

Appendix I

Asbestos Abatement Report, January 10, 2019

January 10, 2019
 Revised: September 11, 2019

Mark Lovejoy
 Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

**Re: Asbestos Abatement
 Underground NIKE Missile Silos – Defense Battery BU-34/35
 601 Willardshire Road
 Aurora, New York
 Interior/Exterior Abatement Project
 SET #3239**

Dear Mr. Lovejoy:

The Asbestos Abatement Project at 601 Willardshire Road consisted of the removal of the following asbestos-containing materials (ACM):

Room/Work Area	ACM Removed	Project Size
Silo #1 – Interior	Corrugated Pipe Insulation and Mudded Pipe Fittings / Associated Debris	Large
	Gaskets	
	Cementitious Pegboard	
	Wire Insulation	
Silo #1 – Exterior	Buried Cementitious Piping	Large
Silo #2 – Interior	Corrugated Pipe Insulation and Mudded Pipe Fittings / Associated Debris	Large
	Gaskets	
	Cementitious Pegboard	
	Wire Insulation	
Silo #2 - Exterior	Buried Cementitious Piping	Large
	Expansion Joint Caulk	Small
Silo #3 – Interior	Corrugated Pipe Insulation and Mudded Pipe Fittings / Associated Debris	Large
	Gaskets	
	Cementitious Pegboard	
	Wire Insulation	
Silo #3 – Exterior	Buried Cementitious Piping	Large
Silo #4 – Interior	Corrugated Pipe Insulation and Mudded Pipe Fittings / Associated Debris	Large
	Gaskets	
	Cementitious Pegboard	
	Wire Insulation	
Silo #4 – Exterior	Buried Cementitious Piping	Large
Silo #5 – Interior	Corrugated Pipe Insulation and Mudded Pipe Fittings / Associated Debris	Large
	Gaskets	
	Cementitious Pegboard	
	Wire Insulation	
Silo #5 – Exterior	Buried Cementitious Piping	Large
Silo #6 – Interior	Asbestos Containing Material Contaminated Soil / Debris	Large
Silo #6 – Exterior	Buried Cementitious Piping	Large

Allied Environmental Services LLC. was charged with conducting the abatement within the conditions outlined in:

- New York State Industrial Code Rule 56 as granted by the New York State Department of Labor.
- OSHA 29 CFR 1926.1101
- EPA 40 CFR Part 61
- Site Specific Variance 18-0656

A total of four-hundred five (405) Phase Contrast Microscopy (PCM) air samples were taken throughout the course of the project.

The final Project Monitor Clearance Visual Inspection was conducted by Sienna Environmental Technologies on May 29, 2019, and the contractor's log book was signed by the Sienna Project Monitor on site.

Final clearance air sampling was performed on October 30, 2018 and all work areas were cleared with sample results below a concentration of 0.01 fibers per cubic centimeter for all PCM air samples.

Sincerely,

Sean Fitzgerald
Project Manager

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1. INTRODUCTION

Sienna Environmental Technologies, LLC (Sienna) was contracted to provide Project Monitoring and Air Sampling services for the aforementioned Asbestos Abatement Project.

Sienna Environmental Technologies, LLC (ELAP No. 11727) performed the analysis on the PCM air sampling cassettes provided to them by their personnel.

A Large Asbestos Project is defined as a project involving the removal, disturbance, enclosure, encapsulation, repair or handling of one hundred and sixty (160) square feet or more of Asbestos Containing Material (ACM) or Presumed Asbestos Containing Material (PACM) or two hundred and sixty (260) linear feet or more of ACM or PACM.

A Small Asbestos Project is defined as a project involving the removal, disturbance, enclosure, encapsulation, repair or handling of more than ten (10) and less than one hundred and sixty (160) square feet of ACM or PACM or asbestos material of more than twenty five (25) and less than two hundred and sixty (260) linear feet of ACM or PACM.

A Minor Asbestos Project is defined as a project involving the removal, disturbance, enclosure, encapsulation, repair or handling of ten (10) square feet or less of ACM or PACM or asbestos material of twenty five (25) linear feet or less of ACM or PACM.

2. METHODOLOGY

Phase IB Background Pre-Abatement Air Samples – Background air sampling is conducted prior to Asbestos Abatement Contractor mobilization. This method is used to determine airborne fiber concentrations in the area where abatement work is to be conducted, prior to starting Phase IIA of the asbestos project. Background air sampling is required for all large and small projects.

Phase IIA Regulated Abatement Work Area Preparation Air Samples – Pre-Abatement air sampling is conducted throughout the entire shift during work area preparation to determine if any Asbestos Material is disturbed. Pre-Abatement air sampling is required for all large asbestos projects with OSHA Class I or Class II friable ACM subject to handling/abatement.

Phase IIB Asbestos Handling Air Samples – Abatement sampling is conducted while the abatement is being performed to determine whether any airborne Asbestos is escaping the contained work area. Abatement air sampling is required on most interior large projects.

Phase IIC Final Cleaning and Clearance Air Samples – Post-Abatement/Final/Clearance sampling is conducted after the completion of abatement activities to determine airborne fiber concentrations. Clearance air sampling is required on most large, small and some minor projects that are completed utilizing a negative pressure enclosure.

Asbestos Air Samples are analyzed under Phase Contrast Microscopy (PCM) using the NIOSH 7400 methodology. This methodology is non-specific for asbestos. All fibers and fiber-like particles having a length greater than 5 micrometers and a length to width ratio of 3:1 must be counted.



2. METHODOLOGY (continued)

PCM clearance air sample results shall be considered satisfactory when every clearance air sample demonstrates an airborne concentration of less than 0.01 fibers per cubic centimeter or the established background level, whichever is greater. If TEM is the selected method of clearance air sampling and analysis, the clearance criteria and sampling protocols of AHERA shall be used.

No air sampling is required for exterior project removal of non-friable organically bound asbestos materials unless the asbestos is rendered friable during removal or debris falls within the building or structure. In these cases air sampling is generally conducted as part of exterior project removals.

An appropriately trained and certified Project Monitor must complete a visual inspection of the abatement area for all large and small projects. The visual inspection for completeness of abatement and completeness of cleanup is performed per the provisions of the current ASTM standard E1368 "Standard Practice for Visual Inspection of Asbestos Abatement Projects".



3. DAILY FIELD REPORT(S)

CLIENT/CONTACT: Tantara Corp./Mark Lovejoy		DATE: 06/12/18
PROJECT NAME/ADDRESS: Nike Missile BU-34/35 / 601 Willardshire Rd.		S M <input checked="" type="checkbox"/> W TH F S
WORK AREA LOCATION: Silo #2		SET#: 3239
MATERIALS REMOVED: Pipe Insulation and Fittings		PROJECT TYPE: Asbestos
Gaskets		START TIME: 0830
Cementitious Pegboard		END TIME: 1600
Wire Insulation		NUMBER OF SAMPLES: 6+2
CONTRACTOR: Allied Env. Services	SUPERVISOR: Mark Maloney	
NUMBER OF WORKERS ON-SITE: 3	(716) 796-4021	
RESPIRATORY PROTECTION REQUIRED: PAPR	RESPIRATORY PROTECTION USED BY CONTRACTOR: none	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: NA _____ AM _____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: Craig Mikida	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: Large	VISUAL INSPECTION OK: NA	
ENCLOSURE TYPE: Negative Pressure Enclosure	WAITING PERIOD REQUIRED: NA	

PHASE OF WORK: B <input checked="" type="checkbox"/> A C	AIR RESULTS REVIEWED/POSTED: NA	ANY HIGH LEVELS: NA
OSHA PERSONALS TAKEN: PE EX	AIR RESULTS REVIEWED: NA	ANY HIGH LEVELS: NA

NOTES: Arrived on site with Sean from Sienna at 0830. Discussed SSV-18-0656 and scope of work for the project. Met with Tantara Corp. workers and discussed project. Also met with Allied Env. services workers and discussed project. Set up and calibrated pumps at 1000. Also took personals today. Sean left site at 1030. Checked Allied workers hard cards and certifications posted in decan. Allied workers setup remote personal decan per ICR 56-7.5(d). Allied workers also setup signage and barrier tape per ICR 56-7.4. Took break. Allied workers began prepping lowering reg air machines and equipment into work area. Allied opened gasket to determine if it was an ACM. Basket material needs to be inspected. Generator and hard top dumpster arrived on site. Contractor finished for the day and left site. Took final pump calibration and finished sampling at 1600. Finished paper work and left site at 1615.

Craig Mikida
SIGNATURE

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CLIENT/CONTACT: Tantara Corp. / Mark Lovejoy		DATE: 06/13/18
PROJECT NAME/ADDRESS: Nike Missile BU-34/35/601 Willardshire Rd.		S M T <input checked="" type="checkbox"/> TH F S
WORK AREA LOCATION: Silo #2		SET#: 3239
MATERIALS REMOVED: Pipe Insulation and Fittings None (prep)		PROJECT TYPE: Asbestos
Gaskets		START TIME: 0730
Granular Polyboard		END TIME: 1500
Wire Insulation		NUMBER OF SAMPLES: 6+2
CONTRACTOR: Allied	SUPERVISOR: Mark Maloney	
NUMBER OF WORKERS ON-SITE: 3		
RESPIRATORY PROTECTION REQUIRED: PAPR	RESPIRATORY PROTECTION USED BY CONTRACTOR: none	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: NA AM PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: Craig Mikida	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: Large	VISUAL INSPECTION OK: NA	
ENCLOSURE TYPE: NPE w/ glovebag abatement	WAITING PERIOD REQUIRED: 4 hr	

PHASE OF WORK: B <input checked="" type="checkbox"/> A <input type="checkbox"/> C <input type="checkbox"/>	AIR RESULTS REVIEWED/POSTED: NA	ANY HIGH LEVELS: NA
OSHA PERSONALS TAKEN: PE <input checked="" type="checkbox"/> EX <input type="checkbox"/>	AIR RESULTS REVIEWED: NA	ANY HIGH LEVELS: NA
NOTES: Arrived on site at 0745. Met with contractor and client and Sean (Sienna) and Mark Lovejoy (Tantara) arrived on site. Discussed prep plan for the day as well as further inspection for possible ACM. Set up and calibrated pumps at 0800. Contractor began setting up neg air machines, airlock, and critical barriers. Sean left site at 0930. Contractor started to line hard top dumpster with poly. Critical barriers applied per ICR 56-7.11(a) around vent hatch and elevator hatch. Airlock set up per ICR 56-7.5(d)(3). Neg air setup per ICR 56-7.8 and established at 1145. Hardwall containment to be built and placed around neg air exhaust. Took break. Contractor lining dumpster per ICR-56-9.9(g). Contractor built hardwall structure around neg air exhaust. Contractor finished work and left site. Took final pump calibration and finished sampling at 1500. Finished paper work and left site.		

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CLIENT/CONTACT: Tantara Corp. / Mark Lovejoy		DATE: 06/14/18
PROJECT NAME/ADDRESS: Nike Missile BU-34/35 / 601 Willardshire Rd.		S M T W TH F S
WORK AREA LOCATION: Silo #2		SET#: 3239
MATERIALS REMOVED: Pipe Insulation and Fittings		PROJECT TYPE: Asbestos
Associated debris and sediment		START TIME: 0730
CONTRACTOR: Allied SUPERVISOR: Mark Maloney		END TIME: 1515
NUMBER OF WORKERS ON-SITE: 4		NUMBER OF SAMPLES: 7+2
RESPIRATORY PROTECTION REQUIRED: PAPR	RESPIRATORY PROTECTION USED BY CONTRACTOR: full face respirator	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: -0.021 AM -0.018 PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: Craig Mikida	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: Large	VISUAL INSPECTION OK: NA	
ENCLOSURE TYPE: NPE w/ glovebag abatement	WAITING PERIOD REQUIRED: NA	

PHASE OF WORK: B P A C	AIR RESULTS REVIEWED/POSTED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: No
OSHA PERSONALS TAKEN: PE EX	AIR RESULTS REVIEWED: NA	ANY HIGH LEVELS: NA
NOTES: Arrived on site at 0745. Met with contractor and discussed abatement plan for the day. Setup and calibrated pumps at 0800. New worker on site, checked hard card. Workers first started removing associated debris and sediment per SSV-18-0656. Jeremy from Army Core arrived on site and conducted walkthrough with Tantara. NRC also on site conducting work near work area that is causing dusty conditions. Entered work area at 1030 and visually inspected removed sediment. Sediment removed per SSV-18-0656. Workers removed light fixture and determined they were filled with water and oil. Workers laid down drop cloth and were removing pipe insulation using glovebag. Workers were using glovebag, amended water, and bagging waste per ICR 56-8.4. Took break. Workers continued to remove insulation. Entered work area at 1330. Glovebag abatement of insulation per ICR 56-8.4. Cleanup waste, drop clothes, and bagging waste. Removal of waste per ICR 56-8.9. Took final calibration and finished sampling at 1500. Finished work and left site 1515.		

 Craig Mikida
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CLIENT/CONTACT: <u>Tantara Corp. / Mark Lovejoy</u>		DATE: <u>06/18/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BU-34/35 / 601 Willardshire Rd.</u>		S <input checked="" type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> TH <input type="checkbox"/> F <input type="checkbox"/> S
WORK AREA LOCATION: <u>Silo #2</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Pipe Insulation and Fittings</u> <u>Cementitious Pegboard</u>		PROJECT TYPE: <u>Asbestos</u>
		START TIME: <u>0745</u>
		END TIME: <u>1630</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Mark Maloney</u>	NUMBER OF SAMPLES: <u>7+2</u>
NUMBER OF WORKERS ON-SITE: <u>4</u>		
RESPIRATORY PROTECTION REQUIRED: <u>PAPR</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>Full face</u>	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: _____ AM _____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: <u>Craig Milkida</u>	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <u>NA</u>	
ENCLOSURE TYPE: <u>NPE w/ glovebag abatement</u> <u>SSV-18-0656</u>	WAITING PERIOD REQUIRED: <u>NA</u>	

PHASE OF WORK: <u>B P <input checked="" type="checkbox"/> C</u>	AIR RESULTS REVIEWED/POSTED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>
OSHA PERSONALS TAKEN: <u>PE EX</u>	AIR RESULTS REVIEWED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>

NOTES: Arrived on site at 0745. Met with supervisor and discussed abatement plan for the day. Set up, calibrated pumps and began sampling at 0800. Workers began abating work area per ICR 56-8.4. Workers unscrewing pegboard, spraying amended water, and bagging waste. Workers also scrubbing pipes where pipe insulation was removed. Took break. New worker on site, checked hard card. Workers continued to remove pegboard in personnel room and remove light fixtures. Workers bagging out waste per ICR-8.9. Contractor finished for the day and left site. Took final calibration and finished sampling at 1600. Finished paper work and left site at 1630

Craig Milkida
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CLIENT/CONTACT: <u>Tantara Corp. / Mark Lovejoy</u>		DATE: <u>06/19/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BU-34/35 / Col Willardshire Rd.</u>		S M <input checked="" type="checkbox"/> W TH F S
WORK AREA LOCATION: <u>Silo #2</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Pipe Insulation and Fittings</u>		PROJECT TYPE: <u>Asbestos</u>
<u>Cementitious Pegboard</u>		START TIME: <u>0730</u>
<u>Wire Insulation</u>		END TIME:
<u>Gaskets</u>		NUMBER OF SAMPLES: <u>12+2</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Mark Maloney</u>	
NUMBER OF WORKERS ON-SITE: <u>4</u>		
RESPIRATORY PROTECTION REQUIRED: <u>PAPR</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>Full face</u>	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: _____ AM _____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: <u>Craig Mikida</u>	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <u>NA</u>	
ENCLOSURE TYPE: <u>NPE w/ glovebag, SSV-18-0656</u>	WAITING PERIOD REQUIRED: <u>8 hours</u>	

PHASE OF WORK: <u>B P A <input checked="" type="checkbox"/></u>	AIR RESULTS REVIEWED/POSTED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>
OSHA PERSONALS TAKEN: <u>PE EX NA</u>	AIR RESULTS REVIEWED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>
NOTES: <u>Arrived on site at 0730. Met with supervisor and discussed abatement plan for the day. Contractor plans to finish abatement and clean work area making it their last full work day inside the work area. In accordance with SSV-18-0656 5 IWA's will be run along with OWA's normally run to count as clearance samples. Set up, calibrated pumps and began sampling at 0830. Workers began abating work area per ICR 56-8.4. Workers spraying amended water, removing pegboard, and bagging waste. Workers also scrubbing pipes and removing light fixtures and wire insulation. Contractor wrapping gaskets and plans to remove gaskets with machinery through elevator hatch due to gasket weight. Took break. Workers continued abating work area per ICR 56-8.4. Workers bagging out waste not in accordance with ICR 56-8.9. Workers using any personal pick up truck not hired to transport waste to dumpster. Entered work area, gross removal of all ACM complete. Contractor finished, left site. Took final calibration and finished sampling. Finished paper work and left site at 1700.</u>		

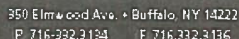
Craig Mikida

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CLIENT/CONTACT:

DATE: 06/20/18

S M T ~~W~~ TH F S

SET#:

3239

PROJECT TYPE:

Asbestos

START TIME:

1600

END TIME:

1730

SUPERVISOR: Mark Maloney

NUMBER OF WORKERS ON-SITE: 3

NUMBER OF SAMPLES:

 $C+2$

RESPIRATORY PROTECTION REQUIRED: PAPR

RESPIRATORY PROTECTION USED BY CONTRACTOR: none

SIENNA LICENSE POSTED: ✓

MONOMETER READING: NA AM PM

AIR MONITOR CERTIFICATIONS POSTED:

PUMP LOCATIONS CHECKED:

TECHNICIAN: Craig Mikida

PUMPS CALIBRATED:

WORK AREA(S) SIZE: 0 Large

VISUAL INSPECTION OK: NA

ENCLOSURE TYPE: NPE w/ glovebag, SSV-18-0056

WAITING PERIOD REQUIRED: ~~30 DAYS~~ NA

PHASE OF WORK: B P A C

AIR RESULTS REVIEWED/POSTED: NA

ANY HIGH LEVELS: NA

OSHA PERSONALS TAKEN: PE EX NA

AIR RESULTS REVIEWED: NA

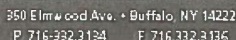
ANY HIGH LEVELS: NA

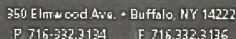
NOTES: Arrived on site at 1000. Talked with supervisor about prep plan for the day. Set up, calibrated pumps and began sampling at 1030. Contractor set up remote decon per ICR 5C-7.5 and SSV-18-065C. Workers lowered equipment and neg air machines down into work area. Workers wrapped and removed gaskets per ICR 5C-8.9. Contractor plans to apply 2 critical barriers, set up airlock, and establish negative air tomorrow. Contractor finished work and left site. Took final calibration and finished sampling at 1630. Finished paper work and left site.

Craig SIGNATURE

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CLIENT/CONTACT: <u>Tantara Corp. / Mark Lovejoy</u>		DATE: <u>06/27/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BU-34/35 / Col Willardshire Rd.</u>		S M T <u>W</u> TH F S
WORK AREA LOCATION: <u>Silo #3</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Pipe Insulation and Fittings</u>		PROJECT TYPE: <u>Asbestos</u>
<u>Cementitious Pegboard</u>		START TIME: <u>0745</u>
<u>Light Fixtures and wire insulation</u>		END TIME: <u>1645</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Mark Maloney</u>	NUMBER OF SAMPLES: <u>12+2</u>
NUMBER OF WORKERS ON-SITE: <u>4</u>		
RESPIRATORY PROTECTION REQUIRED: <u>NA</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>half</u>	
SIENNA LICENSE POSTED: <u>✓</u>	MONOMETER READING: _____ AM _____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <u>✓</u>	PUMP LOCATIONS CHECKED: <u>✓</u>	
TECHNICIAN: <u>Craig Mikida</u>	PUMPS CALIBRATED: <u>✓</u>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <u>NA</u>	
ENCLOSURE TYPE: <u>NPE w/ glovebag, SSV-18-0656</u>	WAITING PERIOD REQUIRED: <u>8 hours</u>	

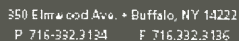
PHASE OF WORK: <u>B P <u>W</u> C</u>	AIR RESULTS REVIEWED/POSTED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>
OSHA PERSONALS TAKEN: <u>PE EX NA</u>	AIR RESULTS REVIEWED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>

NOTES: Arrived on site at 0745. Met with supervisor and discussed abatement plan for the day. Contractor in accordance with SSV-18-0656 requested 5 IWA's along with regular OWA samples be run today. Set up, calibrated pumps, and began sampling at 0800. Contractor plans to finish abatement and cleaning today and samples will be used for clearance. Workers began removing peg board and light fixtures. Workers spraying amended water and bagging waste per ICR 56-8.4. Workers continued to remove peg board and wire insulation associated with light fixtures. Workers bagged out waste per ICR 56-8.9. Took break. Workers finished abatement. Workers began cleaning per ICR 56-9.1. Workers wet wiping and HEPA vacuums any remaining debris. Workers finished cleaning and 8 hour waiting period began. Contractor finished for the day and left site. Took final calibration and finished sampling at 1630. Finished paper work and left site.

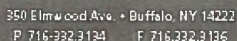
Craig Mikida
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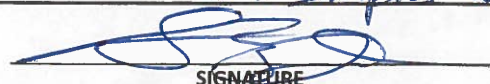
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CLIENT/CONTACT: <u>Tantara Corp / Mark Love Jay</u>		DATE: <u>7/9/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BU-34/35 / 601 Willard Shire Rd Aurora</u>		S <u>(M)</u> T W TH F S
WORK AREA LOCATION: <u>Silo #5</u>		SET#: <u>3239</u>
MATERIALS REMOVED:		PROJECT TYPE: <u>ACM</u>
		START TIME: <u>0715</u>
		END TIME: <u>1345</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Mark Maloney</u>	NUMBER OF SAMPLES: <u>8 (6+2)</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>	RESPIRATORY PROTECTION REQUIRED: <u>1/2 face</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>1/2 face</u>
SIENNA LICENSE POSTED: <u>Y</u>	MONOMETER READING: <u>N/A</u> AM <u> </u> PM	
AIR MONITOR CERTIFICATIONS POSTED: <u>Y</u>	PUMP LOCATIONS CHECKED: <u>Y</u>	
TECHNICIAN: <u>Sean Fitzgerald</u>	PUMPS CALIBRATED: <u>Y</u>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <u>N/A</u>	
ENCLOSURE TYPE: <u>SSR-18-0656</u>	WAITING PERIOD REQUIRED: <u>4 hr</u>	

PHASE OF WORK: <u>B</u> <u>(P)</u> <u>A</u> <u>C</u>	AIR RESULTS REVIEWED/POSTED:	ANY HIGH LEVELS:
OSHA PERSONALS TAKEN: <u>PE EX</u>	AIR RESULTS REVIEWED:	ANY HIGH LEVELS:
NOTES:		
<p><u>@0715</u></p> <p>- Monitor onsite and meets w/ Tantara's Bob Foley; Signs in on sheet and awaits Allied to arrive</p> <p>↳ Allied onsite @ 0745; Signs in at Tantara trailer</p> <p>- Allied moves remote decan from Silo #3 to Silo #5</p> <p>- Monitor sets up prep air samples; all samples running and calibrated by 0738</p> <p>- Monitor meets w/ Supervisor Mark Maloney → Plans to finish prep of workarea in Silo #5, expects to be a shorter day</p> <p>- Allied worker clear dirt/debris from stairway</p> <p>↳ Allied lowers power cords down through hatch and attaches plywood w/ Neg. Air Exhaust Tubes</p> <p>- Monitor checks pumps @ 0950, all running and in place</p> <p>Allied hooks up negative air and all prep complete @ 1150</p> <p>↳ Allied offsite @ 1215</p> <p>- Monitor collects samples after proper volume collected and offsite</p>		


SIGNATURE

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D.O.L. CERTIFICATION NUMBER

PAGE OF

CLIENT/CONTACT: <u>Tantara Corp / Mark Lavejay</u>		DATE: <u>7/10/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile Silo BU 34/35 - Aurora, NY</u>		S M <u>T</u> W T H F S
WORK AREA LOCATION: <u>Silo #5</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Arcecl Pipe Insulation</u> <u>Aluminum Elbows</u> <u>Corrugated Pipe Insulation</u> <u>Mudded Pipe Fittings</u>		PROJECT TYPE: <u>ACM</u>
CONTRACTOR: <u>Allied</u> SUPERVISOR: <u>Mark Maloney</u>		START TIME: <u>0730</u>
NUMBER OF WORKERS ON-SITE:		END TIME: <u>1615</u>
RESPIRATORY PROTECTION REQUIRED: <u>1/2 face</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>1/2 face</u>	NUMBER OF SAMPLES: <u>7+2</u>
SIENNA LICENSE POSTED: <u>X</u>	MONOMETER READING: <u>-0.19</u> AM <u> </u> PM	
AIR MONITOR CERTIFICATIONS POSTED: <u>X</u>	PUMP LOCATIONS CHECKED: <u>X</u>	
TECHNICIAN: <u>Sean Fitzgerald</u>	PUMPS CALIBRATED: <u>X</u>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <u>YES</u>	
ENCLOSURE TYPE: <u>SSV-18-0656</u>	WAITING PERIOD REQUIRED: <u>N/A</u>	

PHASE OF WORK: <u>B P <u>A</u> C</u>	AIR RESULTS REVIEWED/POSTED:	ANY HIGH LEVELS:
OSHA PERSONALS TAKEN: <u>PE EX</u>	AIR RESULTS REVIEWED:	ANY HIGH LEVELS:
NOTES: <u>-Monitor onsite @ 0730 and signs in at Tantara trailer</u> <u>-Monitor sets up work in progress air samples for Silo #5</u> <u>↳ All pumps set up and calibrated by 0750</u> <u>-Allied onsite @ 7⁴⁵; opens decon.</u> <u>↳ Allied to start abatement of corrugated pipe insulation and mudded pipe fittings.</u> <u>-Monitor checks pumps @ 0900 → all o.k. in place and running.</u> <u>-Monitor dons PPE, signs entry log, and enters Silo #5 work area @ 0930 → observes workers w/ PPE on and setting up and removing corrugated pipe insulation using proper glovebag procedures, utilized drop clothes</u> <u>-Monitor exits work area and decons out</u> <u>-Monitor checks pumps @ 1130 → ok and in place</u> <u>-Allied decons out of area and goes to lunch @ 1250 → back onsite @ 1330</u>		



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CLIENT/CONTACT:	Tantara Corp / Mark Lovejoy	DATE:	7/10/18					
PROJECT NAME/ADDRESS:	Nike Missile BU 34/35 Aurora, NY	S	M	<input checked="" type="radio"/> T	W	TH	F	S
WORK AREA LOCATION:	Silo #5	SET#:	3239					
		PROJECT TYPE:	ACM					

- Allied dons PPE and continues abatement of corrugated pipe insulation and mudded elbows @ 1445
- Monitor dons PPE and enters work area to check progress of ~~the~~ abatement → all o.k. ~ 15 LF left to abate → Allied setting up glovebags.
- Allied exits work area → Supervisor tells monitor that pipe is all abated, locks decan and offsite @ 1600
- Monitor collects working progress air samples, finishes paperwork and offsite @ 1615.


