



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 23 – December 29, 2013

The following pages display the results from the USACE-NYD real-time website for the week of Monday, December 23, through Sunday, December 29, 2013.

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

We recorded vibrations in the S-AK-3 project area. The maximum vibration recorded was 0.0287 in/s recorded at Elizabeth Marina on December 27. 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 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:

- December 23
- December 24
- December 25
- December 26
- December 27
- December 28
- December 29

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.

Ground vibrations at NYCT were all below 0.02 in/s. Ground vibrations at Elizabethport were all below 0.02 in/s. Ground vibrations at Elizabeth Marina were all below 0.03 in/s. Blast vibration measurements were 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-157	2014-12-23 14:29	2,200 - 3,600	0.0237
AK-158	2014-12-24 11:45	2,340 - 3,740	0.015
AK-159	2014-12-27 09:20	2,480 - 3,880	0.0287
AK-160	2014-12-27 14:45	2,250 - 3,640	0.0225
AK-161	2014-12-28 10:00	2,600 - 4,000	0.0119
AK-162	2014-12-28 14:26	2,260 - 3,640	0.0144



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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
2013-12-29 Sun	Drillboat Apache	577450	657804	
2013-12-28 Sat	Drillboat Apache	577407	658113	
2013-12-27 Fri	Drillboat Apache	577432	658157	
2013-12-26 Thu	Drillboat Apache	577315	657643	
2013-12-25 Wed	Drillboat Apache	577309	657650	
2013-12-24 Tue	Drillboat Apache	577562	658289	
2013-12-23 Mon	Drillboat Apache	577642	658413	



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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.

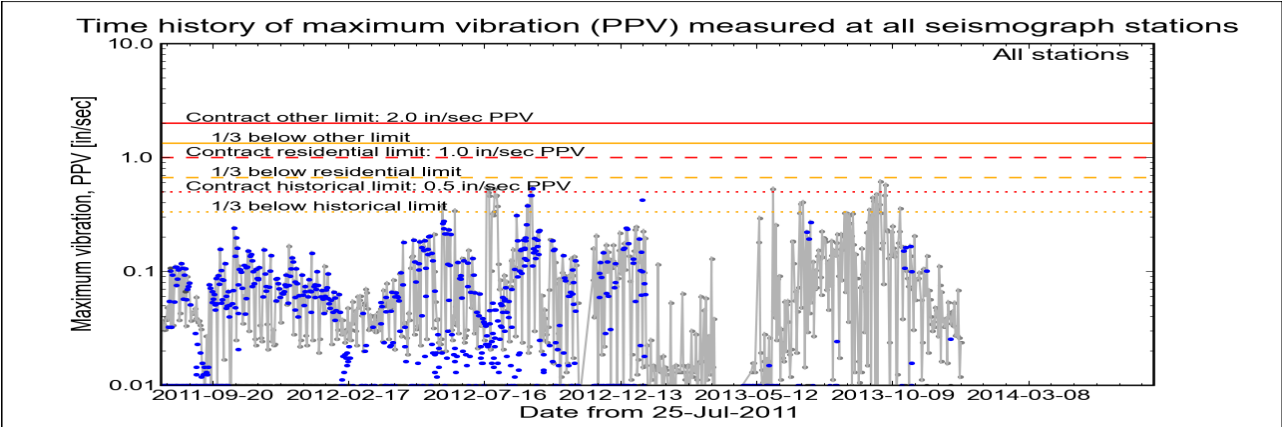
Click station for station information or click channel for event summary.



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: Mon 23-Dec-2013 19:17:37



(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
<a href="#">Ambient</a>	<a href="#">Mon 23-Dec-2013</a>	19:17:37	0.0237	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Sun 22-Dec-2013</a>	02:02:34	0.0119	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Sat 21-Dec-2013</a>	14:17:36	0.0262	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Fri 20-Dec-2013</a>	19:17:32	0.0681	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Thu 19-Dec-2013</a>	18:17:51	0.0269	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Wed 18-Dec-2013</a>	14:17:36	0.0281	<a href="#">Elizabeth Marina</a>



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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.

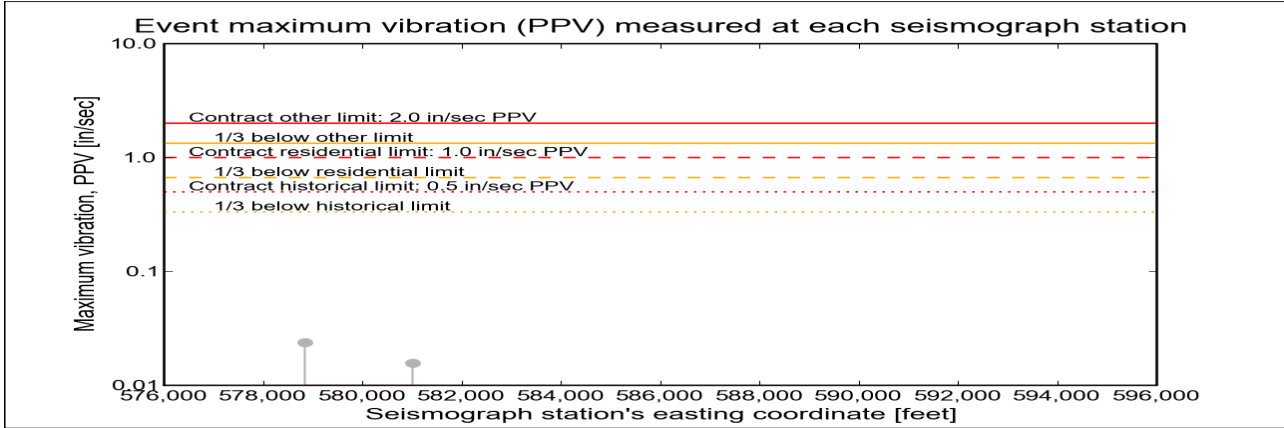
Click station for more information about the station.



