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 December 30, 2012 – January 06, 2013

The following pages display the results from the USACE-NYD real-time website for the week of Monday, December 31, 2012 through Sunday, January 6, 2013.

There were 7 blasts this week in the S-AK-2 project area.

We recorded waveforms in the S-AK-2 project area. The maximum vibration recorded was 0.427 in/s recorded at Elizabethport on January 05. 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. Capt AJ Fournier, Dredge FJ Belesimo and Drillboat Kraken operated in S-AK-2 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:

December 31
January 01
January 02
January 03
January 04
January 05
January 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: Port Ivory, New York Container Terminal (NYCT) and Elizabethport. The station locations are on each page.

Ground vibrations at Port Ivory were all below 0.065 in/s. Ground vibrations at NYCT were all below 0.195 in/s. Ground vibrations at Elizabethport were all below 0.430 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)**
AK2-312	2013-01-02 15:43	1,530 - 3,980	0.193
AK2-313	2013-01-03 09:00	0,820 - 2,330	0.122
AK2-314	2013-01-03 13:44	0,920 - 2,580	0.102
AK2-315	2013-01-04 09:16	0,860 - 2,410	0.148
AK2-316	2013-01-04 15:44	1,000 - 2,710	0.0719
AK2-317	2013-01-05 09:03	0,900 - 2,500	0.0994
AK2-318	2013-01-05 17:07	0,360 - 2,480	0.427

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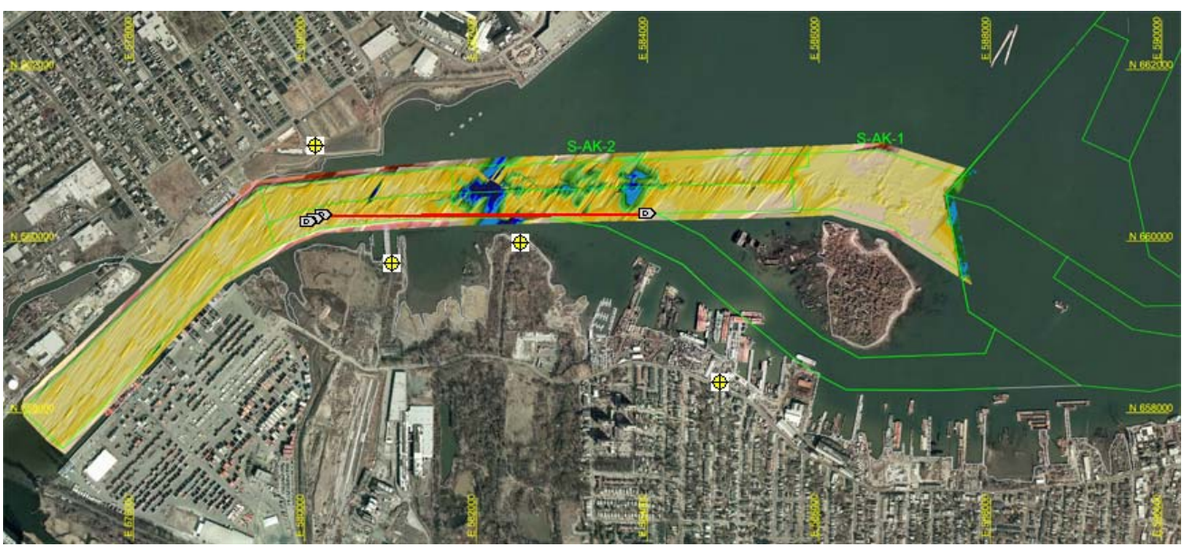
Dredge Position Summary

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
2013-01-06 Sun				No Activity
2013-01-05 Sat	Drillboat Kraken	582448	660327	
2013-01-04 Fri	Drillboat Kraken	579787	660152	
2013-01-03 Thu	Drillboat Kraken	579921	660205	
2013-01-02 Wed	Drillboat Kraken	583986	660305	
2013-01-01 Tue				No Activity
2012-12-31 Mon				No Activity

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Arthur Kill Blast Vibration Summary

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This page represents the most recent observations.

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Latest Event Summary

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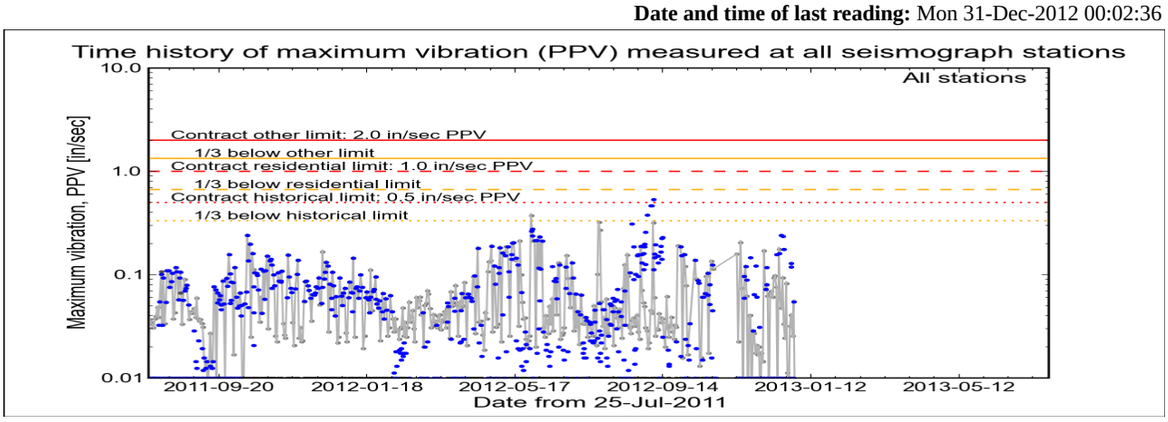
Date and time of last reading: Mon 31-Dec-2012 00:02:36