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 D.O.L. CERTIFICATION NUMBER

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CLIENT/CONTACT: <u>Tantara Corp / Mark Lovejoy</u>		DATE: <u>7/11/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile Silo BU 34/35-601 Willard Shore Ament</u>		M T W T H F S
WORK AREA LOCATION: <u>Silo #5</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Cementitious Pegboard</u>		PROJECT TYPE: <u>ACM</u>
<u>Light Fixture Wire Insulation</u>		START TIME: <u>0730</u>
		END TIME:
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Mark Maloney</u>	NUMBER OF SAMPLES: <u>7+2</u>
NUMBER OF WORKERS ON-SITE:	RESPIRATORY PROTECTION REQUIRED: <u>1/2 face</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR:
SIENNA LICENSE POSTED:	MONOMETER READING: _____ AM _____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <u>Y</u>	PUMP LOCATIONS CHECKED: <u>Y</u>	
TECHNICIAN: <u>S. Fitzgerald</u>	PUMPS CALIBRATED: <u>Y</u>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <u>N/A</u>	
ENCLOSURE TYPE: <u>SSV 18-0656</u>	WAITING PERIOD REQUIRED: <u>N/A</u>	

PHASE OF WORK: <u>B P A C</u>	AIR RESULTS REVIEWED/POSTED: <u>Y</u>	ANY HIGH LEVELS: <u>No</u>
OSHA PERSONALS TAKEN: <u>RE-EX</u>	AIR RESULTS REVIEWED: <u>N/A</u>	ANY HIGH LEVELS: <u>N/A</u>
NOTES: <u>- Monitor onsite @ 0730, signs in at Tantara trailer → Monitor sets up work in progress air samples for Silo #5 → All ^{pumps} calibrated and running by 0741</u> <u>- Allied onsite @ 0755 and signs in at Tantara trailer, opens decan, and enters work area to continue abatement</u> <u>↳ Allied to start Cementitious pegboard removal</u> <u>- Monitor checks pumps @ 0910 → all running and in place</u> <u>- Allied bags out friable pipe insulation to Hard Top Dumpster</u> <u>↳ All bags labelled and double bagged</u> <u>- Monitor checks pumps @ 1110 → all o.k.</u> <u>- Allied takes lunch and offsite @ 1220 → 1330, enters work area @ 1355.</u> <u>- Monitor enters work area @ 1410 → Workers removing Cementitious Pegboard and light fixture wire insulation</u> <u>↳ Allied should be finished with removal & clean by tomorrow.</u>		


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D.O.L. CERTIFICATION NUMBER

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NT/CONTACT: <u>Tanjara / Mark Lavejoy</u>	DATE: <u>7/11/18</u>
PROJECT NAME/ADDRESS: <u>Nike M-ssile BU 34/35</u>	S M T <u>W</u> TH F S
WORK AREA LOCATION: <u>Silo #5</u>	SET#: <u>3239</u>
	PROJECT TYPE: <u>ACM</u>

- Monitor checks pumps @ 1440 all o.k. and running
 - Allred out of work area @ 1600 and done for day.
 ↳ Will finish removal & cleaning tomorrow → offsite @
 - Monitor collects air samples, equipment, & finishes
 paperwork → offsite to lab w/ samples


 SIGNATURE

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 D.O.L. CERTIFICATION NUMBER

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CLIENT/CONTACT: <u>Tantara Corp / Mark Lavejay</u>		DATE: <u>7/12/18</u>
PROJECT NAME/ADDRESS: <u>Mike Missile BU 34/35 - 604 Willardshire Ave</u>		S M T W <u>TH</u> F S
WORK AREA LOCATION: <u>Silo #5</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Cementitious Pegboard</u>		PROJECT TYPE: <u>ACM</u>
		START TIME: <u>0730</u>
		END TIME: <u>1500</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Mark Maloney</u>	NUMBER OF SAMPLES: <u>12+2</u>
NUMBER OF WORKERS ON-SITE: <u>4</u>		
RESPIRATORY PROTECTION REQUIRED: <u>Full Face</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>Full-Face & 1/2 Face</u>	
SIENNA LICENSE POSTED: <u>X</u>	MONOMETER READING: _____ AM _____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <u>Y</u>	PUMP LOCATIONS CHECKED: <u>Y</u>	
TECHNICIAN: <u>Sean Fitzgerald</u>	PUMPS CALIBRATED: <u>Y</u>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: _____	
ENCLOSURE TYPE: <u>SSV 18-0656</u>	WAITING PERIOD REQUIRED: <u>12 hours</u>	

PHASE OF WORK: <u>B P A C</u>	AIR RESULTS REVIEWED/POSTED: <u>Y</u>	ANY HIGH LEVELS: <u>No</u>
OSHA PERSONALS TAKEN: <u>PE EX</u>	AIR RESULTS REVIEWED: <u>N/A</u>	ANY HIGH LEVELS: <u>N/A</u>
NOTES: <u>- Monitor onsite @ 0730 and signs in at Tantara Trailer</u> <u>- Monitor sets up work in progress samples for Silo #5</u> <u>- Allied onsite @ 0800 and opens up decan @ 0830</u> <u>- Monitor dons PPE and enters work area to set up</u> <u>Inside Work Area samples per SSV 18-0656 for clearance</u> <u>- Allied dons PPE and enters work area @ 0900 to</u> <u>continue abatement of Cementitious Pegboard & Wire</u> <u>Insulation → then will clean work area</u> <u>- Monitor checks OWA samples @ 1000 all o.k.</u> <u>↳ Spoke w/ Supervisor → Allied finished abatement and</u> <u>will bag out and decan out all tools & equipment</u> <u>- Allied bags out all waste from Silo #5 Work Area (Non-Fractal)</u> <u>- Allied goes to lunch @ 1240 back onsite. → Monitor enters work</u> <u>area and checks work area cleanliness → o.k. Allied out of work area</u> <u>↳ Sienna picks up all air samples and finishes paperwork.</u> <u>- Allied offsite, Monitor offsite @ 1500</u>		


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CLIENT/CONTACT: <u>Tantara Corp. / Mark Lovejoy</u>		DATE: <u>07/16/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BU-34/35 / 601 Willardshire Rd.</u>		S <input checked="" type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> TH <input type="checkbox"/> F <input type="checkbox"/> S
WORK AREA LOCATION: <u>Silo #5</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>None (clearances)</u>		PROJECT TYPE: <u>Asbestos</u>
		START TIME: <u>0730</u>
		END TIME: <u>1445</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Mark Maloney</u>	NUMBER OF SAMPLES: <u>12 + 2</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>half</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>none</u>	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: _____ AM _____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: <u>Craig Mikida</u>	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <input checked="" type="checkbox"/>	
ENCLOSURE TYPE: <u>NPE w/ glovebag, SSU-18-0656</u>	WAITING PERIOD REQUIRED: <u>NA</u>	

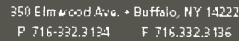
PHASE OF WORK: <u>B P A</u>	AIR RESULTS REVIEWED/POSTED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <u>Yes</u>
OSHA PERSONALS TAKEN: <u>PE EX NA</u>	AIR RESULTS REVIEWED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>

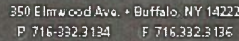
NOTES: Arrived on site at 0730. Met with supervisor and discussed that previous work in progress samples failed. Workers began re-cleaning per ICR 56-9.2(g)(1). Workers sprayed water in stairwell to minimize dusty conditions. Conducted Project Monitor Visual Inspection per ICR 56-9.1(d)(1) and ASTM E1368. Project Monitor Visual Inspection passed. Set up pumps and began sampling at 0830. Started paper work. Contractor began moving equipment over to silo #4. Took break. Contractor left site. Took final calibration and finished sampling at 1430. Finished paper work and left site.

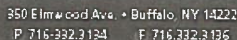
Craig Mikida
SIGNATURE

18-50360
D.O.L. CERTIFICATION NUMBER

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CLIENT/CONTACT: Tantara Corp. / Mark Lovejoy	
PROJECT NAME/ADDRESS: Nike Missile BU-34/35 / 601 Willardshire Rd.	
WORK AREA LOCATION: Silo #1	
MATERIALS REMOVED: Corrugated Pipe Insulation and Muddled Pipe Fittings + sediment/debris Cementitious Pegboard Gaskets Light Fixtures and Wire Insulation	
CONTRACTOR: Allied	SUPERVISOR: Mark Maloney
NUMBER OF WORKERS ON-SITE: 4	
RESPIRATORY PROTECTION REQUIRED: half	RESPIRATORY PROTECTION USED BY CONTRACTOR: half

NUMBER OF SAMPLES: 12 + 2

SIENNA LICENSE POSTED: ✓	MONOMETER READING: _____ AM _____ PM
AIR MONITOR CERTIFICATIONS POSTED: ✓	PUMP LOCATIONS CHECKED: ✓
TECHNICIAN: Craig Mikida	PUMPS CALIBRATED: ✓
WORK AREA(S) SIZE: Large	VISUAL INSPECTION OK: NA
ENCLOSURE TYPE: NPE w/ glovebag, SSV-18-0656	WAITING PERIOD REQUIRED: 8 hours

PHASE OF WORK: B P <u>A</u> C	AIR RESULTS REVIEWED/POSTED: ✓	ANY HIGH LEVELS: No
OSHA PERSONALS TAKEN: PE EX <u>NA</u>	AIR RESULTS REVIEWED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>

NOTES: Arrived on site at 0730. Met with supervisor and discussed abatement plan for the day. Set up pumps and began work in progress clearance samples at 0830. Workers began removing cumatitious pegboard and light fixtures. Contractor bagging waste per ICR 56-8.4. Workers continued to remove lights and cut out asbestos wire insulation. Gross removal of all ACM complete. Workers bagged out waste per ICR 56-8.9. Entered work area at 1100 and saw minimal amounts of pegboard and pipe insulation remaining. Took break. Contractor returned and began scrubbing pipes and removing left over pieces of pegboard around nails. Work area appears to be clear of all ACM. Visual Inspection to be conducted 07/25/18. Contractor left site. Took final calibration and finished sampling at 1630. Finished paper work and left site.

Craig M. H.
SIGNATURE

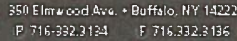
18-50360
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DATE: 07/25/18 JOB # 3239		PROJECT TYPE: Asbestos		PAGE 1 OF 1 :
CLIENT/CONTACT: Tantara Corp. / Mark Lovejoy				START TIME 0730
PROJECT NAME/ADDRESS: Nike Missile BU-34/35 / 601 Willardshire Rd.				
WORK AREA LOCATION: Silo #4				
<input type="checkbox"/> PIPE INSULATION <input type="checkbox"/> FIREPROOFING <input type="checkbox"/> CAULK <input type="checkbox"/> FLOOR TILE <input type="checkbox"/> MASTIC MATERIALS REMOVED: <input type="checkbox"/> BOILER/TANK INSULATION <input type="checkbox"/> TRANSITE <input type="checkbox"/> DRYWALL/PLASTER <input type="checkbox"/> ROOFING <input type="checkbox"/> OTHER None (prep day)				END TIME 1600
CONTRACTOR: Allied		SUPERVISOR: Mark Maloney		
AIR MONITOR: Craig Mikida		TECHNICIAN: Craig Mikida		
PROJECT MONITOR (IF APPLICABLE): Craig Mikida				
SIENNA LICENSE POSTED <input checked="" type="checkbox"/>		NUMBER OF SAMPLES REQUIRED 6+2		
AIR MONITOR CERTIFICATIONS POSTED <input checked="" type="checkbox"/>		PUMP LOCATIONS CHECKED <input checked="" type="checkbox"/>		
PERSONAL SAFETY EQUIPMENT <input checked="" type="checkbox"/>		PUMPS CALIBRATED <input checked="" type="checkbox"/>		
WORK AREA(S) SIZE Large		VISUAL INSPECTION OK <input checked="" type="checkbox"/>		
ENCLOSURE TYPE NPE w/ glovebag, SSV-18-0656		WAITING PERIOD REQUIRED 4 hours		

PHASE OF WORK	B <input checked="" type="checkbox"/> A <input type="checkbox"/> C <input type="checkbox"/>	AIR RESULTS REVIEWED <input checked="" type="checkbox"/>	ANY HIGH LEVELS No
OSHA PERSONALS TAKEN	PE <input type="checkbox"/> EX <input type="checkbox"/> NA <input checked="" type="checkbox"/>	AIR RESULTS REVIEWED NA	ANY HIGH LEVELS NA

NOTES: Arrived on site at 0730. Met with supervisor and conducted Project Monitor Visual Inspection per ICR 56-9.1(d)(1) and ASTM E1368. Project Monitor Visual Inspection passed for Silo #1. Contractor began tear-down per ICR 56-9.3. Workers began prepping Silo #4. Set up pumps and began sampling at 0830. Remote decan moved on site per ICR 56-7.5. Barrier tape and signage installed per ICR 56-7.4. Steve (Sienna) arrived on site at 0945 and conducted safety walkthrough. Steve left 1045. Contractor lowered equipment into Silo #4 and began setting up critical barriers, airlock, and negative air. Took break. Workers applied poly over hardwall barrier surrounding elevator doors. Workers secured airlock. Critical barriers and airlock installed per ICR 56-7.11. Contractor established negative air per ICR 56-7.8. Contractor left site. Took final calibration and finished sampling at 1530. Finished paper work and left site.



CLIENT/CONTACT: <u>Tantara Corp. / Mark Lovejoy</u>		DATE: <u>08/01/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BU-34/35/601 Willardshire Rd.</u>		S M T <u>W</u> TH F S
WORK AREA LOCATION: <u>Silo 4 Exterior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Cementitious Pipe</u>		PROJECT TYPE: <u>Asbestos</u>
		START TIME: <u>0730</u>
		END TIME: <u>1700</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Mark Maloney</u>	NUMBER OF SAMPLES: <u>7+2</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>half</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>half</u>	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: <u>NA</u> _____ AM _____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: <u>Craig Mikida</u>	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <input checked="" type="checkbox"/>	
ENCLOSURE TYPE: <u>SSV-18-0656</u>	WAITING PERIOD REQUIRED: <u>NA</u>	

PHASE OF WORK: <u>B P E C</u>	AIR RESULTS REVIEWED/POSTED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <u>No</u>
OSHA PERSONALS TAKEN: <u>PE EX NA</u>	AIR RESULTS REVIEWED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>
NOTES: <u>Arrived on site at 0730. Met with supervisor and conducted visual inspection. Project Monitor Visual Inspection conducted per ICR 56-9.1(d)(1) and ASTM E1368. Project Monitor Visual Inspection passed. Herc Rentals arrived on site and delivered excavator to Allied. Contractor set up barrier tape per ICR 56-7.4 for exterior work. Woodsmith Fence arrived on site and installed chainlink fence around silo 4. 1000 clearance samples passed for silo 4 interior. Set up pumps and began sampling at 1000 for silo 4 exterior work. Contractor pulled equipment, new air machines, and air lock out of silo 4. Decon stayed on site for silo 4 exterior work. Workers began exploratory dig to try to locate cementitious pipe. Excavator broke. Herc Rentals arrived on site to fix machine. Took break. Workers returned and continued exploratory digging. Contractor not wearing PPE or using water and Tantara workers on site helping locate pipe. Told Allied PPE and water needs to be used when they are digging and told Tantara they are not allowed in barrier tape work area. Workers located pipe. Workers began removing</u> <u>Craig Mikida</u> <u>18-50360</u>		
SIGNATURE		PAGE <u>1</u> OF <u>2</u>

CLIENT/CONTACT: <u>Tantera Corp / Mark Lovejoy</u>	DATE: <u>08/01/18</u>
PROJECT NAME/ADDRESS: <u>601 Willardshire Rd. / Nike Missile BU-34/35</u>	S M T <u>W</u> TH F S
WORK AREA LOCATION: <u>Silo 4 Exterior</u>	SET#: <u>3239</u>
	PROJECT TYPE: <u>Asbestos</u>

Sections of cementitious pipe and double wrapping it in poly. Contractor finished for the day and left site. Took final calibration and finished sampling at 1700. Finished paper work and left site.

Craig Miller
 SIGNATURE

18-50360
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CLIENT/CONTACT: <u>Tantara Corp. / Mark Lovejoy</u>		DATE: <u>08/02/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BU-34/35 / 601 Willardshire Rd.</u>		S M T W <u>Th</u> F S
WORK AREA LOCATION: <u>Silo 4 Exterior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Cementitious Pipe</u>		PROJECT TYPE: <u>Asbestos</u>
		START TIME: <u>0730</u>
		END TIME: <u>1630</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Mark Maloney</u>	NUMBER OF SAMPLES: <u>7+2</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>half</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>half</u>	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: <u>NA</u> _____ AM _____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: <u>Craig Mikida</u>	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <input checked="" type="checkbox"/>	
ENCLOSURE TYPE: <u>SSV-18-0656</u>	WAITING PERIOD REQUIRED: <u>NA</u>	

PHASE OF WORK: <u>B P A C</u>	AIR RESULTS REVIEWED/POSTED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <u>No</u>
OSHA PERSONALS TAKEN: <u>PE EX NA</u>	AIR RESULTS REVIEWED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>
NOTES: <u>Arrived on site at 0730. Met with supervisor and discussed abatement plan for the day. Set up pumps and began sampling at 0830. Contractor brought moving truck on site and loaded equipment, reg air machines, and air lock. Workers started excavating pipe, breaking into sections, spraying water, and double wrapping ACM. Workers properly wearing PPE. Any broken pieces were bagged. Visually inspected trench where ^{section} of pipe was removed and cleared it to be backfilled. Took break. Workers continued to excavate pipe, wet it, and wrap it in poly per ICA 56-11.5 and SSV-18-0656. Contractor moved all bagged/wrapped waste into dumpster per ICA 56-8.9. Conducted visual inspection with supervisor. Project Monitor Visual Inspection passed. Workers backfilled excavated work area. Contractor finished for the day and left site. Took final calibration and finished sampling at 1630. Finished paper work and left site.</u>		

Craig Mikida
 SIGNATURE

18-50360
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CLIENT/CONTACT: <u>Tantara Corp. / Mark Lovejoy</u>		DATE: <u>08/10/18</u>
PROJECT NAME/ADDRESS: <u>601 Willardshire Rd. / Nike Missile BU-34/35</u>		S <input checked="" type="checkbox"/> M <input type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> TH <input type="checkbox"/> F <input type="checkbox"/> S
WORK AREA LOCATION: <u>Silo 1 Exterior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Cementitious Pipe</u>		PROJECT TYPE: <u>Asbestos</u>
		START TIME: <u>0730</u>
		END TIME: <u>1630</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Mark Maloney</u>	NUMBER OF SAMPLES: <u>7+2</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>half</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>half</u>	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: <u>NA</u> _____ AM _____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: <u>Craig Mikida</u>	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <input checked="" type="checkbox"/>	
ENCLOSURE TYPE: <u>SSV-18-0C56</u>	WAITING PERIOD REQUIRED: <u>NA</u>	

PHASE OF WORK: <u>B P A C</u>	AIR RESULTS REVIEWED/POSTED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <u>No</u>
OSHA PERSONALS TAKEN: <u>PE EX NA</u>	AIR RESULTS REVIEWED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>
NOTES: <u>Arrived on site at 0730. Met with supervisor and discussed abatement plan for the day. Set up pumps and began sampling at 0830. Contractor moved decan on site per ICR 56-7.5. Workers set up barrier tape and signage per ICR 56-7.4. Susanne (Sienna) arrived on site and conducted walkthrough. Susanne left site. Workers started excavating pipe, breaking into sections, wetting it, and double wrapping it in poly. Other construction work going on around site that could be contributing possible dust to samples. Took break. Workers returned and continued to remove pipe per ICR 56-11.5 and SSV-18-0C56. Conducted visual inspection with supervisor. Project Monitor Visual Inspection passed. Minimal pieces of pipe spotted and bagged. All bagged/wrapped ACM waste moved to dumpster per ICR 56-8.9. Contractor backfilled excavated work area. Contractor finished for the day and left site. Took final calibration and finished sampling at 1630. Finished paper work and left site.</u>		

Craig Mikida
SIGNATURE

18-50360
DOI CERTIFICATION NUMBER

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CLIENT/CONTACT: <u>Tantara Corp. / Mark Lovejoy</u>		DATE: <u>08/07/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile - BU-34/35 / 601 Willardshire Rd.</u>		S <u>M</u> <u>W</u> <u>TH</u> <u>F</u> <u>S</u>
WORK AREA LOCATION: <u>Silo 2 Exterior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Cementitious Pipe</u>		PROJECT TYPE: <u>Asbestos</u>
		START TIME: <u>0730</u>
		END TIME: <u>1630</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Frank McCullough</u>	NUMBER OF SAMPLES: <u>7+2</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>half</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>half</u>	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: <u>NA</u> <u> </u> AM <u> </u> PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: <u>Craig Mikida</u>	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <input checked="" type="checkbox"/>	
ENCLOSURE TYPE: <u>SSV-18-0656</u>	WAITING PERIOD REQUIRED: <u>NA</u>	

PHASE OF WORK: <u>B P Q C</u>	AIR RESULTS REVIEWED/POSTED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <u>No</u>
OSHA PERSONALS TAKEN: <u>PE EX NA</u>	AIR RESULTS REVIEWED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>
NOTES: <u>Arrived on site at 0730. Met with supervisor and discussed abatement plan for the day. Set up pumps and started sampling at 0830. Contractor set up barrier tape and signage per ICR 56-7.4. Workers moved down on site per ICR 56-7.5. Workers started excavating pipe, breaking into sections, wetting it, and double wrapping it in poly. Partially passed visual so workers could backfill trench where pipe had been removed. Took break. Workers returned and continued to remove pipe per ICR 56-11.5 and SSV-18-0656. Workers wearing PPE per ICR 56-7.6. Contractor finished abatement. Conducted visual inspection with supervisor. Project Monitor Visual Inspection passed. All bagged/wrapped ACM waste moved to dumpster per ICR 56-8.9. Contractor backfilled excavated work area. Contractor finished for the day and left site. Took final calibration and finished sampling at 1630. Finished paper work and left site.</u>		

Craig Mikida
SIGNATURE

18-50360
D.O.L. CERTIFICATION NUMBER

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CLIENT/CONTACT: <u>Tantara Corp. / Mark Lovejoy</u>		DATE: <u>08/08/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BU-34/35 / 601 Willardshire Rd.</u>		S M T <u>W</u> TH F S
WORK AREA LOCATION: <u>Silo 3 Exterior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Cementitious Pipe</u>		PROJECT TYPE: <u>Asbestos</u>
		START TIME: <u>0730</u>
		END TIME: <u>1700</u> 1630
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Frank McCullough</u>	NUMBER OF SAMPLES: <u>7+2</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>half</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>half</u>	
SIENNA LICENSE POSTED: <u>✓</u>	MONOMETER READING: <u>NA</u> _____ AM _____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <u>✓</u>	PUMP LOCATIONS CHECKED: <u>✓</u>	
TECHNICIAN: <u>Craig Mikida</u>	PUMPS CALIBRATED: <u>✓</u>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <u>✓</u>	
ENCLOSURE TYPE: <u>SSV-18-0656</u>	WAITING PERIOD REQUIRED: <u>NA</u>	

PHASE OF WORK: <u>B P R C</u>	AIR RESULTS REVIEWED/POSTED: <u>✓</u>	ANY HIGH LEVELS: <u>NA Yes</u>
OSHA PERSONALS TAKEN: <u>PE EX NA</u>	AIR RESULTS REVIEWED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>

NOTES: Arrived on site at 0730. Met with supervisor and discussed abatement plan for the day. Set up pumps and began sampling at 0830. Contractor set up barrier tape and signage per ICR 56-7.4. Workers moved decon on site per ICR 56-7.5. Silo 1 Exterior samples came back overloaded so samples will have to be rerun. Workers started excavating pipe, breaking into sections, wetting it, and double wrapping it in poly. Weather delayed work. Partially passed visual so workers could backfill trench where pipe had been removed. Took break. Workers continued to remove pipe per ICR 56-11.5 and SSV-18-0656. All bagged waste moved to dumpster per ICR 56-8.9. Visually inspected majority of the work area so contractor could backfill. Contractor will resume and finish pipe abatement tomorrow. Contractor left site. Took final calibration and finished sampling at 1630. Finished paper work and left site at 1700.

Craig Mikida
 SIGNATURE

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CLIENT/CONTACT: <u>Tantara Corp. / Mark Lovejoy</u>		DATE: <u>08/09/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BU-34/35 / 601 Willardshire Rd.</u>		S M T W TH F S
WORK AREA LOCATION: <u>Silo 3 Exterior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Comminuted Pipe</u>		PROJECT TYPE: <u>Asbestos</u>
		START TIME: <u>0730</u>
		END TIME: <u>1630</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Frank McCullough</u>	NUMBER OF SAMPLES: <u>7+2</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>	RESPIRATORY PROTECTION REQUIRED: <u>half</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>half</u>
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: <u>NA</u> _____ AM _____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: <u>Craig Mlikids</u>	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <input checked="" type="checkbox"/>	
ENCLOSURE TYPE: <u>SSV-18-0656</u>	WAITING PERIOD REQUIRED: <u>NA</u>	

PHASE OF WORK: <u>B P Q C</u>	AIR RESULTS REVIEWED/POSTED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <u>No</u>
OSHA PERSONALS TAKEN: <u>PE EX NA</u>	AIR RESULTS REVIEWED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>
NOTES: <u>Arrived on site at 0730. Met with supervisor and discussed abatement plan for the day. Set up pumps and began sampling at 0830. Also set up pumps and began re-running clearance samples for Silo 1 Exterior. Contractor finished abatement for Silo 3 Exterior. Conducted visual inspection with supervisor. Project Monitor Visual Inspection passed. Contractor starting abatement on Silo 5 Exterior. Workers moved decon on site per ICR 56-7.5. Workers set up barrier tape and signage per ICR 56-7.4. Took break. Workers returned and began excavating pipe, breaking into sections, wetting it, and double wrapping it in poly. Workers wearing PPE per ICR 56-7.6. Workers continued to remove pipe per ICR 56-11.5 and SSV-18-0656. Took final calibration and finished Silo 1 Exterior samples at 1600. Workers bagged any broken pieces of pipe and moved ^{left} all ACM waste wrapped and contained. Contractor finished for the day and left site. Took final calibration and finished sampling at 1630. Finished paper work and left site.</u>		

Craig Mlikids
 SIGNATURE

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 D.O.L. CERTIFICATION NUMBER

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CLIENT/CONTACT: Tantora Corp. / Mark Lovejoy		DATE: 08/13/18
PROJECT NAME/ADDRESS: Nike Missile BU-3435 / 601 Willardshire Rd.		S <input checked="" type="checkbox"/> T <input type="checkbox"/> W <input type="checkbox"/> TH <input type="checkbox"/> F <input type="checkbox"/> S <input type="checkbox"/>
WORK AREA LOCATION: Silo 5 Exterior		SET#: 3239
MATERIALS REMOVED: Cementitious Pipe		PROJECT TYPE: Asbestos
		START TIME: 0730
		END TIME: 1630
CONTRACTOR: Allied	SUPERVISOR: Frank McCullough	NUMBER OF SAMPLES: 7+2
NUMBER OF WORKERS ON-SITE: 3		
RESPIRATORY PROTECTION REQUIRED: half	RESPIRATORY PROTECTION USED BY CONTRACTOR: half	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: NA <input type="checkbox"/> AM <input type="checkbox"/> PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: Craig Mlikide	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: Large	VISUAL INSPECTION OK: <input checked="" type="checkbox"/>	
ENCLOSURE TYPE: SSU-18-0656	WAITING PERIOD REQUIRED: NA	

PHASE OF WORK: B P <input checked="" type="checkbox"/> C	AIR RESULTS REVIEWED/POSTED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: No
OSHA PERSONALS TAKEN: PE EX NA	AIR RESULTS REVIEWED: NA	ANY HIGH LEVELS: NA
NOTES: Arrived on site at 0730. Met with supervisor and discussed abatement plan for the day. Set up pumps and began sampling at 0830. Contractor finished abatement for Silo 5 Exterior. Workers moved all wrapped/bagged ACM waste to dumpster per ICR 56-8.9. Conducted visual inspection with supervisor. Project Monitor Visual Inspection passed. Contractor began abatement on Silo 6 Exterior. Workers moved decan on site per ICR 56-7.5. Workers set up barrier tape and signage per ICR 56-7.4. Took break. Workers returned and began excavating ground to find any evidence of pipe. Due to the conditions of Silo 6 (previously demo-ed backfilled) only minimal amounts of broken pipe being found. Workers continued to remove pipe per ICR 56-11.5 and SSU-18-0656. Workers bagged any broken pieces of pipe. Contractor finished for the day and left site. Took final calibration and finished sampling at 1630. Finished paper work and left site.		

