Remedial Design Work Plan

Farmingdale Plaza Cleaners

Farmingdale
Nassau County
New York

NYSDEC Site No. 130107

Prepared by
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7015

May 2017

Table of Content

Sections		Page Number
1.0	Introduction	1
2.0	Background	2
2.1	Physical Setting & Site Uses	2
2.2	Site Geology	2
2.3	Site Hydrogeology	3
2.4	Liberty Industrial Finishing Investigation Findings	3
2.5	Farmingdale Plaza Cleaners OU 2 Remedial Investigation	4
3.0	Pre-Design Investigation	7
4.0	Remedial Action Plan	8
5.0	Remedial Design Tasks	8
6.0	References	9

Tables

Table 1 – Farmingdale Plaza Cleaners Monitoring Well Elevation Data
Table 2 – Groundwater Analytical Results for Farmingdale Plaza Cleaners for August 25, 2015

Figures

Figure 1 – Site Location Plan
Figure 2 – Cross Section
Figure 3 – Groundwater Flow Contours Upper Glacial Aquifer
Figure 4 – Groundwater Flow Contours Magothy Aquifer
Figure 5 – Locations of Plumes A & B
Figure 6 – Groundwater Contours
Figure 7 – August 2015 Groundwater Sampling Results
Figure 8 – Groundwater Capture Zones
Figure 9 – Vertical Placement of Groundwater Extraction Well
Figure 10 – Piping Conveyance Plan

Appendices

A Investigation Logs
B Laboratory Results

1.0 Introduction

New York State Department of Environmental Conservation (NYSDEC) has developed this work plan to complete the remediation for the Farmingdale Plaza Cleaners (FPC) site (referred to herein as the site). The site is located at 450 Main Street in the Village of Farmingdale, Town of Oyster Bay, Nassau County, New York (see Figure 1).

Site activities are being conducted under the State Superfund Program. The site is divided into two operable units. Operable Unit 1 (OU1) consists of contaminated soil and soil vapor and includes the plaza property and portions of adjacent properties. An Interim Remedial Measure was performed in November 2011 for OU1 to address on-site soil and soil vapor contamination. A Record of Decision, dated March 30, 2012, was issued by NYSDEC for OU1 and required continued operation of a soil vapor extraction system to remediate contamination within onsite soil vapor and soils. OU1 activities are presently being performed by the current site owner. Operable Unit 2 (OU2) addresses on-site and off-site groundwater. A Record of Decision was issued by the NYSDEC on March 25, 2014, which discusses the groundwater contamination migrating from the site and the selected remedial action to install a groundwater extraction well down-gradient of the site to capture the groundwater contamination originating from the site. The potentially responsible parties (PRPs) failed to sign an Order on Consent and the FPC site was referred to the State Superfund for remedial activities. As a result the NYSDEC intends to design and implement the selected remedial action for OU2.

2.0 Background

Site background information regarding physical setting and summary of historical investigation activities at the LIF site and FPC site are presented below.

2.1 Physical Setting & Site Uses

Location: The Farmingdale Plaza Cleaners Site is located at 450 Main Street in Farmingdale, Nassau County. The site is in a suburban area and lies at the intersection of Main Street and Fulton Street. This site is 1,000 feet up-gradient of the Liberty Industrial Finishing (LIF) site, which is a United States Environmental Protection Agency (USEPA) National Priorities List (NPL) site. The sites are shown on Figure 1.

Site Features: The site is a commercial plaza that formerly housed the Farmingdale Plaza Cleaners. The shopping plaza consists of a single 33,000-square foot building and a paved parking lot, surrounded by apartment buildings and other commercial structures.

Current Zoning/Use(s): The former dry cleaner and adjacent former supermarket are no longer present. The site building was recently renovated and a CVS is presently occupying the southern portion of the building. The shopping plaza is zoned for commercial use. The surrounding parcels are zoned residential or commercial.

Past Use(s) of the site: Waldbaum Shopping Plaza was reportedly constructed in 1983, at which time the Farmingdale Plaza Cleaners (FPC) began operation. Dry cleaning operations ceased in August 2003.

2.2 Site Geology

Site investigations encountered the Upper Glacial aquifer (UGA) and Magothy aquifer (MA). The nature of the overburden at the site was characterized and presented in the FPC Remedial Investigation report. The total overburden thickness in the area is unknown as monitoring wells and borings were drilled to a maximum depth of 200 feet below ground surface; however, the deepest overburden water supply well in the area is over 750 feet deep.

Site investigations determined that the UGA was observed to be approximately 85 to 100 feet thick and primarily consisted of gravelly sand, sometimes with a trace of silt. The lower portion of the UGA consisted of fine-grained sand, silt, and clay but sometimes also contained a trace of gravel. The soils changed from brown/tan to dark brown/gray. These finer grained soils of varying thickness were generally recognizable in gamma logs from the profile borings and appear to correlate with a unit identified as the “20-foot-clay” described in regional geologic literature (URS 2000; Perlmutter and Geraghty 1962).

Site investigations determined that the MA soils consisted of interbedded medium- to coarse-grained sands silty sand, clayey silt, and silty clay. Gamma logs showed layers containing a relatively high clay content compared to other zones, which were of variable depth and thickness.

Figure 2 presents a geologic cross-section depicting the subsurface stratigraphy. This cross section presents site information from the north to the south. This section depicts the transition from the UGA to the MA at approximate depths ranging from 100 to 110 feet below ground surface.

2.3 Site Hydrogeology

The Remedial Investigation assessed groundwater flow within the UGA and MA. In March 2012, water level measurements were obtained from 61 monitoring wells. Figures 3 and 4 present the groundwater elevations and interpreted isopleths for the UGA and MA, respectively. Groundwater flow is to the south for both aquifers. In both the UGA and MA, the overall horizontal gradient was measured to be approximately 0.2% to the south. The vertical hydraulic gradient varies within the limits of the investigation area, but in general a downward gradient does appear to be present between the UGA and MA. Vertical migration groundwater will be limited by the fine-grained transitional unit between the UGA and MA.

The LIFS CRI report (URS 2000) indicated that while groundwater movement is predominantly horizontal in the UGA, upward or downward gradients exist within the MA and also between the two aquifers on a seasonal basis.

2.4 Liberty Industrial Finishing Investigation Findings

Investigations were initiated in 1990's by the USEPA at the adjacent LIF site. A 2000 remedial investigation conducted for the USEPA at the LIF site (URS 2000) indicated that the Farmingdale area had been impacted by two Volatile Organic Compound (VOC) contaminant plumes (designated Plume A and Plume B). Plume A consisted of trichloroethene (TCE) and was determined to originate from the LIF site, while the tetrachloroethene (PCE)-dominated Plume B was identified to originate from an up-gradient source that was later identified as the FPC site. Since then, the LIF site has been the subject of a number of environmental investigations over several years by USEPA to define the limits of the plumes. Investigation reports concluded that:

- Based on potentiometric surface elevations, groundwater flow is primarily toward the south with a clear downward vertical hydraulic gradient existing in the UGA near the FPC site; This is further supported by current data presented in Table 1, which was collected at monitoring well clusters.

- Primary VOCs detected during this investigation were PCE, TCE, and cis-1,2-DCE;

- VOC contamination detected within the investigation area originates from multiple potential sources including the LIF site, FPC site, and possibly an unknown source(s) up-gradient of the FPC site;

- Plume A consists of cadmium (Cd), chromium (Cr), TCE, and its daughter products extending from the LIF site southward towards the Southern State Parkway. Plume A contamination is located within the UGA and MA. In August 1998, the USEPA issued a unilateral administrative order to the LIF site PRPs to initiate an interim groundwater action. This action ultimately resulted in construction and operation of an on-site groundwater pump and treat system operated as a non-time critical removal action. The off-site groundwater system has numerous components. Groundwater is extracted from the UGA by three recovery wells and from the MA by three additional wells that have an estimated capture width of approximately 940 feet. In addition, at the far end of the cadmium and chromium plume, a single UGA extraction well operates with a design capture width of approximately 500 feet. Figure 5 illustrates the approximate extent of Plume A;

- Plume B (identified as originating from the FPC site and possibly unknown source(s) north of the FPC site) consists of PCE and its daughter products within UGA and MA. Plume B migrates from the FPC site and across the LIF site in a southerly direction with a slightly westward component. Downgradient of the FPC site, higher levels of contamination at depth suggest a general dipping of the contaminant plumes as they move southward along the direction of groundwater flow. The downward dipping trend observed in the plumes is likely the result of the downward hydraulic gradient. Figure 5 illustrates the approximate extent of Plume B;

- Based on the site investigations, Plumes A and B have comingled making delineation difficult (see Figure 5); and

- As a result of data collected during the USEPA investigation, the FPC site was listed as a Class 2 site on the State's Registry of Inactive Hazardous Waste Disposal Sites in December 2002.

2.5 Farmingdale Plaza Cleaners OU 2 Remedial Investigation

In March 2012, the third and final mobilization of the remedial investigation was completed to define the extent of contamination migrating from the FPC site, identified as Plume B. A total of 39 samples were collected from new and existing wells/piezometers, including the six new permanent monitoring wells, 16 existing permanent monitoring wells/piezometer, and 17 existing profile well channels. Each of the existing profile wells sampled (PW-01, PW-03, PW-04, PW-06, PW-08, PW-09, and PW- 11) contains seven “channels” that allow the well to be sampled at varying depths. Only a few channels of each profile well were sampled for this task for comparison with results when the profile wells were installed (YU 2009). Site findings are presented below:

- Groundwater flows in a southerly direction from the site;

- Groundwater migrates vertically downwards through the formation;

- On-site PCE within the UGA was detected at a maximum concentration of 21 parts per billion (ppb) at 40 feet below ground surface (bgs). Most of the PCE concentrations in the on-site groundwater wells are below 5 ppb. The PCE plume shape downgradient of the site was interpreted to be discontinuous based on the locations of the detections exceeding Class GA standards (5 ppb for PCE and TCE) in wells north of Motor Avenue;

- Off-site PCE within the UGA was detected at a maximum concentration of 38 ppb in PW-09 at 94 feet bgs. Most off-site wells did not detect any PCE contamination, with a few wells showing PCE concentrations between 10 ppb to 20 ppb. The portion of the PCE plume with highest concentrations within the UGA appears to be between Motor Avenue and Yoakum Avenue;

- Off-site PCE within the MA was detected at a maximum concentration of 130 ppb in MW-37C at 119 feet bgs. This detection is within the comingled portion of Plumes A and B. The highest concentration of PCE off-site and not located within Plume A was detected at a maximum concentration of 110 ppb in PW-19 at 145 feet bgs, which is located towards the leading edge of the plume. Most of the other groundwater monitoring wells showed PCE concentrations from non-detect to less than 100 ppb;

- The PCE plume widens as it extends southward until the plume ends abruptly at Tomes Avenue (based on the lack of PCE in MW-31C, -31D, and -47C);

- The extent of PCE and TCE contamination in the UGA and MA has decreased compared to data from the sampling completed in 2008 and remains similar to data from LIF site monitoring program in 2011. Reduction in the extent of TCE contamination in the UGA is attributed to the construction and operation of the LIF site groundwater treatment system and the FPC OU-1 vapor extraction system, in addition to natural degradation processes including, but not limited to, dispersion, dilution, and reductive dechlorination. The overall reduction and limitation to the horizontal extent of PCE contamination may be attributed to elimination of the source at the FPC site and natural degradation processes;

- The uncaptured portion of Plume B extends approximately 500 feet east of the capture zone for the LIF site/Plume A at MW- 48C. (see figure 5)

- The base of both the PCE and TCE plumes is interpreted to end at an approximate depth of 200 feet at a clay layer detected in numerous groundwater profile borings;

- PCE is shown to be present up-gradient of the FPC site in monitoring well identified as MW-3. The concentration was 21 ppb in the UGA;

- One monitoring well (EPA-MW-1B) is installed in the MA near the site and sample results from 2007 show the PCE levels to be below Class GA standards in this area;

- The investigation showed that there is no on-going source at the site, since most of the higher PCE concentrations are found at the lead edge of the plume;

- Other breakdown products were also observed within the UGA and MA, but the data are inconclusive as to whether their source is the FPC site or the nearby LIF site; and

- Figure 2 represents a generally north-south cross section. This figure shows the extent of PCE in the UGA and MA from the site to the leading edge of the Plume B.

3.0 Pre-Design Investigation

On August 25, 2015, a sampling event was completed to provide current groundwater flow and VOC concentrations at the lead edge of the plume. This information will be used to design the FPC site groundwater extraction system.

The depth to groundwater was recorded at 19 wells during the sampling event (see Table 1). The groundwater flow direction was determined to be towards the south (see Figure 6).

Groundwater samples were collected at five monitoring wells, identified as MW-28C, MW-28D, MW-37C, MW-46C, and MW-47C. Samples were obtained using passive diffusion bags. Samples were analyzed for VOCs via method 8260 (see Appendix B for laboratory results). Table 2 provides a summary of the analytical results. Highlighted Values indicate exceedances of NYSDEC Groundwater Standards. Samples show levels above Class GA standards for both PCE and TCE (see Figure 7). The analytical results are similar to 2012 findings for these wells, which identified the leading edge of the plume to be near MW-47C.

4.0 Remedial Action Plan

According to the OU 2 Record of Decision, the selected remedial action was groundwater extraction and treatment. This decision was based on FPC site Remedial Investigation Report and the criteria identified for evaluation of remedial alternatives. The FPC groundwater extraction system will be designed and installed so that the capture zone is sufficient to intercept the areal and vertical extent of the elevated PCE contamination that is not currently remediated by the LIF site groundwater extraction system. The LIF site information was used to develop the conceptual design for the FPC site.

A comparison of soil log from LIF extraction wells RW-8 and RW-9 and gamma logs along Tomes Ave (MW-25C, MW-31D, and MW-47C) indicate that the soil conditions are similar. See Table below for log interpretations. The gamma logs show similar material within the upper 140 feet of the logs. MW-25 did not extend beyond that depth, but a soil log was available for RW-9 which extended to 195 feet. Based on the soil log the increased clay zone at approximately 145 feet was not encountered at the LIF recovery well location.

Soil Logs

CPS Gamma Readings	well 25C	Well 31D	Well 47C
~ 20 CPS	0 feet	0 feet	0 feet
~ 35 CPS	70 feet	70 feet	75 feet
~ 70 CPS	----*	140 feet	150 feet
~ 25 CPS	----*	163 feet	194feet

*Gamma logs ended at ~140 feet.
CPS (counts per second).
Two different gamma loggers were used.

The soil boring logs for these wells are provided in Appendix A. (MW-25 is also identified as OS-15)

In August 1998, the USEPA issued a unilateral administrative order to the LIF site PRPs to initiate an interim groundwater action. The LIF extraction well system was designed based on modelling by Ecology and Environment Engineering, P.C. This design required three extraction wells located within the MA with screen depths ranging from approximately 90 to 180 feet below ground surface (ft bgs) and a total purge rate of 85 gallons per minute, see table below for individual extraction well specifications. The designed capture width was approximately 940 feet. The influence of the LIF groundwater extraction system is shown on Figure 8.

Magothy Aquifer Extraction Well Design Specifications

Extraction Well	Design Flow (gpm)	Screen Top (ft bgs)	Screen Bottom (ft bgs)	Screen Length (ft)
RW-8	30	94	139	45
RW-9	20	154	184	30
RW-10	35	99	139	40

The FPC groundwater extraction system will be designed to capture the PCE and associated breakdown products at the leading edge of the FPC site plume (Plume B) to minimize any further down-gradient migration of the contaminated groundwater. Based on the LIF pump test results, a similar system shall be considered for the FPC site. The proposed extraction well shall be located near MW-47C and is anticipated to provide a capture width of 400 feet, see Figure 8. The depth of the proposed extraction well is approximately 150 feet bgs and the length of the extraction well screen will be approximately 20 feet (see Figure 9 Vertical Placement of Groundwater Extraction Well). The base of the well screen will be located just above the fine grained soils.

The FPC groundwater extraction system will be integrated with the existing LIF site groundwater extraction and treatment system, or discharged to the Nassau County sewer system. The proposed FPC groundwater extraction well is located approximately 1,500 feet from the existing LIF site extraction well system. The underground piping conveyance is anticipated to run from the FPC extraction well adjacent to MW-47C, along Tomes Avenue, to either the LIF site extraction well system (see Figure 10) or a Nassau County sewer main. This will permit groundwater discharged from the proposed FPC extraction well to be conveyed to an acceptable treatment facility.

5.0 Remedial Design Tasks

Based on the remedial investigation and evaluation of remedial alternatives, the NYSDEC selected groundwater extraction and treatment as the selected remedial action. The FPC groundwater extraction system will be incorporated into the existing LIF site groundwater extraction and treatment system or discharged to the Nassau County sewer system. Discussions with Nassau County regarding discharge requirements shall be performed during the design process. This will capture PCE and associated breakdown products at the leading edge of Plume B that is not presently being captured by the LIF groundwater extraction system. The installation of the FPC extraction well will minimize any further down-gradient migration of the PCE contaminated groundwater. A NYSDEC Engineering Contractor shall be retained to develop design documents. The design elements will include: groundwater recovery (extraction) well and vault construction, pump specifications, initial pump test of extraction well, utilities, and pipe conveyances. Extracted groundwater will not be treated but simply conveyed to a treatment system.