(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 31-Dec-2012	00:02:36	0.0050	K-Sea Transportation
Ambient	Sun 30-Dec-2012	17:32:36	0.0063	K-Sea Transportation
Blast	Sat 29-Dec-2012	21:03:27	0.0550	K-Sea Transportation
Ambient	Fri 28-Dec-2012	18:32:34	0.0256	K-Sea Transportation
Ambient	Thu 27-Dec-2012	14:53:42	0.0406	K-Sea Transportation
Ambient	Wed 26-Dec-2012	20:02:53	0.0319	K-Sea Transportation

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Arthur Kill Blasting Event Summary

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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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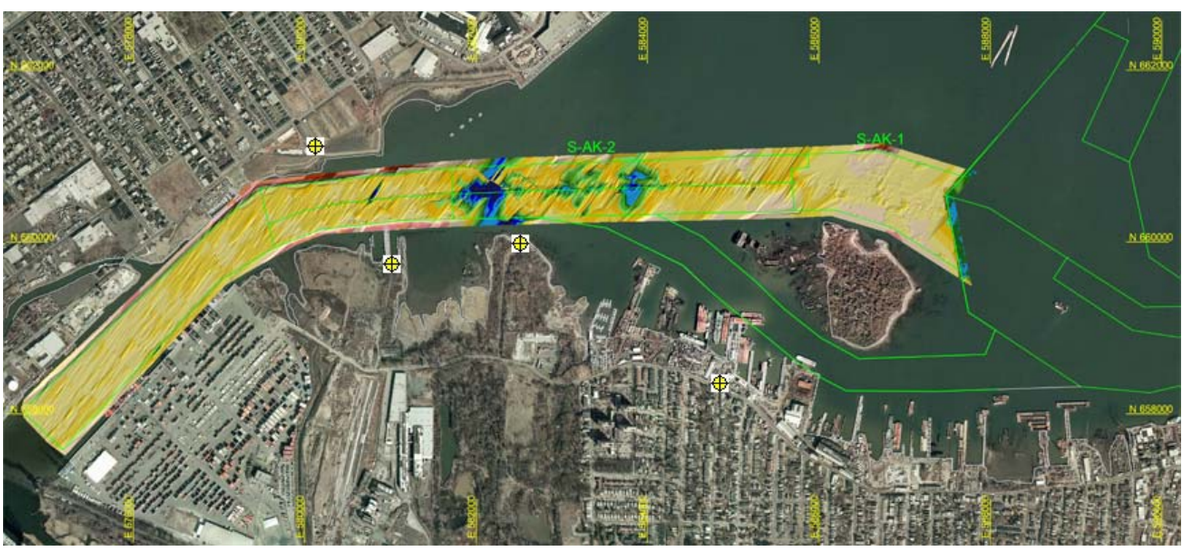

Selected Event Summary

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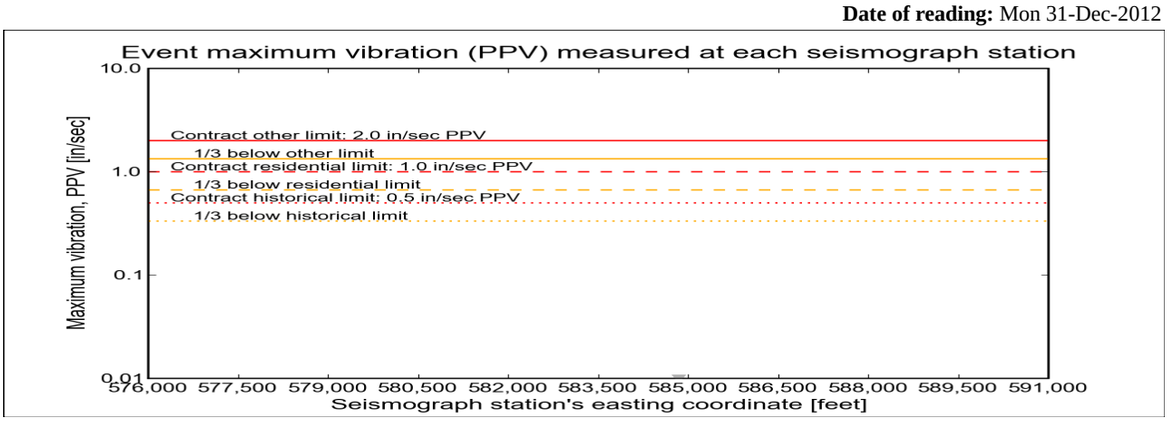

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The table below lists the date, time, and level of the maximum-vibration recording at each station for the selected event.

Station	Date	Time	Max PPV (in / second)	Vibration Type
K-Sea Transportation - e4s006	Mon 31-Dec-2012	00:02:36	0.005	Ambient

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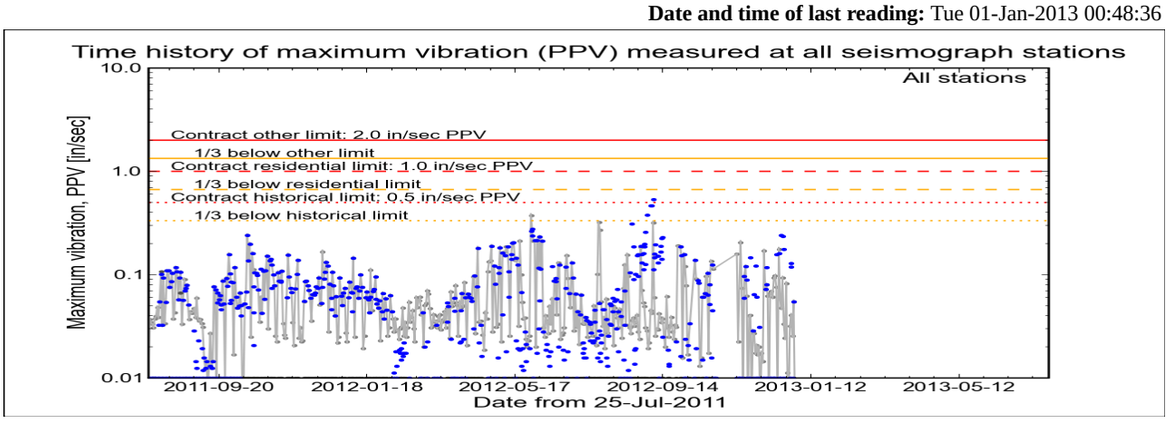
Date and time of last reading: Tue 01-Jan-2013 00:48:36



