

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 November 25 – December 01, 2013

The following pages display the results from the USACE-NYD real-time website for the week of Monday, November 25, through Sunday, December 01, 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 0.111 in/s recorded at Elizabeth Marina on November 29. 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:

November 25 November 26 November 27 November 28 November 29 November 30 December 01

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 0.08 in/s. Ground vibrations at Elizabethport were all below 0.03 in/s. Ground vibrations at Elizabeth Marina were all below 0.12 in/s. Blast vibration measurements were 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-128	2013-11-25 13:16	1,280 - 2,900	0.0481
AK-129	2013-11-26 13:04	1,120 - 2,220	0.0456
AK-130	2013-11-27 09:08	1,420 - 3,050	0.0419
AK-131	2013-11-29 15:00	0,640 - 2,420	0.111
AK-132	2013-11-30 09:05	1,410 - 3,060	0.0444
AK-133	2013-11-30 15:15	0,790 - 2,550	0.0756

## Table 1. Blast Summary for this week



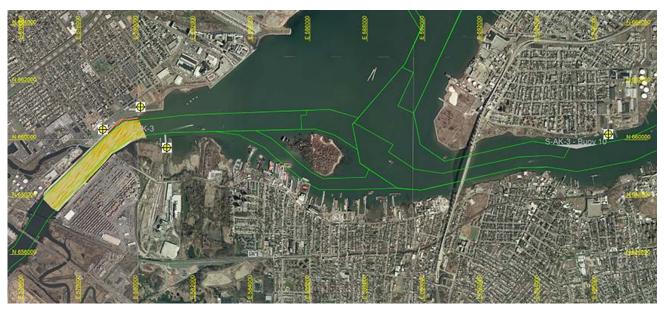
History Links

# **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	e			
Date	Dredge Name	Easting	Northing	Notes
2013-12-01 Sun				No Activity
2013-11-30 Sat				No Activity
2013-11-29 Fri				No Activity
2013-11-28 Thu				No Activity
2013-11-27 Wed				No Activity
2013-11-26 Tue				No Activity
2013-11-25 Mon				No Activity
_	Captores - Dave an ended			
_e4	sciences   Earthworks, LLC	27 Glen Road, Sandy	Hook, CT 06482	www.e4sciences.com



#### 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.

Links

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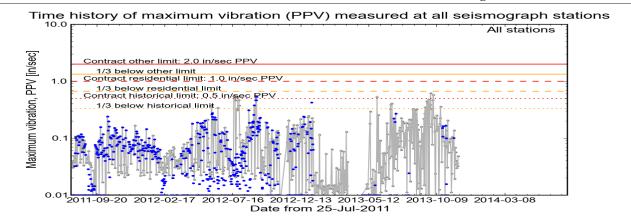
Click station for station information or click channel for event summary.



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 25-Nov-2013 18:02:53



(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 25-Nov-2013	18:02:53	0.0481	Elizabeth Marina
Ambient	Sun 24-Nov-2013	03:33:30	0.0325	Bayonne
Ambient	Sat 23-Nov-2013	16:02:35	0.0362	Elizabeth Marina
Ambient	Fri 22-Nov-2013	04:03:54	0.0300	Bayonne
Ambient	Thu 21-Nov-2013	01:02:37	0.0344	Bayonne
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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.

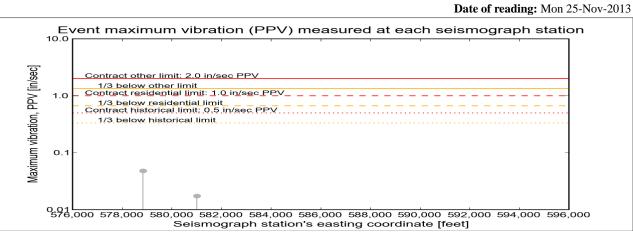
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Selected Event Summary

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(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Mon 25-Nov-2013	18:02:53	0.0481	Ambient
NYCT - e4s008	Mon 25-Nov-2013	18:07:44	0.0175	Ambient



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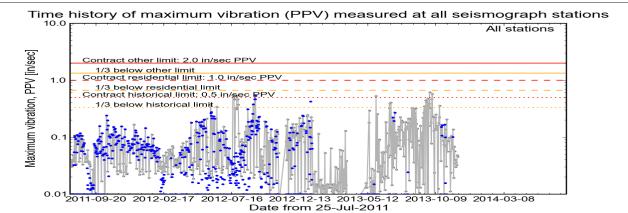
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Date and time of last reading: Tue 26-Nov-2013 18:02:35