6.0 References

Ecology and Environment Engineering, P.C. February 2008. *Final Engineering Design Report for the Liberty Industrial Finishing Superfund Site Farmingdale, Nassau County, New York.*

Ecology and Environment Engineering, P.C. February 2012. *Final Remedial Investigation Report for the Farmingdale Plaza Cleaners Site, Operable Unit 2 Farmingdale, Nassau County, New York.*

New York State Department of Environmental Conservation March 2014. *Record of Decision Farmingdale Plaza Cleaners Operable Unit Number 02: On-site and Offs-site Groundwater State Superfund Project Farmingdale, Nassau County.*

New York State Department of Environmental Conservation March 2014. *Record of Decision Farmingdale Plaza Cleaners Operable Unit Number 01: Remedial Program – Onsite Area for Soil and Soil Vapor State Superfund Project Farmingdale, Nassau County*.

URS. July 2000. *Final Continued Remedial Investigation Report for the Liberty Industrial Finishing Site, Farmingdale, New York.* Index No. II, CERCLA 97-0203.

YU & Associates, Inc. 2009. *Final Report, Immediate Investigation, Farmingdale Plaza Cleaners Site, Farmingdale, New York, Site Number: 130107,* prepared for NYSDEC on behalf of AECOM Technical Services Northeast, Inc.

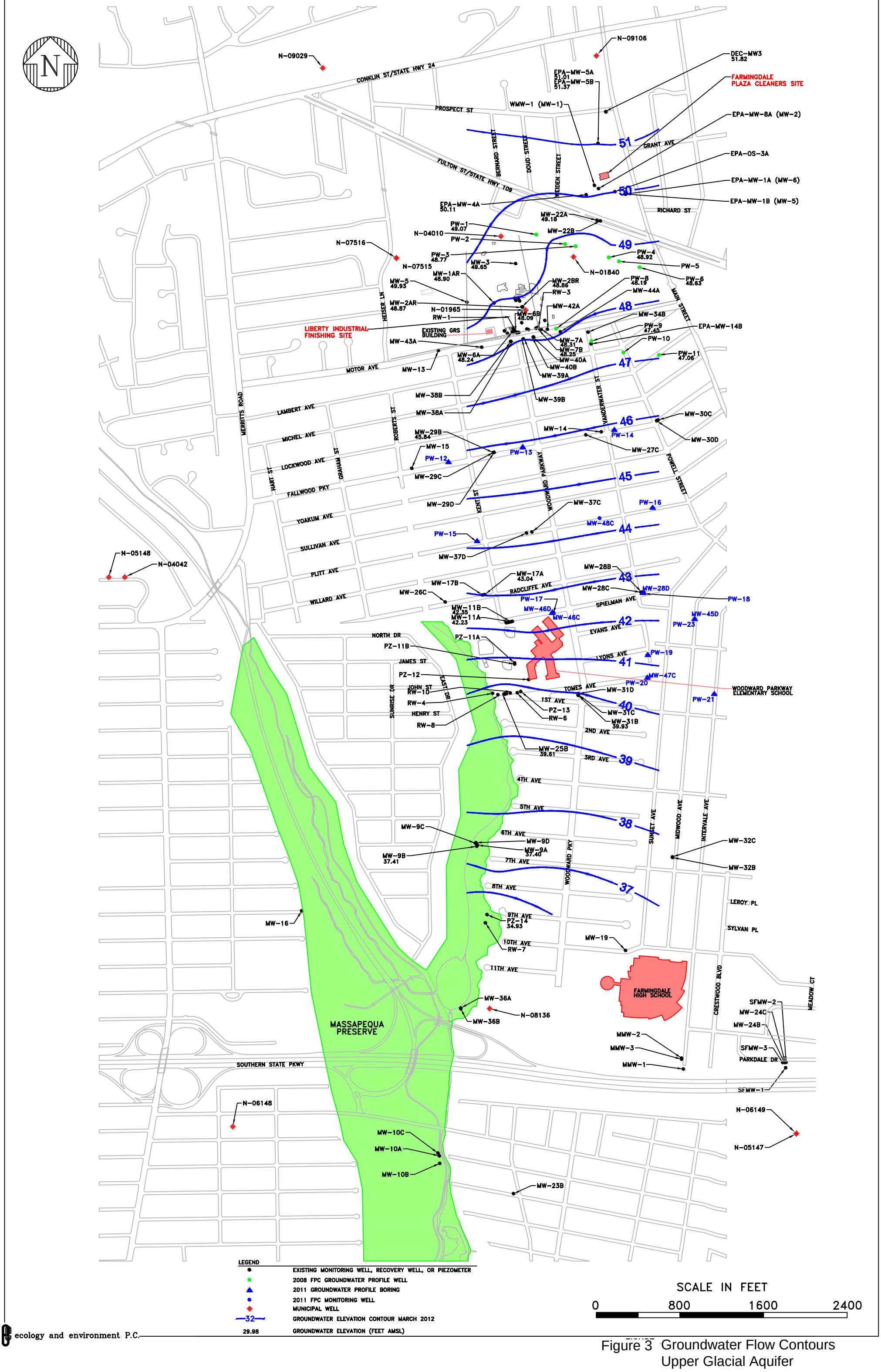
Appendix A

NEW YORK STATE OF OPPORTUNITY
Department of Environmental Conservation

Figure 1
Site Location Map
Farmingdale Plaza Cleaners
Site Number 130107
Farmingdale, Nassau County, New York

N

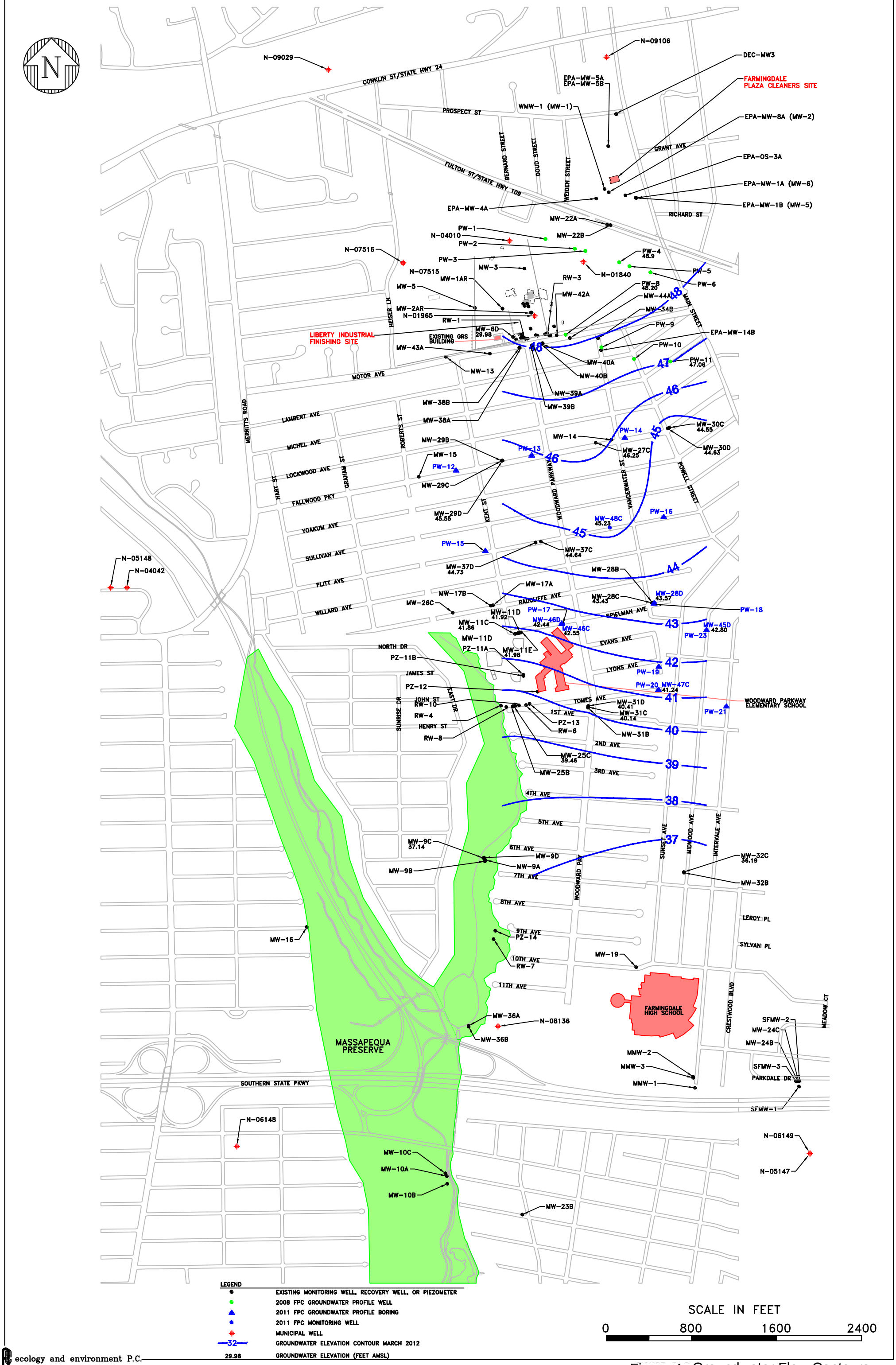
F:\Farmingdale Cleaners\5-7-12 updates\Figure 3-4.dwg



ecology and environment P.C.

Figure 3 Groundwater Flow Contours
Upper Glacial Aquifer

F:\Farmingdale Cleaners\5-7-12 updates\Figure 3-4.dwg



ecology and environment P.C.

Figure 4 Groundwater Flow Contours
Magothy Aquifer

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

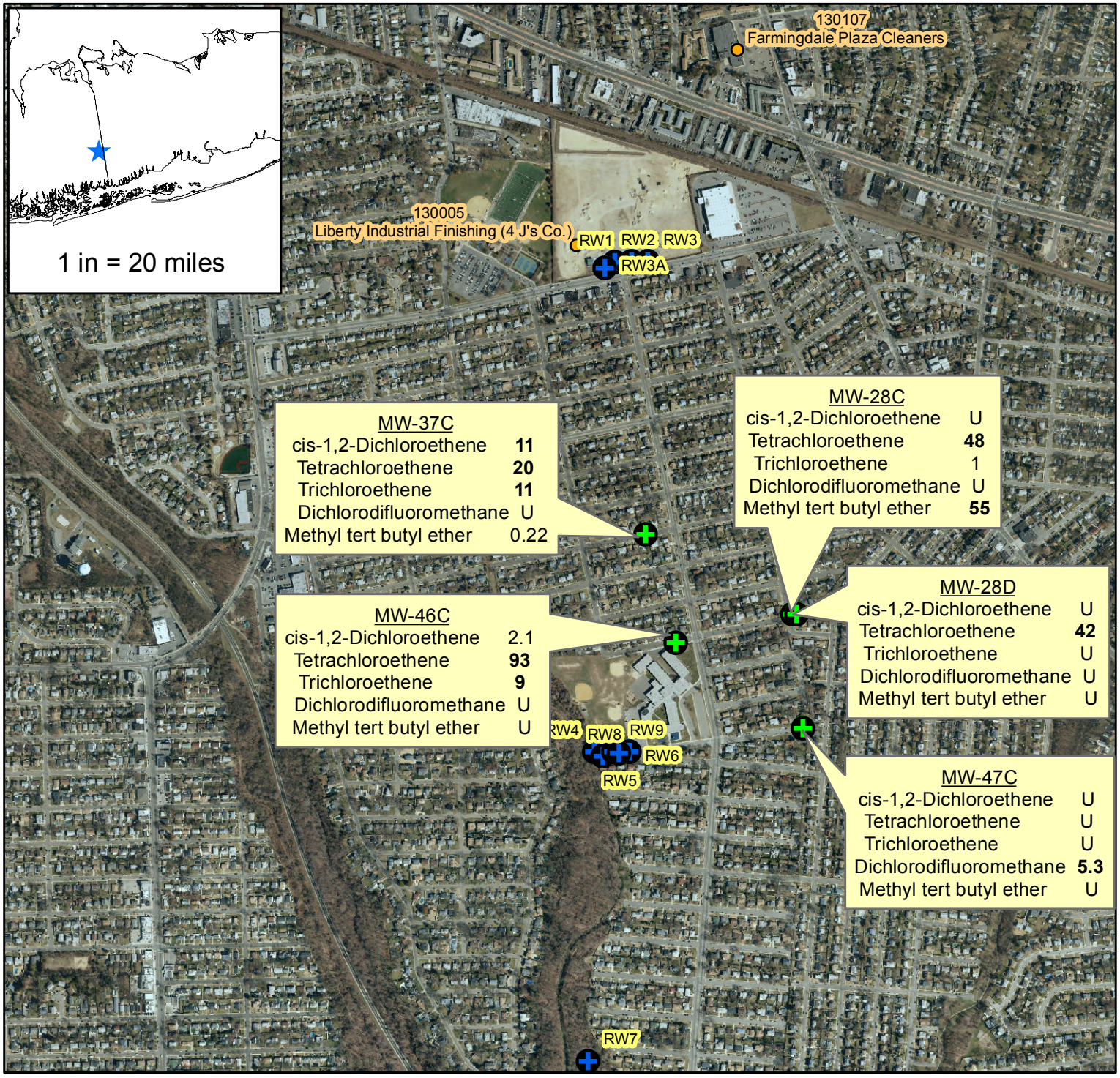
Figure 5
Location of Plumes A & B
Farmingdale Plaza Cleaners
Site Number 130107
Farmingdale, Nassau County, New York

N

NEW YORK STATE OF OPPORTUNITY
Department of Environmental Conservation

Figure 6
Approximate Plume A & B Locations
Farmingdale Plaza Cleaners
Site Number 130107
Farmingdale, Nassau County, New York

N



Legend

- Remediation Sites
- RW
- MW

Well ID
Analyte Concentration (ug/l)

Notes:
U = Non detect
Bold Conentrations Indicate a concentration above respective Groundwater Standard

Source Data: OrthoImagery Nassau

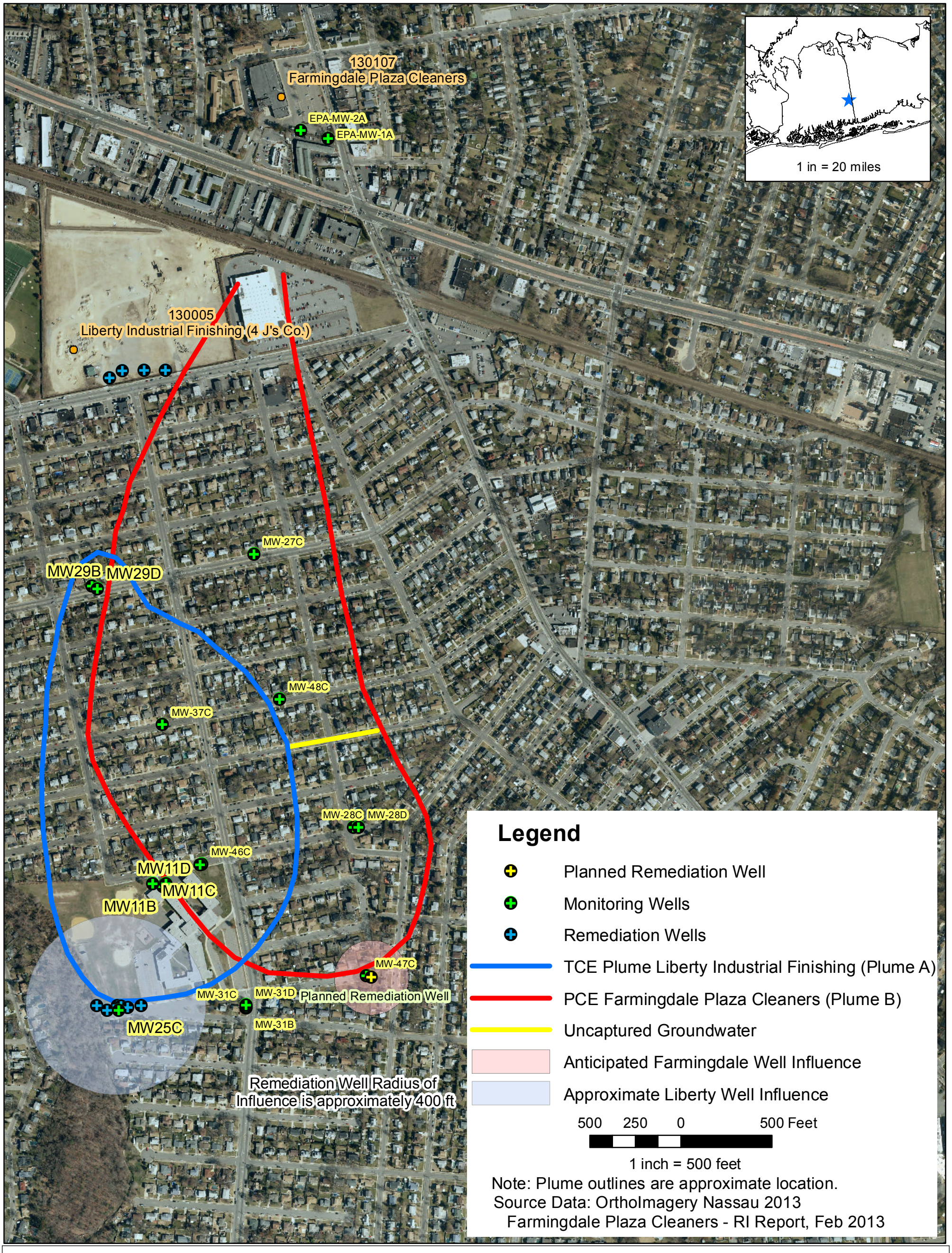
1,000 500 0 1,000 Feet

1 inch = 1,000 feet

NEW YORK STATE OF OPPORTUNITY
Department of Environmental Conservation

Figure 7
August 2015 Groundwater Sampling Results
Farmingdale Plaza Cleaners
Site Number 130107
Farmingdale, Nassau County, New York

