

Department of the Army New York District Corps of Engineers Jacob K. Javits Federal Building 26 Federal Plaza New York, NY 10278-0090

Week of September 30 – October 06, 2013

The following pages display the results from the USACE-NYD real-time website for the week of Monday, September 30, through Sunday, October 06, 2013.

There were 8 blasts this week in the S-AK-3 project area.

We recorded vibrations in S-AK-3 project area. The maximum vibration recorded was 0.576 in/s recorded at Elizabeth Marina on October 01. Table 1 summarizes the blasts this week.

Page 2 summarizes dredge locations for this week. The map shows the week's last dredge locations by colored symbols, connected by colored lines to the week's previous locations marked by gray symbols. Drillboat Apache and operated in S-AK-3 all week.

The remaining odd pages display the home page showing the maximum vibration measured in all of the stations for the most recent event for each day:

September 30 October 01 October 02 October 03 October 04 October 05 October 06

The even pages show the maximum vibration observed at each station along easting for each event.

The results for this week show the measurements at the three active stations: New York Container Terminal (NYCT), Elizabethport, and Elizabeth Marina. The station locations are on each page.

Ground vibrations at NYCT were all below 0.060 in/s. Vibrations at Elizabethport were all below 0.080 in/s. Vibrations at Elizabeth Marina were all below 0.580 in/s. All blast vibration measurements are below the contract vibration limits for this site.

Blast	Date & Time	Distance from blast	e4s Max.
	EST/EDT of blast	to e4s stations (feet)	vibration (in/s)
AK-065	2013-09-30 17:00	0,340 - 1,840	0.466
AK-066	2013-10-01 09:05	0,320 - 1,860	0.301
AK-067	2013-10-01 16:49	0,230 - 1,960	0.576
AK-068	2013-10-02 17:00	0,480 - 1,720	0.234
AK-069	2013-10-03 12:59	0,440 - 1,780	0.225
AK-069A	2013-10-03 14:01	0,430 - 1,800	0.177
AK-069B	2013-10-03 15:26	0,430 - 1,800	0.194
AK-070	2013-10-04 13:09	0,580 - 1,710	0.13

Table 1. Blast Summary for this week



History Links

Dredge Position Summary

This page summarizes dredge positions for the week. The Arthur Kill contract area is mapped with a top-of-rock map. The navigation grid is superimposed. The map shows dredge locations by colored symbols, connected by colored lines to the week's past locations marked by gray symbols. The map resets beginning the Monday of each week.

Mousing over a dredge location produces a pop-up text box giving dredge name, date of location, and easting and northing coordinates of the location in the NAD83 New Jersey State Plane coordinate system.

Click on a station for station information.



Todays Dredge Position

Latest Week's Dredge Position Summary Project History List

The table below lists the date, name, easting, northing, and notes for the week's dredge positions. The position is the last reported dredge position of the day.

Dredge Location Table						
Date	Dredge Name	Easting	Northing	Notes		
2013-10-06 Sun	Drillboat Apache	579641	660646			
2013-10-05 Sat	Drillboat Apache	579641	660646			
2013-10-04 Fri	Drillboat Apache	579364	660390			
2013-10-03 Thu	Drillboat Apache	579253	660280			
2013-10-02 Wed	Drillboat Apache	579309	660244			
2013-10-01 Tue	Drillboat Apache	579087	660243			
2013-09-30 Mon	Drillboat Apache	579143	660207			
_	Land the law at the second					
_e4	sciences Earthworks, LLC	27 Glen Road, Sandy	Hook, CT 06482	www.e4sciences.com		



History Links

Arthur Kill Blast Vibration Summary

This site summarizes the measured ground vibrations in northwest Staten Island, from rock blasting in the Arthur Kill and other possible sources. The site is updated daily. The data are intended for the sole use of the US Army Corps of Engineers - New York District, for managing and monitoring the performance of NYNJ Harbor Deepening Project Contract in Arthur Kill starting 25 July 2011.

This page represents the most recent observations.

The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

Click station for station information or click channel for event summary.



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(Click on graph or here for larger view)

The table below lists the date, time, level, and station of the maximum-vibration recording for each and every event. Selecting an event activates its event page.

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Mon 30-Sep-2013	20:47:35	0.4660	Elizabeth Marina
Ambient	Sun 29-Sep-2013	04:36:34	0.0775	Elizabeth Marina
Ambient	Sat 28-Sep-2013	18:47:33	0.1790	Elizabeth Marina
Ambient	Fri 27-Sep-2013	19:32:33	0.1590	Elizabeth Marina
Ambient	Thu 26-Sep-2013	13:02:36	0.3240	Elizabeth Marina
Ambient	Wed 25-Sep-2013	21:32:36	0.6150	Elizabeth Marina
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Arthur Kill Blasting Event Summary

This page summarizes measurements of ground vibrations for the selected event. This page displays the maximum vibration recorded at each and every seismograph station during this event.