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: Mon 23-Dec-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
<a href="#">Elizabeth Marina - e4s010</a>	Mon 23-Dec-2013	19:17:37	0.0237	<a href="#">Ambient</a>
<a href="#">NYCT - e4s008</a>	Mon 23-Dec-2013	19:23:01	0.0156	<a href="#">Ambient</a>



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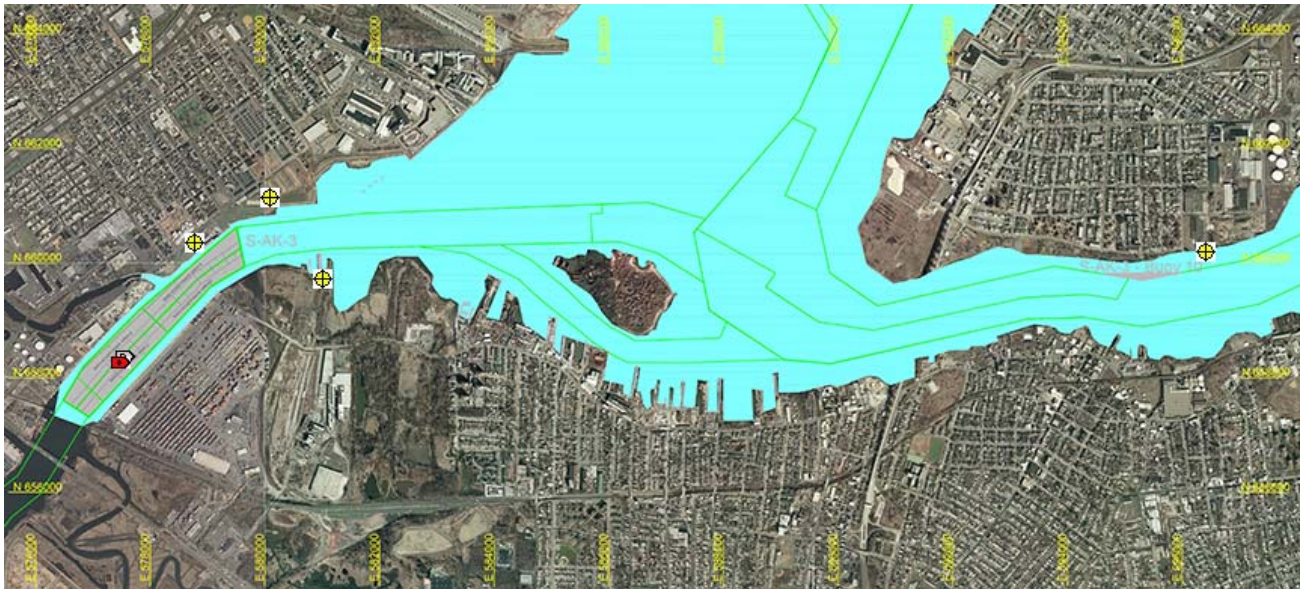
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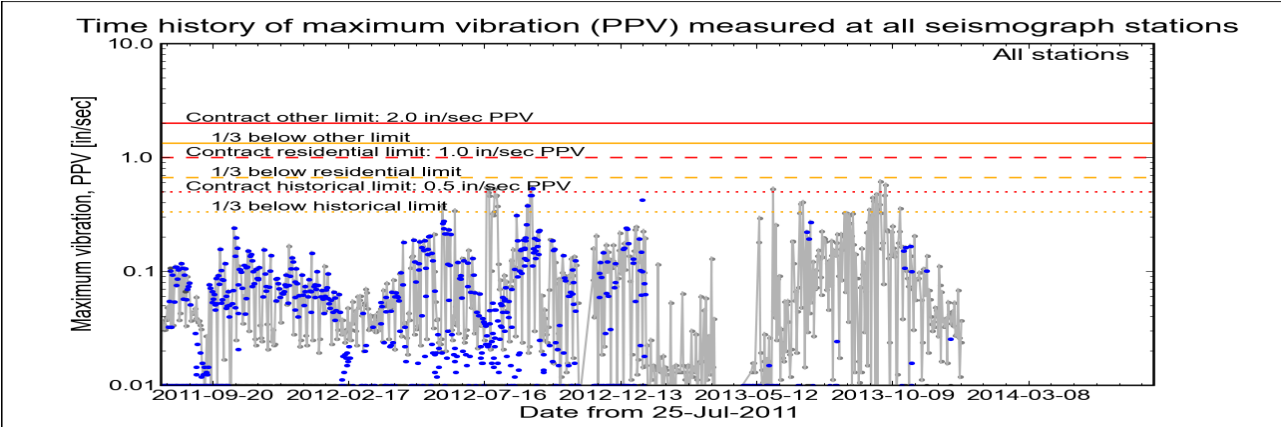
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Latest Event Summary

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Date and time of last reading: Tue 24-Dec-2013 16:35:21



(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
<a href="#">Ambient</a>	<a href="#">Tue 24-Dec-2013</a>	16:35:21	0.0369	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Mon 23-Dec-2013</a>	19:17:37	0.0237	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Sun 22-Dec-2013</a>	02:02:34	0.0119	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Sat 21-Dec-2013</a>	14:17:36	0.0262	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Fri 20-Dec-2013</a>	19:17:32	0.0681	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Thu 19-Dec-2013</a>	18:17:51	0.0269	<a href="#">Elizabeth Marina</a>



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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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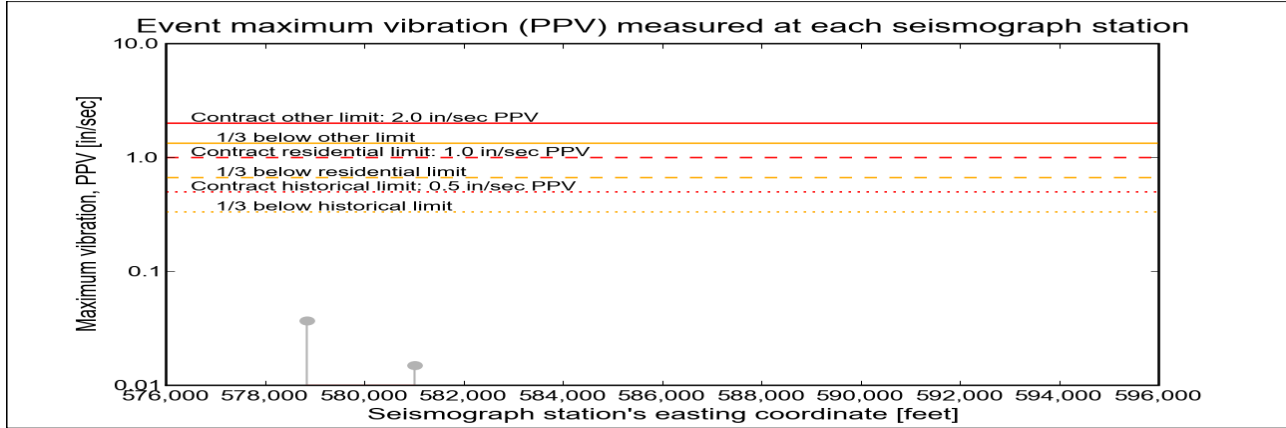
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Selected Event Summary

