

Department of the Army New York District Corps of Engineers Jacob K. Javits Federal Building 26 Federal Plaza New York, NY 10278-0090

Week of November 11 – November 17, 2013

The following pages display the results from the USACE-NYD real-time website for the week of Monday, November 11, through Sunday, November 17, 2013.

There were 10 blasts this week in the S-AK-3 project area.

We recorded vibrations in S-AK-3 project area. The maximum vibration recorded was 0.106 in/s recorded at Elizabeth Marina on November 13. 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:

November 11

November 12

November 13

November 14

November 15 November 16

November 17

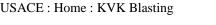
The even pages show the maximum vibration observed at each station along easting for each event.

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 0.035 in/s. Vibrations at Elizabethport were all below 0.080 in/s. Vibrations at Elizabeth Marina were all below 0.110 in/s. All blast vibration measurements are below the contract vibration limits for this site.

Table 1. Blast Summary for this week

| 14010 11 21400 2411 | mary for time week | | • |
|---------------------|--------------------|------------------------|------------------|
| Blast | Date & Time | Distance from blast | e4s Max. |
| | EST/EDT of blast | to e4s stations (feet) | vibration (in/s) |
| AK-108 | 2013-11-12 09:15 | 0,820 - 2,020 | 0.105 |
| AK-109 | 2013-11-12 15:30 | 1,100 - 2,880 | 0.0644 |
| AK-110 | 2013-11-13 09:05 | 0,930 - 2,150 | 0.106 |
| AK-111 | 2013-11-13 15:15 | 0,860 - 2,000 | 0.0744 |
| AK-112 | 2013-11-14 09:05 | 0,970 - 2,150 | 0.0625 |
| AK-113 | 2013-11-14 15:05 | 0,870 - 1,990 | 0.0612 |
| AK-114 | 2013-11-15 09:05 | 1,060 - 2,310 | 0.101 |
| AK-115 | 2013-11-16 09:09 | 0,660 - 1,700 | 0.0319 |
| AK-115A | 2013-11-16 10:47 | 0,660 - 1,700 | 0.0531 |
| AK-116 | 2013-11-16 14:57 | 0,600 - 1,670 | 0.075 |





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Dredge Position Summary

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

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

Click on a station for station information.



Todays Dredge Position

Latest Week's
Dredge Position Summary

Project History List

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

| Dredge Location Tab | ole | | | |
|---------------------|------------------|---------------|----------|-------------|
| Date | Dredge Name | Easting | Northing | Notes |
| | | | | |
| 2013-11-17 Sun | | | | No Activity |
| 2013-11-16 Sat | | | | No Activity |
| 2013-11-15 Fri | Drillboat Kraken | 578689 | 659275 | |
| 2013-11-14 Thu | | | | No Activity |
| 2013-11-13 Wed | | | | No Activity |
| 2013-11-12 Tue | | | | No Activity |





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Arthur Kill Blast Vibration Summary

New York District

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

This page represents the most recent observations.

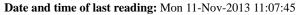
The Arthur Kill contract area is mapped below in light gray. The navigation grid is superimposed. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge is marked in red. The easting and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

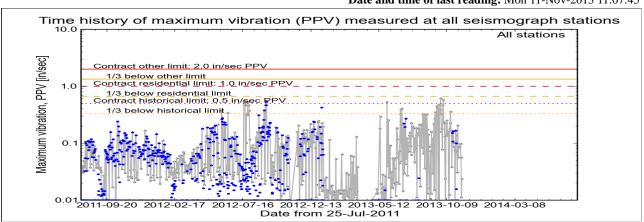
Click station for station information or click channel for event summary.



Latest Event Summary

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





(Click on graph or here for larger view)

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

| Blast ID | Date | Time | Max PPV (in / second) | Max PPV Station |
|----------|-------------------------|----------------------|-----------------------|-----------------------|
| Ambient | Mon 11-Nov-2013 | 11:07:45 | 0.0237 | NYCT |
| Ambient | Sun 10-Nov-2013 | 16:07:45 | 0.0112 | NYCT |
| Ambient | Sat 09-Nov-2013 | 14:02:36 | 0.0562 | Elizabeth Marina |
| Ambient | Fri 08-Nov-2013 | 14:02:36 | 0.0975 | Elizabeth Marina |
| Ambient | Thu 07-Nov-2013 | 14:02:33 | 0.0975 | Elizabeth Marina |
| Ambient | Wed 06-Nov-2013 | 14:02:33 | 0.0869 | Elizabeth Marina |
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Event Summary

