

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 18 - November 24, 2013

The following pages display the results from the USACE-NYD real-time website for the week of Monday, November 18, through Sunday, November 24, 2013.

There were 11 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 0.0569 in/s recorded at Elizabeth Marina on November 19. 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 18

November 19

November 20

November 21

November 22

November 23

November 24

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  $0.06~\rm in/s$ . Ground vibrations at Elizabethport were all below  $0.03~\rm in/s$ . Ground vibrations at Elizabeth Marina were all below  $0.04~\rm in/s$ . Blast vibration measurements were below the contract vibration limits for this site.

Table 1. Blast Summary for this week

Blast	Date & Time	Distance from blast	e4s Max.
	EST/EDT of blast	to e4s stations (feet)	vibration (in/s)
AK-117	2013-11-18 09:59	1,160 - 2,440	0.05
AK-118	2013-11-18 15:13	1,080 - 2,300	0.05
AK-119	2013-11-19 09:04	1,190 - 2,430	0.0569
AK-120	2013-11-19 13:44	1,090 - 2,300	0.0256
AK-121	2013-11-20 09:04	1,290 - 2,580	0.0325
AK-122	2013-11-20 15:15	1,290 - 2,550	0.0175
AK-123	2013-11-21 09:30	1,440 - 2,750	0.0325
AK-124	2013-11-21 15:15	1,360 - 2,640	0.0187
AK-125	2013-11-22 09:01	1,470 - 2,750	0.0187
AK-126	2013-11-22 12:58	1,370 - 2,640	0.0244
AK-127	2013-11-23 11:04	1,260 - 2,910	0.0362



**New York District** 

USACE : Home : KVK Blasting

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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

2013-11-18 Mon No Activity

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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.

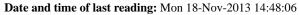
The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and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

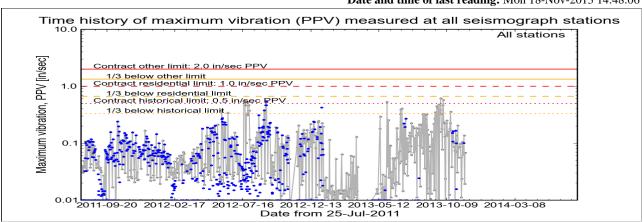
Click station for station information or click channel for event summary.



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	Mon 18-Nov-2013	14:48:06	0.0681	Elizabeth Marina
Ambient	Sun 17-Nov-2013	23:49:15	0.0194	Bayonne
Ambient	Sat 16-Nov-2013	14:02:35	0.1360	Elizabeth Marina
Blast	Fri 15-Nov-2013	14:02:35	0.1010	Elizabeth Marina
Ambient	Thu 14-Nov-2013	14:00:30	0.0625	Elizabeth Marina
Ambient	Wed 13-Nov-2013	14:02:35	0.1060	Elizabeth Marina
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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.

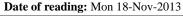
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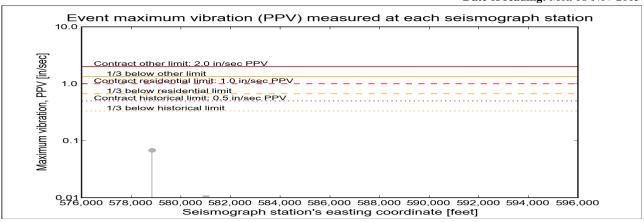
Click station for more information about the station.



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 18-Nov-2013	14:48:06	0.0681	Ambient
NYCT - e4s008	Mon 18-Nov-2013	01:40:34	0.00375	Ambient

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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.

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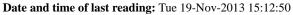
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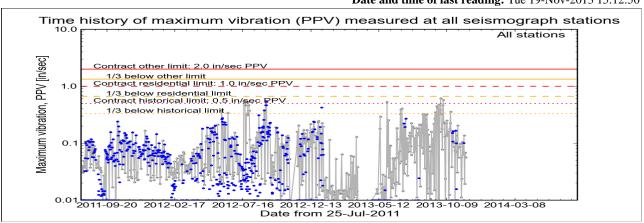
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Latest Event Summary

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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
Ambient	Tue 19-Nov-2013	15:12:50	0.0569	NYCT
Ambient	Mon 18-Nov-2013	14:48:06	0.0681	Elizabeth Marina
Ambient	Sun 17-Nov-2013	23:49:15	0.0194	Bayonne
Ambient	Sat 16-Nov-2013	14:02:35	0.1360	Elizabeth Marina
Blast	Fri 15-Nov-2013	14:02:35	0.1010	Elizabeth Marina
Ambient	Thu 14-Nov-2013	14:00:30	0.0625	Elizabeth Marina
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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.