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Date of reading: Tue 24-Dec-2013



(Click on graph or [here](#) for larger view)

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Station	Date	Time	Max PPV (in / second)	Vibration Type
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<a href="#">NYCT - e4s008</a>	<a href="#">Tue 24-Dec-2013</a>	16:37:47	0.015	<a href="#">Ambient</a>



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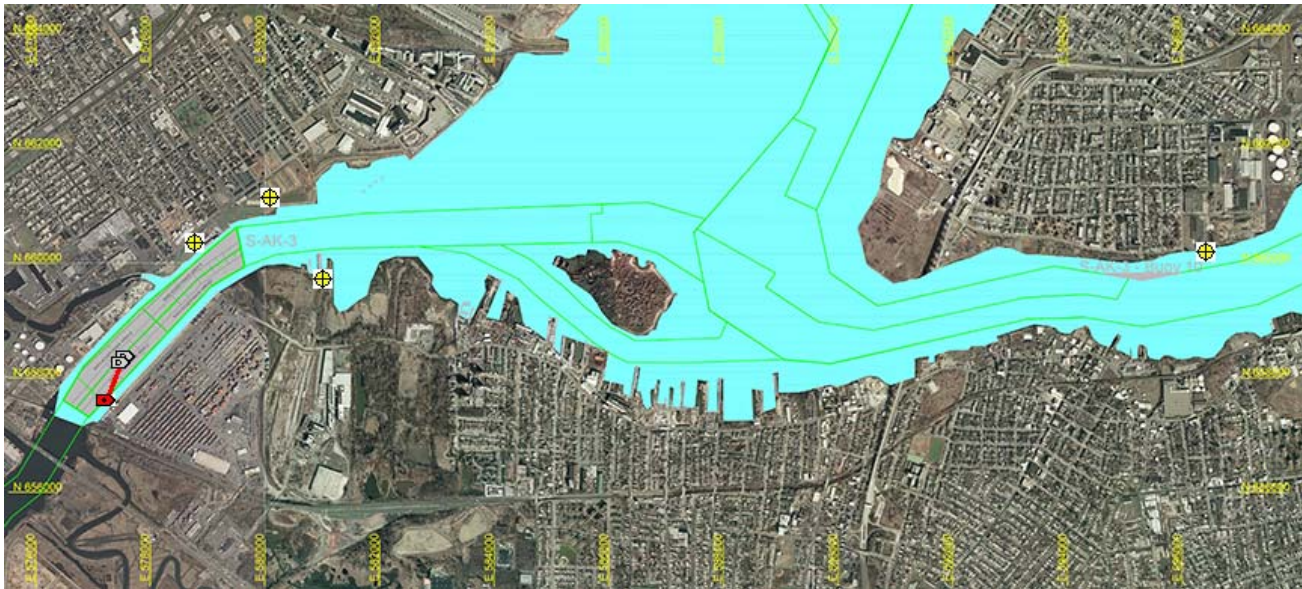
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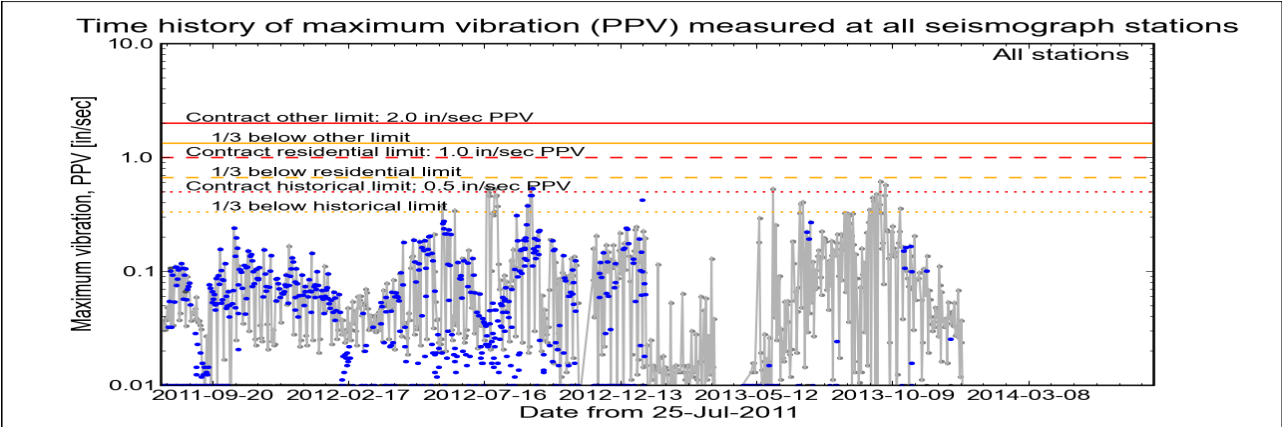
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Latest Event Summary

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Date and time of last reading: Wed 25-Dec-2013 03:52:47



(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
<a href="#">Ambient</a>	<a href="#">Wed 25-Dec-2013</a>	03:52:47	0.0081	<a href="#">NYCT</a>
<a href="#">Ambient</a>	<a href="#">Tue 24-Dec-2013</a>	16:35:21	0.0369	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Mon 23-Dec-2013</a>	19:17:37	0.0237	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Sun 22-Dec-2013</a>	02:02:34	0.0119	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Sat 21-Dec-2013</a>	14:17:36	0.0262	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Fri 20-Dec-2013</a>	19:17:32	0.0681	<a href="#">Elizabeth Marina</a>



