



**Department of
Environmental
Conservation**

GROUNDWATER SAMPLING EVENT LETTER REPORT

EAST OF VANDERVOORT AREAS

**MEEKER AVENUE PLUME TRACKDOWN SITE NO. 224121
WORK ASSIGNMENT D007622-27
FORMER LOMBARDY STREET SOAP and LACQUER Mfg.
SITE (ID No. 224182) - WORK ASSIGNMENT D007622-31
GREENPOINT/KINGS COUNTY, NY
EAST WILLIAMSBURG INDUSTRIAL AREA**

Prepared for:
NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
625 Broadway, Albany, New York

Basil Seggos, Acting Commissioner

DIVISION OF ENVIRONMENTAL REMEDIATION
Remedial Bureau B

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February 2017

LETTER REPORT
GROUNDWATER SAMPLING EVENT
EAST OF VANDERVOORT AREAS
MEEKER AVENUE PLUME TRACKDOWN SITE
SITE ID NO. 224121 - WORK ASSIGNMENT D007622-27
FORMER LOMBARDY STREET SOAP AND LACQUER MFG. SITE
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BROOKLYN, KINGS COUNTY, NEW YORK

PREPARED FOR:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
REMEDIATION BUREAU B
WORK ASSIGNMENT NUMBER D007622-31

PREPARED BY:

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257 WEST GENESEE STREET, SUITE 400
BUFFALO, NEW YORK 14202

FEBRUARY 2017

February 16, 2017

Mr. David K. Harrington, P.E.
Senior Environmental Engineer
Remedial Bureau B
Division of Environmental Remediation
NYS Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, New York 12233-7016

**Re: NYSDEC Standby Contract, Work Assignment No. D007622-27
Letter Report - Groundwater Sampling Event - East of Vandervoort Areas
Meeker Avenue Plume Trackdown, Site ID No. 224121
Former Lombardy Soap and Lacquer Mfg. Site ID No. 224182, Work Assignment
No. D007622-31**

Dear Mr. Harrington:

URS Corporation - New York (URS) has prepared this Letter Report to summarize the field activities and groundwater analytical results associated with the September 2016 Groundwater Sampling Event east of Vandervoort Avenue. The groundwater sampling event was completed areas downgradient of the Former Klink Cosmo Site (NYSDEC Site ID #224130), along the public right-of-way adjacent to the Former Lombardy Street Lacquer and Soap Mfg. Site (NYSDEC Site ID #224182) and nearby ACME Steel Properties (NYSDEC Site ID #s 224131 and 224132). These areas are generally situated north of Division Place, east of Vandervoort Avenue, south of the Brooklyn Queens Expressway, extending east to Gardner Avenue in the Greenpoint/East Williamsburg section of the Borough of Brooklyn, New York (Figure 1). The work activities were completed in accordance with the Groundwater Sampling Work Plan submitted to the Department in September 2016 (URS, September 2016)

The work associated with this sampling event was completed under the Work Assignment No. D007622-27 and was not part of the original Scope of Work.

1.0 INTRODUCTION

URS prepared a Project Work Plan for the groundwater sampling which was submitted to and approved by the Department on June 21, 2016 and June 22, 2016, respectively (Attachment 1). The following monitoring wells were included for sampling, and are shown in Figure 2:

<u>NYSDEC Monitoring Wells</u>		<u>ACME Steel RI Monitoring Wells</u>	
DEC-005	DEC-005D	DEC-006D	DEC-026D
DEC-006DD	DEC-006TC	DEC-007	DEC-039D
DEC-007D	DEC-008	DEC-015	DEC-040D
DEC-015D	DEC-015R	DEC-016R	ACME-MW-2
DEC-016D	DEC-017D	DEC-018	ACME-MW-2D
DEC-018D	DEC-018TC	DEC-019	ACME-MW-8
DEC-022D	DEC-026	DEC-029	ACME-MW-8D
DEC-029D	DEC-029TC	DEC-039	
DEC-040	DEC-041	DEC-041D	
DEC-041TC	DEC-042	DEC-043	

<i>DEC-043D</i>	<i>DEC-051</i>	<i>DEC-064</i>
<i>DEC-064D</i>	<i>DEC-080</i>	<i>DEC-080D</i>
<i>DEC-081</i>	<i>DEC-082</i>	<i>DEC-088</i>
<i>DEC-088D</i>	<i>DEC-089</i>	<i>DEC-089D</i>
<i>DEC-094</i>	<i>DEC-094D</i>	<i>DEC-095</i>
<i>DEC-095D</i>	<i>DEC-096</i>	<i>DEC-096D</i>
<i>MW-097D</i>		

In addition to the aforementioned groundwater sampling, the contents of an underground sewer tank/vault located beneath the sidewalk adjacent to 514 Varick Avenue were sampled for waste characterization. The following work activities were completed:

- The aforementioned monitoring wells were inspected and any maintenance activities performed or necessary were documented on monitoring well inspection forms.
- Collected groundwater samples at monitoring wells listed above, and were analyzed for VOCs via USEPA Method 8260B as indicated on Table 1. Category B deliverables were required. A Data Usability Summary Report (DUSR) has been prepared.
- Collected tank depth, liquid depth, and a liquid sample from the sewer tank/vault located in the sidewalk adjacent to 514 Varick Avenue. The tank liquid sample was analyzed for compounds/parameters as indicated on Table 1.
- Surveyed for location, surface elevation and measuring point elevation, four ACME Steel monitoring wells. The survey was performed by the NYSDEC approved URS subcontractor, MJ Engineering & Land Surveying, P.C.
- Completed this Letter Report of findings including: a) text describing the work performed; b) figures depicting the site location, all sampling locations, figures of sampling results (spider map as well as concentration gradients, groundwater flow direction, and petroleum product location(s)); c) tables containing analytical results; d) groundwater purge logs; e) field notes; f) monitoring well inspection forms, and g) a Data Usability Summary Report (DUSR) on Compact Disc (CD).

Purpose

The purpose of this groundwater sampling event is the following:

- Compare the groundwater data collected during this event to historical data, further define potential sources of chlorinated volatile organic compound (CVOC) groundwater contamination, update contaminant plume definitions, and ascertain trends, if any.
- Characterize the liquid in the underground sewer tank/vault and determine waste classification.

2.0 PREVIOUS INVESTIGATIONS

Groundwater sampling results obtained by URS as part of the Klink Cosmo Remedial Investigation (RI) has shown that a dissolved-phase CVOC groundwater plume is originating from the Klink Cosmo Site and is migrating towards the ACME Steel and Lombardy Street properties.

The November 2013, URS Phase VII Site Characterization Report provided groundwater flow information throughout areas east of Vandervoort Avenue. Figure 3 shows the shallow overburden groundwater in the vicinity of the Former Klink Cosmo Site and the ACME Steel and Lombardy Street properties. Figure 4 shows the deep overburden groundwater in the vicinity of the Former Klink Cosmo Site and ACME Steel and Lombardy Street properties. In general, groundwater flows towards the northeast from the Klink Cosmo site area into the ACME Steel and Lombardy Street properties where a more northerly flow direction occurs.

In July 2013, Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan) generated an RI report of the Former ACME Steel/Metal Works site. The report summarized the soil and groundwater data Langan collected from this site between September 18, 2012 and December 13, 2012. The following is an excerpt from the report that summarizes the aforementioned groundwater data:

- “• PCE concentrations in the shallow overburden groundwater at the Site are lower than upgradient concentrations, suggesting that the Site is impacted by an upgradient, off-site PCE source.
- TCE concentrations at the Site are one to two orders of magnitude higher than PCE concentrations, which indicate that TCE is not the result of PCE degradation but is likely from a separate source.
- TCE concentrations in shallow and deep groundwater measured during this RI were highest in the northern and northwestern part of the Site, near AOC 3, and in a downgradient monitoring well (DEC-026). These results are not consistent with historical URS groundwater sample results.”

In June 2013, Langan generated an RI report of the Former ACME Steel/Brass Foundry site. The report summarized the soil and groundwater data Langan collected from this site between September 18, 2012 and January 16, 2013. The following is an excerpt from the report that summarizes the aforementioned groundwater data:

- “• Upgradient sources – PCE and TCE concentrations in upgradient monitoring wells are greater than those at the Site, indicating that an upgradient source is contributing to the CVOC impacts in the Site groundwater.
- Down/Cross-gradient source – PCE concentrations in Site groundwater are lower than concentrations at downgradient perimeter monitoring wells, indicating that the former soap manufacturer and lacquer storage at 171 Lombardy Street and 514 Varick Avenue may contribute to CVOC impacts in Site groundwater.

- The extent of TCE in groundwater has been delineated, originating from an off-site source to the west and attenuating across the Site from west to east.
- The extent of PCE-impacted groundwater appears to be bound to the northwest and southeast corners of the Site; however, because of off-site upgradient and downgradient PCE concentrations are higher than on-site concentrations, additional investigation is necessary to differentiate the off-site sources and to determine the extent and magnitude of PCE impacts that originate from the Site.”

In December 2016, URS generated a report on Phase IX of its site characterization efforts, which summarized groundwater data collected in the vicinity of the ACME Steel and Lombardy Street properties and Klink Cosmo Site. The following is an excerpt from this report that summarizes the aforementioned groundwater data, and references dissolved phase CVOC plumes identified via compound-specific stable isotope analysis (CSIA) (Figure 5):

“a dissolved phase chlorinated solvent plume originates at the Klink Cosmo site. The horizontal extent of the chlorinated solvents has been mostly delineated. It appears that the chlorinated solvent plumes in the shallow and deep overburden have higher concentrations of perchloroethene (PCE) immediately north and east of the Klink Cosmo site. The extent of PCE has a larger footprint in the shallow groundwater compared to the deep groundwater and appears to be moving with regional deep groundwater flow towards the northeast and comingles with the dissolved phase chlorinated solvent plumes originating within the ACME Steel Areas (i.e., CSIA PCE Source 1 – mostly shallow groundwater), and a newly identified discrete source in the shallow groundwater near DEC-013 as determined by the CSIA evaluation (i.e., CSIA PCE Source 2 – shallow groundwater). The vertical extent of PCE and trichloroethene (TCE) impacted groundwater was determined to extend down to the top of the Raritan Formation east and northeast of the Klink Cosmo site. The horizontal extent of PCE impacted groundwater in the deep overburden near the top of the Raritan Formation has not fully been delineated. PCE has migrated vertically downward to the top of the Raritan Formation (DEC-029TC and DEC-031TC) adjacent to and downgradient of the Klink Cosmo property. The chlorinated solvent plume is not expected to extend beyond the top of the Raritan Formation due to its vast areal extent and low permeability”

“several discrete dissolved phase chlorinated solvent plumes originate in the vicinity of the ACME Steel Areas. The complete horizontal extents of the chlorinated solvent plumes have not been fully delineated. The overall lateral extent of PCE has a larger footprint in the shallow groundwater when compared to the overall lateral extent of PCE in the deep groundwater. Discrete source areas appear to originate from the former Brass Foundry location on Anthony Street in the vicinity of DEC-016R extending to DEC-017 (i.e., CSIA PCE Source 4 – shallow groundwater), and DEC-040 (CSIA Source 3 – shallow groundwater), and from an apparent shallow soil source of PCE near well pairs DEC-080/080D (CSIA PCE Source 7 – shallow and deep groundwater), and near DEC-041 and DEC-018 which was not explicitly identified by Zymax, and would appear to encompass DEC-041 and DEC-018 in shallow groundwater.”