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Ambient	Mon 31-Dec-2012	00:02:36	0.0050	K-Sea Transportation
Ambient	Sun 30-Dec-2012	17:32:36	0.0063	K-Sea Transportation
Blast	Sat 29-Dec-2012	21:03:27	0.0550	K-Sea Transportation
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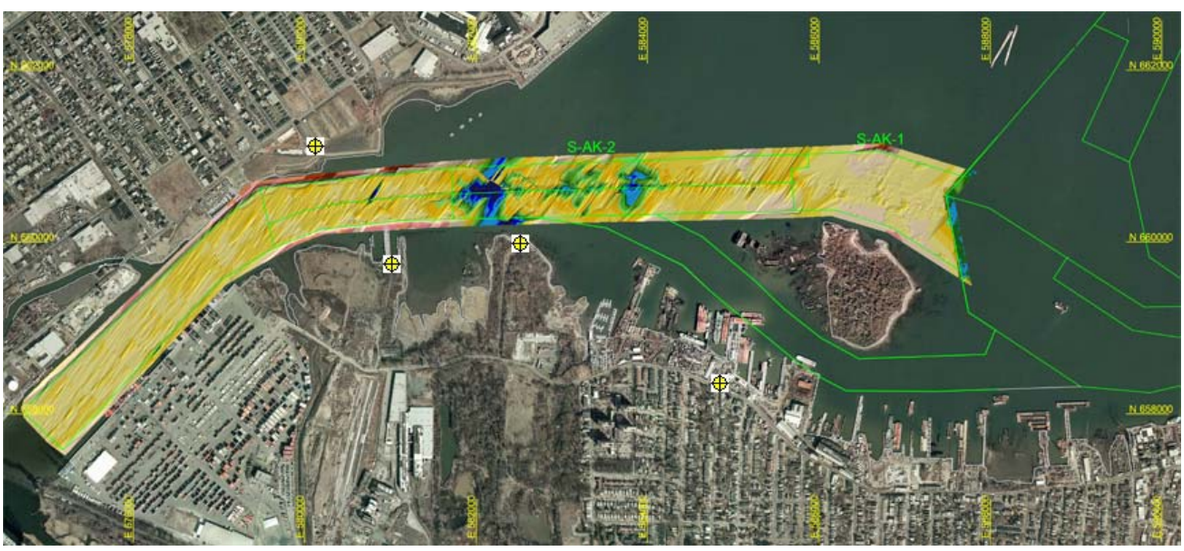

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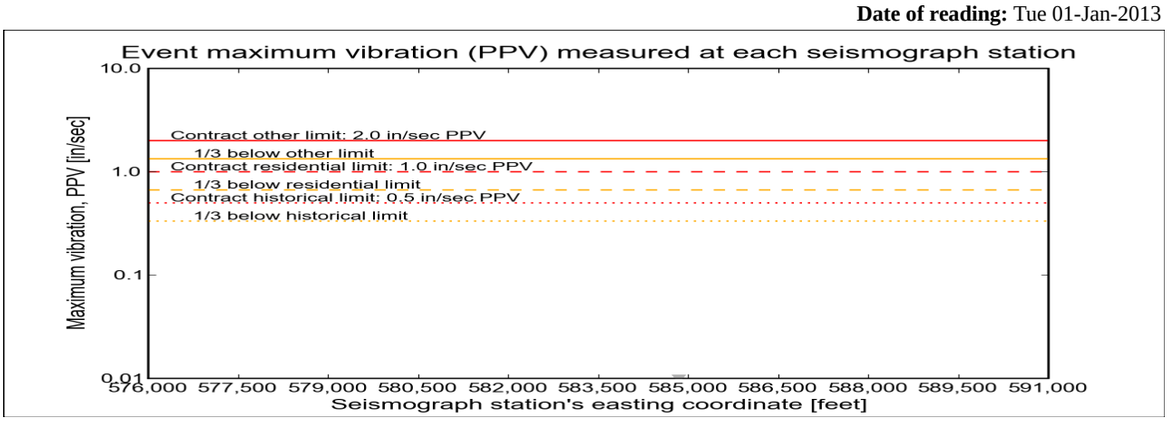

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The table below lists the date, time, and level of the maximum-vibration recording at each station for the selected event.

Station	Date	Time	Max PPV (in / second)	Vibration Type
K-Sea Transportation - e4s006	Tue 01-Jan-2013	00:48:36	0.00437	Ambient

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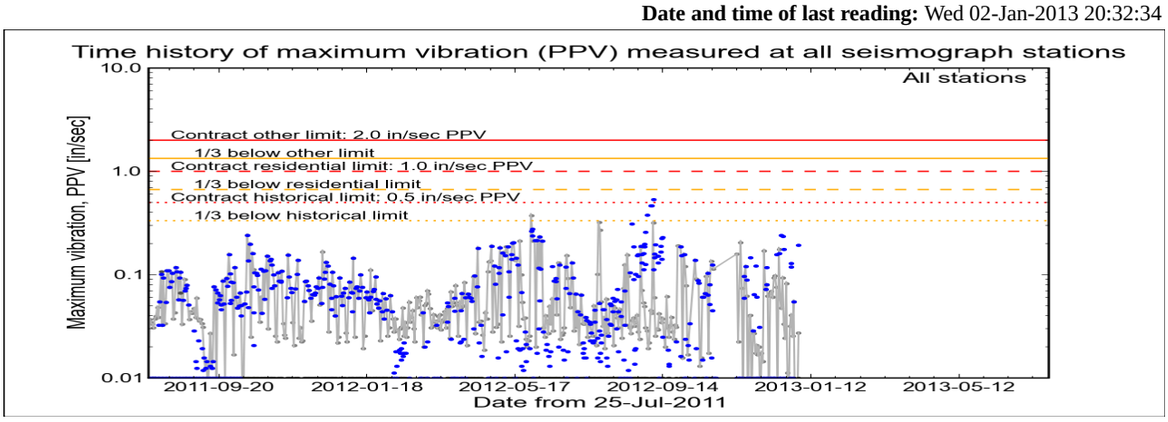
Date and time of last reading: Wed 02-Jan-2013 20:32:34