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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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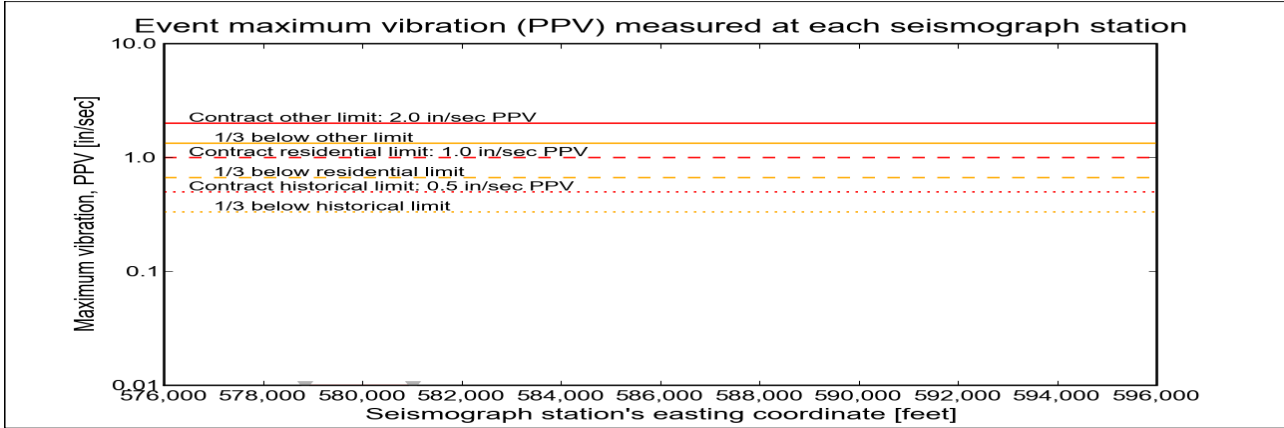
Click station for more information about the station.



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Date of reading: Wed 25-Dec-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
<a href="#">Elizabeth Marina - e4s010</a>	Wed 25-Dec-2013	04:17:39	0.00687	<a href="#">Ambient</a>
<a href="#">NYCT - e4s008</a>	Wed 25-Dec-2013	03:52:47	0.00812	<a href="#">Ambient</a>







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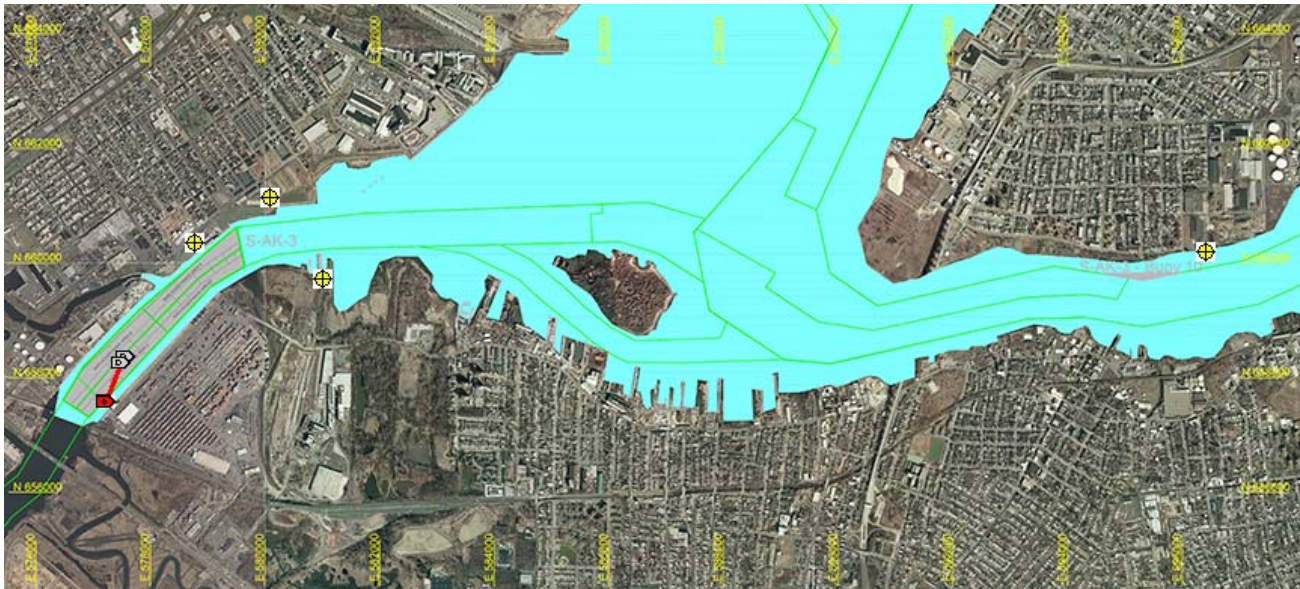
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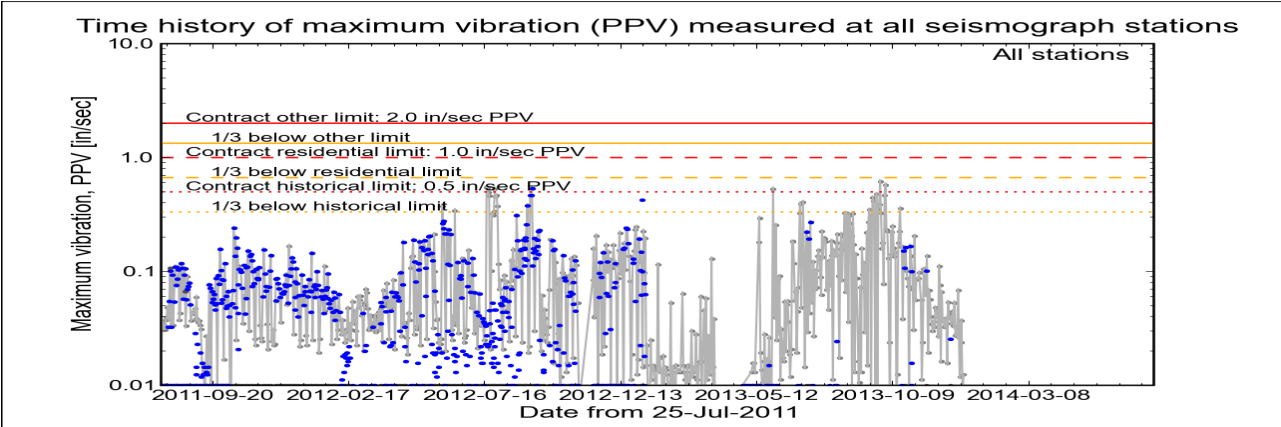
Click station for station information or click channel for event summary.



