



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 10 – February 16, 2014

The following pages display the results from the USACE-NYD real-time website for the week of Monday, February 10, through Sunday, February 16, 2014.

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

We recorded vibrations in S-AK-3 project area. The maximum vibration recorded was 0.0275 in/s recorded at Elizabeth Marina on February 15. 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 and 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 10
- February 11
- February 12
- February 13
- February 14
- February 15
- February 16

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. The station locations are on each page.

Ground vibrations at NYCT were all below 0.02 in/s. Vibrations at Elizabethport were all below 0.02 in/s. Vibrations at Elizabeth Marina were all below 0.03 in/s. All blast vibration measurements are below the contract vibration limits for this site.

Table 1. Blast Summary for this week

Blast	Date & Time EST/EDT of blast	Distance from blast to e4s stations (feet)	e4s Max. vibration (in/s)
AK-204	2014-02-10 14:25	2,740 - 4,110	0.0187
AK-205	2014-02-11 14:31	3,160 - 4,560	0.0244
AK-206	2014-02-12 09:05	2,760 - 4,120	0.0137
AK-207	2014-02-13 08:47	2,900 - 4,270	0.0181
AK-208	2014-02-14 09:05	3,050 - 4,430	0.0194
AK-209	2014-02-15 10:45	3,300 - 4,700	0.0275



US Army Corps
of Engineers®
New York District

Home Event Summary Stations: **Dredges** 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
2014-02-16 Sun				No Activity
2014-02-15 Sat				No Activity
2014-02-14 Fri				No Activity
2014-02-13 Thu	Drillboat Apache	577325	657945	
2014-02-12 Wed	Drillboat Apache	577483	658011	
2014-02-11 Tue	Drillboat Apache	576993	657685	
2014-02-10 Mon	Drillboat Apache	577430	658069	



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



US Army Corps
of Engineers®
New York District

Home Event Summary Stations: Dredges History Links

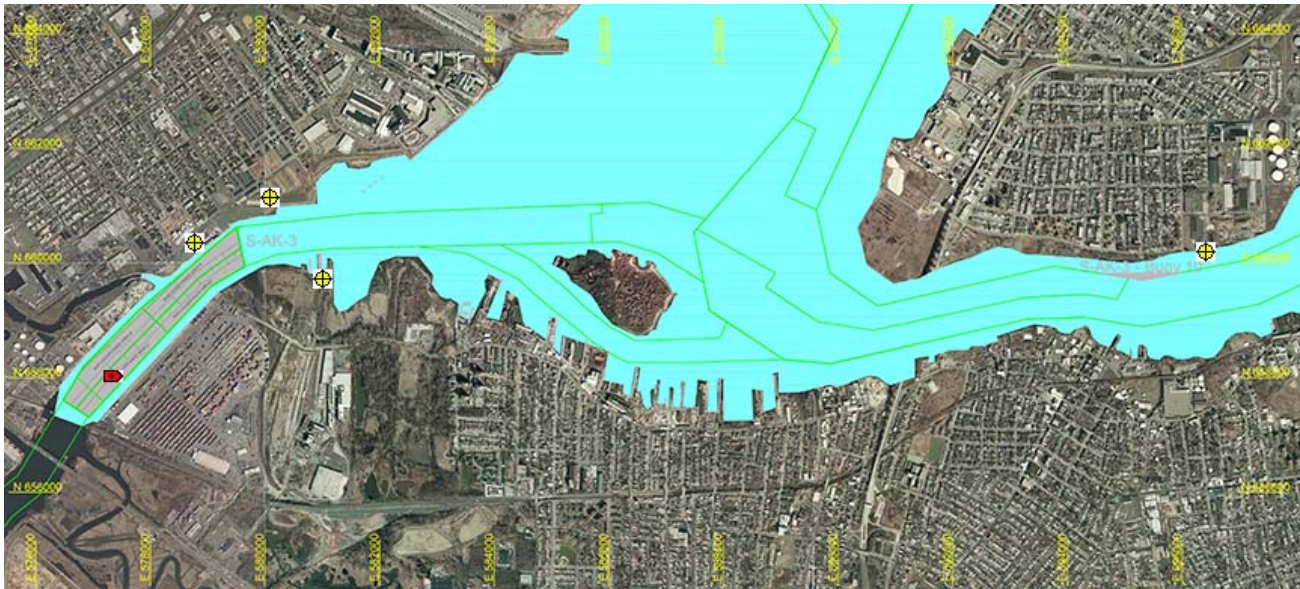
Arthur Kill Blast Vibration Summary

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.

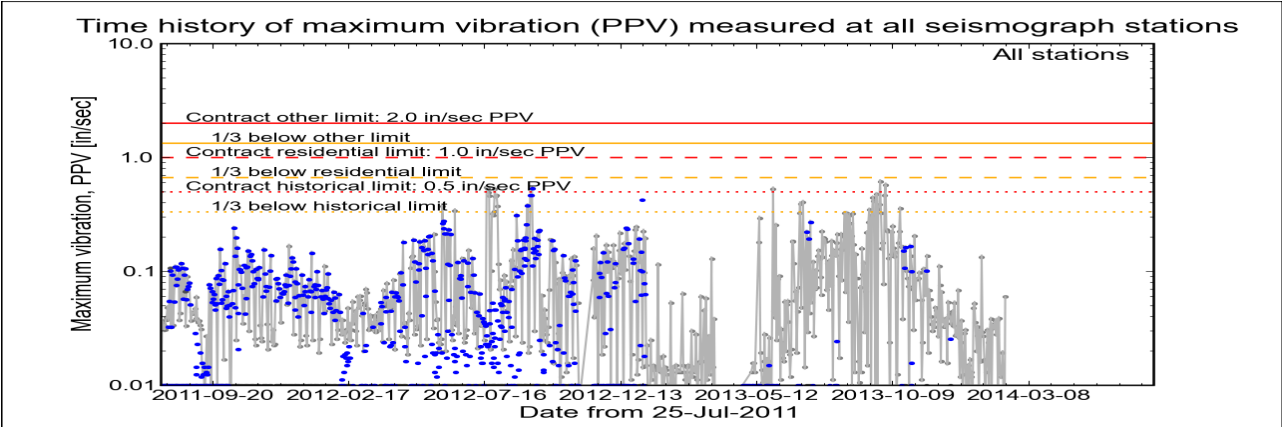
Click station for station information or click channel for event summary.



