# SITE CHARACTERIZATION REPORT FOR THE TOP HAT DRY CLEANERS

# 152 Graham Avenue Brooklyn, East Williamsburg Section of Brooklyn, Kings County, New York

# Prepared For:



New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 12th Floor Albany, NY 12233-7012

Prepared By:

#### **PARSONS**

301 Plainfield Road, Suite 350 Syracuse, New York 13212

**MARCH 2016** 

# **TABLE OF CONTENTS**

		<u>Page</u>
AC	RON	NYMS AND ABBREVIATIONSIII
1.0	INT	FRODUCTION1
2.0	PR	OJECT OBJECTIVES AND BACKGROUND1
3.0	SIT	TE CHARACTERIZATION SCOPE AND RESULTS2
	3.1	ANALYTICAL SERVICES AND DATA VALIDATION3
	3.2	GEOPHYSICAL INVESTIGATION/SURVEY3
	3.3	SUBSURFACE INVESTIGATION
	3.4	WASTE CHARACTERIZATION6
	3.5	COMMUNITY AIR MONITORING PROGRAM7
4.0	RE	FERENCES7

# **PARSONS**

File:

# TABLE OF CONTENTS (CONTINUED)

# LIST OF TABLES

Table 1	Groundwater Elevation Summary (October 12, 2015)
Table 2	Soil Sample Analytical Data Summary Table
Table 3	Groundwater Sample Analytical Data Summary Table

# LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Site Map
Figure 3	Groundwater Contour Map (October 2015)
Figure 4	Groundwater Analytical Data Summary Map (October 2015)

# LIST OF APPENDICES

APPENDIX A	DATA USABILITY SUMMARY REPORT
APPENDIX B	DIG SAFELY NEW YORK TICKETS INFORMATION
APPENDIX C	BORING AND WELL CONSTRUCTION LOGS
APPENDIX D	WELL DEVELOPMENT LOGS
APPENDIX E	PHOTOGRAPHIC LOG
APPENDIX F	GROUNDWATER MONITORING WELLS SURVEY DATA
APPENDIX G	GROUNDWATER SAMPLE LOGS
APPENDIX H	INVESTIGATION DERIVED WASTE MANIFESTS
APPENDIX I	AIR MONITORING DATA LOGS (Data Provided on CD)

**PARSONS** 

 $File: P:\NYSDEC\ Program\ 449485-WA\ \#21-Top\ Hat\ Cleaners\ Site\ Characterization\ 9.0\ Reports\ Top\ Hat\ Report\ Final\ SCR1-2016\_R4.Docx$ 

# ACRONYMS AND ABBREVIATIONS

AGV Air-Guideline Value bgs Below Ground Surface

DER Division of Environmental Remediation

DUSR Data Usability Summary Report

ELAP Environmental Laboratory Accreditation Program

ft. feet/foot

HSA Hollow stem auger

IDW Investigation Derived Waste

μg/L micrograms per liter
NAD North American Datum

NAVD North American Vertical Datum

NELAP National Environmental Laboratory Approval Program

NYCRR New York State Codes, Rules and Regulations NYCSWA New York City Sewer and Water Authority

NYSDEC New York State Department of Environmental Conservation

NYSDOH New York State Department of Health

NYSDOT New York State Department of Transportation

OBG O'Brien & Gere
PCE Tetrachloroethylene
PID Photoionization Detector

PVC Polyvinyl chloride

SCO Soil Cleanup Objective

sq. ft. Square feet

TAL Test America Laboratories

TCE Trichloroethylene
THDC Top Hat Dry Cleaners

USEPA United States Environmental Protection Agency

VOC Volatile Organic Compound

**PARSONS** 

 $File: P:\ NYSDEC\ Program\ 449485-WA\ \#21-Top\ Hat\ Cleaners\ Site\ Characterization\ 9.0\ Reports\ Top\ Hat\ Report\ Final\ SCR1-2016\_R4.Docx$ 

I, Thomas Drachenberg, certify that I am currently a NYS registered professional engineer or Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

Program Manager:

PARSONS

File:

# SITE CHARACTERIZATION REPORT TOP HAT DRY CLEANERS BROOKLYN, NEW YORK

# 1.0 INTRODUCTION

This Site Characterization Report documents results from the investigation conducted at Top Hat Dry Cleaners (THDC) located at 152 Graham Avenue in the East Williamsburg section of Brooklyn, Kings County, New York. Parsons conducted the fieldwork during the early fall 2015 under contract with the New York State Department of Environmental Conservation (NYSDEC). Sampling and analyses were conducted pursuant to a work scope accepted in advance by the NYSDEC. Data obtained during the site characterization have been compiled and are summarized in this report.

### 2.0 PROJECT OBJECTIVES AND BACKGROUND

The THDC property being investigated (herein referred to as the Site) is located at the intersection of Graham and Johnson Avenues. A site location map is included as Figure 1.

The THDC Site measure 2,500 square feet (sq. ft.) (0.057 acres) and houses a 3,000-sq. ft., three-story building with an open courtyard area behind the building. The first floor of the building is currently used as a drop off dry cleaner (THDC). Residential apartments are located on the second and third floor.

The THDC Site is roughly rectangular in shape. It is bounded by Graham Avenue to the west, a three-story mixed commercial/residential building to the north, a four-story mixed commercial/residential building with a one-story annex and a three-story mixed commercial/residential building to the south, and a four-story residential building to the east. The three-story commercial building to the south also includes a dry cleaner operating on the first floor (Martinez Dry Cleaning).

The three-story building on the THDC Site was built in 1920. Historical records indicate that the dry cleaner has occupied the location since the 1960s. Although dry cleaning activities are not currently performed at the THDC Site, active dry cleaning is reported to have been performed in the building previously, and an inactive dry cleaning machine was observed on the premises during the initial site walk.

**PARSONS** 

 $File: P:\ NYSDEC\ Program\ 449485-WA\ \#21-Top\ Hat\ Cleaners\ Site\ Characterization\ 9.0\ Reports\ Top\ Hat\ Report\ Final\ SCR1-2016\_R4.Docx$ 

A vapor intrusion investigation was performed at 154 Graham Avenue, which is adjacent to the THDC building. Two sub-slab samples, one basement indoor air sample, and one ambient air sample were collected and submitted for laboratory analysis. Elevated concentrations of tetrachloroethylene (PCE), trichloroethylene (TCE), and cis-1,2-dichloroethylene were detected in the sub-slab vapor samples. PCE concentrations were detected in the basement indoor air sample above the New York State Final Guidance Air Guideline Value (AGV). The Vapor Intrusion Report (Merritt 2014) identifies the THDC Site as the most likely source of the PCE contamination. No soil or groundwater samples were collected during the vapor intrusion investigation at 154 Graham Avenue, and no known soil or groundwater data are currently available for this site.

# 3.0 SITE CHARACTERIZATION SCOPE AND RESULTS

Parsons' findings from its 2015 investigation are described in the following sections. Each portion of the investigation followed NYSDEC guidelines outlined in the Division of Environmental Remediation, Ch. 10 (DER-10) (NYSDEC 2010). The investigation consisted of the following elements:

- 1. A geophysical investigation/survey to locate underground utilities and other structures
- 2. A subsurface soil investigation that consisted of drilling soil borings and collecting soil samples
- 3. Monitoring well installations and a groundwater investigation
- 4. A survey of final monitoring well locations and elevations

Field activities were conducted in accordance with the Quality Assurance Project Plan (Parsons and O'Brien & Gere [OBG] 2011a) and the Generic Health and Safety Plan (Parsons and OBG 2011b) prepared and approved for Parsons' contract with NYSDEC. Site-specific elements and specific job safety analyses for soil sampling, monitoring well installation, and groundwater sampling were added to the Health and Safety Plan. A site map showing soil boring and groundwater monitoring well locations is provided as Figure 2.