Latest Event Summary

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Date and time of last reading: Thu 26-Dec-2013 23:22:46



(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
<a href="#">Ambient</a>	<a href="#">Thu 26-Dec-2013</a>	23:22:46	0.0125	<a href="#">NYCT</a>
<a href="#">Ambient</a>	<a href="#">Wed 25-Dec-2013</a>	03:52:47	0.0081	<a href="#">NYCT</a>
<a href="#">Ambient</a>	<a href="#">Tue 24-Dec-2013</a>	16:35:21	0.0369	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Mon 23-Dec-2013</a>	19:17:37	0.0237	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Sun 22-Dec-2013</a>	02:02:34	0.0119	<a href="#">Elizabeth Marina</a>
<a href="#">Ambient</a>	<a href="#">Sat 21-Dec-2013</a>	14:17:36	0.0262	<a href="#">Elizabeth Marina</a>



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Arthur Kill Blasting Event Summary

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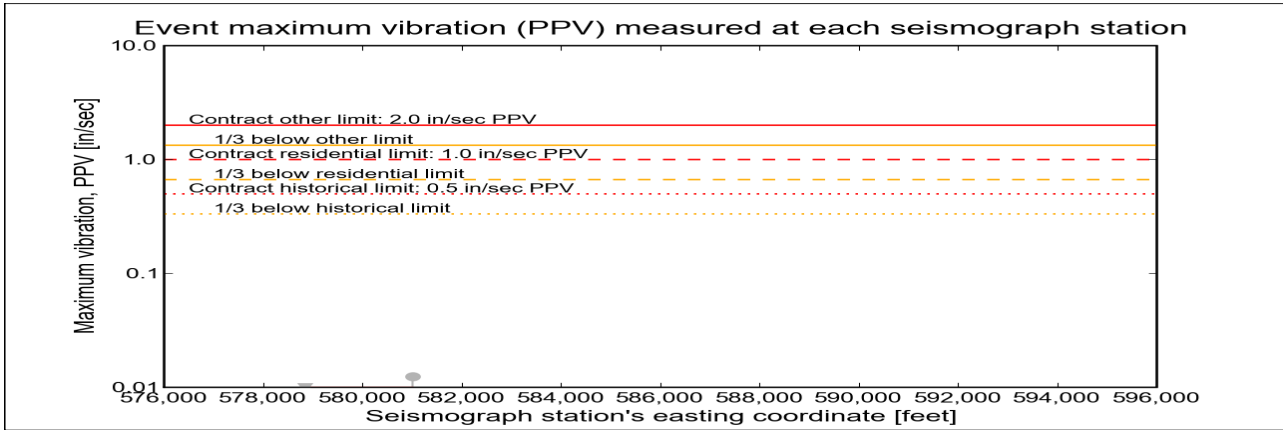
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(Click on graph or [here](#) for larger view)

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Station	Date	Time	Max PPV (in / second)	Vibration Type
<a href="#">Elizabeth Marina - e4s010</a>	Thu 26-Dec-2013	11:32:36	0.00937	<a href="#">Ambient</a>
<a href="#">NYCT - e4s008</a>	Thu 26-Dec-2013	23:22:46	0.0125	<a href="#">Ambient</a>







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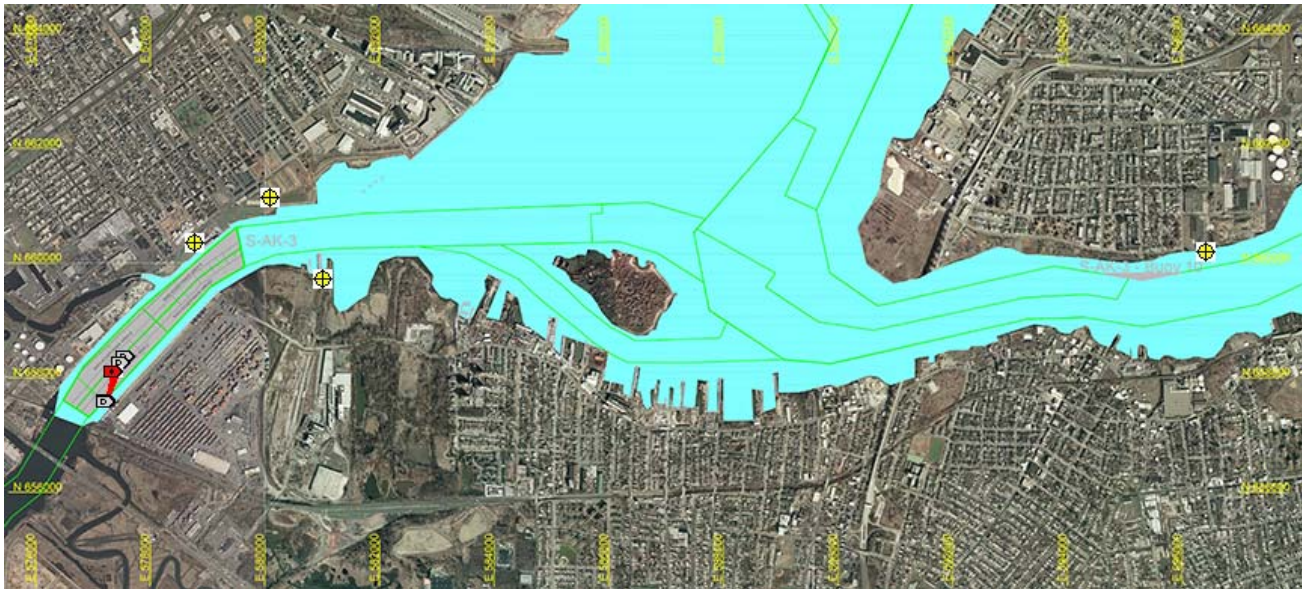
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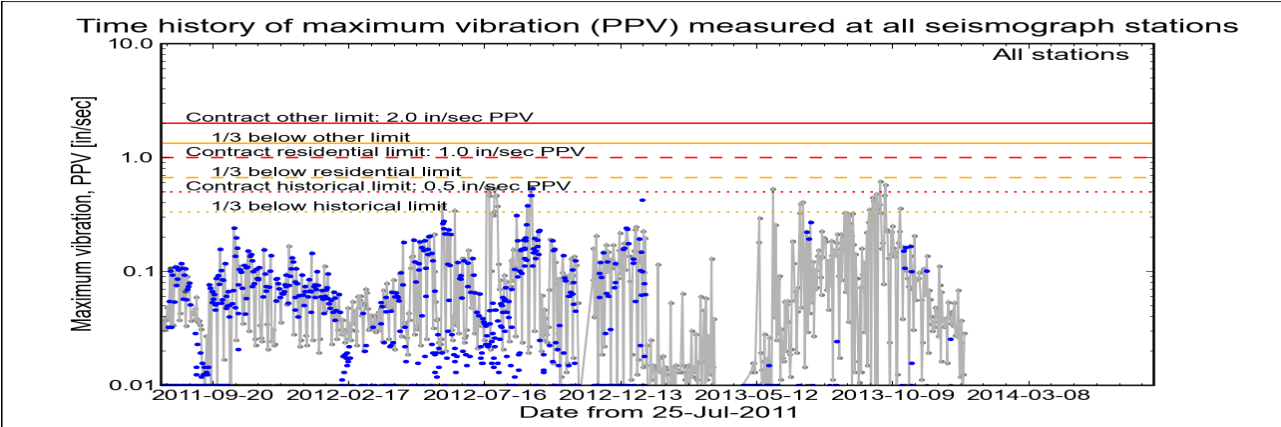
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Date and time of last reading: Fri 27-Dec-2013 14:17:36