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Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Blast	Wed 02-Jan-2013	20:32:34	0.0275	K-Sea Transportation
Ambient	Tue 01-Jan-2013	00:48:36	0.0044	K-Sea Transportation
Ambient	Mon 31-Dec-2012	00:02:36	0.0050	K-Sea Transportation
Ambient	Sun 30-Dec-2012	17:32:36	0.0063	K-Sea Transportation
Blast	Sat 29-Dec-2012	21:03:27	0.0550	K-Sea Transportation
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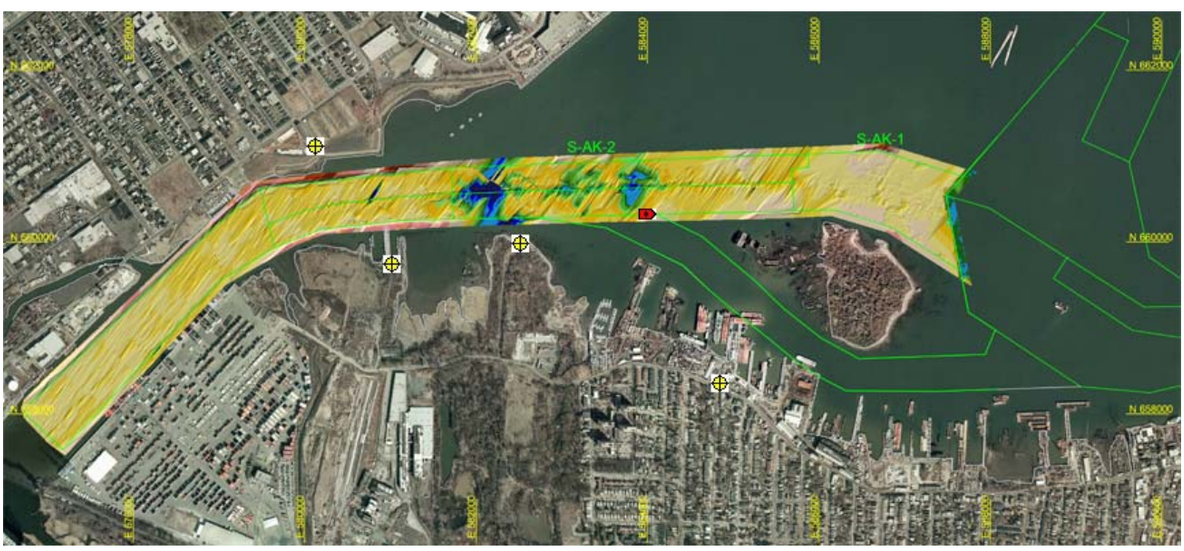

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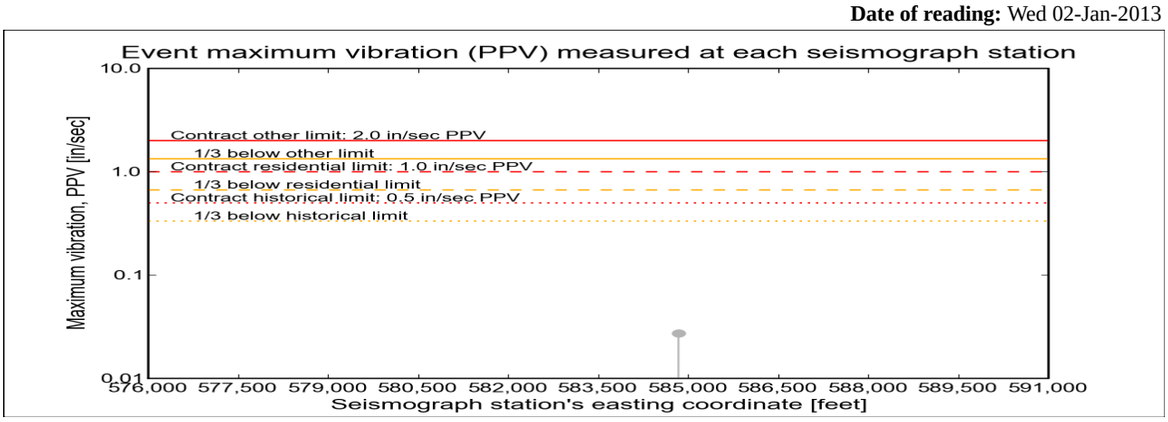
Date of reading: Wed 02-Jan-2013



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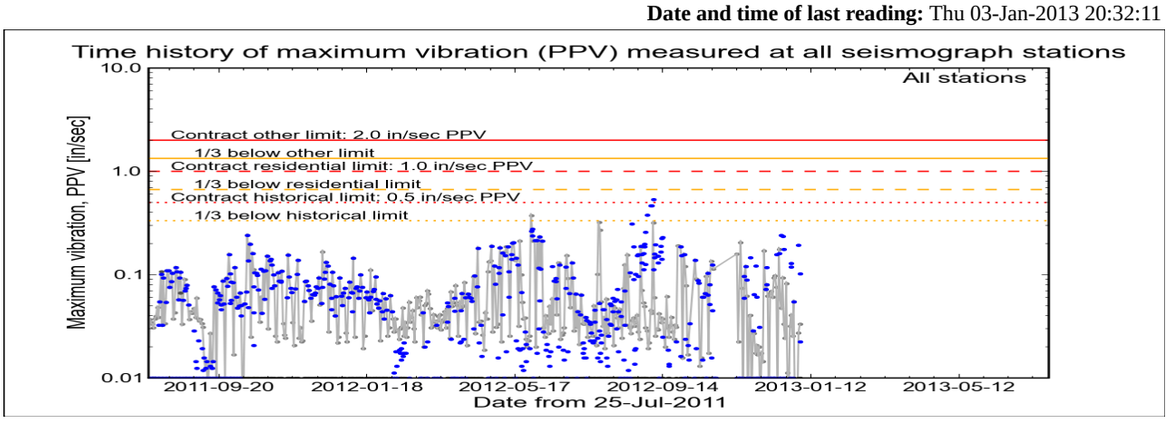
Date and time of last reading: Thu 03-Jan-2013 20:32:11