 Craig Mlikide
 SIGNATURE

 18-50360
 P.O. CERTIFICATION NUMBER

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CLIENT/CONTACT: <u>Tantara Corp. / Mark Lovejoy</u>		DATE: <u>08/14/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BU-34/35/601 Willardshire Rd.</u>		S M <input checked="" type="checkbox"/> W TH F S
WORK AREA LOCATION: <u>Silo 6 Exterior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Cementitious Pipe</u>		PROJECT TYPE: <u>Asbestos</u>
		START TIME: <u>0730</u>
		END TIME: <u>1630</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Frank McCullough</u>	NUMBER OF SAMPLES: <u>7+2</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>half</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>half</u>	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: <u>NA</u> ____ AM ____ PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: <u>Craig Mikida</u>	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <input checked="" type="checkbox"/>	
ENCLOSURE TYPE: <u>SSV-18-0C5G</u>	WAITING PERIOD REQUIRED: <u>NA</u>	

PHASE OF WORK: <u>B P <input checked="" type="checkbox"/> C</u>	AIR RESULTS REVIEWED/POSTED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <u>No</u>
OSHA PERSONALS TAKEN: <u>PE EX NA</u>	AIR RESULTS REVIEWED: <u>NA</u>	ANY HIGH LEVELS: <u>NA</u>
NOTES: <u>Arrived on site at 0730. Met with supervisor and discussed abatement plan for the day. Set up pumps and began sampling at 0830. Contractor began excavating ground looking for any remains of broken pipe. Workers occasionally finding small pieces of pipe, wetting it, and bagging it. Contractor digging trenches, project monitor visually inspecting them, and workers backfilling. Took break. Workers continued to dig. Workers conducting abatement per ICR 5G-11.5 and SSV ^{SSV} 18-0C5G. Conducted final visual inspection with supervisor. Due to Silo C previously being demo-ed and backfilled a whole/intact run of cementitious pipe was not found. Only minimal amounts of broken pipe pieces were removed. Project Monitor Visual Inspection passed. Workers moved all bagged ACM waste to dumpster per ICR 5G-8.9. Contractor backfilled work area. Contractor left site. Took final calibration and finished sampling at 1630. Finished paper work and left site.</u>		

Craig Mikida
 SIGNATURE

18-50360
 D.O.L. CERTIFICATION NUMBER

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CLIENT/CONTACT: <u>Tantara Corp / Mark Lovejoy</u>		DATE: <u>10/15/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BU-34/35/601 Willardshire Rd.</u>		S M T W T H F S
WORK AREA LOCATION: <u>Silo 6 Interior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>aerosol insulation</u>		PROJECT TYPE: <u>ACM</u>
		START TIME: <u>0800</u>
		END TIME: <u>1700</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Frank McCullough</u>	NUMBER OF SAMPLES: <u>7+2</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>1/2 Face</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>1/2 Face</u>	
SIENNA LICENSE POSTED: <u>on-site</u>	MONOMETER READING: <u>/</u> AM <u>/</u> PM	
AIR MONITOR CERTIFICATIONS POSTED: <u>on-site</u>	PUMP LOCATIONS CHECKED: <u>✓</u>	
TECHNICIAN: <u>Matt Zetkle</u>	PUMPS CALIBRATED: <u>✓</u>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <u>N/a</u>	
ENCLOSURE TYPE: <u>11.5</u>	WAITING PERIOD REQUIRED: <u>N/a</u>	

PHASE OF WORK: B <u>P</u> A C	AIR RESULTS REVIEWED/POSTED: <u>N/a</u>	ANY HIGH LEVELS: <u>N/a</u>
OSHA PERSONALS TAKEN: PE EX <u>N/a</u>	AIR RESULTS REVIEWED: <u>N/a</u>	ANY HIGH LEVELS: <u>N/a</u>

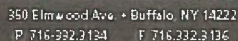
NOTES: Arrived on site at 0800. Met with Project manager Sean and discussed scope of work for the project. Today preparation to remove asbestos contaminated soil, and transite pegboard would be carried out, and removed. at 0900 all pumps were set up in worksite area. From 9:00-11:00 abatement crew waited for excavator to arrive onsite. Supervisor stated piping in missile silo 5 would be removed. At 13:00 removal of piping was started, and finished at 15:00. Upon finishing project monitor passed visual inspection. at 1530 excavator was used to lighten contaminated soil in missile silo 6. at 1611 work in silo 6 ceased. at 1630 I began pulling samples from site, and allied left site at 1700 Project monitor left site with samples.

Matt Zetkle
SIGNATURE

18-54216

D.O.I. CERTIFICATION NUMBER

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CLIENT/CONTACT: <u>Tantara Corp./Mark Lovejoy</u>		DATE: <u>10/18/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BL-34/35/601 Willardshire Rd.</u>		S M <u>T</u> W TH F S
WORK AREA LOCATION: <u>Silo 6 Exterior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>None</u>		PROJECT TYPE: <u>ACM</u>
		START TIME: <u>0700</u>
		END TIME: <u>1645</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Frank McCullough</u>	NUMBER OF SAMPLES: <u>9</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>half mask</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>full face</u>	
SIENNA LICENSE POSTED: <u>✓</u>	MONOMETER READING: <u>✓</u> AM <u>✓</u> PM	
AIR MONITOR CERTIFICATIONS POSTED: <u>✓</u>	PUMP LOCATIONS CHECKED: <u>✓</u>	
TECHNICIAN: <u>Matt Zerkle</u>	PUMPS CALIBRATED: <u>✓</u>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <u>N/A</u>	
ENCLOSURE TYPE: <u>SSV-18-0656</u>	WAITING PERIOD REQUIRED: <u>N/A</u>	

PHASE OF WORK:	B	P	<u>A</u>	C	AIR RESULTS REVIEWED/POSTED:	N/A	ANY HIGH LEVELS:	N/A
OSHA PERSONALS TAKEN:	PE	EX	N/A		AIR RESULTS REVIEWED:	N/A	ANY HIGH LEVELS:	N/A
NOTES:								
<p>Arrived onsite at 0705, waited in Tantara trailer for Allied to arrive onsite. At 0750 Allied arrived onsite. From 0800 to 1000 Allied brought transite pipe casing from missile silos 1 & 2 to missile silo 6, and covered it with poly. at 1020 a truck arrived with sawdust. Sawdust was dumped into silo hole and mixed with contaminated soil. contaminated dirt and sawdust were then being removed by excavator. at 1300 crew and project monitor took lunch. At 1330 Steve Drossowski, Health and Safety Specialist, project monitor gave him tour of site. at 1400 he left field site. at 1400 abatement crew began excavating more contaminated soil, and sawdust. at 1430 checked on sampler, all were running properly, at 1600 workers left field site. pulled field samples at 1630 to get daily volume. Left field site at 1645 to bring samples back to the office.</p>								


SIGNATURE

18-54216

D.O.L. CERTIFICATION NUMBER



CLIENT/CONTACT: <u>Tantara Corp / Mark Lovejoy</u>		DATE: <u>10/18/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile BU-34/35</u>		S M T W <u>TH</u> F S
WORK AREA LOCATION: <u>Silo 6 Exterior/Interior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>asbestos contaminated soil (cementitious piping, Airtcell)</u>		PROJECT TYPE: <u>ACM</u>
		START TIME: <u>0730</u>
		END TIME: <u>1700</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Frank McCullough</u>	NUMBER OF SAMPLES: <u>9</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>1/2 Face</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>full face</u>	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: <u>1</u> AM <u>1</u> PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: <u>Matt Zerkle</u>	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <u>N/A</u>	
ENCLOSURE TYPE: <u>SSV-18-0656</u>	WAITING PERIOD REQUIRED: <u>N/A</u>	

PHASE OF WORK: <u>B P A C</u>	AIR RESULTS REVIEWED/POSTED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <u>NO</u>
OSHA PERSONALS TAKEN: <u>PE EX</u>	AIR RESULTS REVIEWED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <u>NO</u>

NOTES: Arrived onsite at 0730. Waited in Tantara trailer for allied to arrive. Onsite at 0800 allied arrived onsite. From 0800 to 0810 set up air samples in missile silo 6 while allied workers put on PPE. at 0815 workers began lining tri-axial dumptruck, and started to load first truck. Through morning 8 dump trucks were loaded and hauled to the landfill. at 1230 workers decon out and have site for lunch. at 1300 workers return onsite wearing proper PPE. dump trucks were lined and continuously loaded. 3 dump truck loads were taken to Chaffee landfill. at 1400 technician was onsite to fix excavator. at 1500 excavator was used to dig out more contaminated soil and form a poly-covered pile. at 1500 workers decon out. I pulled samples at 1545 and left field site. 1600 drove back and dropped off samples at Sienna.

Matt Zerkle
 SIGNATURE

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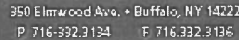
CLIENT/CONTACT: <i>Tantara Corp / Mark Lovejoy</i>		DATE: <i>10/22/18</i>
PROJECT NAME/ADDRESS: <i>Nike Missile Silos / 601 Willardshire Rd.</i>		S <input checked="" type="radio"/> M <input type="radio"/> T <input type="radio"/> W <input type="radio"/> TH <input type="radio"/> F <input type="radio"/> S
WORK AREA LOCATION: <i>Silo 6 Exterior/Interior</i>		SET#: <i>3239</i>
MATERIALS REMOVED: <i>asbestos contaminated soil (cementitious piping/air cell)</i>		PROJECT TYPE: <i>ACM</i>
		START TIME: <i>0645</i>
		END TIME: <i>1700</i>
CONTRACTOR: <i>Allied</i>	SUPERVISOR: <i>Frank McCullough</i>	
NUMBER OF WORKERS ON-SITE: <i>3</i>	NUMBER OF SAMPLES: <i>9</i>	
RESPIRATORY PROTECTION REQUIRED: <i>1/2 Face</i>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <i>full face</i>	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: <i>/</i> AM <input checked="" type="checkbox"/> PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: <i>Matt Zerkle</i>	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: <i>Large</i>	VISUAL INSPECTION OK: <i>N/A</i>	
ENCLOSURE TYPE: <i>SSV-18-0656</i>	WAITING PERIOD REQUIRED: <i>N/A</i>	

PHASE OF WORK: <input type="checkbox"/> B <input type="checkbox"/> P <input checked="" type="checkbox"/> A <input type="checkbox"/> C	AIR RESULTS REVIEWED/POSTED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <i>NO</i>
OSHA PERSONALS TAKEN: <input checked="" type="checkbox"/> PE <input type="checkbox"/> EX	AIR RESULTS REVIEWED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <i>NO</i>
NOTES: <i>Arrived onsite at 0645. Allied arrived onsite at 0745. after arrival I set up work in progress samples around Silo #6. all barrier tape on Silo 6 was up, and decon was opened. at 0800 workers changed into proper PPE, and began loading triaxial trucks. at 1000 I checked on air samples, all were running correctly. at 1100 all workers Decon out at 50yd of woodchips were delivered. at 1115 workers put on proper PPE and continued loading triaxial dump trucks. at 1300 workers decon out and break for lunch. at 1330 workers re-enter site wearing proper PPE, and continue digging out soil. workers exited work area at 1600, and I pulled samples at 1645. workers and project monitor left site at 1700.</i>		

Matt Zerkle
 SIGNATURE

18-54216
 D.O.L. CERTIFICATION NUMBER

PAGE 1 OF 1



CLIENT/CONTACT: <u>Tantata Corp/Mark Lovejoy</u>		DATE: <u>10/24/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile Silos / 601 Willardshire rd.</u>		S M T <u>W</u> TH F S
WORK AREA LOCATION: <u>Silo 6 Exterior/Interior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>None</u>		PROJECT TYPE: <u>ACM</u>
		START TIME: <u>0730</u>
		END TIME: <u>1709</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Frank McDullough</u>	NUMBER OF SAMPLES: <u>9</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>1/2 Mask</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>full face</u>	
SIENNA LICENSE POSTED: <input checked="" type="checkbox"/>	MONOMETER READING: <u> </u> AM <u> </u> PM	
AIR MONITOR CERTIFICATIONS POSTED: <input checked="" type="checkbox"/>	PUMP LOCATIONS CHECKED: <input checked="" type="checkbox"/>	
TECHNICIAN: <u>Matt Zerkle</u>	PUMPS CALIBRATED: <input checked="" type="checkbox"/>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <u>N/A</u>	
ENCLOSURE TYPE: <u>SSV-18-0656</u>	WAITING PERIOD REQUIRED: <u>N/A</u>	

PHASE OF WORK: <u>B P <u>A</u> C</u>	AIR RESULTS REVIEWED/POSTED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <u>N/A</u>
OSHA PERSONALS TAKEN: <u>CPE EX</u>	AIR RESULTS REVIEWED: <input checked="" type="checkbox"/>	ANY HIGH LEVELS: <u>N/A</u>
NOTES: <u>0730 arrived onsite. allied arrived onsite at 0750. Barrier tape was secure, and dixon was running correctly. at 0830 all workers suit up in proper PPE and begin digging walls along Silo 6. at 1030 Bobcat mechanic arrived onsite to fix excavator. He was outside barrier tape. at 1120 machinery was all working correctly, and workers were back in full PPE. at 1330 crew dixon out for lunch. 1400 workers resume cleaning in proper PPE. North wall adjacent contaminated soil was completely removed using shovels, and excavator. at 15:00 checked on all air sampler. all were running correctly. at 1500 to 1630 workers were piling ACM soil to get ready for removal tomorrow. at 1645 I pulled all air sampler. Both project monitor and allied left site at 1700.</u>		

Matt Zerkle
 SIGNATURE

18-54218

D.O.I. CERTIFICATION NUMBER

 PAGE 1 OF 1

CLIENT/CONTACT: <u>Tantara Corp</u>		DATE: <u>10/25/18</u>
PROJECT NAME/ADDRESS: <u>Nike Missile Silos/601 Willard Shite Rd.</u>		S M T W <u>TH</u> F S
WORK AREA LOCATION: <u>Silo 6 Exterior/Interior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>None</u>		PROJECT TYPE: <u>ACM</u>
		START TIME: <u>0730</u>
		END TIME: <u>1700</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Frank McCullough</u>	NUMBER OF SAMPLES: <u>9</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>1/2 Face</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>Full face</u>	
SIENNA LICENSE POSTED: <u>✓</u>	MONOMETER READING: <u>✓</u> AM <u>✓</u> PM	
AIR MONITOR CERTIFICATIONS POSTED: <u>✓</u>	PUMP LOCATIONS CHECKED: <u>✓</u>	
TECHNICIAN: <u>Matt Zerkle</u>	PUMPS CALIBRATED: <u>✓</u>	
WORK AREA(S) SIZE: <u>Large</u>	VISUAL INSPECTION OK: <u>N/A</u>	
ENCLOSURE TYPE: <u>SSV-18-0256</u>	WAITING PERIOD REQUIRED: <u>N/A</u>	

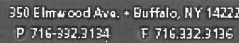
PHASE OF WORK: B P <u>A</u> C	AIR RESULTS REVIEWED/POSTED: <u>✓</u>	ANY HIGH LEVELS: <u>N/A</u>
OSHA PERSONALS TAKEN: PE EX	AIR RESULTS REVIEWED: <u>✓</u>	ANY HIGH LEVELS: <u>N/A</u>

NOTES: at 0730 arrived onsite. allied arrived onsite at 0750. Barrier tape was secure, and decon was running correctly. at 0820 all workers suited up in proper PPE, and began digging walls along silo 6. 4 workers, also dug out office corner where transite pegboard was present. at 11:00 project manager arrived onsite, and toured abatement area. Everything was to satisfactory. at 1130 project manager was offsite. at 1300 crew decon out for lunch, and leave site. at 1330 workers resume cleaning pit in proper PPE. at 1400 checked on all air sampler, all are running correctly. at 1500 workers were shoveling out dirt and debris in back office. at 1630 all workers exited work site, and decon out. at 1645 workers leave site, and project monitor collects all air sampler. project monitor off site by 1700.

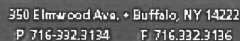
Matt Zerkle
SIGNATURE

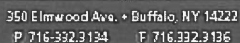
18-54216

D.O.L. CERTIFICATION NUMBER



PAGE 1 OF 1





D.O.L. CERTIFICATION NUMBER

CLIENT/CONTACT: <u>Tantara / Mark Loujoy</u>		DATE: <u>5/29/19</u>
PROJECT NAME/ADDRESS: <u>601 Willard Shire - Underground Nike Missile Silos</u>		S M T <u>(W)</u> TH F S
WORK AREA LOCATION: <u>• Silo #2 - Exterior</u>		SET#: <u>3239</u>
MATERIALS REMOVED: <u>Expansion Joint Caulk</u>		PROJECT TYPE: <u>ACM</u>
		START TIME: <u>1315</u>
		END TIME: <u>1350</u>
CONTRACTOR: <u>Allied</u>	SUPERVISOR: <u>Mark Armbruster</u>	NUMBER OF SAMPLES: <u>0</u>
NUMBER OF WORKERS ON-SITE: <u>3</u>		
RESPIRATORY PROTECTION REQUIRED: <u>1/2 face</u>	RESPIRATORY PROTECTION USED BY CONTRACTOR: <u>1/2 face</u>	
SIENNA LICENSE POSTED: <u>Y</u>	MONOMETER READING: <u>N/A</u> AM <u> </u> PM	
AIR MONITOR CERTIFICATIONS POSTED: <u>Y</u>	PUMP LOCATIONS CHECKED: <u>N/A</u>	
TECHNICIAN: <u>S. Fitzgerald</u>	PUMPS CALIBRATED: <u>N/A</u>	
WORK AREA(S) SIZE: <u>Small</u>	VISUAL INSPECTION OK: <u>Yes</u>	
ENCLOSURE TYPE: <u>11.6</u>	WAITING PERIOD REQUIRED: <u>N/A</u>	

PHASE OF WORK: <u>B P A (C)</u>	AIR RESULTS REVIEWED/POSTED: <u>N/A</u>	ANY HIGH LEVELS: <u> </u>
OSHA PERSONALS TAKEN: <u>-PE -EX -</u>	AIR RESULTS REVIEWED: <u>N/A</u>	ANY HIGH LEVELS: <u> </u>

NOTES:

- Monitor onsite @ 1315 and signs in at job trailer
- Monitor locates decan trailer on perimeter of Silo #2
 - ↳ Meets w/ Contractor Supervisor Mark Armbruster and Allied ready for final visual inspection
- Monitor enters work area w/ (2) Allied workers
 - ↳ Some debris found and Allied bags up waste
 - ↳ Some material remaining on concrete and Allied workers chips off
 - ↳ Area free and clear of ACM expansion joint caulk
 - ↳ Monitor signs off in supervisor's logbook
 - finishes paperwork and offsite.



4. LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTS



LABORATORY REPORT

Attention: Mark Lovejoy
Client: Tantara Corporation
54 Mason Street
Worcester, MA 01610

Project: SET3239- Nike Missile BU- 34/35 - Silo #2

Lab Project #: S35441
Sample Date: 6/12/2018
Date Received: 6/13/2018
Analysis Date: 6/13/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
061218-3239-01	Elevator hatch	P	6/12/2018	1044	1.5	100	1.91	<0.003
061218-3239-02	Vent hatch	P	6/12/2018	1044	0.5	100	0.64	<0.003
061218-3239-03	Decon entrance	P	6/12/2018	1044	1	100	1.27	<0.003
061218-3239-04	Decon exit	P	6/12/2018	1044	2	100	2.55	<0.003
061218-3239-05	Work area entrance/exit, airlock	P	6/12/2018	1044	3.5	100	4.46	<0.003
061218-3239-06	Ambient air	P	6/12/2018	1044	1	100	1.27	<0.003
061218-3239-07	Field	BL	6/12/2018		0	100		
061218-3239-08	Box	BL	6/12/2018		0	100		

Amanda Bentley
Analyst

Approved Signatory

B=Background
CR=Clearance Rush

P=Preparation
EX=Excursion Air

A=Abatement
PE=Personal Air Sample

C=Clearance
BL=Blank

Results relate only to samples as provided by client. This laboratory is not responsible for sample collection activities, analytical method limitations or data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report shall not be reproduced, except in full, without written approval by Sienna. The Sr for analysts is calculated per NIOSH Method 7400 using quality control data including 95% Confidence Interval (CI). Minimum volume of 900L required by NIOSH Method 7400 to reach CI of 95% at Method's Limit of Detection (LOD) at < 0.01 fiber/cc.
Analysts' Sr Ranges: Low: 41, Med: 25, High: 20. NYS ELAP #11727

Air Sampling Worksheet

Chain of Custody

Date 06/12/18 Silo #2
 Job Name Nike Missile BU-34/35 Work Area Location Tantara Corp
 Job # 3239 Client Mark Lowjoy
 Client Contact # _____

Temp/Rain/Wind 70°F / No Rain / Low Wind
 DC - Lite Primary Flow 20171218
 Calibrator # 605

Turnaround (circle)
 3 hour
 24 hour
 48 hour
 Other _____
 Analysis (circle)
 TEM
 other _____

Sample Number	Pump #	Sample Location	IB	IWA	B	Time (military)	Flow (LPM)	Volume (liters)	Results (f/cc)
061218-3239-01		Elevator hatch	OB	OWA	P	1000 1600 360	2.9 2.9 2.9	1044	
02		Vent hatch				1001 1601 360	2.9 2.9 2.9	1044	
03		Decon entrance				1002 1602 360	2.9 2.9 2.9	1044	
04		Decon exit				1003 1603 360	2.9 2.9 2.9	1044	
05		Work area entrance/exit, airlock				1004 1604 360	2.9 2.9 2.9	1044	
06		Ambient air				1005 1605 360	2.9 2.9 2.9	1044	
07		Field							
08		Box							

Comments/Special Conditions

Sketch

06/12/18

06/12/18

06/13/18 8:00

S35441

Received by lab

Relinquished by

Sampler

Launch Pad

Elevator hatch

Launch Pad

Decon



LABORATORY REPORT

Attention: Mark Lovejoy
Client: Tantara Corporation
54 Mason Street
Worcester, MA 01610

Project: SET3239- Nike Missile BU- 34/35 - Silo #2

Lab Project #: S35479
Sample Date: 6/13/2018
Date Received: 6/14/2018
Analysis Date: 6/15/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
061318-3239-01	Elevator hatch - critical 1	P	6/13/2018	1218	4	100	5.1	<0.002
061318-3239-02	Vent hatch - critical 2	P	6/13/2018	1218	4.5	100	5.73	<0.002
061318-3239-03	Decon entrance	P	6/13/2018	1218	3.5	100	4.46	<0.002
061318-3239-04	Decon exit	P	6/13/2018	1218	7.5	100	9.55	0.003
061318-3239-05	Work area entrance/exit, airlock	P	6/13/2018	1218	4	100	5.1	<0.002
061318-3239-06	Ambient air	P	6/13/2018	1218	4	100	5.1	<0.002
061318-3239-07	Field Blank	BL	6/13/2018		0	100		
061318-3239-08	Box Blank	BL	6/13/2018		0	100		

Amanda Bentley
Analyst

Approved Signatory

B=Background
CR=Clearance Rush

P=Preparation
EX=Excursion Air

A=Abatement
PE=Personal Air Sample

C=Clearance
BL=Blank

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Analysts' Sr Ranges: Low .41, Med .25, High .20 NYS ELAP #11727



Air Sampling Worksheet

Chain of Custody

76°F / Rain / Low Wind
Temp/Rain/Wind
20171218
605
DC - Lite
Primary Flow
Calibrator #

Turnaround (circle)
3 hour 6 hour 24 hour 48 hour
Other _____
Analysis (circle)
PCM TEM other _____

		Comments/Special Conditions	
Craig M. Kida	06/13/18	:	
Craig M. Kida	06/13/18	:	
Relinquished by			
Arrived at Bunkery	6/14/18	14:37	
Received by lab	535479		

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET 3239- Nike Missile BU- 34/35- Silo #2

Lab Project #: S35490
 Sample Date: 6/14/2018
 Date Received: 6/14/2018
 Analysis Date: 6/15/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
061418-3239-01	Elevator Hatch- Critical 1	A	6/14/2018	1218	1.5	100	1.91	<0.002
061418-3239-02	Vent Hatch- Critical 2	A	6/14/2018	1218	3	100	3.82	<0.002
061418-3239-03	Decon Entrance	A	6/14/2018	1218	2	100	2.55	<0.002
061418-3239-04	Decon Exit	A	6/14/2018	1218	2	100	2.55	<0.002
061418-3239-05	Work Area Entrance/Exit, Airlock	A	6/14/2018	1218	0	100	0	<0.002
061418-3239-06	Negative Air Exhaust	A	6/14/2018	1218	0	100	0	<0.002
061418-3239-07	Ambient Air	A	6/14/2018	1218	0	100	0	<0.002
061418-3239-08	Field Blank	BL	6/14/2018		0	100		
061418-3239-09	Box Blank	BL	6/14/2018		0	100		

Carson Cain
 Analyst


 Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low 37, Med 24, High 16. NYS ELAP #11727

Air Sampling Worksheet
Chain of Custody

Date 06/14/18 Job # 3239
Job Name Nike Missile BU-34/35
Client Tantara Corp.
Client Contact Mark Lowjoy

Temp/Rain/Wind 70°F / No Rain / Low Wind
Calibrator # 605
DC - Lite Primary Flow

Turnaround (circle)
3 hour 24 hour 6 hour
48 hour
Other TEM
Analysis (circle)
TEM

Sample Number	Pump #	Sample Location	IB	IWA	B	P	C	Time (military)	Flow (LPM)	Volume (liters)	Results (f/cc)
061418-3239-01		Elevator hatch - critical 1	OB	OWA	A			0800	2.9	1218	
02		Vent hatch - critical 2						0801	2.9	1218	
03		Decon entrance						0802	2.9	1218	
04		Decon exit						0803	2.9	1218	
05		Work area entrance/exist, airlock						0804	2.9	1218	
06		Negative air exhaust						0805	2.9	1218	
07		Ambient air						0806	2.9	1218	
08		Field Blank									
09		Box Blank									

Comments/Special Conditions 07X

Sketch

Received by lab 535490



LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET3239- Nike Missile BU- 34/35 - Silo #2

Lab Project #: S35517
 Sample Date: 6/18/2018
 Date Received: 6/19/2018
 Analysis Date: 6/19/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
061818-3239-01	Elevator hatch - critical 1	A	6/18/2018	1392	2.5	100	3.18	<0.002
061818-3239-02	Vent hatch - critical 2	A	6/18/2018	1392	2.5	100	3.18	<0.002
061818-3239-03	Decon entrance	A	6/18/2018	1392	2	100	2.55	<0.002
061818-3239-04	Decon exit	A	6/18/2018	1392	1.5	100	1.91	<0.002
061818-3239-05	Work area entrance/exit, airlock	A	6/18/2018	1392	1	100	1.27	<0.002
061818-3239-06	Negative air exhaust	A	6/18/2018	1392	5	100	6.37	<0.002
061818-3239-07	Ambient air	A	6/18/2018	1392	3	100	3.82	<0.002
061818-3239-08	Field Blank	BL	6/18/2018		0	100		
061818-3239-09	Box Blank	BL	6/18/2018		0	100		

Amanda Bentley
 Analyst


 Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges Low 41, Med 25, High 20. NYS ELAP # 11727

06/19/18 Date
 Nike Missile BU-34/35 Job Name
 3239 Job #

Silo #2 Work Area Location
 Tentara Corp. Client
 Mark Lovejoy Client Contact

88°F / No Rain / Low Wind Temp/Rain/Wind
 20171218
 C05 Calibrator #

DC - Lite Primary Flow

Turnaround (circle)
 3 hour 6 hour 48 hour
 Other Analysis (circle)
 TEM

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B EX	P C PE	Time (military) Start Stop	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
061818-3239-01		Elevator hatch - critical 1	0B	0WA	A		0800 1600	2.9 2.9 2.9	1392	
02		Vent hatch - critical 2					0801 1601	2.9 2.9 2.9	1392	
03		Decan entrance					0802 1602	2.9 2.9 2.9	1392	
04		Decan exit					0803 1603	2.9 2.9 2.9	1392	
05		Work area entrance/exit, airlock					0804 1604	2.9 2.9 2.9	1392	
06		Negative air exhaust					0805 1605	2.9 2.9 2.9	1392	
07		Ambient air					0806 1606	2.9 2.9 2.9	1392	
08		Field Blank								
09		Box Blank								

Comments/Special Conditions

Sketch

07X Silo door

01X

05X air lock

02X Vent hatch

03X Decan

04X Launch pad

06/18/18

06/18/18

06/19/18 8:03

535517

Craig Mikida Sampler

Gary my Relinquished by

Lawrence Boddy Received by lab

Fluxator hatch

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Project: SET3239- Nike Missile BU- 34/35 - Silo #2

Lab Project #: S35533
 Sample Date: 6/19/2018
 Date Received: 6/20/2018
 Analysis Date: 6/20/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
061918-3239-01	Elevator hatch - critical 1	C	6/19/2018	1392	3	100	3.82	<0.002
061918-3239-02	Vent hatch - critical 2	C	6/19/2018	1392	1	100	1.27	<0.002
061918-3239-03	Decon entrance	C	6/19/2018	1392	0	100	0	<0.002
061918-3239-04	Decon exit	C	6/19/2018	1392	2	100	2.55	<0.002
061918-3239-05	Work area entrance/exit, airlock	C	6/19/2018	1392	5	100	6.37	<0.002
061918-3239-06	Negative air exhaust	C	6/19/2018	1392	0	100	0	<0.002
061918-3239-07	Ambient air	C	6/19/2018	1392	5.5	100	7.01	0.002
061918-3239-08	Back up negative air machine	C	6/19/2018	1392	5	100	6.37	<0.002
061918-3239-09	Structure under elevator hatch	C	6/19/2018	1392	2	100	2.55	<0.002
061918-3239-10	Near airlock and personnel room	C	6/19/2018	1392	5	100	6.37	<0.002
061918-3239-11	Centered East side of elevator	C	6/19/2018	1392	6	100	7.64	0.002
061918-3239-12	Centered West side of elevator	C	6/19/2018	1392	5	100	6.37	<0.002
061918-3239-13	Field Blank	BL	6/19/2018		0	100		
061918-3239-14	Box Blank	BL	6/19/2018		0	100		

Amanda Bentley
 Analyst



Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low .41, Med .25, High .20. NYS ELAP #11727

Air Sampling Worksheet

Chain of Custody

Date 06/19/18 Job # 3239

Client Nike Missile BU-34/35

Client Contact Mark Lovejoy

Work Area Location Silo #2

Client Tantara Corp.