“The source of TCE originating at the ACME Steel Brass Foundry site (i.e., near DEC-016R) has migrated with groundwater flow toward the north/northeast (i.e., MW-30R), with the highest concentrations of TCE observed near MW-30D and MW-30R. Based

upon the 2013 CSIA evaluation, TCE concentrations are attributable to a discrete primary source of TCE, and are not attributable to degradation of PCE. The TCE plume is designated as CSIA TCE Source 1 in the shallow and deep groundwater. CSIA results collected from DEC-005 in September 2009 indicate the presence of an independent source of TCE (TCE Source 6) in the vicinity of the ACME Steel Metal Works site that does not appear to be associated with TCE Source 1 designated from the March 2013 CSIA results”

“At DEC-040D and DEC-006DD, dissolved phase TCE concentrations were 120 and 88 ppb, respectively indicating a dilute source of TCE (TCE Source 5) at this general location, or potentially a TCE source located elsewhere. The TCE $\delta^{13}\text{C}$ of DEC-040D (-29.9 ‰) is similar to the TCE $\delta^{13}\text{C}$ of DEC-006DD (-29.8 ‰). The TCE $\delta^{37}\text{Cl}$ ratios in these wells were also similar”

3.0 FIELD ACTIVITIES

Field activities associated with the sampling event were performed between September 7, 2016 and September 22, 2016.

3.1 Sewer Tank Liquid Sampling

On September 14, 2016, URS personnel collected a liquid sample from the sewer tank/vault located beneath the sidewalk adjacent to 514 Varick Avenue using a dedicated/disposable high density polyethylene (HDPE) bailer. A chain-of-custody (COC) form was maintained and accompanied the sample containers via lab courier to Hampton Clarke, Inc. of Fairfield, New Jersey, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) accredited laboratory, where it was analyzed for waste characterization parameters listed in Table 1. Depth to the bottom of the tank/vault was 10.67 feet below ground surface, and depth to the liquid surface was 3.3 feet bgs. There was a relatively thin layer (less than 2 inches) of black aqueous/sludge mixture that appeared to be sewage at the bottom of the sewer tank/vault.

3.2 Monitoring Well Sampling

From September 7, 2016 through September 22, 2016, URS personnel collected groundwater samples from the 56 monitoring wells shown on Figure 2. Prior to sample collection, standing water was purged from each well with a downhole pump (i.e., QED Sample Pro bladder pump or Grundfos Redi-Flo2 submersible pump) using dedicated/disposable HDPE tubing.

Wells were purged at a rate of 1-liter per minute or less and the purge rate was adjusted to minimize draw down. During the purging of a well, water quality parameters (pH, specific conductivity, temperature, dissolved oxygen, turbidity) were measured using a Horiba U-52 Multi-parameter Instrument with a flow-through cell and documented on a purge log. Samples were collected after the water quality parameters stabilized. All investigation derived waste (IDW) including purge water and HDPE tubing, was collected and placed into Department of Transportation (DOT) approved 55-gallon drums. A copy of the daily field notes is provided in Attachment 2, and purge logs are provided in Attachment 3.

All samples were transported under COC via laboratory courier to Hampton Clarke, Inc. The samples were analyzed for Target Compound List (TCL) VOCs as listed in Table 1, plus tentatively identified compounds (TICs), following USEPA SW846 Method 8260B.

3.3 Monitoring Well Inspection/ Maintenance

During the groundwater sampling event, URS conducted inspection and maintenance activities at the monitoring wells sampled. The results of these inspections and any maintenance activities documented are presented in the Monitoring Well Inspection Forms (Attachment 4).

3.4 Investigation Derived Waste Disposal

Island Pump & Tank Corp. (IP&T) of East Northport, New York was contracted for the daily pick-up and disposal of all drummed IDW at a permitted disposal facility. Copies of the non-hazardous bills of lading and hazardous waste manifests are provided in Attachment 5.

4.0 ANALYTICAL RESULTS

Full deliverable data packages [i.e., NYSDEC Analytical Service Protocol (ASP) Category B] were provided by the laboratory, and included all reporting forms and raw data necessary to fully evaluate and verify the reported analytical results.

A DUSR was prepared following the guidelines provided NYSDEC Division of Environmental Remediation Draft DER-10 *Technical Guidance for Site Investigation and Remediation, Appendix 2B - Guidance for the Development of Data Usability Summary Reports*, December 2002. The data packages were reviewed for compliance with analytical method requirements and the following: USEPA Region II's *Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B*, HW-24, Revision 2, October 2006. The type and quality of analytical results that are needed to answer specific environmental questions and support proper environmental decisions met the project quality objectives (PQOs) for this sampling event.

A summary of the detected TCL VOCs in the groundwater samples collected from monitoring wells is presented in Table 2. Results exceeding Technical Guidance Series Memorandum (TOGS) No. 1.1.1 Class GA groundwater criteria are circled. The locations of detected VOCs that exceeded their respective criteria are shown on Figure 6. Isoconcentration contours of tetrachloroethene (PCE) and trichloroethene (TCE) in the groundwater samples are shown on Figures 7 through 10. Table 3 provides a statistical summary of the detected parameters for the groundwater samples as follows: the number of detections; the minimum, maximum and average values; and the location of the maximum value. Table 4 provides a historical summary of the detected parameters for all groundwater samples collected by URS since Phase I of the Site Characterization, for the monitoring wells sampled during this monitoring event. Figures 11 and 12 show PCE and TCE data for all groundwater samples collected by URS since Phase I of the Site Characterization, for monitoring wells located east of Vandervoort Avenue. Table 5 provides a statistical summary of the detected parameters for all samples collected by URS since Phase I of the Site Characterization in the wells sampled during this monitoring event as follows: the number of detections; the minimum, maximum and average values; and the location of the maximum value.

The complete validated analytical results from the groundwater samples are presented in the DUSR in Attachment 6, on a CD. Data summary tables, Form I and Form Ie (TICs) are provided in the DUSR and include the reporting limit for each non-detected compound.

4.1 Groundwater PCE Detections

PCE was detected in 54 of the 56 groundwater samples collected, with 52 locations at concentrations exceeding groundwater criteria. Concentrations exceeding groundwater criteria ranged from 5.8 micrograms per liter (µg/L) to 8,700 µg/L (Figure 6). The highest concentration of PCE was detected at DEC-029 (8,700 µg/L), followed by DEC-094 (4,600 µg/L), DEC-006TC (2,200 µg/L), DEC-040 (1,700 µg/L) and DEC-006D (1,200 µg/L).

4.2 Groundwater TCE Detections

TCE was detected in 51 of the 56 groundwater samples collected, with 41 locations at concentrations exceeding groundwater criteria. Concentrations exceeding groundwater criteria ranged from 5.1 µg/L to 4,200 µg/L (Figure 6). The highest concentrations of TCE were reported

at DEC-005D (4,200 µg/L), followed by DEC-026D (4,100 µg/L) and ACME-MW-2 (2,400 µg/L) around the perimeter of the ACME Steel/Metal Works site.

4.3 PCE and TCE Degradation Product Detections

The presence of PCE and TCE degradation products have also been detected in monitoring well groundwater samples during this groundwater sampling event at concentrations exceeding groundwater criteria (Figure 6). The concentration of PCE and TCE degradation products is similar to the concentrations found during the previous rounds of groundwater sampling in this area.

Cis-1,2-dichloroethene (cis-1,2-DCE) was detected in 42 of the 56 groundwater samples collected, with 27 locations at concentrations exceeding groundwater criteria, as listed in Table 2. The range of cis-1,2-DCE detections exceeding groundwater criteria varied from 5.4 µg/L to 160 µg/L, with the highest concentration reported at DEC-018.

Trans-1,2-dichloroethene (trans-1,2-DCE) was detected in 6 of the 56 groundwater samples collected, with 3 locations at concentrations exceeding groundwater criteria, as listed in Table 2. The range of trans-1,2-DCE exceeding groundwater criteria varied from 10 µg/L to 20 µg/L, with the highest concentration detected at DEC-026.

Vinyl chloride was detected in 4 of the 56 groundwater samples collected, with 4 locations at concentrations exceeding groundwater criteria, as listed in Table 2. The range of vinyl chloride exceeding groundwater criteria varied from 2.1 µg/L to 59 µg/L, with the highest concentration detected at DEC-005D.

4.4 Shallow and Deep Groundwater Impacts

4.4.1 Shallow Groundwater Zone

Figures 7 and 9 depict the PCE and TCE plumes in the shallow groundwater zone. The PCE plume in the vicinity of Division Place is attributed to the Klink Cosmo site and is migrating with groundwater flow to the northeast. Higher concentrations of PCE were also reported near the intersection of Lombardy Street and Porter Avenue, and is likely attributable to the ACME Steel/Brass Foundry site, as well as along Varick Avenue which is likely attributable to the Lombardy Street site. TCE concentrations were highest adjacent to the ACME Steel Metal Works site.

4.4.2 Deep Groundwater Zone

Figures 8 and 10 depict the PCE and TCE plumes in the deep groundwater zone. The PCE plume in the vicinity of Division Place is attributed to the Klink Cosmo site and is migrating with groundwater flow to the northeast. Higher concentrations of PCE were also reported along Porter Avenue and higher concentrations extend into the ACME Steel Brass Foundry Area and Lombardy Street site, as well as in the vicinity of the northwest corner of the ACME Steel Metal Works site. TCE concentrations were highest adjacent to the ACME Steel Metal Works site.

4.5 Historical PCE/TCE Results

Table 4 and Figures 11 and 12 depict the historical PCE/TCE concentrations in the monitoring wells dating back to 2007. There is no apparent trend in the data.

4.6 Field Parameter Analyses

The purge logs are included in Attachment 3, which present the field parameters collected during this sampling event. These logs show groundwater samples collected from DEC-008, DEC-018D, DEC-042, DEC-051 and DEC-096 had dissolved oxygen (DO) values greater than 2 milligrams per liter (mg/L). The remainder of samples had DO values less than 2 mg/l, with most at or near zero (0). Also, the logs show that the redox potential (Eh) is lower in the deep, groundwater zone. The groundwater samples collected from the monitoring wells screened in the shallow aquifer had an average Eh of 155 millivolts (mV); whereas the Eh values from samples collected from wells screened in the deep aquifer and top of the Raritan Formation were 46 mV and -97 mV respectively. Reductive dechlorination would be more likely to occur in the deep groundwater zone.

4.7 Sewer Tank/Vault Liquid Sampling Results

A summary of the detected analytes in the liquid sample collected from the sewer tank is presented in Table 6, which shows vinyl chloride at a concentration exceeding its hazardous waste criterion (40 CFR Part 261, Subpart C). No other compounds or analytes were detected in the sample at concentrations exceeding their respective hazardous waste criteria. Detected VOCs included cis-1,2-DCE, chloroform, and toluene. Detected SVOCs included cresols and phenol. Detected metals included arsenic, barium, cadmium, chromium, lead, mercury, and selenium.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Based upon the results of the previous site investigations, the following conclusions are provided.

5.1.1 Groundwater Analytical Results

- PCE and TCE were detected in groundwater monitoring wells located downgradient of the Klink Cosmo Site and at the ACME Steel and Lombardy Street Site properties at concentrations above groundwater criteria.
- PCE and TCE degradation products have also been detected in monitoring well groundwater samples at concentrations exceeding groundwater criteria (Figure 6).
- Groundwater analytical data indicates multiple sources are contributing to the observed dissolved phase PCE distribution originating from the Klink Cosmo Site, ACME Steel Sites, and Lombardy Street properties.
- Groundwater analytical data indicates multiple sources are contributing to the observed dissolved phase TCE distribution originating from the ACME Steel Sites.
- The data suggests that chlorinated hydrocarbon reduction of PCE is occurring downgradient of the Klink Cosmo Site at the ACME/Lombardy properties.

5.1.2 Sewer Tank Liquid Analytical Results

- Vinyl chloride was detected at a concentration exceeding its hazardous waste criterion.

5.2 Recommendations

The following recommendations are offered for consideration by the Department:

- Groundwater analytical data from this sampling event should be used as a baseline event for the upcoming RI work at the Former Lombardy Street Lacquer and Soap Mfg. Site (#224182).
- The liquid within sewer tank/vault should be disposed of a hazardous waste.