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 10-Feb-2014 21:35:08



(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 10-Feb-2014	21:35:08	0.0600	Elizabeth Marina
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



Earthworks, LLC

27 Glen Road, Sandy Hook, CT 06482

[www.e4sciences.com](#)



US Army Corps
of Engineers®
New York District

Home 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.

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.

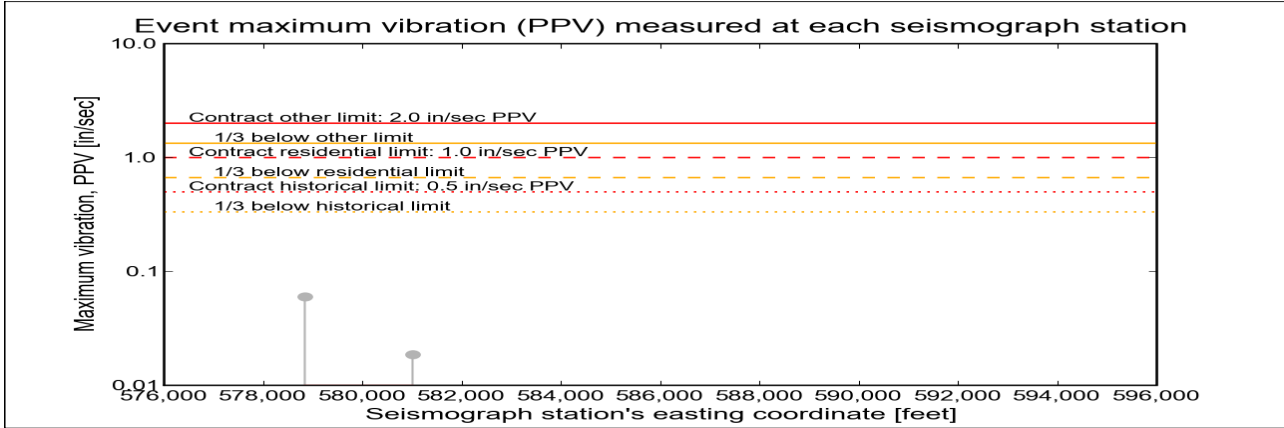
Click station for more information about the station.



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 10-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
Elizabeth Marina - e4s010	Mon 10-Feb-2014	21:35:08	0.06	Ambient
NYCT - e4s008	Mon 10-Feb-2014	19:22:47	0.0187	Ambient





US Army Corps
of Engineers®
New York District

Home Event Summary Stations: Dredges History Links

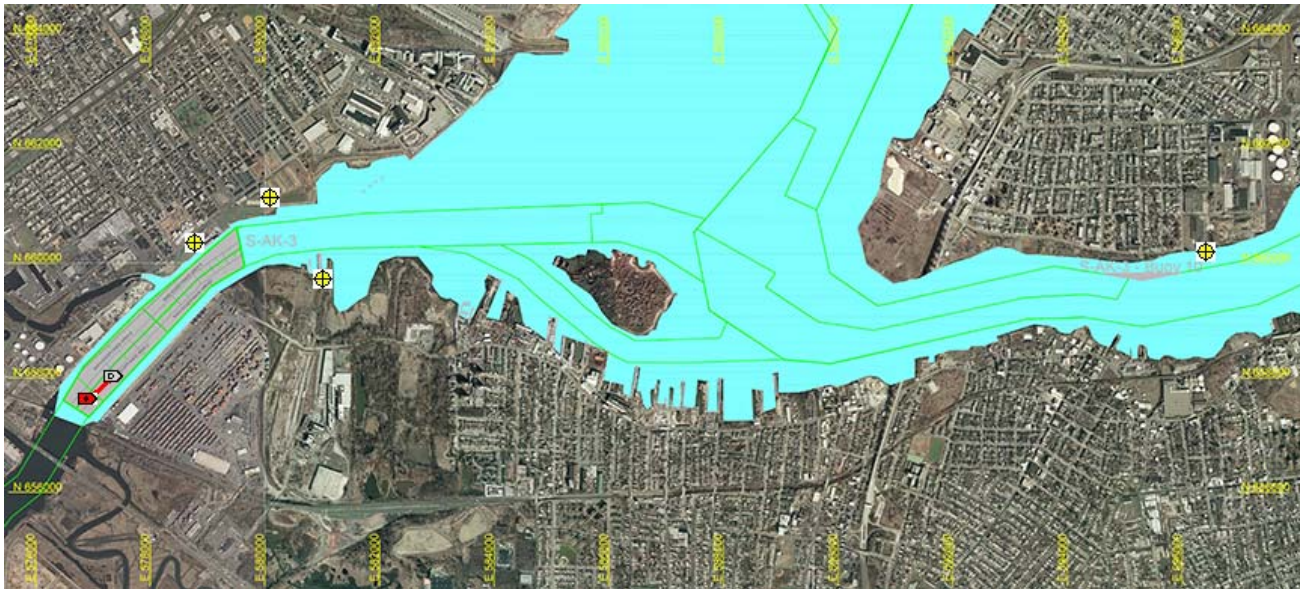
Arthur Kill Blast Vibration Summary

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.

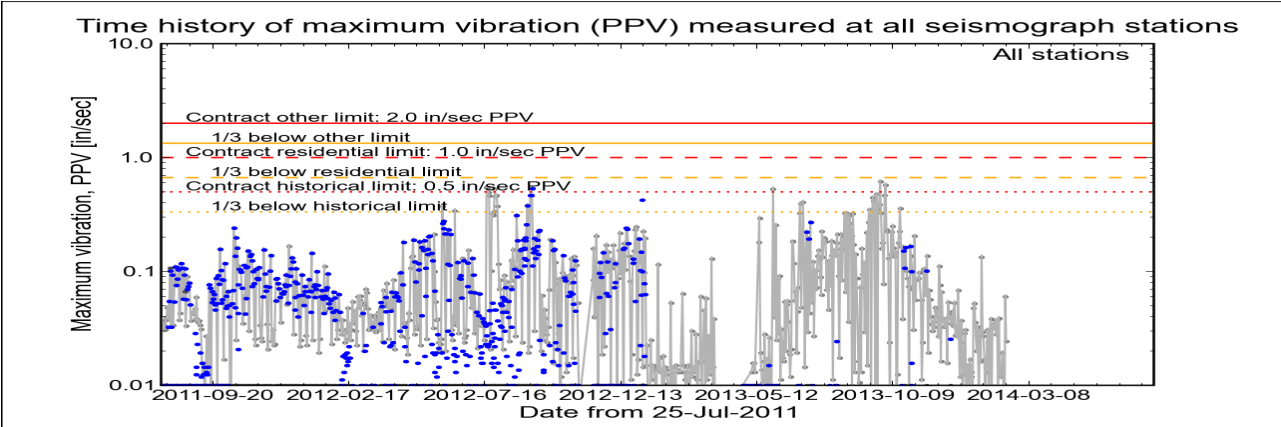
Click station for station information or click channel for event summary.



