

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 February 03 – February 09, 2014

The following pages display the results from the USACE-NYD real-time website for the week of Monday, February 03, through Sunday, February 09, 2014.

There were 7 blasts this week in the S-AK-3 project area.

Station e4s-010 (Elizabeth Marina) was down for maintenance this week.

We recorded vibrations in the S-AK-3 project area. The maximum vibration recorded was 0.0162 in/s recorded at Elizabethport on February 03. 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:

February 03

February 04

February 05

February 06

February 07

February 08

February 09

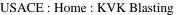
The even pages show the maximum vibration observed at each station along easting for each event.

The results for this week show the measurements at the two active stations: New York Container Terminal (NYCT) and Elizabethport.

Ground vibrations at NYCT were all below 0.02 in/s. Ground vibrations at Elizabethport were all below 0.02 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-197	2014-02-03 10:58	2,720 - 4,120	0.0162
AK-198	2014-02-04 10:30	2,870 - 4,270	0.0137
AK-199	2014-02-05 09:59	2,720 - 4,110	0.0119
AK-200	2014-02-06 09:09	2,880 - 4,270	0.0137
AK-201	2014-02-06 16:14	2,880 - 4,260	0.00875
AK-202	2014-02-07 15:35	3,000 - 4,410	0.0112
AK-203	2014-02-08 15:15	3,040 - 4,430	0.00937





Stations: Dredges **Event Summary** History Links

## **Dredge Position Summary**

This page summarizes dredge positions for the week. The Arthur Kill contract area is mapped with a top-of-rock map. The navigation grid is superimposed. The map shows dredge locations by colored symbols, connected by colored lines to the week's past locations marked by gray symbols. The map resets beginning the Monday of each week.

Mousing over a dredge location produces a pop-up text box giving dredge name, date of location, and easting and northing coordinates of the location in the NAD83 New Jersey State Plane coordinate system.

Click on a station for station information.



**Todays Dredge Position** 

Latest Week's **Dredge Position Summary** 

**Project** History List

The table below lists the date, name, easting, northing, and notes for the week's dredge positions. The position is the last reported dredge position of the day.

#### Dredge Location Table

Date	Dredge Name	Easting	Northing Notes
2014-02-09 Sun 2014-02-08 Sat 2014-02-07 Fri 2014-02-06 Thu 2014-02-05 Wed 2014-02-04 Tue	Drillboat Apache Drillboat Apache Drillboat Apache Drillboat Apache Drillboat Apache	577298 577145 577084 577270 577358 577242	657588 657726 657821 657821 657938 657865
2014-02-03 Mon	Drillboat Apache	<b>577305</b>	658000



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## **Arthur Kill Blast Vibration Summary**

New York District

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This page represents the most recent observations.

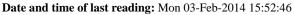
The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

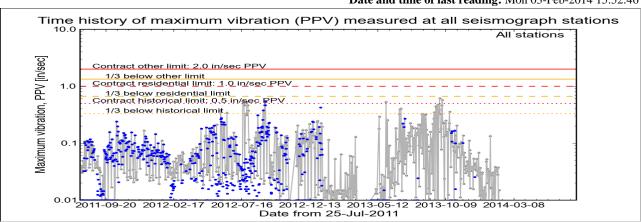
Click station for station information or click channel for event summary.



Latest Event Summary

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 03-Feb-2014	15:52:46	0.0150	NYCT
Ambient	Sun 02-Feb-2014	12:50:20	0.0056	Elizabeth Marina
Ambient	Sat 01-Feb-2014	14:02:36	0.0375	Elizabeth Marina
Ambient	Fri 31-Jan-2014	14:05:21	0.0281	Elizabeth Marina
Ambient	Thu 30-Jan-2014	14:05:20	0.0369	Elizabeth Marina
Ambient	Wed 29-Jan-2014	14:05:20	0.0319	Elizabeth Marina
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# **Arthur Kill Blasting Event Summary**

This page summarizes measurements of ground vibrations for the selected event. This page displays the maximum vibration recorded at each and every seismograph station during this event.

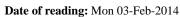
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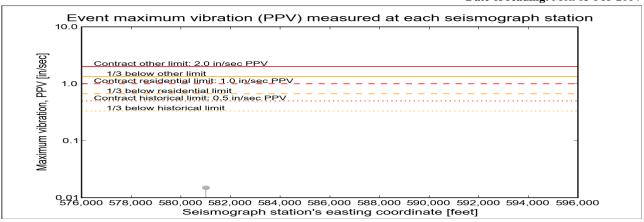
Click station for more information about the station.



