:53	
o-Xylene	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/03/19 13:53	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/03/19 13:53	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 114	04/03/19 13:53	
Dibromofluoromethane	100	80 - 119	04/03/19 13:53	
Toluene-d8	99	89 - 112	04/03/19 13:53	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:00
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R1902767-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.21	1	04/03/19 12:47	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.25	1	04/03/19 12:47	
1,2,3-Trichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
1,2,4-Trichlorobenzene	ND U	5.0	1.0	0.25	1	04/03/19 12:47	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/03/19 12:47	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
1,3-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
1,4-Dioxane	ND U	100	-	13	1	04/03/19 12:47	
2-Butanone (MEK)	ND U	10	-	0.78	1	04/03/19 12:47	
2-Hexanone	ND U	10	-	0.20	1	04/03/19 12:47	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	04/03/19 12:47	
Acetone	ND U	10	5.0	2.1	1	04/03/19 12:47	
Benzene	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
Bromochloromethane	ND U	5.0	1.0	0.24	1	04/03/19 12:47	
Bromodichloromethane	ND U	5.0	1.0	0.22	1	04/03/19 12:47	
Bromoform	ND U	5.0	1.0	0.25	1	04/03/19 12:47	
Bromomethane	ND U	5.0	1.0	0.70	1	04/03/19 12:47	
Carbon Disulfide	ND U	10	1.0	0.25	1	04/03/19 12:47	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/03/19 12:47	
Chlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
Chloroethane	ND U	5.0	1.0	0.23	1	04/03/19 12:47	
Chloroform	ND U	5.0	1.0	0.24	1	04/03/19 12:47	
Chloromethane	ND U	5.0	1.0	0.28	1	04/03/19 12:47	
Cyclohexane	ND U	10	1.0	0.26	1	04/03/19 12:47	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
Dichlorodifluoromethane (CFC 12)	ND U	5.0	1.0	0.21	1	04/03/19 12:47	
Dichloromethane	ND U	5.0	1.0	0.36	1	04/03/19 12:47	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
Isopropylbenzene (Cumene)	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
Methyl Acetate	ND U	10	1.0	0.33	1	04/03/19 12:47	
Methyl tert-Butyl Ether	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
Methylcyclohexane	ND U	10	1.0	0.20	1	04/03/19 12:47	
Styrene	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
Tetrachloroethene (PCE)	ND U	5.0	1.0	0.21	1	04/03/19 12:47	
Toluene	ND U	5.0	1.0	0.20	1	04/03/19 12:47	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:00
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R1902767-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/03/19 12:47	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	04/03/19 12:47	
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	04/03/19 12:47	
o-Xylene	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/03/19 12:47	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/03/19 12:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	85 - 114	04/03/19 12:47	
Dibromofluoromethane	99	80 - 119	04/03/19 12:47	
Toluene-d8	97	89 - 112	04/03/19 12:47	

Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 12:40
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #6	**Units:**	ug/L
Lab Code:	R1902767-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	20	10	1.0	1	04/03/19 18:44	4/2/19	
2,3,4,6-Tetrachlorophenol	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
2,4,5-Trichlorophenol	ND U	9.8	5.0	1.1	1	04/03/19 18:44	4/2/19	
2,4,6-Trichlorophenol	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
2,4-Dichlorophenol	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
2,4-Dimethylphenol	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
2,4-Dinitrophenol	ND U	49	25	2.9	1	04/03/19 18:44	4/2/19	
2,4-Dinitrotoluene	ND U	9.8	5.0	2.7	1	04/03/19 18:44	4/2/19	
2,6-Dinitrotoluene	ND U	9.8	5.0	1.5	1	04/03/19 18:44	4/2/19	
2-Chloronaphthalene	ND U	9.8	5.0	1.1	1	04/03/19 18:44	4/2/19	
2-Chlorophenol	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
2-Methylnaphthalene	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
2-Methylphenol	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
2-Nitroaniline	ND U	49	25	2.4	1	04/03/19 18:44	4/2/19	
2-Nitrophenol	ND U	9.8	5.0	1.5	1	04/03/19 18:44	4/2/19	
3,3'-Dichlorobenzidine	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
3- and 4-Methylphenol Coelution	ND U	20	10	1.0	1	04/03/19 18:44	4/2/19	
3-Nitroaniline	ND U	49	25	1.8	1	04/03/19 18:44	4/2/19	
4,6-Dinitro-2-methylphenol	ND U	49	25	3.7	1	04/03/19 18:44	4/2/19	
4-Bromophenyl Phenyl Ether	ND U	9.8	5.0	1.4	1	04/03/19 18:44	4/2/19	
4-Chloro-3-methylphenol	ND U	9.8	5.0	1.1	1	04/03/19 18:44	4/2/19	
4-Chloroaniline	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
4-Chlorophenyl Phenyl Ether	ND U	9.8	5.0	1.2	1	04/03/19 18:44	4/2/19	
4-Nitroaniline	ND U	49	25	1.9	1	04/03/19 18:44	4/2/19	
4-Nitrophenol	ND U	49	25	3.0	1	04/03/19 18:44	4/2/19	
Acenaphthene	ND U	9.8	5.0	1.6	1	04/03/19 18:44	4/2/19	
Acenaphthylene	ND U	9.8	5.0	1.3	1	04/03/19 18:44	4/2/19	
Acetophenone	ND U	20	10	1.3	1	04/03/19 18:44	4/2/19	
Anthracene	ND U	9.8	5.0	1.4	1	04/03/19 18:44	4/2/19	
Atrazine	ND U	20	10	1.3	1	04/03/19 18:44	4/2/19	
Benz(a)anthracene	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
Benzaldehyde	ND U	9.8	5.0	1.1	1	04/03/19 18:44	4/2/19	
Benzo(a)pyrene	ND U	9.8	5.0	1.3	1	04/03/19 18:44	4/2/19	
Benzo(b)fluoranthene	ND U	9.8	5.0	1.3	1	04/03/19 18:44	4/2/19	
Benzo(g,h,i)perylene	ND U	9.8	5.0	1.5	1	04/03/19 18:44	4/2/19	
Benzo(k)fluoranthene	ND U	9.8	5.0	1.5	1	04/03/19 18:44	4/2/19	
Biphenyl	ND U	9.8	5.0	1.9	1	04/03/19 18:44	4/2/19	
2,2'-Oxybis(1-chloropropane)	ND U	9.8	5.0	1.4	1	04/03/19 18:44	4/2/19	
Bis(2-chloroethoxy)methane	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
Bis(2-chloroethyl) Ether	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
Bis(2-ethylhexyl) Phthalate	ND U	10	10	9.7	1	04/03/19 18:44	4/2/19	
Butyl Benzyl Phthalate	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
Caprolactam	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 12:40
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #6	**Units:**	ug/L
Lab Code:	R1902767-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	ND U	9.8	5.0	1.3	1	04/03/19 18:44	4/2/19	
Chrysene	ND U	9.8	5.0	1.5	1	04/03/19 18:44	4/2/19	
Di-n-butyl Phthalate	ND U	9.8	5.0	1.1	1	04/03/19 18:44	4/2/19	
Di-n-octyl Phthalate	ND U	9.8	5.0	1.8	1	04/03/19 18:44	4/2/19	
Dibenz(a,h)anthracene	ND U	9.8	5.0	1.4	1	04/03/19 18:44	4/2/19	
Dibenzofuran	ND U	9.8	5.0	1.3	1	04/03/19 18:44	4/2/19	
Diethyl Phthalate	ND U	9.8	5.0	1.2	1	04/03/19 18:44	4/2/19	
Dimethyl Phthalate	ND U	9.8	5.0	1.5	1	04/03/19 18:44	4/2/19	
Fluoranthene	ND U	9.8	5.0	1.4	1	04/03/19 18:44	4/2/19	
Fluorene	ND U	9.8	5.0	1.6	1	04/03/19 18:44	4/2/19	
Hexachlorobenzene	ND U	9.8	5.0	1.4	1	04/03/19 18:44	4/2/19	
Hexachlorobutadiene	ND U	9.8	5.0	1.1	1	04/03/19 18:44	4/2/19	
Hexachlorocyclopentadiene	ND U	9.8	5.0	1.5	1	04/03/19 18:44	4/2/19	
Hexachloroethane	ND U	9.8	5.0	1.2	1	04/03/19 18:44	4/2/19	
Indeno(1,2,3-cd)pyrene	ND U	9.8	5.0	1.4	1	04/03/19 18:44	4/2/19	
Isophorone	ND U	9.8	5.0	1.2	1	04/03/19 18:44	4/2/19	
N-Nitrosodi-n-propylamine	ND U	9.8	5.0	2.0	1	04/03/19 18:44	4/2/19	
N-Nitrosodiphenylamine	ND U	9.8	5.0	4.7	1	04/03/19 18:44	4/2/19	
Naphthalene	ND U	9.8	5.0	1.1	1	04/03/19 18:44	4/2/19	
Nitrobenzene	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
Pentachlorophenol (PCP)	ND U	49	25	6.0	1	04/03/19 18:44	4/2/19	
Phenanthrene	ND U	9.8	5.0	1.6	1	04/03/19 18:44	4/2/19	
Phenol	ND U	9.8	5.0	1.0	1	04/03/19 18:44	4/2/19	
Pyrene	ND U	9.8	5.0	1.8	1	04/03/19 18:44	4/2/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	75	43 - 140	04/03/19 18:44	
2-Fluorobiphenyl	61	44 - 119	04/03/19 18:44	
2-Fluorophenol	27	19 - 119	04/03/19 18:44	
Nitrobenzene-d5	62	44 - 120	04/03/19 18:44	
Phenol-d6	19	10 - 107	04/03/19 18:44	
Terphenyl-d14	56	50 - 134	04/03/19 18:44	

