

RECORD OF DECISION

New York Twist Drill (Loading Dock Area)
Operable Unit Number 02: Off-Site Contamination
State Superfund Project
Melville, Suffolk County
Site No. 152169
January 2015



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - RECORD OF DECISION

New York Twist Drill (Loading Dock Area)
Operable Unit Number: 02
State Superfund Project
Melville, Suffolk County
Site No. 152169
January 2015

Statement of Purpose and Basis

This document presents the remedy for Operable Unit Number: 02: Off-Site Contamination of the New York Twist Drill (Loading Dock Area) site, a Class 2 inactive hazardous waste disposal site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for Operable Unit Number: 02 of the New York Twist Drill (Loading Dock Area) site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

During the course of the investigation, actions were performed by the on-site Volunteer for Operable Unit Number 01. Based on the implementation of the Volunteer's actions, the findings of the investigation off-site for Operable Unit Number 02 indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. The selected remedy includes site management activities to further assess the performance of the Operable Unit Number 01 remedy on off-site conditions (Operable Unit Number 02).

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

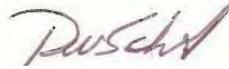
Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions

and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

January 15, 2015

Date



Robert W. Schick, P.E., Director
Division of Environmental Remediation

RECORD OF DECISION

New York Twist Drill (Loading Dock Area)
Melville, Suffolk County
Site No. 152169
January 2015

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of hazardous wastes at the site resulted in threats to public health and the environment that were addressed by the Volunteer's actions for Operable Unit Number 01, which were undertaken at the site.

Based on the implementation of Volunteer's actions, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The Volunteer's actions conducted at the site will attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the remedy selected by this Record of Decision (ROD). A No Further Action remedy may include site management, which will include continued operation of any remedial system installed and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This ROD identifies the Volunteer's actions conducted and discusses the basis for No Further Action.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

Half Hollow Hills Community Library
510 Sweet Hollow Road
Melville, NY 11747
Phone: 631-421-4535

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The New York Twist Drill Loading Dock Area is located at 25 Melville Park Road in a large commercial/industrial area immediately south of the Long Island Expressway in Melville, New York.

Site Features: The main facility feature is a two-story office building. Paved parking lots are located to the east and north of the building and a grass lawn is located to the south.

Current Zoning/Use(s): The property is presently zoned for commercial use and currently used for offices.

Past Use of the Site: The site was initially developed in 1966 and occupied by the New York Twist Drill Company (NYTD) until 1984. NYTD manufactured carbon steel and other hardened metal twist drills. Operations included heat treatment with salt baths, nitriding, and vapor degreasing with chlorinated solvents. A State Pollutant Discharge Elimination System (SPDES) permit was in place from the mid 1960's to early 1980's, which permitted discharging industrial wastewater from site operations to the environment. Several SPDES violations were issued to NYTD for unacceptable discharges. In 1985, the building was converted into a two-story office complex.

Operable Units (OU): The site was divided into two operable units. An operable unit represents

a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.

OU 01 covers on-site activities for this class 2 site which are undertaken under the Voluntary Cleanup Program (Site number V00128). Remedial actions are being performed on-site to address contamination and prevent the migration of contamination off-site in accordance with the Record of Decision, dated March 2004. Site remedial actions include reductive dechlorination, free-phase product removal and a vapor control system.

OU 02 covers off-site activities, which are being conducted under the State Superfund Program.

Site Geology and Hydrogeology: Glacial deposits consisting of stratified sand and gravel are present from the surface to a depth of approximately 100 feet. The Magothy formation underlies the glacial deposits and consists of fine grained sand with interbedded layers of clayey sand, silty sand, and clay. Groundwater is approximately 45 feet below ground surface and flows southeast.

Operable Unit (OU) Number 02 is the subject of this document.

A Record of Decision was issued previously for OU 01.

A site location map is attached as Figure 1. Figure 2 indicates the site boundary of OU 01.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy. For OU 02, an alternative which allows for unrestricted use of OU 02 was evaluated.

A comparison of the results of the investigation against unrestricted use standards, criteria and guidance values (SCGs) for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

Drico Corporation

Robert, Mark and Jeffrey Hammer and Suzanne Eliot

A consent order for a remedial investigation/feasibility study was executed on November 16, 2004 between the Department and the potentially responsible parties (PRPs) for OU 02. PRPs

for the site have performed investigation activities to date as required by the Department. An agreement is in place for the PRPs to implement the selected remedy for OU 02.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on OU 02 includes data for:

- air
- groundwater
- indoor air
- sub-slab vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCG in the footnotes. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: Remedial Investigation Results

The data have identified contaminants of concern. A "contaminant of concern" is a hazardous waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified for OU 02 at this site are:

tetrachloroethene (PCE)	dichloroethene (trans-1,2-)
trichloroethene (TCE)	1,1,1-trichloroethane (TCA)
dichloroethene (cis-1,2-)	1,1-dichloroethane (DCA)
dichloroethene (1,1-)	

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media are being addressed by remedial actions undertaken on-site (OU 01) by a remedial party (Volunteer) under the Voluntary Cleanup Program. More complete information can be found in the RI Report.

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

There were no IRMs performed on OU 02 during the RI.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 02.

Nature and Extent of Contamination: Based upon investigations conducted to date, the primary contaminants of concern for OU 02 include tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2 Dichloroethene (DCE), trans-1,2-dichloroethene, 1,1 dichloroethene, 1,1,1-trichloroethane and 1,1-dichloroethane.

Groundwater - Based on the groundwater monitoring results from 2012, PCE and its associated degradation products TCE and DCE are considered the primary contaminants, which were detected above the groundwater standard of 5 parts per billion. The leading edge of the PCE contamination was detected approximately 4,600 feet downgradient of the site along Ruland

Road at a concentration of 180 parts per billion (ppb). However, a subsequent sample detected PCE at 23 ppb. The depth of contamination is approximately 50 feet below ground surface (bgs) at the site and descends to approximately 300 feet bgs downgradient of the site south of Bayliss Road. The width of the groundwater contamination plume is approximately 400 feet near Bayliss Road where the highest detections of PCE (211 ppb) and DCE (286 ppb) were located. The detection of DCE within the plume at a greater concentration than PCE indicates that natural degradation of PCE is occurring, since PCE is the primary contaminant detected on-site and DCE is a known degradation product of PCE. On-site remedial activities conducted since 2003 have significantly reduced site impacts to off-site groundwater, as a result groundwater conditions near the site have improved and reduced the length of the plume to 4,300 feet. Groundwater contamination is attenuating further down-gradient of the site based on low levels detected at the furthest monitoring well from the site located along Ruland Road, the decreasing trend of site related contamination detected at MW-09 from 2008 to 2012 and the detection of the final degradation product of PCE, known as ethane/ethene, within the plume.

