

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 March 24 – March 30, 2014

The following pages display the results from the USACE-NYD real-time website for the week of Monday, March 24, through Sunday, March 30, 2014.

There were eight 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 0.0831 in/s recorded at Elizabeth Marina on March 21. 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 most recent event for each day:

March 24 March 25 March 26 March 27 March 28 March 29 March 30

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 0.0231 in/s. Vibrations at Elizabethport were all below 0.0431 in/s. Vibrations at Elizabeth Marina were all below 0.0831 in/s. All blast vibration measurements are below the contract vibration limits for this site.

Blast	Date & Time	Distance from blast	e4s Max. vibration
	EST/EDT of blast	to e4s stations (feet)	(in/s)
AK-256	2014-03-24 15:15	3,960 - 5,550	0.0200
AK-247	2014-03-25 09:07	4,120 - 5,700	0.0256
AK-258	2014-03-25 14:15	4,240 - 5,820	0.0125
AK-259	2014-03-26 09:06	4,260 - 5,840	0.0250
AK-260	2014-03-26 16:59	4,390 - 5,960	0.0156
AK-261	2014-03-27 09:19	4,520 - 6,080	0.0237
AK-262	2014-03-28 13:54	4,640 - 6,200	0.0187
AK-263	2014-03-29 12:41	3,020 - 4,730	0.0119

Table 1. Blast Summary for this week





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

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	2			
Date	Dredge Name	Easting	Northing	Notes
2014-03-30 Sun				No Activity
2014-03-29 Sat	Drillboat Apache	577843	659000	
2014-03-29 Sat	Drillboat Kraken 🗾	577849	659090	
2014-03-28 Fri	Drillboat Apache	576707	657681	
2014-03-27 Thu				No Activity
2014-03-26 Wed				No Activity
2014-03-25 Tue	Drillboat Apache	577046	658203	
2014-03-24 Mon	Drillboat Apache	577185	658294	
_e4	sciences Earthworks, LLC	27 Glen Road, Sandy	Hook, CT 06482	www.e4sciences.com



Event Summary Dredges Links Home Stations 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.

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 24-Mar-2014 14:48:24

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 24-Mar-2014	14:48:24	0.0594	Elizabeth Marina
Ambient	Sun 23-Mar-2014	04:02:37	0.0862	Elizabeth Marina
Ambient	Sat 22-Mar-2014	20:47:36	0.0212	Elizabeth Marina
Ambient	Fri 21-Mar-2014	16:37:28	0.0475	NYCT
Ambient	Thu 20-Mar-2014	16:09:23	0.0462	Elizabeth Marina
Ambient	Wed 19-Mar-2014	15:31:48	0.1810	Elizabeth Marina
	easciences Earthwork	CILC 27 Close De	ad Sandy Hook CT 064	02 www.edecioncor.c

eqsciences | Earthworks, LLC

27 Glen Road, Sandy Hook, CT 06482

www.e4sciences.com

⁽Click on graph or here for larger view)



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 24-Mar-2014



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Mon 24-Mar-2014	14:48:24	0.0594	Ambient
NYCT - e4s008	Mon 24-Mar-2014	13:52:46	0.0119	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.

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 25-Mar-2014 16:09:33

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Tue 25-Mar-2014	16:09:33	0.0719	Elizabeth Marina
Ambient	Mon 24-Mar-2014	14:48:24	0.0594	Elizabeth Marina
Ambient	Sun 23-Mar-2014	04:02:37	0.0862	Elizabeth Marina
Ambient	Sat 22-Mar-2014	20:47:36	0.0212	Elizabeth Marina
Ambient	Fri 21-Mar-2014	16:37:28	0.0475	NYCT
Ambient	Thu 20-Mar-2014	16:09:23	0.0462	Elizabeth Marina
	eqsciences Earthwork	S, LLC 27 Glen Ro	oad, Sandy Hook, CT 064	82 www.e4sciences.com

⁽Click on graph or here for larger view)



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 25-Mar-2014



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Tue 25-Mar-2014	16:09:33	0.0719	Ambient
NYCT - e4s008	Tue 25-Mar-2014	12:52:46	0.01	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.

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 26-Mar-2014 13:40:06

(Click on graph or here for larger view)

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Wed 26-Mar-2014	13:40:06	0.0869	Elizabeth Marina
Ambient	Tue 25-Mar-2014	16:09:33	0.0719	Elizabeth Marina
Ambient	Mon 24-Mar-2014	14:48:24	0.0594	Elizabeth Marina
Ambient	Sun 23-Mar-2014	04:02:37	0.0862	Elizabeth Marina
Ambient	Sat 22-Mar-2014	20:47:36	0.0212	Elizabeth Marina
Ambient	Fri 21-Mar-2014	16:37:28	0.0475	NYCT
	e4 <mark>sciences</mark> Earthwork	5, LLC 27 Glen Roa	ad, Sandy Hook, CT 064	82 www.e4sciences.com



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 26-Mar-2014



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Wed 26-Mar-2014	13:40:06	0.0869	Ambient
NYCT - e4s008	Wed 26-Mar-2014	13:22:45	0.0219	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.