6.0 REFERENCES

- Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan), July 2013. Remedial Investigation Report for Former ACME Steel/ Metal Works.
- Langan, July 2013. Remedial Investigation Report for Former ACME Steel/ Brass Foundry.
- NYSDEC, Division of Water. April 2000. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. Technical and Operational Guidance Series (TOGS) No. 1.1.1, Class GA including June 2004 Addenda
- United States Environmental Protection Agency. 1998. Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water
- URS Corporation – New York, November 2013. Final – Site Characterization, Phase VII Report
- URS Corporation – New York, June 2016. Groundwater Sampling Work Plan.
- URS Corporation – New York, December 2016. Final – Site Characterization, Phase IX Report

7.0 TABLES, FIGURES, AND ATTACHMENTS

The following tables, figures, and attachments are included as part of this letter report:

Tables (following text)

Table 1	Summary of Samples and Analytical Parameters
Table 2	Summary of Detected Compounds in Groundwater Samples
Table 3	Statistical Summary of Compounds Detected in Groundwater Samples
Table 4	Summary of Historically Detected VOCs in Groundwater Samples
Table 5	Statistical Summary of Historically Detected VOCs Detected in Groundwater Samples
Table 6	Summary of Detected Compounds in Sewer Tank Liquid Sample

Figures (following Tables)

Figure 1	Site Locations
Figure 2	Groundwater Monitoring Well Sampling Locations
Figure 3	Site Characterization – Phase VII, Shallow Overburden Groundwater Potentiometric Surface with 0.1 Foot Intervals Around Klink Cosmo Area (2/25/2013)
Figure 4	Site Characterization – Phase VII, Deep Overburden Groundwater Potentiometric Surface (2/25/2013)
Figure 5	CSIA Location History with PCE and TCE Source Plumes
Figure 6	Groundwater Analytical Results
Figure 7	Tetrachloroethene Isoconcentration Contours in Shallow Groundwater
Figure 8	Tetrachloroethene Isoconcentration Contours in Deep Groundwater
Figure 9	Trichloroethene Isoconcentration Contours in Shallow Groundwater
Figure 10	Trichloroethene Isoconcentration Contours in Deep Groundwater
Figure 11	Shallow Groundwater Monitoring Data
Figure 12	Deep Groundwater Monitoring Data

Attachments (following Figures)

Attachment 1	URS Project Work Plan
Attachment 2	Field Notes
Attachment 3	Purge Logs
Attachment 4	Monitoring Well Inspection Forms
Attachment 5	Investigation Derived Waste (IDW) Disposal Documents
Attachment 6	Data Usability Summary Report (on CD)

Should you have any questions or comments, please do not hesitate to contact me at 716-856-5636.

Sincerely,

URS Corporation – New York

A handwritten signature in dark ink, appearing to read 'Michael Gutmann', with a long horizontal flourish extending to the right.

Michael Gutmann
Project Manager

cc: File: 11176359 (R-1)
George Kisluk URS

TABLES

TABLE 1
SUMMARY OF SAMPLES AND ANALYTICAL PARAMETERS
DOWNGRADIENT OF FORMER KLINK COSMO CLEANERS AND
NEAR FORMER LOMBARDY ST. LACQUER AND SOAP MFG.
GREENPOINT/EAST WILLIAMSBURG INDUSTRIAL AREA
BROOKLYN, NY

			QC Samples			
Parameter	Analytical Method	Number of Samples	Field Duplicates	Trip Blanks	MS/MSD pairs	Total No. of Samples
Groundwater						
TCL VOCs	8260B	56	6	3	5	75
Sewer Tank Liquid						
TCL VOCs	8260B	1	--	--	Laboratory Batch QC	1
TCL SVOCs	8270D	1	--	--		1
TCL Pesticides	8081B	1	--	--		1
TCL PCBs (including Aroclors 1262 and 1268)	8151B	1	--	--		1
RCRA Metals	6010D/7470A	1	--	--		1
pH	9045C	1	--	--	--	1
Flashpoint	1010	1	--	--	--	1
Reactivity (Cyanide and Sulfide)	SW846 Chapter 7 Section 7.3	1	--	--	--	1

Notes:

NYSDEC Analytical Services Protocol (ASP) with Category B Deliverables

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			ACME-MW-2	ACME-MW-2D	ACME-MW-8	ACME-MW-8D	DEC-005
Sample ID			ACME-MW-2	ACME-MW-2D	ACME-MW-8	ACME-MW-8D	DEC-005 1710
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/22/16	09/22/16	09/21/16	09/21/16	09/20/16
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	10 U	10 U	1.0 U	2.7	1.0 U
1,1-Dichloroethane	UG/L	5	10 U	10 U	4.0	4.4	1.0 U
1,1-Dichloroethene	UG/L	5	10 UJ	10 UJ	1.0 U	5.0	1.0 U
1,2-Dichloroethane	UG/L	0.6	5.0 U	5.0 U	0.50 UJ	0.50 UJ	0.50 UJ
1,2-Dichloroethene (cis)	UG/L	5	96	38	31 J	22 J	8.5 J
1,2-Dichloroethene (trans)	UG/L	5	10 U	10 U	1.0 U	1.0 U	1.0 U
Benzene	UG/L	1	5.0 U	5.0 U	0.50 U	0.50 U	0.50 UJ
Chloroform	UG/L	7	10 U	10 U	1.9	1.0 U	1.0 U
Methyl tert-butyl ether	UG/L	10	5.0 U	5.0 U	1.3 J	0.74 J	0.50 UJ
Tetrachloroethene	UG/L	5	42	1,100	490 J	120 J	19 J
Trichloroethene	UG/L	5	2,400	120	80 J	230 J	290 J
Trichlorofluoromethane	UG/L	5	10 U	10 U	1.1	1.6	1.0 U
Vinyl chloride	UG/L	2	10 U	10 U	1.0 U	2.1	1.0 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.

 Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			DEC-005D	DEC-006D	DEC-006DD	DEC-006TC	DEC-007
Sample ID			DEC-005 1825	DEC-006 D	DEC-006 DD	DEC-006TC	DEC-007
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/20/16	09/13/16	09/13/16	09/22/16	09/08/16
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	10 UJ	5.0 U	3.1	5.0 U	5.0 U
1,1-Dichloroethane	UG/L	5	10 U	5.0 U	2.1	5.0 U	5.0 U
1,1-Dichloroethene	UG/L	5	11	5.0 U	29	5.0 U	5.0 UJ
1,2-Dichloroethane	UG/L	0.6	5.0 U	2.5 U	1.0	830	2.5 U
1,2-Dichloroethene (cis)	UG/L	5	150 J	5.0 U	5.4	50	5.0 U
1,2-Dichloroethene (trans)	UG/L	5	13	5.0 U	1.0 U	5.0 U	5.0 U
Benzene	UG/L	1	5.0 U	2.5 U	0.50 U	2.5 U	2.5 U
Chloroform	UG/L	7	10 U	5.0 U	1.0 U	5.0 U	5.0 U
Methyl tert-butyl ether	UG/L	10	5.0 UJ	2.5 U	0.85	2.5 U	2.5 U
Tetrachloroethene	UG/L	5	24	1,200	170	2,200	620
Trichloroethene	UG/L	5	4,200	13	170	410	16
Trichlorofluoromethane	UG/L	5	10 U	5.0 U	1.0 U	5.0 U	5.0 U
Vinyl chloride	UG/L	2	59	5.0 U	1.0 U	5.0 U	5.0 UJ

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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 Concentration Exceeds Criteria

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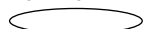
Detection Limits shown are PQL

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			DEC-007D	DEC-008	DEC-015	DEC-015D	DEC-015R
Sample ID			DEC-007D	DEC-008	DEC-015	DEC-015D	DEC-015R
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/08/16	09/14/16	09/08/16	09/08/16	09/08/16
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	5	1.0 U	5.0 U	8.6	1.0 U	6.7
1,1-Dichloroethene	UG/L	5	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	UG/L	0.6	0.50 UJ	2.5 U	0.50 UJ	0.50 UJ	0.50 UJ
1,2-Dichloroethene (cis)	UG/L	5	9.4	25	10	5.7	11
1,2-Dichloroethene (trans)	UG/L	5	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Benzene	UG/L	1	0.50 UJ	2.5 U	0.50 UJ	0.50 UJ	0.50 UJ
Chloroform	UG/L	7	1.0 U	5.0 U	1.7	1.0 U	1.0 U
Methyl tert-butyl ether	UG/L	10	0.50 UJ	2.5 U	0.50 UJ	0.50 UJ	0.50 UJ
Tetrachloroethene	UG/L	5	160	770	490	290	120
Trichloroethene	UG/L	5	31	71 J	22	26	9.1
Trichlorofluoromethane	UG/L	5	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	UG/L	2	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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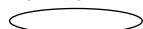
Detection Limits shown are PQL

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			DEC-016D	DEC-016D	DEC-016R	DEC-017D	DEC-017D
Sample ID			DEC-016D	FD1-091416	DEC-016R	DEC-017D	DEC-017D (DUP)
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/14/16	09/14/16	09/14/16	09/20/16	09/20/16
Parameter	Units	Criteria*		Field Duplicate (1-1)			Field Duplicate (1-1)
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	1.6	2.4	3.5	1.3	1.3
1,1-Dichloroethane	UG/L	5	5.4	4.2	4.1	4.8	3.9
1,1-Dichloroethene	UG/L	5	3.1	3.0	2.0	9.9	10
1,2-Dichloroethane	UG/L	0.6	0.55	0.56	0.50 U	150 J	170 J
1,2-Dichloroethene (cis)	UG/L	5	28	32	23	4.4 J	3.4 J
1,2-Dichloroethene (trans)	UG/L	5	2.8	1.9	1.0 U	1.0 U	1.0 U
Benzene	UG/L	1	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ
Chloroform	UG/L	7	1.2	1.0 U	1.7	1.0 U	1.0 U
Methyl tert-butyl ether	UG/L	10	1.3	1.1	2.2	0.50 UJ	0.50 J
Tetrachloroethene	UG/L	5	340	390	380	460 J	430 J
Trichloroethene	UG/L	5	230	240	160	140 J	140 J
Trichlorofluoromethane	UG/L	5	1.0 U	1.0 U	4.1	1.0 U	1.0 U
Vinyl chloride	UG/L	2	4.1	4.4	1.0 U	1.0 U	1.0 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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Only Detected Results Reported.