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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.

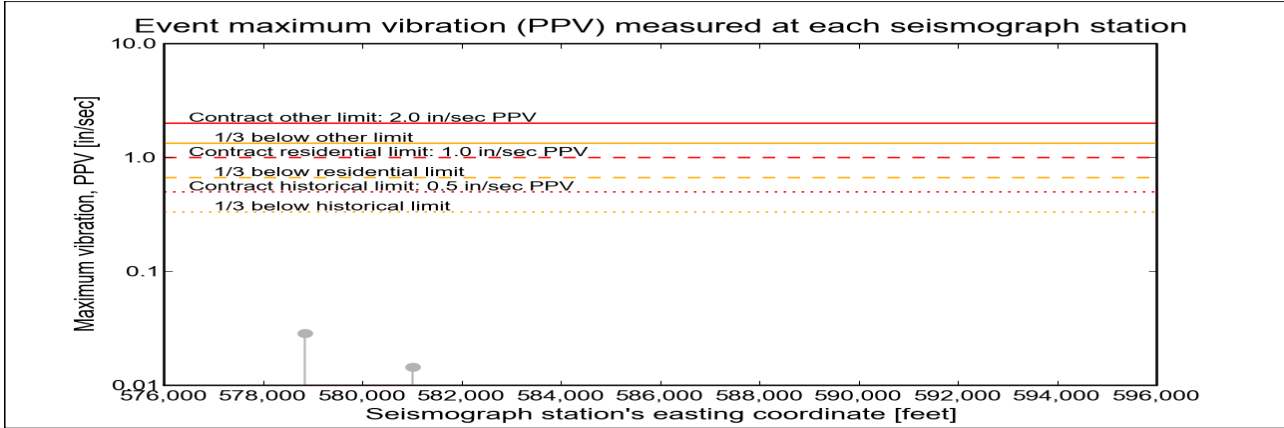
Click station for more information about the station.



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: Fri 27-Dec-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
<a href="#">Elizabeth Marina - e4s010</a>	Fri 27-Dec-2013	14:17:36	0.0287	<a href="#">Ambient</a>
<a href="#">NYCT - e4s008</a>	Fri 27-Dec-2013	14:07:45	0.0144	<a href="#">Ambient</a>



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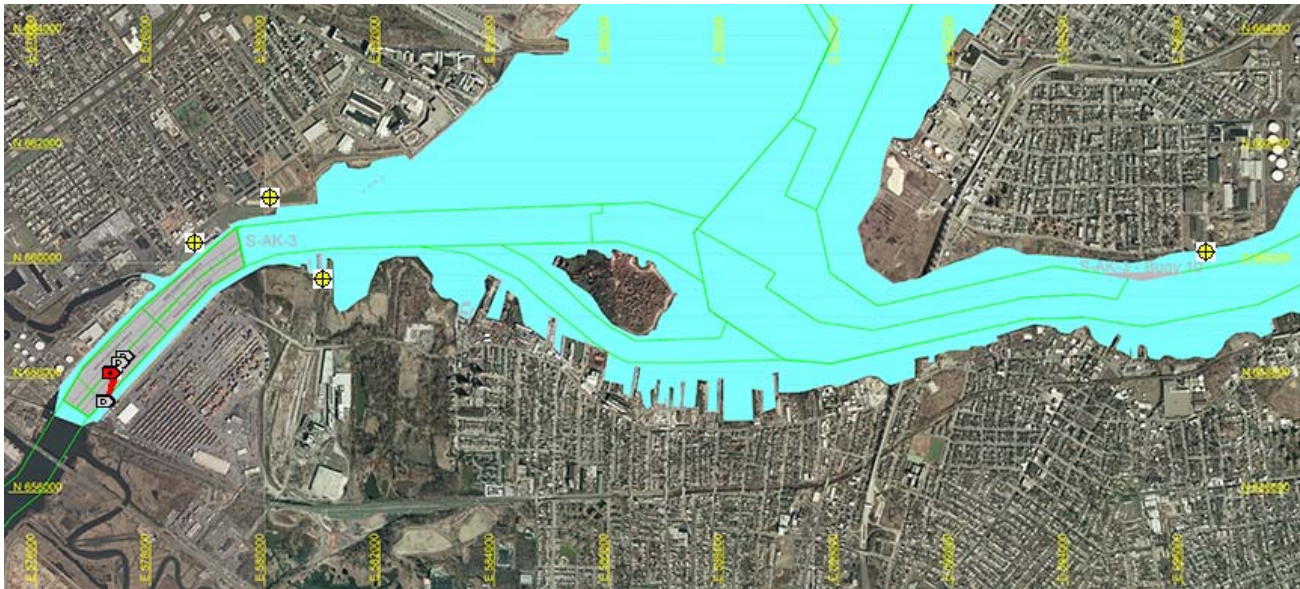
Arthur Kill Blast Vibration Summary

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.