Results of the 2015 site characterization indicate the following:

- 1. Soil lithology consisted of two main types of soils. The first soil type was "fill" material that consisted of fine to medium sand to silt with fine to coarse gravel and traces of brick and other miscellaneous debris. The second type was "natural material" composed of fine to coarse sand to silt with fine to coarse gravel and little clay.
- 2. Groundwater was encountered between 17.5 ft. (THPMW-02) and 22.5 ft. (THPMW-01) below ground surface (bgs). Groundwater flow was determined to be in the north to northwest direction under a hydraulic gradient of approximately

PARSONS

- 0.023 vertical feet per each horizontal foot. Refer to Table 1 for depth to water measurements.
- 3. No subsurface soil contamination was observed surrounding the THDC Site based on soil samples collected during field activities. All soil sample concentrations were below the NYSDEC "Division of Environmental Remediation, 6 New York State Codes, Rules and Regulations (6 NYSCRR), Part 375, Environmental Remediation Programs Subparts 375-1 to 375-4 and 375-6, Effective December 14, 2006, Unrestricted Soil Criteria."
- 4. Groundwater analytical results indicated the presence of PCE in exceedance of the Class GA New York State Groundwater Quality Standards and Guidance Values in monitoring wells THPMW-01 and THPMW-03. Chloroform was observed in exceedance of the Class GA standard at monitoring well THPMW-02.

#### 3.1 ANALYTICAL SERVICES AND DATA VALIDATION

Analytical services for water, soil, and waste samples were provided by TestAmerica Laboratories (TAL) of Edison, New Jersey. TAL is accredited under the National Environmental Laboratory Approval Program (NELAP) and Department of Defense Environmental Laboratory Accreditation Program (ELAP) and is a New York State Department of Health (NYSDOH) ELAP-certified laboratory (Lab ID 11452). A United States Environmental Protection Agency (USEPA) Level IV data validation was conducted on 10 percent of the chemical samples (i.e., full data validation), and a USEPA Level III data validation was conducted on the remaining 90 percent of the samples, as described in the Data Usability Summary Report (DUSR), which is provided in Appendix A.

### 3.2 GEOPHYSICAL INVESTIGATION/SURVEY

A geophysical investigation/survey was performed at the THDC Site to locate subsurface utility lines and any structures that might exist in the drilling areas. The geophysical survey was performed by NAEVA Geophysics, Inc. from Congers, New York. A combination of electrical tracing, magnetic techniques, and ground penetrating radar was used at the THDC Site to complete the investigation. The owners of the THDC Site and adjacent buildings allowed Parsons and subcontractor personnel access to trace service lines into the building at the THDC Site. Several utility lines were noted and marked in the investigation areas.

A Dig Safely New York utility notification request was also made prior to mobilizing to the THDC Site (ticket numbers 152540245 and 152540235, which are provided in Appendix B). A representative from Premier (a subcontractor firm hired by the utility agencies to mark out subsurface utilities) arrived onsite and confirmed that all public utilities except those owned by the New York City Sewer and Water Authority (NYCSWA) had been marked out during the geophysical survey. On October 21<sup>st</sup>, Parsons visited the local NYCSWA office in Brooklyn and obtained utility maps for sewer and water for the intersection of Graham and Johnson Avenues.

PARSONS

 $File: P:\NYSDEC\ Program \ 449485 - WA\ \#21 - Top\ Hat\ Cleaners\ Site\ Characterization \ 9.0\ Reports \ Top\ Hat\ Report \ Final \ SCR1-2016\_R4.Docx$ 

The maps were given to the geophysical subcontractor, and utility locations were marked out prior to drilling activities. Utilities found in the four drilling areas included sewer, gas, water, electric, and unknown miscellaneous structures.

#### 3.3 SUBSURFACE INVESTIGATION

# 3.3.1 Soil Borings

As shown on Figure 2, soil borings were advanced to delineate potential contamination, namely PCE and daughter products, in subsurface soils surrounding the THDC Site. Drilling activities performed in each area are discussed below.

# 3.3.1.1 Soil Borings Advanced Along Public Sidewalks

Prior to the start of drilling activities, a concrete saw was used to remove the overlying concrete from the sidewalk flags. Three borings (THPMW-01, THPMW-02, and THPMW-03) were then hand cleared to 5 ft. bgs. The soil borings were then advanced to a target depth of 10 ft. into the underlying water table utilizing 4.25-inch-inner-diameter, hollow-stem augers (HSAs). Stainless steel split-spoon samplers were used to continuously sample soil during drilling.

The augers and samplers were advanced with a Geoprobe<sup>®</sup> 7822DT rig at THPMW-01 and a CME 55 Track Rig at locations THPMW-02 and THPMW-03. The larger track rig was mobilized to the THDC Site during the advancement of the THPMW-03 boring when subsurface soils were too dense for the Geoprobe<sup>®</sup> unit to continue advancing drill tools. Boring logs are provided in Appendix C.

Soil samples were visually classified for soil type, grain size, texture, moisture content, and visible evidence of staining or impacts. Each sample was also screened for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID).

Two samples were selected at each boring location for VOC analysis by USEPA Method SW8260C. The first sample at each location was collected from the interval with the highest PID measurement within the impacted zone. The second sample was collected from a clean interval below the impacted zone (based on PID measurements and visual observations) for vertical delineation. Intervals submitted for laboratory analysis are noted on the boring logs included as Appendix C.

#### 3.3.1.2 Soil Borings Installed in Courtyard

Three attempts were made at advancing the soil boring designated as THPMW-04 in the courtyard area behind the onsite building following the methodology described in Section 3.3.1.1. However, the three boring attempts could only be advanced to a maximum depth of 6 ft. bgs because of an obstruction encountered within the borehole. Attempts were made to break through the obstruction using a pry-bar and a solid-pointed coned shaped Geoprobe<sup>®</sup> drilling point. All drilling attempts were unsuccessful, and the three soil borings were backfilled

PARSONS

with original drill cuttings and finished with concrete at the surface to match the surrounding area.

One soil sample was collected from 5 to 6 ft. bgs and analyzed for VOCs by USEPA Method SW8260C. The analytical program used the data quality objectives and quality assurance objectives as described in Section 3.1.

The validated results for detected compounds in soil are summarized in Table 2. No soil samples exhibited concentrations that exceeded the 6 NYCRR Part 375 Soil Cleanup Objectives (SCOs).

# 3.3.2 Groundwater Monitoring Well Installations

As shown on Figure 2, three of the four soil boring locations were converted to overburden groundwater monitoring wells (THPMW-01, THPMW-02, and THPMW-03). The wells were installed to delineate potential contamination in groundwater and to determine if the source of the contamination at the THDC Site is one or both of the dry cleaners located at and south of the THDC Site. The monitoring well locations were also selected to provide hydraulic gradient information in the area of the THDC Site. The boring located in the courtyard was not converted to a monitoring well because the three attempted borings for that one location could not be advanced to the water table due to an obstruction encountered at depths of 4 to 6 ft. bgs (see Section 3.3.1.2). In addition, the monitoring well initially installed at THPMW-02 had to be abandoned and re-installed adjacent to the original monitoring well location (approximately 3 feet from original well) because the original monitoring well screen broke during installation and compromised the well (filter sand flowed into well). The original well was abandoned by over drilling the well, removing all well materials, and grouting the borehole up to the surface. The replacement well was reinstalled without additional soil sampling.