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Ambient	Sun 30-Dec-2012	17:32:36	0.0063	K-Sea Transportation
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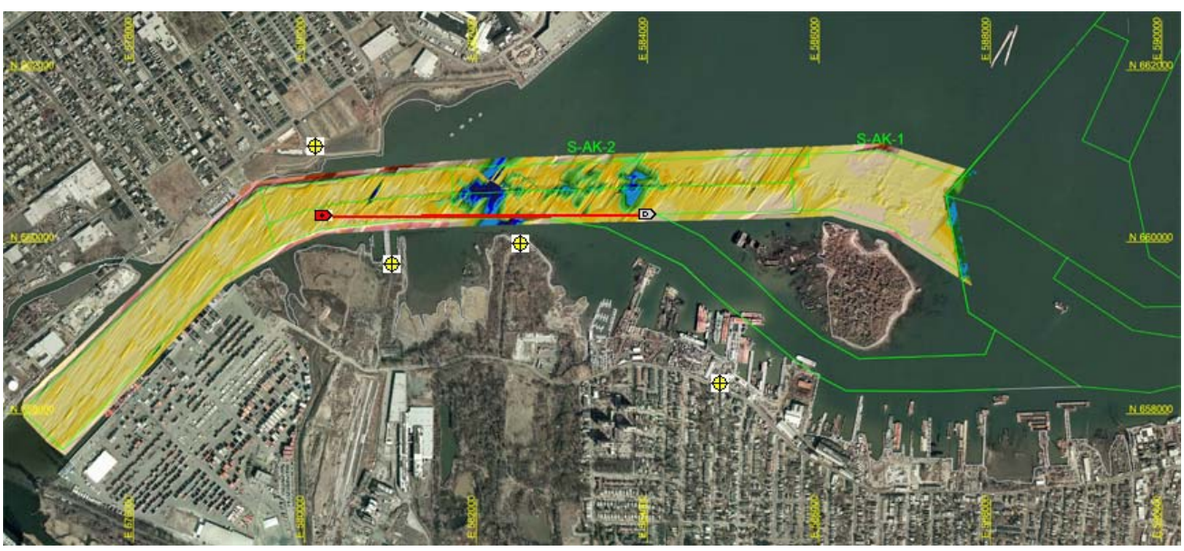

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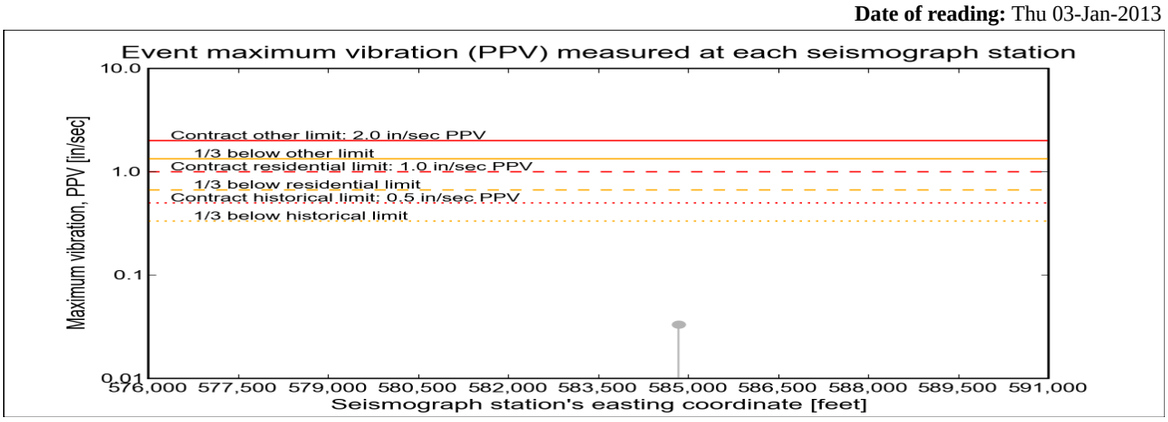

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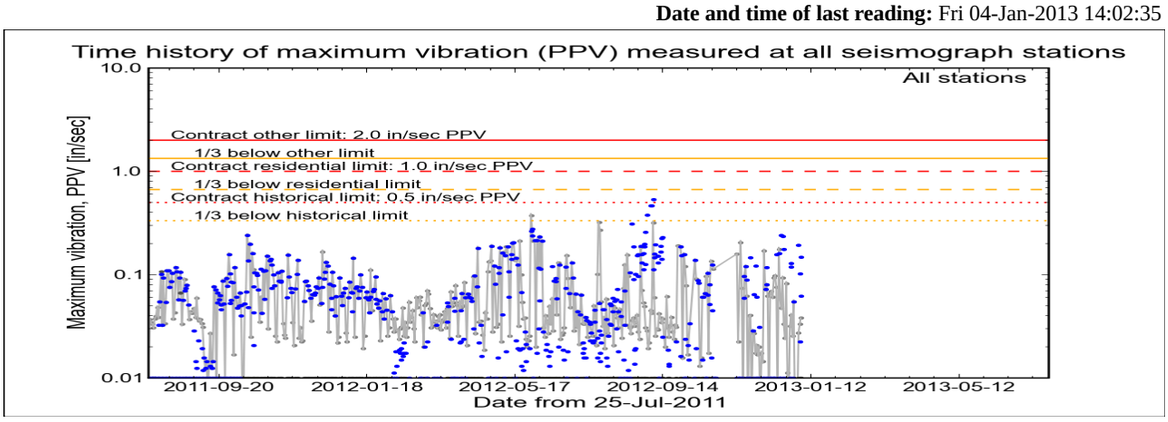
Date and time of last reading: Fri 04-Jan-2013 14:02:35