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: Tue 11-Feb-2014 19:17:36



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

The table below lists the date, time, level, and station of the maximum-vibration recording for each and every event. Selecting an event activates its event page.

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Tue 11-Feb-2014	19:17:36	0.0244	Elizabeth Marina
Ambient	Mon 10-Feb-2014	21:35:08	0.0600	Elizabeth Marina
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



Earthworks, LLC

27 Glen Road, Sandy Hook, CT 06482

www.e4sciences.com



US Army Corps
of Engineers®
New York District

Home 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.

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.

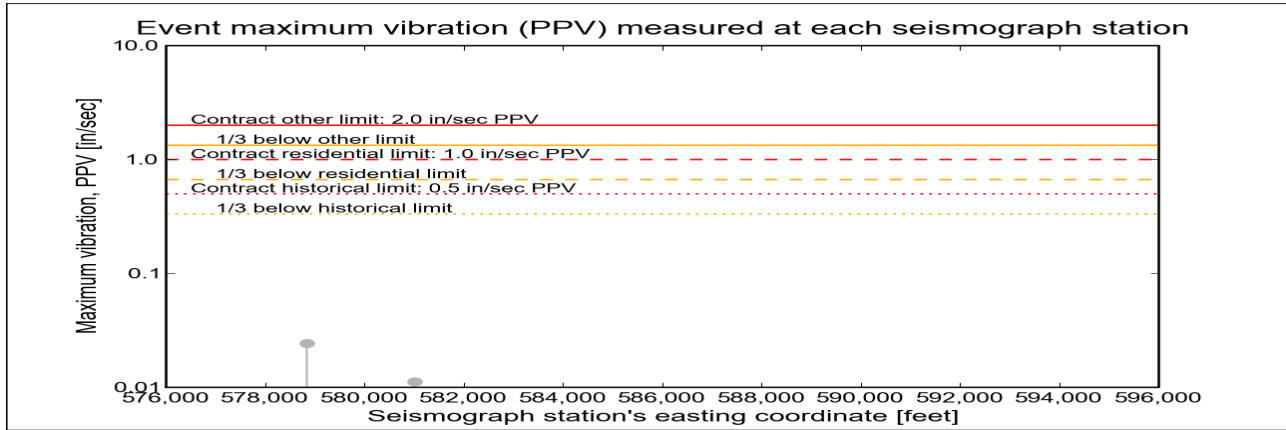
Click station for more information about the station.



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: Tue 11-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
Elizabeth Marina - e4s010	Tue 11-Feb-2014	19:17:36	0.0244	Ambient
NYCT - e4s008	Tue 11-Feb-2014	19:22:46	0.0112	Ambient



Earthworks, LLC

27 Glen Road, Sandy Hook, CT 06482

[www.e4sciences.com](#)



US Army Corps
of Engineers®
New York District

Home Event Summary Stations: Dredges History Links

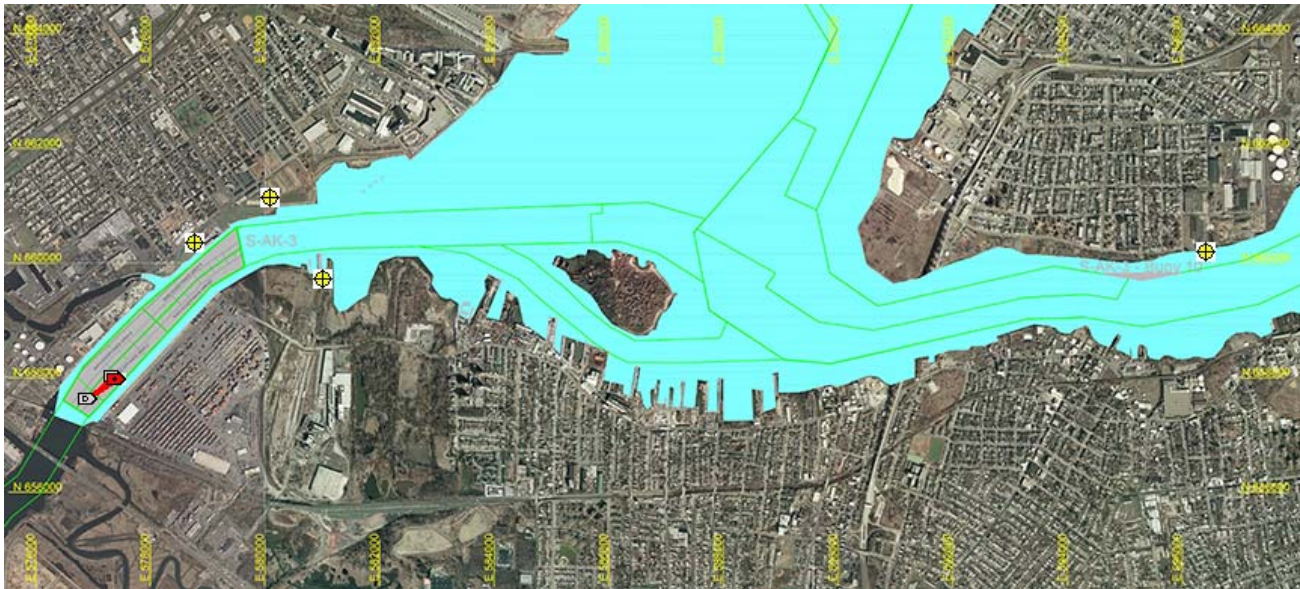
Arthur Kill Blast Vibration Summary

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.