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
NYCT - e4s008	Mon 03-Feb-2014	15:52:46	0.015	Ambient

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## **Arthur Kill Blast Vibration Summary**

New York District

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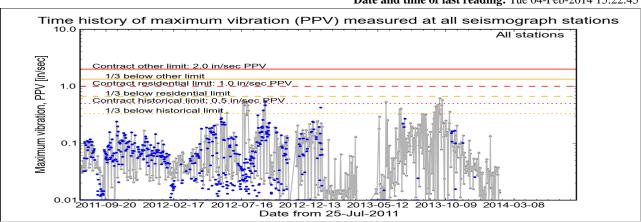
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Latest Event Summary

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Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Tue 04-Feb-2014	15:22:45	0.0137	NYCT
Ambient	Mon 03-Feb-2014	15:52:46	0.0150	NYCT
Ambient	Sun 02-Feb-2014	12:50:20	0.0056	Elizabeth Marina
Ambient	Sat 01-Feb-2014	14:02:36	0.0375	Elizabeth Marina
Ambient	Fri 31-Jan-2014	14:05:21	0.0281	Elizabeth Marina
Ambient	Thu 30-Jan-2014	14:05:20	0.0369	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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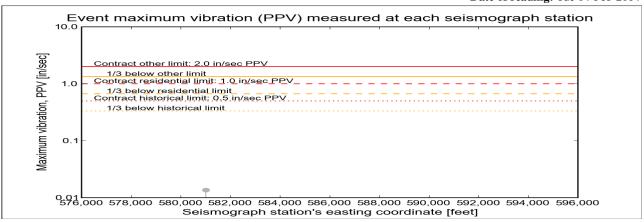
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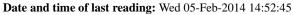
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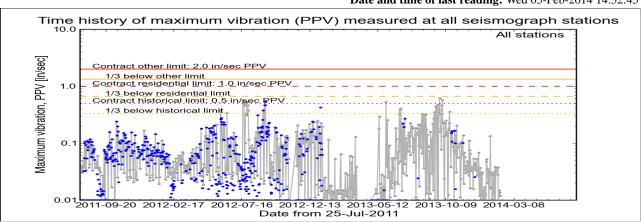
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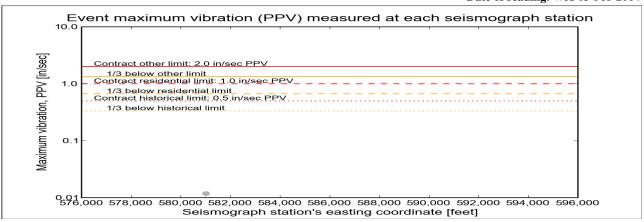
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Station	Date	Time	Max PPV (in / second)	Vibration Type
NYCT - e4s008	Wed 05-Feb-2014	14:52:45	0.0119	Ambient

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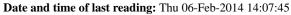
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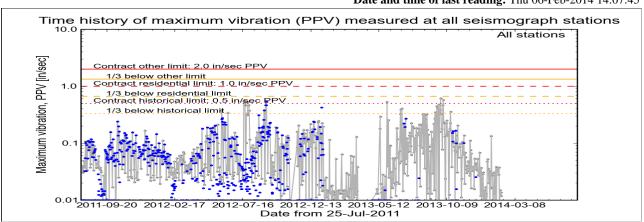
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Ambient	Thu 06-Feb-2014	14:07:45	0.0137	NYCT
Ambient	Wed 05-Feb-2014	14:52:45	0.0119	NYCT
Ambient	Tue 04-Feb-2014	15:22:45	0.0137	NYCT
Ambient	Mon 03-Feb-2014	15:52:46	0.0150	NYCT
Ambient	Sun 02-Feb-2014	12:50:20	0.0056	Elizabeth Marina
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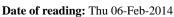
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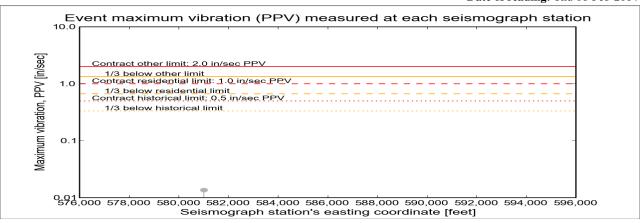
Click station for more information about the station.



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Station	n Date		Max PPV (in / second)	Vibration Type
NYCT - e4s008	Thu 06-Feb-2014	14:07:45	0.0137	Ambient

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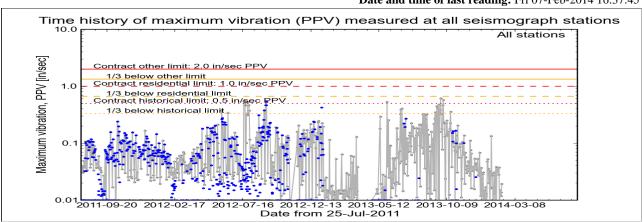
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Ambient	Thu 06-Feb-2014	14:07:45	0.0137	NYCT
Ambient	Wed 05-Feb-2014	14:52:45	0.0119	NYCT
Ambient	Tue 04-Feb-2014	15:22:45	0.0137	NYCT
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Stations:

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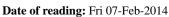
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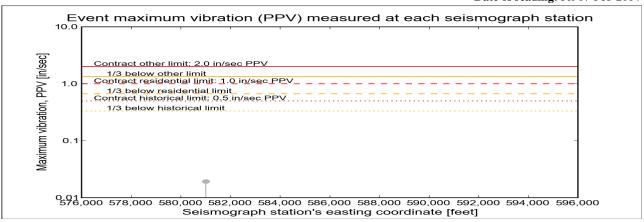
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NYCT - e4s008	Fri 07-Feb-2014	16:37:45	0.0194	Ambient

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Home Event Summary Stations: Dredges History Links

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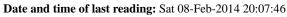
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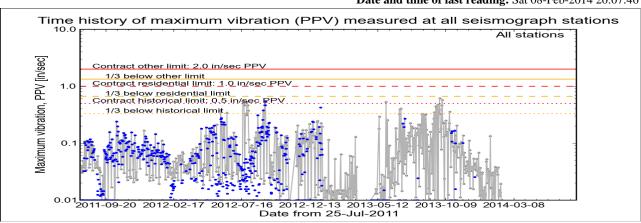
Click station for station information or click channel for event summary.



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)

1 of 1

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 08-Feb-2014	20:07:46	0.0094	NYCT
Ambient	Fri 07-Feb-2014	16:37:45	0.0194	NYCT
Ambient	Thu 06-Feb-2014	14:07:45	0.0137	NYCT
Ambient	Wed 05-Feb-2014	14:52:45	0.0119	NYCT
Ambient	Tue 04-Feb-2014	15:22:45	0.0137	NYCT
Ambient	Mon 03-Feb-2014	15:52:46	0.0150	NYCT
e	4sciences   Earthworks,	LLC 27 Glen Road, Sa	andy Hook, CT 064	www.e4sciences.com

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Stations:

Dredges

History Links

# **Arthur Kill Blasting Event Summary**

This page summarizes measurements of ground vibrations for the selected event. This page displays the maximum vibration recorded at each and every seismograph station during this event.

The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates in the New Jersey State Plane coordinate system are in yellow. The locations of active seismograph stations are marked by yellow station symbols. (e4sciences stations are circles. CDB stations are triangles.) Selecting a station activates its station page.

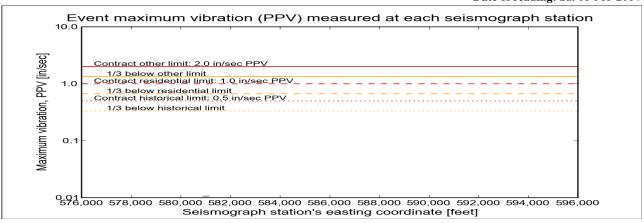
Click station for more information about the station.



Selected Event Summary

The graph below plots the maximum vibration during the selected event period (blast or ambient) recorded at each and every seismograph station along the easting positions. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). If the maximum vibration level at a station is below 0.01 in/sec, the marker is a v-shaped triangle at 0.01 in/sec. (Light-gray stems indicate ambientvibration level. Black stems indicate blast-vibration level. Dark-gray stems indicate predicted blast-vibration level.)

Date of reading: Sat 08-Feb-2014



(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	Sat 08-Feb-2014	20:07:46	0.00937	Ambient

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US Army Corps of Engineers® New York District

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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.

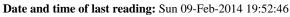
The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and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

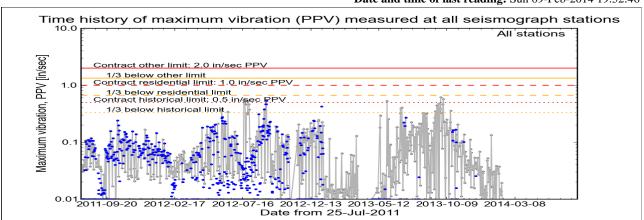
Click station for station information or click channel for event summary.



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 09-Feb-2014	19:52:46	0.0037	NYCT
Ambient	Sat 08-Feb-2014	20:07:46	0.0094	NYCT
Ambient	Fri 07-Feb-2014	16:37:45	0.0194	NYCT
Ambient	Thu 06-Feb-2014	14:07:45	0.0137	NYCT
Ambient	Wed 05-Feb-2014	14:52:45	0.0119	NYCT
Ambient	Tue 04-Feb-2014	15:22:45	0.0137	NYCT
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Stations:

Dredges

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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.

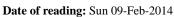
The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates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

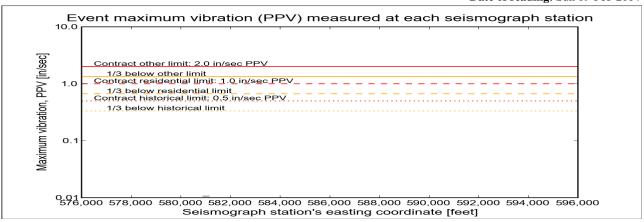
Click station for more information about the station.



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
NYCT - e4s008	Sun 09-Feb-2014	19:52:46	0.00375	Ambient

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