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Arthur Kill Blasting Event Summary

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

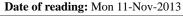
The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates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

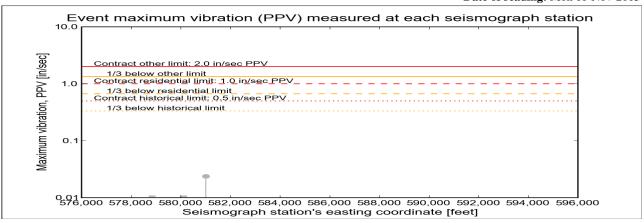
Click station for more information about the station.



Selected Event Summary

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





(Click on graph or here for larger view)

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

| Station | Date | Time | Max PPV (in / second) | Vibration Type |
|--|------------------------------------|----------------------|-----------------------|--------------------|
| Elizabeth Marina - e4s010 | Mon 11-Nov-2013 | 01:17:34 | 0.00437 | Ambient |
| Elizabeth Port - e4s009 NYCT - e4s008 | Mon 11-Nov-2013 Mon 11-Nov-2013 | 01:17:34 11:07:45 | 0.00437 0.0237 | Ambient Ambient |

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Home Event Summary Stations: Dredges History Links

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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.

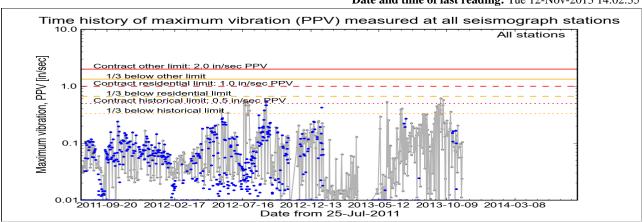
Click station for station information or click channel for event summary.



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.)





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| Blast ID | Date | Time | Max PPV (in / second) | Max PPV Station |
|----------|-------------------------|-----------------------|-----------------------|-----------------------|
| Ambient | Tue 12-Nov-2013 | 14:02:35 | 0.1050 | Elizabeth Marina |
| Ambient | Mon 11-Nov-2013 | 11:07:45 | 0.0237 | NYCT |
| Ambient | Sun 10-Nov-2013 | 16:07:45 | 0.0112 | NYCT |
| Ambient | Sat 09-Nov-2013 | 14:02:36 | 0.0562 | Elizabeth Marina |
| Ambient | Fri 08-Nov-2013 | 14:02:36 | 0.0975 | Elizabeth Marina |
| Ambient | Thu 07-Nov-2013 | 14:02:33 | 0.0975 | Elizabeth Marina |
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Event Summary

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Arthur Kill Blasting Event Summary

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

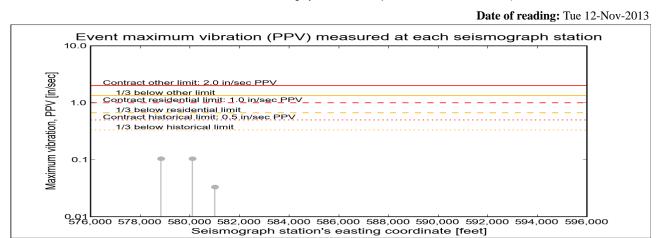
The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates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

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(Click on graph or here for larger view)

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

| Station | Date | Time | Max PPV (in / second) | Vibration Type |
|--|------------------------------------|----------------------|-----------------------|--------------------|
| Elizabeth Marina - e4s010 | Tue 12-Nov-2013 | 14:02:35 | 0.105 | Ambient |
| Elizabeth Port - e4s009 NYCT - e4s008 | Tue 12-Nov-2013 Tue 12-Nov-2013 | 14:02:35 14:07:44 | 0.105 0.0331 | Ambient Ambient |