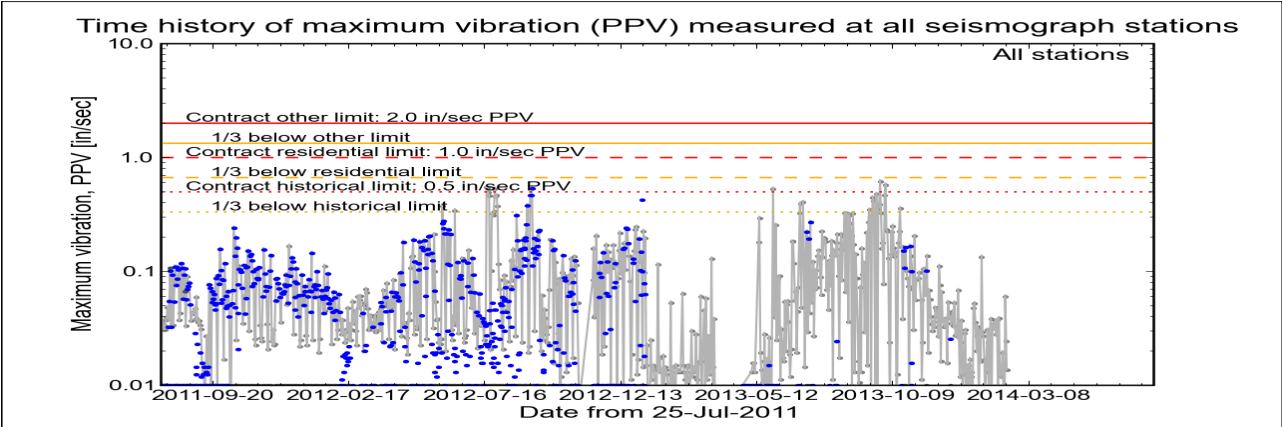
Click station for station information or click channel for event summary.



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: Wed 12-Feb-2014 14:02:36



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

The table below lists the date, time, level, and station of the maximum-vibration recording for each and every event. Selecting an event activates its event page.

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Wed 12-Feb-2014	14:02:36	0.0137	Elizabeth Marina
Ambient	Tue 11-Feb-2014	19:17:36	0.0244	Elizabeth Marina
Ambient	Mon 10-Feb-2014	21:35:08	0.0600	Elizabeth Marina
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



Earthworks, LLC

27 Glen Road, Sandy Hook, CT 06482

www.e4sciences.com



US Army Corps
of Engineers®
New York District

Home 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.

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.

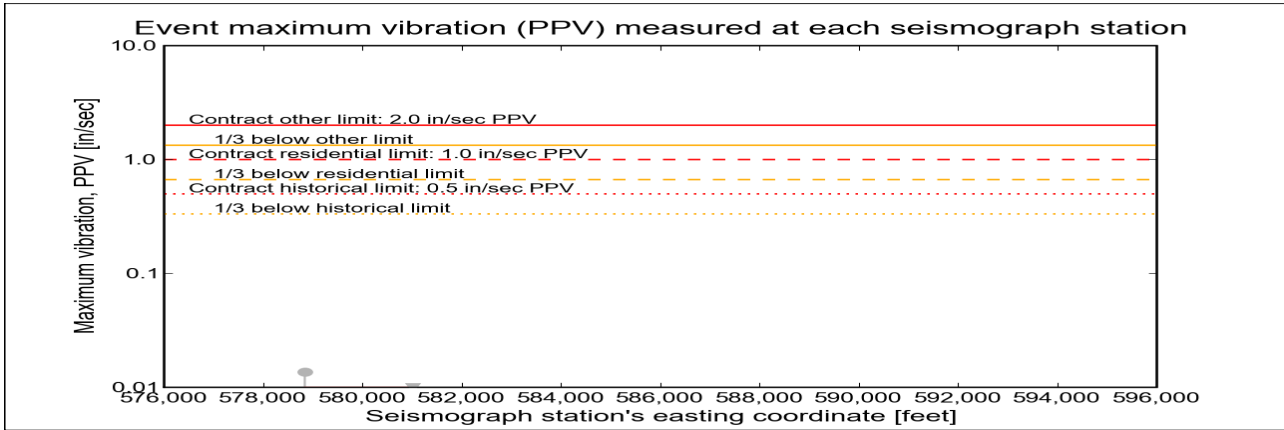
Click station for more information about the station.



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: Wed 12-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
Elizabeth Marina - e4s010	Wed 12-Feb-2014	14:02:36	0.0137	Ambient
NYCT - e4s008	Wed 12-Feb-2014	13:52:44	0.0075	Ambient



Earthworks, LLC

27 Glen Road, Sandy Hook, CT 06482

www.e4sciences.com



Home Event Summary Stations: Dredges History Links

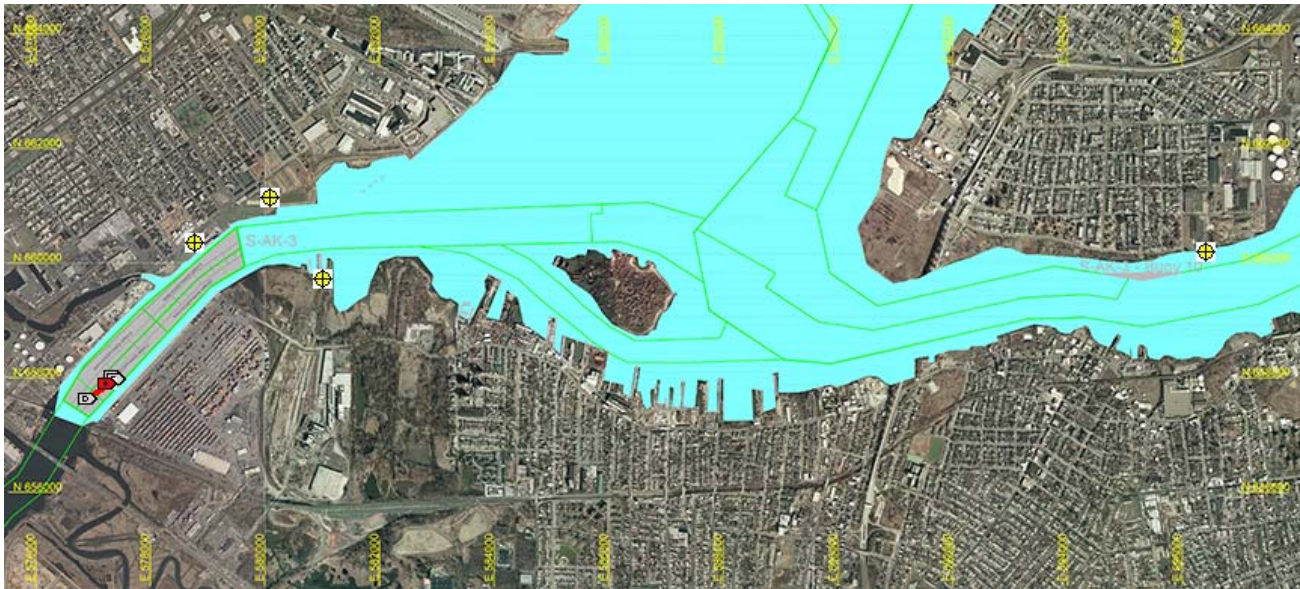
Arthur Kill Blast Vibration Summary

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.