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Ambient	Sun 30-Dec-2012	17:32:36	0.0063	K-Sea Transportation

e4sciences | Earthworks, LLC 27 Glen Road, Sandy Hook, CT 06482 www.e4sciences.com

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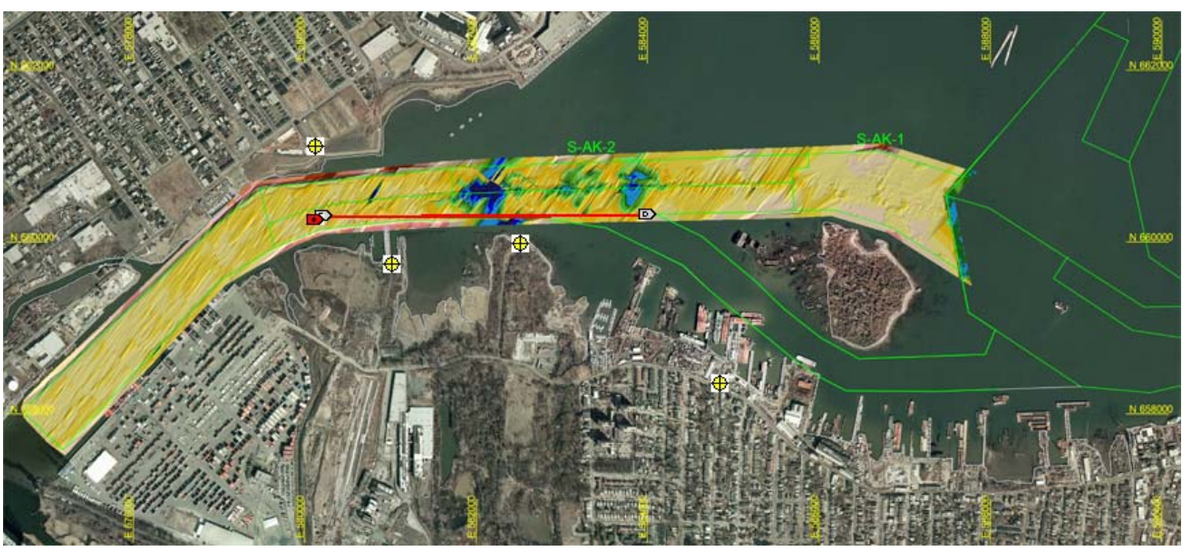

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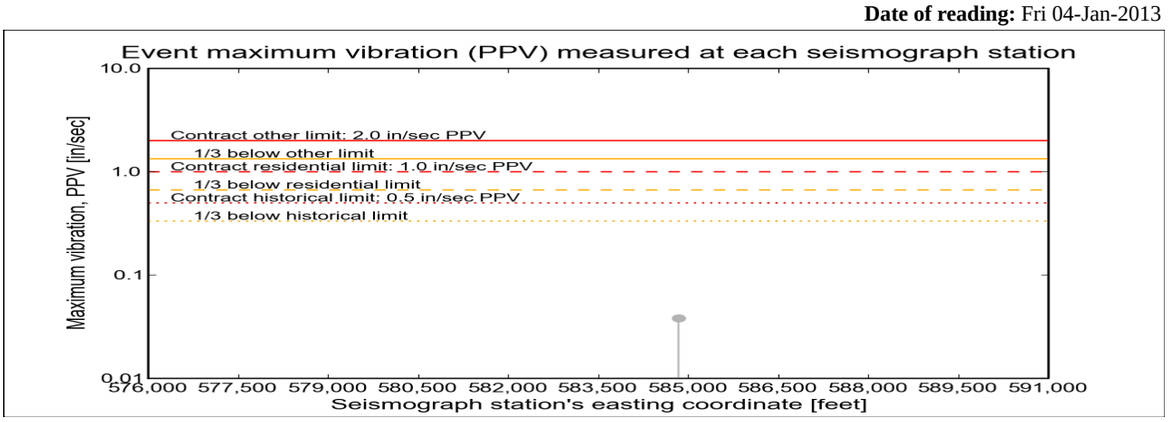
Date of reading: Fri 04-Jan-2013



(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
K-Sea Transportation - e4s006	Fri 04-Jan-2013	14:02:35	0.0381	Ambient

US Army Corps of Engineers®
New York District

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.

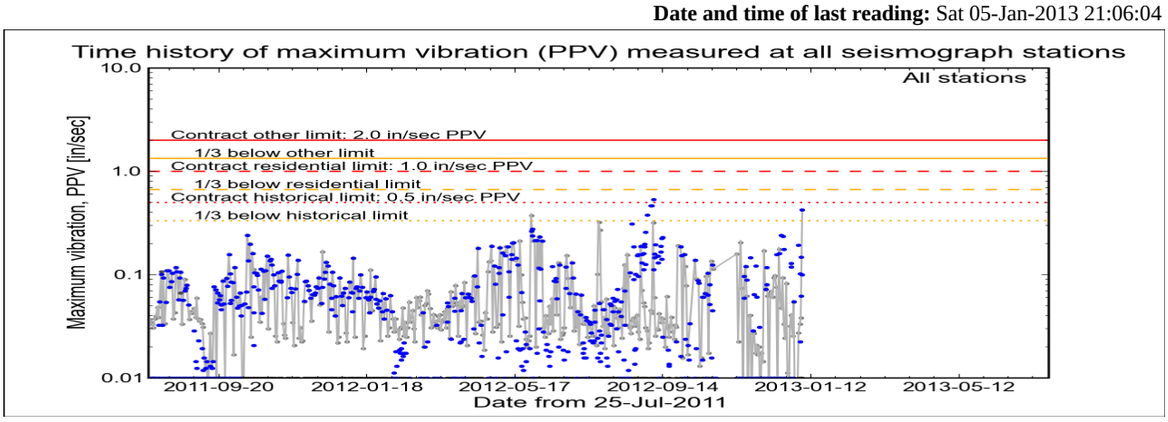
The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and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