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 27-Mar-2014 11:18:09

(Click on graph or here for larger view)

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Thu 27-Mar-2014	11:18:09	0.0919	Elizabeth Marina
Ambient	Wed 26-Mar-2014	13:40:06	0.0869	Elizabeth Marina
Ambient	Tue 25-Mar-2014	16:09:33	0.0719	Elizabeth Marina
Ambient	Mon 24-Mar-2014	14:48:24	0.0594	Elizabeth Marina
Ambient	Sun 23-Mar-2014	04:02:37	0.0862	Elizabeth Marina
Ambient	Sat 22-Mar-2014	20:47:36	0.0212	Elizabeth Marina
	eqsciences Earthwork	S, LLC 27 Glen Ro	ad, Sandy Hook, CT 064	82 www.e4sciences.com



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 27-Mar-2014



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Thu 27-Mar-2014	11:18:09	0.0919	Ambient
NYCT - e4s008	Thu 27-Mar-2014	20:52:46	0.0156	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.

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 28-Mar-2014 13:17:36

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Fri 28-Mar-2014	13:17:36	0.0319	Elizabeth Marina
Ambient	Thu 27-Mar-2014	11:18:09	0.0919	Elizabeth Marina
Ambient	Wed 26-Mar-2014	13:40:06	0.0869	Elizabeth Marina
Ambient	Tue 25-Mar-2014	16:09:33	0.0719	Elizabeth Marina
Ambient	Mon 24-Mar-2014	14:48:24	0.0594	Elizabeth Marina
Ambient	Sun 23-Mar-2014	04:02:37	0.0862	Elizabeth Marina
	eqsciences Earthwork	S, LLC 27 Glen Ro	ad, Sandy Hook, CT 064	82 www.e4sciences.com

⁽Click on graph or here for larger view)



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 28-Mar-2014



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Fri 28-Mar-2014	13:17:36	0.0319	Ambient
NYCT - e4s008	Fri 28-Mar-2014	11:52:44	0.0231	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.

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 29-Mar-2014 01:02:34

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Sat 29-Mar-2014	01:02:34	0.0181	Elizabeth Marina
Ambient	Fri 28-Mar-2014	13:17:36	0.0319	Elizabeth Marina
Ambient	Thu 27-Mar-2014	11:18:09	0.0919	Elizabeth Marina
Ambient	Wed 26-Mar-2014	13:40:06	0.0869	Elizabeth Marina
Ambient	Tue 25-Mar-2014	16:09:33	0.0719	Elizabeth Marina
Ambient	Mon 24-Mar-2014	14:48:24	0.0594	Elizabeth Marina
	4 <mark>sciences</mark> Earthworks,	LLC 27 Glen Road, S	Sandy Hook, CT 064	182 www.e4sciences.com

⁽Click on graph or here for larger view)



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 29-Mar-2014



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Sat 29-Mar-2014	01:02:34	0.0181	Ambient
NYCT - e4s008	Sat 29-Mar-2014	16:37:45	0.0144	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.

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 30-Mar-2014 15:32:32

(Click on graph or here for larger view)

Blast ID	Date	Time	Max PPV (in / second)	Max PPV Station
Ambient	Sun 30-Mar-2014	15:32:32	0.0256	Elizabeth Marina
Ambient	Sat 29-Mar-2014	01:02:34	0.0181	Elizabeth Marina
Ambient	Fri 28-Mar-2014	13:17:36	0.0319	Elizabeth Marina
Ambient	Thu 27-Mar-2014	11:18:09	0.0919	Elizabeth Marina
Ambient	Wed 26-Mar-2014	13:40:06	0.0869	Elizabeth Marina
Ambient	Tue 25-Mar-2014	16:09:33	0.0719	Elizabeth Marina
	e4 <mark>sciences</mark> Earthwork	S, LLC 27 Glen Ro	ad, Sandy Hook, CT 064	82 www.e4sciences.com



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 30-Mar-2014



(Click on graph or here for larger view)

Station	Date	Time	Max PPV (in / second)	Vibration Type
Elizabeth Marina - e4s010	Sun 30-Mar-2014	15:32:32	0.0256	Ambient
NYCT - e4s008	Sun 30-Mar-2014	19:08:01	0.005	Ambient