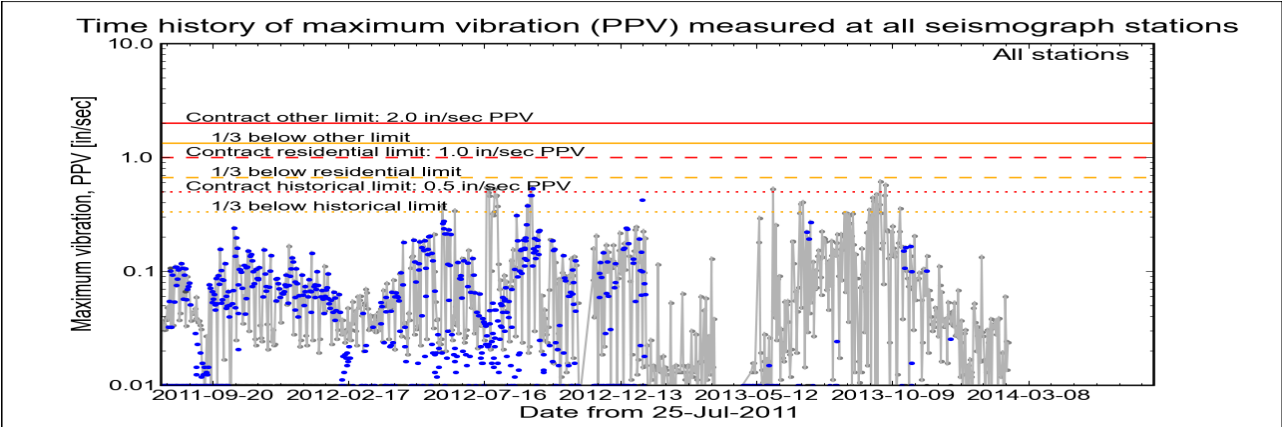
Click station for station information or click channel for event summary.



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: Thu 13-Feb-2014 19:32:16



(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	Thu 13-Feb-2014	19:32:16	0.0237	Elizabeth Marina
Ambient	Wed 12-Feb-2014	14:02:36	0.0137	Elizabeth Marina
Ambient	Tue 11-Feb-2014	19:17:36	0.0244	Elizabeth Marina
Ambient	Mon 10-Feb-2014	21:35:08	0.0600	Elizabeth Marina
Ambient	Sun 09-Feb-2014	19:52:46	0.0037	NYCT
Ambient	Sat 08-Feb-2014	20:07:46	0.0094	NYCT



US Army Corps
of Engineers®
New York District

Home 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.

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.

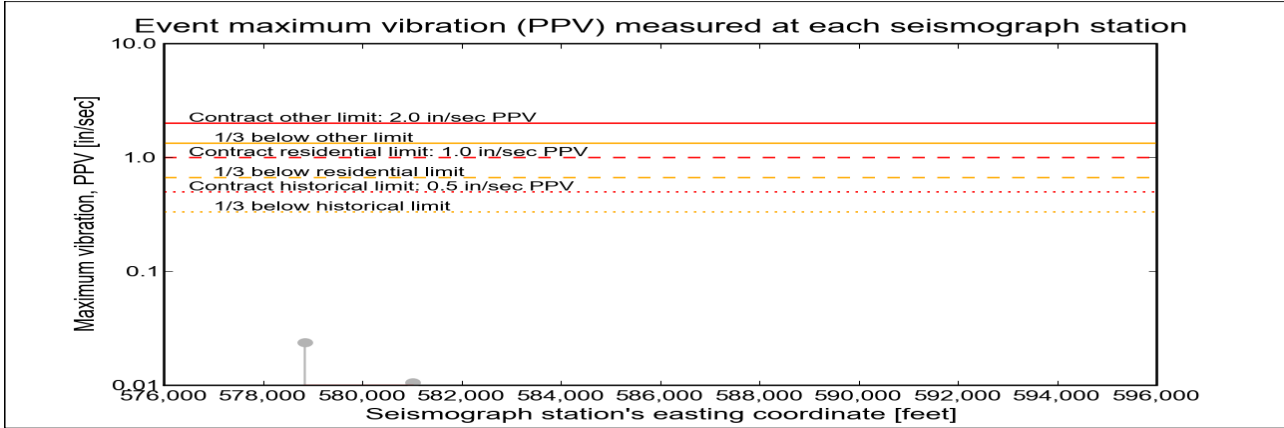
Click station for more information about the station.



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: Thu 13-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
Elizabeth Marina - e4s010	Thu 13-Feb-2014	19:32:16	0.0237	Ambient
NYCT - e4s008	Thu 13-Feb-2014	13:38:03	0.0106	Ambient