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TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			DEC-018	DEC-018D	DEC-018TC	DEC-019	DEC-022D
Sample ID			DEC-018	DEC-018D	DEC-018TC	DEC-019	DEC-022 D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/13/16	09/13/16	09/21/16	09/22/16	09/20/16
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	5.0 U	1.0 U	1.0 UJ	1.0 U	5.0 UJ
1,1-Dichloroethane	UG/L	5	5.0 U	1.0 U	1.0 U	1.0 U	5.0 U
1,1-Dichloroethene	UG/L	5	5.0 U	1.0 U	1.0 U	1.0 UJ	5.0 U
1,2-Dichloroethane	UG/L	0.6	2.5 U	0.50 U	45	0.50 U	2.5 U
1,2-Dichloroethene (cis)	UG/L	5	160	11	2.1 J	1.0 U	15 J
1,2-Dichloroethene (trans)	UG/L	5	5.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Benzene	UG/L	1	2.5 U	0.50 U	0.50 U	0.50 U	2.5 U
Chloroform	UG/L	7	5.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Methyl tert-butyl ether	UG/L	10	2.5 U	0.50 U	0.50 UJ	0.50 U	2.5 UJ
Tetrachloroethene	UG/L	5	980	140	28	3.3	740
Trichloroethene	UG/L	5	240	11	2.9	2.6	34
Trichlorofluoromethane	UG/L	5	5.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Vinyl chloride	UG/L	2	5.0 U	1.0 U	1.0 U	1.0 U	5.0 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			DEC-026	DEC-026D	DEC-029	DEC-029D	DEC-029D
Sample ID			DEC-026	DEC-026D	DEC-029	DEC-029 D	DEC-029 D (DUP)
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/15/16	09/15/16	09/13/16	09/13/16	09/13/16
Parameter	Units	Criteria*					Field Duplicate (1-1)
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	10 U	20 U	50 U	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	5	10 U	20 U	50 U	1.0 U	1.0 U
1,1-Dichloroethene	UG/L	5	10 U	20 U	50 U	1.0 U	1.0 U
1,2-Dichloroethane	UG/L	0.6	5.0 U	10 U	25 U	3.4	3.7
1,2-Dichloroethene (cis)	UG/L	5	52	140	50 U	1.5	1.2
1,2-Dichloroethene (trans)	UG/L	5	10 U	20	50 U	1.0 U	1.0 U
Benzene	UG/L	1	5.0 U	10 U	25 U	0.50 U	0.50 U
Chloroform	UG/L	7	10 U	20 U	50 U	1.0 U	1.0 U
Methyl tert-butyl ether	UG/L	10	5.0 U	10 U	25 U	1.7	1.5
Tetrachloroethene	UG/L	5	49	20 U	8,700	120	110
Trichloroethene	UG/L	5	1,900	4,100	50 U	4.1	3.1
Trichlorofluoromethane	UG/L	5	10 U	20 U	50 U	1.0 U	1.0 U
Vinyl chloride	UG/L	2	10 U	20 U	50 U	1.0 U	1.0 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			DEC-029TC	DEC-039	DEC-039D	DEC-040	DEC-040D
Sample ID			DEC-029TC	DEC-039	DEC-039D	DEC-040	DEC-040D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/22/16	09/13/16	09/13/16	09/15/16	09/15/16
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	10 U	4.0	10 U	10 U	1.0 U
1,1-Dichloroethane	UG/L	5	10 U	2.0	10 U	10 U	1.0 U
1,1-Dichloroethene	UG/L	5	10 UJ	2.4	10 U	10 U	4.4 J
1,2-Dichloroethane	UG/L	0.6	2,500	0.66	5.0 U	5.0 U	0.50 U
1,2-Dichloroethene (cis)	UG/L	5	10 U	9.5	71	10 U	3.2
1,2-Dichloroethene (trans)	UG/L	5	10 U	1.0	10	10 UJ	1.0 UJ
Benzene	UG/L	1	5.0 U	0.50 U	5.0 U	5.0 U	0.50 U
Chloroform	UG/L	7	10 U	1.0 U	10 U	10 U	1.0 U
Methyl tert-butyl ether	UG/L	10	5.0 U	0.69	5.0 U	5.0 U	1.3
Tetrachloroethene	UG/L	5	220	79	20	1,700	340
Trichloroethene	UG/L	5	160	120	1,300	30 J	42 J
Trichlorofluoromethane	UG/L	5	10 U	1.0 U	10 U	10 U	1.0 U
Vinyl chloride	UG/L	2	10 U	1.0 U	10 U	10 U	1.0 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			DEC-041	DEC-041D	DEC-041TC	DEC-042	DEC-043
Sample ID			DEC-041	DEC-041D	DEC-041TC	DEC-042	DEC-043
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/13/16	09/13/16	09/15/16	09/15/16	09/07/16
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	1.0 U	1.0 U	10 U	3.3	1.0 U
1,1-Dichloroethane	UG/L	5	1.0 U	1.0 U	10 U	1.7	1.0 U
1,1-Dichloroethene	UG/L	5	1.0 U	1.0 U	10 U	1.0 J	1.0 UJ
1,2-Dichloroethane	UG/L	0.6	0.50 U	0.50 U	1,300	0.50 U	0.50 U
1,2-Dichloroethene (cis)	UG/L	5	1.6	2.3	10 U	6.4	1.0 U
1,2-Dichloroethene (trans)	UG/L	5	1.0 U	1.0 U	10 U	1.0 UJ	1.0 U
Benzene	UG/L	1	0.50 U	0.50 U	5.0 U	0.50 U	0.50 U
Chloroform	UG/L	7	1.0 U	1.0 U	10 U	1.0 U	1.0 U
Methyl tert-butyl ether	UG/L	10	0.50 U	0.50 U	5.0 U	0.50 U	0.50 U
Tetrachloroethene	UG/L	5	120	77	73	59	8.0
Trichloroethene	UG/L	5	5.1	4.0	11	40 J	1.0 U
Trichlorofluoromethane	UG/L	5	1.0 U	1.0 U	10 U	1.0 U	1.0 U
Vinyl chloride	UG/L	2	1.0 U	1.0 U	10 U	1.0 U	1.0 UJ

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TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			DEC-043	DEC-043D	DEC-051	DEC-064	DEC-064D
Sample ID			DEC-043 DUP	DEC043D	DEC-051	DEC-064	DEC-064D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/07/16	09/07/16	09/22/16	09/21/16	09/21/16
Parameter	Units	Criteria*	Field Duplicate (1-1)				
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0
1,2-Dichloroethane	UG/L	0.6	0.50 UJ	5.0 J	0.50 U	0.50 UJ	0.50 UJ
1,2-Dichloroethene (cis)	UG/L	5	1.0 U	1.0 U	1.0 U	1.2 J	1.0 UJ
1,2-Dichloroethene (trans)	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	UG/L	1	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U
Chloroform	UG/L	7	1.0 U	1.0 U	1.0 U	5.0	1.0 U
Methyl tert-butyl ether	UG/L	10	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ	0.50 UJ
Tetrachloroethene	UG/L	5	7.5	5.8	1.0 U	12 J	11 J
Trichloroethene	UG/L	5	1.0 U	1.3	1.0 U	3.8 J	13 J
Trichlorofluoromethane	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	UG/L	2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

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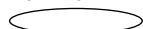
Detection Limits shown are PQL

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			DEC-080	DEC-080D	DEC-080D	DEC-081	DEC-082
Sample ID			DEC-080	DEC-080D	DEC-080D DUP	DEC-081	DEC-082
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/14/16	09/14/16	09/14/16	09/16/16	09/22/16
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	UG/L	0.6	0.50 U	100	100	0.50 U	0.50 U
1,2-Dichloroethene (cis)	UG/L	5	3.9	8.7	9.5	2.0	4.1
1,2-Dichloroethene (trans)	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	UG/L	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	UG/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-butyl ether	UG/L	10	0.50 UJ	0.50 UJ	0.51 J	0.50 U	0.50 U
Tetrachloroethene	UG/L	5	180 J	170 J	160 J	100	48
Trichloroethene	UG/L	5	8.3	9.0	9.7	4.5	6.0
Trichlorofluoromethane	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	UG/L	2	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

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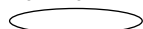
Detection Limits shown are PQL

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			DEC-088	DEC-088D	DEC-089	DEC-089D	DEC-094
Sample ID			DEC-088	DEC-088D	DEC-089	DEC-089D	DEC-094
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/08/16	09/08/16	09/07/16	09/07/16	09/14/16
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	20 U
1,1-Dichloroethane	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	20 U
1,1-Dichloroethene	UG/L	5	1.0 U	1.0 UJ	1.0 U	1.0 UJ	20 U
1,2-Dichloroethane	UG/L	0.6	0.66 J	2.2	0.50 UJ	10	10 U
1,2-Dichloroethene (cis)	UG/L	5	1.1	3.9	1.6	4.8	20 U
1,2-Dichloroethene (trans)	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	20 U
Benzene	UG/L	1	0.56 J	0.93	0.50 UJ	0.50 U	10 U
Chloroform	UG/L	7	1.0 U	1.0 U	1.0 U	1.0 U	20 U
Methyl tert-butyl ether	UG/L	10	0.50 UJ	0.50 U	0.50 UJ	0.50 U	10 U
Tetrachloroethene	UG/L	5	61	56	54	15	4,600
Trichloroethene	UG/L	5	1.0 U	2.3	1.7	7.9	53
Trichlorofluoromethane	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	20 U
Vinyl chloride	UG/L	2	1.0 U	1.0 UJ	1.0 U	36 J	20 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

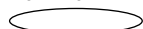
Detection Limits shown are PQL

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			DEC-094D	DEC-095	DEC-095D	DEC-096	DEC-096D
Sample ID			DEC-094D	DEC-095	DEC-095D	DEC-096	DEC-096D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/14/16	09/14/16	09/14/16	09/15/16	09/15/16
Parameter	Units	Criteria*					
Volatile Organic Compounds							
1,1,1-Trichloroethane	UG/L	5	1.5	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	5	4.1	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	UG/L	5	10	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	UG/L	0.6	85	0.50 U	1.9	0.50 U	0.50 U
1,2-Dichloroethene (cis)	UG/L	5	4.9	5.5	6.9	1.0 U	1.0 U
1,2-Dichloroethene (trans)	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Benzene	UG/L	1	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chloroform	UG/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-butyl ether	UG/L	10	1.4	0.50 U	0.50 U	0.50 UJ	0.50 U
Tetrachloroethene	UG/L	5	240	160	100	29 J	1.7
Trichloroethene	UG/L	5	100	6.1 J	18 J	1.8	1.0 U
Trichlorofluoromethane	UG/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	UG/L	2	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

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J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

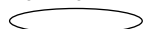
Detection Limits shown are PQL

TABLE 2
SUMMARY OF DETECTED COMPOUNDS IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			MW-097D	MW-097D
Sample ID			MW-097D	MW-097D (DUP)
Matrix			Groundwater	Groundwater
Depth Interval (ft)			-	-
Date Sampled			09/22/16	09/22/16
Parameter	Units	Criteria*		Field Duplicate (1-1)
Volatile Organic Compounds				
1,1,1-Trichloroethane	UG/L	5	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	5	1.0 U	1.0 U
1,1-Dichloroethene	UG/L	5	1.0 U	1.0 U
1,2-Dichloroethane	UG/L	0.6	12	11
1,2-Dichloroethene (cis)	UG/L	5	16	13
1,2-Dichloroethene (trans)	UG/L	5	2.2	1.3
Benzene	UG/L	1	0.50 U	0.50 U
Chloroform	UG/L	7	1.0 U	1.0 U
Methyl tert-butyl ether	UG/L	10	0.50 U	0.50 U
Tetrachloroethene	UG/L	5	310	310
Trichloroethene	UG/L	5	27	26
Trichlorofluoromethane	UG/L	5	1.0 U	1.0 U
Vinyl chloride	UG/L	2	1.0 U	1.0 U

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.

J - The reported concentration is an estimated value. D - Result reported from a secondary dilution analysis.

Only Detected Results Reported.

Detection Limits shown are PQL

TABLE 3
STATISTICAL SUMMARY OF COMPOUNDS DETECTED IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value
					Min	Max	Avg		
Volatile Organic Compounds									
1,1,1-Trichloroethane	UG/L	5	56	8	1.30	4.00	2.63	0	DEC-039
1,1-Dichloroethane	UG/L	5	56	11	1.70	8.60	4.35	3	DEC-015
1,1-Dichloroethene	UG/L	5	56	11	1.00	29.00	7.16	5	DEC-006DD
1,2-Dichloroethane	UG/L	0.6	56	17	0.550	2,500	296.9	16	DEC-029TC
1,2-Dichloroethene (cis)	UG/L	5	56	42	1.10	160.0	25.18	27	DEC-018
1,2-Dichloroethene (trans)	UG/L	5	56	6	1.00	20.00	8.17	3	DEC-026D
Benzene	UG/L	1	56	2	0.560	0.930	0.745	0	DEC-088D
Chloroform	UG/L	7	56	5	1.20	5.00	2.30	0	DEC-064
Methyl tert-butyl ether	UG/L	10	56	9	0.690	2.20	1.28	0	DEC-016R
Tetrachloroethene	UG/L	5	56	54	1.70	8,700	529.7	52	DEC-029
Trichloroethene	UG/L	5	56	51	1.30	4,200	331.1	41	DEC-005D
Trichlorofluoromethane	UG/L	5	56	3	1.10	4.10	2.27	0	DEC-016R
Vinyl chloride	UG/L	2	56	4	2.10	59.00	25.30	4	DEC-005D

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.