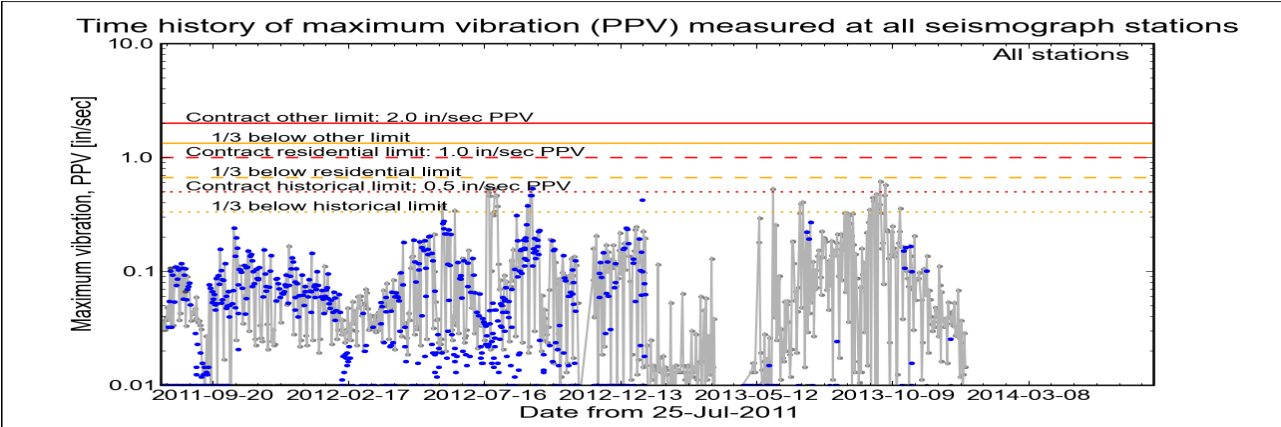
Click station for station information or click channel for event summary.



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 28-Dec-2013 19:22:46



(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 28-Dec-2013	19:22:46	0.0144	<a href="#">NYCT</a>
Ambient	Fri 27-Dec-2013	14:17:36	0.0287	<a href="#">Elizabeth Marina</a>
Ambient	Thu 26-Dec-2013	23:22:46	0.0125	<a href="#">NYCT</a>
Ambient	Wed 25-Dec-2013	03:52:47	0.0081	<a href="#">NYCT</a>
Ambient	Tue 24-Dec-2013	16:35:21	0.0369	<a href="#">Elizabeth Marina</a>
Ambient	Mon 23-Dec-2013	19:17:37	0.0237	<a href="#">Elizabeth Marina</a>



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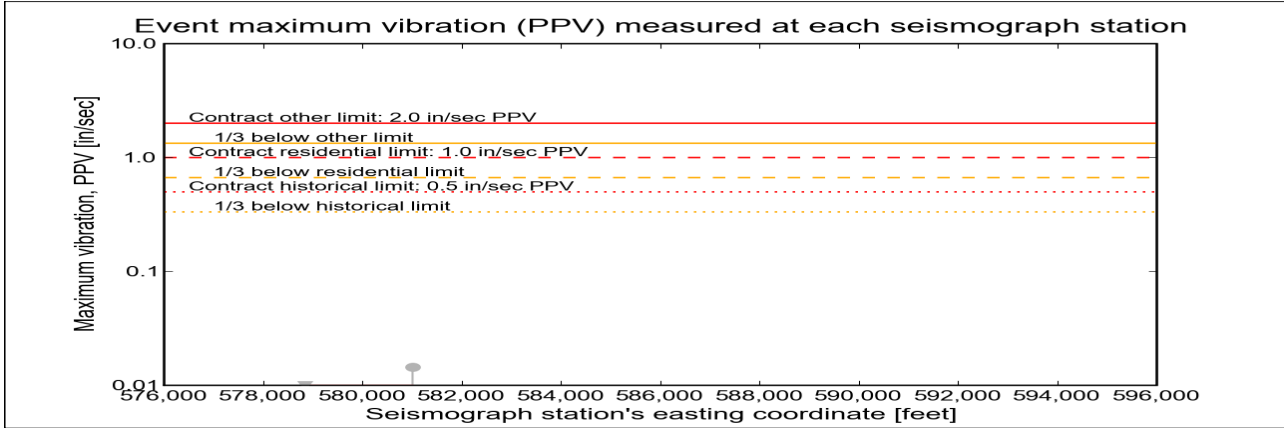
Click station for more information about the station.



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 28-Dec-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
<a href="#">Elizabeth Marina - e4s010</a>	Sat 28-Dec-2013	00:32:34	0.00437	<a href="#">Ambient</a>
<a href="#">NYCT - e4s008</a>	Sat 28-Dec-2013	19:22:46	0.0144	<a href="#">Ambient</a>







