

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 October 14 - October 20, 2013

The following pages display the results from the USACE-NYD real-time website for the week of Monday, October 14, through Sunday, October 20, 2013.

There were 6 blasts this week in the S-AK-3 project area.

We recorded vibrations in S-AK-3 project area. The maximum vibration recorded was 0.356 in/s recorded at Elizabeth Marina on October 17. 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:

October 14

October 15

October 16

October 17

October 18

October 19

October 20

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 0.050 in/s. Vibrations at Elizabeth Marina were all below 0.360 in/s. All blast vibration measurements are below the contract vibration limits for this site.

Table 1. Blast Summary for this week

Blast	Date & Time EST/EDT of blast	Distance from blast to e4s stations (feet)	e4s Max. vibration (in/s)
AK-079	2013-10-15 14:09	0,590 - 1,990	0.178
AK-080	2013-10-16 10:00	0,690 - 2,110	0.226
AK-081	2013-10-17 09:29	0,810 - 2,220	0.356
AK-082	2013-10-18 09:06	0,780 - 2,520	0.165
AK-083	2013-10-18 18:08	0,880 - 2,550	0.0381
AK-084	2013-10-19 12:30	0,950 - 2,640	0.167





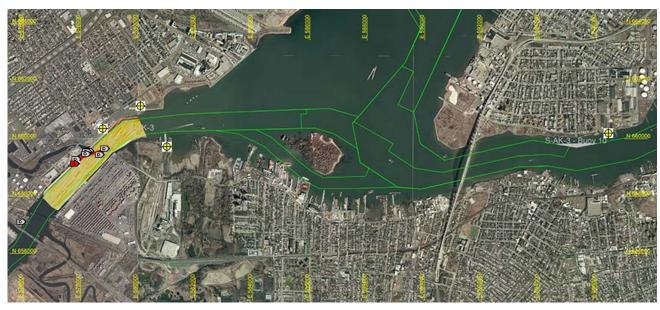
Stations: Dredges **Event Summary** History Links

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
2013-10-20 Sun	Drillboat Apache	577870	659146	
2013-10-19 Sat	Drillboat Apache	■ 578257	659475	
2013-10-18 Fri	Drillboat Apache	5 78368	659585	
2013-10-18 Fri	Drillboat Kraken	578279	659558	
2013-10-17 Thu	Dredge FJ Belesimo	5 76073	657172	
2013-10-17 Thu	Drillboat Apache	578701	659440	
2013-10-16 Wed				No Activity
2013-10-15 Tue	Drillboat Apache	5 78895	659659	
2013-10-14 Mon	Dredge FJ Belesimo	5 76073	657172	
2013-10-14 Mon	Drillboat Apache	577925	659292	

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Arthur Kill Blast Vibration Summary

New York District

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This page represents the most recent observations.

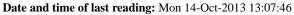
The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and 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.

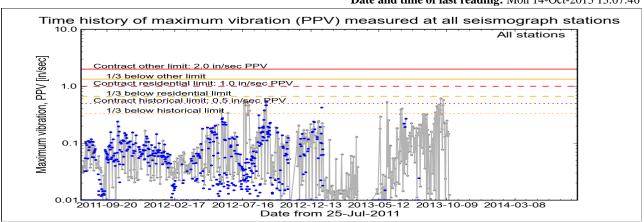
Click station for station information or click channel for event summary.



Latest 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 14-Oct-2013	13:07:46	0.0125	NYCT
Ambient	Sun 13-Oct-2013	19:22:46	0.0075	NYCT
Ambient	Sat 12-Oct-2013	19:55:51	0.1470	Elizabeth Marina
Ambient	Fri 11-Oct-2013	19:17:33	0.1350	Elizabeth Marina
Ambient	Thu 10-Oct-2013	13:02:37	0.1610	Elizabeth Marina
Ambient	Wed 09-Oct-2013	16:17:37	0.2500	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.

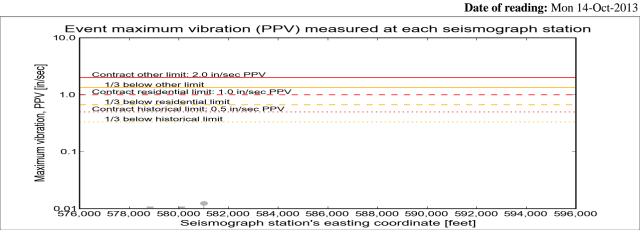
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Selected Event Summary

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(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	Mon 14-Oct-2013	10:02:35	0.005	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Mon 14-Oct-2013 Mon 14-Oct-2013	10:02:35 13:07:46	0.005 0.0125	Ambient Ambient