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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
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Ambient	Mon 25-Nov-2013	18:02:53	0.0481	Elizabeth Marina
Ambient	Sun 24-Nov-2013	03:33:30	0.0325	Bayonne
Ambient	Sat 23-Nov-2013	16:02:35	0.0362	Elizabeth Marina
Ambient	Fri 22-Nov-2013	04:03:54	0.0300	Bayonne
Ambient	Thu 21-Nov-2013	01:02:37	0.0344	Bayonne
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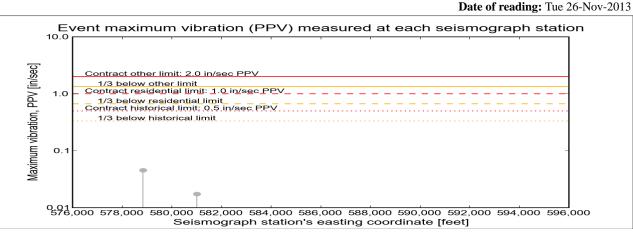
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(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Tue 26-Nov-2013	18:02:35	0.0456	Ambient
NYCT - e4s008	Tue 26-Nov-2013	17:52:45	0.0175	Ambient



Home Event Summary Stations: Dredges History

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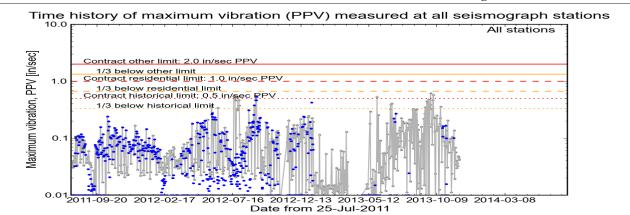
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Date and time of last reading: Wed 27-Nov-2013 14:02:35



(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	Wed 27-Nov-2013	14:02:35	0.0419	Elizabeth Marina
Ambient	Tue 26-Nov-2013	18:02:35	0.0456	Elizabeth Marina
Ambient	Mon 25-Nov-2013	18:02:53	0.0481	Elizabeth Marina
Ambient	Sun 24-Nov-2013	03:33:30	0.0325	Bayonne
Ambient	Sat 23-Nov-2013	16:02:35	0.0362	Elizabeth Marina
Ambient	Fri 22-Nov-2013	04:03:54	0.0300	Bavonne
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History Links

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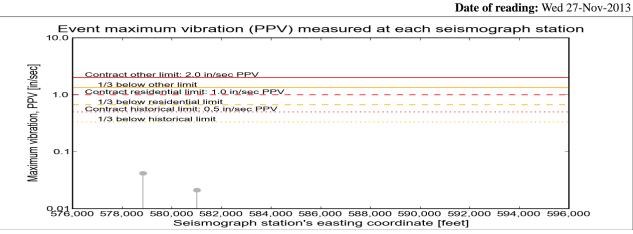
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(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Wed 27-Nov-2013	14:02:35	0.0419	Ambient
NYCT - e4s008	Wed 27-Nov-2013	11:52:47	0.0212	Ambient



Links

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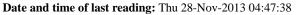
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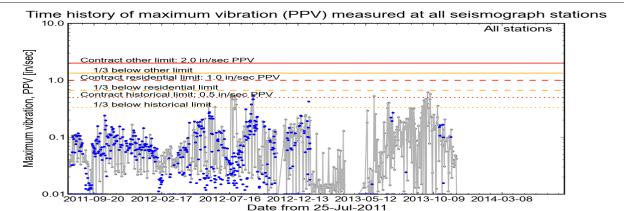
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Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Thu 28-Nov-2013	04:47:38	0.0081	Elizabeth Marina
Ambient	Wed 27-Nov-2013	14:02:35	0.0419	Elizabeth Marina
Ambient	Tue 26-Nov-2013	18:02:35	0.0456	Elizabeth Marina
Ambient	Mon 25-Nov-2013	18:02:53	0.0481	Elizabeth Marina
Ambient	Sun 24-Nov-2013	03:33:30	0.0325	Bayonne
Ambient	Sat 23-Nov-2013	16:02:35	0.0362	Elizabeth Marina
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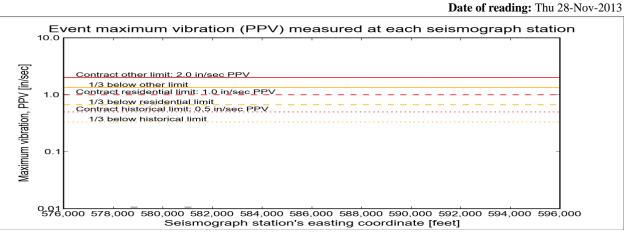
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(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Thu 28-Nov-2013	04:47:38	0.00812	Ambient
NYCT - e4s008	Thu 28-Nov-2013	12:52:45	0.00562	Ambient