Vapor Intrusion - One structure down-gradient of the site has been evaluated for vapor intrusion. Sampling has detected elevated PCE, TCE and DCE concentrations beneath the building, but has not detected PCE, TCE or DCE within the indoor air. In 2007, sub-slab soil vapor concentrations of PCE, TCE and DCE were detected at 1,010 micrograms per cubic meter (ug/m³), 67 ug/m³ and 14.6 ug/m³, respectively. Subsequent sub-slab soil vapor sampling in 2014 detected PCE up to 74 ug/m³, but TCE and DCE were not detected. Clean groundwater is located above the zone of contaminated groundwater further downgradient of the site, therefore, soil vapor will not be impacted from this site's groundwater contamination.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

Exposures associated with contamination on Operable Unit 1 (on-site) have been assessed as part of remedial activities for Site #V00128. Exposures to off-site contamination are being assessed as part of Operable Unit 2. People will not come into contact with groundwater contamination unless they dig or drill below the surface. Contaminated groundwater in the area is not used for drinking and the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Environmental sampling indicates soil vapor intrusion does not appear to be currently occurring off-site; however, the potential for exposures via soil vapor intrusion should be monitored.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to

pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: SUMMARY OF SELECTED REMEDY

Based on the results of the investigations, the actions performed by the Volunteer, and the evaluation presented here, the Department is proposing No Further Action with Groundwater and Vapor Monitoring as the remedy for Operable Unit (OU) 02 pertaining to off-site contamination. This proposed remedy does not change the selected remedy for OU 01 regarding the on-site contamination currently being performed by the Volunteer. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

A Site Management Plan is required, which includes the Monitoring Plan to assess the performance and effectiveness of OU 01 remedy on off-site media. The plan must include, but may not be limited to:

1. Complete two vertical profile borings and install monitoring wells at determined intervals as conducted at VP-09 to complete the fifth transect.
2. Monitoring of groundwater to assess the performance and effectiveness of the on-site remedy (OU 01).
3. Monitoring of sub-slab vapor in one off-site building.
4. A schedule of monitoring and frequency of submittals to the Department;

5. If new private wells (potable wells, irrigation wells, heating and cooling wells) are identified within or near the off-site contamination, samples of groundwater will be collected and evaluated to determine if there are potential exposures to site contamination;

6. Site monitoring activities will evaluate on- and off-site conditions and determine if corrective action(s) or exposure evaluation(s) are warranted.

Green remediation principals and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are volatile organic compounds (VOCs). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. The data presented is from OU 02, which is located beyond the OU 01 boundary, shown on Figure 2.

Groundwater

Groundwater samples were collected to assess groundwater conditions off-site and to evaluate the on-site remedy. Groundwater investigations were conducted by completing vertical profile points along transects located down-gradient of the site (Figure 3) to identify zones where site contamination was present. Based on the results from the vertical profile points, permanent monitoring wells were installed (Figure 4) and sampled prior to conducting the next transect.

Table 1 - Groundwater

Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
VOCs			
1,1,1-trichloroethane	0 - 40	5	25/259
1,1-dichloroethane	0 - 39.3	5	24/259
1,1-dichloroethene	0 - 43	5	26/145
cis-1,2-dichloroethene (DCE)	0 - 499	5	122/259
tetrachloroethylene (PCE)	0 - 2,700	5	151/259
trans-1,2-dichloroethene	0 - 68.2	5	11/259
trichloroethene (TCE)	0 - 740	5	136/259
1,1,2-trichloro-1,2,2-trifluoroethane	0 - 12.1	5	9/234
1,2,4-trimethylbenzene	0 - 9.6	5	5/153
1,2-dichlorobenzene	0 - 3.9	3	1/259
1,2-dichloroethane	0 - 1	0.6	2/259
acetone	0 - 103	50	4/248

benzene	0 – 4.1	1	1/259
chlorobenzene	0 – 18.6	5	2/259
chloroethane	0 – 6.7	5	1/259
chloroform	0 10.6	7	2/259
dichlorodifluoromethane	0 – 7.7	5	3/259
methyl ethyl ketone	0 – 2,040	50	3/192
sec-butylbenzene	0 – 7.9	5	4/153
tert-butyl methyle ether	0 – 33	10	4/259
toluene	0 – 265	5	4/259
vinyl chloride	0 – 7.4	2	4/259

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

Site contamination was detected above groundwater SCGs 4,600 feet downgradient of the site near Ruland Road (Figure 4) and at a width of approximately 400 feet near Bayliss Road (Figure 5). Site contamination was detected 50 feet below groundwater surface (ft bgs) at the site and descends to 300 ft bgs at VP-08 located downgradient of the site (Figure 6). In 2006, initial sampling at a vertical profile point, identified as VP-01, detected PCE at 2,700 ppb. Groundwater quality has improved immediately downgradient of the site, which is illustrated on Figure 7 by the outline of the contamination defined by the vertical groundwater profiles and current groundwater measurements from the monitoring wells near the site that are below SCGs. Due to the remedial actions conducted on-site, the overall length of the plume has been reduced to approximately 4,300 feet. From 2008 to 2012, a decreasing trend of site related contamination was detected within the plume at MW-09. The highest detection during the last round of groundwater sampling in December 2012 was 286 ppb of cis-1,2-dichloroethene (DCE) at MW-11D (Figure 4). The detection of DCE within the plume at a greater concentration than PCE indicates that natural degradation of PCE is occurring, since PCE is the primary contaminant detected on-site and DCE is a known degradation product of PCE. Attenuation of volatile organic compounds within the plume is expected to continue to occur due to remedial activities conducted by the Volunteer and degradation of PCE.

A well search was performed, which identified private wells located within the plume. No private wells used for potable water were identified within the groundwater contamination plume, however private wells used for air conditioning and diffusion were identified. Private well owners were contacted and samples were collected if permitted by the property owner. Site related contamination was found in an air conditioning system well (screened from 240 to 270 ft bgs) and the associated diffusion well (screened from 86 to 100 ft bgs) just south of MW-11 cluster (Figure 4). Two supply well fields are located down-gradient of the site. The Gazza Boulevard well field is located approximately 2.1 miles from the site and the New Highway well field is located approximately 4.1 miles from the site. Each of these supply well fields have treatment for volatile organic compounds that are not related to the New York Twist Drill site.

Site investigations conducted at VP-05, VP-06 and the deep interval of VP-09 detected trichloroethene (TCE), which is also a chlorinated VOC, as the primary contaminant. Due to the characteristics of the contamination (concentration of TCE verses PCE, depth and location of contamination within the aquifer and isotope analysis),

the contamination at these locations was determined to be originating from another source and is not considered to be related to the site. A subsequent investigation was conducted by the Department, but was unable to locate the source of the contamination. Continued monitoring at MW-07 and MW-08 has shown a reduction in contamination. The remaining 15 contaminants indicated in Table 1 (beneath TCE) are not considered to be site related contaminants of concern due to the sporadic detections, comparison to on-site concentrations and/or are not significantly above the SCGs.