The monitoring wells were constructed of 2-inch polyvinyl chloride (PVC) casing with a 10-ft.-long, 10-slot screen. Each well was screened a minimum of 3 ft. above the water table to account for seasonal fluctuations of the water table. The annulus around the outside of the screen was backfilled with filter sand (Fipro U.S. Silica Sand - WG#2) to a minimum 2.5 ft. above the screen, followed by a bentonite seal (minimum 2.5 ft. thick) above the sand pack. The seal in each well was allowed to hydrate prior to placement of grout from above it to near the ground surface. Each well was completed with an 8-inch, steel, protective flush-mount cover and locking adjustable cap. Well construction logs are included in Appendix C.

Following well installation, the new monitoring wells were developed to remove material that may have settled in and around the well screen. Development consisted of the removal of greater than 10 well volumes. Well development logs are included in Appendix D. After well development activities were completed, the entire sidewalk flag where each well was installed was replaced to comply with New York State Department to Transportation (NYSDOT) permit requirements for drilling on public sidewalks. Photos of the restored sidewalk flags are included in Appendix E.

**PARSONS** 

File: P:\NYSDEC Program\449485 - WA #21 - Top Hat Cleaners Site Characterization\9.0 Reports\Top Hat Report\Final\SCR1-2016\_R4.Docx Rev: #4 Date: March 31, 2016

### 3.3.3 Surveying of Groundwater Monitoring Wells

Each newly installed groundwater monitoring well was surveyed by a New York State licensed surveyor (Borbas Surveying and Mapping, LLC, from Boonton, New Jersey) and survey data are provided in Appendix F. At each well location, the elevation of the top of the PVC well casing was determined to within  $\pm 0.01$  ft. The top of the PVC casing was marked with a permanent marker inside the curb box at the point surveyed, so that any groundwater monitoring event can be based on the same reference elevation. Coordinates were measured in the 1983 North American Datum (NAD83) for the horizontal datum, while the vertical datum used was the 1988 North American Vertical Datum (NAVD88).

# 3.3.4 Groundwater Sampling and Analysis

Once well installations and development were completed, the three new groundwater monitoring wells were sampled using low-flow sampling techniques on October 12 and 13, 2015. Groundwater sample logs are included in Appendix G. Water levels were collected at each location prior to sampling. The water levels were converted to elevations and plotted to determine groundwater contours and flow direction. Water level elevations are recorded on Table 1, and groundwater contours and flow direction are depicted on Figure 3. In general, the groundwater flow was determined to be in the north to northwest direction under a hydraulic gradient of approximately 0.023 vertical feet per each horizontal foot.

Groundwater samples were analyzed for VOCs by USEPA Method 8260C. The analytical program used the data quality objectives and quality assurance objectives described in Section 3.1

Groundwater analytical results were compared to New York State Groundwater Quality Standards and Guidance Values. Table 3 summarizes the validated results for detected compounds in groundwater. Groundwater analytical results indicated the presence of PCE in exceedance of the Class GA New York State Groundwater Quality Standards and Guidance Values in monitoring wells THPMW-01 (56 micrograms per liter [ $\mu$ g/L]) and THPMW-03 (10  $\mu$ g/L). Chloroform was observed in exceedance of the Class GA standard at monitoring well THPMW-02 (8.7  $\mu$ g/L). Exceedences of the Class GA standards are graphically depicted on Figure 4.

# 3.3.5 Photographic Documentation

A photographic log documenting typical field activities at the THDC Site is provided as Appendix E.

# 3.4 WASTE CHARACTERIZATION

Investigation derived waste (IDW), including excess soils, well development water, purge water, and personal protective equipment were placed in NYSDOT-approved, 55-gallon 17-H

**PARSONS** 

 $File: P:\ NYSDEC\ Program\ 449485-WA\ \#21-Top\ Hat\ Cleaners\ Site\ Characterization\ 9.0\ Reports\ Top\ Hat\ Report\ Final\ SCR1-2016\_R4.Docx$ 

type drums and staged at a central waste accumulation area for daily pickup by a qualified waste hauler (Cycle Chem of Elizabeth, New Jersey).

Samples from each waste stream were collected during the first day it was generated and analyzed for waste characterization. A waste profile for subsequent disposal was developed for each waste stream based on the initial sampling. Results from the waste profile sampling indicated that all the IDW was nonhazardous. During subsequent sampling of waste drums performed by the Cycle Chem, two drums were characterized with high pH concentrations that exceeded the initial characterization. These drums were characterized as hazardous waste. All IDW drums were disposed of in accordance with applicable NYSDEC regulations. Waste manifests are provided in Appendix H.

#### 3.5 COMMUNITY AIR MONITORING PROGRAM

There was a potential to generate large quantities of airborne matter during drilling activities if it were not properly controlled. Therefore, continuous air-monitoring was performed during drilling activities in accordance with the THDC Site's Health and Safety Plan. No significant, long lasting, airborne measurements were observed during drilling activities that violated airmonitoring protocols. Air-monitoring data are provided in Appendix I.

# 4.0 REFERENCES

- Merritt Environmental Consulting Corp., 2014, *Vapor Intrusion Investigation* (VII) 154 Graham Avenue, Brooklyn, New York 11206, Prepared for Mr. Fred Levine. December.
- NYSDEC, 2006, 6 NYCRR Part 375 Environmental Remediation Programs, Subparts 375-1 to 375-4 and 375-6, New York State Department of Environmental Conservation. September.
- NYSDEC, 2010, DEC Program Policy DER-10 / Technical Guidance for Site Investigation and Remediation. New York State Department of Environmental Conservation. May.
- Parsons and OBG, 2011a, *Generic Quality Assurance Project Plan*, Prepared for the New York State Department of Environmental Conservation, Albany, New York. May.
- Parsons and OBG, 2011b, *Generic/Site-Specific Health and Safety Plan*. Prepared for the New York State Department of Environmental Conservation, Albany, NY. May.

**PARSONS** 

File:

File:

# **TABLES**

# TABLE 1 GROUNDWATER ELEVATION SUMMARY OCTOBER 12, 2015 TOP HAT DRY CLEANERS 152 GRAHAM AVENUE BROOKLYN, NEW YORK 11206 SITE CHARACTERIZATION

Well ID	Top of Casing Elevation (feet) (1a)(1b)	Depth to Product (feet)	Depth to Water (feet)	Depth to Thickness (feet)	Elevation of Water (feet)
THPMW-01	27.71	22.50	22.50	0.0	5.21
THPMW-02	26.85	17.61	17.61	0.0	9.24
THPMW-03	27.48	18.20	18.20	0.0	9.28

#### Notes:

- (1a) Horizontal datum is via NY Long Island State Plane Coordination System NAD 83.
- (1b) Vertical datum is the North American vertical datum of 1988 (NAVD88).