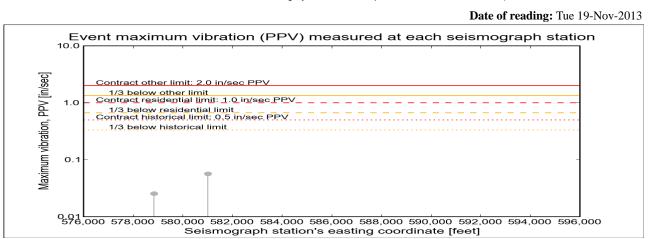
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The table below lists the date, time, and level of the maximum-vibration recording at each station for the selected event.

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Tue 19-Nov-2013	18:35:33	0.0256	Ambient
NYCT - e4s008	Tue 19-Nov-2013	15:12:50	0.0569	Ambient

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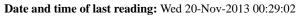
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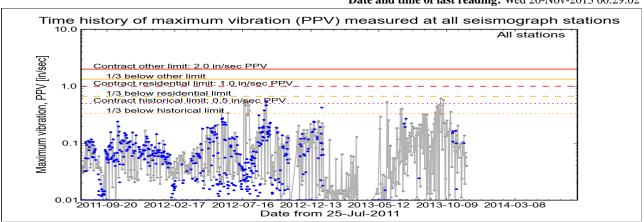
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Ambient	Wed 20-Nov-2013	00:29:02	0.0400	Bayonne
Ambient	Tue 19-Nov-2013	15:12:50	0.0569	NYCT
Ambient	Mon 18-Nov-2013	14:48:06	0.0681	Elizabeth Marina
Ambient	Sun 17-Nov-2013	23:49:15	0.0194	Bayonne
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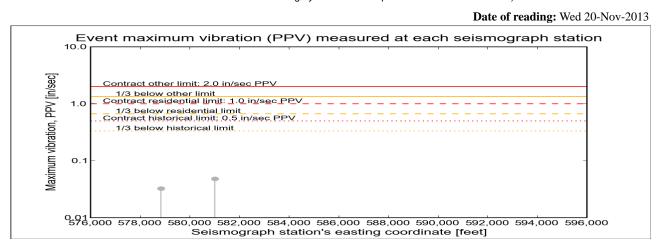
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Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Wed 20-Nov-2013	14:02:36	0.0325	Ambient
NYCT - e4s008	Wed 20-Nov-2013	14:29:08	0.0481	Ambient

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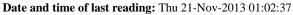
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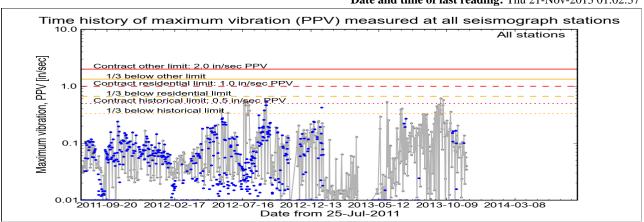
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Ambient	Thu 21-Nov-2013	01:02:37	0.0344	Bayonne
Ambient	Wed 20-Nov-2013	00:29:02	0.0400	Bayonne
Ambient	Tue 19-Nov-2013	15:12:50	0.0569	NYCT
Ambient	Mon 18-Nov-2013	14:48:06	0.0681	Elizabeth Marina
Ambient	Sun 17-Nov-2013	23:49:15	0.0194	Bayonne
Ambient	Sat 16-Nov-2013	14:02:35	0.1360	Elizabeth Marina
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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.