Based on the findings of the RI, the presence of chlorinated volatile organic compounds has resulted in the contamination of groundwater. The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of groundwater to be addressed by the remedy selection process are: PCE, TCE, DCE, 1,1-dichloroethene, trans-1,2-dichloroethene, 1,1,1-trichloroethane (TCA), 1,1-dichloroethane.

Soil Vapor

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was evaluated by the sampling of sub-slab soil vapor under a structure and indoor air inside a structure. At the structure within OU 02, a full suite of samples were collected to evaluate whether soil vapor intrusion was occurring.

Samples were collected from the sub-slab (two sample points) of a structure located to the south of the site. Sub-slab soil vapor sample results were shown to have decreased at both locations within the building footprint during the second round of sampling. Indoor air and outdoor air samples were also collected at this time. The samples were collected to assess the potential for soil vapor intrusion. The results indicate PCE and TCE were detected in sub-slab vapor, but not in indoor air or ambient air samples. Based on the findings further monitoring is warranted at the structure.

Based on the findings of the Remedial Investigation, the presence of PCE and TCE has resulted in the contamination of soil vapor. The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of soil vapor to be addressed by the remedy selection process are, PCE and TCE.

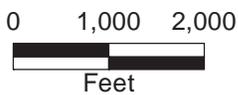
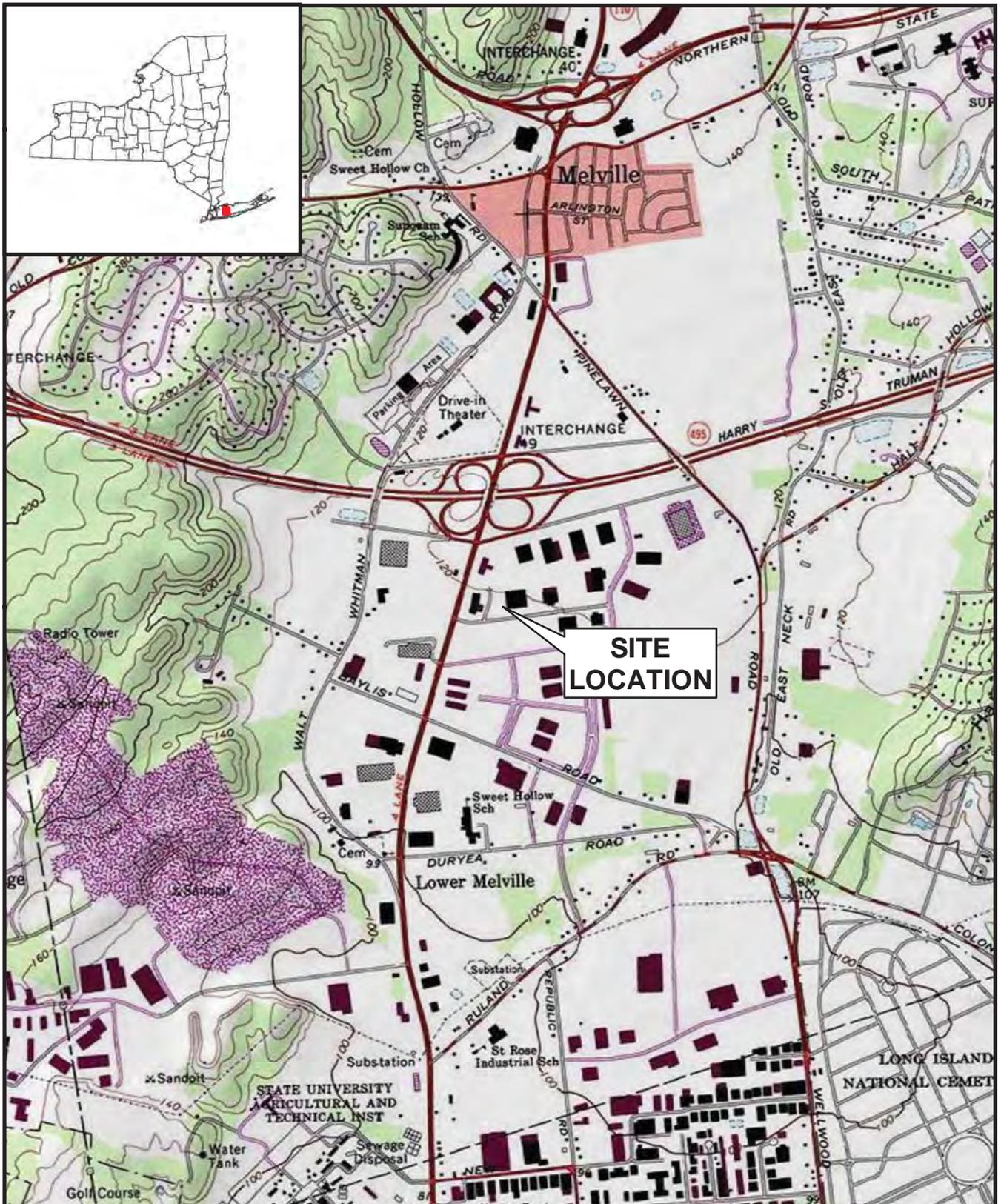


Figure 1
 Site Location Map
 New York Twist Drill
 Town of Huntington, Suffolk County
 Site No. 152169