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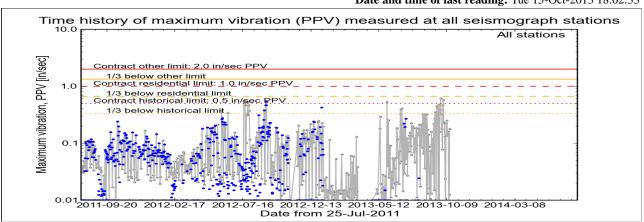
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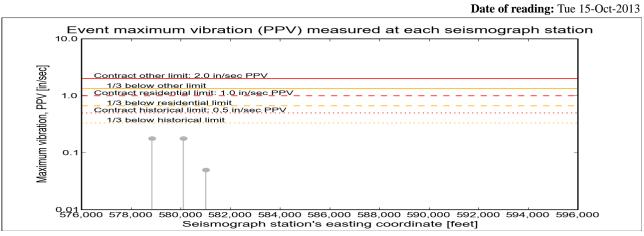
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Elizabeth Port - e4s009 NYCT - e4s008	Tue 15-Oct-2013 Tue 15-Oct-2013	18:02:33 18:07:45	0.178 0.05	Ambient Ambient

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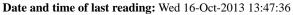
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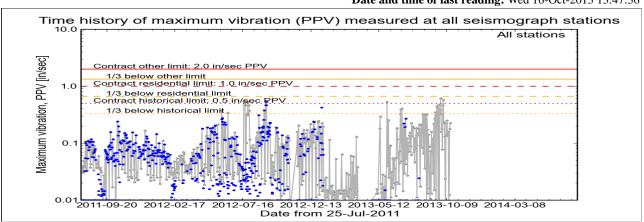
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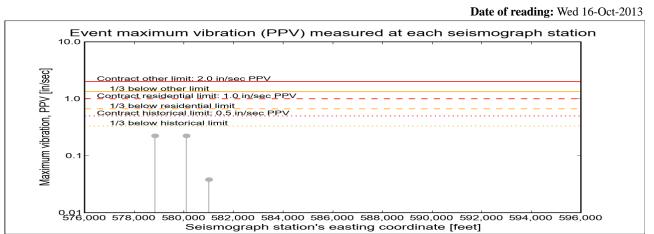
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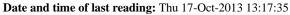
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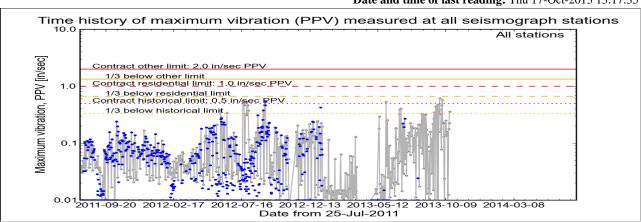
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Event Summary Stations: Dredges History Links

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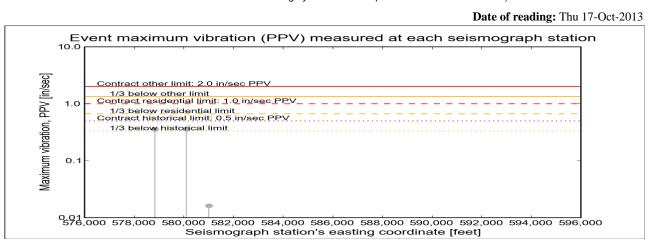
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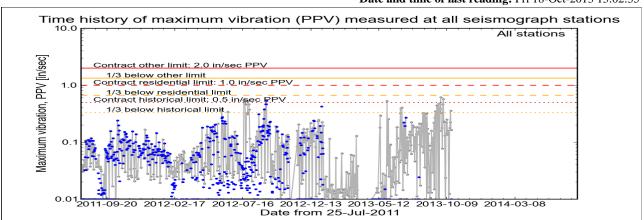
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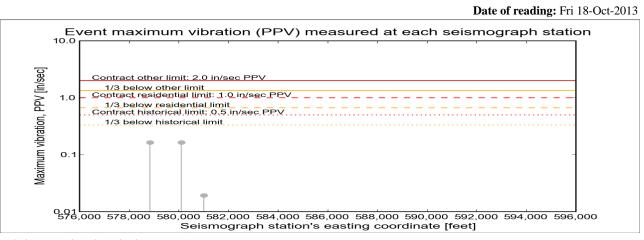
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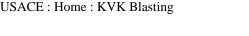


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Elizabeth Port - e4s009	Fri 18-Oct-2013	13:02:35	0.165	Ambient
NYCT - e4s008	Fri 18-Oct-2013	12:53:04	0.0194	Ambient

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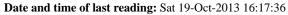
The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and 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.