Temp/Rain/Wind 70°F / No Rain / Low Wind

DC - Lite Primary Flow 20171218

Calibrator # 605

Turnaround (circle)

3 hour 24 hour 6 hour 48 hour

Other TEM

Sample Number	Pump #	Sample Location	IB	IWA	OWA	OB	OA	PE	Time (military)	Flow (LPM)	Volume (liters)	Results (f/cc)
061918-3239-01		Elevator hatch - critical 1	OB	OWA					08191619	2.9	2.9	1392
02		Vent hatch - critical 2	OB	OWA					08201620	2.9	2.9	1392
03		Decon entrance	OB	OWA					08211621	2.9	2.9	1392
04		Decon exit	OB	OWA					08221622	2.9	2.9	1392
05		Work area entrance/exit, airlock	OB	OWA					08231623	2.9	2.9	1392
06		Negative air exhaust	OB	OWA					08241624	2.9	2.9	1392
07		Ambient air	OB	OWA					08251625	2.9	2.9	1392
08		Back up negative air machine	IB	IWA					08261626	2.9	2.9	1392
09		Structure under elevator hatch	IB	IWA					08271627	2.9	2.9	1392
10		Near airlock and personnel room	IB	IWA					08281628	2.9	2.9	1392
11		Centred East side of elevator	IB	IWA					08291629	2.9	2.9	1392
12		Centred West side of elevator	IB	IWA					08301630	2.9	2.9	1392
13		Field Blank										
14		Box Blank										

Comments: Special Conditions IWA

Sketch OWA 05 airlock 09 hatch 12 X 10 airlock 08 back up 09 hatch 08 neg air

Relinquished by Craig Mihale Sampler

Received by lab Yaron Badoff

Received by lab S35533

Received by lab 06/20/18 7:50

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Project: SET 3239- Nike Missile BU-34/35- Silo #3

Lab Project #: S35554
 Sample Date: 6/20/2018
 Date Received: 6/22/2018
 Analysis Date: 6/22/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
062018-3239-01	Critical 1- Elevator Hatch	P	6/20/2018	1044	1	100	1.27	<0.003
062018-3239-02	Critical 2- Silo Door Hatch	P	6/20/2018	1044	1.5	100	1.91	<0.003
062018-3239-03	Decon Entrance	P	6/20/2018	1044	4	100	5.1	<0.003
062018-3239-04	Decon Exit	P	6/20/2018	1044	1	100	1.27	<0.003
062018-3239-05	Work Area Entrance/Exit, Airlock	P	6/20/2018	1044	3	100	3.82	<0.003
062018-3239-06	Ambient Air	P	6/20/2018	1044	0	100	0	<0.003
062018-3239-07	Field Blank	BL	6/20/2018		0	100		
062018-3239-08	Box Blank	BL	6/20/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

Results relate only to samples as provided by client. This laboratory is not responsible for sample collection activities, analytical method limitations or data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report shall not be reproduced, except in full, without written approval by Sienna. The Sr for analysts is calculated per NIOSH Method 7400 using quality control data including 95% Confidence Interval (CI). Minimum volume of 900L required by NIOSH Method 7400 to reach CI of 95% at Method's Limit of Detection (LOD) at < 0.01 fiber/cc.
 Analysts' Sr Ranges: Low 37, Med 24, High 16. NYS ELAP #11727

Air Sampling Worksheet

Chain of Custody

Date 06/20/18 Job Name Nike Missile BU-34/35 Job # 3239

Work Area Location Silo #3 Client Tantara Corp. Client Contact Mark Lovejoy

Temp/Rain/Wind 70°F / No Rain / Low Wind

Calibrator # 605 / DC - Lite Primary Flow

Turnaround (circle) 3 hour 6 hour 48 hour

Other Analysis (circle) TEM

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A C EX PE	Time (military)			Flow (LPM)			Volume (liters)	Results (f/cc)
						Start	Stop	Tot	Beg	End	Avg		
062018-3239-01		Critical 1 - Elevator Hatch	08	08A	P	1030	1030	360	2.9	2.9	2.9	1044	
02		Critical 2 - Elevator Silo Door Hatch				1031	1031	360	2.9	2.9	2.9	1044	
03		Decon entrance				1032	1032	360	2.9	2.9	2.9	1044	
04		Decon exit				1033	1033	360	2.9	2.9	2.9	1044	
05		Work area entrance/exit, airlock				1034	1034	360	2.9	2.9	2.9	1044	
06		Ambient air				1035	1035	360	2.9	2.9	2.9	1044	
07		Field Blank											
08		Box Blank											
1001													

Comments/Special Conditions

Sketch 05

Sketch 06

Received by lab

Received by lab

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Project: SET 3239- Nike Missile Silo BU- 34/35- Silo #3

Lab Project #: S35555
 Sample Date: 6/21/2018
 Date Received: 6/22/2018
 Analysis Date: 6/22/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
062118-3239-01	Critical 1- Elevator Hatch	P	6/21/2018	913.5	7.5	100	9.55	0.004
062118-3239-02	Critical 2- Silo Door Hatch	P	6/21/2018	913.5	1	100	1.27	<0.003
062118-3239-03	Decon Entrance	P	6/21/2018	913.5	2	100	2.55	<0.003
062118-3239-04	Decon Exit	P	6/21/2018	913.5	3	100	3.82	<0.003
062118-3239-05	Work Area Entrance/Exit, Airlock	P	6/21/2018	913.5	2	100	2.55	<0.003
062118-3239-06	Negative Air Exhaust	P	6/21/2018	913.5	0	100	0	<0.003
062118-3239-07	Ambient Air	P	6/21/2018	913.5	1	100	1.27	<0.003
062118-3239-08	Field Blank	BL	6/21/2018		0	100		
062118-3239-09	Box Blank	BL	6/21/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low 37, Med 24, High 16 NYS ELAP #11727

Date 06/21/18 Job # 3239
 Client Name Nike Missile BU-34/35
 Client Mark Lovejoy
 Client Contact Mark Lovejoy

Temp/Rain/Wind 70°F / No Rain/Low Wind
20/7/2/19
 Calibrator # COS
 DC - Lite Primary Flow

Turnaround (circle)
 3 hour 24 hour 48 hour
 Other Analysis (circle)
PCND TEM other

Sample Number	Pump #	Sample Location	IB	IWA	B	Time (military)	Flow (LPM)	Volume (liters)	Results (f/cc)
062118-3239-01		Critical 1 - Elevator Hatch	08	OWA	P	0800 1315 315	2.9 2.9 2.9	913.5	
02		Critical 2 - Silo Door Hatch				0801 1316 315	2.9 2.9 2.9	913.5	
03		Devon entrance				0802 1317 315	2.9 2.9 2.9	913.5	
04		Devon exit				0803 1318 315	2.9 2.9 2.9	913.5	
05		Work area entrance/exist, airlock				0804 1319 315	2.9 2.9 2.9	913.5	
06		Negative air exhaust				0805 1320 315	2.9 2.9 2.9	913.5	
07		Ambient air				0806 1321 315	2.9 2.9 2.9	913.5	
08		Field Blank							
09		Box Blank							

Comments/Special Conditions

Sketch

Silo Door Hatch

airlock

Launch Pad

Elevator Hatch

Craig Mikida

Relinquished by

Received by lab

06/21/18

06/21/18

6/22/18

535555

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Project: SET 3239- Nike Missile Silo BU- 34/35- Silo #3

Lab Project #: S35578
 Sample Date: 6/25/2018
 Date Received: 6/26/2018
 Analysis Date: 6/26/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
062518-3239-01	Critical 1- Elevator Hatch	A	6/25/2018	1479	3	100	3.82	<0.002
062518-3239-02	Critical 2- Silo Door Hatch	A	6/25/2018	1479	8	100	10.19	0.003
062518-3239-03	Decon Entrance	A	6/25/2018	1479	0.5	100	0.64	<0.002
062518-3239-04	Decon Exit	A	6/25/2018	1479	1	100	1.27	<0.002
062518-3239-05	Work Area Entrance/Exit, Airlock	A	6/25/2018	1479	0	100	0	<0.002
062518-3239-06	Negative Air Exhaust	A	6/25/2018	1479	0	100	0	<0.002
062518-3239-07	Ambient Air	A	6/25/2018	1479	0	100	0	<0.002
062518-3239-08	Field Blank	BL	6/25/2018		0	100		
062518-3239-09	Box Blank	BL	6/25/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low 37, Med 24, High 16, NYS ELAP #11727

Air Sampling Worksheet
Chain of Custody

Date 06/25/18 Silo # 3
Job Name Nike Missile BU-34/35 Work Area Location Tantara Corp.
Job # 3239 Client Mark Lowery
Client Contact Lowery

Temp/Rain/Wind 70°F / No Rain / Low Wind
Calibrator # 605
DC - Lite Primary Flow 20171218

Turnaround (circle)
3 hour
24 hour
Other
Analysis (circle)
PCM
TEM
other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B EX	P C PE	Time (military) Start Stop	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
062518-3239-01		Critical 1 - Elevator Hatch	08	OWA	A		0800 1630	2.9 2.9 2.9	1479	
02		Critical 2 - Silo Door Hatch					0801 1631	2.9 2.9 2.9	1479	
03		Dean Entrance					0802 1632	2.9 2.9 2.9	1479	
04		Dean Exit					0803 1633	2.9 2.9 2.9	1479	
05		Work area entrance/exit, airtlock					0804 1634	2.9 2.9 2.9	1479	
06		Negative air exhaust					0805 1635	2.9 2.9 2.9	1479	
07		Ambient air					0806 1636	2.9 2.9 2.9	1479	
08		Field Blank								
09		Box Blank								

Comments/Special Conditions

Sketch

Craig Mikels 06/25/18 :

Sampler

Craig Mikels 06/25/18 :

Relinquished by

Received by lab

06/26/18 8:54

535578 03

Silo Door Hatch

air lock

air exhaust

Launch Pad

Decom

05

01

02

07

04

03

Fluorocarbon Hatch

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Project: SET3239 - Nike Missile BU- 34/35 - Sito #3

Lab Project #: S35589
 Sample Date: 6/26/2018
 Date Received: 6/27/2018
 Analysis Date: 6/27/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
062618-3239-01	Critical 1 - Elevator Hatch	A	6/26/2018	1479	4	100	5.1	<0.002
062618-3239-02	Critical 2 - Silo Door Hatch	A	6/26/2018	1479	2	100	2.55	<0.002
062618-3239-03	Decon Entrance	A	6/26/2018	1479	4.5	100	5.73	<0.002
062618-3239-04	Decon Exit	A	6/26/2018	1479	5.5	100	7.01	0.002
062618-3239-05	Work Area Entrance/Exit, Airlock	A	6/26/2018	1479	3	100	3.82	<0.002
062618-3239-06	Negative Air Exhaust	A	6/26/2018	1479	0	100	0	<0.002
062618-3239-07	Ambient Air	A	6/26/2018	1479	3	100	3.82	<0.002
062618-3239-08	Field Blank	BL	6/26/2018		0	100		
062618-3239-09	Box Blank	BL	6/26/2018		0	100		

Amanda Bentley
 Analyst



Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low .41, Med .25, High .20 NYS ELAP #11727

Air Sampling Worksheet
Chain of Custody

Date 06/26/18 Job # 3239
Client Nike Missile BU-34/35
Client Contact Mark Lovejoy
Work Area Location Silo #3
Client Tantara Corp.

Temp/Rain/Wind
70°F / No Rain/Low Wind
2017/218
Calibrator # 605
DC - Lite Primary Flow

Turnaround (circle)
3 hour 6 hour 48 hour
Other PCM Analysis (circle) TEM other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B EX	P C	Time (military)	Flow (LPM)	Volume (liters)	Results (f/cc)
062618-3239-01		Critical 1 - Elevator Hatch	OB	OWA	A		0800	2.9	1479	
02		Critical 2 - Silo Door Hatch					0801	2.9	1479	
03		Decon entrance					0802	2.9	1479	
04		Decon exit					0803	2.9	1479	
05		Work area entrance/exist, airlock					0804	2.9	1479	
06		Negative air exhaust					0805	2.9	1479	
07		Ambient air					0806	2.9	1479	
08		Field Blank								
09		Box Blank								

Comments/Special Conditions

Sketch

06/26/18 :
06/26/18 :
6/27/18 8:04 :
535189

Craig Mikida
SAMPLER

Craig MUR
RELINQUISHED BY

Received by lab

07X
Silo Door Hatch
X02
X01
Launch Pad
Decon
04
03
Elevator Hatch

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Project: SET3239- Nike Missile BU- 34/35 - Silo #3

Lab Project #: S35599
 Sample Date: 6/27/2018
 Date Received: 6/28/2018
 Analysis Date: 6/28/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
062718-3239-01	Critical 1 - Elevator Hatch	C	6/27/2018	1479	1	100	1.27	<0.002
062718-3239-02	Critical 2 - Silo Door Hatch	C	6/27/2018	1479	4	100	5.1	<0.002
062718-3239-03	Decon Entrance	C	6/27/2018	1479	6.5	100	8.28	0.002
062718-3239-04	Decon Exit	C	6/27/2018	1479	2.5	100	3.18	<0.002
062718-3239-05	Work Area Entrance/Exit, Airlock	C	6/27/2018	1479	3	100	3.82	<0.002
062718-3239-06	Negative Air Exhaust	C	6/27/2018	1479	0	100	0	<0.002
062718-3239-07	Ambient Air	C	6/27/2018	1479	3.5	100	4.46	<0.002
062718-3239-08	Back Up Negative Air Machine	C	6/27/2018	1479	6	100	7.64	0.002
062718-3239-09	Structure Under Elevator Hatch	C	6/27/2018	1479	7.5	100	9.55	0.002
062718-3239-10	Near Airlock and Personnel Room	C	6/27/2018	1479	5.5	100	7.01	0.002
062718-3239-11	Centered East Side of Elevator	C	6/27/2018	1479	5.5	100	7.01	0.002
062718-3239-12	Centered West Side of Elevator	C	6/27/2018	1479	5.5	100	7.01	0.002
062718-3239-13	Field Blank	BL	6/27/2018		0	100		
062718-3239-14	Box Blank	BL	6/27/2018		0	100		

Amanda Bentley
 Analyst



Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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ENVIRONMENTAL TECHNOLOGIES

350 Elmwood Ave. • Buffalo, NY 14222
(P) 716-332.3134 (F) 716.332.3136

Air Sampling Worksheet

Chain of Custody

OC/27/18	Date	Work Area Location	Silo #3
Nkr Missile BU-34/35	Job Name	Tentara Corp.	Client
3239	Job #	Mark Lowrey	Client Contact

70°F / Light Rain / Low Wind	Temp/Rain/Wind
20171218	
605	DC - Lite Primary Flow
	Calibrator #

Turnaround (circle)
3 hour 6 hour 24 hour 48 hour Other _____
Analysis (circle)
~~PCM~~ TEM other _____

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A EX PE	Time (military)	Flow (LPM)	Volume (liters)	Results (f/cc)
						Start Stop	Beg End Avg		
02718-3239-01		Critical 1 - Elevator Hatch	OB	OWA	C	0800 1630	2.9 2.9 2.9	1479	
02		Critical 2 - Silo Door Hatch	OB	OWA		0801 1631	2.9 2.9 2.9	1479	
03		Decan entrance	OB	OWA		0802 1632	2.9 2.9 2.9	1479	
04		Decan exit	OB	OWA		0803 1633	2.9 2.9 2.9	1479	
05		Work area entrance/exit airlock	OB	OWA		0804 1634	2.9 2.9 2.9	1479	
06		Negative air exhaust	OB	OWA		0805 1635	2.9 2.9 2.9	1479	
07		Ambient air	OB	OWA		0806 1636	2.9 2.9 2.9	1479	
08		Back up negative air machine	IB	IWA		0807 1637	2.9 2.9 2.9	1479	
09		Structure under elevator hatch	IB	IWA		0808 1638	2.9 2.9 2.9	1479	
10		Near airlock and personnel room	IB	IWA		0809 1639	2.9 2.9 2.9	1479	
11		Entered East side of elevator	IB	IWA		0810 1640	2.9 2.9 2.9	1479	
12		Entered West side of elevator	IB	IWA	✓	0811 1641	2.9 2.9 2.9	1479	
13		Field Blank							
14		Box Blank							

[illegible]

LABORATORY REPORT


Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET 3239- Nike Missile BV- 34/35- Silo #5

Lab Project #: S35692
 Sample Date: 7/9/2018
 Date Received: 7/10/2018
 Analysis Date: 7/10/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm ²	Fibers/cc
0709-3239-01	Decon Entrance- E. of Silo #5	P	7/9/2018	900	5.5	100	7.01	0.003
0709-3239-02	Decon Exit- E. of Silo #5	P	7/9/2018	900	1	100	1.27	<0.003
0709-3239-03	Ambient- NW Corner of Elev. Pad	P	7/9/2018	900	2	100	2.55	<0.003
0709-3239-04	Work Area Entrance- Silo #5 Stairs	P	7/9/2018	900	1	100	1.27	<0.003
0709-3239-05	Crit. #1- W. of Hatch	P	7/9/2018	900	1	100	1.27	<0.003
0709-3239-06	Crit. #2- S. of Hatch	P	7/9/2018	900	0.5	100	0.64	<0.003
0709-3239-07	Field Blank	BL	7/9/2018		0	100		
0709-3239-08	Box Blank	BL	7/9/2018		0	100		

Carson Cain
 Analyst


 Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low .37, Med .24, High .16 NYS ELAP #11727

Date 7/9/18
Job Name Nike Missile BV-34/35
Job # 3239

Work Area Location Silo #5
Client Tantara Corp
Client Contact Mark Lovejoy

Temp/Rain/Wind 74°F / No / 0-5
Calibrator # 4104
DC - Lite Primary Flow

Turnaround (circle)
3 hour
24 hour
Other
Analysis (circle)
PCM
TEM
other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A EX	P C PE	Time (military) Start Stop Tot	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
0709-3239-01		Deron Entrance - E. of Silo #5	OR	OWA	P		0730 1330 360	2.5 2.5 2.5	900	
02		Deron Exit - E. of Silo #5					0731 1331 360	2.5 2.5 2.5	900	
03		Ambient - NW Corner of Elev. Pad					0733 1333 360	2.5 2.5 2.5	900	
04		Work Area Entrance - Silo #5 Stairs					0735 1335 360	2.5 2.5 2.5	900	
05		Crit. #1 - W. of Hatch					0737 1337 360	2.5 2.5 2.5	900	
06		Crit. #2 - S. of Hatch	OR	OWA	P		0738 1338 360	2.5 2.5 2.5	900	
07		Field Blank			BL					
08		Box Blank			BL					

Comments/Special Conditions

Sketch

Received by lab 535692

Relinquished by [Signature]

Sampler S. Fitzgerald

Date 7/9/18

Date 7/9/18

Date 7/10/18 8:05

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Lab Project #: S35706
 Sample Date: 7/10/2018
 Date Received: 7/11/2018
 Analysis Date: 7/11/2018

Project: SET 3239- Nike U/G Missile Silo BU 34/35- Silo #5

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
0710-3239-01	Decon Ent.- E. of Silo	A	7/10/2018	1250	1	100	1.27	<0.002
0710-3239-02	Decon Exit- E. of Silo	A	7/10/2018	1250	2	100	2.55	<0.002
0710-3239-03	Ambient- NW of Elev. Pad	A	7/10/2018	1250	1.5	100	1.91	<0.002
0710-3239-04	Work Area Ent.- on Stairway	A	7/10/2018	1250	0	100	0	<0.002
0710-3239-05	Crit #1- N. of Elev. Pad	A	7/10/2018	1250	1	100	1.27	<0.002
0710-3239-06	Crit #2- S. of Elev. Pad	A	7/10/2018	1250	0	100	0	<0.002
0710-3239-07	Neg. Air Exhaust- Elev. Hatch	A	7/10/2018	1250	0	100	0	<0.002
0710-3239-08	Field Blank	BL	7/10/2018		0	100		
0710-3239-09	Box Blank	BL	7/10/2018		0	100		

Carson Cain
 Analyst

Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

Results relate only to samples as provided by client. This laboratory is not responsible for sample collection activities, analytical method limitations or data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report shall not be reproduced, except in full, without written approval by Sienna. The Sr for analysts is calculated per NIOSH Method 7400 using quality control data including 95% Confidence Interval (CI). Minimum volume of 900L required by NIOSH Method 7400 to reach CI of 95% at Method's Limit of Detection (LOD) at < 0.01 fiber/cc.
 Analysts' Sr Ranges: Low .37, Med .24, High .16 YS ELAP #11727

Date 7/10/18 Job # 3239
Work Area Location Missile Silo B034/15 Client Mark Lovejoy
Job Name W. Ke U/L Missile Silo B034/15 Client Contact Mark Lovejoy

Temp/Rain/Wind 75/110/0-5
Calibrator # 20170116
DC - Lite Primary Flow 404

Turnaround (circle)
3 hour
6 hour
24 hour
48 hour
Other PCMs
Analysis (circle)
TEM
other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A C EX PE	Time (military) Start Stop	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
0710-3239-01		Decon Entry - E. of Decon Silo	OB	OWA	A	0742 1602	2.5 2.5 2.5	1250	
02		Decon Exit - E. of Silo				0743 1603	2.5 2.5 2.5	1250	
03		Ambient - NW of Elev. Pad				0745 1605	2.5 2.5 2.5	1250	
04		Work Area Entry - On Stairway				0747 1607	2.5 2.5 2.5	1250	
05		Crit #1 - N. of Elev. Pad				0748 1608	2.5 2.5 2.5	1250	
06		Crit #2 - S. of Elev. Pad				0749 1609	2.5 2.5 2.5	1250	
07		Neg. Air Exhaust - Elev. Hatch	OB	OWA	A	0750 1610	2.5 2.5 2.5	1250	
08		Field Blank			BL				
09		Box Blank			BL				
0710-3239-09									

Comments/Special Conditions

Sketch

7/10/18

7/10/18

7/11/18 8:02

575 706

Received by lab

San Fitzgerald

Requisitioned by

Decom

01

02

05

07

06

04



EMSL Analytical, Inc.

490 Rowley Road Depew, NY 14043

Tel/Fax: (716) 651-0030 / (716) 651-0394

<http://www.EMSL.com> / buffalolab@emsl.com

EMSL Order: 141803488

Customer ID: SIET21

Customer PO:

Project ID:

Attention: Sean Fitzgerald
Sienna Environmental Technologies
350 Elmwood Avenue
Buffalo, NY 14222

Phone: (716) 332-3134

Fax: (716) 332-3136

Received Date: 07/12/2018 8:00 AM

Analysis Date: 07/12/2018

Collected Date: 07/11/2018

Project: 3239 Nike Missile BU 34/35, Silo #5

Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method - A Rules, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/mm ²	Fibers/cc	Notes
0711-3239-01	Decon Entry- E. of Silo	7/11/2018	1287.50	<5.5	100	0.002	<7.01	<0.002	
141803488-0001									
0711-3239-02	Decon Exit- E. of Silo	7/11/2018	1287.50	<5.5	100	0.002	<7.01	<0.002	
141803488-0002									
0711-3239-03	Ambient- N. of Elev. Pad	7/11/2018	1287.50	<5.5	100	0.002	<7.01	<0.002	
141803488-0003									
0711-3239-04	Work Area Ent.- Stairway to Silo	7/11/2018	1287.50	<5.5	100	0.002	<7.01	<0.002	
141803488-0004									
0711-3239-05	Crit. #1- N. of Elev. Hatch	7/11/2018	1287.50	<5.5	100	0.002	<7.01	<0.002	
141803488-0005									
0711-3239-06	Crit. #2- SE of Elev. Hatch	7/11/2018	1287.50	<5.5	100	0.002	<7.01	<0.002	
141803488-0006									
0711-3239-07	Neg. Air Exhaust- Elev. Hatch	7/11/2018	1287.50	<5.5	100	0.002	<7.01	<0.002	
141803488-0007									
0711-3239-08	Field Blank	7/11/2018	0.00	<5.5	100		<7.01		Field Blank
141803488-0008									
0711-3239-09	Box Blank	7/11/2018	0.00	<5.5	100		<7.01		Field Blank
141803488-0009									

The results reported have been blank corrected as applicable.

Analyst(s):

Joseph Gentile PCM (9)

Rhonda McGee, Laboratory Manager
or Other Approved Signatory

Limit of detection is 7 fibers/mm². Intra-laboratory Sr values: 5-20 fibers = 0.41, 21-50 fibers = 0.30, 51-100 fibers = 0.22. Inter-laboratory SR values (Average of EMSL round robin data) = 0.32. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. The results in this report meet all requirements of the NELAC standards unless otherwise noted. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NYS ELAP 11606

Initial report from: 07/12/2018 15:00:04

Primary Flow

Signature	Date	Sketch	Comments/Special Conditions
Sean Fitzgerald Sampler	7/11/18		
	7/11/18	<p>DB 8.00m</p> <p>RECEIVED JUL 12 2018</p>	
		Relinquished by	
		Received by lab	



EMSL Analytical, Inc.