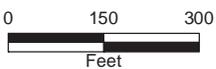
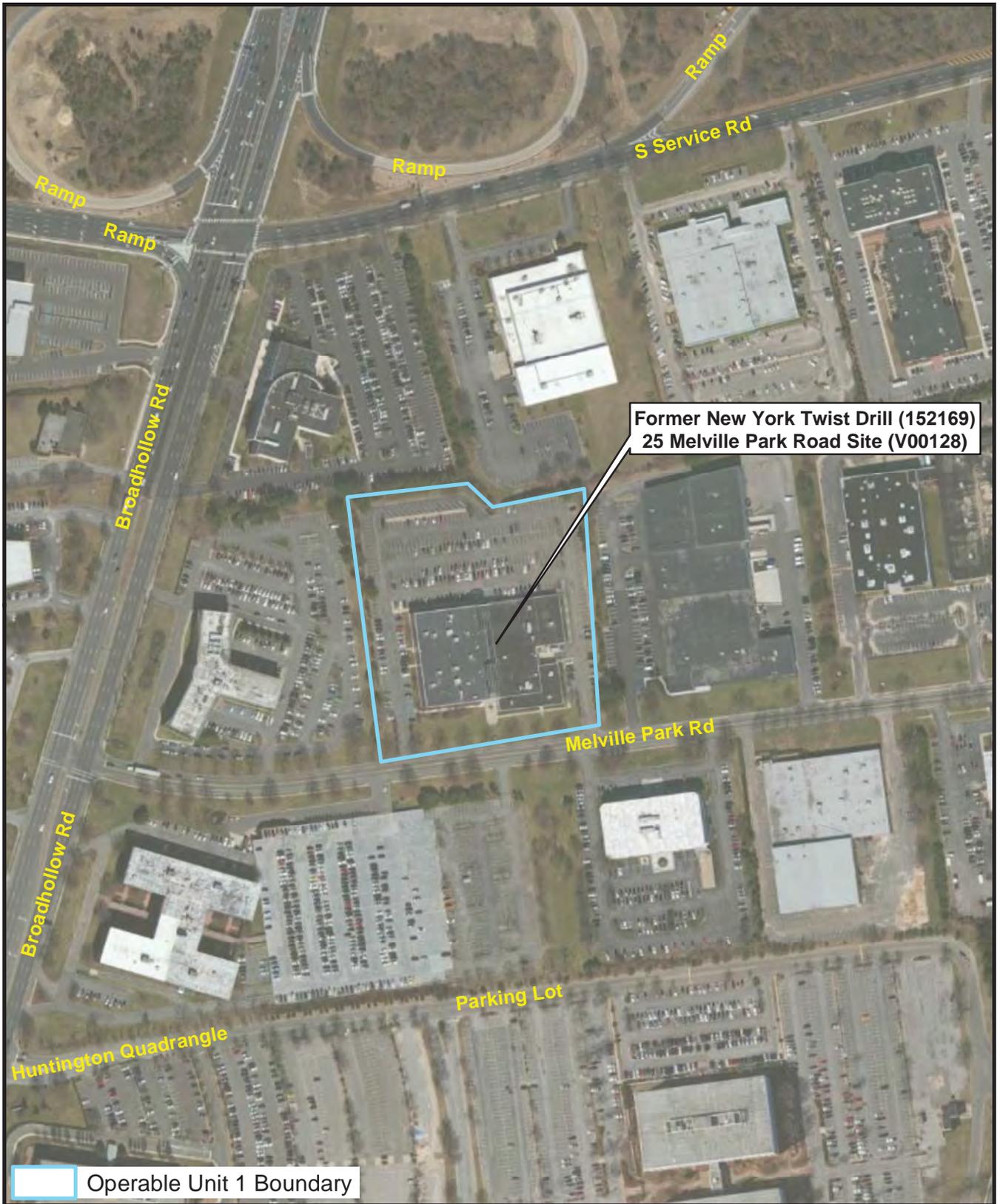


Figure 2
Site Map
 New York Twist Drill
 Town of Huntington, Suffolk County
 Site No. 152169



NY TWIST DRILL SITE LOCATION



TRANSECT 5

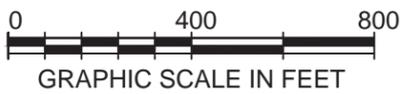
TRANSECT 3

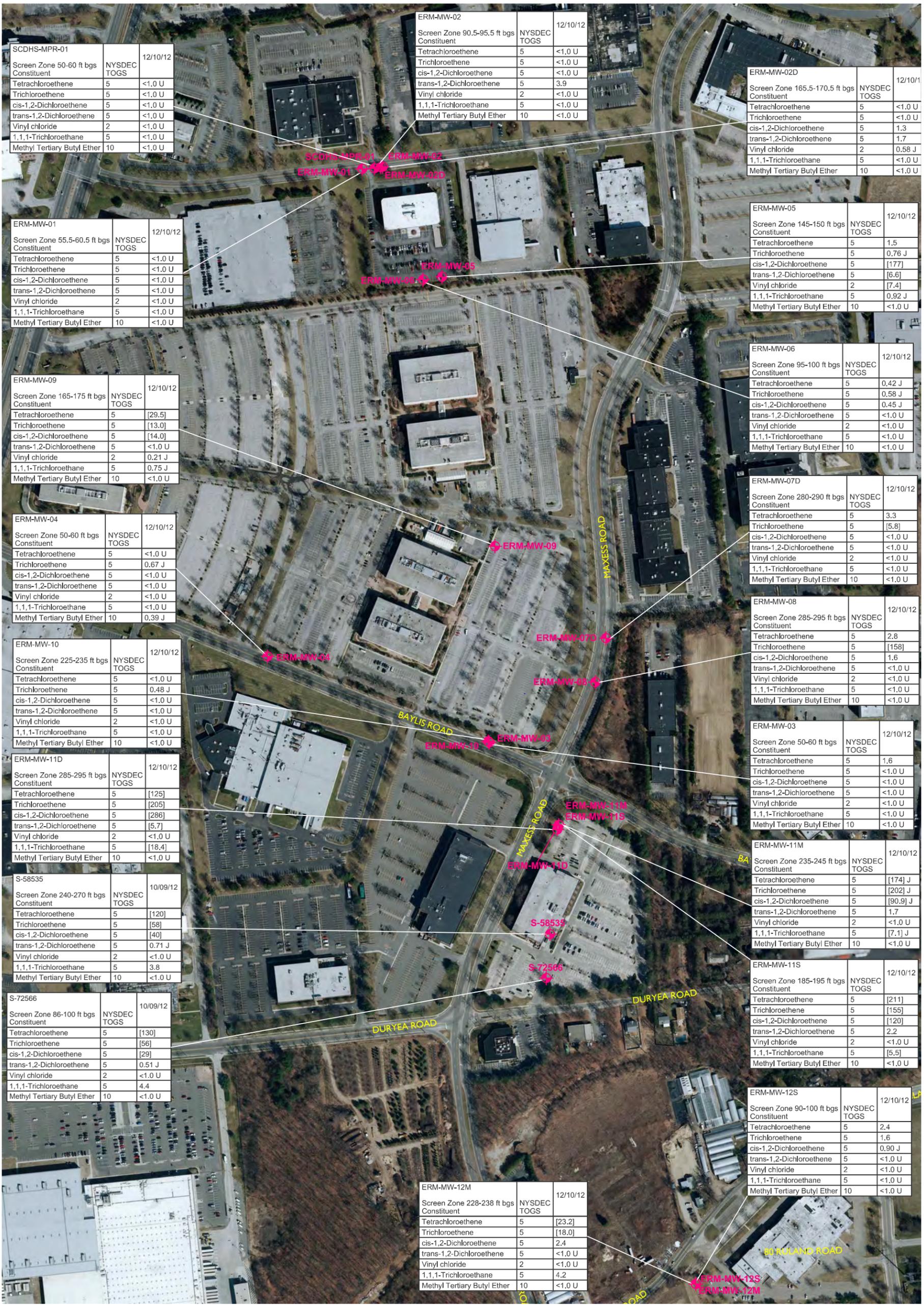
TRANSECT 4

TRANSECT 2

TRANSECT 1

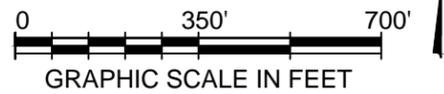
TITLE				VERTICAL PROFILE ORING LOCATIONS	
PREPARED FOR				RESPONDANTS ORDER ON CONSENT NO. W1-0998-04-04	
DRAWN BY				SCALE	
G. S/EMF				AS SHOWN	
DATE				JOB NO.	
11/0 /13				0025381	
FIGURE					3