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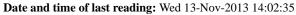
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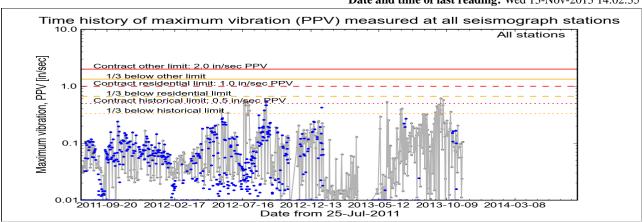
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| Blast ID | Date | Time | Max PPV (in / second) | Max PPV Station |
|----------|-------------------------|----------------------|-----------------------|--------------------|
| Ambient | Wed 13-Nov-2013 | 14:02:35 | 0.1060 | Elizabeth Marina |
| Ambient | Tue 12-Nov-2013 | 14:02:35 | 0.1050 | Elizabeth Marina |
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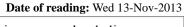
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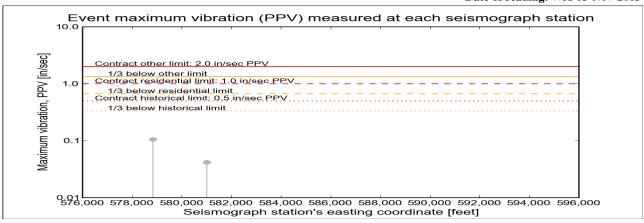
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|------------------------------|-----------------|----------|-----------------------|----------------|
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| NYCT - e4s008 | Wed 13-Nov-2013 | 15:31:49 | 0.0419 | Ambient |

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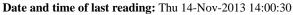
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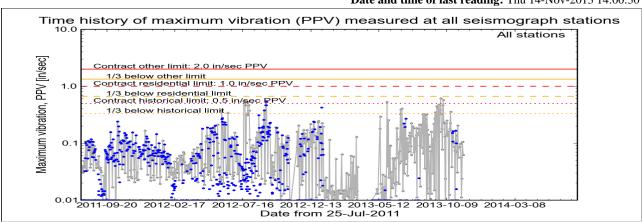
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|----------|------------------------|-------------------|------------------------|-----------------------|
| Ambient | Thu 14-Nov-2013 | 14:00:30 | 0.0625 | Elizabeth Marina |
| Ambient | Wed 13-Nov-2013 | 14:02:35 | 0.1060 | Elizabeth Marina |
| Ambient | Tue 12-Nov-2013 | 14:02:35 | 0.1050 | Elizabeth Marina |
| Ambient | Mon 11-Nov-2013 | 11:07:45 | 0.0237 | NYCT |
| Ambient | Sun 10-Nov-2013 | 16:07:45 | 0.0112 | NYCT |
| Ambient | Sat 09-Nov-2013 | 14:02:36 | 0.0562 | Elizabeth Marina |
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Arthur Kill Blasting Event Summary

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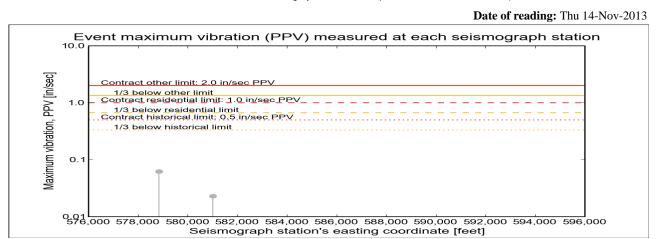
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|------------------------------|-----------------|----------|-----------------------|----------------|
| Elizabeth Marina - e4s010 | Thu 14-Nov-2013 | 14:00:30 | 0.0625 | Ambient |
| NYCT - e4s008 | Thu 14-Nov-2013 | 02:38:01 | 0.0231 | Ambient |

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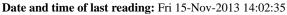
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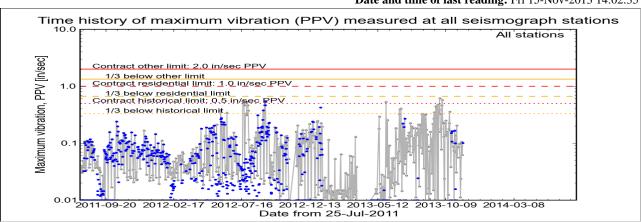
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| Blast ID | Date | Time | Max PPV (in / second) | Max PPV Station |
|----------|-------------------------|----------------------|-----------------------|--------------------|
| Blast | Fri 15-Nov-2013 | 14:02:35 | 0.1010 | Elizabeth Marina |
| Ambient | Thu 14-Nov-2013 | 14:00:30 | 0.0625 | Elizabeth Marina |
| Ambient | Wed 13-Nov-2013 | 14:02:35 | 0.1060 | Elizabeth Marina |
| Ambient | Tue 12-Nov-2013 | 14:02:35 | 0.1050 | Elizabeth Marina |
| Ambient | Mon 11-Nov-2013 | 11:07:45 | 0.0237 | NYCT |
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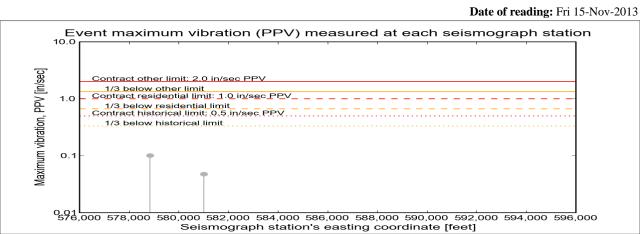
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Arthur Kill Blast Vibration Summary