N

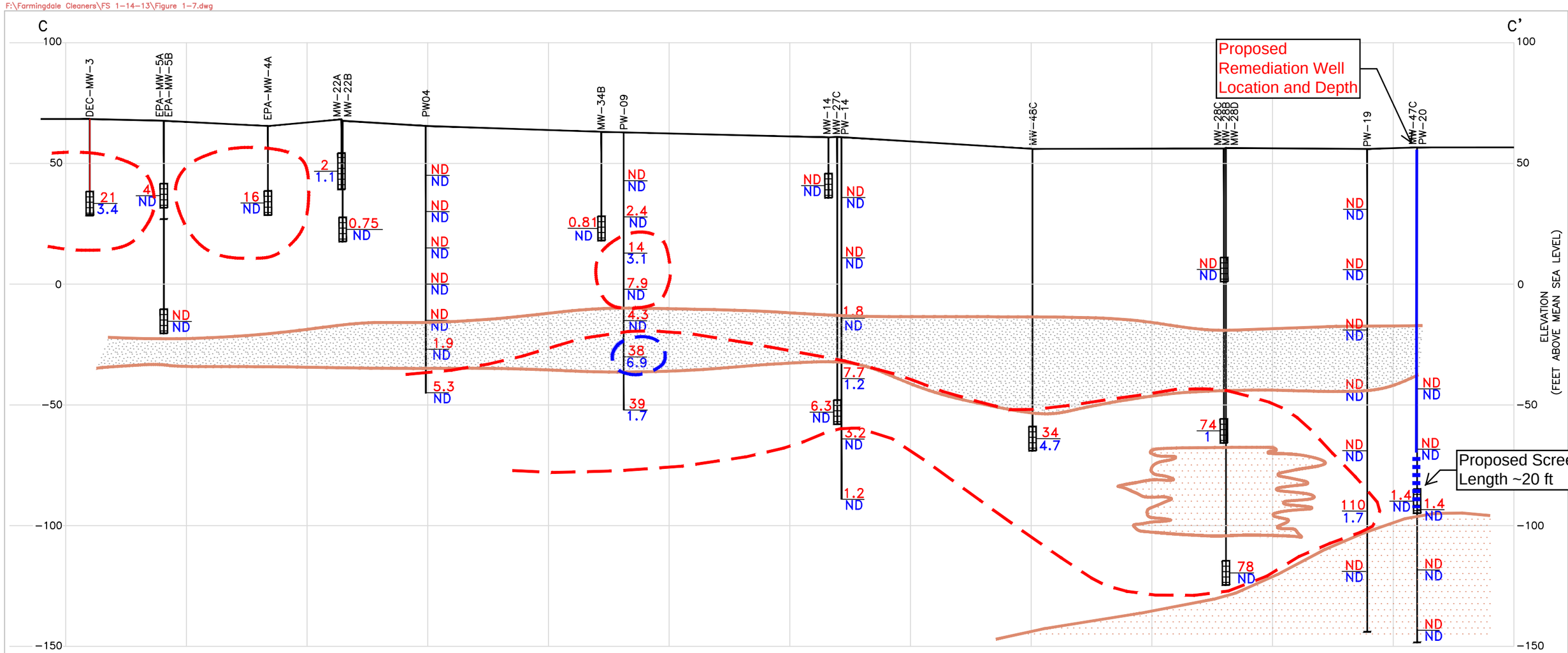


NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Figure 8
Groundwater Capture Zones
Farmingdale Plaza Cleaners
Site Number 130107
Farmingdale, Nassau County, New York

N

F:\Farmingdale Cleaners\FS 1-14-13\Figure 1-7.dwg



NOTES:

1. ALL LOCATIONS ARE APPROXIMATE.
2. MOST RECENT ANALYTICAL RESULTS FROM EACH WELL PRESENTED. SOURCES: LIFS 2012, LIFS 2011, LIFS 2010, AND YU 2009 GROUNDWATER INVESTIGATION.
3. AT LOCATIONS WHERE MULTIPLE SAMPLES WERE COLLECTED (E.G., FIELD DUPLICATES AND PROFILE BORINGS), MAXIMUM REPORTED ANALYTE CONCENTRATION IS PRESENTED ON THE FIGURE.

LEGEND

INTERMITTENT SILT AND CLAY LENSES	74 — PCE RESULT (ug/L)
TCE ISOCONCENTRATION (5 ug/L)	1.6 — TCE RESULT (ug/L)
PCE ISOCONCENTRATION (5 ug/L)	MONITORING WELL SCREEN INTERVAL
APPROXIMATE TRANSITIONAL UNIT (SILTS AND CLAYS)	ND — NOT DETECTED
	MW-28D — MONITORING WELL
	PW-18 — GROUNDWATER PROFILE BORING

APPROXIMATE HORIZONTAL SCALE

0 400 800 1200

APPROXIMATE VERTICAL SCALE

0 40 80 120

ecology and environment P.C.

FIGURE 9

CROSS-SECTION C-C'
FARMINGDALE PLAZA CLEANERS SITE
FARMINGDALE, NEW YORK

Original Figure from 2014 Farmingdale Plaza ROD

130107
Farmingdale Plaza Cleaners

130005
Liberty Industrial Finishing (4 J's Co.)

1 in = 20 miles

Distance Between Remediation Wells and
Proposed Remediation Well is approximately 1,500 ft

Planned Remediation Well

Legend

- Planned Remediation Well
- Remediation Wells
- Planned Groundwater Discharge Piping

500 250 0 500 Feet

1 inch = 500 feet

Source Data: OrthoImagery Nassau 2013

NEW YORK
STATE OF
OPPORTUNITY

Department of
Environmental
Conservation

Figure 10
Piping Conveyance Plan
Farmingdale Plaza Cleaners
Site Number 130107
Farmingdale, Nassau County, New York

N

Table 1: Farmingdale Plaza Cleaners Monitoring Well Elevation Data

Well ID	Latitude	Longitude	Reference Elevation (ft amsl)	Top of bag (ft) 8/25/15	Depth to Water (ft) 8/25/15	Total Depth (ft) 8/25/15	Elevation (ft amsl) 8/25/15
EPA-MW-1A	-73.444948	40.728524	65.50	*	18.50	39.70	47.00
EPA-MW-2A	-73.445489	40.728650	67.00	*	18.09	37.50	48.91
MW-11B	-73.448449	40.717324	50.12	*	9.58	*	40.54
MW-11C	-73.448561	40.717303	50.06	*	10.87	*	39.19
MW-11D	-73.448396	40.717330	50.19	*	11.10	*	39.09
MW-25C	-73.449406	40.715479	44.41	*	6.02	46.60	38.39
MW-27C	-73.446560	40.722273	61.00	*	17.06	*	43.94
MW-28C	-73.444688	40.718127	56.06	116	15.12	*	40.94
MW-28D	-73.444592	40.718125	56.41	175	15.35	*	41.06
MW-29B	-73.449758	40.721821	60.47	*	17.24	50.90	43.23
MW-29D	-73.449727	40.721829	60.61	*	18.04	195.00	42.57
MW-31B	-73.446880	40.715433	53.48	*	14.10	*	39.38
MW-31C	-73.446877	40.715451	53.44	*	15.46	*	37.98
MW-31D	-73.446870	40.715478	53.30	*	15.66	*	37.64
MW-37C	-73.448439	40.719727	55.44	113	13.72	*	41.72
MW-46C	-73.447706	40.717608	54.45	144	14.52	*	39.93
MW-46D	-73.447739	40.717603	54.39	*	14.71	*	39.68
MW-47C	-73.444483	40.715883	56.64	145	17.91	*	38.73
MW-48C	-73.446100	40.720081	56.04	*	13.40	*	42.64

Notes:
1.) ft amsl = feet above mean sea level
2.) Length of diffusion bag used was 2 ft
3.) * = no available data

Table 2: Groundwater Analytical Results for Farmingdale Plaza Cleaners for August 25th 2015

VOC Analyte Concentration	Monitoring Well ID					Groundwater Standard
	MW-28C	MW-28D	MW-37C	MW-46C	MW-47C	
1,1-Dichloroethene	U	0.61	U	1.7	U	5.0
2-Butanone	1.4	U	U	1.7	U	50.0
cis-1,2-Dichloroethene	U	U	11	2.1	U	5.0
Tetrachloroethene	48	42	20	93	U	5.0
Trichloroethene	1.0	U	11	9.0	U	5.0
Dichlorodifluoromethane	U	U	U	U	5.3	5.0
1,2-Dichlorobenzene	U	U	1.8	U	U	3.0
Chlorobenzene	U	U	2.0	U	U	5.0
Methyl tert butyl ether	55	U	0.22	U	U	10.0
Toluene	U	U	1.6	U	U	5.0
1,1,2-Trichloroethane	U	0.61	U	U	U	1.0
1,1,-Dichloroethane	U	1.6	U	U	U	5.0
Chloroform	U	0.45	U	U	U	7.0

Note: 1.) VOC = Volatile Organic Compound

2.) Units are in micrograms per liter (ug/l)

3.) Acetone was assumed to be a lab contaminant and thus was not included in the table