# TABLE 2 SOIL SAMPLE ANALYTICAL DATA SUMMARY TABLE TOP HAT DRY CLEANERS 152 GRAHAM AVENUE BROOKLYN, NEW YORK 11206 SITE CHARACTERIZATION

NYSDEC-	Γop Hat Site		Location ID:	THPMW-01	THPMW-01 <sup>(*)</sup>	THPMW-01	THPMW-02	THPMW-02
2015 Site Investigation			Sample ID:	THPMW-01 (9-11)-20150922	THPMW-101 (9-11)-20150922	THPMW-01 (21-23)-20150922	THPMW-02 (12'-14')-20150923	THPMW-02 (17'-19')-20150924
Validated S	Soil Analytical Data		Lab Sample Id:	460-101583-1	460-101583-2	460-101583-3	460-101691-1	460-101691-2
Detected Compounds Only		NYSDEC Subpart 375	Source:	TALED	TALED	TALED	TALED	TALED
			SDG:	4601015831	4601015831	4601015831	4601016911	4601016911
		Unrestricted	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL
		Use Soil	Sampled:	9/22/2015 11:00	9/22/2015 12:01	9/22/2015 14:00	9/23/2015 14:00	9/24/2015 9:00
		Cleanup	Validated:	11/6/2015	11/6/2015	11/6/2015	11/6/2015	11/6/2015
CAS NO.	COMPOUND	Objectives <sup>(1)</sup>	UNITS					
	VOLATILES(2)							
67-64-1	Acetone	50	ug/kg	ND	ND	ND	ND	ND
75-27-4	Bromodichloromethane	NS	ug/kg	ND	ND	ND	ND	ND
67-66-3	Chloroform	370	ug/kg	ND	ND	ND	ND	ND
78-93-3	Methyl Ethyl Ketone	120	ug/kg	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethylene (PCE)	1300	ug/kg	ND	ND	0.36 J	0.27 J	3.6
108-88-3	Toluene	700	ug/kg	ND	ND	ND	0.24 J	0.27 J

# TABLE 2 SOIL SAMPLE ANALYTICAL DATA SUMMARY TABLE TOP HAT DRY CLEANERS 152 GRAHAM AVENUE BROOKLYN, NEW YORK 11206 SITE CHARACTERIZATION

NYSDEC-Top Hat Site 2015 Site Investigation Validated Soil Analytical Data Detected Compounds Only		NYSDEC Subpart 375 Unrestricted Use Soil Cleanup	Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	THPMW-03 THPMW-03(14'-15')-20150924 460-101771-1 TALED 4601017711 SOIL 9/24/2015 16:00 11/6/2015	THPMW-03 THPMW-03(15'-17')-20150925 460-101771-2 TALED 4601017711 SOIL 9/25/2015 9:00 11/6/2015	THPMW-004 THPMW-004 (5'-6')-20150929 460-101970-1 TALED 4601019701 SOIL 9/29/2015 11:00 11/6/2015
CAS NO.	COMPOUND	Objectives <sup>(1)</sup>	UNITS			
	VOLATILES <sup>(2)</sup>					
67-64-1	Acetone	50	ug/kg	ND	12 J	ND
75-27-4	Bromodichloromethane	NS	ug/kg	ND	ND	ND
67-66-3	Chloroform	370	ug/kg	ND	ND	ND
78-93-3	Methyl Ethyl Ketone	120	ug/kg	ND	2.5 J	ND
127-18-4	Tetrachloroethylene (PCE)	1300	ug/kg	0.96	0.33 J	1.7
108-88-3	Toluene	700	ug/kg	ND	ND	0.33 J

# Notes for Table 2

- J The analyte was positively identified, but the quantitation is an estimation.
- ND Parameter deteted below or at method detection limit.
- NS Not specified.

# ug/Kg Micrograms per kilograms

- \* Duplicate sample
- (1) Soil criteria obtained from the NYSDEC document entitled, "Division of Environmental Remediation, 6NYCRR Part 375, Environmental Remediation Programs, Subparts 375-1 to 375-4 and 375-6, Effective December 14, 2006." Compated soil data to Unrestricted Soil Criteria.
- (2) Only parameters exhibiting concentrations above method detection limit shown on table.

# Table 3 GROUNDWATER SAMPLE ANALYTICAL SUMMARY TABLE TOP HAT DRY CLEANERS 152 GRAHAM AVENUE BROOKLYN, NEW YORK 11206 SITE CHARACTERIZATION

NYSDEC-Top Hat Site 2015 Site Investigation Validated Water Analytical Data Detected Compounds Only		NYSDEC Class GA Groundwater TOGs <sup>(1)</sup>	Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	THPMW-01 THPMW-01-20151012 460-102788-1 TALED 4601027881 WATER 10/12/2015 11:25 11/6/2015	THPMW-02 THPMW-02-20151013 460-102788-2 TALED 4601027881 WATER 10/13/2015 7:00 11/6/2015	THPMW-02 <sup>(*)</sup> THPMW-102-20151013 460-102788-3 TALED 4601027881 WATER 10/13/2015 7:15 11/6/2015	THPMW-03 THPMW-03-20151013 460-102788-4 TALED 4601027881 WATER 10/13/2015 8:15 11/6/2015
CAS NO.	COMPOUND		UNITS:				
	VOLATILES <sup>(2)</sup>						
67-64-1	Acetone	50	ug/l	ND	15 J	ND	ND
71-43-2	Benzene	1	ug/l	ND	0.12 J	ND	ND
67-66-3	Chloroform	7	ug/l	0.66 J	8.3	8.7	1.2
156-59-2	Cis-1,2-Dichloroethylene	5	ug/l	2	ND	ND	ND
100-41-4	Ethylbenzene	5	ug/l	ND	0.6 J	0.54 J	ND
179601-23-1	M,P-Xylenes	5	ug/l	ND	0.38 J	0.42 J	0.34 Ј
98-82-8	Isopropylbenzene (Cumene)	5	ug/l	ND	0.41 J	ND	ND
78-93-3	Methyl Ethyl Ketone (2-Butanone)	50	ug/l	ND	6.5 J	ND	ND
108-87-2	Methylcyclohexane	NS	ug/l	ND	0.28 J	ND	ND
75-09-2	Methylene Chloride	5	ug/l	ND	0.32 J	ND	ND
95-47-6	O-Xylene (1,2-Dimethylbenzene)	5	ug/l	ND	2.3	2.4	ND
1634-04-4	Tert-Butyl Methyl Ether	10	ug/l	ND	0.34 J	0.4 J	ND
127-18-4	Tetrachloroethylene (PCE)	5	ug/l	56	3.1	3.2	10
108-88-3	Toluene	5	ug/l	ND	0.38 J	0.35 J	0.42 J
79-01-6	Trichloroethylene (TCE)	5	ug/l	0.43 J	ND	0.26 J	0.5 J