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:50
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #4	**Units:**	ug/L
Lab Code:	R1902767-002	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	19	10	1.0	1	04/03/19 19:13	4/2/19	
2,3,4,6-Tetrachlorophenol	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
2,4,5-Trichlorophenol	ND U	9.4	5.0	1.1	1	04/03/19 19:13	4/2/19	
2,4,6-Trichlorophenol	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
2,4-Dichlorophenol	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
2,4-Dimethylphenol	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
2,4-Dinitrophenol	ND U	47	25	2.9	1	04/03/19 19:13	4/2/19	
2,4-Dinitrotoluene	ND U	9.4	5.0	2.7	1	04/03/19 19:13	4/2/19	
2,6-Dinitrotoluene	ND U	9.4	5.0	1.5	1	04/03/19 19:13	4/2/19	
2-Chloronaphthalene	ND U	9.4	5.0	1.1	1	04/03/19 19:13	4/2/19	
2-Chlorophenol	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
2-Methylnaphthalene	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
2-Methylphenol	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
2-Nitroaniline	ND U	47	25	2.4	1	04/03/19 19:13	4/2/19	
2-Nitrophenol	ND U	9.4	5.0	1.5	1	04/03/19 19:13	4/2/19	
3,3'-Dichlorobenzidine	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
3- and 4-Methylphenol Coelution	ND U	19	10	1.0	1	04/03/19 19:13	4/2/19	
3-Nitroaniline	ND U	47	25	1.8	1	04/03/19 19:13	4/2/19	
4,6-Dinitro-2-methylphenol	ND U	47	25	3.7	1	04/03/19 19:13	4/2/19	
4-Bromophenyl Phenyl Ether	ND U	9.4	5.0	1.4	1	04/03/19 19:13	4/2/19	
4-Chloro-3-methylphenol	ND U	9.4	5.0	1.1	1	04/03/19 19:13	4/2/19	
4-Chloroaniline	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
4-Chlorophenyl Phenyl Ether	ND U	9.4	5.0	1.2	1	04/03/19 19:13	4/2/19	
4-Nitroaniline	ND U	47	25	1.9	1	04/03/19 19:13	4/2/19	
4-Nitrophenol	ND U	47	25	3.0	1	04/03/19 19:13	4/2/19	
Acenaphthene	ND U	9.4	5.0	1.6	1	04/03/19 19:13	4/2/19	
Acenaphthylene	ND U	9.4	5.0	1.3	1	04/03/19 19:13	4/2/19	
Acetophenone	ND U	19	10	1.3	1	04/03/19 19:13	4/2/19	
Anthracene	ND U	9.4	5.0	1.4	1	04/03/19 19:13	4/2/19	
Atrazine	ND U	19	10	1.3	1	04/03/19 19:13	4/2/19	
Benz(a)anthracene	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
Benzaldehyde	ND U	9.4	5.0	1.1	1	04/03/19 19:13	4/2/19	
Benzo(a)pyrene	ND U	9.4	5.0	1.3	1	04/03/19 19:13	4/2/19	
Benzo(b)fluoranthene	ND U	9.4	5.0	1.3	1	04/03/19 19:13	4/2/19	
Benzo(g,h,i)perylene	ND U	9.4	5.0	1.5	1	04/03/19 19:13	4/2/19	
Benzo(k)fluoranthene	ND U	9.4	5.0	1.5	1	04/03/19 19:13	4/2/19	
Biphenyl	ND U	9.4	5.0	1.9	1	04/03/19 19:13	4/2/19	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	5.0	1.4	1	04/03/19 19:13	4/2/19	
Bis(2-chloroethoxy)methane	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
Bis(2-chloroethyl) Ether	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
Bis(2-ethylhexyl) Phthalate	ND U	10	10	9.7	1	04/03/19 19:13	4/2/19	
Butyl Benzyl Phthalate	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
Caprolactam	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:50
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #4	**Units:**	ug/L
Lab Code:	R1902767-002	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	ND U	9.4	5.0	1.3	1	04/03/19 19:13	4/2/19	
Chrysene	ND U	9.4	5.0	1.5	1	04/03/19 19:13	4/2/19	
Di-n-butyl Phthalate	ND U	9.4	5.0	1.1	1	04/03/19 19:13	4/2/19	
Di-n-octyl Phthalate	ND U	9.4	5.0	1.8	1	04/03/19 19:13	4/2/19	
Dibenz(a,h)anthracene	ND U	9.4	5.0	1.4	1	04/03/19 19:13	4/2/19	
Dibenzofuran	ND U	9.4	5.0	1.3	1	04/03/19 19:13	4/2/19	
Diethyl Phthalate	ND U	9.4	5.0	1.2	1	04/03/19 19:13	4/2/19	
Dimethyl Phthalate	ND U	9.4	5.0	1.5	1	04/03/19 19:13	4/2/19	
Fluoranthene	ND U	9.4	5.0	1.4	1	04/03/19 19:13	4/2/19	
Fluorene	ND U	9.4	5.0	1.6	1	04/03/19 19:13	4/2/19	
Hexachlorobenzene	ND U	9.4	5.0	1.4	1	04/03/19 19:13	4/2/19	
Hexachlorobutadiene	ND U	9.4	5.0	1.1	1	04/03/19 19:13	4/2/19	
Hexachlorocyclopentadiene	ND U	9.4	5.0	1.5	1	04/03/19 19:13	4/2/19	
Hexachloroethane	ND U	9.4	5.0	1.2	1	04/03/19 19:13	4/2/19	
Indeno(1,2,3-cd)pyrene	ND U	9.4	5.0	1.4	1	04/03/19 19:13	4/2/19	
Isophorone	ND U	9.4	5.0	1.2	1	04/03/19 19:13	4/2/19	
N-Nitrosodi-n-propylamine	ND U	9.4	5.0	2.0	1	04/03/19 19:13	4/2/19	
N-Nitrosodiphenylamine	ND U	9.4	5.0	4.7	1	04/03/19 19:13	4/2/19	
Naphthalene	ND U	9.4	5.0	1.1	1	04/03/19 19:13	4/2/19	
Nitrobenzene	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
Pentachlorophenol (PCP)	ND U	47	25	6.0	1	04/03/19 19:13	4/2/19	
Phenanthrene	ND U	9.4	5.0	1.6	1	04/03/19 19:13	4/2/19	
Phenol	ND U	9.4	5.0	1.0	1	04/03/19 19:13	4/2/19	
Pyrene	ND U	9.4	5.0	1.8	1	04/03/19 19:13	4/2/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	76	43 - 140	04/03/19 19:13	
2-Fluorobiphenyl	59	44 - 119	04/03/19 19:13	
2-Fluorophenol	30	19 - 119	04/03/19 19:13	
Nitrobenzene-d5	63	44 - 120	04/03/19 19:13	
Phenol-d6	22	10 - 107	04/03/19 19:13	
Terphenyl-d14	62	50 - 134	04/03/19 19:13	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:00
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #1	**Units:**	ug/L
Lab Code:	R1902767-003	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	19	10	1.0	1	04/03/19 19:42	4/2/19	
2,3,4,6-Tetrachlorophenol	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
2,4,5-Trichlorophenol	ND U	9.4	5.0	1.1	1	04/03/19 19:42	4/2/19	
2,4,6-Trichlorophenol	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
2,4-Dichlorophenol	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
2,4-Dimethylphenol	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
2,4-Dinitrophenol	ND U	47	25	2.9	1	04/03/19 19:42	4/2/19	
2,4-Dinitrotoluene	ND U	9.4	5.0	2.7	1	04/03/19 19:42	4/2/19	
2,6-Dinitrotoluene	ND U	9.4	5.0	1.5	1	04/03/19 19:42	4/2/19	
2-Chloronaphthalene	ND U	9.4	5.0	1.1	1	04/03/19 19:42	4/2/19	
2-Chlorophenol	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
2-Methylnaphthalene	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
2-Methylphenol	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
2-Nitroaniline	ND U	47	25	2.4	1	04/03/19 19:42	4/2/19	
2-Nitrophenol	ND U	9.4	5.0	1.5	1	04/03/19 19:42	4/2/19	
3,3'-Dichlorobenzidine	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
3- and 4-Methylphenol Coelution	ND U	19	10	1.0	1	04/03/19 19:42	4/2/19	
3-Nitroaniline	ND U	47	25	1.8	1	04/03/19 19:42	4/2/19	
4,6-Dinitro-2-methylphenol	ND U	47	25	3.7	1	04/03/19 19:42	4/2/19	
4-Bromophenyl Phenyl Ether	ND U	9.4	5.0	1.4	1	04/03/19 19:42	4/2/19	
4-Chloro-3-methylphenol	ND U	9.4	5.0	1.1	1	04/03/19 19:42	4/2/19	
4-Chloroaniline	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
4-Chlorophenyl Phenyl Ether	ND U	9.4	5.0	1.2	1	04/03/19 19:42	4/2/19	
4-Nitroaniline	ND U	47	25	1.9	1	04/03/19 19:42	4/2/19	
4-Nitrophenol	ND U	47	25	3.0	1	04/03/19 19:42	4/2/19	
Acenaphthene	ND U	9.4	5.0	1.6	1	04/03/19 19:42	4/2/19	
Acenaphthylene	ND U	9.4	5.0	1.3	1	04/03/19 19:42	4/2/19	
Acetophenone	ND U	19	10	1.3	1	04/03/19 19:42	4/2/19	
Anthracene	ND U	9.4	5.0	1.4	1	04/03/19 19:42	4/2/19	
Atrazine	ND U	19	10	1.3	1	04/03/19 19:42	4/2/19	
Benz(a)anthracene	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
Benzaldehyde	ND U	9.4	5.0	1.1	1	04/03/19 19:42	4/2/19	
Benzo(a)pyrene	ND U	9.4	5.0	1.3	1	04/03/19 19:42	4/2/19	
Benzo(b)fluoranthene	ND U	9.4	5.0	1.3	1	04/03/19 19:42	4/2/19	
Benzo(g,h,i)perylene	ND U	9.4	5.0	1.5	1	04/03/19 19:42	4/2/19	
Benzo(k)fluoranthene	ND U	9.4	5.0	1.5	1	04/03/19 19:42	4/2/19	
Biphenyl	ND U	9.4	5.0	1.9	1	04/03/19 19:42	4/2/19	
2,2'-Oxybis(1-chloropropane)	ND U	9.4	5.0	1.4	1	04/03/19 19:42	4/2/19	
Bis(2-chloroethoxy)methane	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
Bis(2-chloroethyl) Ether	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
Bis(2-ethylhexyl) Phthalate	ND U	10	10	9.7	1	04/03/19 19:42	4/2/19	
Butyl Benzyl Phthalate	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
Caprolactam	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:00
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #1	**Units:**	ug/L
Lab Code:	R1902767-003	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	ND U	9.4	5.0	1.3	1	04/03/19 19:42	4/2/19	
Chrysene	ND U	9.4	5.0	1.5	1	04/03/19 19:42	4/2/19	
Di-n-butyl Phthalate	ND U	9.4	5.0	1.1	1	04/03/19 19:42	4/2/19	
Di-n-octyl Phthalate	ND U	9.4	5.0	1.8	1	04/03/19 19:42	4/2/19	
Dibenz(a,h)anthracene	ND U	9.4	5.0	1.4	1	04/03/19 19:42	4/2/19	
Dibenzofuran	ND U	9.4	5.0	1.3	1	04/03/19 19:42	4/2/19	
Diethyl Phthalate	ND U	9.4	5.0	1.2	1	04/03/19 19:42	4/2/19	
Dimethyl Phthalate	ND U	9.4	5.0	1.5	1	04/03/19 19:42	4/2/19	
Fluoranthene	ND U	9.4	5.0	1.4	1	04/03/19 19:42	4/2/19	
Fluorene	ND U	9.4	5.0	1.6	1	04/03/19 19:42	4/2/19	
Hexachlorobenzene	ND U	9.4	5.0	1.4	1	04/03/19 19:42	4/2/19	
Hexachlorobutadiene	ND U	9.4	5.0	1.1	1	04/03/19 19:42	4/2/19	
Hexachlorocyclopentadiene	ND U	9.4	5.0	1.5	1	04/03/19 19:42	4/2/19	
Hexachloroethane	ND U	9.4	5.0	1.2	1	04/03/19 19:42	4/2/19	
Indeno(1,2,3-cd)pyrene	ND U	9.4	5.0	1.4	1	04/03/19 19:42	4/2/19	
Isophorone	ND U	9.4	5.0	1.2	1	04/03/19 19:42	4/2/19	
N-Nitrosodi-n-propylamine	ND U	9.4	5.0	2.0	1	04/03/19 19:42	4/2/19	
N-Nitrosodiphenylamine	ND U	9.4	5.0	4.7	1	04/03/19 19:42	4/2/19	
Naphthalene	ND U	9.4	5.0	1.1	1	04/03/19 19:42	4/2/19	
Nitrobenzene	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
Pentachlorophenol (PCP)	ND U	47	25	6.0	1	04/03/19 19:42	4/2/19	
Phenanthrene	ND U	9.4	5.0	1.6	1	04/03/19 19:42	4/2/19	
Phenol	ND U	9.4	5.0	1.0	1	04/03/19 19:42	4/2/19	
Pyrene	ND U	9.4	5.0	1.8	1	04/03/19 19:42	4/2/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	77	43 - 140	04/03/19 19:42	
2-Fluorobiphenyl	63	44 - 119	04/03/19 19:42	
2-Fluorophenol	34	19 - 119	04/03/19 19:42	
Nitrobenzene-d5	66	44 - 120	04/03/19 19:42	
Phenol-d6	23	10 - 107	04/03/19 19:42	
Terphenyl-d14	68	50 - 134	04/03/19 19:42	

Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 12:40
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #6	**Units:**	ug/L
Lab Code:	R1902767-001	**Basis:**	NA

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	ND U	0.94	0.50	0.44	1	04/03/19 16:53	4/3/19	
Aroclor 1221	ND U	1.9	1.0	0.54	1	04/03/19 16:53	4/3/19	
Aroclor 1232	ND U	0.94	0.50	0.50	1	04/03/19 16:53	4/3/19	
Aroclor 1242	ND U	0.94	0.50	0.32	1	04/03/19 16:53	4/3/19	
Aroclor 1248	ND U	0.94	0.50	0.25	1	04/03/19 16:53	4/3/19	
Aroclor 1254	ND U	0.94	0.50	0.28	1	04/03/19 16:53	4/3/19	
Aroclor 1260	ND U	0.94	0.50	0.46	1	04/03/19 16:53	4/3/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	28	10 - 152	04/03/19 16:53	
Tetrachloro-m-xylene	64	14 - 129	04/03/19 16:53	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:50
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #4	**Units:**	ug/L
Lab Code:	R1902767-002	**Basis:**	NA

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	ND U	0.94	0.50	0.44	1	04/03/19 17:12	4/3/19	
Aroclor 1221	ND U	1.9	1.0	0.54	1	04/03/19 17:12	4/3/19	
Aroclor 1232	ND U	0.94	0.50	0.50	1	04/03/19 17:12	4/3/19	
Aroclor 1242	ND U	0.94	0.50	0.32	1	04/03/19 17:12	4/3/19	
Aroclor 1248	ND U	0.94	0.50	0.25	1	04/03/19 17:12	4/3/19	
Aroclor 1254	ND U	0.94	0.50	0.28	1	04/03/19 17:12	4/3/19	
Aroclor 1260	ND U	0.94	0.50	0.46	1	04/03/19 17:12	4/3/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	25	10 - 152	04/03/19 17:12	
Tetrachloro-m-xylene	59	14 - 129	04/03/19 17:12	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:00
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #1	**Units:**	ug/L
Lab Code:	R1902767-003	**Basis:**	NA