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



US Army Corps
of Engineers®
New York District

Home Event Summary Stations: Dredges History Links

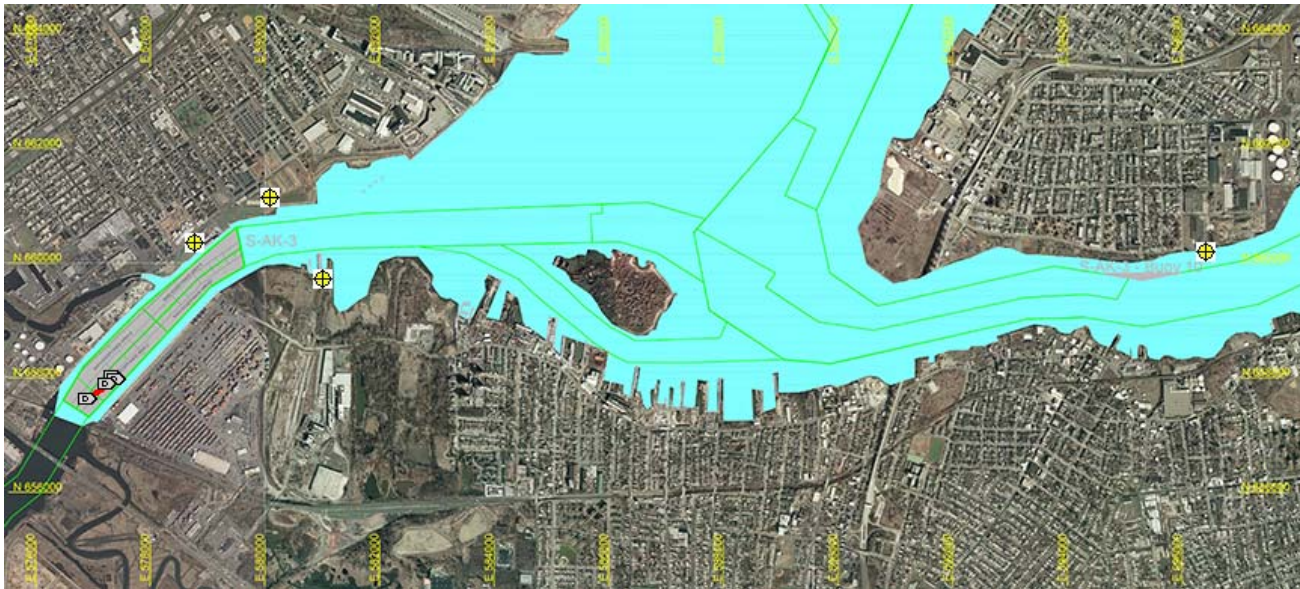
Arthur Kill Blast Vibration Summary

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.

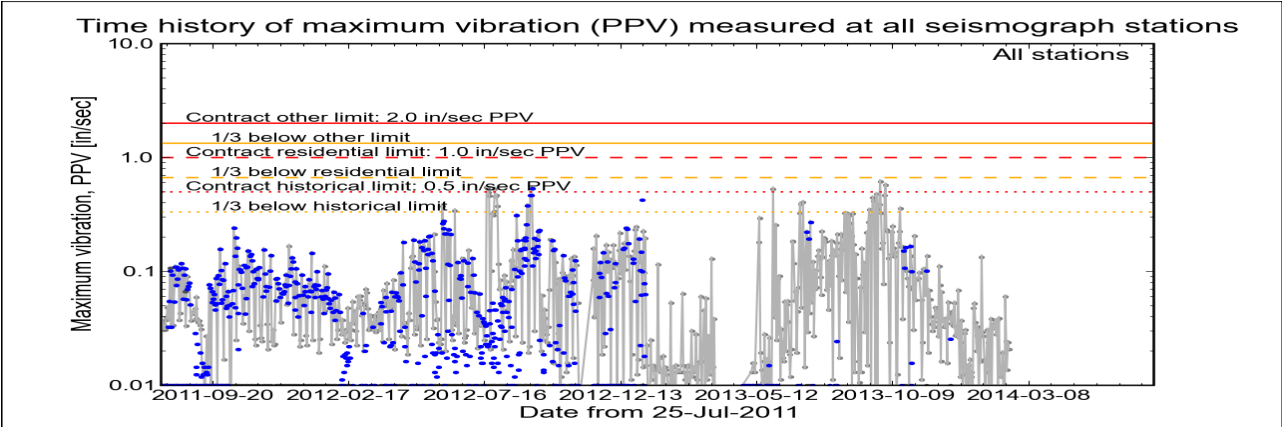
Click station for station information or click channel for event summary.



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: Fri 14-Feb-2014 12:32:35



(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	Fri 14-Feb-2014	12:32:35	0.0206	Elizabeth Marina
Ambient	Thu 13-Feb-2014	19:32:16	0.0237	Elizabeth Marina
Ambient	Wed 12-Feb-2014	14:02:36	0.0137	Elizabeth Marina
Ambient	Tue 11-Feb-2014	19:17:36	0.0244	Elizabeth Marina
Ambient	Mon 10-Feb-2014	21:35:08	0.0600	Elizabeth Marina
Ambient	Sun 09-Feb-2014	19:52:46	0.0037	NYCT



| Earthworks, LLC

27 Glen Road, Sandy Hook, CT 06482

[www.e4sciences.com](#)



US Army Corps
of Engineers®
New York District

Home 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.

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.

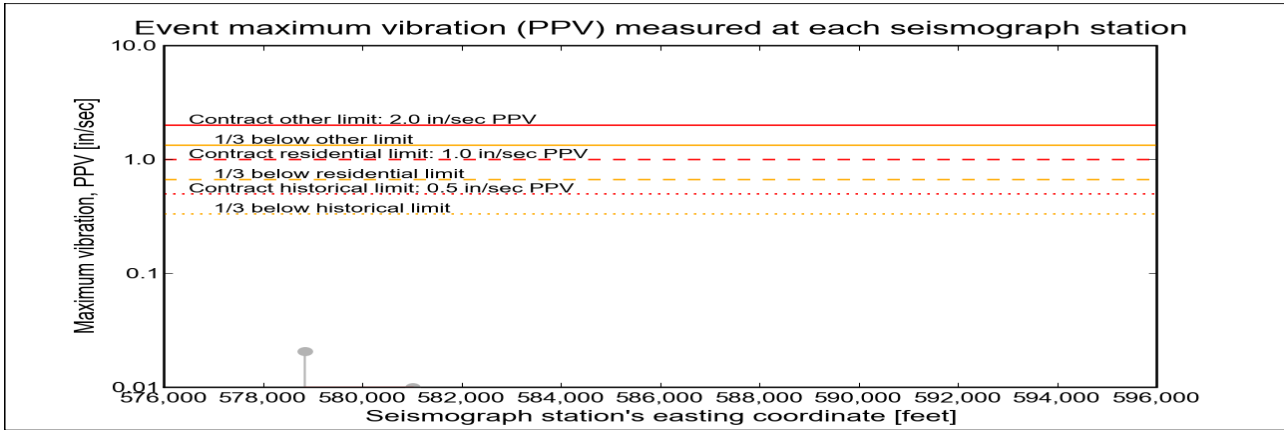
Click station for more information about the station.



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 14-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
Elizabeth Marina - e4s010	Fri 14-Feb-2014	12:32:35	0.0206	Ambient
NYCT - e4s008	Fri 14-Feb-2014	13:52:45	0.01	Ambient





Home

Event Summary

Stations:

Dredges

History

Links

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.