490 Rowley Road Depew, NY 14043

Tel/Fax: (716) 651-0030 / (716) 651-0394

<http://www.EMSL.com> / buffalolab@emsl.com

EMSL Order: 141803536

Customer ID: SIET21

Customer PO:

Project ID:

Attention: Sean Fitzgerald
Sienna Environmental Technologies
350 Elmwood Avenue
Buffalo, NY 14222

Phone: (716) 332-3134
Fax: (716) 332-3136
Received Date: 07/12/2018 4:56 PM
Analysis Date: 07/13/2018
Collected Date: 07/12/2018

Project: 3239 Nike Missile BU 34/35 Silo #5

Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method - A Rules, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/mm ²	Fibers/cc	Notes
0712-3239-01	decon ent - E. of Elev. Pad	7/12/2018	1050.00	<5.5	100	0.003	<7.01	<0.003	
141803536-0001									
0712-3239-02	decon exit - E. of Elev. Pad	7/12/2018	1050.00	<5.5	100	0.003	<7.01	<0.003	
141803536-0002									
0712-3239-03	ambient - NE. of Elev. Pad	7/12/2018	1050.00	<5.5	100	0.003	<7.01	<0.003	
141803536-0003									
0712-3239-04	work area ent. - on stairway	7/12/2018	1050.00	<5.5	100	0.003	<7.01	<0.003	
141803536-0004									
0712-3239-05	crit 1 - N. of Elev. Hatch	7/12/2018	1050.00	<5.5	100	0.003	<7.01	<0.003	
141803536-0005									
0712-3239-06	crit 2 - SW of Elev. Hatch	7/12/2018	1050.00	<5.5	100	0.003	<7.01	<0.003	
141803536-0006									
0712-3239-07	Neg. air exhaust - on Elev. Hatch	7/12/2018	1050.00	<5.5	100	0.003	<7.01	<0.003	
141803536-0007									
0712-3239-08	IWA 1 - NW in main room	7/12/2018	900.00	34	100	0.003	43.3	0.019	
141803536-0008									
0712-3239-09	IWA 2 - SW in main room	7/12/2018	900.00	22	100	0.003	28.0	0.012	
141803536-0009									
0712-3239-10	IWA 3 - NE in main room	7/12/2018	900.00	36	100	0.003	45.9	0.020	
141803536-0010									
0712-3239-11	IWA 4 - SE in main room	7/12/2018	900.00	27	100	0.003	34.4	0.015	
141803536-0011									
0712-3239-12	IWA 5 - Middle of escape room	7/12/2018	900.00	15	100	0.003	19.1	0.008	
141803536-0012									
0712-3239-13	field blank	7/12/2018	0.00	<5.5	100		<7.01		Field Blank

Limit of detection is 7 fibers/mm². Intra-laboratory Sr values: 5-20 fibers = 0.41, 21-50 fibers = 0.30, 51-100 fibers = 0.22. Inter-laboratory SR values (Average of EMSL round robin data) = 0.32. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. The results in this report meet all requirements of the NELAC standards unless otherwise noted. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NYS ELAP 11606

Initial report from: 07/13/2018 15:40:12



EMSL Analytical, Inc.

490 Rowley Road Depew, NY 14043

Tel/Fax: (716) 651-0030 / (716) 651-0394

<http://www.EMSL.com> / buffalolab@emsl.com

EMSL Order: 141803536

Customer ID: SIET21

Customer PO:

Project ID:

Attention: Sean Fitzgerald
Sienna Environmental Technologies
350 Elmwood Avenue
Buffalo, NY 14222

Phone: (716) 332-3134

Fax: (716) 332-3136

Received Date: 07/12/2018 4:56 PM

Analysis Date: 07/13/2018

Collected Date: 07/12/2018

Project: 3239 Nike Missile BU 34/35 Silo #5

Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method - A Rules, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm ²	Fibers/ cc	Notes
141803536-0013									
0712-3239-14	blank box	7/12/2018	0.00	<5.5	100		<7.01		Field Blank
141803536-0014									

The results reported have been blank corrected as applicable.

Analyst(s):

Joseph Gentile PCM (14)

Rhonda McGee, Laboratory Manager
or Other Approved Signatory

Limit of detection is 7 fibers/mm². Intra-laboratory Sr values: 5-20 fibers = 0.41, 21-50 fibers = 0.30, 51-100 fibers = 0.22. Inter-laboratory SR values (Average of EMSL round robin data) = 0.32. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. The results in this report meet all requirements of the NELAC standards unless otherwise noted. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NYS ELAP 11606

Initial report from: 07/13/2018 15:40:12



350 Elmwood Ave. • Buffalo, NY 14222
P 716-332.3134 F 716.332.3136

141803536

Air Sampling Worksheet
Chain of Custody

Date 7/12/18	Work Area Location Silo #5
Job Name Nike Missile BV 34/35	Client Tantara Corp
Job # 3239	Client Contact Mark Lovejoy
	Temp/Rain/Wind 20170116
	Calibrator # 404
	DC - Lite Primary Flow

Turnaround (circle)
3 hour
6 hour
24 hour
48 hour
Other
Analysis (circle)
PCM
TEM
other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A	P C	Time (military) Start Stop	Flow (LPM)			Volume (liters)	Results (f/cc)
								Beg	End	Avg		
0712-3239-01		Decon Ent. - E. of Elev. Pad	OB	OWA A/C			0750 1450	2.5	2.5	2.5	1050	
02		Decon Exit - E. of Elev. Pad					0751 1451	2.5	2.5	2.5	1050	
03		Ambient - NE of Elev. Pad					0752 1452	2.5	2.5	2.5	1050	
04		Work Area Ent. - On Stairway					0753 1453	2.5	2.5	2.5	1050	
05		Crit 1 - N. of Elev. Hatch					0755 1455	2.5	2.5	2.5	1050	
06		Crit 2 - SW of Elev. Hatch					0756 1456	2.5	2.5	2.5	1050	
07		Neg. Air Exhaust - On Elev. Hatch	OB	OWA			0757 1457	2.5	2.5	2.5	1050	
08		IWA 1 - NW in Main Room	IB	IWA			0830 1430	2.5	2.5	2.5	900	
09		IWA 2 - SW in Main Room					0832 1432	2.5	2.5	2.5	900	
10		IWA 3 - NE in Main Room					0835 1435	2.5	2.5	2.5	900	
11		IWA 4 - SE in Main Room					0836 1436	2.5	2.5	2.5	900	
12		IWA 5 - Middle of Escape Room	IB	IWA A/C			0839 1439	2.5	2.5	2.5	900	
13		Field Blank										
0712-3239-14		Box Blank										

Signature: Sean Fitzgerald	Date: 7/12/18	Sketch:	Comments/Special Conditions: Please call Sean F. w/ results @ 716-338-6882
Signature: [Signature]	Date: 7/12/18	Sketch:	Comments/Special Conditions: w/ results @ 716-338-6882
Signature: [Signature]	Date: / /	Sketch:	Comments/Special Conditions: w/ results @ 716-338-6882
Received by lab			

RECEIVED
JUL 12 2018
BY: [Signature] 45678 w/



EMSL Analytical, Inc.

490 Rowley Road Depew, NY 14043

Tel/Fax: (716) 651-0030 / (716) 651-0394

<http://www.EMSL.com> / buffalolab@emsl.com

EMSL Order: 141803615

Customer ID: SIET21

Customer PO:

Project ID:

Attention: Craig Mikida
Sienna Environmental Technologies
350 Elmwood Avenue
Buffalo, NY 14222

Phone: (716) 392-8041
Fax: (716) 332-3136
Received Date: 07/16/2018 3:06 PM
Analysis Date: 07/16/2018
Collected Date: 07/16/2018

Project: 3239 / Nike Missile BU-34/35, Silo #5

Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method - A Rules, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/mm ²	Fibers/cc	Notes
071618-3239-01	Back Up Negative Air Machine	7/16/2018	1044.00	<5.5	100	0.003	<7.01	<0.003	
141803615-0001									
071618-3239-02	Structure Under Elevator Hatch	7/16/2018	1044.00	<5.5	100	0.003	<7.01	<0.003	
141803615-0002									
071618-3239-03	Near Airlock and Personnel Room	7/16/2018	1044.00	<5.5	100	0.003	<7.01	<0.003	
141803615-0003									
071618-3239-04	Centered East Side of Silo Door	7/16/2018	1044.00	<5.5	100	0.003	<7.01	<0.003	
141803615-0004									
071618-3239-05	Centered West Side of Silo Door	7/16/2018	1044.00	<5.5	100	0.003	<7.01	<0.003	
141803615-0005									
071618-3239-06	Critical 1 - Elevator Hatch	7/16/2018	1044.00	<5.5	100	0.003	<7.01	<0.003	
141803615-0006									
071618-3239-07	Critical 2 - Vent Hatch	7/16/2018	1044.00	<5.5	100	0.003	<7.01	<0.003	
141803615-0007									
071618-3239-08	Decon Entrance	7/16/2018	1044.00	<5.5	100	0.003	<7.01	<0.003	
141803615-0008									
071618-3239-09	Dexon Exit	7/16/2018	1044.00	<5.5	100	0.003	<7.01	<0.003	
141803615-0009									
071618-3239-10	Work Area Entrance/Exit, Airlock	7/16/2018	1044.00	<5.5	100	0.003	<7.01	<0.003	
141803615-0010									
071618-3239-11	Negative Air Exhaust	7/16/2018	1044.00	<5.5	100	0.003	<7.01	<0.003	
141803615-0011									
071618-3239-12	Ambient Air	7/16/2018	1044.00	<5.5	100	0.003	<7.01	<0.003	
141803615-0012									
071618-3239-13	Field Blank	7/16/2018	0.00	<5.5	100		<7.01		Field Blank

Limit of detection is 7 fibers/mm². Intra-laboratory Sr values: 5-20 fibers = 0.41, 21-50 fibers = 0.30, 51-100 fibers = 0.22. Inter-laboratory SR values (Average of EMSL round robin data) = 0.32. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. The results in this report meet all requirements of the NELAC standards unless otherwise noted. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NYS ELAP 11606

Initial report from: 07/16/2018 16:18:13



EMSL Analytical, Inc.

490 Rowley Road Depew, NY 14043

Tel/Fax: (716) 651-0030 / (716) 651-0394

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EMSL Order: 141803615

Customer ID: SIET21

Customer PO:

Project ID:

Attention: Craig Mikida
Sienna Environmental Technologies
350 Elmwood Avenue
Buffalo, NY 14222

Phone: (716) 392-8041

Fax: (716) 332-3136

Received Date: 07/16/2018 3:06 PM

Analysis Date: 07/16/2018

Collected Date: 07/16/2018

Project: 3239 / Nike Missile BU-34/35, Silo #5

Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method - A Rules, Revision 3, Issue 2, 8/15/94

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm ²	Fibers/ cc	Notes
141803615-0013									
071618-3239-14	Box Blank	7/16/2018	0.00	<5.5	100		<7.01		Field Blank
141803615-0014									

The results reported have been blank corrected as applicable.

Analyst(s):

Michelle Skillman PCM (14)

Rhonda McGee, Laboratory Manager
or Other Approved Signatory

Limit of detection is 7 fibers/mm². Intra-laboratory Sr values: 5-20 fibers = 0.41, 21-50 fibers = 0.30, 51-100 fibers = 0.22. Inter-laboratory SR values (Average of EMSL round robin data) = 0.32. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. The results in this report meet all requirements of the NELAC standards unless otherwise noted. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NYS ELAP 11606

Initial report from: 07/16/2018 16:18:13

Date 07/16/18
 Job Name Nike Missile BU-34/35
 Job # 3239

Work Area Location Silo #5
 Client Tentara Corp.
 Client Contact Mark Lovjoy

Temp/Rain/Wind 80°F / No Rain / Low Wind
20180321
 Calibrator # G05

DC - Lite Primary Flow

Turnaround (circle)
3 hour
 6 hour
 24 hour
 48 hour
 Other
 Analysis (circle)
 TEM
 other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A EX	P PE	Time (military) Start Stop	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
071618-3239-01		Back up negative air machine	IB	IWA	C		0830 1430 360	2.9 2.9 2.9	1044	
02		Structure under elevator hatch	IB	IWA			0831 1431 360	2.9 2.9 2.9	1044	
03		Near airlock and personnel room	IB	IWA			0832 1432 360	2.9 2.9 2.9	1044	
04		Centered East side of silo door	IB	IWA			0833 1433 360	2.9 2.9 2.9	1044	
05		Centered West side of silo door	IB	IWA			0834 1434 360	2.9 2.9 2.9	1044	
06		Critical 1 - Elevator Hatch	OB	OWA			0835 1435 360	2.9 2.9 2.9	1044	
07		Critical 2 - Vent Hatch	OB	OWA			0836 1436 360	2.9 2.9 2.9	1044	
08		Decon entrance	OB	OWA			0837 1437 360	2.9 2.9 2.9	1044	
09		Decon exit	OB	OWA			0838 1438 360	2.9 2.9 2.9	1044	
10		Work area entrance/exit, airlock	OB	OWA			0839 1439 360	2.9 2.9 2.9	1044	
11		Negative air exhaust	OB	OWA			0840 1440 360	2.9 2.9 2.9	1044	
12		Ambient air	OB	OWA			0841 1441 360	2.9 2.9 2.9	1044	
13		Field Blank								
14		Box Blank								

Comments/Special Conditions
 Call Craig (716) 392-8041 with results. Thank You

RECEIVED
 JUL 16 2018
 BY: ALM 3:06 pm

Sketch

Received by lab



LABORATORY REPORT

Attention: Mark Lovejoy
Client: Tantara Corporation
54 Mason Street
Worcester, MA 01610

Project: SET 3239- Nike Missile BU- 34/35- Silo #4

Lab Project #: S35791
Sample Date: 7/17/2018
Date Received: 7/17/2018
Analysis Date: 7/18/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
071718-3239-01	Critical 1- Elevator Hatch	P	7/17/2018	957	0	100	0	<0.003
071718-3239-02	Critical 2- Silo Door Hatch	P	7/17/2018	957	1	100	1.27	<0.003
071718-3239-03	Decon Entrance	P	7/17/2018	957	0	100	0	<0.003
071718-3239-04	Decon Exit	P	7/17/2018	957	0	100	0	<0.003
071718-3239-05	Work Area Entrance/Exit, Airlock	P	7/17/2018	957	1	100	1.27	<0.003
071718-3239-06	Ambient Air	P	7/17/2018	957	0	100	0	<0.003
071718-3239-07	Field Blank	BL	7/17/2018		0	100		
071718-3239-08	Box Blank	BL	7/17/2018		0	100		

Carson Cain
Analyst

Approved Signatory

B=Background
CR=Clearance Rush

P=Preparation
EX=Excursion Air

A=Abatement
PE=Personal Air Sample

C=Clearance
BL=Blank

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Analysts' Sr Ranges: Low 37, Med 24, High 16. NYS ELAP #11727



Air Sampling Worksheet

Chain of Custody

75°F / No Rain / Low Wind	Temp/Rain/Wind
20180321	
605	DC - Lite Primary Flow
	Calibrator #

Turnaround (circle)
3 hour 6 hour 24 hour 48 hour Other _____
Analysis (circle)
pCM TEM other _____

Craig Mikida	07/17/18	:		Comments/Special Conditions
Sampler				
Craig Mikida	07/17/18	:		
Relinquished by				
	2/18/18	8:01		
Received by lab	535791	03		



LABORATORY REPORT

Attention: Mark Lovejoy
Client: Tantara Corporation
54 Mason Street
Worcester, MA 01610

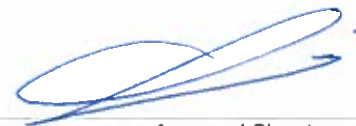
Project: SET 3239- Nike Missile BU-34/35- Silo #1

Lab Project #: S35799
Sample Date: 7/18/2018
Date Received: 7/19/2018
Analysis Date: 7/19/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm ²	Fibers/cc
071818-3239-01	Critical 1- Elevator Hatch	A	7/18/2018	1392	1	100	1.27	<0.002
071818-3239-02	Critical 2- Elevator Door	A	7/18/2018	1392	0	100	0	<0.002
071818-3239-03	Decon Entrance	A	7/18/2018	1392	0	100	0	<0.002
071818-3239-04	Decon Exit	A	7/18/2018	1392	1.5	100	1.91	<0.002
071818-3239-05	Work Area Entrance/Exit, Airlock	A	7/18/2018	1392	0	100	0	<0.002
071818-3239-06	Negative Air Exhaust	A	7/18/2018	1392	0	100	0	<0.002
071818-3239-07	Ambient Air	A	7/18/2018	1392	0	100	0	<0.002
071818-3239-08	Field Blank	BL	7/18/2018		0	100		
071818-3239-09	Box Blank	BL	7/18/2018		0	100		

Carson Cain
Analyst



Approved Signatory

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P=Preparation
EX=Excursion Air

A=Abatement
PE=Personal Air Sample

C=Clearance
BL=Blank

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Analysts' Sr Ranges: Low .37, Med .24, High .16. NYS ELAP #11727



Air Sampling Worksheet

Chain of Custody

70°F / No Rain / Low Wind	Temp/Rain/Wind	DC - Lite Primary Flow
20180321		
605		Calibrator #

[illegible]

Craig Mikida	07/18/18	:	Sketch	Elevator Door	Comments/Special Conditions
Sampler					
Craig Mabeau	07/18/18	:			
Relinquished by					
	7/19/18	8:54			
		535799			
Received by lab					

03



LABORATORY REPORT

Attention: Mark Lovejoy
Client: Tantara Corporation
54 Mason Street
Worcester, MA 01610

Project: SET 3239- Nike Missile BU-34/35- Silo #1

Lab Project #: S35816
Sample Date: 7/19/2018
Date Received: 7/20/2018
Analysis Date: 7/20/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
071918-3239-01	Critical 1- Elevator Hatch	A	7/19/2018	1218	0	100	0	<0.002
071918-3239-02	Critical 2- Elevator Door	A	7/19/2018	1218	0	100	0	<0.002
071918-3239-03	Decon Entrance	A	7/19/2018	1218	1	100	1.27	<0.002
071918-3239-04	Decon Exit	A	7/19/2018	1218	2.5	100	3.18	<0.002
071918-3239-05	Work Area Entrance/Exit, Airlock	A	7/19/2018	1218	0.5	100	0.64	<0.002
071918-3239-06	Negative Air Exhaust	A	7/19/2018	1218	4	100	5.1	<0.002
071918-3239-07	Ambient Air	A	7/19/2018	1218	0	100	0	<0.002
071918-3239-08	Field Blank	BL	7/19/2018		0	100		
071918-3239-09	Box Blank	BL	7/19/2018		0	100		

Carson Cain
Analyst

Approved Signatory

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CR=Clearance Rush

P=Preparation
EX=Excursion Air

A=Abatement
PE=Personal Air Sample

C=Clearance
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Analysts' Sr Ranges: Low: 37, Med: 24, High: 16. NYS ELAP #11727



Air Sampling Worksheet

Chain of Custody

70°F / No Rain / Low Wind
Temp/Rain/Wind
20180321
DC - Lite Primary Flow
605
Calibrator #

Turnaround (circle)
3 hour 6 hour
24 hour 48 hour
Other _____
Analysis (circle)
PCIV TEM
_____ other

Comments/Special Conditions	
<p>Sketch</p>	<p>07/19/18</p> <p>07/19/18</p> <p>7 Dec 18 8:07</p> <p>53585</p>
<p>Craig Mikida</p> <p>Craig Mikida</p> <p><i>[Signature]</i></p>	<p>Sampler</p> <p>Relinquished by</p> <p>Received by lab</p>



LABORATORY REPORT

Attention: Mark Lovejoy
Client: Tantara Corporation
54 Mason Street
Worcester, MA 01610


Project: SET 3239- Nike Missile Silo BU-34/35- Silo #1

Lab Project #: S35853
Sample Date: 7/23/2018
Date Received: 7/24/2018
Analysis Date: 7/24/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
072318-3239-01	Back up Negative Air Machine	C	7/23/2018	1392	0.5	100	0.64	<0.002
072318-3239-02	Negative Air Machine	C	7/23/2018	1392	1	100	1.27	<0.002
072318-3239-03	Center of Silo Under Elevator Doors	C	7/23/2018	1392	0.5	100	0.64	<0.002
072318-3239-04	East Side of Silo (North)	C	7/23/2018	1392	1	100	1.27	<0.002
072318-3239-05	East Side of Silo (South), Near Airlock	C	7/23/2018	1392	1	100	1.27	<0.002
072318-3239-06	Critical 1- Elevator Hatch	C	7/23/2018	1392	0	100	0	<0.002
072318-3239-07	Critical 2- Elevator Door	C	7/23/2018	1392	2	100	2.55	<0.002
072318-3239-08	Decon Entrance	C	7/23/2018	1392	5	100	6.37	<0.002
072318-3239-09	Decon Exit	C	7/23/2018	1392	5	100	6.37	<0.002
072318-3239-10	Work Area Entrance/Exit, Airlock	C	7/23/2018	1392	3	100	3.82	<0.002
072318-3239-11	Negative Air Exhaust	C	7/23/2018	1392	0	100	0	<0.002
072318-3239-12	Ambient Air	C	7/23/2018	1392	1	100	1.27	<0.002
072318-3239-13	Field Blank	BL	7/23/2018		0	100		
072318-3239-14	Box Blank	BL	7/23/2018		0	100		

Carson Cain
Analyst


Approved Signatory

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CR=Clearance Rush

P=Preparation
EX=Excursion Air

A=Abatement
PE=Personal Air Sample

C=Clearance
BL=Blank

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Air Sampling Worksheet

Chain of Custody

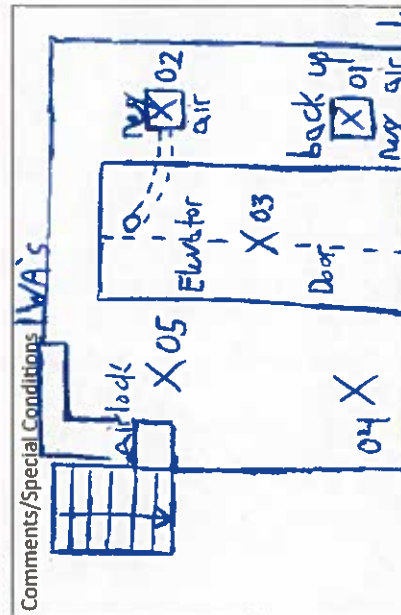
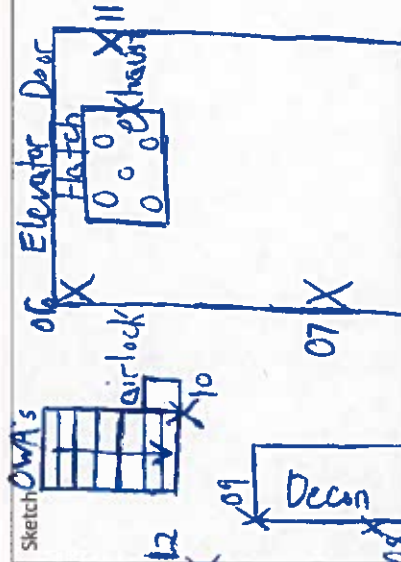
07/23/18 **Silo #1**
 Date Work Area Location
Nike Missile BU-34/35 **Tantara Corp.**
 Job Name Client
3239 **Mark Lonjoy**
 Job # Client Contact

70°F / No Rain / Low Wind
 Temp/Rain/Wind
20180321
 Calibrator #
G05
 DC - Lite Primary Flow

Turnaround (circle)
 3 hour 6 hour 48 hour
24 hour
 Other
 Analysis (circle)
PCM TEM other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A EX	P C PE	Time (military)			Flow (LPM)			Volume (liters)	Results (f/cc)
							Start	Stop	Tot	Beg	End	Avg		
072318-3239-01		Back up negative air machine	IB	IWA	C		0830	1030	480	2.9	2.9	2.9	1392	
02		Negative air machine	IB	IWA			0931	1031	480	2.9	2.9	2.9	1392	
03		Center of silo under elevator door	IB	IWA			0832	1032	480	2.9	2.9	2.9	1392	
04		East side of silo (north)	IB	IWA			0833	1033	480	2.9	2.9	2.9	1392	
05		East side of silo (south), near airlock	IB	IWA			0834	1034	480	2.9	2.9	2.9	1392	
06		Critical 1 - Elevator Hatch	OB	OWA			0835	1035	480	2.9	2.9	2.9	1392	
07		Critical 2 - Elevator Door	OB	OWA			0836	1036	480	2.9	2.9	2.9	1392	
08		Decan entrance	OB	OWA			0837	1037	480	2.9	2.9	2.9	1392	
09		Decan exit	OB	OWA			0839	1039	480	2.9	2.9	2.9	1392	
10		Work area entrance/exit, airlock	OB	OWA			0939	1039	480	2.9	2.9	2.9	1392	
11		Negative air exhaust	OB	OWA			0940	1040	480	2.9	2.9	2.9	1392	
12		Ambient air	OB	OWA			0841	1041	480	2.9	2.9	2.9	1392	
13		Field Blank												
14		Box Blank												

Craig Mikida **07/23/18** :
 Sampler
Craig Mikida **07/23/18** :
 Relinquished by
7/24/18 8:03
 Received by lab **535853**



LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Project: SET 3239- Nike Missile Silo BU-34/35- Silo #4

Lab Project #: S35866
 Sample Date: 7/25/2018
 Date Received: 7/26/2018
 Analysis Date: 7/26/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm ²	Fibers/cc
072518-3239-01	Critical 1- Elevator Hatch	P	7/25/2018	1218	0.5	100	0.64	<0.002
072518-3239-02	Critical 2- Elevator Door	P	7/25/2018	1218	3.5	100	4.46	<0.002
072518-3239-03	Decon Entrance	P	7/25/2018	1218	0	100	0	<0.002
072518-3239-04	Decon Exit	P	7/25/2018	1218	0	100	0	<0.002
072518-3239-05	Work Area Entrance/Exit, Airlock	P	7/25/2018	1218	1	100	1.27	<0.002
072518-3239-06	Ambient Air	P	7/25/2018	1218	0	100	0	<0.002
072518-3239-07	Field Blank	BL	7/25/2018		0	100		
072518-3239-08	Box Blank	BL	7/25/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low: 37, Med: 24, High: 16. NYS ELAP #11727

Air Sampling Worksheet

Chain of Custody

07/25/18 Date
 Nike Missile BU-34/35 Job Name
 3239 Job #

Silo #4 Work Area Location
 Tantara Corp. Client
 Mark Lovejoy Client Contact

70°F / Light Rain / Low Wind Temp/Rain/Wind
 20180321
 G-05

Calibrator # DC - Lite Primary Flow

Turnaround (circle)
 3 hour 6 hour 48 hour
 24 hour
 Other
 Analysis (circle)
 TEM

Sample Number	Pump #	Sample Location	IB	IWA	B	P	Time (military)	Flow (LPM)	Volume (liters)	Results (f/cc)
072518-3239-01		Critical 1 - Elevator Hatch	OB	OWA	P	0830	1530	2.9	2.9	1218
02		Critical 2 - Elevator Door	OB	OWA	P	0831	1531	2.9	2.9	1218
03		Decon Entrance	OB	OWA	P	0832	1532	2.9	2.9	1218
04		Decon exit	OB	OWA	P	0833	1533	2.9	2.9	1218
05		Work area entrance/exit, airlock	OB	OWA	P	0834	1534	2.9	2.9	1218
06		Ambient air	OB	OWA	P	0835	1535	2.9	2.9	1218
07		Field Blank								
08		Box Blank								

Comments/Special Conditions

Sketch

07/25/18 : 06

07/25/18 : 05

7/26/18 8:00 : 04

535866 : 03

Craig Mikida Sampler

Craig Mikida Relinquished by

Received by lab

Elevator Door X02

Hatch X01

Decon X04



LABORATORY REPORT

Attention: Mark Lovejoy
Client: Tantara Corporation
54 Mason Street
Worcester, MA 01610

Project: SET 3239- Nike Missile BU- 34/35- Silo #4

Lab Project #: S35881
Sample Date: 7/26/2018
Date Received: 7/27/2018
Analysis Date: 7/27/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
72618-3239-01	Critical 1- Elevator Hatch	A	7/26/2018	1392	0	100	0	<0.002
72618-3239-02	Critical 2- Elevator Door	A	7/26/2018	1392	0	100	0	<0.002
72618-3239-03	Decon Entrance	A	7/26/2018	1392	1	100	1.27	<0.002
72618-3239-04	Decon Exit	A	7/26/2018	1392	0	100	0	<0.002
72618-3239-05	Work Area Entrance/Exit, Airlock	A	7/26/2018	1392	2	100	2.55	<0.002
72618-3239-06	Negative Air Exhaust	A	7/26/2018	1392	0	100	0	<0.002
72618-3239-07	Ambient Air	A	7/26/2018	1392	0	100	0	<0.002
72618-3239-08	Field Blank	BL	7/26/2018		0	100		
72618-3239-09	Box Blank	BL	7/26/2018		0	100		