Concentration Exceeds Criteria

Only Detected Results Reported.

Location ID			DEC-005D	DEC-005D	DEC-006D	DEC-006D	DEC-006D
Sample ID			DEC-005D	DEC-005 1825	DEC-006D	DEC-06D	DEC-006D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/24/08	09/20/16	07/21/08	11/04/09	06/20/11
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Methylcyclohexane	UG/L	-	200 U	10 U	1.0 U	10 U	5.0 U
Methylene chloride	UG/L	5	200 U	10 U	1.0 U	10 U	5.0 U
Tetrachloroethene	UG/L	5	1,100 D	24	1,600 D	1,200	6,600 D
Toluene	UG/L	5	200 U	10 U	1.0 U	10 U	5.0 U
Trichloroethene	UG/L	5	70,000 D	4,200	71	23	39
Trichlorofluoromethane	UG/L	5	200 U	10 U	1.0 U	10 U	5.0 UJ
Vinyl chloride	UG/L	2	200 U	59	1.0 U	10 U	5.0 U
Xylene (total)	UG/L	5	1,500 U	10 U	3.0 U	10 U	5.0 U

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Location ID			DEC-006D	DEC-006D	DEC-006D	DEC-006D	DEC-006D
Sample ID			DEC-006D	DEC-006D	DEC-006D	DEC-006D	DEC-006 D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			10/22/11	03/26/12	07/25/12	03/02/13	09/13/16
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Methylcyclohexane	UG/L	-	1.0 U	100 U	1.0 U	200 U	5.0 U
Methylene chloride	UG/L	5	1.0 U	100 U	1.0 U	200 U	5.0 U
Tetrachloroethene	UG/L	5	8,000 D	3,300	4,000 D	6,000	1,200
Toluene	UG/L	5	1.0 U	100 U	0.91 J	200 U	5.0 U
Trichloroethene	UG/L	5	34	100 U	20	200 U	13
Trichlorofluoromethane	UG/L	5	1.0 U	100 U	1.0 U	200 U	5.0 U
Vinyl chloride	UG/L	2	1.0 U	100 U	1.0 U	200 U	5.0 U
Xylene (total)	UG/L	5	2.0 U	100 U	0.93 J	400 U	5.0 U

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Location ID			DEC-006DD	DEC-006DD	DEC-006DD	DEC-006DD	DEC-006DD
Sample ID			DEC-006DD	DUP-062011	DEC-006DD	DEC-006DD	DEC-006DD
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			06/20/11	06/20/11	10/22/11	03/26/12	07/25/12
Parameter	Units	Criteria*		Field Duplicate (1-1)			
Volatile Organic Compounds							
Methylcyclohexane	UG/L	-	5.0 U	5.0 U	8.0 U	20 U	5.0 U
Methylene chloride	UG/L	5	5.0 U	5.0 U	8.0 U	20 U	5.0 U
Tetrachloroethene	UG/L	5	410 D	420 D	440	320	320
Toluene	UG/L	5	5.0 U	5.0 U	8.0 U	20 U	5.0 U
Trichloroethene	UG/L	5	210 D	210 D	120	220	210
Trichlorofluoromethane	UG/L	5	5.0 UJ	5.0 UJ	8.0 U	20 U	5.0 U
Vinyl chloride	UG/L	2	5.0 U	5.0 U	8.0 U	20 U	5.0 U
Xylene (total)	UG/L	5	5.0 U	5.0 U	16 U	20 U	10 U

Detection Limits shown are PQL

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[LOCIID] = 'ACME-MW-8B' OR [LOCIID] = 'DEC-005' OR [LOCIID] = 'DEC-005D' OR [LOCIID] = 'DEC-005F' OR [LOCIID] = 'DEC-006D' OR [LOCIID] = 'DEC-006T' OR [LOCIID] = 'DEC-007'
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[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006DSD' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'  
OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D'
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OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D'
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OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D'
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[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006DSD' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'  
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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR  
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OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D'
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[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'  
OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D'
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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2Z' OR [LOCID] = 'ACME-MW-8' OR [LOCID] = 'ACME-MW-8B' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007' OR [LOCID] = 'DEC-007A' OR [LOCID] = 'DEC-007B' OR [LOCID] = 'DEC-007C' OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-007E' OR [LOCID] = 'DEC-007F' OR [LOCID] = 'DEC-007G' OR [LOCID] = 'DEC-007H' OR [LOCID] = 'DEC-007I' OR [LOCID] = 'DEC-007J' OR [LOCID] = 'DEC-007K' OR [LOCID] = 'DEC-007L' OR [LOCID] = 'DEC-007M' OR [LOCID] = 'DEC-007N' OR [LOCID] = 'DEC-007O' OR [LOCID] = 'DEC-007P' OR [LOCID] = 'DEC-007Q' OR [LOCID] = 'DEC-007R' OR [LOCID] = 'DEC-007S' OR [LOCID] = 'DEC-007T' OR [LOCID] = 'DEC-007U' OR [LOCID] = 'DEC-007V' OR [LOCID] = 'DEC-007W' OR [LOCID] = 'DEC-007X' OR [LOCID] = 'DEC-007Y' OR [LOCID] = 'DEC-007Z')

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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2F' OR [LOCID] = 'ACME-MW-2P'
OR [LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-005DF' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006DF' OR [LOCID] = 'DEC-007'
OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-007F' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-008DF' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-009DF' OR [LOCID] = 'DEC-010D'

[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2F' OR [LOCID] = 'ACME-MW-2P'
OR [LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-005DF' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006DF' OR [LOCID] = 'DEC-007'
OR [LOCID] = 'DEC-007F' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-008DF' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-009F'

[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-W8' OR
[LOCID] = 'ACME-MW-BD' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006DD' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'
OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D'


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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR  
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006Dd' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'  
OR [LOCID] = 'DEC-007D' OR [LOCID] = 'JOC-006' OR [LOCID] = 'JOC-006D' OR [LOCID] = 'JOC-006D' OR [LOCID] = 'JOC-006D' OR [LOCID] = 'JOC-006D' OR [LOCID] = 'JOC-006D' OR [LOCID] = 'JOC-006D'
```



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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR  
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006Dd' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'  
OR [LOCID] = 'DEC-007d' OR [LOCID] = 'JCFG-MW-1' OR [LOCID] = 'JCFG-MW-1D' OR [LOCID] = 'JCFG-MW-1F' OR [LOCID] = 'JCFG-MW-1FD' OR [LOCID] = 'JCFG-MW-1FV' OR [LOCID] = 'JCFG-MW-1FVD'
```


[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR [LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006DD' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007' OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D'


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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR  
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-0067' OR [LOCID] = 'DEC-007' OR  
[LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D'
```


[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR [LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007' OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D')

[illegible]

[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006DSD' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'
OR [LOCID] = 'DEC-007A' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008A' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009A' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010A'

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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND ([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR  
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006Dd' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'  
OR [LOCID] = 'DEC-007d' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-008Dd' OR [LOCID] = 'DEC-008T' OR [LOCID] = 'DEC-009' OR [LOCID]
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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006SD' OR [LOCID] = 'DEC-006TD' OR [LOCID] = 'DEC-007'
OR [LOCID] = 'DEC-007A' OR [LOCID] = 'DEC-007B' OR [LOCID] = 'DEC-007C' OR [LOCID] = 'DEC-007E' OR [LOCID] = 'DEC-007F' OR [LOCID] = 'DEC-007G' OR [LOCID] = 'DEC-007H'

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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR  
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006Dd' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'  
OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D'
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[LOGDATE] <= #9/22/2016# AND [MATRX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-ZD' OR [LOCID] = 'ACME-MW-8' OR [LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006DD' OR [LOCID] = 'DEC-006TC' OR [LOCID] = 'DEC-007' OR [LOCID] = 'DEC-007D'

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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR  
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006DSD' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'  
OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D'
```

[illegible]

[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-ZD' OR [LOCID] = 'ACME-MW-8' OR [LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006DD' OR [LOCID] = 'DEC-006TC' OR [LOCID] = 'DEC-007' OR [LOCID] = 'DEC-007D')

[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-WM-8' OR [LOCID] = 'ACME-MB-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006SD' OR [LOCID] = 'DEC-007' OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D' OR [LOCID] = 'DEC-011' OR [LOCID] = 'DEC-011D' OR [LOCID] = 'DEC-012' OR [LOCID] = 'DEC-012D' OR [LOCID] = 'DEC-013' OR [LOCID] = 'DEC-013D' OR [LOCID] = 'DEC-014' OR [LOCID] = 'DEC-014D'

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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND ([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR  
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006Dd' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'  
OR [LOCID] = 'DEC-007d' OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-007Dd' OR [LOCID] = 'DEC-007Df' OR [LOCID] = 'DEC-007Dg' OR [LOCID] = 'DEC-007Dh' OR [LOCID] = 'DEC-007Di'
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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR  
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'  
OR [LOCID] = 'DEC-007A' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008A' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009A' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010A'
```

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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND ([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR  
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006Dd' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'  
OR [LOCID] = 'DEC-007d' OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-007Dd' OR [LOCID] = 'DEC-007Df' OR [LOCID] = 'DEC-007Dg' OR [LOCID] = 'DEC-007Dh' OR [LOCID] = 'DEC-007Di'
```

[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-3' OR
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006BD' OR [LOCID] = 'DEC-006TG' OR [LOCID] = 'DEC-007'
OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-009F' OR [LOCID] = 'DEC-009G'

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Location ID			DEC-080D	DEC-080D	DEC-080D	DEC-081	DEC-081
Sample ID			DEC-080D	DEC-080D	DEC-080D DUP	DEC-081	DEC-081
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			02/27/13	09/14/16	09/14/16	10/20/11	07/30/12
Parameter	Units	Criteria*			Field Duplicate (1-1)		
Volatile Organic Compounds							
Methylcyclohexane	UG/L	-	200 U	1.0 U	1.0 U	25 U	1.0 U
Methylene chloride	UG/L	5	200 U	1.0 U	1.0 U	25 UJ	1.0 U
Tetrachloroethene	UG/L	5	14,000	170 J	160 J	330 J	100
Toluene	UG/L	5	200 U	1.0 U	1.0 U	25 U	1.0 U
Trichloroethene	UG/L	5	200 U	9.0	9.7	5.9 J	3.6
Trichlorofluoromethane	UG/L	5	200 U	1.0 U	1.0 U	25 UJ	1.0 U
Vinyl chloride	UG/L	2	200 U	1.0 UJ	1.0 UJ	25 U	1.0 U
Xylene (total)	UG/L	5	400 U	1.0 U	1.0 U	25 UJ	2.0 U

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Location ID			DEC-082	DEC-088	DEC-088	DEC-088	DEC-088
Sample ID			DEC-082	DEC-088	DEC-088	DEC-088	DEC-088
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			09/22/16	03/27/12	07/28/12	02/26/13	09/08/16
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Methylcyclohexane	UG/L	-	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	UG/L	5	1.0 U	5.0 U	1.0 U	1.0 U	1.0 UJ
Tetrachloroethene	UG/L	5	48	150	100	93	61
Toluene	UG/L	5	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	UG/L	5	6.0	1.7 J	1.6	1.7	1.0 U
Trichlorofluoromethane	UG/L	5	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	UG/L	2	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Xylene (total)	UG/L	5	1.0 U	5.0 U	2.0 U	2.0 U	1.0 U

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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006DD' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'
OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-008' OR [LOCID] = 'DEC-008D' OR [LOCID] = 'DEC-009' OR [LOCID] = 'DEC-009D' OR [LOCID] = 'DEC-010' OR [LOCID] = 'DEC-010D'