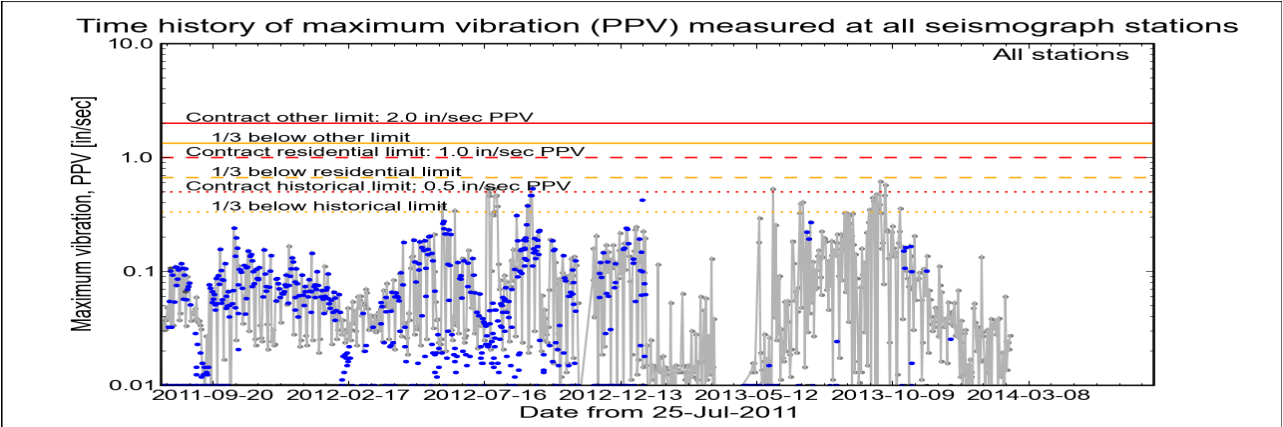
Click station for station information or click channel for event summary.



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 15-Feb-2014 15:32:36



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

The table below lists the date, time, level, and station of the maximum-vibration recording for each and every event. Selecting an event activates its event page.

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Sat 15-Feb-2014	15:32:36	0.0275	Elizabeth Marina
Ambient	Fri 14-Feb-2014	12:32:35	0.0206	Elizabeth Marina
Ambient	Thu 13-Feb-2014	19:32:16	0.0237	Elizabeth Marina
Ambient	Wed 12-Feb-2014	14:02:36	0.0137	Elizabeth Marina
Ambient	Tue 11-Feb-2014	19:17:36	0.0244	Elizabeth Marina
Ambient	Mon 10-Feb-2014	21:35:08	0.0600	Elizabeth Marina



US Army Corps
of Engineers®
New York District

Home 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.

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

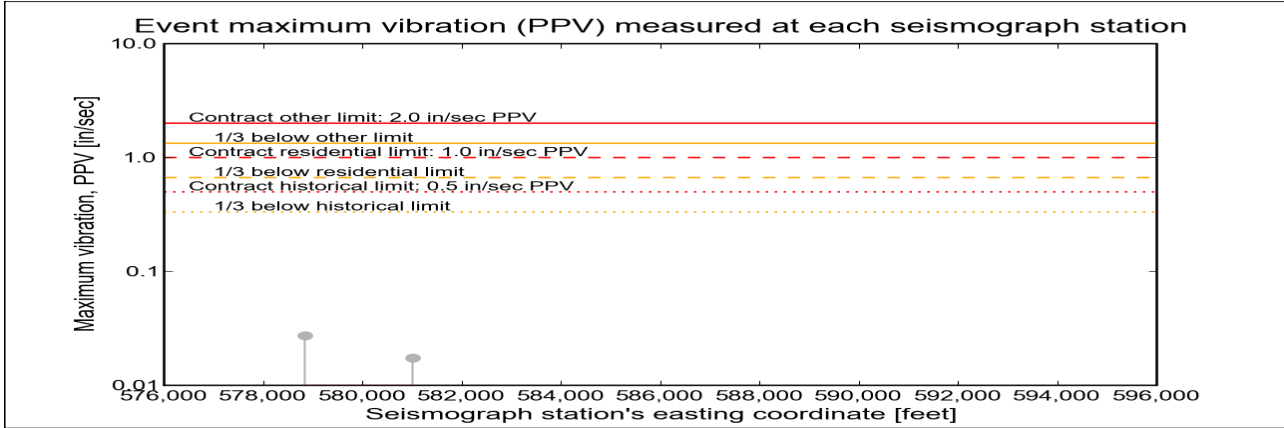
Click station for more information about the station.



Selected Event Summary

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

Date of reading: Sat 15-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
Elizabeth Marina - e4s010	Sat 15-Feb-2014	15:32:36	0.0275	Ambient
NYCT - e4s008	Sat 15-Feb-2014	15:37:45	0.0175	Ambient



Earthworks, LLC

27 Glen Road, Sandy Hook, CT 06482

www.e4sciences.com



US Army Corps
of Engineers®
New York District

Home Event Summary Stations: Dredges History Links

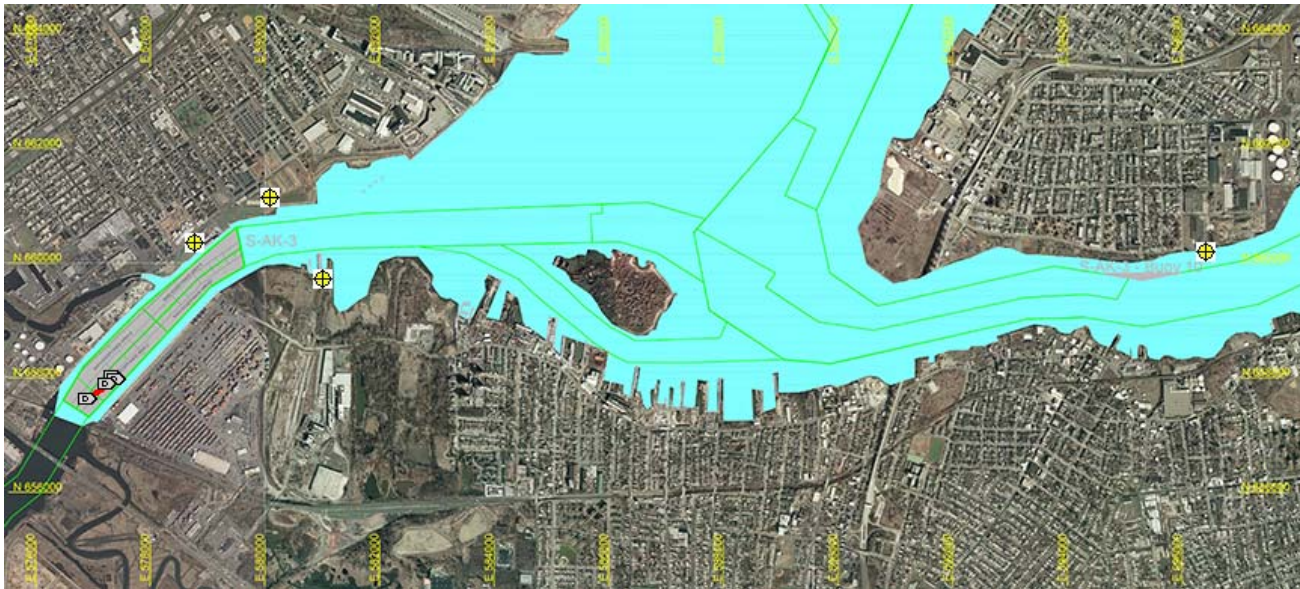
Arthur Kill Blast Vibration Summary

This site summarizes the measured ground vibrations in northwest Staten Island, from rock blasting in the Arthur Kill and other possible sources. The site is updated daily. The data are intended for the sole use of the US Army Corps of Engineers - New York District, for managing and monitoring the performance of NYNJ Harbor Deepening Project Contract in Arthur Kill starting 25 July 2011.