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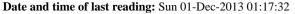
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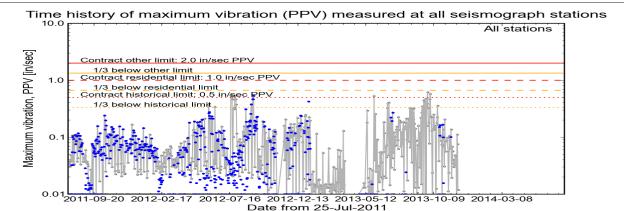
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Ambient	Sun 01-Dec-2013	01:17:32	0.0119	Elizabeth Marina
Ambient	Sat 30-Nov-2013	20:02:33	0.0756	Elizabeth Marina
Ambient	Fri 29-Nov-2013	19:47:35	0.1110	Elizabeth Marina
Ambient	Thu 28-Nov-2013	04:47:38	0.0081	Elizabeth Marina
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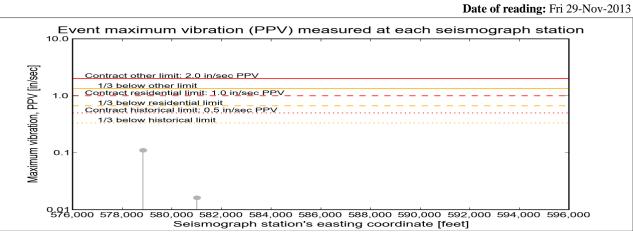
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Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Fri 29-Nov-2013	19:47:35	0.111	Ambient
NYCT - e4s008	Fri 29-Nov-2013	19:52:46	0.0162	Ambient



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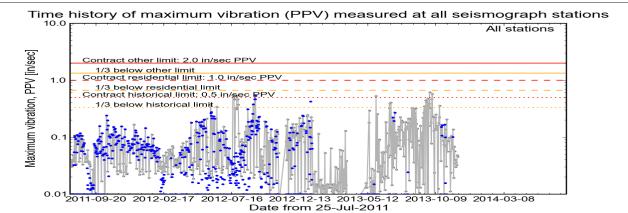
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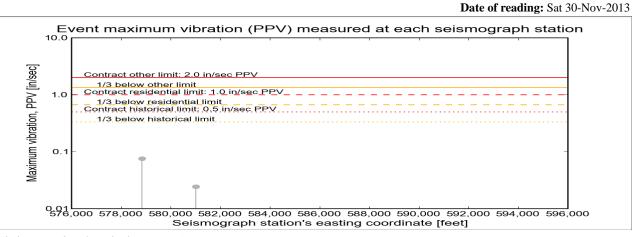
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Click station for more information about the station.



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.*)



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Sat 30-Nov-2013	20:02:33	0.0756	Ambient
NYCT - e4s008	Sat 30-Nov-2013	20:11:20	0.0244	Ambient



Home Event Summary Stations: Dredges History

#### 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.

Links

This page represents the most recent observations.

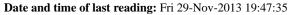
The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and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

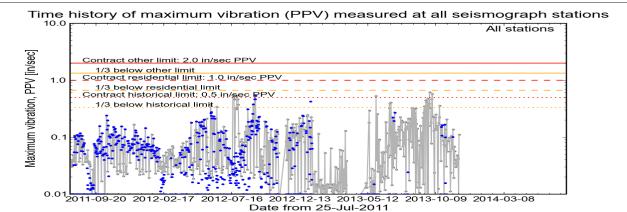
Click station for station information or click channel for event summary.



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*.)





(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	Fri 29-Nov-2013	19:47:35	0.1110	Elizabeth Marina
Ambient	Thu 28-Nov-2013	04:47:38	0.0081	Elizabeth Marina
Ambient	Wed 27-Nov-2013	14:02:35	0.0419	Elizabeth Marina
Ambient	Tue 26-Nov-2013	18:02:35	0.0456	Elizabeth Marina
Ambient	Mon 25-Nov-2013	18:02:53	0.0481	Elizabeth Marina
Ambient	Sun 24-Nov-2013	03:33:30	0.0325	Bavonne
	aussiances Earthwork	C 11.C 27.Class Re	ad Sandy Haals CT 0(4	(92)

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



Home Event Summary 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

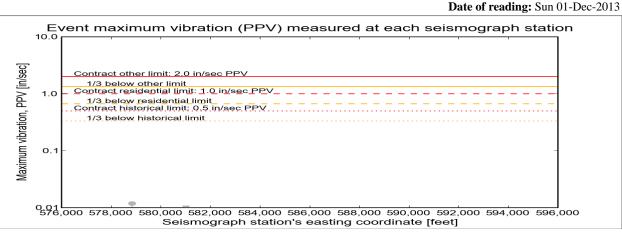
The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates 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 ambient-vibration level. Black stems indicate blast-vibration level. Dark-gray stems indicate predicted blast-vibration level.*)



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Sun 01-Dec-2013	01:17:32	0.0119	Ambient
NYCT - e4s008	Sun 01-Dec-2013	12:23:36	0.005	Ambient



#### 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.

Links

This page represents the most recent observations.

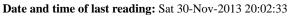
The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and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

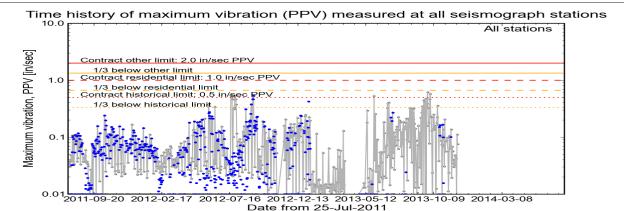
Click station for station information or click channel for event summary.



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.)





(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.

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Ambient	Tue 26-Nov-2013	18:02:35	0.0456	Elizabeth Marina
Ambient	Mon 25-Nov-2013	18:02:53	0.0481	Elizabeth Marina
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