The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

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The table below lists the date, time, and level of the maximum-vibration recording at each station for the selected event.

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Mon 30-Sep-2013	20:47:35	0.466	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Mon 30-Sep-2013 Mon 30-Sep-2013	20:47:35 13:40:03	0.466 0.06	Ambient Ambient

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History Links

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Date and time of last reading: Tue 01-Oct-2013 20:47:34



(Click on graph or here for larger view)

The table below lists the date, time, level, and station of the maximum-vibration recording for each and every event. Selecting an event activates its event page.

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Tue 01-Oct-2013	20:47:34	0.5760	Elizabeth Marina
Ambient	Mon 30-Sep-2013	20:47:35	0.4660	Elizabeth Marina
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Arthur Kill Blasting Event Summary

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Dredges

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Elizabeth Port - e4s009 NYCT - e4s008	Tue 01-Oct-2013 Tue 01-Oct-2013	20:47:34 20:38:00	0.576 0.0206	Ambient Ambient



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Elizabeth Marina - e4s010	Wed 02-Oct-2013	20:47:34	0.234	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Wed 02-Oct-2013 Wed 02-Oct-2013	20:47:34 20:52:47	0.234 0.0562	Ambient Ambient



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Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
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Elizabeth Port - e4s009 NYCT - e4s008	Thu 03-Oct-2013 Thu 03-Oct-2013	16:47:33 16:53:00	0.225 0.0337	Ambient Ambient



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Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Fri 04-Oct-2013	17:02:33	0.13	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Fri 04-Oct-2013 Fri 04-Oct-2013	17:02:33 17:07:45	0.13 0.0475	Ambient Ambient



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Date and time of last reading: Sat 05-Oct-2013 16:32:34



(Click on graph or here for larger view)

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Ambient	Sat 05-Oct-2013	16:32:34	0.0237	Elizabeth Marina
Ambient	Fri 04-Oct-2013	17:02:33	0.1300	Elizabeth Marina
Ambient	Thu 03-Oct-2013	16:47:33	0.2250	Elizabeth Marina
Ambient	Wed 02-Oct-2013	20:47:34	0.2340	Elizabeth Marina
Ambient	Tue 01-Oct-2013	20:47:34	0.5760	Elizabeth Marina
Ambient	Mon 30-Sep-2013	20:47:35	0.4660	Elizabeth Marina
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Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Sat 05-Oct-2013	16:32:34	0.0237	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Sat 05-Oct-2013 Sat 05-Oct-2013	16:32:34 16:07:45	0.0237 0.00562	Ambient Ambient



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The graph below is a plot of the maximum vibration recorded by any and all of the numerous seismograph stations during the current observation event (ambient or blast). The horizontal axis gives the date from the start of the project on 25 July 2011. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). The red curves show the project's contract limits; the orange curves show one-third (1/3) below these contract limits. (The light gray curve is ambient-vibration level. The blue dots are blast-vibration levels. The dark gray dots are predicted blast-vibration levels.)





(Click on graph or here for larger view)

The table below lists the date, time, level, and station of the maximum-vibration recording for each and every event. Selecting an event activates its event page.

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Sun 06-Oct-2013	12:52:46	0.0050	NYCT
Ambient	Sat 05-Oct-2013	16:32:34	0.0237	Elizabeth Marina
Ambient	Fri 04-Oct-2013	17:02:33	0.1300	Elizabeth Marina
Ambient	Thu 03-Oct-2013	16:47:33	0.2250	Elizabeth Marina
Ambient	Wed 02-Oct-2013	20:47:34	0.2340	Elizabeth Marina
Ambient	Tue 01-Oct-2013	20:47:34	0.5760	Elizabeth Marina
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Home Event Summarv Stations: History Links

Arthur Kill Blasting Event Summary

This page summarizes measurements of ground vibrations for the selected event. This page displays the maximum vibration recorded at each and every seismograph station during this event.

Dredges

The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

Click station for more information about the station.



Selected Event Summary

The graph below plots the maximum vibration during the selected event period (blast or ambient) recorded at each and every seismograph station along the easting positions. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). If the maximum vibration level at a station is below 0.01 in/sec, the marker is a v-shaped triangle at 0.01 in/sec. (Light-gray stems indicate ambientvibration level. Black stems indicate blast-vibration level. Dark-gray stems indicate predicted blast-vibration level.)



(Click on graph or here for larger view)

The table below lists the date, time, and level of the maximum-vibration recording at each station for the selected event.

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Sun 06-Oct-2013	03:02:36	0.00437	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Sun 06-Oct-2013 Sun 06-Oct-2013	03:02:36 12:52:46	0.00437 0.005	Ambient Ambient



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