This page represents the most recent observations.

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

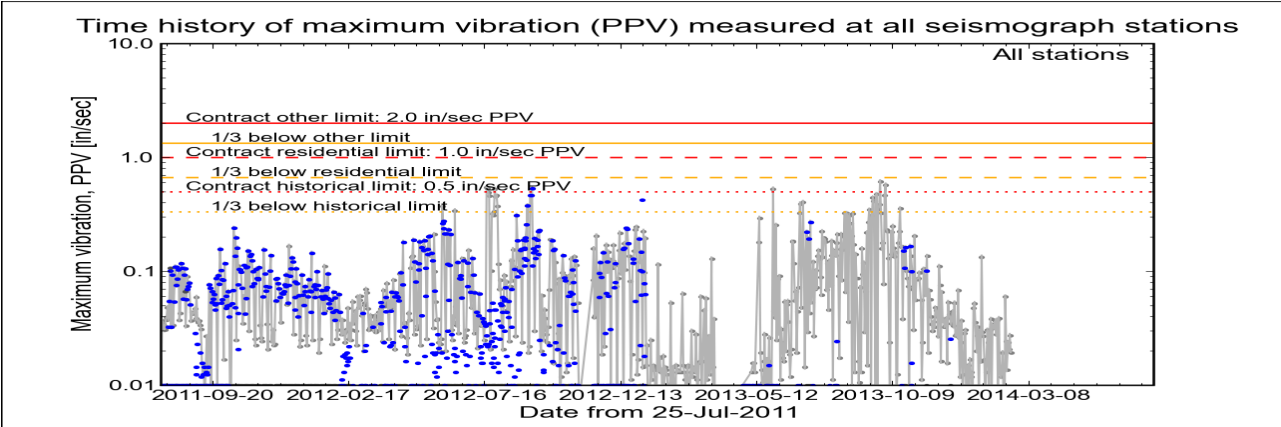
Click station for station information or click channel for event summary.



Latest Event Summary

The graph below is a plot of the maximum vibration recorded by any and all of the numerous seismograph stations during the current observation event (ambient or blast). The horizontal axis gives the date from the start of the project on 25 July 2011. The vertical axis gives the maximum vibration in peak particle velocity (PPV) in units of inches per second (in/sec). The red curves show the project's contract limits; the orange curves show one-third (1/3) below these contract limits. (The light gray curve is ambient-vibration level. The blue dots are blast-vibration levels. The dark gray dots are predicted blast-vibration levels.)

Date and time of last reading: Sun 16-Feb-2014 18:32:36



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

The table below lists the date, time, level, and station of the maximum-vibration recording for each and every event. Selecting an event activates its event page.

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Sun 16-Feb-2014	18:32:36	0.0194	Elizabeth Marina
Ambient	Sat 15-Feb-2014	15:32:36	0.0275	Elizabeth Marina
Ambient	Fri 14-Feb-2014	12:32:35	0.0206	Elizabeth Marina
Ambient	Thu 13-Feb-2014	19:32:16	0.0237	Elizabeth Marina
Ambient	Wed 12-Feb-2014	14:02:36	0.0137	Elizabeth Marina
Ambient	Tue 11-Feb-2014	19:17:36	0.0244	Elizabeth Marina



Earthworks, LLC

27 Glen Road, Sandy Hook, CT 06482

[www.e4sciences.com](#)



US Army Corps
of Engineers®
New York District

Home 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.

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

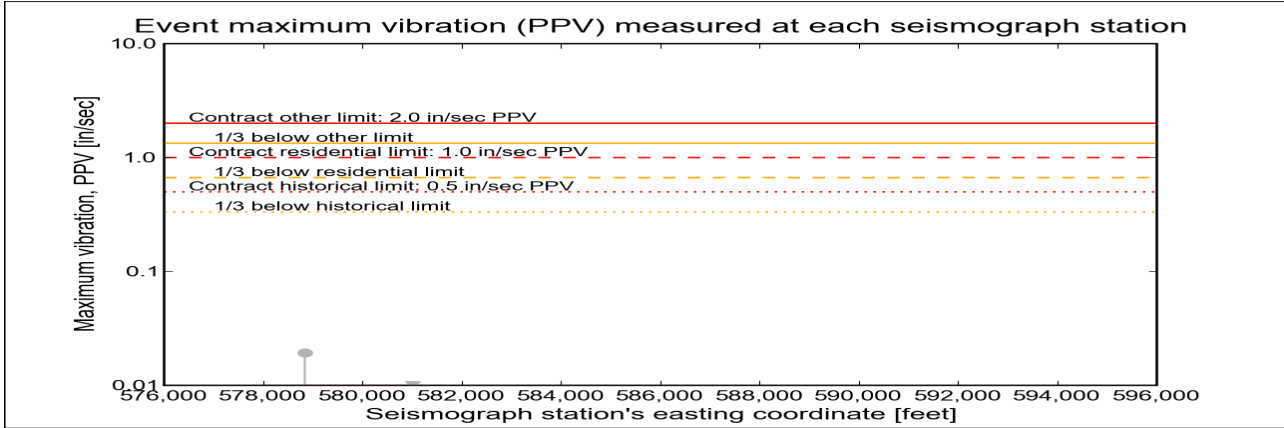
Click station for more information about the station.



Selected Event Summary

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

Date of reading: Sun 16-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
Elizabeth Marina - e4s010	Sun 16-Feb-2014	18:32:36	0.0194	Ambient
NYCT - e4s008	Sun 16-Feb-2014	23:54:22	0.00375	Ambient



Earthworks, LLC

27 Glen Road, Sandy Hook, CT 06482

www.e4sciences.com