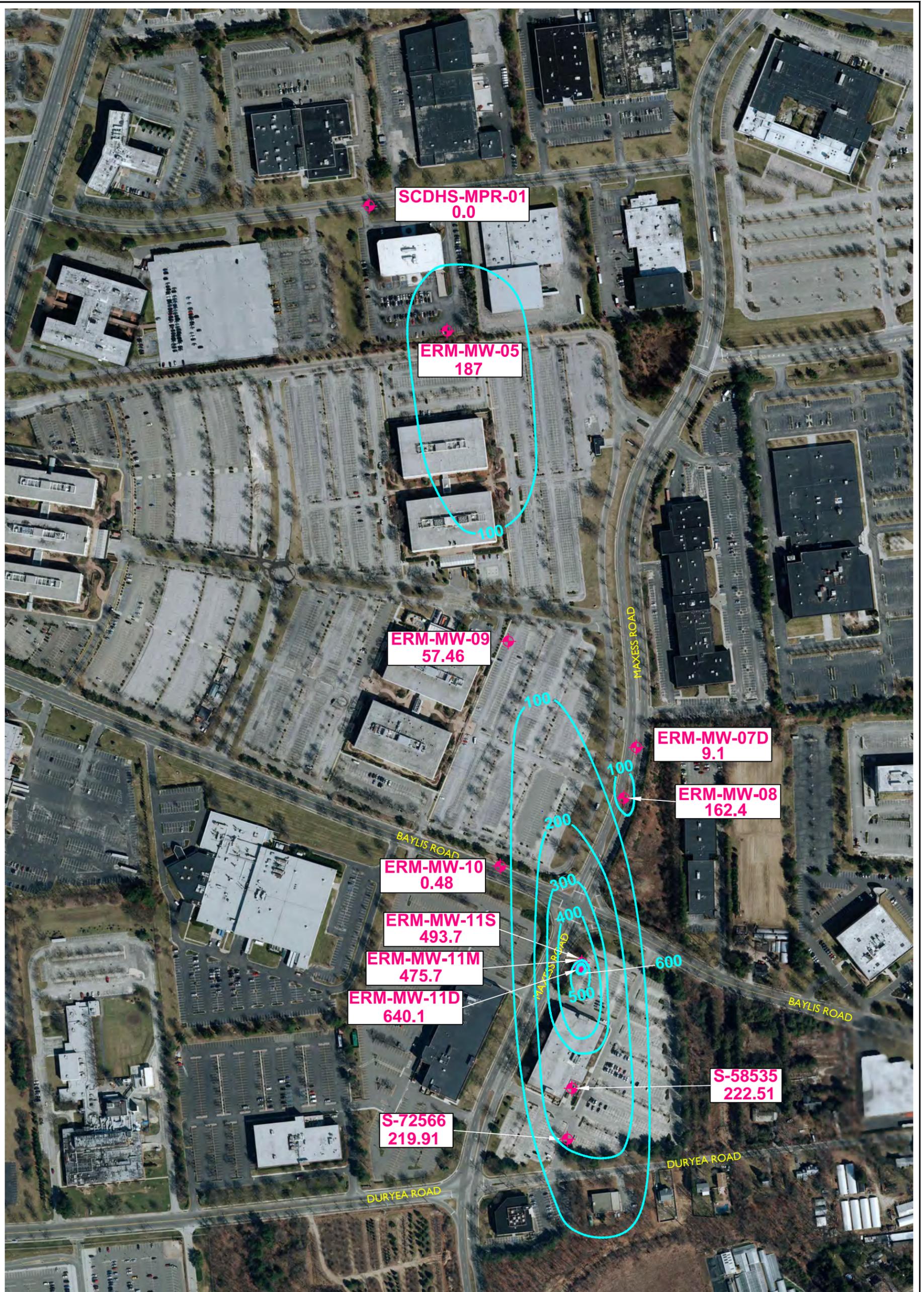


Legend

- Monitoring well location
 - J** The constituent was positively identified the associated numerical value is the approximate concentration of the constituent for the sample.
 - []** Indicates that a compound was detected above it's comparison criteria.
 - U** Non detect
- All data reporting is in micrograms per liter (ug/l).



TITLE			
VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER 2012			
PREPARED FOR			
RESPONDANTS ORDER ON CONSENT NO. W1-0998-04-04			
Environmental Resources Management			FIGURE
			4
DRAWN BY	SCALE	DATE	JOB NO.
GKS/EMF	AS SHOWN	11/22/13	0025381