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Location ID			DEC-088D	DEC-088D	DEC-088D	DEC-088D	DEC-089
Sample ID			DEC-088D	DEC-088D	DEC-088D	DEC-088D	DEC-089
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			03/27/12	07/28/12	02/26/13	09/08/16	03/27/12
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Methylcyclohexane	UG/L	-	10 U	1.0 U	2.0 U	1.0 U	5.0 U
Methylene chloride	UG/L	5	10 U	1.0 U	2.0 U	1.0 U	5.0 U
Tetrachloroethene	UG/L	5	190	190 D	110	56	59
Toluene	UG/L	5	10 U	1.0 U	2.0 U	1.0 U	5.0 U
Trichloroethene	UG/L	5	2.7 J	2.6	1.6 J	2.3	1.3 J
Trichlorofluoromethane	UG/L	5	10 U	1.0 U	2.0 U	1.0 U	5.0 U
Vinyl chloride	UG/L	2	10 U	1.0 U	2.0 U	1.0 UJ	5.0 U
Xylene (total)	UG/L	5	10 U	2.0 U	4.0 U	1.0 U	5.0 U

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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND ([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2D' OR [LOCID] = 'ACME-MW-8' OR [LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-005B' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007' OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-007B' OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-007F' OR [LOCID] = 'DEC-007G' OR [LOCID] = 'DEC-007H' OR [LOCID] = 'DEC-007I' OR [LOCID] = 'DEC-007J' OR [LOCID] = 'DEC-007K' OR [LOCID] = 'DEC-007L' OR [LOCID] = 'DEC-007M' OR [LOCID] = 'DEC-007N' OR [LOCID] = 'DEC-007O' OR [LOCID] = 'DEC-007P' OR [LOCID] = 'DEC-007Q' OR [LOCID] = 'DEC-007R' OR [LOCID] = 'DEC-007S' OR [LOCID] = 'DEC-007T' OR [LOCID] = 'DEC-007U' OR [LOCID] = 'DEC-007V' OR [LOCID] = 'DEC-007W' OR [LOCID] = 'DEC-007X' OR [LOCID] = 'DEC-007Y' OR [LOCID] = 'DEC-007Z')

[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-2Z' OR [LOCID] = 'ACME-MW-8' OR [LOCID] = 'ACME-MW-8B' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007' OR [LOCID] = 'DEC-007A' OR [LOCID] = 'DEC-007B' OR [LOCID] = 'DEC-007C' OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-007E' OR [LOCID] = 'DEC-007F' OR [LOCID] = 'DEC-007G' OR [LOCID] = 'DEC-007H' OR [LOCID] = 'DEC-007I' OR [LOCID] = 'DEC-007J' OR [LOCID] = 'DEC-007K' OR [LOCID] = 'DEC-007L' OR [LOCID] = 'DEC-007M' OR [LOCID] = 'DEC-007N' OR [LOCID] = 'DEC-007O' OR [LOCID] = 'DEC-007P' OR [LOCID] = 'DEC-007Q' OR [LOCID] = 'DEC-007R' OR [LOCID] = 'DEC-007S' OR [LOCID] = 'DEC-007T' OR [LOCID] = 'DEC-007U' OR [LOCID] = 'DEC-007V' OR [LOCID] = 'DEC-007W' OR [LOCID] = 'DEC-007X' OR [LOCID] = 'DEC-007Y' OR [LOCID] = 'DEC-007Z')

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Location ID			DEC-094D	DEC-094D	DEC-094D	DEC-095	DEC-095
Sample ID			DEC-094D	DEC-094D	DEC-094D	DEC-095	DEC-095
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			07/26/12	03/02/13	09/14/16	07/29/12	03/02/13
Parameter	Units	Criteria*					
Volatile Organic Compounds							
Methylcyclohexane	UG/L	-	5.0 U	5.0 U	1.0 U	1.0 U	8.0 U
Methylene chloride	UG/L	5	5.0 U	5.0 U	1.0 U	1.0 U	8.0 U
Tetrachloroethene	UG/L	5	400	370	240	440 D	440
Toluene	UG/L	5	5.0 U	5.0 U	1.0 U	1.0 U	8.0 U
Trichloroethene	UG/L	5	220	190	100	11	9.0
Trichlorofluoromethane	UG/L	5	5.0 U	5.0 U	1.0 U	1.0 U	8.0 U
Vinyl chloride	UG/L	2	5.0 U	5.0 U	1.0 U	1.0 U	8.0 U
Xylene (total)	UG/L	5	10 U	10 U	1.0 U	2.0 U	16 U

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[LOGDATE] <= #9/22/2016# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FO') AND (([LOCID] = 'ACME-MW-2' OR [LOCID] = 'ACME-MW-27' OR [LOCID] = 'ACME-MW-8' OR
[LOCID] = 'ACME-MW-8D' OR [LOCID] = 'DEC-005' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-005D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006D' OR [LOCID] = 'DEC-006T' OR [LOCID] = 'DEC-007'
OR [LOCID] = 'DEC-007A' OR [LOCID] = 'DEC-007B' OR [LOCID] = 'DEC-007C' OR [LOCID] = 'DEC-007D' OR [LOCID] = 'DEC-007E' OR [LOCID] = 'DEC-007F' OR [LOCID] = 'DEC-007G' OR [LOCID] = 'DEC-007H'

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TABLE 5
STATISTICAL SUMMARY OF HISTORICALLY DETECTED VOCs IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value
					Min	Max	Avg		
Volatile Organic Compounds									
1,1,1,2-Tetrachloroethane	UG/L	5	41	1	1.90	1.90	1.90	0	DEC-029
1,1,1-Trichloroethane	UG/L	5	273	59	0.850	13.00	3.37	10	DEC-006DD
1,1,2-Trichloroethane	UG/L	1	273	3	0.480	10.00	4.73	2	DEC-016D
1,1-Dichloroethane	UG/L	5	273	98	0.450	23.00	4.08	26	DEC-040
1,1-Dichloroethene	UG/L	5	273	73	0.440	69.00	8.60	33	DEC-006DD
1,2,3-Trichlorobenzene	UG/L	5	98	1	2.10	2.10	2.10	0	DEC-064D
1,2,3-Trichloropropane	UG/L	0.04	41	1	2.70	2.70	2.70	1	DEC-015D
1,2,4-Trichlorobenzene	UG/L	5	273	1	5.50	5.50	5.50	1	DEC-064D
1,2-Dichloroethane	UG/L	0.6	273	71	0.270	3,700	330.7	68	DEC-029TC
1,2-Dichloroethene (cis)	UG/L	5	276	213	0.890	3,200	57.99	150	DEC-005D
1,2-Dichloroethene (trans)	UG/L	5	273	28	0.690	210.0	18.02	14	DEC-005D
1,2-Dichloropropane	UG/L	1	273	3	1.90	2.15	2.03	3	DEC-029TC
1,4-Dichlorobenzene	UG/L	3	273	2	0.820	1.10	0.960	0	DEC-029
Acetone	UG/L	50	214	5	1.40	290.0	90.08	2	DEC-040
Benzene	UG/L	1	273	7	0.560	50.00	8.00	2	DEC-008
Chlorobenzene	UG/L	5	273	1	1.50	1.50	1.50	0	DEC-019
Chloroform	UG/L	7	273	68	0.430	9.20	2.44	1	DEC-015

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.



Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 5
STATISTICAL SUMMARY OF HISTORICALLY DETECTED VOCs IN GROUNDWATER SAMPLES
MEEKER AVENUE PLUME TRACKDOWN SITE

Parameter	Units	Criteria*	No. of Samples	No. of Detections	Range of Detections			No. Exceed	Location of Max Value
					Min	Max	Avg		
Volatile Organic Compounds									
Cyclohexane	UG/L	-	273	11	1.80	605.0	85.90	0	DEC-005
Ethylbenzene	UG/L	5	273	4	1.70	29.00	12.28	2	DEC-049
Isopropylbenzene (Cumene)	UG/L	5	273	5	1.30	22.00	8.88	3	DEC-049
Methyl ethyl ketone (2-Butanone)	UG/L	50	202	1	18.00	18.00	18.00	0	DEC-040
Methyl tert-butyl ether	UG/L	10	273	72	0.220	8.40	1.46	0	DEC-006D
Methylcyclohexane	UG/L	-	273	9	0.690	520.0	86.70	0	DEC-005
Methylene chloride	UG/L	5	273	1	2.20	2.20	2.20	0	DEC-019
Tetrachloroethene	UG/L	5	276	269	0.460	2.00E+04	1,317	263	DEC-080D
Toluene	UG/L	5	273	2	0.910	8.60	4.76	1	DEC-008
Trichloroethene	UG/L	5	276	253	0.700	7.00E+04	931.5	195	DEC-005D
Trichlorofluoromethane	UG/L	5	273	18	1.10	58.00	14.05	13	DEC-042
Vinyl chloride	UG/L	2	273	22	0.970	59.00	8.62	18	DEC-005D
Xylene (total)	UG/L	5	273	4	0.930	170.0	64.48	3	DEC-049

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998, including April 2000 and June 2004 Addenda, Class GA.



Concentration Exceeds Criteria

Only Detected Results Reported.

TABLE 6
SUMMARY OF DETECTED COMPOUNDS IN SEWER TANK LIQUID SAMPLE
MEEKER AVENUE PLUME TRACKDOWN SITE

Location ID			UST 514V
Sample ID			TANK 514V
Matrix			Waste Water
Depth Interval (ft)			-
Date Sampled			09/14/16
Parameter	Units	Criteria*	
Volatile Organic Compounds			
1,2-Dichloroethene (cis)	UG/L	-	1,200
Chloroform	UG/L	6000	14
Toluene	UG/L	-	45
Vinyl chloride	UG/L	200	310
Semivolatile Organic Compounds			
2-Methylphenol (o-cresol)	UG/L	2.00E+05	0.75
4-Methylphenol (p-cresol)	UG/L	2.00E+05	2.5
Phenol	UG/L	-	12
Metals			
Arsenic	UG/L	5000	5.5
Barium	UG/L	100000	81
Cadmium	UG/L	1000	3.2
Chromium	UG/L	5000	360
Lead	UG/L	5000	260
Mercury	UG/L	200	24
Selenium	UG/L	1000	130
Miscellaneous Parameters			
Flash Point	DEG. F	<140	141 U
pH	SU	2-12.5	7.2

*Criteria- Hazardous Waste Criteria, 40 CFR Part 261, Subpart C - Characteristics of Hazardous Waste

Flags assigned during chemistry validation are shown.