Carson Cain
Analyst

Approved Signatory

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P=Preparation
EX=Excursion Air

A=Abatement
PE=Personal Air Sample

C=Clearance
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Analysts' Sr Ranges: Low .37, Med .24, High .16 NYS ELAP #11727




Air Sampling Worksheet

Chain of Custody

70°F / No Rain / Low Wind
Temp/Rain/Wind
20180321
DC - Lite Primary Flow
605
Calibrator #

Turnaround (circle)
3 hour 6 hour 48 hour
24 hour Other _____
Analysis (circle)
PCIM TEM other _____

				Comments/Special Conditions
Craig Mikiya	G712C118	:		
Craig Mikiya	G712C118	:	X07	
Relinquished by 	7P2718	8:07		
Received by lab	S335881		03 X	

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Project: SET 3239- Nike Missile BU- 34/35- Silo 4

Lab Project #: S35910
 Sample Date: 7/30/2018
 Date Received: 7/31/2018
 Analysis Date: 7/31/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
073018-3239-01	Critical 1- Elevator Hatch	A	7/30/2018	1392	0.5	100	0.64	<0.002
073018-3239-02	Critical 2- Elevator Door	A	7/30/2018	1392	0	100	0	<0.002
073018-3239-03	Decon Entrance	A	7/30/2018	1392	5.5	100	7.01	0.002
073018-3239-04	Decon Exit	A	7/30/2018	1392	0	100	0	<0.002
073018-3239-05	Work Area Entrance/Exit	A	7/30/2018	1392	0	100	0	<0.002
073018-3239-06	Negative Air Exhaust	A	7/30/2018	1392	0	100	0	<0.002
073018-3239-07	Ambient Air	A	7/30/2018	1392	0	100	0	<0.002
073018-3239-08	Field Blank	BL	7/30/2018		0	100		
073018-3239-09	Box Blank	BL	7/30/2018		0	100		

Carson Cain
 Analyst


 Approved Signatory

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 EX=Excursion Air

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 Analysts' Sr Ranges: Low .37, Med .24, High .16. NYS ELAP #11727



Air Sampling Worksheet

Chain of Custody

70°F / No Rain / Low Wind
Temp/Rain/Wind
20180321
GOS
DC - Lite
Primary Flow
Calibrator #

Turnaround (circle)
3 hour 6 hour 24 hour 48 hour other _____

Analysis (circle)
Other _____
PCAA TEM

Craig Mikiya	07/30/18	:	
Sampler		:	
Craig Mikiya	07/30/18	:	
Relinquished by			
	7/31/18	8:44	
Received by lab	535910	03	

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET 3239- Nike Missile BU- 34/35- Silo #4

Lab Project #: S35927
 Sample Date: 7/31/2018
 Date Received: 8/1/2018
 Analysis Date: 8/1/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
073118-3239-01	Negative Air Machine	C	7/31/2018	1218	2	100	2.55	<0.002
073118-3239-02	West Side of Silo	C	7/31/2018	1218	1.5	100	1.91	<0.002
073118-3239-03	East Side of Silo	C	7/31/2018	1218	3	100	3.82	<0.002
073118-3239-04	Back Up Negative Air Machine	C	7/31/2018	1218	0	100	0	<0.002
073118-3239-05	Near Airlock + Personnel Room	C	7/31/2018	1218	0	100	0	<0.002
073118-3239-06	Critical 1- Elevator Door	C	7/31/2018	1218	1.5	100	1.91	<0.002
073118-3239-07	Critical 2- Elevator Hatch	C	7/31/2018	1218	0.5	100	0.64	<0.002
073118-3239-08	Decon Entrance	C	7/31/2018	1218	2	100	2.55	<0.002
073118-3239-09	Decon Exit	C	7/31/2018	1218	2	100	2.55	<0.002
073118-3239-10	Work Area Entrance/Exit, Airlock	C	7/31/2018	1218	0	100	0	<0.002
073118-3239-11	Negative Air Exhaust	C	7/31/2018	1218	1	100	1.27	<0.002
073118-3239-12	Ambient Air	C	7/31/2018	1218	0	100	0	<0.002
073118-3239-13	Field	BL	7/31/2018		0	100		
073118-3239-14	Box	BL	7/31/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

B=Background
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 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low .37, Med .24, High .16 NYS ELAP #11727

Air Sampling Worksheet

Chain of Custody

Date: 07/31/18

Job Name: Nike Missile BU-34/35

Job #: 3239

Work Area Location: Silo 4

Client: Tantara Corp.

Client Contact: Mark Lovvex

Temp/Rain/Wind: 70°F / No Rain/Low Wind

Calibrator #: 20180321

DC - Lite Primary Flow: 605

Turnaround (circle): 3 hour 6 hour 48 hour

Other Analysis (circle): PEM TEM

Sample Number	Pump #	Sample Location	IB	IWA	OB	OWA	B	P	A	C	PE	Time (military)	Flow (LPM)	Volume (liters)	Results (f/cc)
073118-3239-01		Negative air machine	IB	IWA	OB	OWA	C	0819	1519	420	2.9	2.9	2.9	1218	
02		West side of silo	IB	IWA	OB	OWA		0820	1520	420	2.9	2.9	2.9	1218	
03		East side of silo	IB	IWA	OB	OWA		0821	1521	420	2.9	2.9	2.9	1218	
04		Back up negative air machine	IB	IWA	OB	OWA		0822	1522	420	2.9	2.9	2.9	1218	
05		Near airlock + personnel room	IB	IWA	OB	OWA		0823	1523	420	2.9	2.9	2.9	1218	
06		Critical 1-Elevator Door	OB	OWA	OB	OWA		0824	1524	420	2.9	2.9	2.9	1218	
07		Critical 2-Elevator Hatch	OB	OWA	OB	OWA		0825	1525	420	2.9	2.9	2.9	1218	
08		Decon entrance	OB	OWA	OB	OWA		0826	1526	420	2.9	2.9	2.9	1218	
09		Decon exit	OB	OWA	OB	OWA		0827	1527	420	2.9	2.9	2.9	1218	
10		Work area entrance/exit, airlock	OB	OWA	OB	OWA		0828	1528	420	2.9	2.9	2.9	1218	
11		Negative air exhaust	OB	OWA	OB	OWA		0829	1529	420	2.9	2.9	2.9	1218	
12		Ambient air	OB	OWA	OB	OWA		0830	1530	420	2.9	2.9	2.9	1218	
13		Field													
14		Box													

Comments/Special Conditions: IWA

Sketch OWA:

Relinquished by: Craig Mikida

Received by lab: 8/1/18 8:02

Received by lab: S35927

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Lab Project #: S35942
 Sample Date: 8/1/2018
 Date Received: 8/2/2018
 Analysis Date: 8/2/2018

Project: SET 3239- Nike Missile Silo BU 34/35- Silo 4 Exterior

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
080118-3239-01	Upwind of Work, East	A	8/1/2018	1218	1	100	1.27	<0.002
080118-3239-02	Downwind of Work, West	A	8/1/2018	1218	0	100	0	<0.002
080118-3239-03	Critical 1- North	A	8/1/2018	1218	0	100	0	<0.002
080118-3239-04	Critical 2- South	A	8/1/2018	1218	2.5	100	3.18	<0.002
080118-3239-05	Decon Entrance	A	8/1/2018	1218	0	100	0	<0.002
080118-3239-06	Decon Exit	A	8/1/2018	1218	2	100	2.55	<0.002
080118-3239-07	Ambient Air	A	8/1/2018	1218	0	100	0	<0.002
080118-3239-08	Field	BL	8/1/2018		0	100		
080118-3239-09	Box	BL	8/1/2018		0	100		

Carson Cain
 Analyst

Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low .37, Med .24, High .16. NYS ELAP #11727

Air Sampling Worksheet

Chain of Custody

Date 08/01/18
 Job Name Nike Missile BU-34/35
 Job # 3239

Work Area Location Silo 4 Exterior
 Client Tentara Corp.
 Client Contact Mark Lovejoy

Temp/Rain/Wind 70°F/No Rain/Low Wind
20180321
6.05

Calibrator # DC - Lite Primary Flow

Turnaround (circle)
 3 hour
 6 hour
 24 hour
 48 hour

Other Analysis (circle)
 PCM
 TEM
 other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A C EX PE	Time (military)	Flow (LPM)	Volume (liters)	Results (f/cc)
080118-3239-01		Upwind of work, East	OB	IWA	A	1000	2.9	1218	
02		Downwind of work, West		IWA		1601	2.9	1218	
03		Critical 1 - North		OWA		1602	2.9	1218	
04		Critical 2 - South		OWA		1603	2.9	1218	
05		Decon entrance		OWA		1604	2.9	1218	
06		Decon exit		OWA		1605	2.9	1218	
07		Ambient air	↓	OWA	↓	1606	2.9	1218	
08		Field							
09		Box							

Comments/Special Conditions

Sketch

08/01/18 : 07

08/01/18 : 06

8/12/18 8:06

535542

Received by lab

Sketch

Decon

Stairs

Elevator Door

Chainlink Fence

N



LABORATORY REPORT

Attention: Mark Lovejoy
Client: Tantara Corporation
54 Mason Street
Worcester, MA 01610

Lab Project #: S35947
Sample Date: 8/2/2018
Date Received: 8/3/2018
Analysis Date: 8/3/2018

Project: SET 3239- Nike Missile BU- 34/35- Silo 4 Exterior

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm ²	Fibers/cc
080218-3239-01	Upwind of Work, East	A	8/2/2018	1392	0	100	0	<0.002
080218-3239-02	Downwind of Work, West	A	8/2/2018	1392	0.5	100	0.64	<0.002
080218-3239-03	Critical 1- North	A	8/2/2018	1392	0	100	0	<0.002
080218-3239-04	Critical 2- South	A	8/2/2018	1392	1	100	1.27	<0.002
080218-3239-05	Decon Entrance	A	8/2/2018	1392	1	100	1.27	<0.002
080218-3239-06	Decon Exit	A	8/2/2018	1392	1	100	1.27	<0.002
080218-3239-07	Ambient Air	A	8/2/2018	1392	0	100	0	<0.002
080218-3239-08	Field	BL	8/2/2018		0	100		
080218-3239-09	Box	BL	8/2/2018		0	100		

Carson Cain
Analyst


Approved Signatory

B=Background
CR=Clearance Rush

P=Preparation
EX=Excursion Air

A=Abatement
PE=Personal Air Sample

C=Clearance
BL=Blank

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Analysts' Sr Ranges: Low: 37, Med: 24, High: 16. NYS ELAP #11727



350 Elmwood Ave. • Buffalo, NY 14222
 (P) 716-332.3134 (F) 716.332.3136

Air Sampling Worksheet

Chain of Custody

08/02/18	Date	Silo 4 Exterior	Work Area Location
Nike Missile BU-34/35	Job Name	Tantara Corp.	Client
3239	Job #	Mark Lovejoy	Client Contact

70°F / No Rain / Low Wind	Temp/Rain/Wind	DC - Lite Primary Flow	Calibrator #
20180321			605

Turnaround (circle)
3 hour 6 hour 48 hour
Other _____
Analysis (circle)
PCM _____ TEM
other _____

[illegible]

Craig Mikida	08/02/18	:	
Sampler		:	
Craig Mikida	08/02/18	:	
Relinquished by		:	
	8/3/18	8:00	
Received by lab	535947		

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET 3239- Nike Missile BU- 34/35- Silo 1 Exterior

Lab Project #: S35976
 Sample Date: 8/6/2018
 Date Received: 8/7/2018
 Analysis Date: 8/7/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
080618-3239-01	Upwind of Work, East	A	8/6/2018	1392	0	100	0	<0.002
080618-3239-02	Downwind of Work, West	A	8/6/2018	1392	1.5	100	1.91	<0.002
080618-3239-03	Critical 1- North	A	8/6/2018					
SAMPLE OVERLOADED								
080618-3239-04	Critical 2- South	A	8/6/2018					
SAMPLE OVERLOADED								
080618-3239-05	Decon Entrance	A	8/6/2018					
SAMPLE OVERLOADED								
080618-3239-06	Decon Exit	A	8/6/2018					
SAMPLE OVERLOADED								
080618-3239-07	Ambient Air	A	8/6/2018	1392	0	100	0	<0.002
080618-3239-08	Field Blank	BL	8/6/2018		0	100		
080618-3239-09	Box Blank	BL	8/6/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Range: Low 37, Med 24, High 16 NYS ELAP #11727

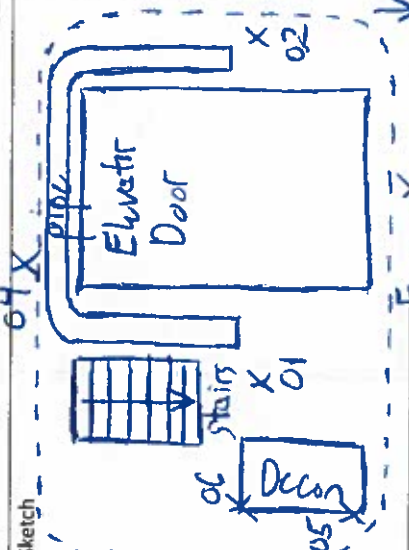
Air Sampling Worksheet
Chain of Custody

Date 08/06/18 Job # 3239
 Client Name Nike Missile DU-34/35
 Client Mark Wujay
 Work Area Location Silo 1 Exterior
 Client Contact Mark Wujay

Temp/Rain/Wind 80°F / No Rain / Low Wind
 Calibrator # 605
 DC - Lite Primary Flow

Turnaround (circle)
 3 hour 24 hour 6 hour 48 hour
 Other Analysis (circle)
 PCMS TEM

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A C EX PE	Time (military) Start Stop Tot	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
080618-3239-01		Upwind of work, East	OB	IWA	A	0830 1030 480	2.9 2.9 2.9	1392	
02		Downwind of work, West		IWA		0831 1031 480	2.9 2.9 2.9	1392	
03		Critical 1 - North		OWA		0832 1032 480	2.9 2.9 2.9	1392	
04		Critical 2 - South		OWA		0833 1033 480	2.9 2.9 2.9	1392	
05		Decon entrance		OWA		0834 1034 480	2.9 2.9 2.9	1392	
06		Decon exit		OWA		0835 1035 480	2.9 2.9 2.9	1392	
07		Ambient air	↓	OWA	↓	0836 1036 480	2.9 2.9 2.9	1392	
08		Field Blank							
09		Box Blank							

Sketch: 

Comments/Special Conditions

Relinquished by Greg Mikids 08/06/18

Received by lab 535476 8/17/18



LABORATORY REPORT

Attention: Mark Lovejoy
Client: Tantara Corporation
54 Mason Street
Worcester, MA 01610

Lab Project #: S35981
Sample Date: 8/7/2018
Date Received: 8/8/2018
Analysis Date: 8/8/2018

Project: SET 3239- Nike Missile BU- 34/35- Silo 2 Exterior

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
080718-3239-01	Upwind of Work, East	A	8/7/2018	1392	1	100	1.27	<0.002
080718-3239-02	Downwind of Work, West	A	8/7/2018	1392	0.5	100	0.64	<0.002
080718-3239-03	Critical 1- North	A	8/7/2018	1392	0	100	0	<0.002
080718-3239-04	Critical 2- South	A	8/7/2018	1392	0	100	0	<0.002
080718-3239-05	Decon Entrance	A	8/7/2018	1392	0	100	0	<0.002
080718-3239-06	Decon Exit	A	8/7/2018	1392	0	100	0	<0.002
080718-3239-07	Ambient Air	A	8/7/2018	1392	1	100	1.27	<0.002
080718-3239-08	Field Blank	BL	8/7/2018		0	100		
080718-3239-09	Box Blank	BL	8/7/2018		0	100		

Carson Cain
Analyst

Approved Signatory

B=Background
CR=Clearance Rush

P=Preparation
EX=Excursion Air

A=Abatement
PE=Personal Air Sample

C=Clearance
BL=Blank

Results relate only to samples as provided by client. This laboratory is not responsible for sample collection activities, analytical method limitations or data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report shall not be reproduced, except in full, without written approval by Sienna. The Sr for analysts is calculated per NIOSH Method 7400 using quality control data including 95% Confidence Interval (CI). Minimum volume of 900L required by NIOSH Method 7400 to reach CI of 95% at Method's Limit of Detection (LOD) at < 0.01 fiber/cc.
Analysts' Sr Ranges: Low .37, Med .24, High .16 NYS ELAP #11727

Air Sampling Worksheet

Chain of Custody

Date 08/07/18
 Job Name Nike Missile BU-34/35
 Job # 3239
 Client Mark Lowrey
 Client Contact Mark Lowrey

Temp/Rain/Wind 70°F / Light Rain / Low Wind
 Date 20180515
 Calibrator # 605
 DC - Lite Primary Flow

Turnaround (circle)
 3 hour
 6 hour
 24 hour
 48 hour
 Other
 Analysis (circle)
 PCM
 TEM
 other

Sample Number	Pump #	Sample Location	IB	IWA	OWA	OB	IB	OWA	OB	Time (military)	Flow (LPM)	Volume (liters)	Results (f/cc)
080718-3239-01		Upwind of work, East	OB	IWA	OWA	OB	IB	OWA	OB	0830 1630	2.9 2.9 2.9	1392	
02		Downwind of work, West		IWA	OWA			IWA		0831 1631	2.9 2.9 2.9	1392	
03		Critical 1 - North		OWA	OWA			OWA		0832 1632	2.9 2.9 2.9	1392	
04		Critical 2 - South		OWA	OWA			OWA		0833 1633	2.9 2.9 2.9	1392	
05		Decon entrance		OWA	OWA			OWA		0834 1634	2.9 2.9 2.9	1392	
06		Decon exit		OWA	OWA			OWA		0835 1635	2.9 2.9 2.9	1392	
07		Ambient air		OWA	OWA			OWA		0836 1636	2.9 2.9 2.9	1392	
08		Field Blank											
09		Box Blank											

Comments/Special Conditions
 Sketch

Sampler Craig Mikida : 08/07/18
 Relinquished by Craig Mikida : 08/07/18
 Received by lab 53581



LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET 3239- Nike Missile BU-34/35- Silo 3 Exterior

Lab Project #: S35989
 Sample Date: 8/8/2018
 Date Received: 8/9/2018
 Analysis Date: 8/9/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
080818-3239-01	Upwind of Work, East	A	8/8/2018	1392	0	100	0	<0.002
080818-3239-02	Downwind of Work, West	A	8/8/2018	1392	0	100	0	<0.002
080818-3239-03	Critical 1- North	A	8/8/2018	1392	2.5	100	3.18	<0.002
080818-3239-04	Critical 2- South	A	8/8/2018	1392	1.5	100	1.91	<0.002
080818-3239-05	Decon Entrance	A	8/8/2018	1392	2.5	100	3.18	<0.002
080818-3239-06	Decon Exit	A	8/8/2018	1392	2.5	100	3.18	<0.002
080818-3239-07	Ambient Air	A	8/8/2018	1392	0	100	0	<0.002
080818-3239-08	Field Blank	BL	8/8/2018		0	100		
080818-3239-09	Box Blank	BL	8/8/2018		0	100		

Carson Cain
 Analyst

Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low .37, Med .24, High .16 NYS ELAP #11727



Air Sampling Worksheet

Chain of Custody

70°F/Heavy Rain/Wind
Temp/Rain/Wind
20180515
605 / DC - Lite Primary Flow
Calibrator #

Turnaround (circle)

3 hour 6 hour

24 hour 48 hour

Other _____

Analysis (circle)

DEM TEM

_____ other _____

[illegible]

		Comments/Special Conditions
Craig Mikida	08/08/18	
Sampler	:	
Craig Mikida	08/08/18	
Relinquished by		
	8/9/18 8:50	
Received by lab	535989	

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET 3239- Nike Missile BU-34/35- Silo 3 Exterior

Lab Project #: S36001
 Sample Date: 8/9/2018
 Date Received: 8/10/2018
 Analysis Date: 8/10/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
080918-3239-01	Upwind of Work, East	A	8/9/2018	1392	0	100	0	<0.002
080918-3239-02	Downwind of Work, West	A	8/9/2018	1392	0.5	100	0.64	<0.002
080918-3239-03	Critical 1- North	A	8/9/2018	1392	0	100	0	<0.002
080918-3239-04	Critical 2- South	A	8/9/2018	1392	0	100	0	<0.002
080918-3239-05	Decon Entrance	A	8/9/2018	1392	0	100	0	<0.002
080918-3239-06	Decon Exit	A	8/9/2018	1392	0	100	0	<0.002
080918-3239-07	Ambient Air	A	8/9/2018	1392	0	100	0	<0.002
080918-3239-08	Field Blank	BL	8/9/2018		0	100		
080918-3239-09	Box Blank	BL	8/9/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low 37, Med 24, High 16 NYS ELAP #11727



Air Sampling Worksheet

Chain of Custody

70 F / No Rain / Low Wind
Temp / Rain / Wind
20180515
DC - Lite
Primary Flow
Calibrator # 605

Turnaround (circle)		Analysis (circle)	
3 hour	6 hour	TEM	other
24 hour	48 hour	PCMA	
Other _____			

		Comments/Special Conditions
Craig Mikida	08/09/18	
Sampler	:	
Craig Mikida	08/09/18	
Relinquished by	8/10/18 8:36	
Received by lab	100855	

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Project: SET 3239- Nike Missile BU-34/35- Silo 1 Exterior

Lab Project #: S36000
 Sample Date: 8/9/2018
 Date Received: 8/10/2018
 Analysis Date: 8/10/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
080918-3239-01	Upwind of Work, East	C	8/9/2018	1392	0	100	0	<0.002
080918-3239-02	Downwind of Work, West	C	8/9/2018	1392	0	100	0	<0.002
080918-3239-03	Critical 1- North	C	8/9/2018	1392	4	100	5.1	<0.002
080918-3239-04	Critical 2- South	C	8/9/2018	1392	0	100	0	<0.002
080918-3239-05	Decon Entrance	C	8/9/2018	1392	0	100	0	<0.002
080918-3239-06	Decon Exit	C	8/9/2018	1392	0	100	0	<0.002
080918-3239-07	Ambient Air	C	8/9/2018	1392	1	100	1.27	<0.002
080918-3239-08	Field Blank	BL	8/9/2018		0	100		
080918-3239-09	Box Blank	BL	8/9/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low 37, Med 24, High 16. NYS ELAP #11727

Date 08/09/18
 Job Name Nike Missile BU-34/35
 Job # 3239

Work Area Location Silo 1 Exterior
 Client Tantara Grp
 Client Contact Mark Lovejoy

Temp/Rain/Wind 70°F / No Rain / Light Wind
20180515
605

Calibrator # 605
 DC - Lite Primary Flow

Turnaround (circle)
 3 hour
 24 hour
 Other Analysis (circle)
 TEM

6 hour
 48 hour
 other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A EX	P C PE	Time (military) Start Stop	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
080918-3239-01		Upwind of work, East	OB	IWA	C		0800 1600	2.9 2.9 2.9	1392	
02		Downwind of work, West		IWA			0801 1601	2.9 2.9 2.9	1392	
03		Critical 1 - North		OWA			0802 1602	2.9 2.9 2.9	1392	
04		Critical 2 - South		OWA			0803 1603	2.9 2.9 2.9	1392	
05		Decon entrance		OWA			0804 1604	2.9 2.9 2.9	1392	
06		Decon exit		OWA			0805 1605	2.9 2.9 2.9	1392	
07		Ambient air		OWA			0806 1606	2.9 2.9 2.9	1392	
08		Field Blank								
09		Box Blank								

Comments/Special Conditions

Sketch

Sampler Craig Mikida : 08/09/18

Relinquished by Craig Mikida : 08/09/18

Received by lab 8/10/18 8:35

536000



LABORATORY REPORT

Attention: Mark Lovejoy
Client: Tantara Corporation
54 Mason Street
Worcester, MA 01610
Project: SET 3239- Nike Missile BU- 34/35- Silo 5 Exterior

Lab Project #: S36020
Sample Date: 8/13/2018
Date Received: 8/14/2018
Analysis Date: 8/14/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
081318-3239-01	Upwind of Work, East	A	8/13/2018	1392	4	100	5.1	<0.002
081318-3239-02	Downwind of Work, West	A	8/13/2018	1392	0	100	0	<0.002
081318-3239-03	Critical 1- North	A	8/13/2018	1392	0	100	0	<0.002
081318-3239-04	Critical 2- South	A	8/13/2018	1392	0	100	0	<0.002
081318-3239-05	Decon Entrance	A	8/13/2018	1392	2.5	100	3.18	<0.002
081318-3239-06	Decon Exit	A	8/13/2018	1392	0	100	0	<0.002
081318-3239-07	Ambient Air	A	8/13/2018	1392	0	100	0	<0.002
081318-3239-08	Field Blank	BL	8/13/2018		0	100		
081318-3239-09	Box Blank	BL	8/13/2018		0	100		

Carson Cain
Analyst

Approved Signatory

B=Background
CR=Clearance Rush

P=Preparation
EX=Excursion Air

A=Abatement
PE=Personal Air Sample

C=Clearance
BL=Blank

Results relate only to samples as provided by client. This laboratory is not responsible for sample collection activities, analytical method limitations or data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report shall not be reproduced, except in full, without written approval by Sienna. The Sr for analysts is calculated per NIOSH Method 7400 using quality control data including 95% Confidence Interval (CI). Minimum volume of 900L required by NIOSH Method 7400 to reach CI of 95% at Method's Limit of Detection (LOD) at < 0.01 fiber/cc.
Analysts' Sr Ranges: Low 37, Med 24, High 16 NYS ELAP #11727

08/13/18 Date
Nike Missile BU-34/35 Job Name
3239 Job #
Silo 5 Exterior Work Area Location
Tantaro Corp. Client
Mark Lourey Client Contact

70°F/No Rain/low Wind Temp/Rain/Wind
20180515
C05 Calibrator #
DC - Lite Primary Flow

Turnaround (circle)
3 hour 6 hour 48 hour
Other Analysis (circle)
TEM

Sample Number	Pump #	Sample Location	IB	IWA	OB	OWA	B A EX	P C PE	Time (military)	Flow (LPM)	Volume (liters)	Results (f/cc)
081318-3239-01		Upwind of work, East	OB	IWA	OB	IWA	A		0830	2.9	1392	
02		Downwind of work, West		IWA		IWA			0831	2.9	1392	
03		Critical 1 - North		OWA		OWA			0832	2.9	1392	
04		Critical 2 - South		OWA		OWA			0833	2.9	1392	
05		Decon entrance		OWA		OWA			0834	2.9	1392	
06		Decon exit		OWA		OWA			0835	2.9	1392	
07		Ambient air		OWA		OWA			0836	2.9	1392	
08		Field Blank										
09		Box Blank										

Sketch

08/13/18 :
08/13/18 :
8/14/18 8:00
536020

Comments/Special Conditions

Sketch

07
X
X01
X02
X03
X04
X05
N

Elevator Door

Decon

Stairs

Received by lab



LABORATORY REPORT

Attention: Mark Lovejoy
Client: Tantara Corporation
54 Mason Street
Worcester, MA 01610

Lab Project #: S36026
Sample Date: 8/14/2018
Date Received: 8/15/2018
Analysis Date: 8/15/2018