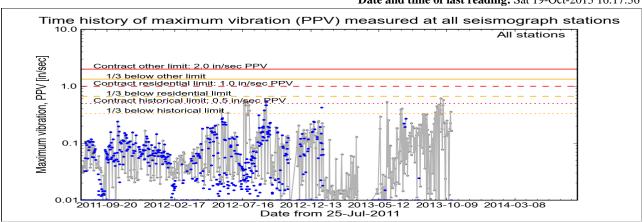
Click station for station information or click channel for event summary.



Latest Event Summary

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.)





(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	Sat 19-Oct-2013	16:17:36	0.1670	Elizabeth Marina
Ambient	Fri 18-Oct-2013	13:02:35	0.1650	Elizabeth Marina
Ambient	Thu 17-Oct-2013	13:17:35	0.3560	Elizabeth Marina
Ambient	Wed 16-Oct-2013	13:47:36	0.2260	Elizabeth Marina
Ambient	Tue 15-Oct-2013	18:02:33	0.1780	Elizabeth Marina
Ambient	Mon 14-Oct-2013	13:07:46	0.0125	NYCT
_	sciences Earthworks,	LLC 27 Glen Road, Sa	ndy Hook, CT 064	82 www.e4sciences.com

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Event Summary Stations: Dredges 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.

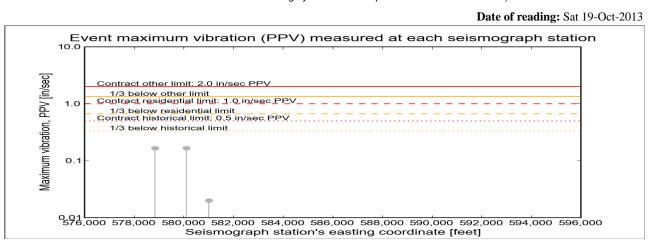
The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates 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	Sat 19-Oct-2013	16:17:36	0.167	Ambient
Elizabeth Port - e4s009	Sat 19-Oct-2013	16:17:36	0.167	Ambient
NYCT - e4s008	Sat 19-Oct-2013	16:22:30	0.02	Ambient

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Home Event Summary Stations: Dredges History Links

Arthur Kill Blast Vibration Summary

New York District

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.

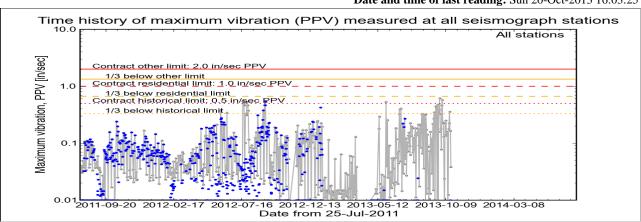
Click station for station information or click channel for event summary.



Latest Event Summary

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.)





(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 20-Oct-2013	16:03:25	0.0381	Elizabeth Marina
Ambient	Sat 19-Oct-2013	16:17:36	0.1670	Elizabeth Marina
Ambient	Fri 18-Oct-2013	13:02:35	0.1650	Elizabeth Marina
Ambient	Thu 17-Oct-2013	13:17:35	0.3560	Elizabeth Marina
Ambient	Wed 16-Oct-2013	13:47:36	0.2260	Elizabeth Marina
Ambient	Tue 15-Oct-2013	18:02:33	0.1780	Elizabeth Marina
e	4sciences Earthworks, I	LC 27 Glen Road, Sa	ndy Hook, CT 064	82 www.e4sciences.com

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Home **Event Summary** Stations: Dredges 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.

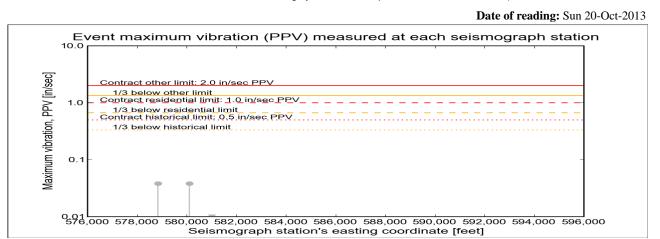
The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates 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 20-Oct-2013	16:03:25	0.0381	Ambient
Elizabeth Port - e4s009 NYCT - e4s008	Sun 20-Oct-2013 Sun 20-Oct-2013	16:03:25 16:37:45	0.0381 0.00375	Ambient Ambient

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