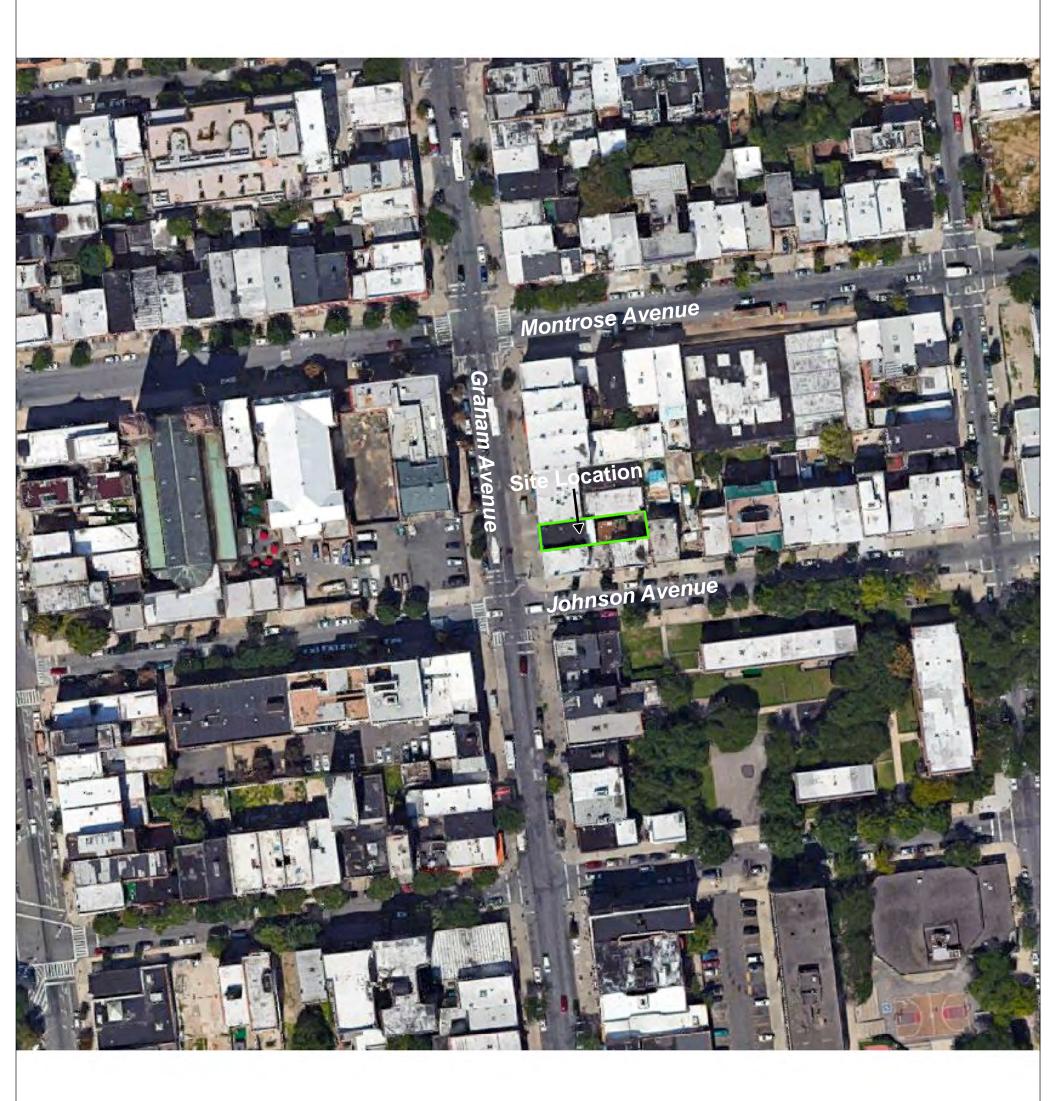
# Notes for Table 3

Concentration of parameter(s) exceeds New York State Department of Environmental Conservation (NYSDEC) Class GA Groundwater Standards. Standard Class used is for "Source of Drinking Water".

- J The analyte was positively identified, but the quantitation is an estimation.
- ND Parameter deteted below or at method detection limit.
- NS Not specified.
- ug/L Micrograms per liter
  - \* Duplicate sample
- (1) Groundwater criteria obtained from the NYSDEC document entitled, "Division of Water Technical and Operational Guidance Series (1.1.1.), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998; Errata Sheet for June 1998 Edition.
- (2) Only parameters exhibiting concentrations above method detection limit shown on table.

File:

# **FIGURES**





# Figure 1



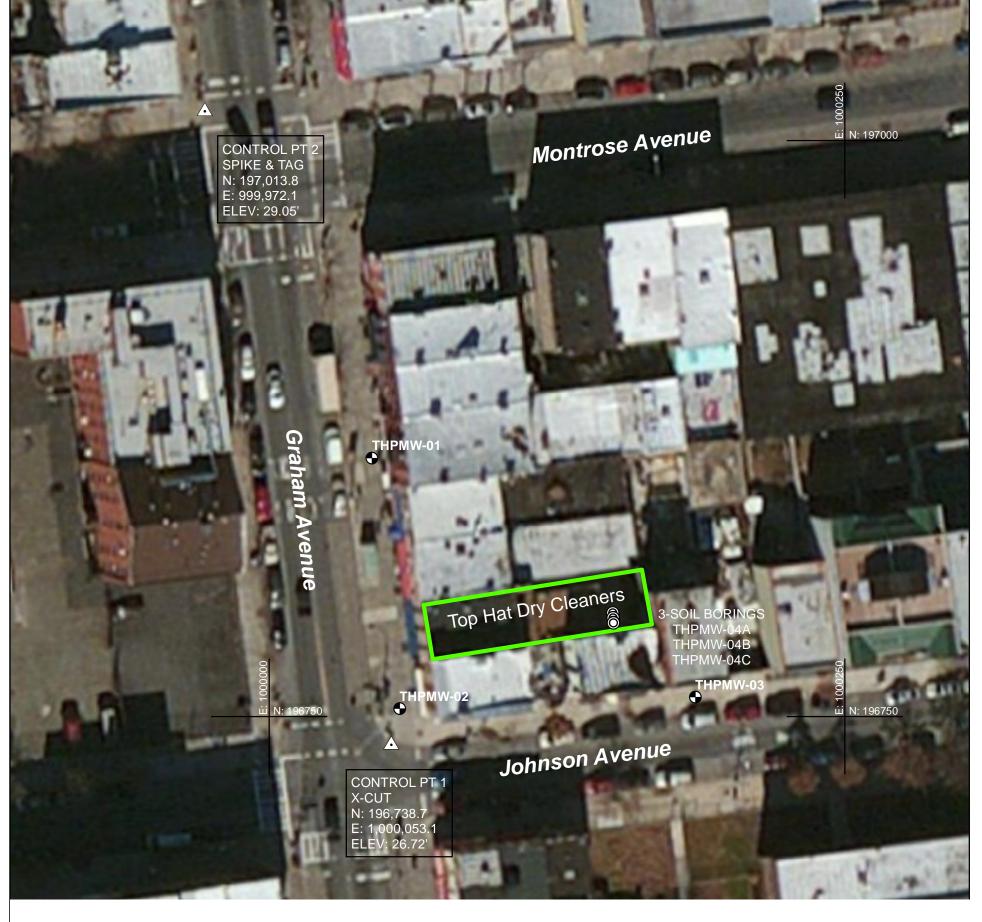
New York State Department of Environmental Conservation

Top Hat Dry Cleaners 152 Graham Avenue Brooklyn, New York 11206

Site Location Map

# **PARSONS**

 $301\ \mathsf{PLAINFIELD}\ \mathsf{RD},\ \mathsf{SUITE}\ 350,\ \mathsf{SYRACUSE},\ \mathsf{NY}\ 13212,\ \mathsf{Phone}\ 315\text{-}451\text{-}9560$ 



# D 25 50 100 FEET



# Legend:

Investigation Area Boundary

THPMW-4A 

Soil Boring Locations

THPMW-1 • Monitoring Well Locations

# Notes:

- 1. THE HORIZONTAL DATUM IS THE NEW YORK LONG ISLAND STATE PLANE COORDINATE SYSTEM NAD 83 DETERMINED BY DIFFERENTIAL GPS ON OCTOBER 12, 2015 USING THE NGS CORS SYSTEM, REFERANCE STATION NYBK.
- 2. THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
  GEOID12A DETERMINED BY DIFFERENTIAL GPS OBSERVATIONS FROM THE NGS CORS NETWORK
  ON OCTOBER 12, 2015. BENCHMARK REFERENCE STATION: NYBK (ORTHOMETRIC
  HEIGHT=54.3776').
- 3. THIS BASE MAP DEPICTS LIMITED PHYSICAL IMPROVEMENTS AS THEY EXISTED ON OCTOBER 12, 2015, IN THE AREA OF THE EXISTING GROUNDWATER MONITORING WELLS. NO ATTEMPT HAS BEEN MADE TO DETERMINE THE LOCATION OF PROPERTY LINES, EASEMENTS OR RIGHT-OF-WAY LINES.
- 4. ALL COORDINATES AND ELEVATIONS SHOWN HEREON ARE IN U.S. SURVEY FEET.