Legend

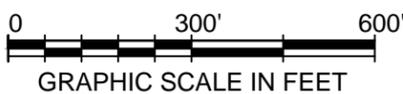
Monitoring well location

162.4 Total VOC Concentration from Groundwater Sample Collected in 2012

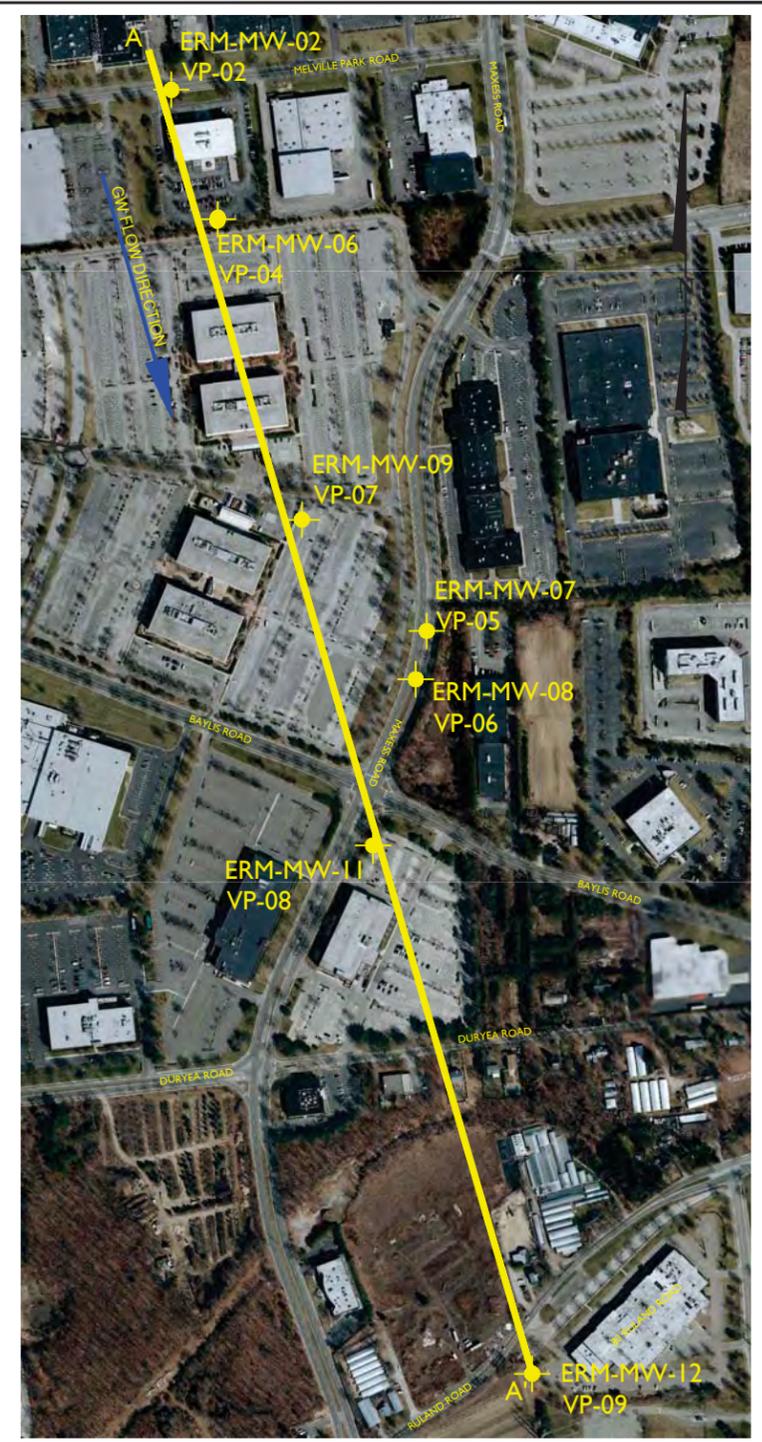
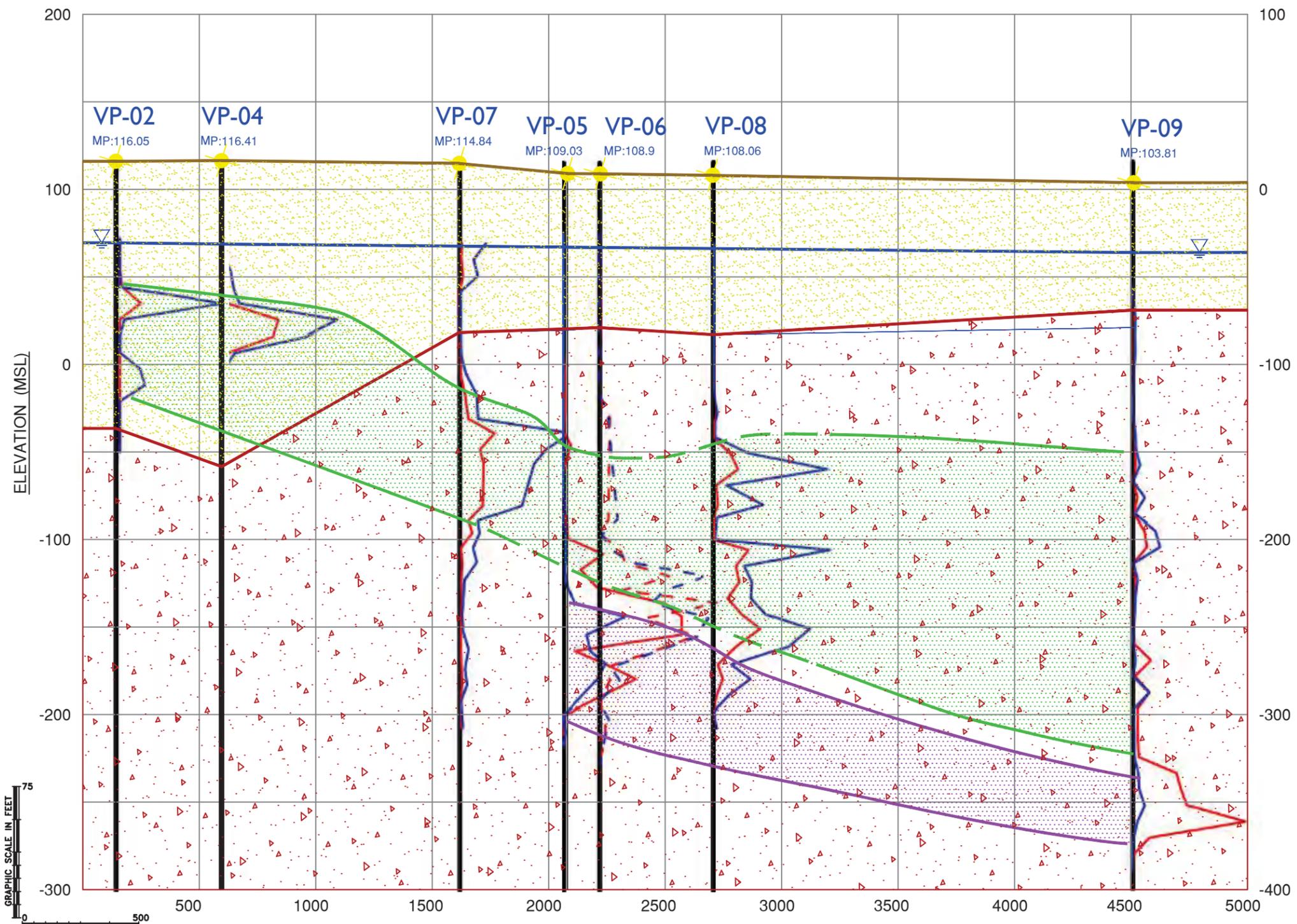
Total VOC Concentration Contour

All data reporting is in micrograms per liter (ug/l).