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	ND U	0.94	0.50	0.44	1	04/03/19 17:32	4/3/19	
Aroclor 1221	ND U	1.9	1.0	0.54	1	04/03/19 17:32	4/3/19	
Aroclor 1232	ND U	0.94	0.50	0.50	1	04/03/19 17:32	4/3/19	
Aroclor 1242	ND U	0.94	0.50	0.32	1	04/03/19 17:32	4/3/19	
Aroclor 1248	ND U	0.94	0.50	0.25	1	04/03/19 17:32	4/3/19	
Aroclor 1254	ND U	0.94	0.50	0.28	1	04/03/19 17:32	4/3/19	
Aroclor 1260	ND U	0.94	0.50	0.46	1	04/03/19 17:32	4/3/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	32	10 - 152	04/03/19 17:32	
Tetrachloro-m-xylene	72	14 - 129	04/03/19 17:32	

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Tantara Corporation
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023
Sample Matrix: Water

Service Request: R1902767
Date Collected: 03/29/19 12:40
Date Received: 04/01/19 08:45

Sample Name: Silo #6
Lab Code: R1902767-001

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**6580**	ug/L	400	200	30	1	04/05/19 11:11	04/02/19	
Arsenic, Total	6010C	**8 J**	ug/L	10	5	4	1	04/05/19 16:05	04/02/19	
Barium, Total	6010C	**59**	ug/L	40	20	3	1	04/05/19 11:11	04/02/19	
Cadmium, Total	6010C	ND U	ug/L	5.0	2.5	0.4	1	04/05/19 11:11	04/02/19	
Chromium, Total	6010C	**9 J**	ug/L	10	5	0.6	1	04/05/19 11:11	04/02/19	
Copper, Total	6010C	**14 J**	ug/L	20	10	4	1	04/05/19 11:11	04/02/19	
Iron, Total	6010C	**6810**	ug/L	200	100	20	1	04/05/19 11:11	04/02/19	
Lead, Total	6010C	**8 J**	ug/L	10	5	3	1	04/05/19 11:11	04/02/19	
Mercury	7470A	ND U	ug/L	0.20	0.10	0.08	1	04/03/19 12:50	04/02/19	
Selenium, Total	6010C	ND U	ug/L	10	5	5	1	04/05/19 11:11	04/02/19	
Silver, Total	6010C	ND U	ug/L	10	5	0.6	1	04/05/19 11:11	04/02/19	

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:50
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #4	**Basis:**	NA
Lab Code:	R1902767-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**18500**	ug/L	400	200	30	1	04/05/19 11:15	04/02/19	
Arsenic, Total	6010C	**10**	ug/L	10	5	4	1	04/05/19 16:08	04/02/19	
Barium, Total	6010C	**117**	ug/L	40	20	3	1	04/05/19 11:15	04/02/19	
Cadmium, Total	6010C	**0.6 J**	ug/L	5.0	2.5	0.4	1	04/05/19 11:15	04/02/19	
Chromium, Total	6010C	**25**	ug/L	10	5	0.6	1	04/05/19 11:15	04/02/19	
Copper, Total	6010C	**35**	ug/L	20	10	4	1	04/05/19 11:15	04/02/19	
Iron, Total	6010C	**21300**	ug/L	200	100	20	1	04/05/19 11:15	04/02/19	
Lead, Total	6010C	**17**	ug/L	10	5	3	1	04/05/19 11:15	04/02/19	
Mercury	7470A	ND U	ug/L	0.20	0.10	0.08	1	04/03/19 12:52	04/02/19	
Selenium, Total	6010C	ND U	ug/L	10	5	5	1	04/05/19 11:15	04/02/19	
Silver, Total	6010C	ND U	ug/L	10	5	0.6	1	04/05/19 11:15	04/02/19	

Client: Tantara Corporation
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023
Sample Matrix: Water

Service Request: R1902767
Date Collected: 03/29/19 11:00
Date Received: 04/01/19 08:45

Sample Name: Silo #1
Lab Code: R1902767-003

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	**3290**	ug/L	400	200	30	1	04/05/19 11:18	04/02/19	
Arsenic, Total	6010C	ND U	ug/L	10	5	4	1	04/05/19 16:11	04/02/19	
Barium, Total	6010C	**39 J**	ug/L	40	20	3	1	04/05/19 11:18	04/02/19	
Cadmium, Total	6010C	ND U	ug/L	5.0	2.5	0.4	1	04/05/19 11:18	04/02/19	
Chromium, Total	6010C	**4 J**	ug/L	10	5	0.6	1	04/05/19 11:18	04/02/19	
Copper, Total	6010C	**9 J**	ug/L	20	10	4	1	04/05/19 11:18	04/02/19	
Iron, Total	6010C	**3870**	ug/L	200	100	20	1	04/05/19 11:18	04/02/19	
Lead, Total	6010C	ND U	ug/L	10	5	3	1	04/05/19 11:18	04/02/19	
Mercury	7470A	ND U	ug/L	0.20	0.10	0.08	1	04/03/19 12:54	04/02/19	
Selenium, Total	6010C	ND U	ug/L	10	5	5	1	04/05/19 11:18	04/02/19	
Silver, Total	6010C	ND U	ug/L	10	5	0.6	1	04/05/19 11:18	04/02/19	

General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 12:40
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #6	**Basis:**	NA
Lab Code:	R1902767-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	**6.9**	mg/L	1.0	0.5	0.5	1	04/03/19 07:36	
Chemical Oxygen Demand, Total	410.4	**22**	mg/L	10	5	4	1	04/02/19 14:45	
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.8	-	1.6	1	04/01/19 10:30	
pH	SM 4500-H+ B	**8.37**	pH Units	-	-	-	1	04/03/19 08:55	*
Solids, Total Suspended (TSS)	SM 2540 D-1997(2011)	**173**	mg/L	7.1	-	-	1	04/03/19 10:15	
Temperature of pH Analysis	SM 4500-H+ B	**20.6**	deg C	-	-	-	1	04/03/19 08:55	*

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:50
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #4	**Basis:**	NA
Lab Code:	R1902767-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	**4.1**	mg/L	1.0	0.5	0.5	1	04/03/19 07:57	
Chemical Oxygen Demand, Total	410.4	**14**	mg/L	10	5	4	1	04/02/19 14:45	
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.8	-	1.6	1	04/01/19 10:30	
pH	SM 4500-H+ B	**7.80**	pH Units	-	-	-	1	04/03/19 08:57	*
Solids, Total Suspended (TSS)	SM 2540 D-1997(2011)	**586**	mg/L	14	-	-	1	04/03/19 10:15	
Temperature of pH Analysis	SM 4500-H+ B	**20.5**	deg C	-	-	-	1	04/03/19 08:57	*

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19 11:00
Sample Matrix:	Water	**Date Received:**	04/01/19 08:45
Sample Name:	Silo #1	**Basis:**	NA
Lab Code:	R1902767-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	**3.1**	mg/L	1.0	0.5	0.5	1	04/03/19 08:18	
Chemical Oxygen Demand, Total	410.4	**9 J**	mg/L	10	5	4	1	04/02/19 14:45	
Oil and Grease, Total (HEM)	1664A	ND U	mg/L	4.7	-	1.6	1	04/01/19 10:30	
pH	SM 4500-H+ B	**7.84**	pH Units	-	-	-	1	04/03/19 08:59	*
Solids, Total Suspended (TSS)	SM 2540 D-1997(2011)	**81.7**	mg/L	3.3	-	-	1	04/03/19 10:15	
Temperature of pH Analysis	SM 4500-H+ B	**20.7**	deg C	-	-	-	1	04/03/19 08:59	*

QC Summary Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Tantara Corporation **Service Request:** R1902767
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene 85-114	Dibromofluoromethane 80-119	Toluene-d8 89-112
Silo #6	R1902767-001	94	100	99
Silo #4	R1902767-002	94	100	99
Silo #1	R1902767-003	95	100	99
Trip Blank	R1902767-004	93	99	97
Method Blank	RQ1902923-04	95	100	99
Lab Control Sample	RQ1902923-03	95	99	99