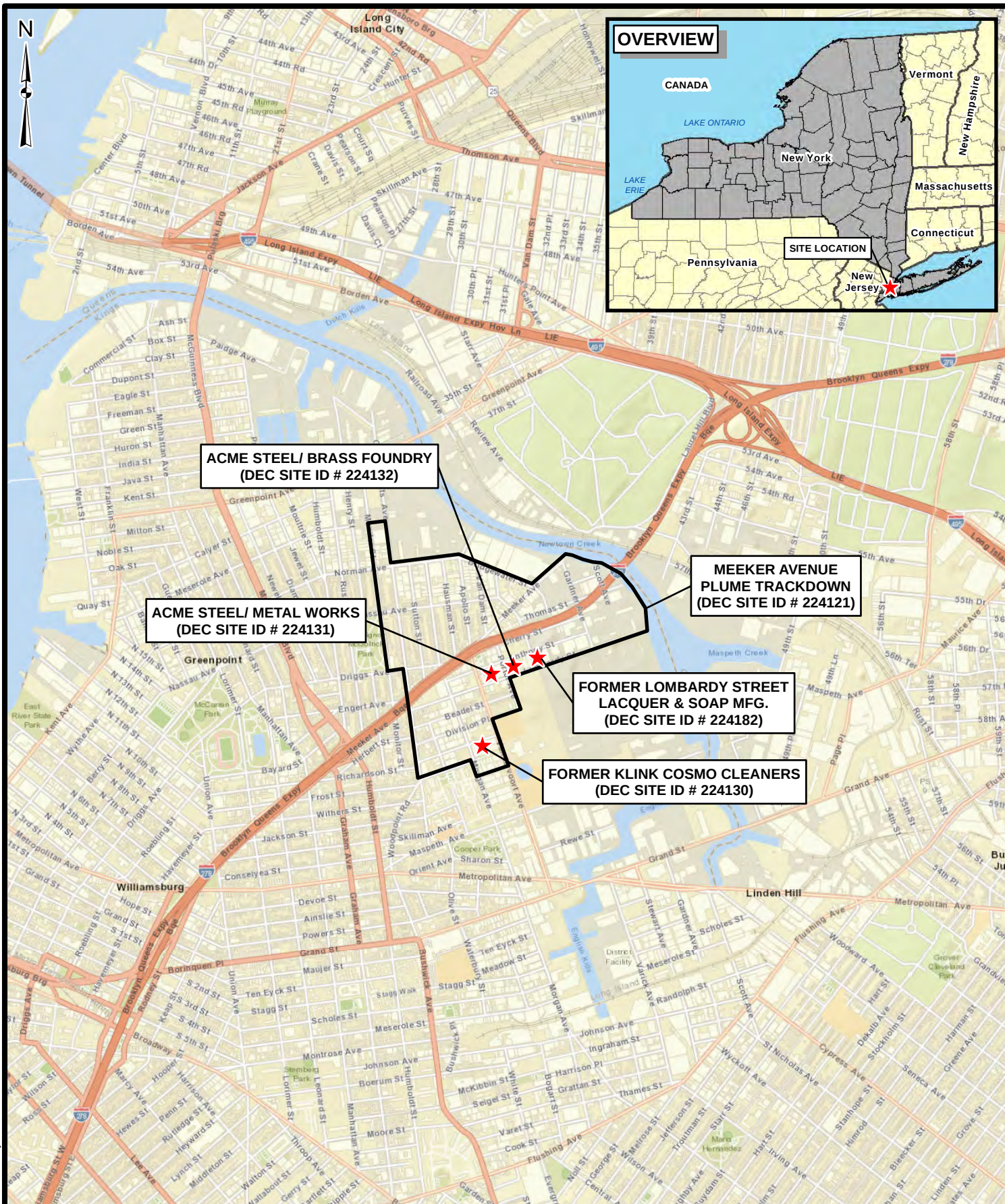
Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit. UJ - Not detected. The reported quantitation limit is an estimated value.

Only Detected Results Reported.

Detection Limits shown are PQL

FIGURES

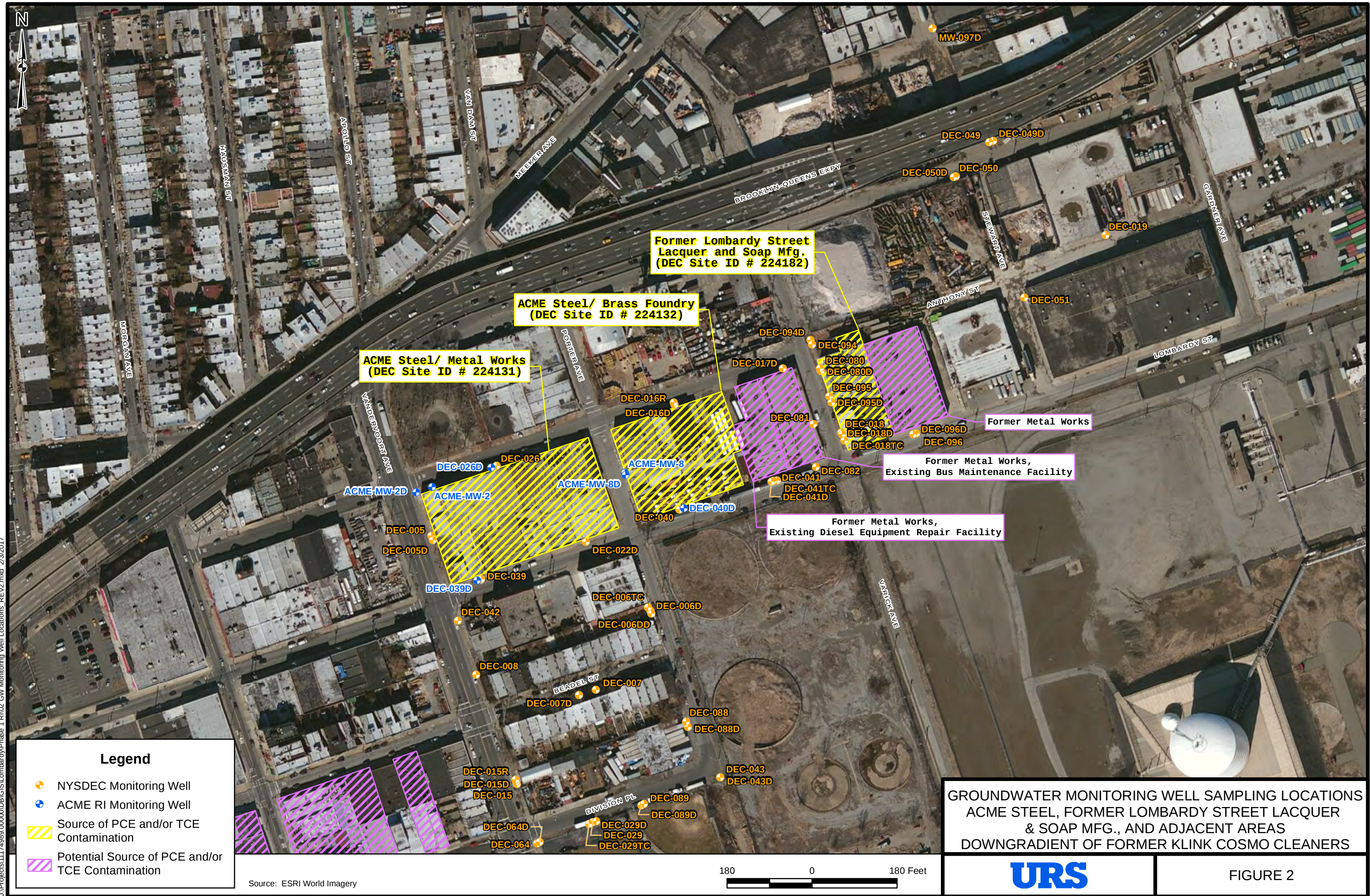


Source: ESRI World Street Map



ACME STEEL,
FORMER LOMBARDY STREET LACQUER & SOAP MFG.
AND FORMER KLINK COSMO CLEANERS
SITE LOCATIONS

FIGURE 1



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J:\11174989_000000\B\GIS\PHASE7\03-25 GW Elev Deep 130225.mxd 7/2/2013 MDL





Legend

NYSDEC Groundwater Sample

Note: Units are in µg/L
Criteria: NYSDEC TOGS 1.1.1 Ambient Water Quality Standards, Class GA
Source: ESRI World Imagery

2000200 Feet

MEEKER AVENUE PLUME TRACKDOWN
GROUNDWATER ANALYTICAL RESULTS
ACME STEEL, FORMER LOMBARDY STREET LACQUER
& SOAP MFG., AND ADJACENT AREAS
DOWNGRADIENT OF FORMER KLINK COSMO CLEANERS