4.) U = Analyte was not detected above the laboratory method detection limit

5.) Highlighted Values indicate excedences of NYSDEC Groundwater Standards

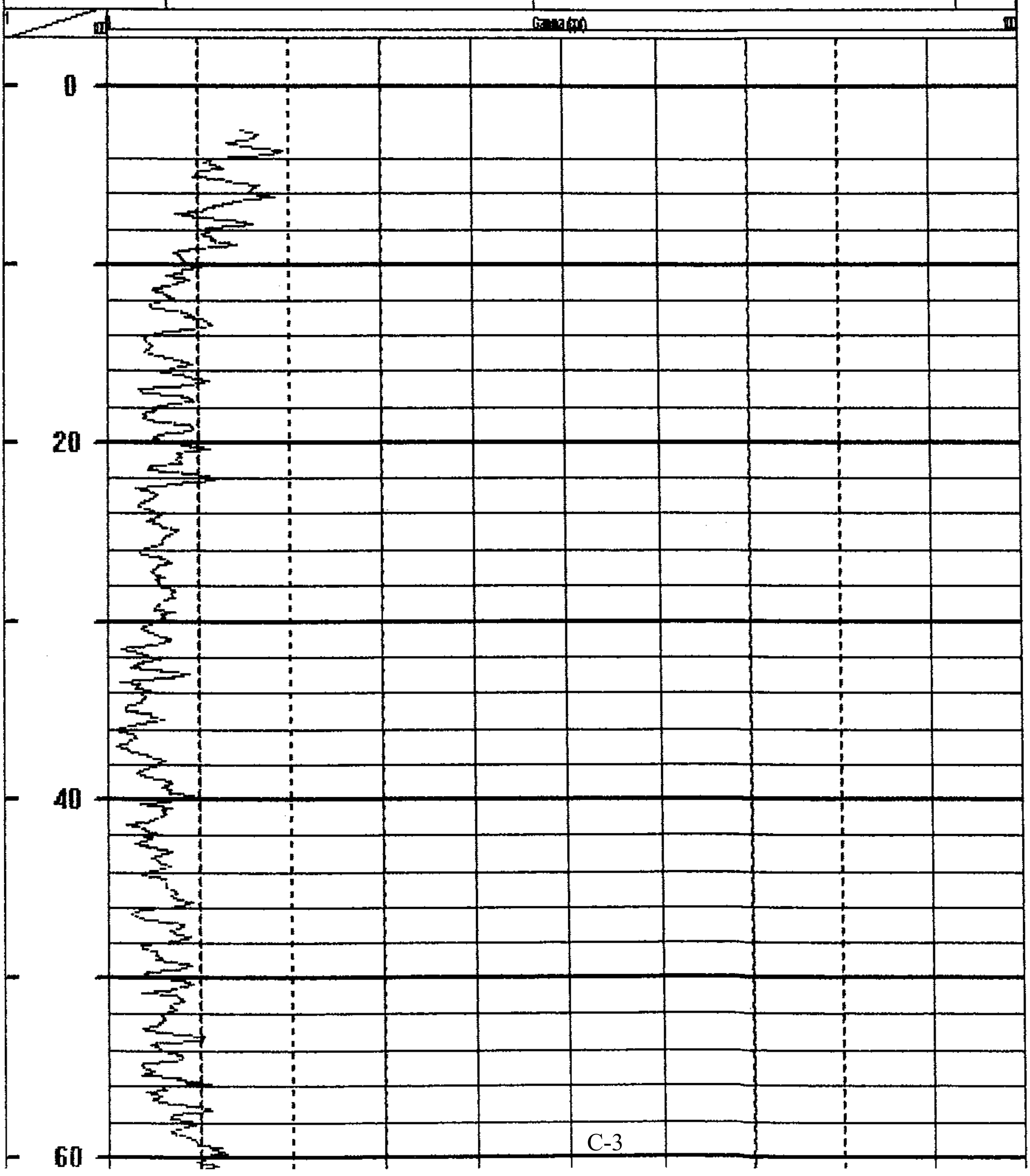
Appendix A

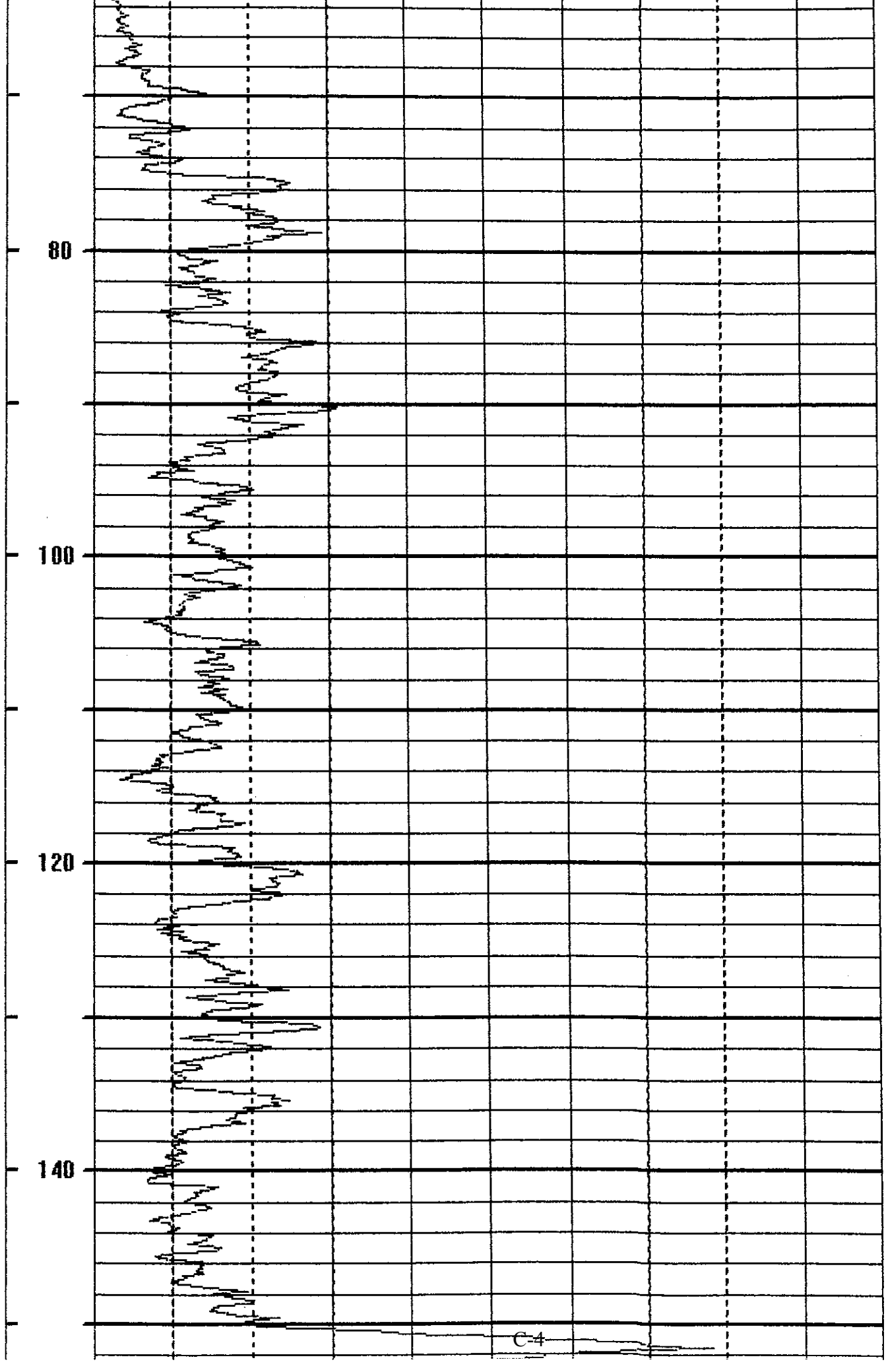
Gamma Logs

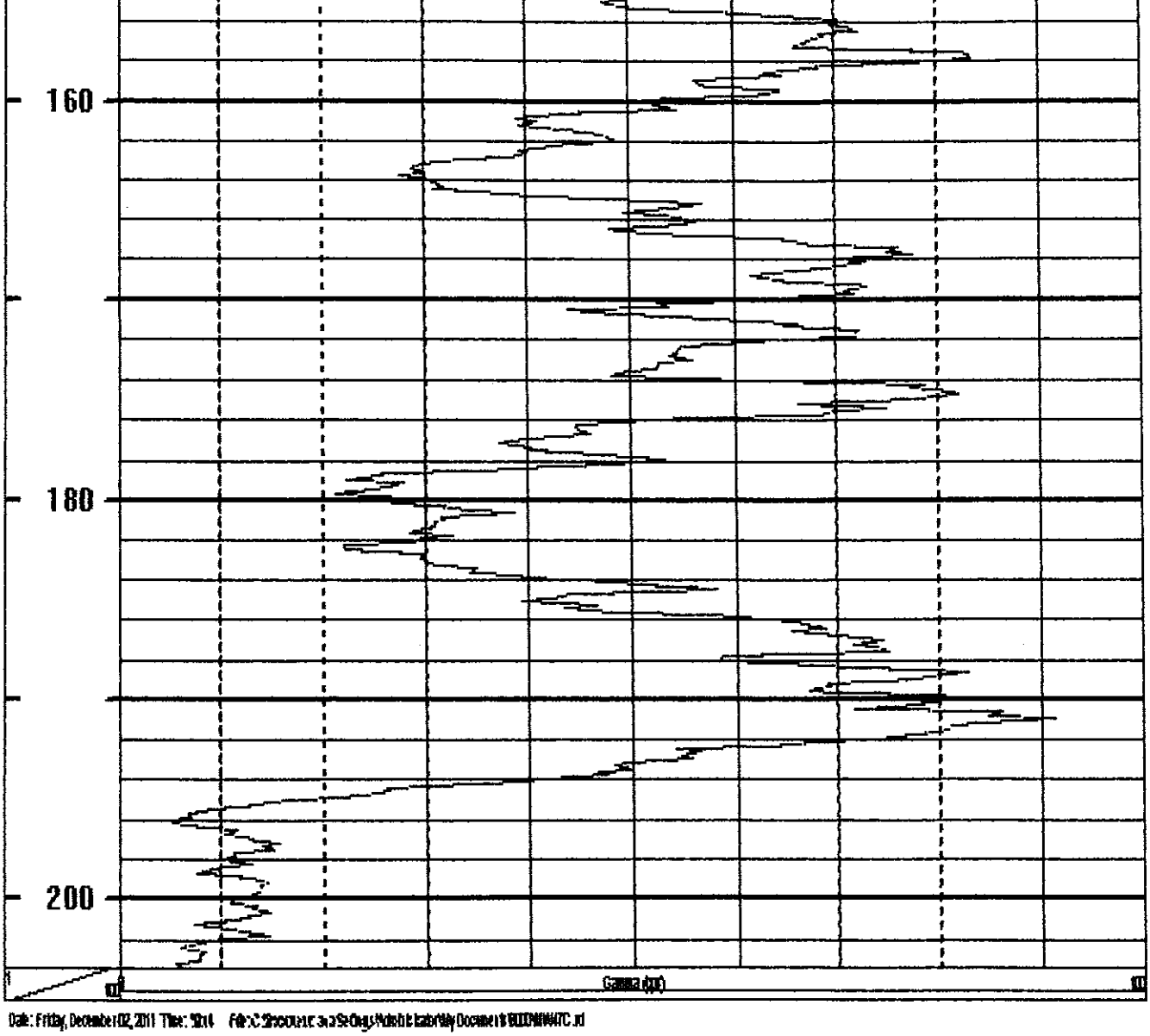
MW47C DOWN

Date: Friday, December 02, 2011 Time: [illegible] File: [illegible]

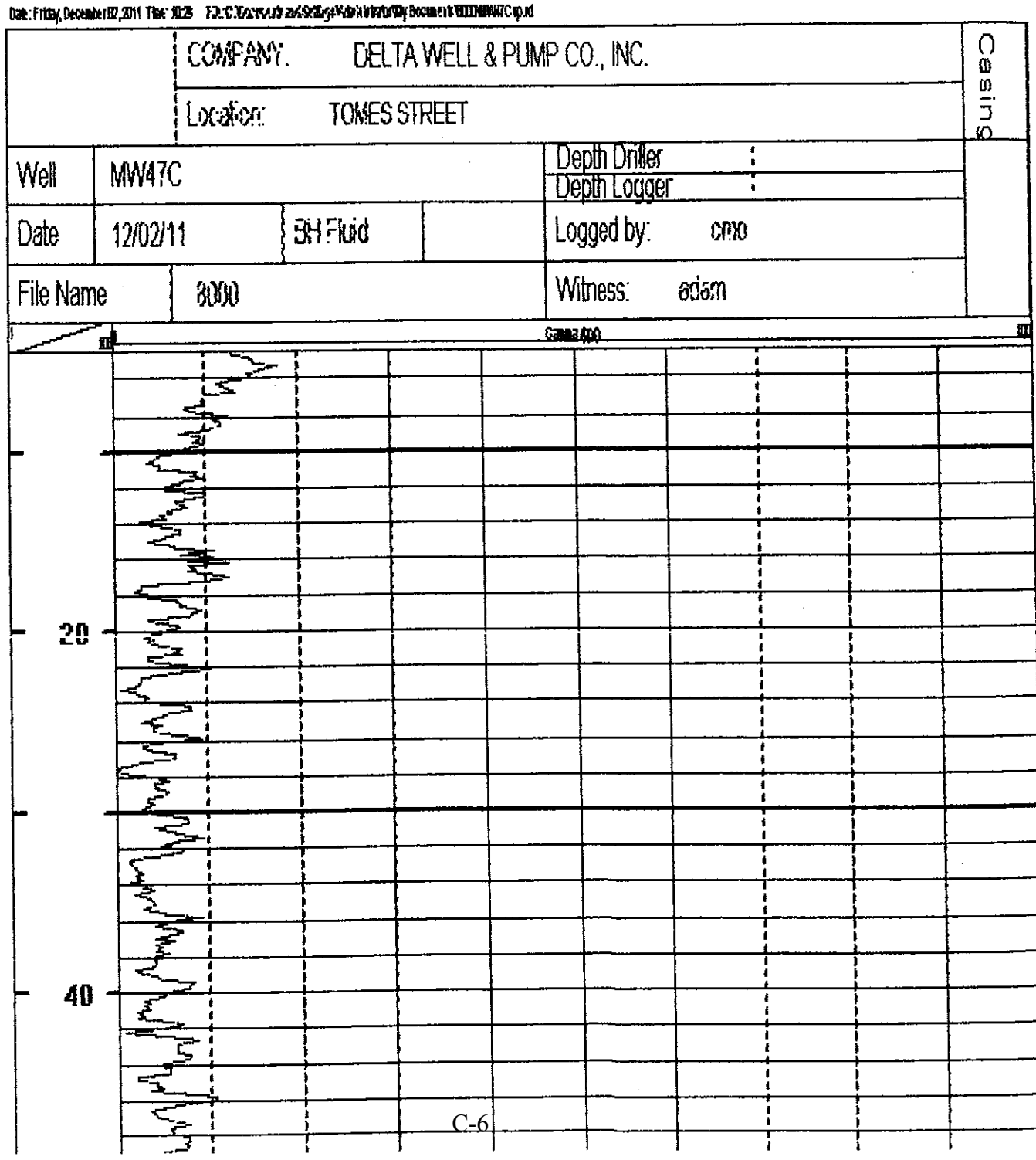
	COMPANY: DELTA WELL & PUMP CO., INC.		Casing
	Location: TOMES STREET		
Well	MW47C	Depth Driller / Depth Logger	
Date	12/02/11	BH Fluid	Logged by: crrc
File Name	8002		Witness: adam

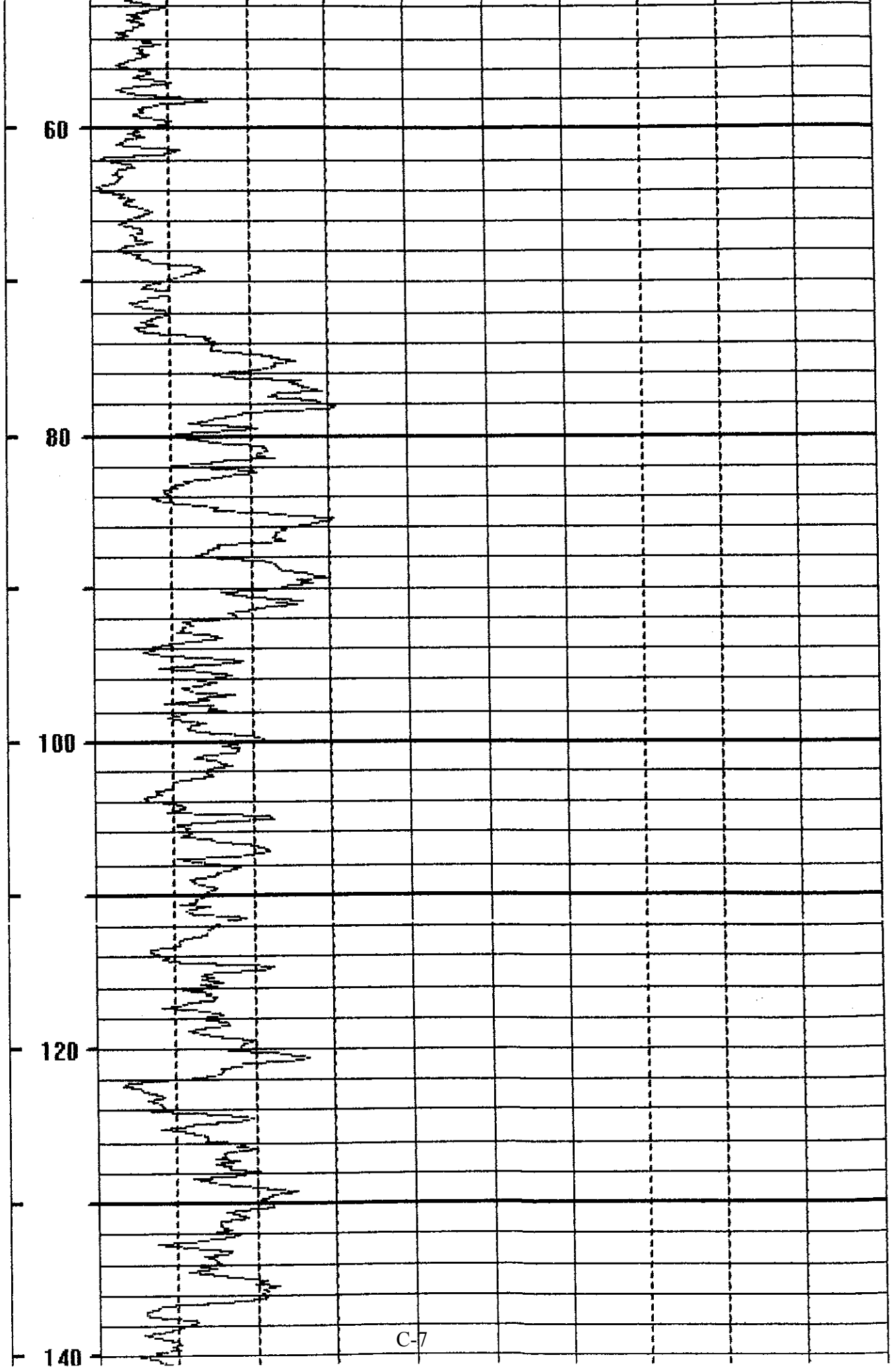


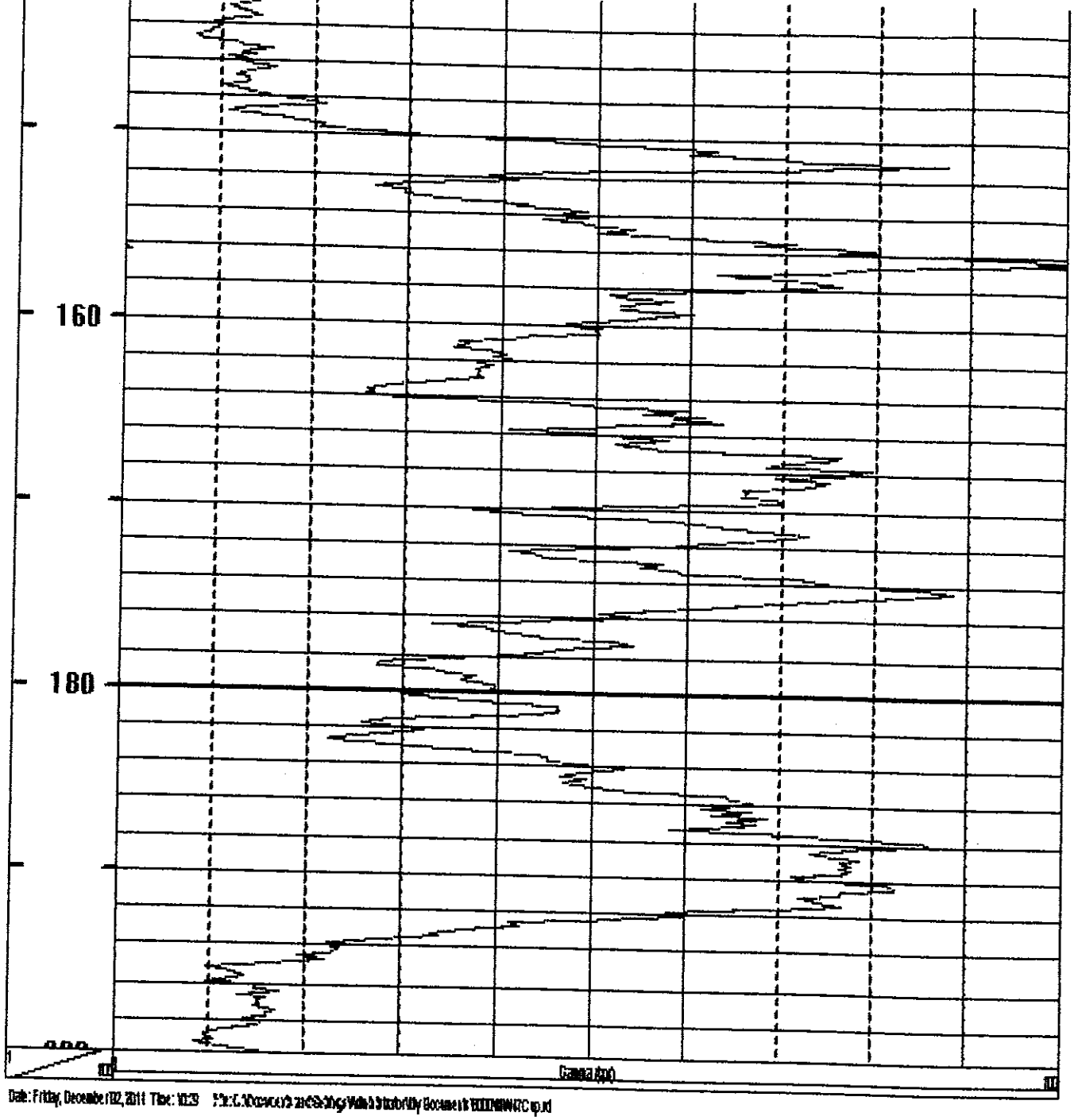

80
100
120
140


160
180
200
Gamma (API)