Project: SET 3239- Nike Missile BU- 34/35- Silo 6 Exterior

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
081418-3239-01	Upwind of Work, East	A	8/14/2018	1392	0	100	0	<0.002
081418-3239-02	Downwind of Work, West	A	8/14/2018	1392	1	100	1.27	<0.002
081418-3239-03	Critical 1- North	A	8/14/2018	1392	1	100	1.27	<0.002
081418-3239-04	Critical 2- South	A	8/14/2018	1392	0	100	0	<0.002
081418-3239-05	Decon Entrance	A	8/14/2018	1392	0	100	0	<0.002
081418-3239-06	Decon Exit	A	8/14/2018	1392	0	100	0	<0.002
081418-3239-07	Ambient Air	A	8/14/2018	1392	0	100	0	<0.002
081418-3239-08	Field Blank	BL	8/14/2018		0	100		
081418-3239-09	Box Blank	BL	8/14/2018		0	100		

Carson Cain
Analyst


Approved Signatory

B=Background
CR=Clearance Rush

P=Preparation
EX=Excursion Air

A=Abatement
PE=Personal Air Sample

C=Clearance
BL=Blank

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Analysts' Sr Ranges: Low 37, Med 24, High 16. NYS ELAP #11727

Date 08/14/18
Job Name Nike Missile BU-34/35
Job # 3239
Work Area Location Silo 6 Exterior
Client Tantara Corp.
Client Contact Mark Lovejoy

Temp/Rain/Wind 70°F / Rain / Low Wind
Calibrator # 20180515
DC - Lite Primary Flow 665

Turnaround (circle)
3 hour
24 hour
48 hour
Other
Analysis (circle)
TEM
other

Sample Number	Pump #	Sample Location	IB	IWA	OB	OWA	BA	PE	Time (military)	Flow (LPM)	Volume (liters)	Results (f/cc)
081418-3239-01		Upwind of work, East	OB	IWA	OB	IWA	BA	PE	0830 1630	2.9 2.9	1392	
02		Downwind of work, West		IWA		IWA			0831 1631	2.9 2.9	1392	
03		Critical 1 - North		OWA		OWA			0832 1632	2.9 2.9	1392	
04		Critical 2 - South		OWA		OWA			0833 1633	2.9 2.9	1392	
05		Decon entrance		OWA		OWA			0834 1634	2.9 2.9	1392	
06		Decon exit		OWA		OWA			0835 1635	2.9 2.9	1392	
07		Ambient air		OWA		OWA			0836 1636	2.9 2.9	1392	
08		Field Blank										
09		Box Blank										

Comments/Special Conditions

Sketch

Excavation Area X₀₁ X₀₂

Decon X₀₅

Fence X₀₃ X₀₇

Received by lab

LABORATORY REPORT

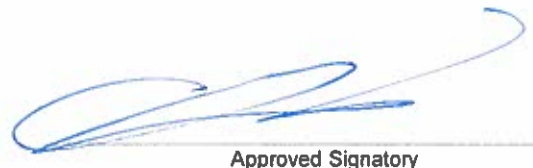
Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET 3239- Nike Missile Silos- Missile Silo 5

Lab Project #: S36276
 Sample Date: 10/15/2018
 Date Received: 10/16/2018
 Analysis Date: 10/16/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
101518-3239-01	Upwind of Work, South	P/A	10/15/2018	1170	2	100	2.55	<0.002
101518-3239-02	Downwind of Work, North	P/A	10/15/2018	1170	0	100	0	<0.002
101518-3239-03	Critical 1- East Fence	P/A	10/15/2018	1170	0.5	100	0.64	<0.002
101518-3239-04	Critical 2- West Fence	P/A	10/15/2018	1170	0	100	0	<0.002
101518-3239-05	Decon Entrance	P/A	10/15/2018	1170	0	100	0	<0.002
101518-3239-06	Decon Exit	P/A	10/15/2018	1170	0	100	0	<0.002
101518-3239-07	Ambient, Outer West Fence	P/A	10/15/2018	1170	0	100	0	<0.002
101518-3239-08	Field Blank	BL	10/15/2018		0	100		
101518-3239-09	Box Blank	BL	10/15/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

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 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low 37, Med .24, High 16. NYS ELAP #11727



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Air Sampling Worksheet

Chain of Custody

Turnaround (circle)
3 hour 6 hour 48 hour
Other 24 hour
Analysis (circle)
PCM TEM other

Temp/Rain/Wind 44°/Rainy/1-15 mph
Calibrator # 20180515
DC - Lite Primary Flow 608

Date 10/15/18 Work Area Location Missile Silo 5
Job Name Nike Missile Silos Client Tantata Corp
Job # 3239 Client Contact Mark Lavey

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A C P A EX PE	Time (military) Start Stop Tot	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
101518-3239-01		Upwind of work, south	08	IWA	P/A	1000 1630 390	3.0 3.0 3.0	1,170	
-02		downwind of work, North		IWA		1002 1632 390	3.0 3.0 3.0	1,170	
-03		Critical 1 - East fence		OWA		1004 1634 390	3.0 3.0 3.0	1,170	
-04		Critical 2 - west fence		OWA		1006 1636 390	3.0 3.0 3.0	1,170	
-05		Decon Entrance		OWA		1008 1638 390	3.0 3.0 3.0	1,170	
-06		Decon Exit		OWA		1010 1640 390	3.0 3.0 3.0	1,170	
-07		ambiant, outer west fence	V	OWA	V	1012 1642 390	3.0 3.0 3.0	1,170	
-08		field blank							
-09		box blank							

Matt Zerkle Sampler	10/15/18 16:00		Comments/Special Conditions
Matt Zerkle Relinquished by	10/15/18 16:00		
	10/16/18 8:01		
Received by lab	536276		

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET3239- Nike Missile BU-34/35- Silo 6 Exterior/Interior

Lab Project #: S36278
 Sample Date: 10/16/2018
 Date Received: 10/17/2018
 Analysis Date: 10/17/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
101618-3239-01	Upwind of Work, South	P/A	10/16/2018	960	0	100	0	<0.003
101618-3239-02	Downwind of Work, North	P/A	10/16/2018	960	3	100	3.82	<0.003
101618-3239-03	Critical 1- East Fence	P/A	10/16/2018	960	0	100	0	<0.003
101618-3239-04	Critical 2- West Fence	P/A	10/16/2018	960	3	100	3.82	<0.003
101618-3239-05	Decon Entrance	P/A	10/16/2018	960	0	100	0	<0.003
101618-3239-06	Decon Exit	P/A	10/16/2018	960	0	100	0	<0.003
101618-3239-07	Ambient, Outer West Fence	P/A	10/16/2018	960	0	100	0	<0.003
101618-3239-08	Field Blank	BL	10/16/2018		0	100		
101618-3239-09	Box Blank	BL	10/16/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

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 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low 37, Med 24, High 16. NYS ELAP #11727



Air Sampling Worksheet

Chain of Custody

Turnaround (circle)	3 hour	6 hour	48 hour	other _____
Analysis (circle)	PCM	24 hour	Other _____	TEM

[illegible]

Comments/Special Conditions		Sketch	
			<div style="border: 1px solid black; padding: 2px; display: inline-block;">Decan</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">05X</div>
<div style="border: 1px solid black; padding: 5px;"> Matt Zerk Sampler </div>	10/16/18 17:00		
<div style="border: 1px solid black; padding: 5px;"> Matt Zerk Relinquished by </div>	10/16/18 17:00		
<div style="border: 1px solid black; padding: 5px;"> </div>	10/17/18 8:01		
<div style="border: 1px solid black; padding: 5px;"> Received by lab </div>	536278		

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET 3239- Nike Missile BU-34/35- Silo 6 Exterior/Interior

Lab Project #: S36282
 Sample Date: 10/17/2018
 Date Received: 10/18/2018
 Analysis Date: 10/18/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm ²	Fibers/cc
101718-3239-01	Upwind of Work, West	A	10/17/2018	1050	0.5	100	0.64	<0.003
101718-3239-02	Downwind of Work, East	A	10/17/2018	1050	3	100	3.82	<0.003
101718-3239-03	Critical 1- North Fence	A	10/17/2018	1050	1.5	100	1.91	<0.003
101718-3239-04	Critical 2- South Fence	A	10/17/2018	1050	0	100	0	<0.003
101718-3239-05	Decon Entrance	A	10/17/2018	1050	1	100	1.27	<0.003
101718-3239-06	Decon Exit	A	10/17/2018	1050	0	100	0	<0.003
101718-3239-07	Ambient, Outer South Fence	A	10/17/2018	1050	1.5	100	1.91	<0.003
101718-3239-08	Field Blank	BL	10/17/2018		0	100		
101718-3239-09	Box Blank	BL	10/17/2018		0	100		

Carson Cain
 Analyst


 Approved Signatory

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P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low 37, Med 24, High 16 NYS ELAP #11727

10/17/18 Date
Nike Missile BU - 34/35 Job Name
3239 Job #

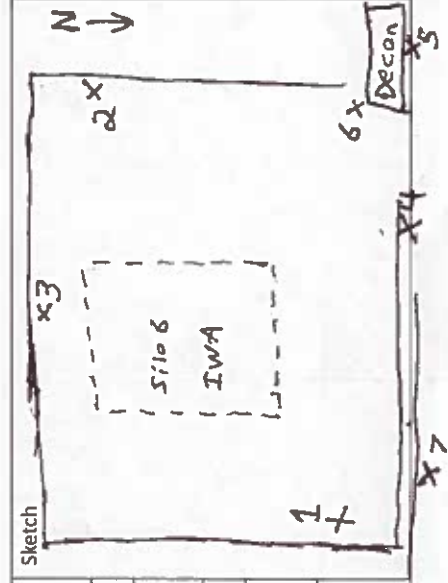
Silo 6 Exterior/Interior Work Area Location
Tantata Corp Client
Mark Lovejoy Client Contact

45° Rainy/10-20 mph Temp/Rain/Wind
20180515
606 Calibrator #
 DC - Lite Primary Flow

Turnaround (circle)
 3 hour 6 hour 48 hour
24 hour
 Other _____
 Analysis (circle)
PCM TEM other _____

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B EX	P C PE	Time (military) Start Stop Tot	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
101718-3237-01		Upwind of work, West	OB	IWA			0800 1645 525	2.0 2.0 2.0	1,050	
-02		Downwind of work, East		IWA			0800 1647 525	2.0 2.0 2.0	1,050	
-03		Critical 1 - North fence		OWA			0804 1649 525	2.0 2.0 2.0	1,050	
-04		Critical 2 - South fence		OWA			0806 1651 525	2.0 2.0 2.0	1,050	
-05		Decon Entrance		OWA			0808 1653 525	2.0 2.0 2.0	1,050	
-06		Decon Exit		OWA			0810 1655 525	2.0 2.0 2.0	1,050	
-07		Ambient, outer south fence		OWA			0812 1657 525	2.0 2.0 2.0	1,050	
-08		field blank								
-09		Box blank								

matthysen Sampler
matthysen Relinquished by
10/17/18 17:00
10/17/18 17:00
10/18/18 8:02
536282 Received by lab



Comments/Special Conditions

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET 3239- Nike Missile Silo BU-34/35- Silo 6 Exterior/Interior

Lab Project #: S36284
 Sample Date: 10/18/2018
 Date Received: 10/19/2018
 Analysis Date: 10/19/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm ²	Fibers/cc
101818-3239-01	Upwind of Work, West	A	10/18/2018	1050	1.5	100	1.91	<0.003
101818-3239-02	Upwind of Work, East	A	10/18/2018	1050	2	100	2.55	<0.003
101818-3239-03	Critical 1- North Fence	A	10/18/2018	1050	0.5	100	0.64	<0.003
101818-3239-04	Critical 2- South Fence	A	10/18/2018	1050	2	100	2.55	<0.003
101818-3239-05	Decon Entrance	A	10/18/2018	1050	0.5	100	0.64	<0.003
101818-3239-06	Decon Exit	A	10/18/2018	1050	0	100	0	<0.003
101818-3239-07	Ambient, Outer South Fence	A	10/18/2018	1050	0	100	0	<0.003
101818-3239-08	Field Blank	BL	10/18/2018		0	100		
101818-3239-09	Box Blank	BL	10/18/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

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 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low .37, Med .24, High .16. NYS ELAP #11727



SIENNA
ENVIRONMENTAL TECHNOLOGIES

350 Elmwood Ave. • Buffalo, NY 14222
☎ 716-332.3134 ☎ 716-332.3136

Air Sampling Worksheet

Chain of Custody

Date 10/18/18
Job Name Nike Missile 84-34/35
Job # 3239

Work Area Location Silo 6 Exterior/Interior
Client Tantara Corp
Client Contact Mark Lovejoy

Temp/Rain/Wind 40°/Sunny/10-15mph
Calibrator # 20180515
DC - Lite Primary Flow 606

Turnaround (circle)
3 hour
24 hour
Other
Analysis (circle)
PCM
TEM
other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A EX	P C PE	Time (military) Start Stop	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
101818-3239-01		upwind of work, west	OB	IWA	A		0800 1645	2.0 2.0 2.0	1,050	
-02		upwind of work, east		IWA			0802 1647	2.0 2.0 2.0	1,050	
-03		Critical 1 - North Fence		OWA			0804 1649	2.0 2.0 2.0	1,050	
-04		Critical 2 - South Fence		DWA			0806 1651	2.0 2.0 2.0	1,050	
-05		Decon Entrance		DWA			0808 1653	2.0 2.0 2.0	1,050	
-06		Decon Exit		OWA			0810 1655	2.0 2.0 2.0	1,050	
-07		ambient, outer south fence		OWA			0812 1657	2.0 2.0 2.0	1,050	
-08		field blank								
-09		box blank								

Sampler Matt Zerk
Relinquished by Matt Zerk
Received by lab 536284

10/18/18 17:00
10/18/18 17:00
10/19/18 8:30

Comments/Special Conditions

Sketch

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET 3239- Nike Missile BU- 34/35- Silo 6 Exterior/Interior

Lab Project #: S36294
 Sample Date: 10/22/2018
 Date Received: 10/23/2018
 Analysis Date: 10/23/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
102218-3239-01	Upwind of Work, South	A	10/22/2018	1050	4	100	5.1	<0.003
102218-3239-02	Downwind of Work, North	A	10/22/2018	1050	5.5	100	7.01	0.003
102218-3239-03	Critical 1- East Fence	A	10/22/2018	1050	0.5	100	0.64	<0.003
102218-3239-04	Critical 2- West Fence	A	10/22/2018	1050	3	100	3.82	<0.003
102218-3239-05	Decon Entrance	A	10/22/2018	1050	2	100	2.55	<0.003
102218-3239-06	Decon Exit	A	10/22/2018	1050	3	100	3.82	<0.003
102218-3239-07	Ambient, Outer South Fence	A	10/22/2018	1050	2.5	100	3.18	<0.003
102218-3239-08	Field Blank	BL	10/22/2018		0	100		
102218-3239-09	Box Blank	BL	10/22/2018		0	100		

Carson Cain
 Analyst


 Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

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 Analysts' Sr Ranges: Low .37, Med .24, High .16 NYS ELAP #11727



Air Sampling Worksheet

Chain of Custody

40°/sunny/10-15 mph
Temp/Rain/Wind

80180515

606 / DC - Lite
Calibrator # Primary Flow

Turnaround (circle)

3 hour 24 hour 48 hour

Other _____

Analysis (circle)

PCM TEM other _____

<i>Matt Zerk</i>	10/22/18	17:00	<p>Sketch</p> <p style="text-align: right;">Decan 07</p>
<i>Matt Zerk</i>	10/22/18	17:00	
Relinquished by			
<i>[Signature]</i>	10/23/18	8:22	
Received by lab	<i>hcc</i> <i>531294</i>		

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Lab Project #: S36296
 Sample Date: 10/23/2018
 Date Received: 10/24/2018
 Analysis Date: 10/24/2018

Project: SET 3239- Nike Missile BU-34/35- Silo 6 Exterior/Interior

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
102318-3239-01	Upwind of Work, West	A	10/23/2018	1050	19.5	100	24.84	0.009
102318-3239-02	Downwind of Work, East	A	10/23/2018	1050	3	100	3.82	<0.003
102318-3239-03	Critical 1- North Fence	A	10/23/2018	1048	0	100	0	<0.003
102318-3239-04	Critical 2- South Fence	A	10/23/2018	1048	6	100	7.64	0.003
102318-3239-05	Decon Entrance	A	10/23/2018	1048	4.5	100	5.73	<0.003
102318-3239-06	Decon Exit	A	10/23/2018	1050	7.5	100	9.55	0.004
102318-3239-07	Ambient, Outer North Fence	A	10/23/2018	1050	1	100	1.27	<0.003
102318-3239-08	Field Blank	BL	10/23/2018		0	100		
102318-3239-09	Box Blank	BL	10/23/2018		0	100		

Carson Cain
 Analyst


 Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

Results relate only to samples as provided by client. This laboratory is not responsible for sample collection activities, analytical method limitations or data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report shall not be reproduced, except in full, without written approval by Sienna. The Sr for analysts is calculated per NIOSH Method 7400 using quality control data including 95% Confidence Interval (CI). Minimum volume of 900L required by NIOSH Method 7400 to reach CI of 95% at Method's Limit of Detection (LOD) at < 0.01 fiber/cc.
 Analysts' Sr Ranges: Low 37, Med 24, High 16. NYS ELAP #11727

Air Sampling Worksheet

Chain of Custody

10/23/18
Date

Nike Missile BU-34/35
Job Name

3239
Job #

Silo 6 Exterior/Interior
Work Area Location

Tantara Corp
Client

Mark Lovejoy
Client Contact

38° Rain/1-10 mph
Temp/Rain/Wind

20180702
Calibrator #

606
DC - Lite Primary Flow

Turnaround (circle)
3 hour 6 hour 48 hour

Other Analysis (circle)
PCM TEM

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B C EX	P PE	Time (military)			Flow (LPM)			Volume (liters)	Results (f/cc)
							Start	Stop	Tot	Beg	End	Avg		
102318-3239-01		upwind of work, West	OB	IWA	A		0800	1645	525	2.0	2.0	2.0	1,050	
-02		downwind of work, East		IWA			0802	1647	525	2.0	2.0	2.0	1,050	
-03		Critical 1 - North fence		OWA			0804	1648	524	2.0	2.0	2.0	1,048	
-04		Critical 2 - South fence		OWA			0806	1649	524	2.0	2.0	2.0	1,048	
-05		Decon Entrance		OWA			0808	1650	524	2.0	2.0	2.0	1,048	
-06		Decon Exit		OWA			0810	1652	525	2.0	2.0	2.0	1,050	
-07		ambient, outer north fence		OWA			0812	1654	525	2.0	2.0	2.0	1,050	
-08		field blank												
-09		Box blank												

Comments/Special Conditions

Sketch

Received by lab

536296

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET 3239- Nike Missile BU- 34/35- Silo 6 Interior/Exterior

Lab Project #: S36301
 Sample Date: 10/24/2018
 Date Received: 10/25/2018
 Analysis Date: 10/25/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
102418-3239-01	Upwind of Work, West	A	10/24/2018	1050	0	100	0	<0.003
102418-3239-02	Downwind of Work, East	A	10/24/2018	1050	1	100	1.27	<0.003
102418-3239-03	Critical 1- North Fence	A	10/24/2018	1050	1.5	100	1.91	<0.003
102418-3239-04	Critical 2- South Fence	A	10/24/2018	1050	0	100	0	<0.003
102418-3239-05	Decon Entrance	A	10/24/2018	1050	3.5	100	4.46	<0.003
102418-3239-06	Decon Exit	A	10/24/2018	1050	0	100	0	<0.003
102418-3239-07	Ambient, Outer North Fence	A	10/24/2018	1050	0	100	0	<0.003
102418-3239-08	Field Blank	BL	10/24/2018		0	100		
102418-3239-09	Box Blank	BL	10/24/2018		0	100		

Carson Cain
 Analyst


 Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

Results relate only to samples as provided by client. This laboratory is not responsible for sample collection activities, analytical method limitations or data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report shall not be reproduced, except in full, without written approval by Sienna. The Sr for analysts is calculated per NIOSH Method 7400 using quality control data including 95% Confidence Interval (CI). Minimum volume of 900L required by NIOSH Method 7400 to reach CI of 95% at Method's Limit of Detection (LOD) at < 0.01 fiber/cc.
 Analysts' Sr Ranges: Low .37, Med .24 High .16 NYS ELAP #11727

Date 10/23/18
 Job Name Nike Missile BU-34/35
 Job # 3237

Work Area Location Silo 6 Interior/Exterior
 Client Tantara Corp
 Client Contact Mark Lovejoy

Temp/Rain/Wind 38°/Rainy/1-10 mph
20180702
 Calibrator # 606

DC - Lite Primary Flow

Turnaround (circle)
 3 hour
24 hour
 6 hour
 48 hour

Other Analysis (circle)
PCM
 TEM

other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B C PE	Time (military)			Flow (LPM)			Volume (liters)	Results (f/cc)
						Start	Stop	Tot	Beg	End	Avg		
102418-3239-01		upwind of work, west	0B	IWA	A	0800	1645	525	2.0	2.0	2.0	1,050	
-02		downwind of work, East		IWA		0802	1647	525	2.0	2.0	2.0	1,050	
-03		Critical 1 - North fence		OWA		0804	1649	525	2.0	2.0	2.0	1,050	
-04		Critical 2 - South fence		OWA		0806	1651	525	2.0	2.0	2.0	1,050	
-05		Decon Entrance		OWA		0808	1653	525	2.0	2.0	2.0	1,050	
-06		Decon Exit		OWA		0810	1655	525	2.0	2.0	2.0	1,050	
-07		ambient, outer North fence		OWA		0812	1657	525	2.0	2.0	2.0	1,050	
-08		field blank											
-09		box blank											

Comments/Special Conditions

Sketch

Sampler Matt Zerkle 10/24/18 17:00

Relinquished by Matt Zerkle 10/24/18 17:00

Received by lab SPD 10/25/18 8:01

Received by lab 536301

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610
 Project: SET 3239- Nike Missile BU- 34/35- Silo 6 Exterior/Interior

Lab Project #: S36307
 Sample Date: 10/25/2018
 Date Received: 10/26/2018
 Analysis Date: 10/26/2018

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
102518-3239-01	Upwind of Work, West	A	10/25/2018	1050	0	100	0	<0.003
102518-3239-02	Downwind of Work, East	A	10/25/2018	1050	1	100	1.27	<0.003
102518-3239-03	Critical 1- North Fence	A	10/25/2018	1050	2	100	2.55	<0.003
102518-3239-04	Critical 2- South Fence	A	10/25/2018	1050	1	100	1.27	<0.003
102518-3239-05	Decon Entrance	A	10/25/2018	1050	0	100	0	<0.003
102518-3239-06	Decon Exit	A	10/25/2018	1050	1	100	1.27	<0.003
102518-3239-07	Ambient, Outer North Fence	A	10/25/2018	1050	0	100	0	<0.003
102518-3239-08	Field Blank	BL	10/25/2018		0	100		
102518-3239-09	Box Blank	BL	10/25/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

Results relate only to samples as provided by client. This laboratory is not responsible for sample collection activities, analytical method limitations or data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report shall not be reproduced, except in full, without written approval by Sienna. The Sr for analysts is calculated per NIOSH Method 7400 using quality control data including 95% Confidence Interval (CI) Minimum volume of 900L required by NIOSH Method 7400 to reach CI of 95% at Method's Limit of Detection (LOD) at < 0.01 fiber/cc.
 Analysts' Sr Ranges: Low .37, Med .24, High .16 NYS ELAP #11727

Date 10/25/18
 Job Name Nike Missile AU-34/35
 Job # 3239

Work Area Location Silo 6 Exterior/Interior
 Client Tanterra Corp
 Client Contact Mark Lovejoy

Temp/Rain/Wind 38°/Rain/1-10mph
20180702

Calibrator # 606 / DC - Lite Primary Flow

Turnaround (circle)
 3 hour 6 hour 48 hour
 Other PCM Analysis (circle) TEM other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A EX PE	P C	Time (military) Start Stop Tot	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
102518-3239-01		Upwind of Work, West	OB	IWA	A		0800 1645 525	2.0 2.0 2.0	1,050	
-02		downwind of Work, East		IWA			0802 1647 525	2.0 2.0 2.0	1,050	
-03		Critical 1 - North fence		OWA			0804 1649 525	2.0 2.0 2.0	1,050	
-04		Critical 2 - South fence		OWA			0806 1651 525	2.0 2.0 2.0	1,050	
-05		Decon Entrance		OWA			0808 1653 525	2.0 2.0 2.0	1,050	
-06		Decon Exit		OWA			0810 1655 525	2.0 2.0 2.0	1,050	
-07		ambient, outer North Fence		OWA			0812 1657 525	2.0 2.0 2.0	1,050	
-08		Field Blank								
-09		Box Blank								

Sampler Matt Zerk 10/25/18 17:00

Relinquished by Matt Zerk 10/25/18 17:00

Received by lab SPB 10/26/18 8:00

Received by lab SPB 536307

Sketch

Comments/Special Conditions

LABORATORY REPORT

Attention: Mark Lovejoy
 Client: Tantara Corporation
 54 Mason Street
 Worcester, MA 01610

Lab Project #: S36322
 Sample Date: 10/29/2018
 Date Received: 10/30/2018
 Analysis Date: 10/30/2018

Project: SET 3239- Nike Missile Silos- Silo #6 Exterior/Int

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
102918-3239-01	Upwind of Work, North	A	10/29/2018	1275	0	100	0	<0.002
102918-3239-02	Downwind of Work, South	A	10/29/2018	1275	1.5	100	1.91	<0.002
102918-3239-03	Critical 1- West Fence	A	10/29/2018	1275	0	100	0	<0.002
102918-3239-04	Critical 2- East Fence	A	10/29/2018	1275	3	100	3.82	<0.002
102918-3239-05	Decon Entrance	A	10/29/2018	1275	4	100	5.1	<0.002
102918-3239-06	Decon Exit	A	10/29/2018	1275	1.5	100	1.91	<0.002
102918-3239-07	Ambient, Outer North Fence	A	10/29/2018	1275	0	100	0	<0.002
102918-3239-08	Field Blank	BL	10/29/2018		0	100		
102918-3239-09	Box Blank	BL	10/29/2018		0	100		

Carson Cain
 Analyst



Approved Signatory

B=Background
 CR=Clearance Rush

P=Preparation
 EX=Excursion Air

A=Abatement
 PE=Personal Air Sample

C=Clearance
 BL=Blank

Results relate only to samples as provided by client. This laboratory is not responsible for sample collection activities, analytical method limitations or data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. This report shall not be reproduced, except in full, without written approval by Sienna. The Sr for analysts is calculated per NIOSH Method 7400 using quality control data including 95% Confidence Interval (CI). Minimum volume of 900L required by NIOSH Method 7400 to reach CI of 95% at Method's Limit of Detection (LOD) at < 0.01 fiber/cc.
 Analysts' Sr Ranges: Low .37, Med .24, High .16. NYS ELAP #11727

Air Sampling Worksheet

Chain of Custody

Date <u>10/29/18</u> Job Name <u>Nike missile silos</u> Job # <u>3239</u>		Work Area Location <u>Nike Silo #6 Exterior</u> Client <u>Tentara Corp</u> Client Contact <u>Mark Lovejoy</u>		Temp/Rain/Wind <u>38°/Rainy/windy</u> <u>00180702</u> Calibrator # <u>606</u>		Turnaround (circle) 3 hour <u>24 hour</u> 6 hour 48 hour Other <u>PCM</u> Analysis (circle) TEM other	
---	--	---	--	---	--	---	--

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A EX	P C PE	Time (military) Start Stop	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
102918-3239-01		upwind of work, North	08	IWA	A		0800 1630	2.5 2.5 2.5		
-02		downwind of work, South		IWA			0802 1632	2.5 2.5 2.5		
-03		Critical 1 - West fence		OWA			0804 1634	2.5 2.5 2.5		
-04		Critical 2 - East fence		OWA			0806 1636	2.5 2.5 2.5		
-05		Decon Entrance		OWA			0808 1638	2.5 2.5 2.5		
-06		Decon Exit		OWA			0810 1640	2.5 2.5 2.5		
-07		ambient, outer North Fence		OWA			0812 1642	2.5 2.5 2.5		
-08		field blank								
-09		Box blank								