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.

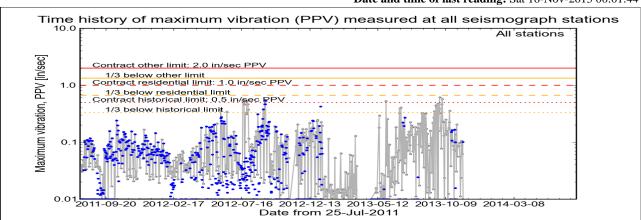
Click station for station information or click channel for event summary.



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 | Sat 16-Nov-2013 | 00:01:44 | 0.0088 | Bayonne |
| Blast | Fri 15-Nov-2013 | 14:02:35 | 0.1010 | Elizabeth Marina |
| Ambient | Thu 14-Nov-2013 | 14:00:30 | 0.0625 | Elizabeth Marina |
| Ambient | Wed 13-Nov-2013 | 14:02:35 | 0.1060 | Elizabeth Marina |
| Ambient | Tue 12-Nov-2013 | 14:02:35 | 0.1050 | Elizabeth Marina |
| Ambient | Mon 11-Nov-2013 | 11:07:45 | 0.0237 | NYCT |
| e | 4sciences Earthworks, | LLC 27 Glen Road, Sa | ndy Hook, CT 064 | 82 www.e4sciences.com |



Event Summary

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Arthur Kill Blasting Event Summary

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

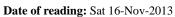
The Arthur Kill contract area is mapped below with a top-of-rock map. Today's dredge locations are marked by colored symbols, connected by colored lines to this week's past locations marked by gray symbols. The drilling and blasting barge location is marked in red. The easting and northing map coordinates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

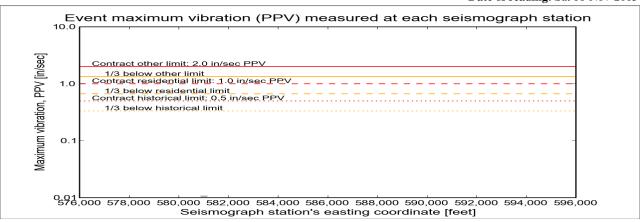
Click station for more information about the station.



Selected Event Summary

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





(Click on graph or here for larger view)

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

| Station | Date | Time | Max PPV (in / second) | Vibration Type | |
|---------------|-----------------|----------|-----------------------|----------------|--|
| NYCT - e4s008 | Sat 16-Nov-2013 | 00:07:44 | 0.00312 | Ambient | |

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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.

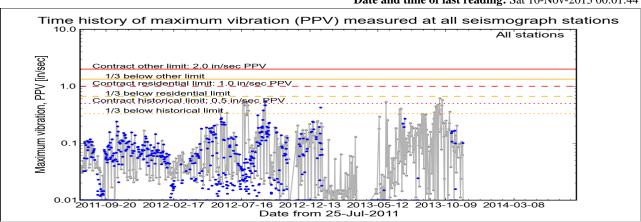
Click station for station information or click channel for event summary.



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.

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| Ambient | Mon 11-Nov-2013 | 11:07:45 | 0.0237 | NYCT |
| | e4sciences Earthworks, | LLC 27 Glen Road, Sa | andy Hook, CT 064 | www.e4sciences.com |

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Event Summary

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Arthur Kill Blasting Event Summary

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

History

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Click station for more information about the station.



Selected Event Summary

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

Station

Date

Time

Max PPV (in / second)

Vibration Type

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