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1902923-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	ND U	5.0	1.0	0.21	1	04/03/19 11:47	
1,1,2,2-Tetrachloroethane	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
1,1,2-Trichloroethane	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
1,1-Dichloroethane (1,1-DCA)	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
1,1-Dichloroethene (1,1-DCE)	ND U	5.0	1.0	0.25	1	04/03/19 11:47	
1,2,3-Trichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
1,2,4-Trichlorobenzene	ND U	5.0	1.0	0.25	1	04/03/19 11:47	
1,2-Dibromo-3-chloropropane (DBCP)	ND U	5.0	1.0	0.45	1	04/03/19 11:47	
1,2-Dibromoethane	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
1,2-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
1,2-Dichloroethane	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
1,2-Dichloropropane	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
1,3-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
1,4-Dichlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
1,4-Dioxane	ND U	100	-	13	1	04/03/19 11:47	
2-Butanone (MEK)	ND U	10	-	0.78	1	04/03/19 11:47	
2-Hexanone	ND U	10	-	0.20	1	04/03/19 11:47	
4-Methyl-2-pentanone	ND U	10	1.0	0.20	1	04/03/19 11:47	
Acetone	ND U	10	5.0	2.1	1	04/03/19 11:47	
Benzene	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
Bromochloromethane	ND U	5.0	1.0	0.24	1	04/03/19 11:47	
Bromodichloromethane	ND U	5.0	1.0	0.22	1	04/03/19 11:47	
Bromoform	ND U	5.0	1.0	0.25	1	04/03/19 11:47	
Bromomethane	ND U	5.0	1.0	0.70	1	04/03/19 11:47	
Carbon Disulfide	ND U	10	1.0	0.25	1	04/03/19 11:47	
Carbon Tetrachloride	ND U	5.0	1.0	0.34	1	04/03/19 11:47	
Chlorobenzene	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
Chloroethane	ND U	5.0	1.0	0.23	1	04/03/19 11:47	
Chloroform	ND U	5.0	1.0	0.24	1	04/03/19 11:47	
Chloromethane	ND U	5.0	1.0	0.28	1	04/03/19 11:47	
Cyclohexane	ND U	10	1.0	0.26	1	04/03/19 11:47	
Dibromochloromethane	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
Dichlorodifluoromethane (CFC 12)	ND U	5.0	1.0	0.21	1	04/03/19 11:47	
Dichloromethane	ND U	5.0	1.0	0.36	1	04/03/19 11:47	
Ethylbenzene	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
Isopropylbenzene (Cumene)	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
Methyl Acetate	ND U	10	1.0	0.33	1	04/03/19 11:47	
Methyl tert-Butyl Ether	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
Methylcyclohexane	ND U	10	1.0	0.20	1	04/03/19 11:47	
Styrene	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
Tetrachloroethene (PCE)	ND U	5.0	1.0	0.21	1	04/03/19 11:47	
Toluene	ND U	5.0	1.0	0.20	1	04/03/19 11:47	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1902923-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Trichloroethene (TCE)	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
Trichlorofluoromethane (CFC 11)	ND U	5.0	1.0	0.24	1	04/03/19 11:47	
Vinyl Chloride	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
cis-1,2-Dichloroethene	ND U	5.0	1.0	0.23	1	04/03/19 11:47	
cis-1,3-Dichloropropene	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
m,p-Xylenes	ND U	5.0	2.0	0.20	1	04/03/19 11:47	
o-Xylene	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
trans-1,2-Dichloroethene	ND U	5.0	1.0	0.20	1	04/03/19 11:47	
trans-1,3-Dichloropropene	ND U	5.0	1.0	0.23	1	04/03/19 11:47	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 114	04/03/19 11:47	
Dibromofluoromethane	100	80 - 119	04/03/19 11:47	
Toluene-d8	99	89 - 112	04/03/19 11:47	

Client: Tantara Corporation
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023
Sample Matrix: Water

Service Request: R1902767
Date Analyzed: 04/03/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1902923-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	8260C	18.7	20.0	94	74-131
1,1,2,2-Tetrachloroethane	8260C	21.5	20.0	107	71-121
1,1,2-Trichloroethane	8260C	18.3	20.0	92	80-119
1,1,2-Trichloro-1,2,2-trifluoroethane	8260C	18.7	20.0	93	70-136
1,1-Dichloroethane (1,1-DCA)	8260C	19.1	20.0	95	77-125
1,1-Dichloroethene (1,1-DCE)	8260C	18.8	20.0	94	71-131
1,2,3-Trichlorobenzene	8260C	17.6	20.0	88	69-129
1,2,4-Trichlorobenzene	8260C	17.7	20.0	88	69-130
1,2-Dibromo-3-chloropropane (DBCP)	8260C	19.6	20.0	98	62-128
1,2-Dibromoethane	8260C	18.9	20.0	95	77-121
1,2-Dichlorobenzene	8260C	17.2	20.0	86	80-119
1,2-Dichloroethane	8260C	19.6	20.0	98	73-128
1,2-Dichloropropane	8260C	18.4	20.0	92	78-122
1,3-Dichlorobenzene	8260C	16.9	20.0	85	80-119
1,4-Dichlorobenzene	8260C	16.9	20.0	84	79-118
1,4-Dioxane	8260C	406	400	102	59-139
2-Butanone (MEK)	8260C	21.7	20.0	109	56-143
2-Hexanone	8260C	21.7	20.0	109	57-139
4-Methyl-2-pentanone	8260C	22.0	20.0	110	67-130
Acetone	8260C	21.1	20.0	106	39-160
Benzene	8260C	17.9	20.0	89	79-120
Bromochloromethane	8260C	18.3	20.0	91	78-123
Bromodichloromethane	8260C	17.9	20.0	90	79-125
Bromoform	8260C	18.2	20.0	91	66-130
Bromomethane	8260C	15.4	20.0	77	53-141
Carbon Disulfide	8260C	21.7	20.0	109	64-133
Carbon Tetrachloride	8260C	17.4	20.0	87	72-136
Chlorobenzene	8260C	17.2	20.0	86	82-118
Chloroethane	8260C	16.4	20.0	82	60-138
Chloroform	8260C	18.8	20.0	94	79-124
Chloromethane	8260C	17.1	20.0	86	50-139
Cyclohexane	8260C	23.4	20.0	117	71-130

Client: Tantara Corporation
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023
Sample Matrix: Water

Service Request: R1902767
Date Analyzed: 04/03/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

Lab Control Sample
RQ1902923-03

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Dibromochloromethane	8260C	17.7	20.0	88	74-126
Dichlorodifluoromethane (CFC 12)	8260C	20.3	20.0	101	32-152
Dichloromethane	8260C	18.3	20.0	92	74-124
Ethylbenzene	8260C	17.1	20.0	85	79-121
Isopropylbenzene (Cumene)	8260C	16.6	20.0	83	72-131
Methyl Acetate	8260C	21.8	20.0	109	56-136
Methyl tert-Butyl Ether	8260C	21.1	20.0	106	71-124
Methylcyclohexane	8260C	23.0	20.0	115	72-132
Styrene	8260C	17.8	20.0	89	78-123
Tetrachloroethene (PCE)	8260C	15.1	20.0	76	74-129
Toluene	8260C	17.3	20.0	87	80-121
Trichloroethene (TCE)	8260C	16.9	20.0	84	79-123
Trichlorofluoromethane (CFC 11)	8260C	18.0	20.0	90	65-141
Vinyl Chloride	8260C	17.9	20.0	90	58-137
cis-1,2-Dichloroethene	8260C	18.7	20.0	94	78-123
cis-1,3-Dichloropropene	8260C	18.8	20.0	94	75-124
m,p-Xylenes	8260C	34.1	40.0	85	80-121
o-Xylene	8260C	17.3	20.0	87	78-122
trans-1,2-Dichloroethene	8260C	18.5	20.0	92	75-124
trans-1,3-Dichloropropene	8260C	19.2	20.0	96	73-127

Semivolatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Tantara Corporation **Service Request:** R1902767
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Extraction Method: EPA 3510C

Sample Name	Lab Code	2,4,6-Tribromophenol 43-140	2-Fluorobiphenyl 44-119	2-Fluorophenol 19-119
Silo #6	R1902767-001	75	61	27
Silo #4	R1902767-002	76	59	30
Silo #1	R1902767-003	77	63	34
Method Blank	RQ1902739-01	85	68	35
Lab Control Sample	RQ1902739-02	73	66	38
Duplicate Lab Control Sample	RQ1902739-03	78	70	38

Client: Tantara Corporation **Service Request:** R1902767

Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-

Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D

Extraction Method: EPA 3510C

		Nitrobenzene-d5	Phenol-d6	Terphenyl-d14
Sample Name	**Lab Code**	**44-120**	**10-107**	**50-134**
Silo #6	R1902767-001	62	19	56
Silo #4	R1902767-002	63	22	62
Silo #1	R1902767-003	66	23	68
Method Blank	RQ1902739-01	71	24	76
Lab Control Sample	RQ1902739-02	64	28	69
Duplicate Lab Control Sample	RQ1902739-03	67	28	68