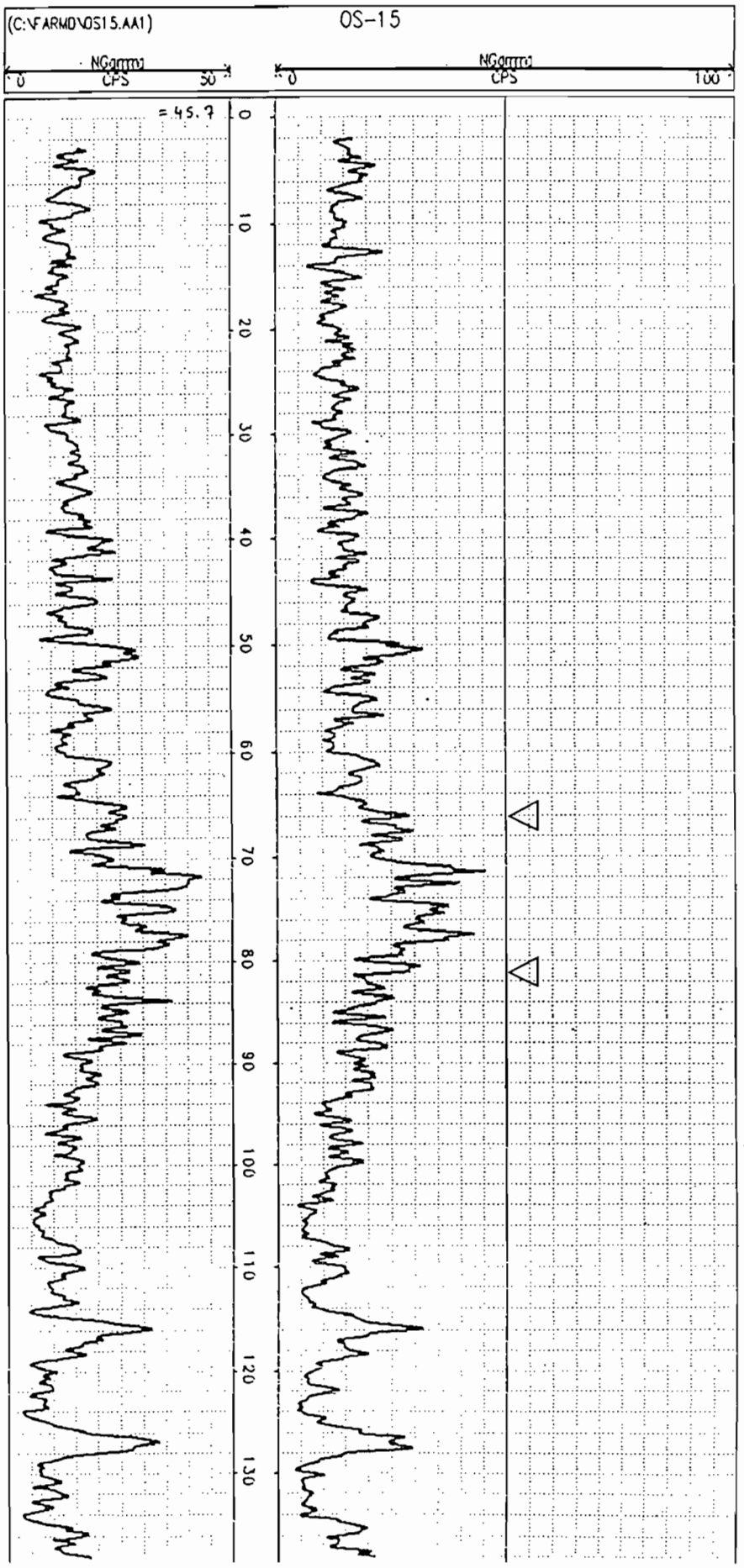
MW47C UP


COMPANY: DELTA WELL & PUMP CO., INC.
Location: TOMES STREET
Casing
Well MW47C
Depth Driller
Depth Logger
Date 12/02/11
BH Fluid
Logged by: cmo
File Name 8000
Witness: adam
Gamma (cps)
20
40


60
80
100
120
140


160
180
Gamma (api)

OS-15 is also shown as GW-25



(C:\FARMD\MW31D.AA1)
MW-31-D
NGamma
0
CPS
50
NGamma
0
CPS
100
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

Well Logs

DRILLING LOG FOR MW 28D

Project Name: Farmingdale Plaza Cleanup

Site Location: Farmingdale, NY

Date Started/Finished: 12/13/11 – 12/15/11

Drilling Company: Major Drilling

Driller's Name: Adam Carson

Geologist's Name: Ben Cole

Geologist's Signature:

Rig Type (s): Roto Sonic

Drilling Method (s): Brat-a-Sonic

Bit Size (s): 6" Auger Size (s): NA

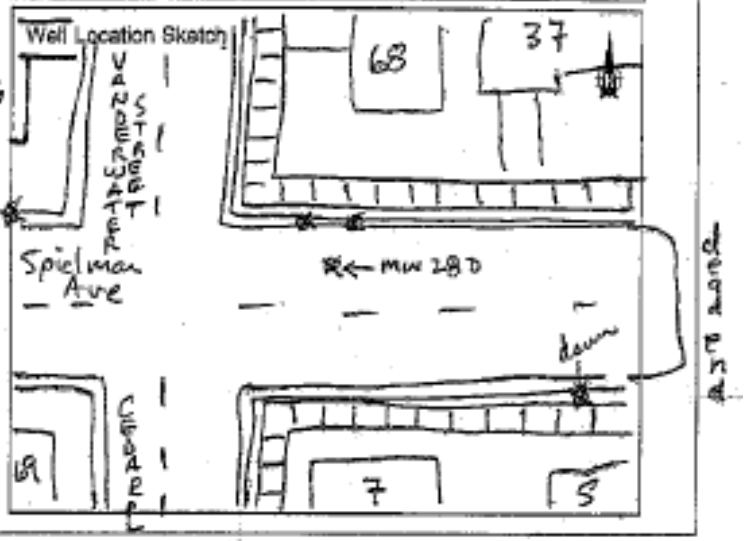
Auger/Split Spoon Refusal: NA

Total Depth of Borehole Is: 181

Total Depth of Corehole Is: NA

Water Level (TOIC)		
Date	Time	Level (Feet)

Well Location Sketch



SCREENED WELL

Stick-up _____ ft

Top of Grout 1 ft

Top of Seal at 163.5 ft

Top of Sand Pack 167.6 ft

Top of Screen at 171 ft

Bottom of Screen at 181 ft

Bottom of Hole at 181 ft

Bottom of Sandpack at 181

Lock Number _____

Inner Casing Material: pvc

Inner Casing Inside Diameter: 2 inches

GROUND SURFACE

Quantity of Material Used:
Bentonite Pellets: 1 bag
Cement: _____
Borehole Diameter: 6 inches
Cement/ Bentonite: _____
Grout: _____
Screen Slot Size: .020
Screen Type: _____
☒ PVC
☐ Stainless Steel

Pack Type/Size:
☒ Sand #2
☐ Gravel _____
☐ Natural _____

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material: _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/ Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

NOTE: See pages 136 and 137 for well construction diagrams

DRILLING LOG FOR PW23 / MW45D

Project Name Farmingdale Plaza Cleaners

Site Location Farmingdale, NY

Date Started/Finished 12/5/11 - 12/7/11

Drilling Company Major Drilling

Driller's Name Adam Carson

Geologist's Name Brian Cerci

Geologist's Signature B. Cerci

Rig Type (s) Bat-A-Sonic

Drilling Method (s) Sonic

Bit Size (s) _____ Casing ~~Auger~~ Size (s) 6"

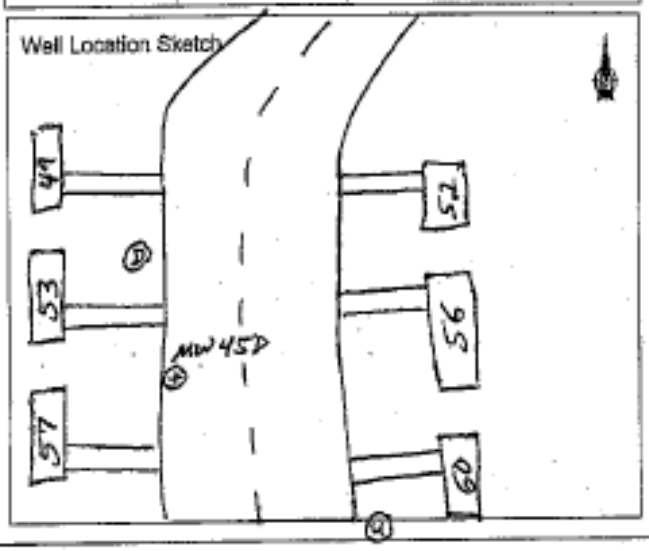
Auger/Split Spoon Refusal NA

Total Depth of Borehole is _____

Total Depth of Corehole is _____

Water Level (TOIC)		
Date	Time	Level (Feet)

Well Location Sketch



MW-45D

SCREENED WELL

Stick-up _____ ft

Top of Grout 1 ft

Top of Seal at 152.5 ft

Top of Sand Pack 156.5 ft

Top of Screen at 160 ft

Bottom of Screen at 170 ft

Bottom of Hole at 171 ft

Bottom of Sandpack at 171

Lock Number _____

Inner Casing Material PVC

Inner Casing Inside Diameter 2 inches

GROUND SURFACE

Quantity of Material Used:

Bentonite Pellets Quik-Gel

Cement _____

Borehole 6 inches Diameter

Cement/ Bentonite _____

Grout _____

Screen Slot Size .020

Screen Type _____

☒ PVC _____

☐ Stainless Steel _____

Pack Type/Size:

☒ Sand Unimin #2

☐ Gravel _____

☐ Natural _____

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/ Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

NOTE: See pages 136 and 137 for well construction diagrams

DRILLING LOG FOR MW-46C

Project Name: Farmingdale Plaza Cleaners

Site Location: Farmingdale, NY

Date Started/Finished: 12/12/11 - 12/13/11

Drilling Company: Mayer Drilling

Driller's Name: Adam Carson

Geologist's Name: Ben Cole

Geologist's Signature:

Rig Type (s): Boart-N-Sonic

Drilling Method (s): Rotosonic

Bit Size (s): 6" Auger Size (s): NA

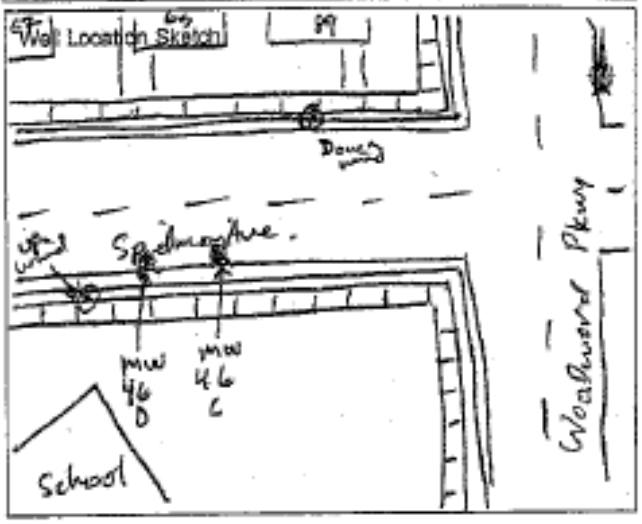
Auger/Split Spoon Refusal: NA

Total Depth of Borehole is: 150.5 ft

Total Depth of Corehole is: NA

Water Level (TOIC)		
Date	Time	Level (Feet)

Well Location Sketch



SCREENED WELL

Stick-up _____ ft

Top of Grout 2 ft

Top of Seal at 129 ft

Top of Sand Pack 134 ft

Top of Screen at 140 ft

Bottom of Screen at 150 ft

Bottom of Hole at 150.5 ft

Bottom of Sandpack at 150.5

Lock Number: _____

Inner Casing Material: PVC

Inner Casing Inside Diameter 2 inches

GROUND SURFACE

Quantity of Material Used:
Bentonite Pellets _____
Cement _____
Borehole 6 inches Diameter
Cement/ Bentonite _____
Grout _____

Screen Slot Size .020

Screen Type _____
☒ PVC _____
☐ Stainless Steel _____

Pack Type/Size:
☒ Sand _____
☐ Gravel _____
☐ Natural _____

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/ Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

NOTE: See pages 136 and 137 for well construction diagrams

DRILLING LOG FOR MW-46D

Project Name Farmingdale Plaza Cleaners

Site Location Farmingdale, NY

Date Started/Finished 12/9/11 - 12/12/11

Drilling Company Major Drilling

Driller's Name Adam Carson

Geologist's Name BrianCarri / Ben Cole

Geologist's Signature B.C. / B.C.

Rig Type (s) Boart-A-Sonic

Drilling Method (s) Sonic

Bit Size (s) 4" rods w/20' core barrel casing, and 6" casing Auger Size (s) _____

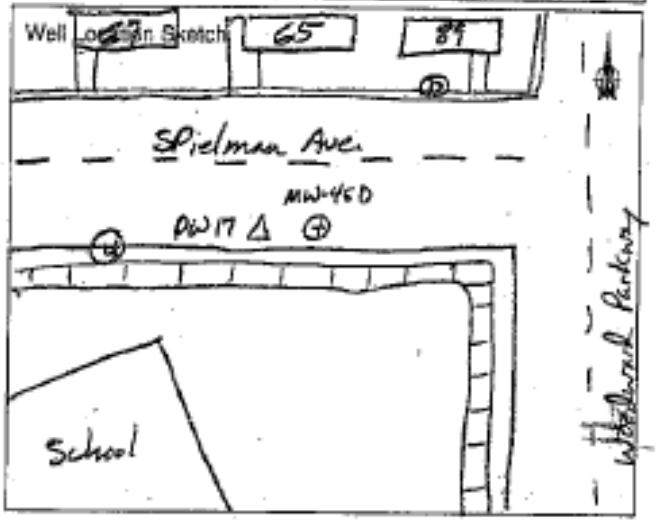
Auger/Split Spoon Refusal NA

Total Depth of Borehole is 195 ft

Total Depth of Corehole is NA

Water Level (TOIC)		
Date	Time	Level(Feet)

Well Location Sketch



SCREENED WELL

Stick-up flush mount ft

Top of Grout 1 ft

Top of Seal at 176 ft

Top of Sand Pack 180.5 ft

Top of Screen at 185 ft

Bottom of Screen at 195 ft

Bottom of Hole at 195 ft

Bottom of Sandpack at 195

Lock Number _____

Inner Casing Material pvc

Inner Casing Inside Diameter 2 inches

GROUND SURFACE

Quantity of Material Used:

Bentonite Pellets _____

Cement _____

Borehole Diameter 6 inches

Cement/ Bentonite _____

Grout _____

Screen Slot Size 0.020

Screen Type _____

☒ PVC 2" x 10'

☐ Stainless Steel _____

Pack Type/Size:

☒ Sand #2

☐ Gravel _____

☐ Natural _____

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/ Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

NOTE: See pages 136 and 137 for well construction diagrams

DRILLING LOG FOR PW20/MW-47C

Project Name: Farmingdale Plaza Cleaners

Site Location: Farmingdale, NY

Date Started/Finished: 11/30/11 - 12/2/11

Drilling Company: Major Drilling

Driller's Name: Adam Carson

Geologist's Name: B. Cerri

Geologist's Signature:

Rig Type (s): Brat-A-Sonic

Drilling Method (s): Sonic

Bit Size (s): _____ Casing Auger Size (s): 6"

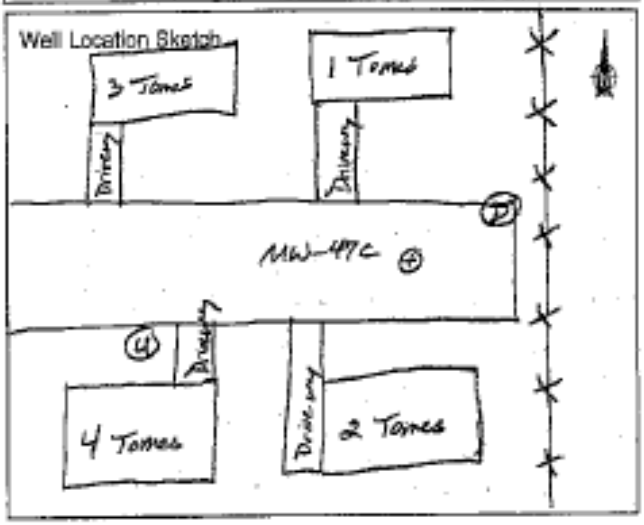
Auger/Split Spoon Refusal: NA

Total Depth of Borehole Is: 205'

Total Depth of Corehole Is: _____

Water Level (TOIC)		
Date	Time	Level (Feet)

Well Location Sketch



MW-47C

SCREENED WELL

Stick-up -0.5 ft

Top of Grout -1 ft

Top of Seal at 130 ft

Top of Sand Pack 136 ft

Top of Screen at ~~140~~ BC 140 ft 141.5

Bottom of Screen at ~~150~~ BC 150 ft 151.5

Bottom of Hole at ~~150.5~~ BC 150.5 ft 153

Bottom of Sandpack at ~~150.5~~ BC 150.5 153

Lock Number: _____

Inner Casing Material: PVC

Inner Casing Inside Diameter 2 Inches

GROUND SURFACE

Quantity of Material Used:

Bentonite Pellets: Quik-Gel

Cement: _____

Borehole 6 Inches Diameter

Cement/ Bentonite: _____

Grout: _____

Screen Slot Size: .020

Screen Type: _____

☒ PVC

☐ Stainless Steel

Pack Type/Size:

☒ Sand US Silica #2

☐ Gravel

☐ Natural

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material: _____

Inner Casing Inside Diameter _____ Inches

Outer Casing Diameter _____ Inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/ Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

NOTE: See pages 136 and 137 for well construction diagrams

DRILLING LOG FOR MW 48C

Project Name: Farmingdale Plaza Cleaners

Site Location: Farmingdale, NY

Date Started/Finished: 12/15/11 - 12/16/11

Drilling Company: Major Drilling

Driller's Name: Adam Cuson

Geologist's Name: Ben Cole

Geologist's Signature:

Rig Type (s): Boart A Sonic

Drilling Method (s): Rotosonic

Bit Size (s): 6" Auger Size (s): NA

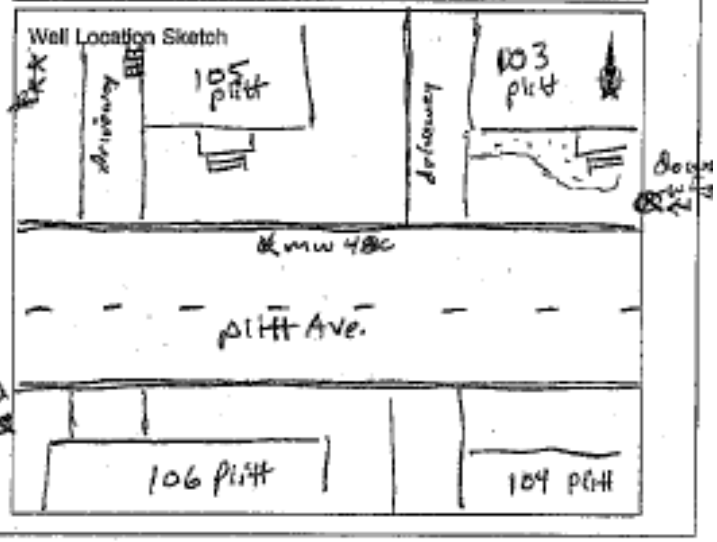
Auger/Split Spoon Refusal: NA

Total Depth of Borehole is: 125

Total Depth of Corehole is: NA

Water Level (TOIC)		
Date	Time	Level (Feet)

Well Location Sketch



SCREENED WELL

Stick-up _____ ft

Top of Grout 1 ft

Top of Seal at 109 ft

Top of Sand Pack 111.8 ft

Top of Screen at 115 ft

Bottom of Screen at 125 ft

Bottom of Hole at 125 ft

Bottom of Sandpack at 125

Lock Number _____

Inner Casing Material PVC

Inner Casing Inside Diameter 2 inches

GROUND SURFACE

Quantity of Material Used:
Bentonite Pellets 1.5 bags
Cement _____

Borehole Diameter 6 inches

Cement/ Bentonite _____

Grout _____

Screen Slot Size .020

Screen Type _____
☒ PVC _____
☐ Stainless Steel _____

Pack Type/Size:
☒ Sand #2
☐ Gravel _____
☐ Natural _____

OPEN-HOLE WELL

Stick-up _____ ft

Inner Casing Material _____

Inner Casing Inside Diameter _____ inches

Outer Casing Diameter _____ inches

Borehole Diameter _____ ft

Bedrock _____ ft

Bottom of Rock Socket/ Outer Casing _____ ft

Bottom of Inner Casing _____ ft

Corehole Diameter _____

Bottom of Corehole _____ ft

NOTE: See pages 136 and 137 for well construction diagrams

Appendix B

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 480-86254-1

Job Description: DEC Farmingdale Plaza Cleaners #130107

For:
New York State D.E.C.
625 Broadway 9th Floor
Albany, NY 12233-7258

Attention: Mr. Brian Jankauskas

Approved for release.
Sarah E Brown
Project Management Assistant II
9/8/2015 5:55 PM

Designee for
Melissa Haas, Project Manager I
777 New Durham Road, Edison, NJ, 08817
(203)944-1310
melissa.haas@testamericainc.com
09/08/2015

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report. TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NHDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

Job Number: 480-86254-1

Job Description: DEC Farmingdale Plaza Cleaners #130107

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Approved for release.
Sarah E Brown
Project Management Assistant II
9/8/2015 5:55 PM

Designee for
Melissa Haas

CASE NARRATIVE

Client: New York State D.E.C.

Project: DEC Farmingdale Plaza Cleaners #130107

Report Number: 480-86254-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 8/27/2015 1:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.3º C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANICS
Samples MW-46C-82015 (480-86254-1), MW-47C-82015 (480-86254-2), MW-37C-82015 (480-86254-3), MW-28C-82015 (480-86254-4), MW-28D-82015 (480-86254-5) and TRIP BLANK (480-86254-6) were analyzed for Volatile organics in accordance with EPA SW-846 Methods 8260C. The samples were analyzed on 09/03/2015 and 09/04/2015.

The initial calibration curve analyzed in batch 480-261126 was outside method criteria for the low point linear regression fit of 30% read back criteria for the following analytes: Bromoform, 1,2-Dibromo-3-Chloropropane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analytes is considered an estimated concentration.

The continuing calibration verification (CCV) associated with batch 480-262028 recovered above the upper control limit for the following analyte: Cyclohexane. The sample associated with this CCV were non-detect for the affected analyte; therefore, the data have been reported.

Refer to the QC report for details.

No other difficulties were encountered during the Volatile organics analysis.

All other quality control parameters were within the acceptance limits.

EXECUTIVE SUMMARY - Detections

Client: New York State D.E.C. Job Number: 480-86254-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
480-86254-1	**MW-46C-82015**					
1,1-Dichloroethene		1.7		1.0	ug/L	8260C
2-Butanone (MEK)		1.7	J	10	ug/L	8260C
Acetone		35		10	ug/L	8260C
cis-1,2-Dichloroethene		2.1		1.0	ug/L	8260C
Tetrachloroethene		93		1.0	ug/L	8260C
Trichloroethene		9.0		1.0	ug/L	8260C
480-86254-2	**MW-47C-82015**					
Acetone		14		10	ug/L	8260C
Dichlorodifluoromethane		5.3		1.0	ug/L	8260C
480-86254-3	**MW-37C-82015**					
1,2-Dichlorobenzene		1.8		1.0	ug/L	8260C
Acetone		28		10	ug/L	8260C
Chlorobenzene		2.0		1.0	ug/L	8260C
cis-1,2-Dichloroethene		11		1.0	ug/L	8260C
Methyl tert-butyl ether		0.22	J	1.0	ug/L	8260C
Tetrachloroethene		20		1.0	ug/L	8260C
Toluene		1.6		1.0	ug/L	8260C
Trichloroethene		11		1.0	ug/L	8260C
480-86254-4	**MW-28C-82015**					
2-Butanone (MEK)		1.4	J	10	ug/L	8260C
Acetone		28		10	ug/L	8260C
Methyl tert-butyl ether		55		1.0	ug/L	8260C
Tetrachloroethene		48		1.0	ug/L	8260C
Trichloroethene		1.0		1.0	ug/L	8260C
480-86254-5	**MW-28D-82015**					
1,1,2-Trichloroethane		0.61	J	1.0	ug/L	8260C
1,1-Dichloroethane		1.6		1.0	ug/L	8260C
1,1-Dichloroethene		0.61	J	1.0	ug/L	8260C
Acetone		24		10	ug/L	8260C
Chloroform		0.45	J	1.0	ug/L	8260C
Tetrachloroethene		42		1.0	ug/L	8260C

METHOD SUMMARY

Client: New York State D.E.C. Job Number: 480-86254-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS	TAL BUF	SW846 8260C	
Purge and Trap	TAL BUF		SW846 5030C

Lab References:

TAL BUF = TestAmerica Buffalo

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: New York State D.E.C. Job Number: 480-86254-1

Method	Analyst	Analyst ID
SW846 8260C	Feldman, Lance J	LJF
SW846 8260C	Goliszek, Gregory T	GTG

SAMPLE SUMMARY

Client: New York State D.E.C. Job Number: 480-86254-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-86254-1	MW-46C-82015	Water	08/25/2015 1310	08/27/2015 0145
480-86254-2	MW-47C-82015	Water	08/25/2015 1330	08/27/2015 0145
480-86254-3	MW-37C-82015	Water	08/25/2015 1350	08/27/2015 0145
480-86254-4	MW-28C-82015	Water	08/25/2015 1420	08/27/2015 0145
480-86254-5	MW-28D-82015	Water	08/25/2015 1430	08/27/2015 0145
480-86254-6	TRIP BLANK	Water	08/25/2015 0000	08/27/2015 0145

SAMPLE RESULTS

Client: New York State D.E.C. Job Number: 480-86254-1

Client Sample ID: MW-46C-82015

Lab Sample ID: 480-86254-1 Date Sampled: 08/25/2015 1310
Client Matrix: Water Date Received: 08/27/2015 0145

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S2162.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2101			Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 2101				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.82	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.31	1.0
1,1,2-Trichloroethane	1.0	U	0.23	1.0
1,1-Dichloroethane	1.0	U	0.38	1.0
1,1-Dichloroethene	1.7		0.29	1.0
1,2,3-Trichlorobenzene	1.0	U	0.41	1.0
1,2,4-Trichlorobenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.39	1.0
1,2-Dichlorobenzene	1.0	U	0.79	1.0
1,2-Dichloroethane	1.0	U	0.21	1.0
1,2-Dichloropropane	1.0	U	0.72	1.0
1,3-Dichlorobenzene	1.0	U	0.78	1.0
1,4-Dichlorobenzene	1.0	U	0.84	1.0
1,4-Dioxane	40	U	9.3	40
2-Butanone (MEK)	1.7	J	1.3	10
2-Hexanone	5.0	U	1.2	5.0
4-Methyl-2-pentanone (MIBK)	5.0	U	2.1	5.0
Acetone	35		3.0	10
Benzene	1.0	U	0.41	1.0
Bromoform	1.0	U	0.26	1.0
Bromomethane	1.0	U	0.69	1.0
Carbon disulfide	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.27	1.0
Chlorobenzene	1.0	U	0.75	1.0
Chlorobromomethane	1.0	U	0.87	1.0
Chlorodibromomethane	1.0	U	0.32	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.34	1.0
Chloromethane	1.0	U	0.35	1.0
cis-1,2-Dichloroethene	2.1		0.81	1.0
cis-1,3-Dichloropropene	1.0	U	0.36	1.0
Cyclohexane	1.0	U	0.18	1.0
Dichlorobromomethane	1.0	U	0.39	1.0
Dichlorodifluoromethane	1.0	U	0.68	1.0
Ethylbenzene	1.0	U	0.74	1.0
Ethylene Dibromide	1.0	U	0.73	1.0
Isopropylbenzene	1.0	U	0.79	1.0
Methyl acetate	2.5	U	1.3	2.5
Methyl tert-butyl ether	1.0	U	0.16	1.0
Methylcyclohexane	1.0	U	0.16	1.0
Methylene Chloride	1.0	U	0.44	1.0
m-Xylene & p-Xylene	2.0	U	0.66	2.0
o-Xylene	1.0	U	0.76	1.0
Styrene	1.0	U	0.73	1.0
Tetrachloroethene	93		0.36	1.0

Client: New York State D.E.C. Job Number: 480-86254-1

Client Sample ID: MW-46C-82015

Lab Sample ID: 480-86254-1 Date Sampled: 08/25/2015 1310
Client Matrix: Water Date Received: 08/27/2015 0145

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S2162.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2101			Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 2101				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Toluene	1.0	U	0.51	1.0
trans-1,2-Dichloroethene	1.0	U	0.90	1.0
trans-1,3-Dichloropropene	1.0	U	0.37	1.0
Trichloroethene	9.0		0.46	1.0
Trichlorofluoromethane	1.0	U	0.88	1.0
Vinyl chloride	1.0	U	0.90	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		66 - 137
4-Bromofluorobenzene (Surr)	101		73 - 120
Dibromofluoromethane (Surr)	105		60 - 140
Toluene-d8 (Surr)	99		71 - 126

Client: New York State D.E.C. Job Number: 480-86254-1

Client Sample ID: **MW-47C-82015**

Lab Sample ID: 480-86254-2 Date Sampled: 08/25/2015 1330
Client Matrix: Water Date Received: 08/27/2015 0145

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S2163.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2124			Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 2124				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.82	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.31	1.0
1,1,2-Trichloroethane	1.0	U	0.23	1.0
1,1-Dichloroethane	1.0	U	0.38	1.0
1,1-Dichloroethene	1.0	U	0.29	1.0
1,2,3-Trichlorobenzene	1.0	U	0.41	1.0
1,2,4-Trichlorobenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.39	1.0
1,2-Dichlorobenzene	1.0	U	0.79	1.0
1,2-Dichloroethane	1.0	U	0.21	1.0
1,2-Dichloropropane	1.0	U	0.72	1.0
1,3-Dichlorobenzene	1.0	U	0.78	1.0
1,4-Dichlorobenzene	1.0	U	0.84	1.0
1,4-Dioxane	40	U	9.3	40
2-Butanone (MEK)	10	U	1.3	10
2-Hexanone	5.0	U	1.2	5.0
4-Methyl-2-pentanone (MIBK)	5.0	U	2.1	5.0
Acetone	14		3.0	10
Benzene	1.0	U	0.41	1.0
Bromoform	1.0	U	0.26	1.0
Bromomethane	1.0	U	0.69	1.0
Carbon disulfide	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.27	1.0
Chlorobenzene	1.0	U	0.75	1.0
Chlorobromomethane	1.0	U	0.87	1.0
Chlorodibromomethane	1.0	U	0.32	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.34	1.0
Chloromethane	1.0	U	0.35	1.0
cis-1,2-Dichloroethene	1.0	U	0.81	1.0
cis-1,3-Dichloropropene	1.0	U	0.36	1.0
Cyclohexane	1.0	U	0.18	1.0
Dichlorobromomethane	1.0	U	0.39	1.0
Dichlorodifluoromethane	5.3		0.68	1.0
Ethylbenzene	1.0	U	0.74	1.0
Ethylene Dibromide	1.0	U	0.73	1.0
Isopropylbenzene	1.0	U	0.79	1.0
Methyl acetate	2.5	U	1.3	2.5
Methyl tert-butyl ether	1.0	U	0.16	1.0
Methylcyclohexane	1.0	U	0.16	1.0
Methylene Chloride	1.0	U	0.44	1.0
m-Xylene & p-Xylene	2.0	U	0.66	2.0
o-Xylene	1.0	U	0.76	1.0
Styrene	1.0	U	0.73	1.0
Tetrachloroethene	1.0	U	0.36	1.0

Client: New York State D.E.C. Job Number: 480-86254-1

Client Sample ID: **MW-47C-82015**

Lab Sample ID: 480-86254-2 Date Sampled: 08/25/2015 1330
Client Matrix: Water Date Received: 08/27/2015 0145

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S2163.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2124			Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 2124				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Toluene	1.0	U	0.51	1.0
trans-1,2-Dichloroethene	1.0	U	0.90	1.0
trans-1,3-Dichloropropene	1.0	U	0.37	1.0
Trichloroethene	1.0	U	0.46	1.0
Trichlorofluoromethane	1.0	U	0.88	1.0
Vinyl chloride	1.0	U	0.90	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		66 - 137
4-Bromofluorobenzene (Surr)	103		73 - 120
Dibromofluoromethane (Surr)	104		60 - 140
Toluene-d8 (Surr)	98		71 - 126

Client: New York State D.E.C. Job Number: 480-86254-1

Client Sample ID: **MW-37C-82015**

Lab Sample ID: 480-86254-3 Date Sampled: 08/25/2015 1350
Client Matrix: Water Date Received: 08/27/2015 0145

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S2164.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2147			Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 2147				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.82	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.31	1.0
1,1,2-Trichloroethane	1.0	U	0.23	1.0
1,1-Dichloroethane	1.0	U	0.38	1.0
1,1-Dichloroethene	1.0	U	0.29	1.0
1,2,3-Trichlorobenzene	1.0	U	0.41	1.0
1,2,4-Trichlorobenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.39	1.0
1,2-Dichlorobenzene	1.8		0.79	1.0
1,2-Dichloroethane	1.0	U	0.21	1.0
1,2-Dichloropropane	1.0	U	0.72	1.0
1,3-Dichlorobenzene	1.0	U	0.78	1.0
1,4-Dichlorobenzene	1.0	U	0.84	1.0
1,4-Dioxane	40	U	9.3	40
2-Butanone (MEK)	10	U	1.3	10
2-Hexanone	5.0	U	1.2	5.0
4-Methyl-2-pentanone (MIBK)	5.0	U	2.1	5.0
Acetone	28		3.0	10
Benzene	1.0	U	0.41	1.0
Bromoform	1.0	U	0.26	1.0
Bromomethane	1.0	U	0.69	1.0
Carbon disulfide	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.27	1.0
Chlorobenzene	2.0		0.75	1.0
Chlorobromomethane	1.0	U	0.87	1.0
Chlorodibromomethane	1.0	U	0.32	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.34	1.0
Chloromethane	1.0	U	0.35	1.0
cis-1,2-Dichloroethene	11		0.81	1.0
cis-1,3-Dichloropropene	1.0	U	0.36	1.0
Cyclohexane	1.0	U	0.18	1.0
Dichlorobromomethane	1.0	U	0.39	1.0
Dichlorodifluoromethane	1.0	U	0.68	1.0
Ethylbenzene	1.0	U	0.74	1.0
Ethylene Dibromide	1.0	U	0.73	1.0
Isopropylbenzene	1.0	U	0.79	1.0
Methyl acetate	2.5	U	1.3	2.5
Methyl tert-butyl ether	0.22	J	0.16	1.0
Methylcyclohexane	1.0	U	0.16	1.0
Methylene Chloride	1.0	U	0.44	1.0
m-Xylene & p-Xylene	2.0	U	0.66	2.0
o-Xylene	1.0	U	0.76	1.0
Styrene	1.0	U	0.73	1.0
Tetrachloroethene	20		0.36	1.0