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. The dark gray dots are predicted blast-vibration levels)*

Date and time of last reading: Sat 05-Jan-2013 21:06:04



(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
Blast	Sat 05-Jan-2013	21:06:04	0.4270	K-Sea Transportation
Blast	Fri 04-Jan-2013	14:02:35	0.0381	K-Sea Transportation
Ambient	Thu 03-Jan-2013	20:32:11	0.0331	K-Sea Transportation
Blast	Wed 02-Jan-2013	20:32:34	0.0275	K-Sea Transportation
Ambient	Tue 01-Jan-2013	00:48:36	0.0044	K-Sea Transportation
Ambient	Mon 31-Dec-2012	00:02:36	0.0050	K-Sea Transportation

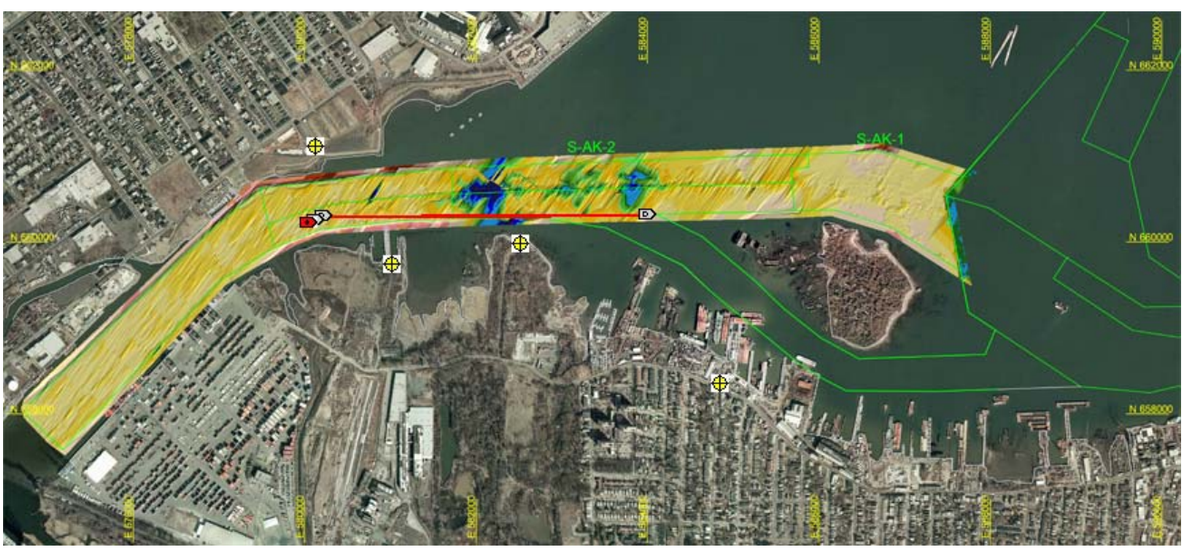
US Army Corps of Engineers®
New York District

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.

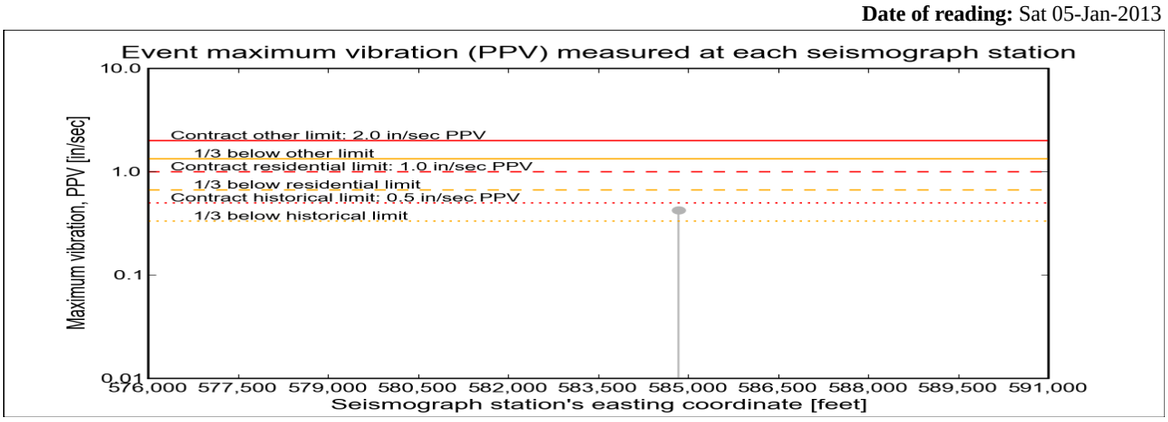
Click station for more information about the station.



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 ambient-vibration level. Black stems indicate blast-vibration level. Dark-gray stems indicate predicted blast-vibration level)*

Date of reading: Sat 05-Jan-2013



(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
K-Sea Transportation - e4s006	Sat 05-Jan-2013	21:06:04	0.427	Ambient

US Army Corps of Engineers®
New York District

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.