URS

FIGURE 6

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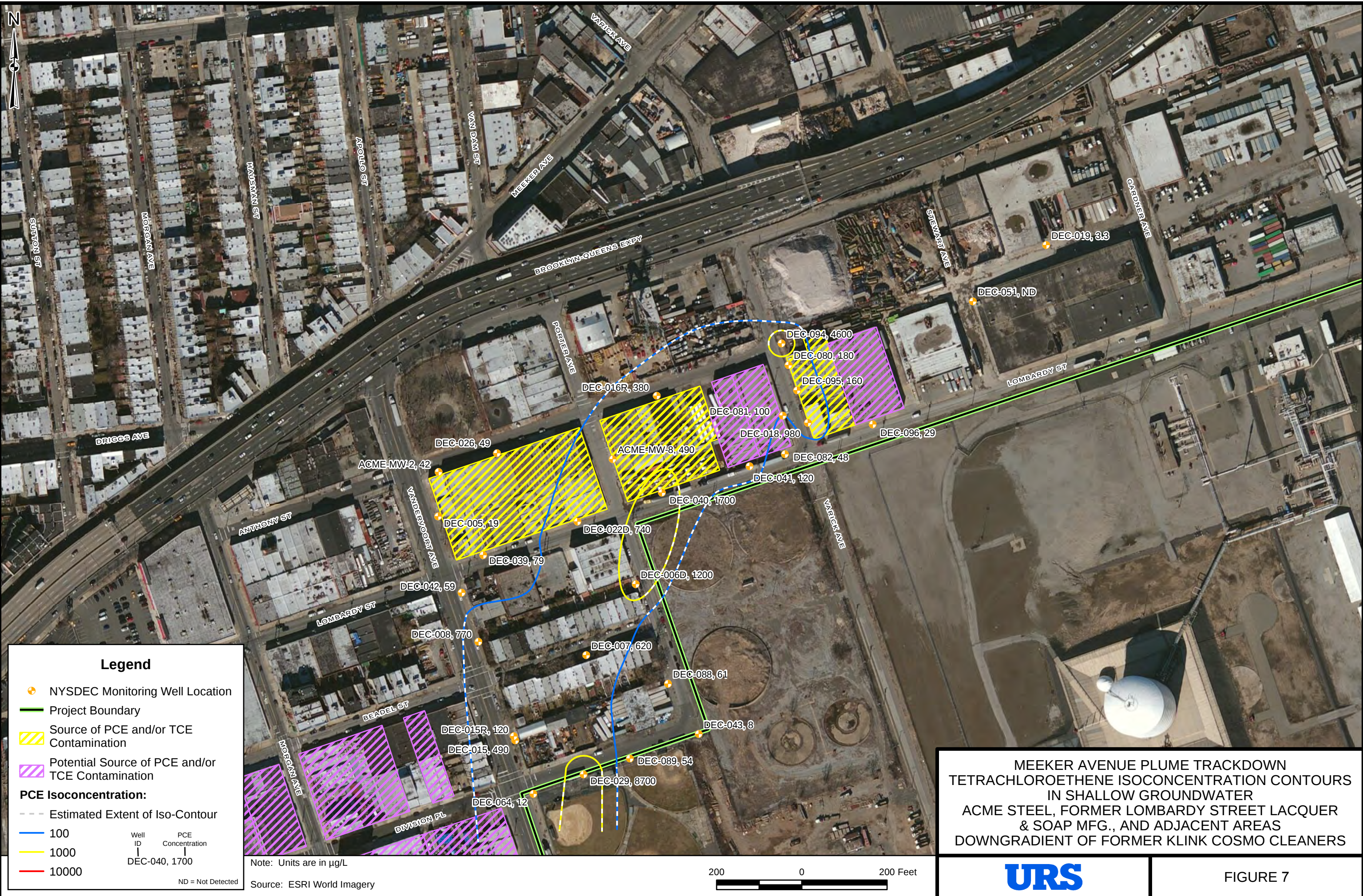
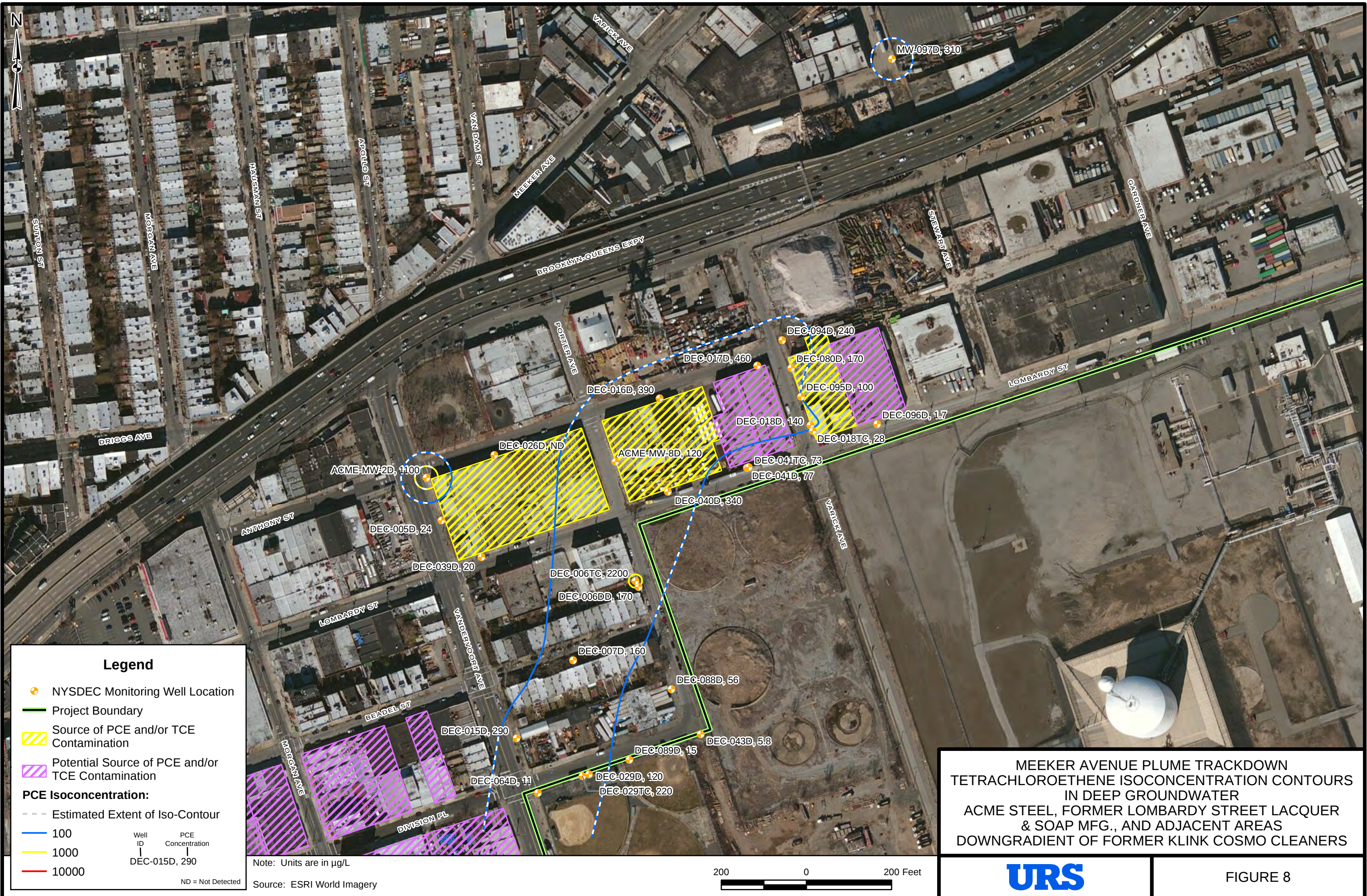
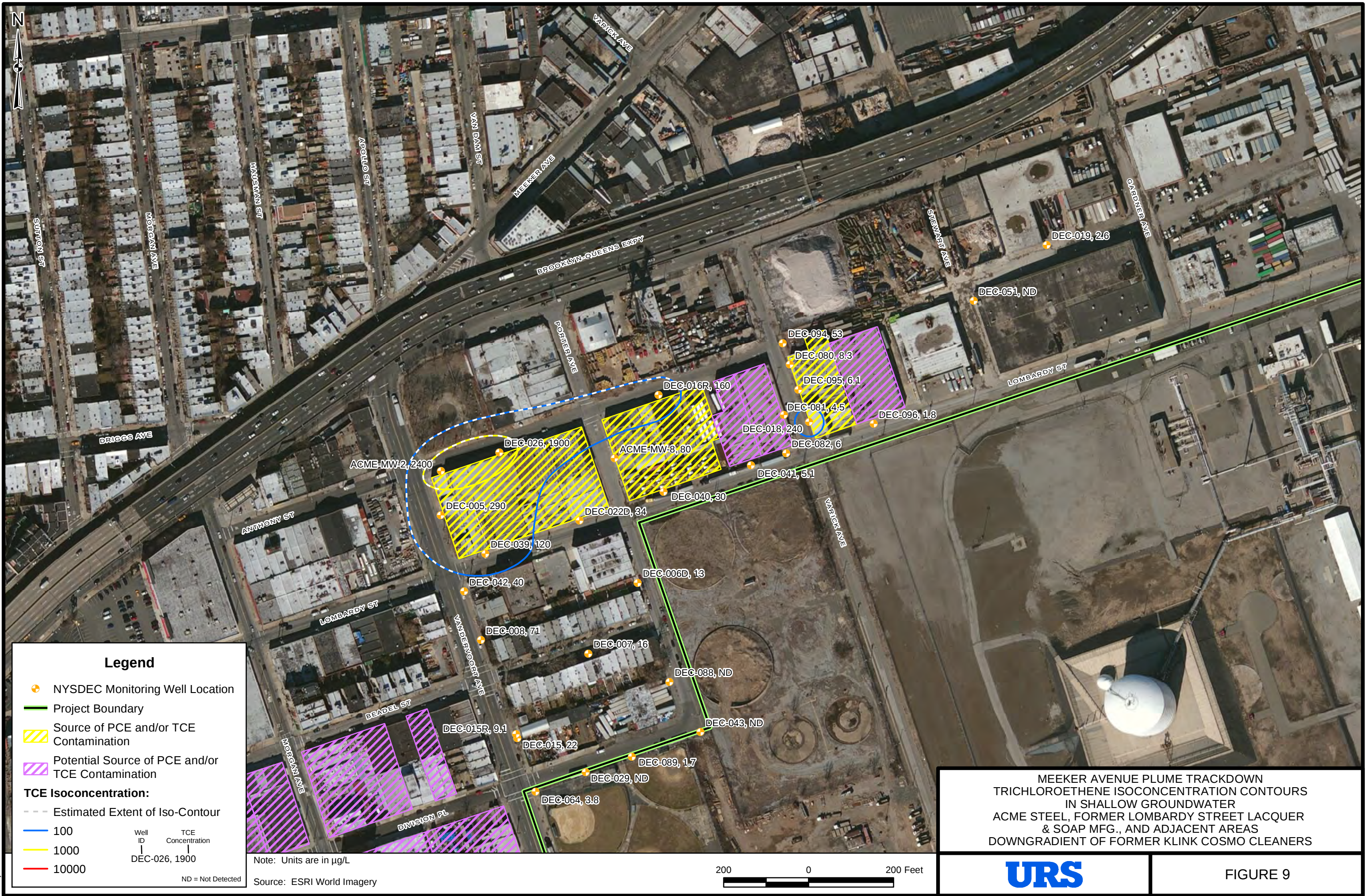


FIGURE 7

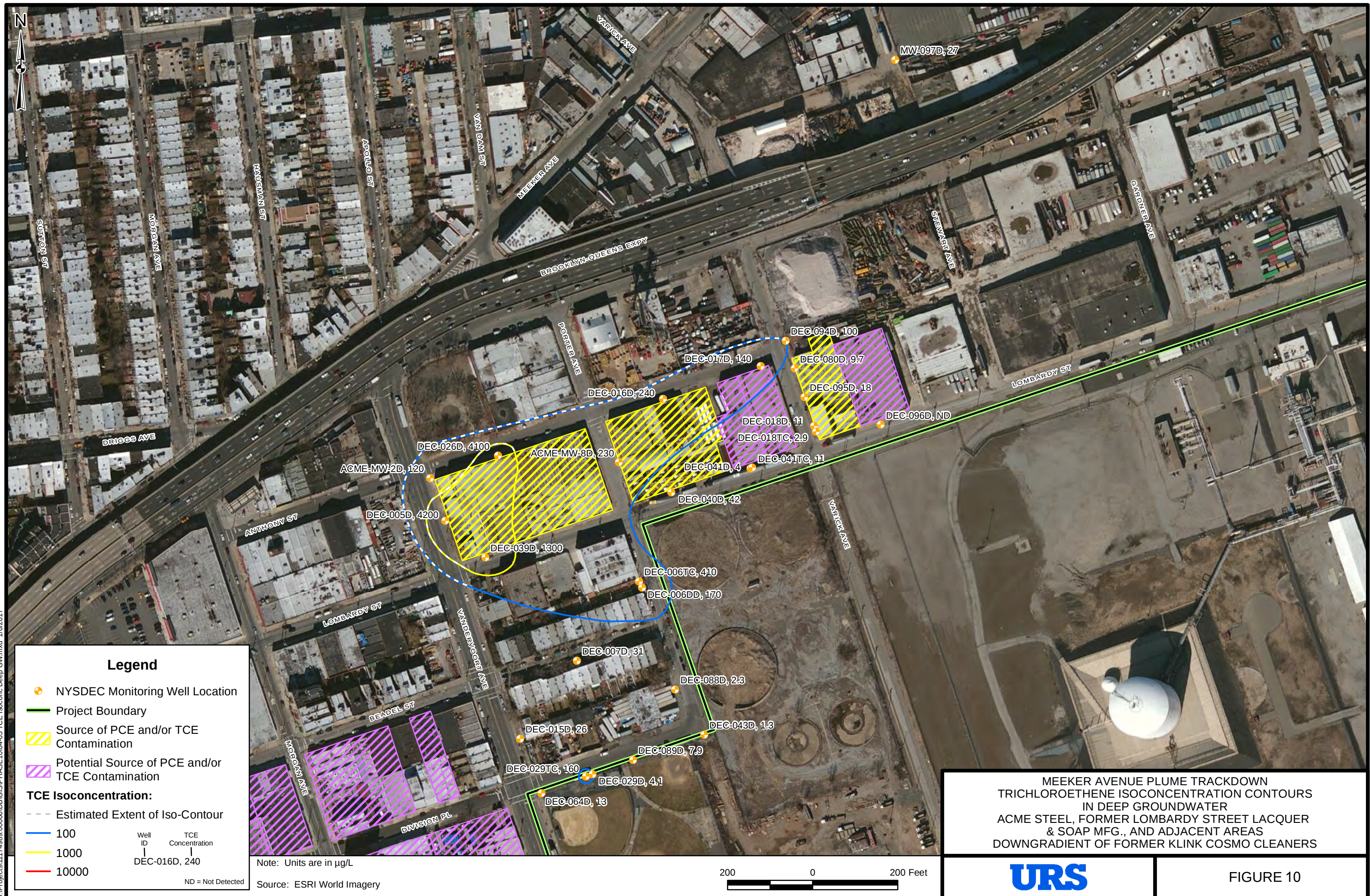
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Legend

NYSDEC Monitoring Well Location

Notes: Units are in µg/L
Criteria: NYSDEC TOGS 1.1.1 Ambient Water Quality Standards, Class GA
Source: ESRI World Imagery

MEEKER AVENUE PLUME TRACKDOWN
EAST OF VANDERVOORT AVENUE
SHALLOW GROUNDWATER MONITORING DATA



FIGURE 11



Legend

 NYSDEC Monitoring Well Location

Notes: Units are in µg/L
Criteria: NYSDEC TOGS 1.1.1 Ambient Water Quality Standards, Class GA
Source: ESRI World Imagery

MEEKER AVENUE PLUME TRACKDOWN
EAST OF VANDERVOORT AVENUE
DEEP GROUNDWATER MONITORING DATA



FIGURE 12

240 0 240 Feet