Client: New York State D.E.C. Job Number: 480-86254-1

Client Sample ID: MW-37C-82015

Lab Sample ID: 480-86254-3 Date Sampled: 08/25/2015 1350
Client Matrix: Water Date Received: 08/27/2015 0145

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S2164.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2147			Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 2147				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Toluene	1.6		0.51	1.0
trans-1,2-Dichloroethene	1.0	U	0.90	1.0
trans-1,3-Dichloropropene	1.0	U	0.37	1.0
Trichloroethene	11		0.46	1.0
Trichlorofluoromethane	1.0	U	0.88	1.0
Vinyl chloride	1.0	U	0.90	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		66 - 137
4-Bromofluorobenzene (Surr)	105		73 - 120
Dibromofluoromethane (Surr)	98		60 - 140
Toluene-d8 (Surr)	100		71 - 126

Client Sample ID: **MW-28C-82015**

Lab Sample ID: 480-86254-4 Date Sampled: 08/25/2015 1420
Client Matrix: Water Date Received: 08/27/2015 0145

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S2165.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2210			Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 2210				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.82	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.31	1.0
1,1,2-Trichloroethane	1.0	U	0.23	1.0
1,1-Dichloroethane	1.0	U	0.38	1.0
1,1-Dichloroethene	1.0	U	0.29	1.0
1,2,3-Trichlorobenzene	1.0	U	0.41	1.0
1,2,4-Trichlorobenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.39	1.0
1,2-Dichlorobenzene	1.0	U	0.79	1.0
1,2-Dichloroethane	1.0	U	0.21	1.0
1,2-Dichloropropane	1.0	U	0.72	1.0
1,3-Dichlorobenzene	1.0	U	0.78	1.0
1,4-Dichlorobenzene	1.0	U	0.84	1.0
1,4-Dioxane	40	U	9.3	40
2-Butanone (MEK)	1.4	J	1.3	10
2-Hexanone	5.0	U	1.2	5.0
4-Methyl-2-pentanone (MIBK)	5.0	U	2.1	5.0
Acetone	28		3.0	10
Benzene	1.0	U	0.41	1.0
Bromoform	1.0	U	0.26	1.0
Bromomethane	1.0	U	0.69	1.0
Carbon disulfide	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.27	1.0
Chlorobenzene	1.0	U	0.75	1.0
Chlorobromomethane	1.0	U	0.87	1.0
Chlorodibromomethane	1.0	U	0.32	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.34	1.0
Chloromethane	1.0	U	0.35	1.0
cis-1,2-Dichloroethene	1.0	U	0.81	1.0
cis-1,3-Dichloropropene	1.0	U	0.36	1.0
Cyclohexane	1.0	U	0.18	1.0
Dichlorobromomethane	1.0	U	0.39	1.0
Dichlorodifluoromethane	1.0	U	0.68	1.0
Ethylbenzene	1.0	U	0.74	1.0
Ethylene Dibromide	1.0	U	0.73	1.0
Isopropylbenzene	1.0	U	0.79	1.0
Methyl acetate	2.5	U	1.3	2.5
Methyl tert-butyl ether	55		0.16	1.0
Methylcyclohexane	1.0	U	0.16	1.0
Methylene Chloride	1.0	U	0.44	1.0
m-Xylene & p-Xylene	2.0	U	0.66	2.0
o-Xylene	1.0	U	0.76	1.0
Styrene	1.0	U	0.73	1.0
Tetrachloroethene	48		0.36	1.0

Client: New York State D.E.C. Job Number: 480-86254-1

Client Sample ID: MW-28C-82015

Lab Sample ID: 480-86254-4 Date Sampled: 08/25/2015 1420
Client Matrix: Water Date Received: 08/27/2015 0145

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S2165.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2210			Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 2210				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Toluene	1.0	U	0.51	1.0
trans-1,2-Dichloroethene	1.0	U	0.90	1.0
trans-1,3-Dichloropropene	1.0	U	0.37	1.0
Trichloroethene	1.0		0.46	1.0
Trichlorofluoromethane	1.0	U	0.88	1.0
Vinyl chloride	1.0	U	0.90	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101		66 - 137
4-Bromofluorobenzene (Surr)	100		73 - 120
Dibromofluoromethane (Surr)	100		60 - 140
Toluene-d8 (Surr)	96		71 - 126

Client: New York State D.E.C. Job Number: 480-86254-1

Client Sample ID: **MW-28D-82015**

Lab Sample ID: 480-86254-5 Date Sampled: 08/25/2015 1430
Client Matrix: Water Date Received: 08/27/2015 0145

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S2166.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2233			Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 2233				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.82	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.31	1.0
1,1,2-Trichloroethane	0.61	J	0.23	1.0
1,1-Dichloroethane	1.6		0.38	1.0
1,1-Dichloroethene	0.61	J	0.29	1.0
1,2,3-Trichlorobenzene	1.0	U	0.41	1.0
1,2,4-Trichlorobenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.39	1.0
1,2-Dichlorobenzene	1.0	U	0.79	1.0
1,2-Dichloroethane	1.0	U	0.21	1.0
1,2-Dichloropropane	1.0	U	0.72	1.0
1,3-Dichlorobenzene	1.0	U	0.78	1.0
1,4-Dichlorobenzene	1.0	U	0.84	1.0
1,4-Dioxane	40	U	9.3	40
2-Butanone (MEK)	10	U	1.3	10
2-Hexanone	5.0	U	1.2	5.0
4-Methyl-2-pentanone (MIBK)	5.0	U	2.1	5.0
Acetone	24		3.0	10
Benzene	1.0	U	0.41	1.0
Bromoform	1.0	U	0.26	1.0
Bromomethane	1.0	U	0.69	1.0
Carbon disulfide	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.27	1.0
Chlorobenzene	1.0	U	0.75	1.0
Chlorobromomethane	1.0	U	0.87	1.0
Chlorodibromomethane	1.0	U	0.32	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	0.45	J	0.34	1.0
Chloromethane	1.0	U	0.35	1.0
cis-1,2-Dichloroethene	1.0	U	0.81	1.0
cis-1,3-Dichloropropene	1.0	U	0.36	1.0
Cyclohexane	1.0	U	0.18	1.0
Dichlorobromomethane	1.0	U	0.39	1.0
Dichlorodifluoromethane	1.0	U	0.68	1.0
Ethylbenzene	1.0	U	0.74	1.0
Ethylene Dibromide	1.0	U	0.73	1.0
Isopropylbenzene	1.0	U	0.79	1.0
Methyl acetate	2.5	U	1.3	2.5
Methyl tert-butyl ether	1.0	U	0.16	1.0
Methylcyclohexane	1.0	U	0.16	1.0
Methylene Chloride	1.0	U	0.44	1.0
m-Xylene & p-Xylene	2.0	U	0.66	2.0
o-Xylene	1.0	U	0.76	1.0
Styrene	1.0	U	0.73	1.0
Tetrachloroethene	42		0.36	1.0

Client: New York State D.E.C. Job Number: 480-86254-1

Client Sample ID: MW-28D-82015

Lab Sample ID: 480-86254-5 Date Sampled: 08/25/2015 1430
Client Matrix: Water Date Received: 08/27/2015 0145

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	S2166.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 2233			Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 2233				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Toluene	1.0	U	0.51	1.0
trans-1,2-Dichloroethene	1.0	U	0.90	1.0
trans-1,3-Dichloropropene	1.0	U	0.37	1.0
Trichloroethene	1.0	U	0.46	1.0
Trichlorofluoromethane	1.0	U	0.88	1.0
Vinyl chloride	1.0	U	0.90	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 137
4-Bromofluorobenzene (Surr)	97		73 - 120
Dibromofluoromethane (Surr)	103		60 - 140
Toluene-d8 (Surr)	95		71 - 126

Client: New York State D.E.C. Job Number: 480-86254-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-86254-6 Date Sampled: 08/25/2015 0000
Client Matrix: Water Date Received: 08/27/2015 0145

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-262028	Instrument ID:	HP5975T
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	T8293.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 1325			Final Weight/Volume:	5 mL
Prep Date:	09/04/2015 1325				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.82	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.31	1.0
1,1,2-Trichloroethane	1.0	U	0.23	1.0
1,1-Dichloroethane	1.0	U	0.38	1.0
1,1-Dichloroethene	1.0	U	0.29	1.0
1,2,3-Trichlorobenzene	1.0	U	0.41	1.0
1,2,4-Trichlorobenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.39	1.0
1,2-Dichlorobenzene	1.0	U	0.79	1.0
1,2-Dichloroethane	1.0	U	0.21	1.0
1,2-Dichloropropane	1.0	U	0.72	1.0
1,3-Dichlorobenzene	1.0	U	0.78	1.0
1,4-Dichlorobenzene	1.0	U	0.84	1.0
1,4-Dioxane	40	U	9.3	40
2-Butanone (MEK)	10	U	1.3	10
2-Hexanone	5.0	U	1.2	5.0
4-Methyl-2-pentanone (MIBK)	5.0	U	2.1	5.0
Acetone	10	U	3.0	10
Benzene	1.0	U	0.41	1.0
Bromoform	1.0	U	0.26	1.0
Bromomethane	1.0	U	0.69	1.0
Carbon disulfide	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.27	1.0
Chlorobenzene	1.0	U	0.75	1.0
Chlorobromomethane	1.0	U	0.87	1.0
Chlorodibromomethane	1.0	U	0.32	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.34	1.0
Chloromethane	1.0	U	0.35	1.0
cis-1,2-Dichloroethene	1.0	U	0.81	1.0
cis-1,3-Dichloropropene	1.0	U	0.36	1.0
Cyclohexane	1.0	U	0.18	1.0
Dichlorobromomethane	1.0	U	0.39	1.0
Dichlorodifluoromethane	1.0	U	0.68	1.0
Ethylbenzene	1.0	U	0.74	1.0
Ethylene Dibromide	1.0	U	0.73	1.0
Isopropylbenzene	1.0	U	0.79	1.0
Methyl acetate	2.5	U	1.3	2.5
Methyl tert-butyl ether	1.0	U	0.16	1.0
Methylcyclohexane	1.0	U	0.16	1.0
Methylene Chloride	1.0	U	0.44	1.0
m-Xylene & p-Xylene	2.0	U	0.66	2.0
o-Xylene	1.0	U	0.76	1.0
Styrene	1.0	U	0.73	1.0
Tetrachloroethene	1.0	U	0.36	1.0

Client: New York State D.E.C. Job Number: 480-86254-1

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 480-86254-6 Date Sampled: 08/25/2015 0000
Client Matrix: Water Date Received: 08/27/2015 0145

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-262028	Instrument ID:	HP5975T
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	T8293.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 1325			Final Weight/Volume:	5 mL
Prep Date:	09/04/2015 1325				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Toluene	1.0	U	0.51	1.0
trans-1,2-Dichloroethene	1.0	U	0.90	1.0
trans-1,3-Dichloropropene	1.0	U	0.37	1.0
Trichloroethene	1.0	U	0.46	1.0
Trichlorofluoromethane	1.0	U	0.88	1.0
Vinyl chloride	1.0	U	0.90	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90		66 - 137
4-Bromofluorobenzene (Surr)	97		73 - 120
Dibromofluoromethane (Surr)	94		60 - 140
Toluene-d8 (Surr)	94		71 - 126

DATA REPORTING QUALIFIERS

Client: New York State D.E.C. Job Number: 480-86254-1

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an estimated value.

QUALITY CONTROL RESULTS

Client: New York State D.E.C. Job Number: 480-86254-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:480-261891					
LCS 480-261891/6	Lab Control Sample	T	Water	8260C	
MB 480-261891/8	Method Blank	T	Water	8260C	
480-86254-1	MW-46C-82015	T	Water	8260C	
480-86254-2	MW-47C-82015	T	Water	8260C	
480-86254-3	MW-37C-82015	T	Water	8260C	
480-86254-4	MW-28C-82015	T	Water	8260C	
480-86254-5	MW-28D-82015	T	Water	8260C	
Analysis Batch:480-262028					
LCS 480-262028/4	Lab Control Sample	T	Water	8260C	
MB 480-262028/6	Method Blank	T	Water	8260C	
480-86236-X-8 MS	Matrix Spike	T	Water	8260C	
480-86236-X-8 MSD	Matrix Spike Duplicate	T	Water	8260C	
480-86254-6	TRIP BLANK	T	Water	8260C	

Report Basis
T = Total

Client: New York State D.E.C. Job Number: 480-86254-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	DBFM %Rec	TOL %Rec
480-86254-1	MW-46C-82015	105	101	105	99
480-86254-2	MW-47C-82015	106	103	104	98
480-86254-3	MW-37C-82015	97	105	98	100
480-86254-4	MW-28C-82015	101	100	100	96
480-86254-5	MW-28D-82015	103	97	103	95
480-86254-6	TRIP BLANK	90	97	94	94
MB 480-261891/8		100	101	98	101
MB 480-262028/6		87	95	92	93
LCS 480-261891/6		99	102	102	99
LCS 480-262028/4		84	98	91	92

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	66-137
BFB = 4-Bromofluorobenzene (Surr)	73-120
DBFM = Dibromofluoromethane (Surr)	60-140
TOL = Toluene-d8 (Surr)	71-126

Client: New York State D.E.C. Job Number: 480-86254-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec	BFB %Rec	TOL %Rec
480-86236-X-8 MS		86	103	94
480-86236-X-8 MSD		85	99	93

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	66-137
BFB = 4-Bromofluorobenzene (Surr)	73-120
TOL = Toluene-d8 (Surr)	71-126

Client: New York State D.E.C. Job Number: 480-86254-1

Method Blank - Batch: 480-261891

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 480-261891/8	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	S2148.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 1527	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 1527				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.82	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.31	1.0
1,1,2-Trichloroethane	1.0	U	0.23	1.0
1,1-Dichloroethane	1.0	U	0.38	1.0
1,1-Dichloroethene	1.0	U	0.29	1.0
1,2,3-Trichlorobenzene	1.0	U	0.41	1.0
1,2,4-Trichlorobenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.39	1.0
1,2-Dichlorobenzene	1.0	U	0.79	1.0
1,2-Dichloroethane	1.0	U	0.21	1.0
1,2-Dichloropropane	1.0	U	0.72	1.0
1,3-Dichlorobenzene	1.0	U	0.78	1.0
1,4-Dichlorobenzene	1.0	U	0.84	1.0
1,4-Dioxane	40	U	9.3	40
2-Butanone (MEK)	10	U	1.3	10
2-Hexanone	5.0	U	1.2	5.0
4-Methyl-2-pentanone (MIBK)	5.0	U	2.1	5.0
Acetone	10	U	3.0	10
Benzene	1.0	U	0.41	1.0
Bromoform	1.0	U	0.26	1.0
Bromomethane	1.0	U	0.69	1.0
Carbon disulfide	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.27	1.0
Chlorobenzene	1.0	U	0.75	1.0
Chlorobromomethane	1.0	U	0.87	1.0
Chlorodibromomethane	1.0	U	0.32	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.34	1.0
Chloromethane	1.0	U	0.35	1.0
cis-1,2-Dichloroethene	1.0	U	0.81	1.0
cis-1,3-Dichloropropene	1.0	U	0.36	1.0
Cyclohexane	1.0	U	0.18	1.0
Dichlorobromomethane	1.0	U	0.39	1.0
Dichlorodifluoromethane	1.0	U	0.68	1.0
Ethylbenzene	1.0	U	0.74	1.0
Ethylene Dibromide	1.0	U	0.73	1.0
Isopropylbenzene	1.0	U	0.79	1.0
Methyl acetate	2.5	U	1.3	2.5
Methyl tert-butyl ether	1.0	U	0.16	1.0
Methylcyclohexane	1.0	U	0.16	1.0
Methylene Chloride	1.0	U	0.44	1.0
m-Xylene & p-Xylene	2.0	U	0.66	2.0
o-Xylene	1.0	U	0.76	1.0
Styrene	1.0	U	0.73	1.0

Client: New York State D.E.C. Job Number: 480-86254-1

Method Blank - Batch: 480-261891

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 480-261891/8	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	S2148.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 1527	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 1527				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Tetrachloroethene	1.0	U	0.36	1.0
Toluene	1.0	U	0.51	1.0
trans-1,2-Dichloroethene	1.0	U	0.90	1.0
trans-1,3-Dichloropropene	1.0	U	0.37	1.0
Trichloroethene	1.0	U	0.46	1.0
Trichlorofluoromethane	1.0	U	0.88	1.0
Vinyl chloride	1.0	U	0.90	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100	66 - 137
4-Bromofluorobenzene (Surr)	101	73 - 120
Dibromofluoromethane (Surr)	98	60 - 140
Toluene-d8 (Surr)	101	71 - 126