Sketch 	Comments/Special Conditions
Sampler <u>Mark Zorba</u> 10/29/18 17:00	
Relinquished by <u>Mark Zorba</u> 10/29/18 17:00	
<u>Mark Zorba</u> 10/30/18 8:01	
Received by lab <u>538322</u>	



LABORATORY REPORT

Attention: Mark Lovejoy
Client: Tantara Corporation
54 Mason Street
Worcester, MA 01610

Lab Project #: S36325
Sample Date: 10/30/2018
Date Received: 10/31/2018
Analysis Date: 10/31/2018

Project: SET 3239- Nike Missile Silos- Nike Silo 6 Exterior/Interior

PHASE CONTRAST MICROSCOPY BY NIOSH METHOD 7400, Fourth Edition, Issue 2, 8/15/94

Sample	Location	Type	Sample Date	Volume	Fibers	Fields	Fibers/mm2	Fibers/cc
103018-3239-01	Upwind of Work, North Wall	C	10/30/2018	1260	0	100	0	<0.002
103018-3239-02	Downwind of Work, South Wall	C	10/30/2018	1260	0.5	100	0.64	<0.002
103018-3239-03	Critical-1, North Wall	C	10/30/2018	1260	0	100	0	<0.002
103018-3239-04	Critical-2, South Wall	C	10/30/2018	1260	0.5	100	0.64	<0.002
103018-3239-05	Critical-3, West Wall	C	10/30/2018	1260	0	100	0	<0.002
103018-3239-06	Critical-4, East Wall	C	10/30/2018	1260	0	100	0	<0.002
103018-3239-07	Critical-5, South Wall	C	10/30/2018	1260	0	100	0	<0.002
103018-3239-08	Decon Entrance	C	10/30/2018	1260	0	100	0	<0.002
103018-3239-09	Decon Exit	C	10/30/2018	1260	0	100	0	<0.002
103018-3239-10	Ambient, Outer North Fence	C	10/30/2018	1260	0	100	0	<0.002
103018-3239-11	Field Blank	BL	10/30/2018		0	100		
103018-3239-12	Box Blank	BL	10/30/2018		0	100		

Carson Cain
Analyst

Approved Signatory

B=Background
CR=Clearance Rush

P=Preparation
EX=Excursion Air

A=Abatement
PE=Personal Air Sample

C=Clearance
BL=Blank

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10/30/18 Date
Nike Missile Silos Job Name
3239 Job #

Nike Silos #6 Exterior/Interior Work Area Location
Tantata Corp Client
Mark Levey Client Contact

38°/Sunny/Windy Temp/Rain/Wind
20180702 DC - Lite Primary Flow
606 Calibrator #

Turnaround (circle)
 3 hour 6 hour 48 hour
24 hour Other
PCM Analysis (circle)
 TEM other

Sample Number	Pump #	Sample Location	IB OB	IWA OWA	B A EX PE	Time (Military) Start Stop	Flow (LPM) Beg End Avg	Volume (liters)	Results (f/cc)
103018-3239-01		upwind of work, Northwall	OB	IWA	C	0745 1445	3.0 3.0 3.0	1,260	
-02		downwind of work, Southwall		IWA		0747 1447	3.0 3.0 3.0	1,260	
-03		Critical-1, Northwall		IWA		0749 1449	3.0 3.0 3.0	1,260	
-04		Critical-2, Southwall		IWA		0751 1451	3.0 3.0 3.0	1,260	
-05		Critical-3, Westwall		IWA		0753 1453	3.0 3.0 3.0	1,260	
-06		Critical-4, Eastwall		OWA		0755 1455	3.0 3.0 3.0	1,260	
-07		Critical-5, Southwall		OWA		0757 1457	3.0 3.0 3.0	1,260	
-08		Decon Entrance		OWA		0759 1459	3.0 3.0 3.0	1,260	
-09		Decon Exit		OWA		0801 1501	3.0 3.0 3.0	1,260	
-10		ambient, outer North Fence		OWA		0803 1503	3.0 3.0 3.0	1,260	
-11		field blank							
-12		Box Blank							

Comments/Special Conditions

Sketch

Sampler Mark Zerk 10/30/18 17:00

Relinquished by Mark Zerk 10/30/18 17:00

Received by lab 10/31/18 8:01 536325



6. LABORATORY ACCREDITATION

**NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER**



Expires 12:01 AM April 01, 2019
Issued April 01, 2018

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

**MS. SUSANNE KELLEY
SIENNA ENVIRONMENTAL TECHNOLOGIES, LLC
350 ELMWOOD AVENUE
BUFFALO, NY 14222**

NY Lab Id No: 11727

*is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES AIR AND EMISSIONS
All approved subcategories and/or analytes are listed below:*

Miscellaneous

Fibers

NIOSH 7400 A RULES

Serial No.: 57942

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER



Expires 12:01 AM April 01, 2019
Issued April 01, 2018

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MS. RHONDA R. MCGEE
EMSL ANALYTICAL INC
490 ROWLEY ROAD
DEPEW, NY 14043

NY Lab Id No: 11606

*is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES AIR AND EMISSIONS
All approved subcategories and/or analytes are listed below:*

Miscellaneous

Asbestos

40 CFR 763 APX A No. III

YAMATE, AGARWAL GIBB

NIOSH 7402

Fibers

NIOSH 7400 A RULES

NEW YORK
state department of
HEALTH

Serial No.: 57853

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.



7. VARIANCE

Division of Safety and Health
Engineering Services Unit

Department of Labor

W. Averell Harriman State Office Campus
Building 12, Room 154, Albany, NY 12240
www.labor.ny.gov
518-457-1536

May 25, 2018

Sienna Environmental Technologies
350 Elmwood Ave
Buffalo, NY 14222

RE: File No. 18-0656

Dear Sir/Madam:

**STATE OF NEW YORK
DEPARTMENT OF LABOR
DIVISION OF SAFETY AND HEALTH**

The attached is a copy of Decision, dated, 5/25/2018, which I have compared with the original filed in this office and which I DO HEREBY CERTIFY to be a correct transcript of the text of the said original.

If you are aggrieved by this decision you may appeal within 60 days from its issuance to the Industrial Board of Appeals as provided by Section 101 of the Labor Law. Your appeal should be addressed to the Industrial Board of Appeals, State Office Building Campus, Building 12, Room 116, Albany, New York, 12240 as prescribed by its Rules and Procedure, a copy of which may be obtained upon request.

WITNESS my hand and the seal of the
NYS Department of Labor, at the City of
Albany, on this day of 5/25/2018.



Edward A. Smith, P.E.
Professional Engineer 2 (Industrial)



Department
of Labor

STATE OF NEW YORK
DEPARTMENT OF LABOR
STATE OFFICE BUILDING CAMPUS
ALBANY, NEW YORK 12240-0100

Variance Petition

of

Sienna Environmental Technologies LLC
Petitioner's Agent on Behalf

of

Waterhill Trust
Petitioner

in re

Premises: Former Nike Missile Silos
601 Willardshire Road
Aurora, New York 14502

**Cleanup of Friable ACM Debris and Intact
Removal of Non-Friable ACM**

File No. 18-0656

DECISION

Cases 1-13

ICR 56

The Petitioner, pursuant to Section 30 of the Labor Law, having filed Petition No. 18-0656 on May 24, 2018 with the Commissioner of Labor for a variance from the provisions of Industrial Code Rule 56 as hereinafter cited on the grounds that there are practical difficulties or unnecessary hardship in carrying out the provisions of said Rule; and the Commissioner of Labor having reviewed the submission of the petitioner dated May 17, 2018; and

Upon considering the merits of the alleged practical difficulties or unnecessary hardship and upon the record herein, the Commissioner of Labor does hereby take the following actions:

Case No. 2	ICR 56-7.11 (e)
Case No. 3	ICR 56-7.5
Case No. 4	ICR 56-9.1 (b, c)
Case No. 5	ICR 56-9.2 (d)
Case No. 6	ICR 56-11.2 (f)
Case No. 7	ICR 56-11.2 (f) (4)
Case No. 8	ICR 56-11.6
Case No. 9	ICR 56-7.5 (e)
Case No. 10	ICR 56-8.9 (d)
Case No. 11	ICR 56-9.2 (d)
Case No. 12	ICR 56-11.3 (d, e)
Case No. 13	ICR 56-11.8

VARIANCE GRANTED. The Petitioner's proposal for cleanup and removal of friable and non-friable as listed by the petitioner, from the subject premises in accordance with the attached 10-page stamped copy of the Petitioner's submittal, is accepted; subject to the Conditions noted below:

THE CONDITIONS

1. A full time independent project monitor shall be on site and responsible for oversight of the abatement contractor during all abatement activities to ensure compliance with ICR 56 and variance conditions and to ensure that no visible emissions are generated. If visible emissions are observed, work practices shall be altered according to the project monitor's recommendations.
2. The Project Monitor shall perform the following functions during asbestos abatement projects in addition to functions already required by ICR-56:
 - a. Inspection of the interior of the asbestos project work area made at least twice every work shift accompanied by the Asbestos Supervisor;
 - b. Observe and monitor the activities of the asbestos abatement contractor to determine that proper work practices are used and are in compliance with all asbestos laws and regulations;
 - c. Inform the asbestos abatement contractor of work practices that, in the Project Monitor's opinion, pose a threat to public health or the environment, and are not in compliance with ICR-56 and/or approved variances or other applicable rules and/or regulations;
 - d. Document in the Project Monitor Log observations and recommendations made to the Asbestos Supervisor based upon the interior/exterior observations of the asbestos project made by the PM.

3. The PM shall alert the local District Office of the NYSDOL Asbestos Control Bureau whenever, after the PM has provided recommendations to the Asbestos Supervisor, unresolved conditions remain at the asbestos project site which present a significant potential to adversely affect human health or the environment.
4. Usage of this variance is limited to those asbestos removals identified in this variance or as outlined in the Petitioner's proposal.

In addition to the conditions required by the above specific variances, the Petitioner shall also comply with the following general conditions:


GENERAL CONDITIONS

1. A copy of this DECISION and the Petitioner's proposals shall be conspicuously displayed at the entrance to the personal decontamination enclosure.
2. This DECISION shall apply only to the removal of asbestos-containing materials from the aforementioned areas of the subject premises.
3. The Petitioner shall comply with all other applicable provisions of Industrial Code Rule 56-1 through 56-12.
4. The NYS Department of Labor Engineering Service Unit retains full authority to interpret this variance for compliance herewith and for compliance with Labor Law Article 30. Any deviation to the conditions leading to this variance shall render this variance Null and Void pursuant to 12NYCRR 56-12.2. Any questions regarding the conditions supporting the need for this variance and/or regarding compliance hereto must be directed to the Engineering Services Unit for clarification.
5. This DECISION shall terminate on May 31, 2019.

Date: May 25, 2018

By

ROBERTA L. REARDON
COMMISSIONER OF LABOR


Edward A. Smith, P.E.
Professional Engineer 2 (Industrial)

PREPARED BY: Edward A. Smith, P.E.
Professional Engineer 2 (Industrial)

REVIEWED BY: Ravi Pilar, P.E.
Professional Engineer 1 (Industrial)



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090
May 23, 2018

REPLY TO
ATTENTION OF

Programs and Project Management Division

New York State Department of Labor
Division of Safety and Health
Engineering Services Unit
c/o Mr. Edward A. Smith, P.E.
Building 12, Room 154
State Office Building Campus
Albany, New York 12240

RE: SITE SPECIFIC VARIANCE REQUEST – FORMER NIAGARA DEFENSE BATTERY,
NIKE BU 34/35, AURORA, NEW YORK
[FORMERLY USED DEFENSE SITE PROJECT No. C02NY0077]

Dear Mr. Smith:

Under our Formerly Used Defense Site Program, we have initiated work on the closure of six (6) underground former missile silos at the former "launch area" property, located at 601 Willardshire Road, Aurora, New York. The property is now owned by a private party (i.e., the Waterhill Trust). In order to inspect the silo interiors prior to demolition, we opened the silos after they were previously shut tight and capped with soil; as Nike site use ended c. 1962.

Prior to demolishing the silos, we must address the conditions presented by asbestos within the silos, and underground piping discovered to contain asbestos containing materials.

Our prime contractor for the work, Tantara Corp., has engaged the services of Sienna Environmental Technologies to prepare the enclosed *Petition for An Asbestos Variance*, and Tantara will further arrange for asbestos abatement services.

We are requesting your review and approval of this *Petition*, such that we may continue the progress of our work. Thank you in advance for your consideration.

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

Sincerely,

A handwritten signature in black ink, reading "Gregory J. Goepfert", is written over a printed name and title.
Gregory J. Goepfert
Project Manager

Encl.: Petition for Asbestos Variance

cc:

U.S. Army Corps of Engineers, New England District (Ms. Penny Reddy)

U.S. Army Corps of Engineers, New York District (Mr. Joseph Salvatore)

Tantara Corp. (Mr. Mark Lovejoy)

Sienna Environmental Technologies, LLC (Mr. Sean Fitzgerald)

Waterhill Trust

- 56-9.2(d) – The presence of a sediment covered floor makes aggressive sampling infeasible.
- 56-11.2(f) – Petitioner requires relief from various provisions in that disturbance is greater than 10 square feet.
- 56-11.2(f)(4) – Petitioner request relief from provisions which disallow abatement of undisturbed quantities of ACM.

Exterior Work Area(s)

- 56-11.6 – Petitioner requests relief from provisions which disallow mechanical removal methods.
- 56-7.5(e) – Waste Decontamination System Enclosure
- 56-8.9(d) – Lockable Hard Top Dumpster – Cementitious Piping will be placed directly into an open top dumpster using heavy machinery.
- 56-9.2(d) – Final air clearance sampling
- 56-11.3(d)(e) – Glove bag and Tent Use
- 56-11.8 – Abandoned Pipe/Duct/Conduit Wrap and Cut Removal – Cementitious Pipe cannot be wrapped or have drop cloth placed underneath before removal.

10. Hardship Description

The Former Niagara Falls-Buffalo Defense Nike Battery BU-34/35 is located in Erie County, New York and consisted of two operational areas located on separate parcels of land separated by approximately 2 miles. This includes the former "Launch Area", which consists of underground Nike missile magazines (referred to as silos). These silos are located at 601 Willardshire Road in East Aurora, NY. The silos' floors, walls, and ceilings are constructed of reinforced concrete, built to withstand direct missile strikes, and are below grade, extending approximately sixteen feet (16') below the ground level. As part of an U.S. Army Corps of Engineers Project, the (6) six Nike Missile Silos are to be demolished.

After the recent re-opening of the sealed Nike Missile Silos #1-5, it was discovered that corrugated pipe insulation and mudded pipe fittings, which have been confirmed to be an asbestos containing materials (ACM), have deteriorated and fallen from overhead piping along the walls of each silo. Approximately 175-185 LF of corrugated pipe insulation and mudded pipe fittings remain intact in each silo. Approximately 20-25 SF of pipe insulation and fitting debris exists within each silo. The silos have been left undisturbed for years, and since last occupied the floors have accumulated roughly 3"-6" of sediment. The extent of contaminated sediment is directly beneath the piping in each silo, roughly 5' from the exterior walls. Also included in interior ACM removal is Cementitious Pegboard, Gaskets, and Wire Insulation located at the light fixtures. All interior ACM is to be removed as part of this project.

Upon investigation of the exterior of the Nike Missile Silos, buried Cementitious Piping has been confirmed to be ACM. Cementitious Piping is believed to be intact and is located approximately 4' below ground level.

11: Proposed Abatement Method:

Interior ACM Removal:

1. A certified full time project monitor shall be onsite for the duration of the project to ensure compliance with these methods, and ensure no visible emissions are observed.
2. The silo shall be vacated of uncertified personnel and the area regulated by the installation of barrier tape and signage per ICR 56-7.4.

Interior ACM Removal (Continued):

8. Work area description table

Work area designation	Exterior or interior	Work/room area dimensions	Type of ACM	Quantity of ACM	Condition of ACM	Friability of ACM	Type of containment
Underground NIKE Missile Silos #1-5	Interior	3600 SF Each	Corrugated Pipe Insulation and Mudded Pipe Fittings	Approx. 185 LF Intact Each and typically 20-25 SF debris Each	Damaged	Friable	See Conditions Below
			Gaskets	15 SF Each	Intact	Non-Friable	
		300 SF Each	Cementitious Pegboard	810 SF Each	Intact	Non-Friable	
		Throughout Interiors	Wire Insulation	53 Fixtures Each	Intact	Non-Friable	
Underground NIKE Missile Silos #1-6	Exterior	Below Grade	Cementitious Piping	200 LF Each	Unknown	Non-Friable	
*Underground NIKE Missile Silo #6	Interior	4000 SF	Contaminated Debris	4000 SF	Damaged	Friable	Standard ICR 56-11.5 Pending Condemnation

*Silo #6 has not been re-opened but is believed to be structurally unsound and filled with contaminated debris and soil mixed with the friable pipe insulation. Silo #6, is assumed to contain the same types and quantities of materials as Silos #1-5. Silo #6 will be treated separately and addressed by the standard requirements of ICR 56-11.5 - Controlled Demolition with Asbestos In Place, pending P.E. or Architect condemnation letter. If Silo #6 is deemed to be structurally sound, an amendment will be submitted to include Silo #6 as part of this variance.

9. ICR 56 Relief Sought

The petitioner proposes that the work methods laid out below be accepted and requests relief from the following provisions of ICR-56:

Interior Work Area(s)

- 56-6 – A disturbance exists, background sampling shall not be conducted.
- 56-7.11(e) – As the space requires decontamination of floor, wall, and ceiling, plasticization shall not be required.
- 56-7.5 – Personal Attached Large Project Decontamination Facilities.
- 56-9.1(b)(c) – Exemption per 56-9.1(e) shall apply

3. In that a disturbance exists background samples shall not be collected.
4. A remote large project decontamination facility shall be established as close to each stairwell as possible. Decontamination facility shall be in compliance with ICR 56-7.5(d). A double - airlock will be attached to each silo and will serve as a changing area for authorized personnel.
5. Upon installation of the decontamination facility, personal protective clothing and respiratory protection shall be worn throughout the duration of the abatement project.
6. Critical barriers shall be installed at all openings to the silo, including but not limited to pipe vents, hatches, and openings per ICR 56-7.11(a). All visible accumulations of ACM in the area of the critical barriers shall be cleaned as per ICR 56-7.10(c)(1) prior to installation of the barriers.
7. Plasticization of floor, walls, and ceiling will not take place, as they are deemed to be contaminated.
8. Negative air pressure shall be established at a minimum of 8 air changes per hour. A minimum four (4) hour pre-abatement settling period per ICR 56-8.2(b) shall elapse once the negative air has been established.
9. All non-porous non-asbestos items/debris within the silo shall be decontaminated and removed from the crawlspace. Porous non-asbestos items shall be properly packaged and disposed of as RACM.
10. All asbestos debris and damaged material shall be wetted and bagged for disposal. The top two inches (2") of sediment shall be removed within five feet (5') of furthest extent of contamination. A Project Monitor shall conduct visual inspection of the soil and debris following ASTM E1368 to determine if the minimum two inches (2") is adequate.
11. Glove bag removal shall then be utilized per ICR 56-8.4(a) to remove the remaining intact corrugated pipe insulation, including use of drop clothes below removal locations.
12. Upon completion of corrugated pipe insulation removal, remaining non-friable materials will be removed in an intact state per ICR 56-8.6. All removals shall utilize wet methods and drop cloths.
13. After each material type is removed an intermediate visual inspection shall take place per ICR 56-8.6(b) by the Project Supervisor and independent third-party Project Monitor.
14. One (1) final cleaning of contaminated non-porous surfaces shall take place per ICR 56-9.1(e). All surfaces will be HEPA vacuumed and wet wiped.
15. In lieu of post-abatement clearance air monitoring in compliance with ICR-56-9.2(d), the most recent daily abatement air samples collected during cleaning operations in the regulated work area, shall be used for comparison with ICR 56-4.11 clearance criteria. An additional five (5) inside work area samples shall be taken during all Phase IIC activities.
16. The contractor shall observe, at minimum, an eight (8) hour waiting (settling/drying) period.
17. After removal and cleanings are complete and a minimum drying period has elapsed, an authorized and qualified Project Monitor shall determine if the scope of work complete and if the work area is free of visible asbestos debris/residue. If the area is determined to be acceptable and the most recent daily abatement air sample results meet ICR 56-4.11 clearance criteria, the final dismantling of the site may begin.
18. After abatement of the asbestos and asbestos debris, all plastic sheeting and tape will be treated as contaminated material and properly disposed of as asbestos waste at the end of the project.

Exterior Cementitious Pipe Removal:

1. The work procedures will follow requirements outlined in 56-11.5 – Controlled Demolition with Asbestos in Place, except as modified by this variance.
2. A certified full time project monitor shall be onsite for the duration of the project to ensure compliance with these methods, and ensure no visible emissions are observed.
3. Asbestos abatement work area isolation methods will be established as per 56-7.4. In addition, all regulated abatement work areas, the remote decontamination unit and dumpster will be cordoned off at a distance of twenty-five feet (25') and will remain vacated except for trained and certified workers, in accordance with ICR 56-3.2.
4. Entry/exit of all persons and equipment shall be through one designated and secure access way within the barrier or fence, which shall provide an adequate and appropriate means of egress from the work area. An area shall be established within this access way that shall suffice as an equipment room/gross decontamination area in which all equipment and personnel will remove all gross contamination utilizing HEPA vacuums and/or wet methods. The remote personal decontamination system enclosure requirements as per ICR 56-7.5(d)(1) through (6) shall be followed.
5. Personal protective equipment as per ICR 56-7.6 shall be utilized by all persons within the work area.
6. Excavation to expose the buried cementitious pipe will be performed by an asbestos certified operator of the mechanical equipment. Proper trench safety in accordance with OSHA 29 CFR 1926 (i.e. installation of trench boxes, trench step-back excavation, etc.) will be utilized.
7. Mechanical excavation shall be used to excavate soils to within 6 inches of the buried pipe. Manual excavation methods must be used to adequately expose the pipe subject to abatement.
8. If possible, glovebags shall be utilized consistent with ICR 56-8.4 and OSHA 29 CFR 1926.1101, for all cuts/breaks of cementitious pipe sections in the pit/trench.
9. One worker shall continually wet down each pipe section during removal operations.
10. Once each section of pipe is extracted from the trench, a thorough cleaning of all visible pipe debris must be completed in the immediate area. Any observed pipe debris will be wetted and immediately containerized or wrapped in two layers of 6 mil, fire retardant plastic sheeting and secured air tight prior to transfer to the appropriate waste container for disposal by appropriate legal method.
11. Nylon slings shall be used to move pipe sections of convenient lengths.
12. Pipe sections shall be immediately containerized in two layers of 6 mil, fire retardant plastic sheeting, and sealed airtight. All containerized pipe sections shall then be placed in an open top asbestos waste dumpster. Asbestos waste dumpsters shall be lined with two layers of 6mil, fire retardant plastic sheeting per ICR 56-8.9(g) until transport.

Exterior Cementitious Pipe Removal (Continued)

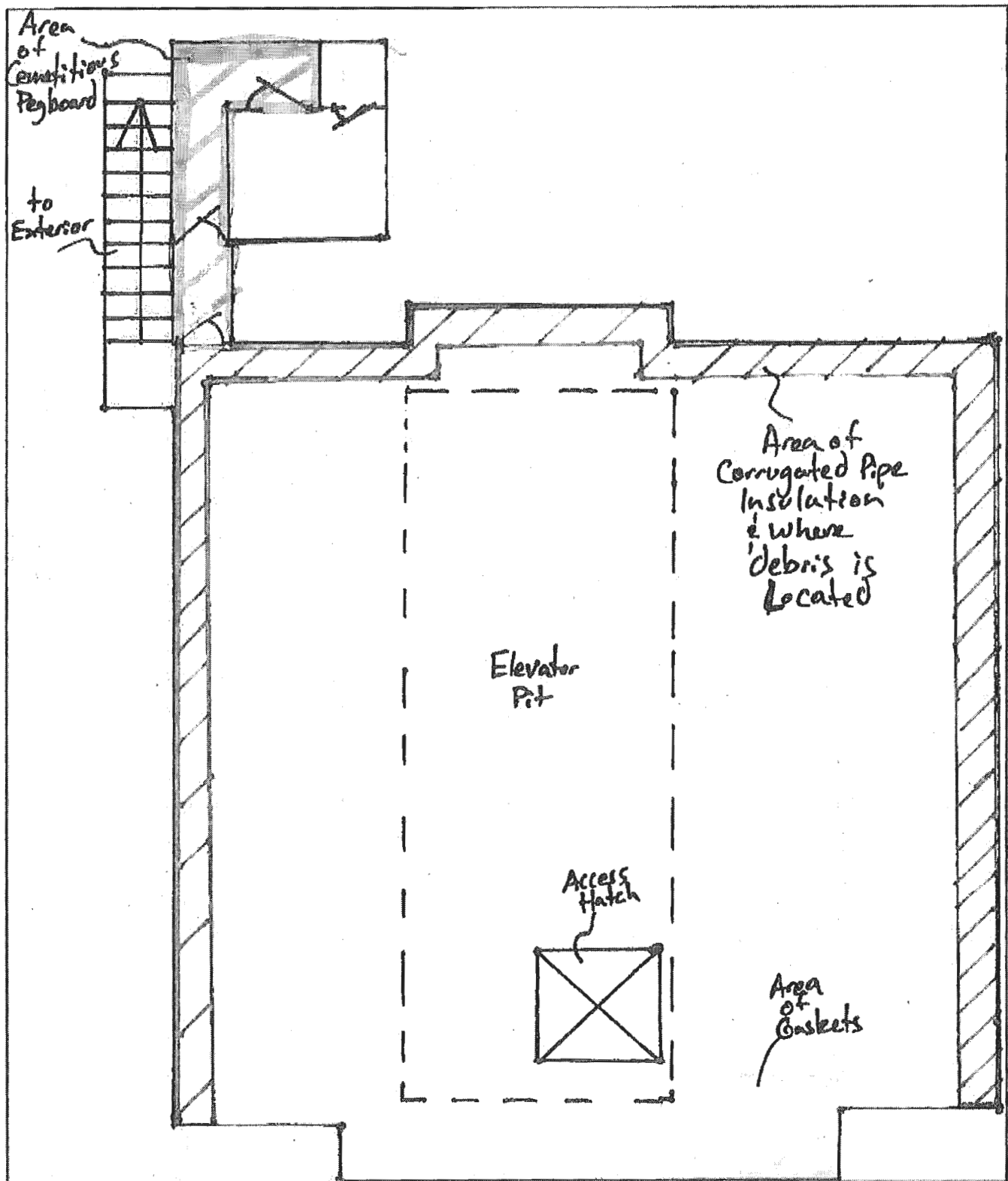
13. Background air sampling shall not be conducted.

14. Daily air sampling shall be conducted for Phase IIA and Phase IIB. In addition to the requirements of ICR 56-4.9(b-c), air monitoring within the work areas shall be conducted daily during abatement and cleaning activities. Two (2) additional daily air samples shall be collected within the work areas in the immediate vicinity of potential disturbance activities. The inside work area air samples shall be collected for each entire work shift with the sample locations being distributed both upwind and downwind of the daily abatement activities.
15. In lieu of post-abatement clearance air monitoring in compliance with ICR-56-9.2(d), the most recent daily abatement air samples collected during cleaning operations in the regulated work area, shall be used for comparison with ICR 56-4.11 clearance criteria.
16. Upon completion of cementitious pipe removal, a certified Project Monitor shall perform visual inspection of the work area to determine if the area is dry and free of visible asbestos debris. If the area is determined to be acceptable and the most recent daily abatement air sample results meet ICR 56-4.11 clearance criteria, the final dismantling of the site may begin.

180656

APPENDIX B – PROJECT SKECTHES

Underground
Project: Nike Missile Silo Date: 5/16/18
Building: Typical Silo (#1-6)
Room: Interior
Scale: None



Key

Storm
Drain
Line

Assumed
Path of
Concrete
Piping

Hatch
Location