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1902739-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
1,2,4,5-Tetrachlorobenzene	ND U	20	10	1.0	1	04/03/19 13:55	4/2/19	
2,3,4,6-Tetrachlorophenol	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
2,4,5-Trichlorophenol	ND U	10	5.0	1.1	1	04/03/19 13:55	4/2/19	
2,4,6-Trichlorophenol	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
2,4-Dichlorophenol	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
2,4-Dimethylphenol	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
2,4-Dinitrophenol	ND U	50	25	2.9	1	04/03/19 13:55	4/2/19	
2,4-Dinitrotoluene	ND U	10	5.0	2.7	1	04/03/19 13:55	4/2/19	
2,6-Dinitrotoluene	ND U	10	5.0	1.5	1	04/03/19 13:55	4/2/19	
2-Chloronaphthalene	ND U	10	5.0	1.1	1	04/03/19 13:55	4/2/19	
2-Chlorophenol	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
2-Methylnaphthalene	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
2-Methylphenol	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
2-Nitroaniline	ND U	50	25	2.4	1	04/03/19 13:55	4/2/19	
2-Nitrophenol	ND U	10	5.0	1.5	1	04/03/19 13:55	4/2/19	
3,3'-Dichlorobenzidine	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
3- and 4-Methylphenol Coelution	ND U	20	10	1.0	1	04/03/19 13:55	4/2/19	
3-Nitroaniline	ND U	50	25	1.8	1	04/03/19 13:55	4/2/19	
4,6-Dinitro-2-methylphenol	ND U	50	25	3.7	1	04/03/19 13:55	4/2/19	
4-Bromophenyl Phenyl Ether	ND U	10	5.0	1.4	1	04/03/19 13:55	4/2/19	
4-Chloro-3-methylphenol	ND U	10	5.0	1.1	1	04/03/19 13:55	4/2/19	
4-Chloroaniline	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
4-Chlorophenyl Phenyl Ether	ND U	10	5.0	1.2	1	04/03/19 13:55	4/2/19	
4-Nitroaniline	ND U	50	25	1.9	1	04/03/19 13:55	4/2/19	
4-Nitrophenol	ND U	50	25	3.0	1	04/03/19 13:55	4/2/19	
Acenaphthene	ND U	10	5.0	1.6	1	04/03/19 13:55	4/2/19	
Acenaphthylene	ND U	10	5.0	1.3	1	04/03/19 13:55	4/2/19	
Acetophenone	ND U	20	10	1.3	1	04/03/19 13:55	4/2/19	
Anthracene	ND U	10	5.0	1.4	1	04/03/19 13:55	4/2/19	
Atrazine	ND U	20	10	1.3	1	04/03/19 13:55	4/2/19	
Benz(a)anthracene	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
Benzaldehyde	ND U	10	5.0	1.1	1	04/03/19 13:55	4/2/19	
Benzo(a)pyrene	ND U	10	5.0	1.3	1	04/03/19 13:55	4/2/19	
Benzo(b)fluoranthene	ND U	10	5.0	1.3	1	04/03/19 13:55	4/2/19	
Benzo(g,h,i)perylene	ND U	10	5.0	1.5	1	04/03/19 13:55	4/2/19	
Benzo(k)fluoranthene	ND U	10	5.0	1.5	1	04/03/19 13:55	4/2/19	
Biphenyl	ND U	10	5.0	1.9	1	04/03/19 13:55	4/2/19	
2,2'-Oxybis(1-chloropropane)	ND U	10	5.0	1.4	1	04/03/19 13:55	4/2/19	
Bis(2-chloroethoxy)methane	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
Bis(2-chloroethyl) Ether	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
Bis(2-ethylhexyl) Phthalate	ND U	10	10	9.7	1	04/03/19 13:55	4/2/19	
Butyl Benzyl Phthalate	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
Caprolactam	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1902739-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Carbazole	ND U	10	5.0	1.3	1	04/03/19 13:55	4/2/19	
Chrysene	ND U	10	5.0	1.5	1	04/03/19 13:55	4/2/19	
Di-n-butyl Phthalate	ND U	10	5.0	1.1	1	04/03/19 13:55	4/2/19	
Di-n-octyl Phthalate	ND U	10	5.0	1.8	1	04/03/19 13:55	4/2/19	
Dibenz(a,h)anthracene	ND U	10	5.0	1.4	1	04/03/19 13:55	4/2/19	
Dibenzofuran	ND U	10	5.0	1.3	1	04/03/19 13:55	4/2/19	
Diethyl Phthalate	ND U	10	5.0	1.2	1	04/03/19 13:55	4/2/19	
Dimethyl Phthalate	ND U	10	5.0	1.5	1	04/03/19 13:55	4/2/19	
Fluoranthene	ND U	10	5.0	1.4	1	04/03/19 13:55	4/2/19	
Fluorene	ND U	10	5.0	1.6	1	04/03/19 13:55	4/2/19	
Hexachlorobenzene	ND U	10	5.0	1.4	1	04/03/19 13:55	4/2/19	
Hexachlorobutadiene	ND U	10	5.0	1.1	1	04/03/19 13:55	4/2/19	
Hexachlorocyclopentadiene	ND U	10	5.0	1.5	1	04/03/19 13:55	4/2/19	
Hexachloroethane	ND U	10	5.0	1.2	1	04/03/19 13:55	4/2/19	
Indeno(1,2,3-cd)pyrene	ND U	10	5.0	1.4	1	04/03/19 13:55	4/2/19	
Isophorone	ND U	10	5.0	1.2	1	04/03/19 13:55	4/2/19	
N-Nitrosodi-n-propylamine	ND U	10	5.0	2.0	1	04/03/19 13:55	4/2/19	
N-Nitrosodiphenylamine	ND U	10	5.0	4.7	1	04/03/19 13:55	4/2/19	
Naphthalene	ND U	10	5.0	1.1	1	04/03/19 13:55	4/2/19	
Nitrobenzene	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
Pentachlorophenol (PCP)	ND U	50	25	6.0	1	04/03/19 13:55	4/2/19	
Phenanthrene	ND U	10	5.0	1.6	1	04/03/19 13:55	4/2/19	
Phenol	ND U	10	5.0	1.0	1	04/03/19 13:55	4/2/19	
Pyrene	ND U	10	5.0	1.8	1	04/03/19 13:55	4/2/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	85	43 - 140	04/03/19 13:55	
2-Fluorobiphenyl	68	44 - 119	04/03/19 13:55	
2-Fluorophenol	35	19 - 119	04/03/19 13:55	
Nitrobenzene-d5	71	44 - 120	04/03/19 13:55	
Phenol-d6	24	10 - 107	04/03/19 13:55	
Terphenyl-d14	76	50 - 134	04/03/19 13:55	

Client: Tantara Corporation
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023
Sample Matrix: Water

Service Request: R1902767
Date Analyzed: 04/03/19

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1902739-02			RQ1902739-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,4,5-Tetrachlorobenzene	8270D	26.4	50.2	53	29.6	50.2	59	35-121	11	20
2,4,5-Trichlorophenol	8270D	37.1	50.0	74	37.5	50.0	75	53-123	<1	20
2,4,6-Trichlorophenol	8270D	36.5	50.0	73	37.9	50.0	76	50-125	4	20
2,4-Dichlorophenol	8270D	32.3	50.0	65	31.8	50.0	64	47-121	2	20
2,4-Dimethylphenol	8270D	33.8	50.0	68	33.1	50.0	66	31-124	2	20
2,4-Dinitrophenol	8270D	39.3 J	50.0	79	40.4 J	50.0	81	23-143	3	20
2,4-Dinitrotoluene	8270D	39.3	50.0	79	41.4	50.0	83	57-128	5	20
2,6-Dinitrotoluene	8270D	41.2	50.0	82	42.5	50.0	85	57-124	3	20
2-Chloronaphthalene	8270D	33.8	50.0	68	36.0	50.0	72	40-116	6	20
2-Chlorophenol	8270D	30.6	50.0	61	31.9	50.0	64	38-117	4	20
2-Methylnaphthalene	8270D	29.6	50.0	59	30.0	50.0	60	40-121	1	20
2-Methylphenol	8270D	30.3	50.0	61	30.2	50.0	60	30-117	<1	20
2-Nitroaniline	8270D	45.9 J	50.0	92	49.2 J	50.0	98	55-127	7	20
2-Nitrophenol	8270D	30.7	50.0	61	31.8	50.0	64	47-123	3	20
3,3'-Dichlorobenzidine	8270D	34.8	50.0	70	37.6	50.0	75	27-129	8	20
3- and 4-Methylphenol Coelution	8270D	27.6	50.0	55	27.1	50.0	54	29-110	2	20
3-Nitroaniline	8270D	32.3 J	50.0	65	34.0 J	50.0	68	41-128	5	20
4,6-Dinitro-2-methylphenol	8270D	38.3 J	50.0	77	37.3 J	50.0	75	44-137	3	20
4-Bromophenyl Phenyl Ether	8270D	41.7	50.0	83	43.5	50.0	87	55-124	4	20
4-Chloro-3-methylphenol	8270D	36.7	50.0	73	35.6	50.0	71	52-119	3	20
4-Chloroaniline	8270D	29.4	50.0	59	30.2	50.0	60	33-117	3	20
4-Chlorophenyl Phenyl Ether	8270D	40.0	50.0	80	42.6	50.0	85	53-121	6	20
Acenaphthene	8270D	35.5	50.0	71	37.8	50.0	76	47-122	6	20
Acenaphthylene	8270D	37.7	50.0	75	39.8	50.0	80	41-130	5	20
Acetophenone	8270D	70.4	100	70	78.2	100	78	46-118	11	20
Anthracene	8270D	43.4	50.0	87	44.6	50.0	89	57-123	3	20
Atrazine	8270D	56.6	50.0	113	60.6	50.0	121	44-142	7	20
Benz(a)anthracene	8270D	40.6	50.0	81	43.1	50.0	86	58-125	6	20
Benzo(a)pyrene	8270D	41.9	50.0	84	45.9	50.0	92	54-128	9	20
Benzo(b)fluoranthene	8270D	38.9	50.0	78	41.1	50.0	82	53-131	6	20
Benzo(g,h,i)perylene	8270D	53.4	50.0	107	73.3	50.0	147 *	50-134	31*	20
Benzo(k)fluoranthene	8270D	41.5	50.0	83	44.6	50.0	89	57-129	7	20