Total VOC: Sum of PCE, TCE, cis-DCE, trans DCE, VC, MTBE and TCA



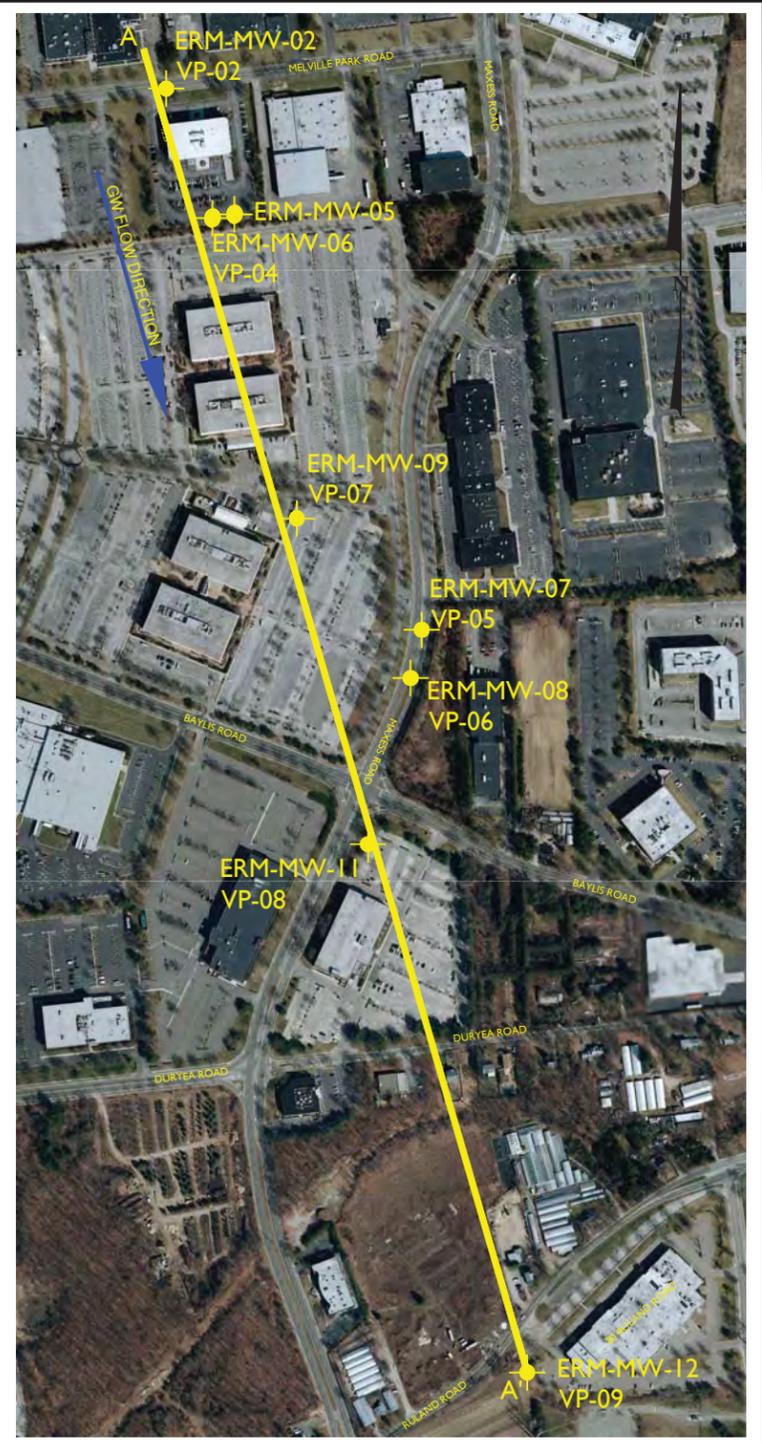
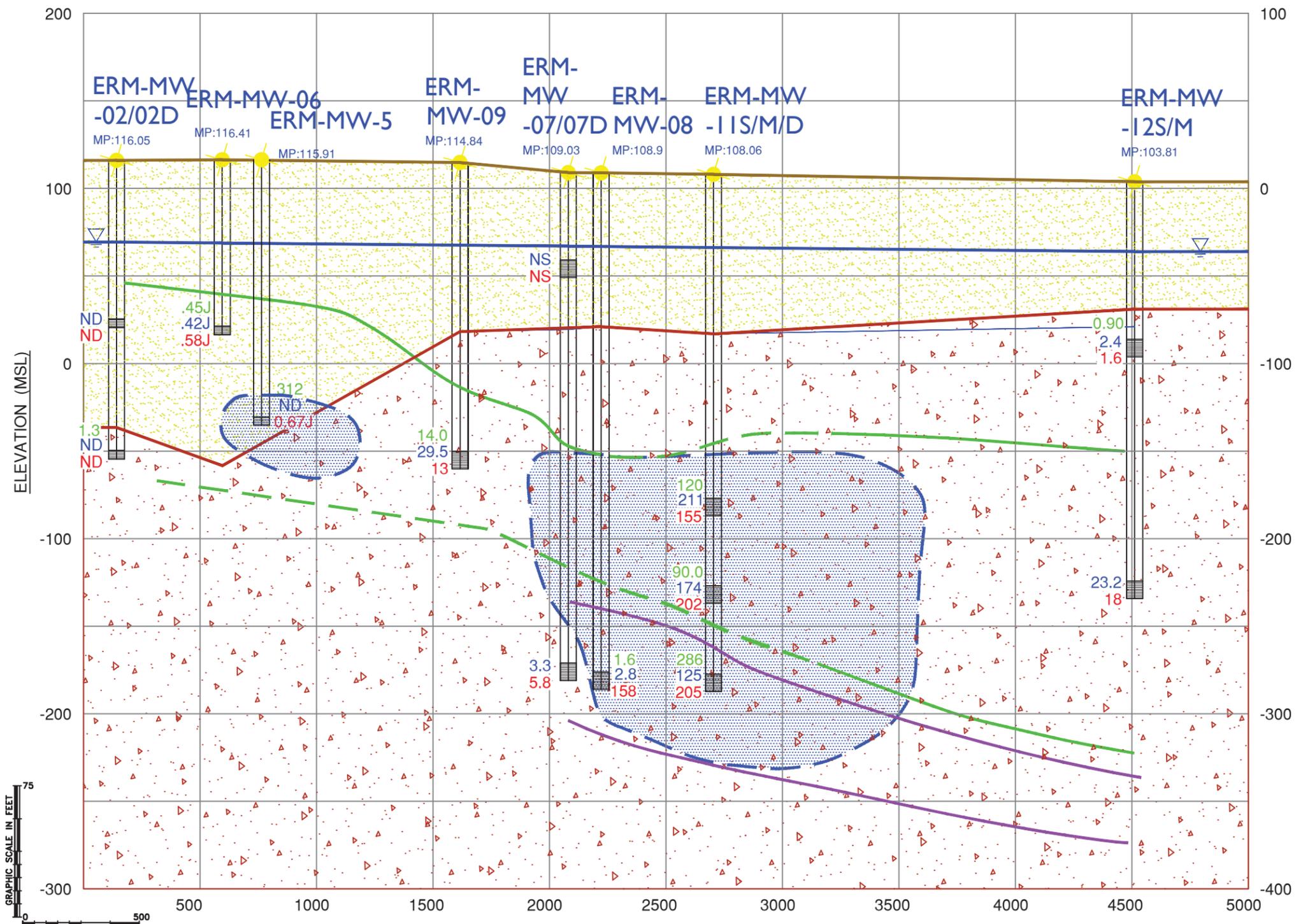
TITLE				FIGURE
TOTAL VOC CONTOUR MAP 2012 NYTD MONITORING WELL NETWORK				
PREPARED FOR				5
RESPONDANTS ORDER ON CONSENT NO. W1-0998-04-04				
Environmental Resources Management				
DRAWN BY	SCALE	DATE	JOB NO.	
GKS/EMF	GRAPHIC	07/03/2014	0025381	



- NOTES:
1. ORTHO IMAGE SOURCE NEW YORK STATE GIS
 2. GROUNDWATER QUALITY DATA, VARIOUS REPORTS FROM 03-2006 TO 03-2008
 3. Vertical profiles completed between March 2006 and October 2012.