# Note:

"EDUCATION LAW ARTICLE 145 SECTION 7209:2 IT IS A VIOLATION OF EDUCATION LAW ARTICLE 145 SECTION 7209:2 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY."

# Figure 2



New York State Department of Environmental Conservation

Top Hat Dry Cleaners 152 Graham Avenue Brooklyn, New York 11206

Site Map

# **PARSONS**

301 PLAINFIELD RD, SUITE 350, SYRACUSE, NY 13212, Phone 315-451-9560



# Legend:

- Monitoring Well Locations
- Investigation Area Boundary
- Groundwater Flow Direction
- Groundwater Contour Line (Interval = 1 foot MSL)
- (5.21) Groundwater Elevation (Feet) (October 12, 2015) (3)

# Notes:

- 1. Soil borings not shown on figure.
- 2. Control points and other related survey information not shown on figure.
- 3. a. Horizontal datum is via NY Long Island State Plane Coordination System NAD 83
  - b. Vertical Datum is the North American Vertical Datum of 1988 (NAVD88)

# Figure 3

New York State Department of Environmental Conservation

Top Hat Dry Cleaners 152 Graham Avenue Brooklyn, New York 11206

Groundwater Contour Map (October 2015)

# **PARSONS**

301 PLAINFIELD RD, SUITE 350, SYRACUSE, NY 13212, Phone 315-451-9560



# Legend:

Investigation Area Boundary

THPMW-01 ◆

Monitoring Well Locations

THPMW-#			
10-12-15			
PCE	56		
Chloroform	8.7		

Well ID Sample Date

Parameter / concentration of parameter (1) (2) (3)

# Notes:

- (1) Concentrations in micrograms per liter (ug/L).
- (2) Only parameters that exceeded NYSDEC Ambient Water Quality Standards presented in TOGS 1.1.1 Groundwater Criteria shown on figure.
- (3) Refer to table 3 within report for detailed analysis of groundwater sampling event.
- (\*) Duplicate sample collected at location. Higher concentration of parameter shown.

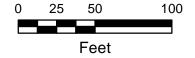




Figure 4



New York State Department of Environmental Conservation

Top Hat Dry Cleaners 152 Graham Avenue Brooklyn, New York 11206

Groundwater Analytical Data Summary Map (October 2015)

# **PARSONS**

301 PLAINFIELD RD, SUITE 350, SYRACUSE, NY 13212, Phone 315-451-9560

File:

# APPENDIX A DATA USABILITY SUMMARY REPORT

# DATA USABILITY SUMMARY REPORT

# **TOP HAT CLEANERS**

# Prepared For:



# New York State Department of Environmental Conservation Division of Environmental Remediation

625 Broadway, 12th Floor Albany, NY 12233-7012

Prepared By:

# **PARSONS**

301 Plainfield Road Suite 350 Syracuse, NY 13212 Phone: (315) 451-9560

Fax: (315) 451-9570

**MARCH 2016** 

# TABLE OF CONTENTS

	<u>Page</u>
LIST OF ACRONYMS	i
SECTION 1 DATA USABILITY SUMMARY	1-1
1.1 LABORATORY DATA PACKAGES	1-1
1.2 SAMPLING AND CHAIN-OF-CUSTODY	1-1
1.3 LABORATORY ANALYTICAL METHODS	
SECTION 2 DATA VALIDATION REPORT	2-1
2.1 SOIL	
2.2 GROUNDWATER SAMPLES 2.2.1 Volatiles	

# LIST OF ATTACHMENTS

# ATTACHMENT A VALIDATED LABORATORY DATA

Attachment A-1 Validated Laboratory Data For Soil Samples

Attachment A-2 Validated Laboratory Data For Groundwater Samples

# LIST OF ACRONYMS

%D Percent Difference

%R Percent Recovery

ASP Analytical Services Protocol

SOP Standard Operating Procedures

COC Chain-of-Custody

ELAP Environmental Laboratory Approval Program

LCS Laboratory Control Sample

MS/MSD Matrix Spike/Matrix Spike Duplicate

NYSDOH New York State Department of Health

PARCCS Precision, Accuracy, Representativeness, Completeness, Comparability,

and Sensitivity

QC Quality Control

RPD Relative Percent Difference

RRF Relative Response Factor

SDG Sample Delivery Groups

TAL Test America Laboratories

USEPA United States Environmental Protection Agency

VOC Volatile Organic Compounds

# **SECTION 1**

# DATA USABILITY SUMMARY

Soil and groundwater samples were collected from the Top Hat Cleaners site in Brooklyn, New York from September 22, 2015 through October 13, 2015. Analytical results from these samples were validated and reviewed by Parsons for usability with respect to the following requirements:

- Work Plan,
- NYSDEC Analytical Services Protocol (ASP), and
- USEPA Region II Standard Operating Procedures (SOPs) for organic and inorganic data review.

The analytical laboratory for this project was Test America Laboratories (TAL) in Edison, New Jersey. This laboratory is certified to perform project analyses through the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP).

#### 1.1 LABORATORY DATA PACKAGES

The laboratory data package turnaround time, defined as the time from sample receipt by the laboratory to receipt of the analytical data packages by Parsons, was 10-20 days for the project samples.

The data packages received from TAL were paginated, complete, and overall were of good quality. Comments on specific quality control (QC) and other requirements are discussed in detail in the attached data validation report which is summarized by sample media in Section 2.

#### 1.2 SAMPLING AND CHAIN-OF-CUSTODY

The samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received at TAL within one day of sampling. All samples were received intact and in good condition at the laboratory.

#### 1.3 LABORATORY ANALYTICAL METHODS

The soil and groundwater samples that were collected from the site were analyzed for volatile organic compounds (VOCs). Summaries of issues concerning this laboratory analysis are presented in Subsection 1.3.1. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS) are discussed for each analytical method by media in Section 2. The laboratory data were reviewed and may be qualified with the following validation flags:

"U" - not detected at the value given,

"UJ" - estimated and not detected at the value given,

PARSONS

"J" - estimated at the value given,

"J+" - estimated biased high at the value given,

"J-" - estimated biased low at the value given,

"N" - presumptive evidence at the value given, and

"R" - unusable value.

The validated laboratory data were tabulated and are presented in Attachment A.

# 1.3.1 Volatile Organic Analysis

The project samples were analyzed for VOCs using the United States Environmental Protection Agency (USEPA) SW-846 8260C analytical method. Certain reported results for these samples were qualified as estimated based upon instrument calibrations and field duplicate precision. The reported VOC analytical results were 100% complete (i.e., usable) for the project data. PARCCS requirements were met.