Client: Tantara Corporation
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023
Sample Matrix: Water

Service Request: R1902767
Date Analyzed: 04/03/19

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		RQ1902739-02			RQ1902739-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Biphenyl	8270D	32.5	50.0	65	34.8	50.0	70	49-115	7	20
Bis(2-chloroethoxy)methane	8270D	39.1	50.0	78	40.0	50.0	80	48-120	2	20
Bis(2-chloroethyl) Ether	8270D	37.4	50.0	75	41.1	50.0	82	43-118	9	20
Bis(2-ethylhexyl) Phthalate	8270D	39.7	50.0	79	41.4	50.0	83	55-135	4	20
Butyl Benzyl Phthalate	8270D	40.2	50.0	80	43.3	50.0	87	53-134	7	20
Carbazole	8270D	45.4	50.0	91	47.4	50.0	95	60-122	4	20
Chrysene	8270D	43.2	50.0	86	46.3	50.0	93	59-123	7	20
Di-n-butyl Phthalate	8270D	43.3	50.0	87	44.9	50.0	90	59-127	4	20
Di-n-octyl Phthalate	8270D	40.2	50.0	80	42.0	50.0	84	51-140	4	20
Dibenz(a,h)anthracene	8270D	39.3	50.0	79	56.3	50.0	113	51-134	36*	20
Dibenzofuran	8270D	37.7	50.0	75	40.2	50.0	80	53-118	6	20
Diethyl Phthalate	8270D	34.4	50.0	69	36.5	50.0	73	56-125	6	20
Dimethyl Phthalate	8270D	36.9	50.0	74	38.8	50.0	78	45-127	5	20
Fluoranthene	8270D	43.7	50.0	87	45.9	50.0	92	57-128	5	20
Fluorene	8270D	39.7	50.0	79	42.2	50.0	84	52-124	6	20
Hexachlorobenzene	8270D	38.7	50.0	77	39.9	50.0	80	53-125	3	20
Hexachlorobutadiene	8270D	24.1	50.0	48	25.7	50.0	51	22-124	6	20
Hexachloroethane	8270D	23.6	50.0	47	27.0	50.0	54	21-115	14	20
Indeno(1,2,3-cd)pyrene	8270D	41.5	50.0	83	43.7	50.0	87	52-134	5	20
Isophorone	8270D	38.2	50.0	76	39.3	50.0	79	42-124	3	20
N-Nitrosodi-n-propylamine	8270D	39.0	50.0	78	43.2	50.0	86	49-119	10	20
N-Nitrosodiphenylamine	8270D	42.9	50.0	86	43.9	50.0	88	51-123	2	20
Naphthalene	8270D	29.0	50.0	58	29.7	50.0	59	40-121	2	20
Nitrobenzene	8270D	32.7	50.0	65	34.0	50.0	68	45-121	4	20
Pentachlorophenol (PCP)	8270D	47.5 J	50.0	95	50.2	50.0	100	35-138	6	20
Phenanthrene	8270D	41.7	50.0	83	43.0	50.0	86	59-120	3	20
Phenol	8270D	14.4	50.0	29 *	14.5	50.0	29 *	34-121	<1	20
Pyrene	8270D	42.0	50.0	84	43.9	50.0	88	57-126	4	20

Semivolatile Organic Compounds by GC

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Tantara Corporation **Service Request:** R1902767

Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-

Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A

Extraction Method: EPA 3510C

Sample Name	Lab Code	Decachlorobiphenyl 10-152	Tetrachloro-m-xylene 14-129
Silo #6	R1902767-001	28	64
Silo #4	R1902767-002	25	59
Silo #1	R1902767-003	32	72
Method Blank	RQ1902799-01	45	67
Lab Control Sample	RQ1902799-02	52	63
Duplicate Lab Control Sample	RQ1902799-03	57	72

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1902799-01	**Basis:**	NA

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	ND U	1.0	0.50	0.44	1	04/03/19 18:12	4/3/19	
Aroclor 1221	ND U	2.0	1.0	0.54	1	04/03/19 18:12	4/3/19	
Aroclor 1232	ND U	1.0	0.50	0.50	1	04/03/19 18:12	4/3/19	
Aroclor 1242	ND U	1.0	0.50	0.32	1	04/03/19 18:12	4/3/19	
Aroclor 1248	ND U	1.0	0.50	0.25	1	04/03/19 18:12	4/3/19	
Aroclor 1254	ND U	1.0	0.50	0.28	1	04/03/19 18:12	4/3/19	
Aroclor 1260	ND U	1.0	0.50	0.46	1	04/03/19 18:12	4/3/19	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	45	10 - 152	04/03/19 18:12	
Tetrachloro-m-xylene	67	14 - 129	04/03/19 18:12	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Tantara Corporation
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023
Sample Matrix: Water

Service Request: R1902767
Date Analyzed: 04/03/19

Duplicate Lab Control Sample Summary
Polychlorinated Biphenyls (PCBs) by GC

Units:ug/L
Basis:NA

			Lab Control Sample RQ1902799-02			Duplicate Lab Control Sample RQ1902799-03				
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aroclor 1016	8082A	3.17	5.00	63	3.85	5.00	77	46-129	19	30
Aroclor 1260	8082A	3.37	5.00	67	3.84	5.00	77	45-134	13	30

Confirmation Results

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-	**Date Collected:**	NA
SRM Matrix:	Water	**Date Received:**	
Sample Name:	Lab Control Sample		
Lab Code:	RQ1902799-02	**Units:**	ug/L
		Basis:	NA

Polychlorinated Biphenyls (PCBs) by GC

Analytical Method: 8082A
Prep Method: EPA 3510C

	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Aroclor 1016	0.44	3.17	3.49	10		1	04/03/19 18:31
Aroclor 1260	0.46	3.37	3.50	4		1	04/03/19 18:31

Confirmation Results

Client: Tantara Corporation
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-
SRM Matrix: Water

Service Request: R1902767
Date Collected: NA
Date Received:

Sample Name: Duplicate Lab Control Sample
Lab Code: RQ1902799-03

Units: ug/L
Basis: NA

Polychlorinated Biphenyls (PCBs) by GC

Analytical Method: 8082A
Prep Method: EPA 3510C

	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Aroclor 1016	0.44	3.85	4.28	11		1	04/03/19 18:51
Aroclor 1260	0.46	3.84	4.06	6		1	04/03/19 18:51