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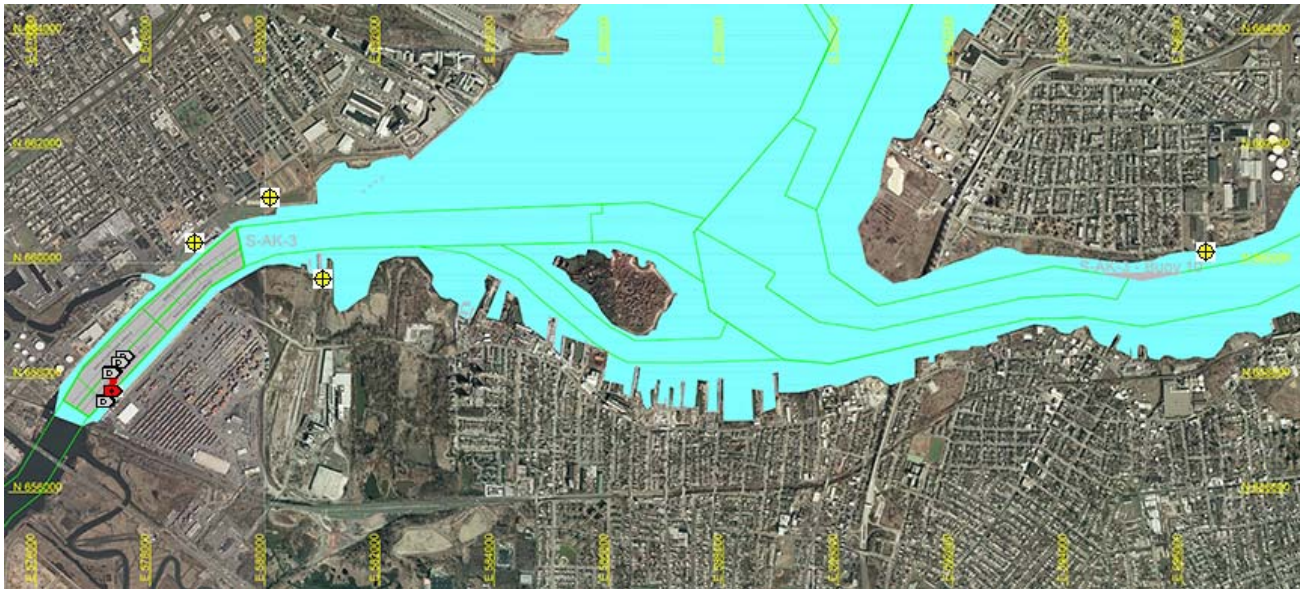
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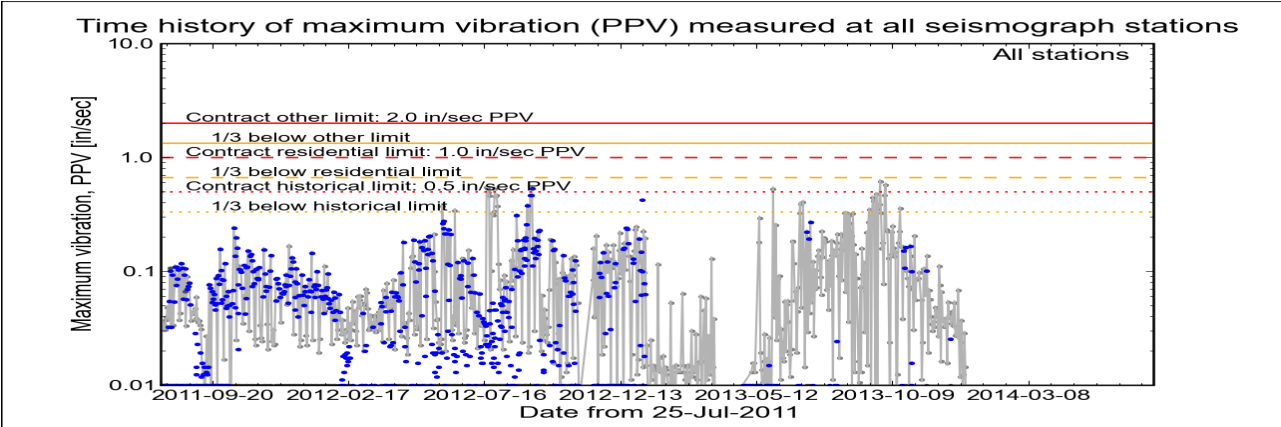
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Date and time of last reading: Sun 29-Dec-2013 00:07:46



(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 29-Dec-2013	00:07:46	0.0037	<a href="#">NYCT</a>
Ambient	Sat 28-Dec-2013	19:22:46	0.0144	<a href="#">NYCT</a>
Ambient	Fri 27-Dec-2013	14:17:36	0.0287	<a href="#">Elizabeth Marina</a>
Ambient	Thu 26-Dec-2013	23:22:46	0.0125	<a href="#">NYCT</a>
Ambient	Wed 25-Dec-2013	03:52:47	0.0081	<a href="#">NYCT</a>
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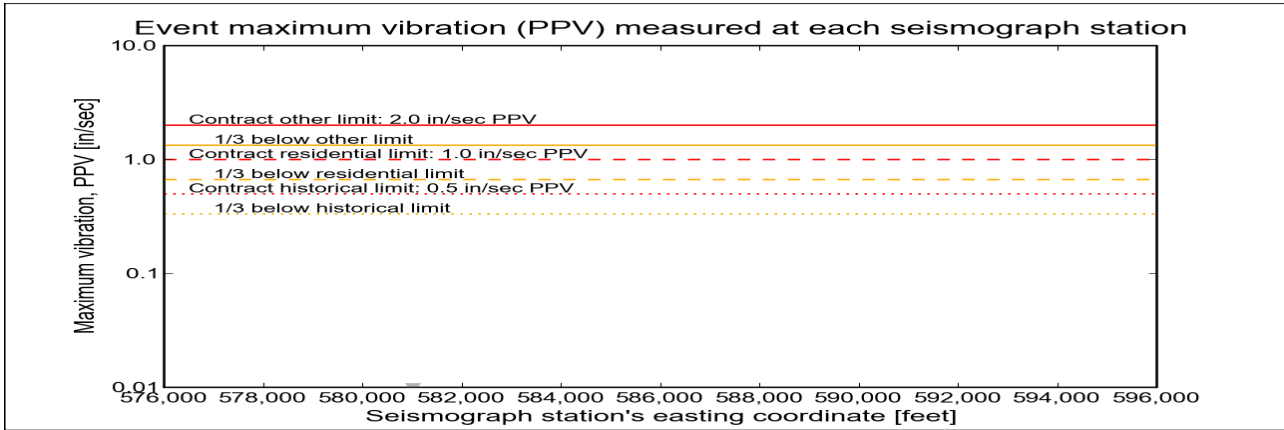
Click station for more information about the station.



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Date of reading: Sun 29-Dec-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
NYCT - e4s008	Sun 29-Dec-2013	00:07:46	0.00375	Ambient