LEGEND	
UPPER GLACIAL	
MAGATHY	
WATER TABLE ELEVATION (11/21/2012)	
GROUND SURFACE	
UPPER GLACIAL/MAGATHY INTERFACE	
PCE (RELATIVE CONCENTRATION)	
TCE (RELATIVE CONCENTRATION)	
NYTD PLUME, 100ug/l	
UNKNOWN SOURCE PLUME, 100 ug/l	

TITLE				VERTICAL PLUME CROSS SECTION VERTICAL PROFILE DATA
PREPARED FOR				
RESPONDANTS ORDER ON CONSENT NO. W1-0998-04-04				FIGURE 6
Environmental Resources Management				
DRAWN BY	SCALE	DATE	JOB NO.	
JMC/MCW/ EMF	GRAPHIC	07/08/14	0025381	



- NOTES:
1. ORTHO IMAGE SOURCE NEW YORK STATE GIS
 2. GROUNDWATER QUALITY DATA FROM DECEMBER 2012 SAMPLING EVENT.
 3. ERM-MW-07 WAS NOT SAMPLED DUE TO AN OBSTRUCTION IN THE WELL.
 4. ND = NON-DETECT
 5. CONCENTRATIONS EXPRESSED IN ug/L

LEGEND		PCE CONCENTRATION	cis-DCE CONCENTRATION
UPPER GLACIAL		23.2	312
MAGATHY		TCE CONCENTRATION	
WATER TABLE ELEVATION (11/21/2012)		18	
GROUND SURFACE		NYTD PLUME 100 ug/l BASED ON VERTICAL PROFILE DATA	
UPPER GLACIAL/MAGATHY INTERFACE		UNKNOWN SOURCE PLUME 100 ug/l BASED ON VERTICAL PROFILE DATA	
		TOTAL VOC PLUME BASED ON 2012 DATA (>100 ug/L)	

TITLE				FIGURE
VERTICAL PLUME CROSS SECTION MONITORING WELL DATA				
PREPARED FOR				7
RESPONDANTS ORDER ON CONSENT NO. W1-0998-04-04				
Environmental Resources Management				0025381
DRAWN BY	SCALE	DATE	JOB NO.	
JMC/MCW/EMF	GRAPHIC	07/09/14		

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

**New York Twist Drill (Loading Dock Area)
Operable Unit (OU) No. 2: Off-Site Contamination
State Superfund Project
Melville, Suffolk County
Site No. 152169**

The Proposed Remedial Action Plan (PRAP) for the New York Twist Drill (Loading Dock Area) OU2 was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on November 26, 2014. The PRAP outlined the remedial measure proposed for the contaminated groundwater and soil vapor at the New York Twist Drill (Loading Dock Area) OU2 site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on December 9, 2014, which included a presentation of the remedial investigation feasibility study (RI/FS) for the New York Twist Drill (Loading Dock Area) OU2 as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on December 26, 2014.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1: What is the source of the contamination?

RESPONSE 1: Site operations produced drill bits that were cleaned with chemicals prior to distribution. Investigative findings suggest that past operations led to the release of chemicals near the loading dock.

COMMENT 2: When did the facility stop operating?

RESPONSE 2: Site operations ceased in 1984.

COMMENT 3: How long were they there?

RESPONSE 3: Site operations began in 1966 and continued until 1984.

COMMENT 4: Did Twist Drill adhere to all the regulations when they were operating?

RESPONSE 4: No, they had violations of their NYS State Pollutant Discharge Elimination System (SPDES) permit.

COMMENT 5: In the 1960s, were regulations in effect that should have prevented the pollution from occurring?

RESPONSE 5: In 1966, site operations began and a permit to discharge industrial wastes to groundwater, similar to a SPDES permit, was approved by Suffolk County Health Department.

COMMENT 6: If they were operating now, would they be in violation of environmental law?

RESPONSE 6: The historic discharges that occurred in the past would not be allowed today.

COMMENT 7: Has SPDES become more lenient over time?

RESPONSE 7: No. On the contrary, the SPDES program is designed to eliminate the pollution of New York waters and to maintain the highest quality of water possible consistent with public health; public enjoyment of the resource; protection and propagation of fish and wildlife; and industrial development in the state.

COMMENT 8: How was the site discovered?

RESPONSE 8: A site owner evaluated the property to assess the condition and value of the site.

COMMENT 9: Were the operators who caused the pollution caught?

RESPONSE 9: The operators were identified and contacted. They signed a Consent Order under the State Superfund Program and are presently conducting the remedial program activities under Department oversight.

COMMENT 10: Who was the volunteer who conducted the cleanup on-site?

RESPONSE 10: A previous owner of the property entered the Voluntary Cleanup Program. Subsequent owners have become participants in the Voluntary Cleanup Program. The current volunteer is BP Moby Holdings LLC.

APPENDIX B

Administrative Record

Administrative Record

**New York Twist Drill (Loading Dock Area)
Operable Unit (OU) No. 2: Off-Site Contamination
State Superfund Project
Melville, Suffolk County
Site No. 152169**

1. Proposed Remedial Action Plan for the New York Twist Drill (Loading Dock Area) site, Operable Unit No. 2, dated November 2014, prepared by the Department.
2. Order on Consent, Index No. W1-0998-04-04, between the Department and Drico Corporation, Robert Hammer, Mark Hammer, Suzanne Eliot, and Jeffrey Hammer, executed on November 11, 2014.
3. OU-2 Off-site - Groundwater Remedial Investigation & Feasibility Study Work Plan, June 2005, prepared by Environmental Resources Management.
4. New York Twist Drill OU-2 Off-Site Remedial Investigation, September 2014, prepared by Environmental Resources Management.
5. New York Twist Drill OU-2 Off-Site Feasibility Study, September 2014, prepared by Environmental Resources Management.