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	NA
		Date Received:	NA
Sample Matrix:	Water		
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1902767-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum, Total	6010C	ND U	ug/L	400	200	30	1	04/05/19 10:48	04/02/19	
Arsenic, Total	6010C	ND U	ug/L	10	5	4	1	04/05/19 15:52	04/02/19	
Barium, Total	6010C	ND U	ug/L	40	20	3	1	04/05/19 10:48	04/02/19	
Cadmium, Total	6010C	ND U	ug/L	5.0	2.5	0.4	1	04/05/19 10:48	04/02/19	
Chromium, Total	6010C	ND U	ug/L	10	5	0.6	1	04/05/19 10:48	04/02/19	
Copper, Total	6010C	ND U	ug/L	20	10	4	1	04/05/19 10:48	04/02/19	
Iron, Total	6010C	**50 J**	ug/L	200	100	20	1	04/05/19 10:48	04/02/19	
Lead, Total	6010C	ND U	ug/L	10	5	3	1	04/05/19 10:48	04/02/19	
Mercury	7470A	ND U	ug/L	0.20	0.10	0.08	1	04/03/19 12:19	04/02/19	
Selenium, Total	6010C	ND U	ug/L	10	5	5	1	04/05/19 10:48	04/02/19	
Silver, Total	6010C	ND U	ug/L	10	5	0.6	1	04/05/19 10:48	04/02/19	

Client: Tantara Corporation
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023
Sample Matrix: Water

Service Request: R1902767
Date Analyzed: 04/03/19

Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

Lab Control Sample
R1902767-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Mercury	7470A	0.94	1.00	94	82-119

Client: Tantara Corporation
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023
Sample Matrix: Water

Service Request: R1902767
Date Analyzed: 04/05/19

Duplicate Lab Control Sample Summary
Inorganic Parameters

Units:ug/L
Basis:NA

		Lab Control Sample			Duplicate Lab Control Sample					
		R1902767-LCS1			R1902767-DLCS1					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum, Total	6010C	1950	2000	97	1940	2000	97	86-115	<1	20
Arsenic, Total	6010C	39	40	99	41	40	102	87-113	3	20
Barium, Total	6010C	2090	2000	105	2080	2000	104	88-113	<1	20
Cadmium, Total	6010C	52.2	50.0	104	52.1	50.0	104	88-113	<1	20
Chromium, Total	6010C	205	200	103	203	200	102	90-113	1	20
Copper, Total	6010C	253	250	101	251	250	101	86-114	<1	20
Iron, Total	6010C	1010	1000	101	1000	1000	100	87-115	<1	20
Lead, Total	6010C	528	500	106	522	500	104	86-113	<1	20
Selenium, Total	6010C	1060	1010	105	1050	1010	104	83-114	<1	20
Silver, Total	6010C	50	50	100	50	50	100	84-115	<1	20

General Chemistry

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Analytical Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project:	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	NA
		Date Received:	NA
Sample Matrix:	Water		
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1902767-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result		Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	ND	U	mg/L	1.0	0.5	0.5	1	04/03/19 01:41	
Chemical Oxygen Demand, Total	410.4	ND	U	mg/L	10	5	4	1	04/02/19 14:45	
Oil and Grease, Total (HEM)	1664A	ND	U	mg/L	5.0	-	1.6	1	04/01/19 10:30	
Solids, Total Suspended (TSS)	SM 2540 D-1997(2011)	ND	U	mg/L	1.0	-	-	1	04/03/19 10:15	

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Tantara Corporation	**Service Request:**	R1902767
Project	Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023	**Date Collected:**	03/29/19
Sample Matrix:	Water	**Date Received:**	04/01/19
		Date Analyzed:	04/03/19

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	Silo #4	**Units:**	mg/L
Lab Code:	R1902767-002	**Basis:**	NA

Analyte Name	Analysis Method	LOQ	LOD	MDL	Sample Result	Duplicate Sample R1902767-002DUP Result	Average	RPD	RPD Limit
Solids, Total Suspended (TSS)	SM 2540 D-1997(2011)	14	-	-	586	538	562	9	10

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Tantara Corporation
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023
Sample Matrix: Water

Service Request: R1902767
Date Analyzed: 04/02/19 - 04/03/19

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1902767-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.10	1.0	110	80-121
Chemical Oxygen Demand, Total	410.4	53	50	105	90-110
Solids, Total Suspended (TSS)	SM 2540 D-1997(2011)	204	214	95	80-120

Client: Tantara Corporation
Project: Underground Nike Missile Silos-Def Bat BU-34/35/USACE-W912WJ-16-C-0023
Sample Matrix: Water

Service Request: R1902767
Date Analyzed: 04/01/19

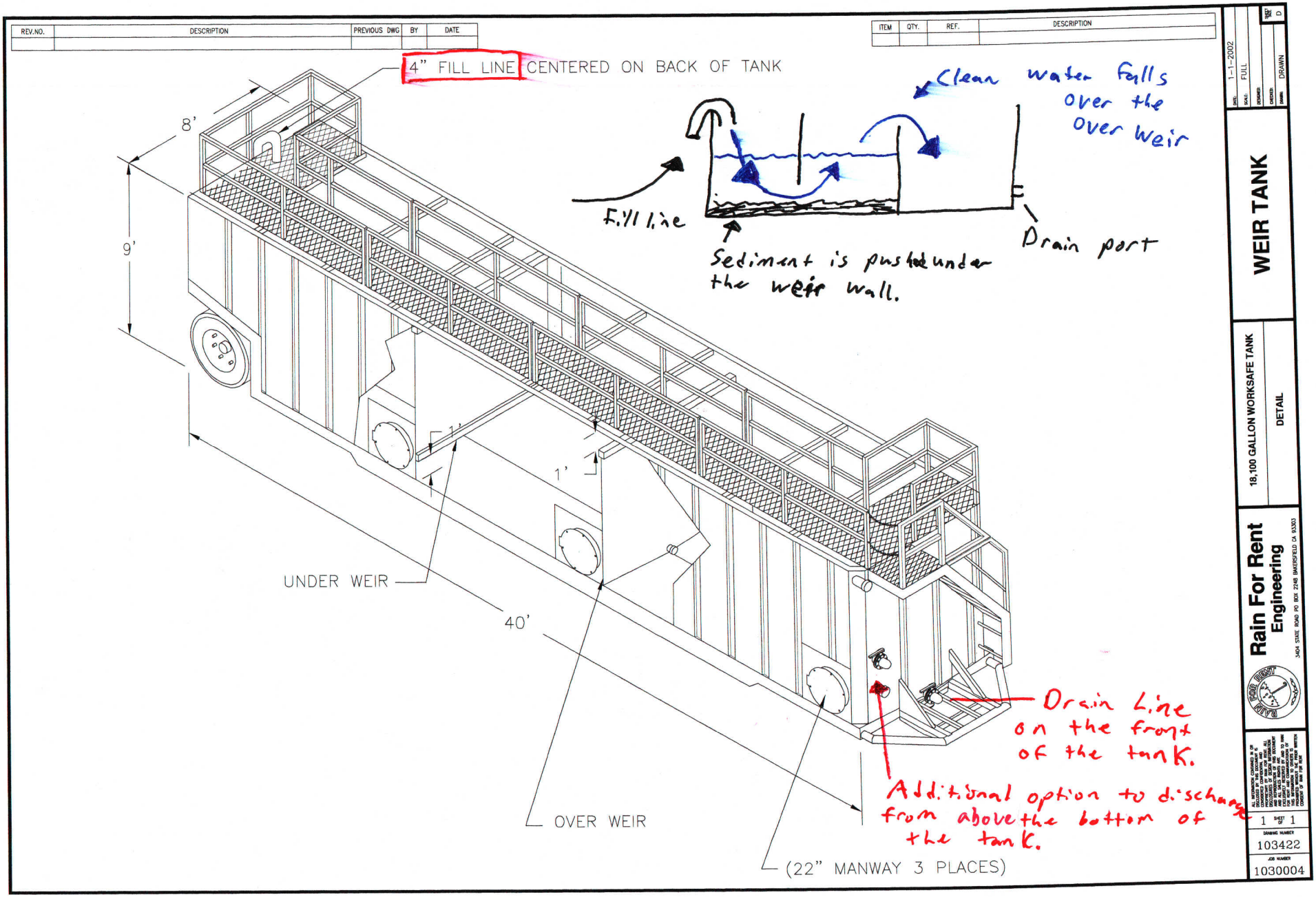
Duplicate Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

		Lab Control Sample R1902767-LCS1			Duplicate Lab Control Sample R1902767-DLCS1					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Oil and Grease, Total (HEM)	1664A	37.6	40.6	93	36.8	40.6	91	78-114	2	18

REV.NO.	DESCRIPTION	PREVIOUS DWG	BY	DATE

ITEM	QTY.	REF.	DESCRIPTION



DATE: 1-1-2002
SCALE: FULL
CHECKED:
DRAWN:

WEIR TANK

18,100 GALLON WORKSAFE TANK

DETAIL

Rain For Rent
Engineering
3404 STATE ROAD PO BOX 2248 BAKERSFIELD CA 93303

SHEET 1 OF 1

DRAWING NUMBER
103422

JOB NUMBER
1030004