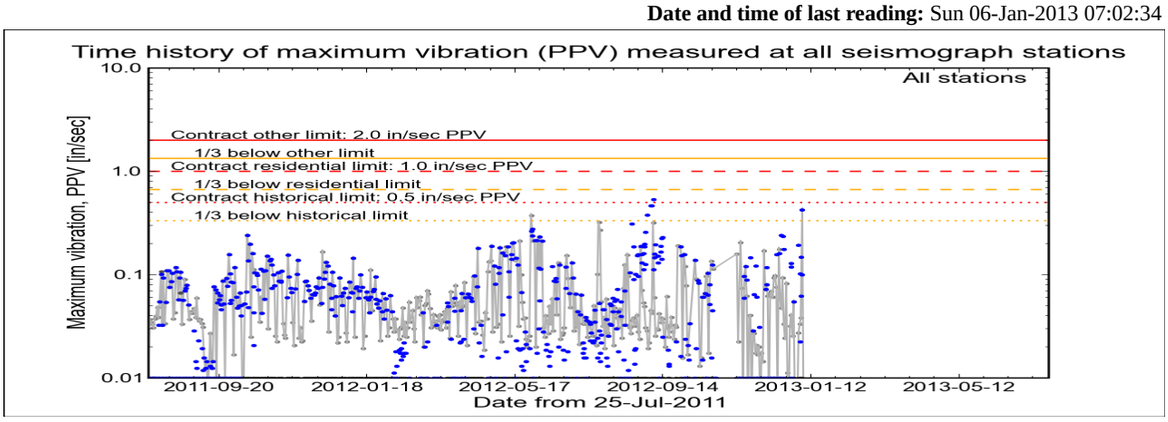
The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and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

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. The dark gray dots are predicted blast-vibration levels)*

Date and time of last reading: Sun 06-Jan-2013 07:02:34



(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	Sun 06-Jan-2013	07:02:34	0.0050	K-Sea Transportation
Blast	Sat 05-Jan-2013	21:06:04	0.4270	K-Sea Transportation
Blast	Fri 04-Jan-2013	14:02:35	0.0381	K-Sea Transportation
Ambient	Thu 03-Jan-2013	20:32:11	0.0331	K-Sea Transportation
Blast	Wed 02-Jan-2013	20:32:34	0.0275	K-Sea Transportation
Ambient	Tue 01-Jan-2013	00:48:36	0.0044	K-Sea Transportation

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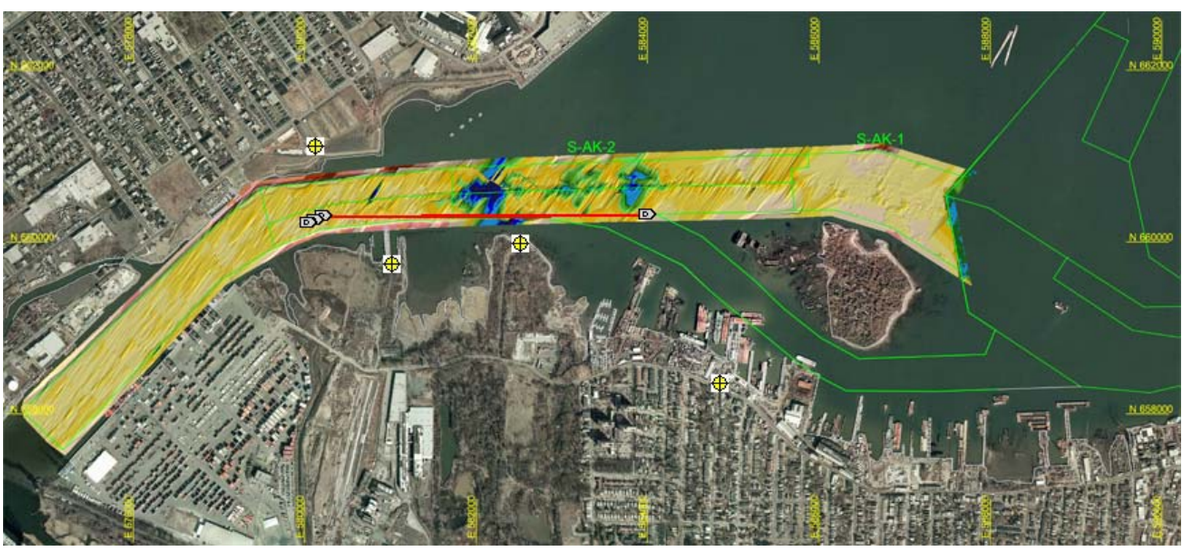
US Army Corps of Engineers®
New York District

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.

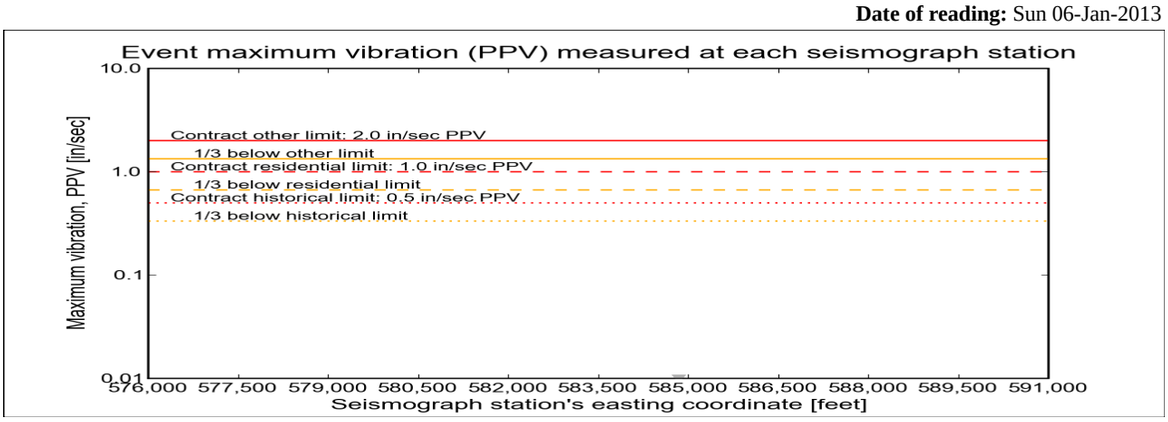
Click station for more information about the station.



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 ambient-vibration level. Black stems indicate blast-vibration level. Dark-gray stems indicate predicted blast-vibration level)*

Date of reading: Sun 06-Jan-2013



(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
K-Sea Transportation - e4s006	Sun 06-Jan-2013	07:02:34	0.005	Ambient