# **SECTION 2**

# DATA VALIDATION REPORT

#### **2.1 SOIL**

Data review has been completed for data packages generated by TAL containing soil samples collected from the site. Analytical results from these samples were contained within sample delivery groups (SDGs) 460-101583-1, 460-101691-1, 460-101771-1, and 460-101970-1. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. The validated laboratory data are presented in Attachment A-1.

Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs for organic and inorganic data review. This data validation and usability report is presented by analysis type.

#### 2.1.1 Volatiles

The following items were reviewed for compliancy in the volatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank contamination and trip/equipment blank contamination
- GC/MS instrument performance
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD precision and accuracy, LCS recoveries, blank contamination, and continuing calibrations as discussed below.

# MS/MSD Precision and Accuracy

All precision (relative percent difference; RPD) and accuracy (percent recovery; %R) measurements for designated spiked project samples were considered acceptable and within QC limits with the exception of the low MSD accuracy results for 1,1,2-trichloro-1,1,2-trifluoroethane (82%R; QC limit 83-136%R), 1,2,3-trichlorobenzene (75%R; QC limit 77-116%R), 1,2,4-trichlorobenzene (75%R; QC limit 77-116%R), and methylcyclohexane (83%R; QC limit 84-127%R) during the spiked analyses of sample THPMW-01(21-23). Validation qualification of this parent sample was not required.

### LCS Recoveries

All LCS recoveries associated with project samples were considered acceptable and within QC limits with the exception of the high LCS recoveries for 2-butanone (173%R; QC limit 56-150%R), 2-hexanone (161%R; QC limit 64-150%R), and acetone (199%R; QC limit 19-150%R) associated with the trip blank samples collected on 9/22/15 and 9/23/15. Validation qualification of these samples was not required.

#### **Blank Contamination**

The equipment blank TOP HAT EB associated with samples in SDG 460-101691-1 contained chloroform and bromodichloromethane below the reporting limits at concentrations of 0.38 and 0.18 micrograms per liter ( $\mu g/L$ ), respectively. Validation qualification of the associated samples was not required.

# **Continuing Calibrations**

All continuing calibration compounds were compliant with a minimum relative response factor (RRF) of 0.05 and a maximum percent difference (%D) within ±20% with the exception of 1,1,2,2-tetrachloroethane (-25.2%D), 1,2,3-trichlorobenzene (-21.5%D), and bromoform (-26.6%D) in the continuing calibration associated with trip blank samples collected on 9/22/15 and 9/23/15; bromomethane (34.5%D), acetone (44.3%D), methyl acetate (-40.5%D), 2-butanone (41.9%D), bromoform (-28.7%D), 1,2-dibromo-3-chloropropane (-42.2%D), and 1,2,3-trichlorobenzene (-26.6%D) in the continuing calibration associated with TOP HAT EB; acetone 87.8%D) in the continuing calibration associated with samples in SDG 460-101771-1; and bromomethane (23.8%D) in the continuing calibration associated with samples in SDG 460-101970-1. Therefore, the sample results for these compounds were considered estimated with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples.

#### **Usability**

All volatile soil sample results were considered usable following data validation.

# **Summary**

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, comparability, and sensitivity. The volatile soil data

PARSONS

presented by TAL were 100% complete (i.e., usable). The validated volatile laboratory data are tabulated and presented in Attachment A-1.

#### 2.2 GROUNDWATER SAMPLES

Data review has been completed for data packages generated by TAL containing analytical results from groundwater samples collected from the site. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. Analytical results from these samples were contained within SDG 460-102788-1. The validated laboratory data are presented in Attachment A-2.

Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs for organic and inorganic data review. This data validation and usability report is presented by analysis type.

#### 2.2.1 Volatiles

The following items were reviewed for compliancy in the volatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- Laboratory method blank and trip blank contamination
- GC/MS instrument performance
- Initial and continuing calibrations
- Internal standard area counts and retention times.
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD precision and accuracy, LCS recoveries, continuing calibrations, and field duplicate precision as discussed below.

#### MS/MSD Precision and Accuracy

All of the MS/MSD precision RPD and accuracy %R) measurements for designated spiked project samples were considered acceptable and within QC limits with the exception of the low MS/MSD accuracy results for methylene chloride (79%R; QC limit 80-126%R) and

tetrachloroethene (49%R/49%R; QC limit 71-132%R) during the spiked analyses of sample THPMW-01. Validation qualification of this parent sample was not required.

### LCS Recoveries

All LCS recoveries were considered acceptable and within QC limits with the exception of the high LCS recoveries for bromomethane (152%R; QC limit 10-150%R) and chloroethane (174%R; QC limit 40-150%R) associated with the groundwater samples. Validation qualification of these samples was not required since these compounds were not detected.

# **Continuing Calibrations**

All continuing calibration compounds were compliant with a minimum RRF of 0.05 and a maximum %D within  $\pm 20\%$  with the exception of bromomethane (64.6%D) and chloroethane (51.7%D) in the continuing calibration associated with all groundwater samples except TRIP BLANK. Therefore, the sample results for these compounds which were nondetects were considered estimated and qualified "UJ" for the affected samples.

# Field Duplicate Precision

All field duplicate results were considered acceptable for sample THPMW-02 and its field duplicate sample THPMW-102 with the exception of the results for 2-butanone (6.5  $\mu$ g/L and nondetect, respectively) and acetone (15  $\mu$ g/L and nondetect, respectively). Therefore, these results were considered estimated with the positive results qualified "J" and the nondetected results qualified "UJ" for these samples.

#### **Usability**

All groundwater sample results were considered usable following data validation.

### Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, comparability, and sensitivity. The volatile groundwater data presented by TAL were 100% complete (i.e., usable). The validated volatile laboratory data are tabulated and presented in Attachment A-2.