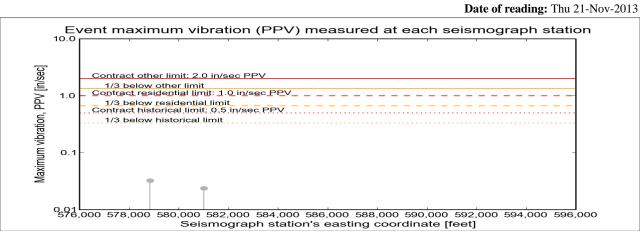
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Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Thu 21-Nov-2013	14:17:35	0.0325	Ambient
NYCT - e4s008	Thu 21-Nov-2013	14:22:45	0.0237	Ambient

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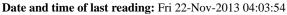
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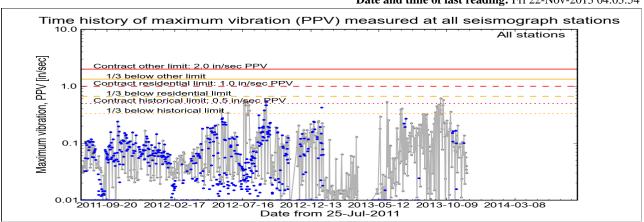
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Ambient	Wed 20-Nov-2013	00:29:02	0.0400	Bayonne
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Stations:

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History

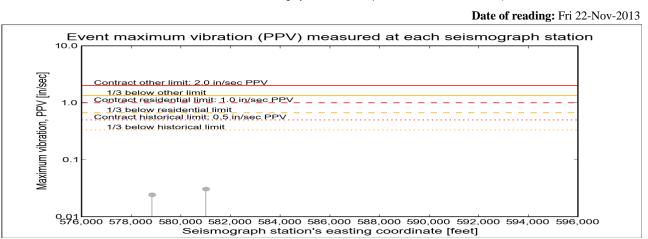
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NYCT - e4s008	Fri 22-Nov-2013	09:23:03	0.0306	Ambient

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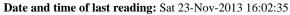
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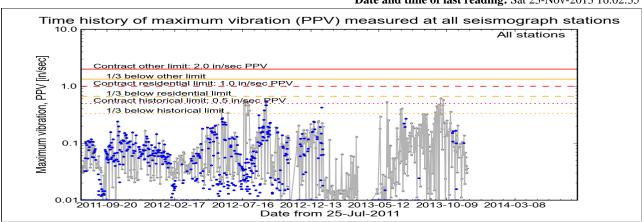
Click station for station information or click channel for event summary.



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.)





(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 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
Ambient	Wed 20-Nov-2013	00:29:02	0.0400	Bayonne
Ambient	Tue 19-Nov-2013	15:12:50	0.0569	NYCT
Ambient	Mon 18-Nov-2013	14:48:06	0.0681	Elizabeth Marina
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Stations:

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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.

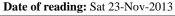
The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates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

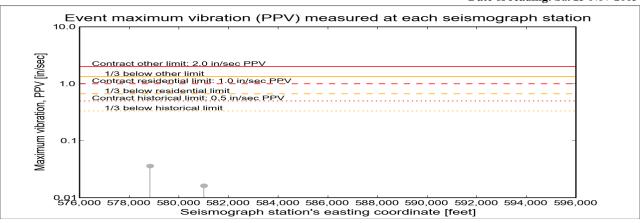
Click station for more information about the station.



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 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 23-Nov-2013	16:02:35	0.0362	Ambient
NYCT - e4s008	Sat 23-Nov-2013	15:52:45	0.0162	Ambient

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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.

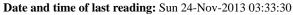
The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and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

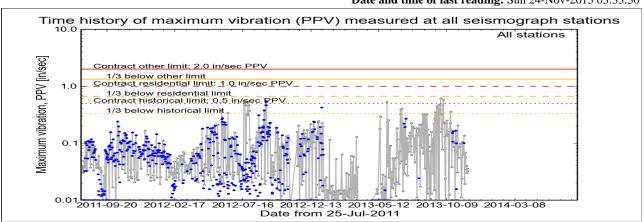
Click station for station information or click channel for event summary.



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.)





(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 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
Ambient	Wed 20-Nov-2013	00:29:02	0.0400	Bayonne
Ambient	Tue 19-Nov-2013	15:12:50	0.0569	NYCT
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**Event Summary** 

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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.

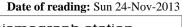
The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates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

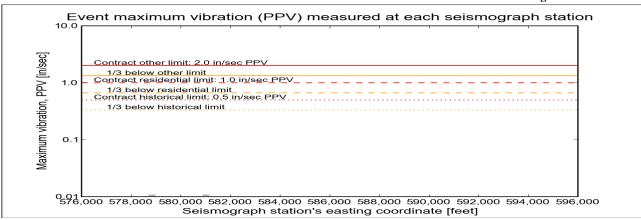
Click station for more information about the station.



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 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 24-Nov-2013	20:17:36	0.00562	Ambient
NYCT - e4s008	Sun 24-Nov-2013	16:37:46	0.00625	Ambient

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