Client: New York State D.E.C. Job Number: 480-86254-1

Lab Control Sample - Batch: 480-261891

Method: 8260C
Preparation: 5030C

Lab Sample ID:	LCS 480-261891/6	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	S2146.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 1437	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 1437				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1-Trichloroethane	25.0	24.2	97	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	23.7	95	70 - 126	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.2	93	52 - 148	
1,1,2-Trichloroethane	25.0	24.6	98	76 - 122	
1,1-Dichloroethane	25.0	22.7	91	71 - 129	
1,1-Dichloroethene	25.0	21.2	85	58 - 121	
1,2,3-Trichlorobenzene	25.0	23.3	93	63 - 138	
1,2,4-Trichlorobenzene	25.0	23.4	93	70 - 122	
1,2-Dibromo-3-Chloropropane	25.0	23.9	96	56 - 134	
1,2-Dichlorobenzene	25.0	23.4	94	80 - 124	
1,2-Dichloroethane	25.0	21.0	84	75 - 127	
1,2-Dichloropropane	25.0	23.8	95	76 - 120	
1,3-Dichlorobenzene	25.0	23.6	95	77 - 120	
1,4-Dichlorobenzene	25.0	23.0	92	75 - 120	
1,4-Dioxane	500	607	121	50 - 174	
2-Butanone (MEK)	125	132	105	57 - 140	
2-Hexanone	125	131	105	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	125	100	71 - 125	
Acetone	125	138	110	56 - 142	
Benzene	25.0	23.4	94	71 - 124	
Bromoform	25.0	20.8	83	52 - 132	
Bromomethane	25.0	19.8	79	55 - 144	
Carbon disulfide	25.0	24.1	96	59 - 134	
Carbon tetrachloride	25.0	23.3	93	72 - 134	
Chlorobenzene	25.0	22.2	89	72 - 120	
Chlorobromomethane	25.0	23.5	94	72 - 130	
Chlorodibromomethane	25.0	21.6	87	75 - 125	
Chloroethane	25.0	20.9	83	69 - 136	
Chloroform	25.0	22.7	91	73 - 127	
Chloromethane	25.0	20.2	81	68 - 124	
cis-1,2-Dichloroethene	25.0	22.7	91	74 - 124	
cis-1,3-Dichloropropene	25.0	25.3	101	74 - 124	
Cyclohexane	25.0	22.9	92	59 - 135	
Dichlorobromomethane	25.0	24.9	99	80 - 122	
Dichlorodifluoromethane	25.0	20.2	81	59 - 135	
Ethylbenzene	25.0	23.1	93	77 - 123	
Ethylene Dibromide	25.0	23.7	95	77 - 120	
Isopropylbenzene	25.0	24.6	99	77 - 122	
Methyl acetate	125	119	95	74 - 133	
Methyl tert-butyl ether	25.0	24.8	99	64 - 127	
Methylcyclohexane	25.0	24.0	96	61 - 138	

Client: New York State D.E.C. Job Number: 480-86254-1

Lab Control Sample - Batch: 480-261891

Method: 8260C
Preparation: 5030C

Lab Sample ID:	LCS 480-261891/6	Analysis Batch:	480-261891	Instrument ID:	HP5973S
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	S2146.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 1437	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	09/03/2015 1437				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Methylene Chloride	25.0	24.5	98	57 - 132	
m-Xylene & p-Xylene	25.0	23.4	94	76 - 122	
o-Xylene	25.0	24.3	97	76 - 122	
Styrene	25.0	25.3	101	70 - 130	
Tetrachloroethene	25.0	22.5	90	74 - 122	
Toluene	25.0	23.0	92	80 - 122	
trans-1,2-Dichloroethene	25.0	23.3	93	73 - 127	
trans-1,3-Dichloropropene	25.0	24.2	97	72 - 123	
Trichloroethene	25.0	22.9	92	74 - 123	
Trichlorofluoromethane	25.0	23.6	95	62 - 152	
Vinyl chloride	25.0	20.3	81	65 - 133	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99	66 - 137
4-Bromofluorobenzene (Surr)	102	73 - 120
Dibromofluoromethane (Surr)	102	60 - 140
Toluene-d8 (Surr)	99	71 - 126

Client: New York State D.E.C. Job Number: 480-86254-1

Method Blank - Batch: 480-262028

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 480-262028/6	Analysis Batch:	480-262028	Instrument ID:	HP5975T
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	T8290.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 1214	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	09/04/2015 1214				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	1.0	U	0.82	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.21	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	0.31	1.0
1,1,2-Trichloroethane	1.0	U	0.23	1.0
1,1-Dichloroethane	1.0	U	0.38	1.0
1,1-Dichloroethene	1.0	U	0.29	1.0
1,2,3-Trichlorobenzene	1.0	U	0.41	1.0
1,2,4-Trichlorobenzene	1.0	U	0.41	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	0.39	1.0
1,2-Dichlorobenzene	1.0	U	0.79	1.0
1,2-Dichloroethane	1.0	U	0.21	1.0
1,2-Dichloropropane	1.0	U	0.72	1.0
1,3-Dichlorobenzene	1.0	U	0.78	1.0
1,4-Dichlorobenzene	1.0	U	0.84	1.0
1,4-Dioxane	40	U	9.3	40
2-Butanone (MEK)	10	U	1.3	10
2-Hexanone	5.0	U	1.2	5.0
4-Methyl-2-pentanone (MIBK)	5.0	U	2.1	5.0
Acetone	10	U	3.0	10
Benzene	1.0	U	0.41	1.0
Bromoform	1.0	U	0.26	1.0
Bromomethane	1.0	U	0.69	1.0
Carbon disulfide	1.0	U	0.19	1.0
Carbon tetrachloride	1.0	U	0.27	1.0
Chlorobenzene	1.0	U	0.75	1.0
Chlorobromomethane	1.0	U	0.87	1.0
Chlorodibromomethane	1.0	U	0.32	1.0
Chloroethane	1.0	U	0.32	1.0
Chloroform	1.0	U	0.34	1.0
Chloromethane	1.0	U	0.35	1.0
cis-1,2-Dichloroethene	1.0	U	0.81	1.0
cis-1,3-Dichloropropene	1.0	U	0.36	1.0
Cyclohexane	1.0	U	0.18	1.0
Dichlorobromomethane	1.0	U	0.39	1.0
Dichlorodifluoromethane	1.0	U	0.68	1.0
Ethylbenzene	1.0	U	0.74	1.0
Ethylene Dibromide	1.0	U	0.73	1.0
Isopropylbenzene	1.0	U	0.79	1.0
Methyl acetate	2.5	U	1.3	2.5
Methyl tert-butyl ether	1.0	U	0.16	1.0
Methylcyclohexane	1.0	U	0.16	1.0
Methylene Chloride	1.0	U	0.44	1.0
m-Xylene & p-Xylene	2.0	U	0.66	2.0
o-Xylene	1.0	U	0.76	1.0
Styrene	1.0	U	0.73	1.0

Client: New York State D.E.C. Job Number: 480-86254-1

Method Blank - Batch: 480-262028

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 480-262028/6	Analysis Batch:	480-262028	Instrument ID:	HP5975T
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	T8290.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 1214	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	09/04/2015 1214				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Tetrachloroethene	1.0	U	0.36	1.0
Toluene	1.0	U	0.51	1.0
trans-1,2-Dichloroethene	1.0	U	0.90	1.0
trans-1,3-Dichloropropene	1.0	U	0.37	1.0
Trichloroethene	1.0	U	0.46	1.0
Trichlorofluoromethane	1.0	U	0.88	1.0
Vinyl chloride	1.0	U	0.90	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87	66 - 137
4-Bromofluorobenzene (Surr)	95	73 - 120
Dibromofluoromethane (Surr)	92	60 - 140
Toluene-d8 (Surr)	93	71 - 126

Client: New York State D.E.C. Job Number: 480-86254-1

Lab Control Sample - Batch: 480-262028

Method: 8260C
Preparation: 5030C

Lab Sample ID:	LCS 480-262028/4	Analysis Batch:	480-262028	Instrument ID:	HP5975T
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	T8285.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 1014	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	09/04/2015 1014				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1-Trichloroethane	25.0	24.0	96	73 - 126	
1,1,2,2-Tetrachloroethane	25.0	24.9	100	70 - 126	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.2	105	52 - 148	
1,1,2-Trichloroethane	25.0	25.1	100	76 - 122	
1,1-Dichloroethane	25.0	25.8	103	71 - 129	
1,1-Dichloroethene	25.0	25.2	101	58 - 121	
1,2,3-Trichlorobenzene	25.0	23.6	94	63 - 138	
1,2,4-Trichlorobenzene	25.0	24.2	97	70 - 122	
1,2-Dibromo-3-Chloropropane	25.0	22.2	89	56 - 134	
1,2-Dichlorobenzene	25.0	25.3	101	80 - 124	
1,2-Dichloroethane	25.0	23.4	94	75 - 127	
1,2-Dichloropropane	25.0	26.4	106	76 - 120	
1,3-Dichlorobenzene	25.0	25.6	102	77 - 120	
1,4-Dichlorobenzene	25.0	25.4	102	75 - 120	
1,4-Dioxane	500	582	116	50 - 174	
2-Butanone (MEK)	125	134	108	57 - 140	
2-Hexanone	125	127	101	65 - 127	
4-Methyl-2-pentanone (MIBK)	125	121	97	71 - 125	
Acetone	125	148	119	56 - 142	
Benzene	25.0	25.6	102	71 - 124	
Bromoform	25.0	22.8	91	52 - 132	
Bromomethane	25.0	22.2	89	55 - 144	
Carbon disulfide	25.0	26.2	105	59 - 134	
Carbon tetrachloride	25.0	23.5	94	72 - 134	
Chlorobenzene	25.0	25.5	102	72 - 120	
Chlorobromomethane	25.0	24.7	99	72 - 130	
Chlorodibromomethane	25.0	23.8	95	75 - 125	
Chloroethane	25.0	25.9	104	69 - 136	
Chloroform	25.0	24.6	98	73 - 127	
Chloromethane	25.0	21.3	85	68 - 124	
cis-1,2-Dichloroethene	25.0	24.9	100	74 - 124	
cis-1,3-Dichloropropene	25.0	23.9	96	74 - 124	
Cyclohexane	25.0	26.7	107	59 - 135	
Dichlorobromomethane	25.0	24.9	100	80 - 122	
Dichlorodifluoromethane	25.0	15.2	61	59 - 135	
Ethylbenzene	25.0	26.1	104	77 - 123	
Ethylene Dibromide	25.0	23.9	96	77 - 120	
Isopropylbenzene	25.0	25.7	103	77 - 122	
Methyl acetate	125	118	94	74 - 133	
Methyl tert-butyl ether	25.0	23.5	94	64 - 127	
Methylcyclohexane	25.0	24.5	98	61 - 138	

Client: New York State D.E.C. Job Number: 480-86254-1

Lab Control Sample - Batch: 480-262028

Method: 8260C
Preparation: 5030C

Lab Sample ID:	LCS 480-262028/4	Analysis Batch:	480-262028	Instrument ID:	HP5975T
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	T8285.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 1014	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	09/04/2015 1014				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Methylene Chloride	25.0	24.6	98	57 - 132	
m-Xylene & p-Xylene	25.0	25.1	100	76 - 122	
o-Xylene	25.0	25.0	100	76 - 122	
Styrene	25.0	25.9	104	70 - 130	
Tetrachloroethene	25.0	25.5	102	74 - 122	
Toluene	25.0	25.9	104	80 - 122	
trans-1,2-Dichloroethene	25.0	25.5	102	73 - 127	
trans-1,3-Dichloropropene	25.0	24.1	96	72 - 123	
Trichloroethene	25.0	25.2	101	74 - 123	
Trichlorofluoromethane	25.0	26.3	105	62 - 152	
Vinyl chloride	25.0	21.6	86	65 - 133	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	84	66 - 137
4-Bromofluorobenzene (Surr)	98	73 - 120
Dibromofluoromethane (Surr)	91	60 - 140
Toluene-d8 (Surr)	92	71 - 126

Client: New York State D.E.C. Job Number: 480-86254-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-262028

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	480-86236-X-8 MS	Analysis Batch:	480-262028	Instrument ID:	HP5975T
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	T8310.D
Dilution:	20	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 2010			Final Weight/Volume:	5 mL
Prep Date:	09/04/2015 2010				5 mL
Leach Date:	N/A				

MSD Lab Sample ID:	480-86236-X-8 MSD	Analysis Batch:	480-262028	Instrument ID:	HP5975T
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	T8311.D
Dilution:	20	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 2033			Final Weight/Volume:	5 mL
Prep Date:	09/04/2015 2033				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1,1-Trichloroethane	105	97	73 - 126	8	15		
1,1,2,2-Tetrachloroethane	101	106	70 - 126	5	15		
1,1,2-Trichloroethane	104	104	76 - 122	0	15		
1,1-Dichloroethane	112	103	71 - 129	9	20		
1,1-Dichloroethene	114	101	58 - 121	12	16		
1,2-Dibromo-3-Chloropropane	88	103	56 - 134	15	15		
1,2-Dichlorobenzene	104	102	80 - 124	1	20		
1,2-Dichloroethane	101	96	75 - 127	5	20		
1,2-Dichloropropane	112	105	76 - 120	6	20		
2-Butanone (MEK)	111	105	57 - 140	5	20		
2-Hexanone	100	102	65 - 127	2	15		
4-Methyl-2-pentanone (MIBK)	109	103	71 - 125	6	35		
Acetone	110	106	56 - 142	4	15		
Benzene	109	103	71 - 124	6	13		
Bromoform	94	91	52 - 132	3	15		
Bromomethane	100	95	55 - 144	6	15		
Carbon disulfide	114	106	59 - 134	7	15		
Carbon tetrachloride	100	94	72 - 134	7	15		
Chlorobenzene	107	104	72 - 120	3	25		
Chlorobromomethane	105	102	72 - 130	3	15		
Chlorodibromomethane	94	97	75 - 125	3	15		
Chloroethane	112	106	69 - 136	5	15		
Chloroform	105	99	73 - 127	5	20		
Chloromethane	96	89	68 - 124	8	15		
cis-1,2-Dichloroethene	109	102	74 - 124	7	15		
cis-1,3-Dichloropropene	104	94	74 - 124	10	15		
Dichlorobromomethane	108	99	80 - 122	9	15		
Dichlorodifluoromethane	69	64	59 - 135	7	20		
Ethylbenzene	114	107	77 - 123	6	15		
Ethylene Dibromide	100	98	77 - 120	2	15		
Methylene Chloride	106	101	57 - 132	5	15		
m-Xylene & p-Xylene	107	100	76 - 122	6	16		

Client: New York State D.E.C. Job Number: 480-86254-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 480-262028

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	480-86236-X-8 MS	Analysis Batch:	480-262028	Instrument ID:	HP5975T
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	T8310.D
Dilution:	20	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 2010			Final Weight/Volume:	5 mL
Prep Date:	09/04/2015 2010				5 mL
Leach Date:	N/A				

MSD Lab Sample ID:	480-86236-X-8 MSD	Analysis Batch:	480-262028	Instrument ID:	HP5975T
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	T8311.D
Dilution:	20	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/04/2015 2033			Final Weight/Volume:	5 mL
Prep Date:	09/04/2015 2033				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
o-Xylene	110	103	76 - 122	6	16		
Styrene	109	104	70 - 130	5	20		
Tetrachloroethene	104	100	74 - 122	3	20		
Toluene	109	107	80 - 122	2	15		
trans-1,2-Dichloroethene	112	102	73 - 127	9	20		
trans-1,3-Dichloropropene	94	96	72 - 123	2	15		
Trichloroethene	109	101	74 - 123	7	16		
Trichlorofluoromethane	112	105	62 - 152	6	20		
Vinyl chloride	100	91	65 - 133	10	15		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86	85	66 - 137
4-Bromofluorobenzene (Surr)	103	99	73 - 120
Toluene-d8 (Surr)	94	93	71 - 126

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record

039946

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Brian Sunkowski	Site Contact: Brian Sunkowski	Date: 8/25/15	COC No:
Company Name: NYSDEC	Tel/Fax:	Lab Contact:	Carrier:	1 of 1 COCs
Address: 625 Broadway 12th Floor	Analysis Turnaround Time			Sampler:
City/State/Zip: Albany, NY 12233-7015	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 518-402-9626	TAT if different from Below 10			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Fonning Dale Plaza Cleaners	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

480-86254 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260c VOC TCL	Sample Specific Notes:
MW-46C-82015	8/25/15	110	G	GW	3	N	N	3	
MW-47C-82015	8/25/15	130	G	GW	3	N	N	3	
MW-37C-82015	8/25/15	150	G	GW	3	N	N	3	
MW-28C-82015	8/25/15	220	G	GW	3	N	N	3	
MW-28D-82015	8/25/15	230	G	GW	3	N	N	3	one with bottle

Page 36 of 37

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Cat A, NYSDEC EDD

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	NYSDEC	8/26/15 945		TA-BUF	8-26-15 09:45
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TA-BUF	8/26/15 1530		TAB	27 Aug 15 0145
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

13

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-86254-1

Login Number: 86254 **List Source: TestAmerica Buffalo**
List Number: 1
Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	False	No: Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	NYSDEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	