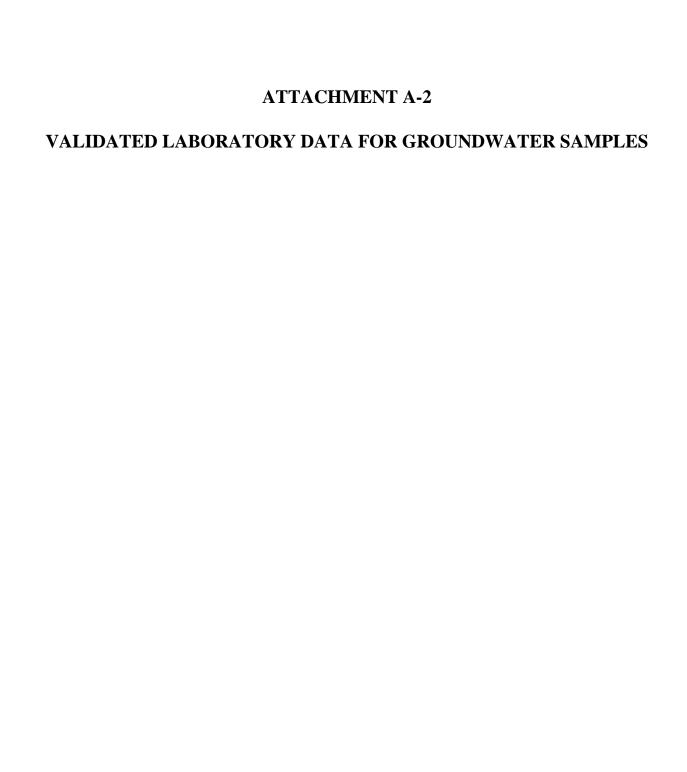
# ATTACHMENT A

# VALIDATED LABORATORY DATA

# ATTACHMENT A-1 VALIDATED LABORATORY DATA FOR SOIL SAMPLES

				Field Duplicate				
NYSDEC-Top		Location ID:	THPMW-01	THPMW-01	THPMW-01	THPMW-02	THPMW-02	THPMW-03
2015 Site Inve		Sample ID:	THPMW-01 (9-11)-20150922	THPMW-101 (9-11)-20150922	THPMW-01 (21-23)-20150922	THPMW-02 (12'-14')-20150923	THPMW-02 (17'-19')-20150924	THPMW-03(14'-15')-20150924
Validated Soil	Analytical Data	Lab Sample Id:	460-101583-1	460-101583-2	460-101583-3	460-101691-1	460-101691-2	460-101771-1
		Source:	TALED	TALED	TALED	TALED	TALED	TALED
		SDG:	4601015831	4601015831	4601015831	4601016911	4601016911	4601017711
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	9/22/2015 11:00	9/22/2015 12:01	9/22/2015 14:00	9/23/2015 14:00	9/24/2015 9:00	9/24/2015 16:00
	T	Validated:	11/6/2015	11/6/2015	11/6/2015	11/6/2015	11/6/2015	11/6/2015
CAS NO.	COMPOUND	UNITS:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
	VOLATILES		0.04.77	0.00.44	4 **	0.04.77	0.00 ***	0.000.00
71-55-6	1,1,1-Trichloroethane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
79-34-5 76-13-1	1,1,2,2-Tetrachloroethane		0.94 U 0.94 U	0.89 U 0.89 U	1 U 1 U	0.84 U 0.84 U	0.82 U 0.82 U	0.77 U 0.77 U
79-00-5	1,1,2-Trichloro-1,2,2-Trifluoroethane 1,1,2-Trichloroethane		0.94 U 0.94 U	0.89 U 0.89 U	1 U	0.84 U 0.84 U	0.82 U 0.82 U	0.77 U
75-34-3	1,1-Dichloroethane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
75-34-3	1,1-Dichloroethane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
87-61-6	1,2,3-Trichlorobenzene		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
120-82-1	1,2,4-Trichlorobenzene		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
96-12-8	1,2-Dibromo-3-Chloropropane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
106-93-4	1,2-Dibromoethane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
95-50-1	1,2-Dichlorobenzene		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
107-06-2	1,2-Dichloroethane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
78-87-5	1,2-Dichloropropane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
541-73-1	1,3-Dichlorobenzene		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
106-46-7	1,4-Dichlorobenzene		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
123-91-1	1,4-Dioxane (P-Dioxane)		19 U	18 U	20 U	17 U	16 U	15 U
591-78-6	2-Hexanone		4.7 U	4.5 U	5.1 U	4.2 U	4.1 U	3.8 U
67-64-1	Acetone		4.7 U	4.5 U	5.1 U	4.2 U	4.1 U	3.8 UJ
71-43-2	Benzene		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
74-97-5	Bromochloromethane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
75-27-4	Bromodichloromethane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
75-25-2	Bromoform		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
74-83-9	Bromomethane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
75-15-0	Carbon Disulfide		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
56-23-5	Carbon Tetrachloride		0.94 U	0.89 U	1 U 1 U	0.84 U	0.82 U	0.77 U
108-90-7 75-00-3	Chlorobenzene Chloroethane		0.94 U 0.94 U	0.89 U 0.89 U	1 U	0.84 U 0.84 U	0.82 U 0.82 U	0.77 U 0.77 U
67-66-3	Chloroform		0.94 U 0.94 U	0.89 U	1 U	0.84 U 0.84 U	0.82 U 0.82 U	0.77 U
74-87-3	Chloromethane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
156-59-2	Cis-1,2-Dichloroethylene		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
10061-01-5	Cis-1,3-Dichloropropene		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
110-82-7	Cyclohexane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
124-48-1	Dibromochloromethane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
75-71-8	Dichlorodifluoromethane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
100-41-4	Ethylbenzene		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
179601-23-1	M,P-Xylenes		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
98-82-8	Isopropylbenzene (Cumene)		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
79-20-9	Methyl Acetate		4.7 U	4.5 U	5.1 U	4.2 U	4.1 U	3.8 U
78-93-3	Methyl Ethyl Ketone (2-Butanone)		4.7 U	4.5 U	5.1 U	4.2 U	4.1 U	3.8 U
108-10-1	Methyl Isobutyl Ketone		4.7 U	4.5 U	5.1 U	4.2 U	4.1 U	3.8 U
108-87-2	Methylcyclohexane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
75-09-2	Methylene Chloride		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
95-47-6	O-Xylene (1,2-Dimethylbenzene)		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
100-42-5 1634-04-4	Styrene Test Buttel Method Ether		0.94 U	0.89 U	1 U	0.84 U 0.84 U	0.82 U 0.82 U	0.77 U 0.77 U
127-18-4	Tert-Butyl Methyl Ether Tetrachloroethylene (PCE)		0.94 U 0.94 U	0.89 U 0.89 U	1 U 0.36 J	0.84 U 0.27 J		0.77 U 0.96
127-18-4	Toluene (PCE)		0.94 U 0.94 U	0.89 U 0.89 U	0.36 J 1 U	0.27 J 0.24 J	3.6 0.27 J	0.96 0.77 U
156-60-5	Trans-1,2-Dichloroethene		0.94 U 0.94 U	0.89 U 0.89 U	1 U	0.24 J 0.84 U	0.27 J 0.82 U	0.77 U
10061-02-6	Trans-1,3-Dichloropropene		0.94 U 0.94 U	0.89 U 0.89 U	1 U	0.84 U 0.84 U	0.82 U 0.82 U	0.77 U
79-01-6	Trichloroethylene (TCE)		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
75-69-4	Trichlorofluoromethane		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
75-07-4	Vinyl Chloride		0.94 U	0.89 U	1 U	0.84 U	0.82 U	0.77 U
1	, ,			1.02 0		3.0.0	5.02 0	e
	•	•		•		•		

NYSDEC-To		Location ID:	THPMW-03	THPMW-004	FIELDQC	FIELDQC	FIELDQC
015 Site Inve		Sample ID:	THPMW-03(15'-17')-20150925	THPMW-004 (5'-6')-20150929	Top Hat EB-20150923	Trip Blank-20150922	Trip Blank-20150923
alidated Soil	Analytical Data	Lab Sample Id:	460-101771-2	460-101970-1	460-101766-1	460-101583-4	460-101766-2
		Source:	TALED	TALED	TALED	TALED	TALED
		SDG:	4601017711	4601019701	4601016911	4601015831	4601016911
		Matrix:	SOIL	SOIL	WATER	WATER	WATER
		Sampled:	9/25/2015 9:00	9/29/2015 11:00	9/23/2015 8:00	9/22/2015 14:00	9/23/2015 8:00
140.10	COMPOUND	Validated:	11/6/2015	11/6/2015	11/6/2015	11/6/2015	11/6/2015
AS NO.		UNITS:	ug/kg	ug/kg	ug/l	ug/l	ug/l
	VOLATILES		0.74 11	0.02.11	1.17	1 U	1.77
1-55-6 9-34-5	1,1,1-Trichloroethane		0.74 U 0.74 U	0.93 U 0.93 U	1 U	1 U 1 UJ	1 U 1 UJ
9-34-5 5-13-1	1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-Trifluoroethane		0.74 U 0.74 U	0.93 U 0.93 U	1 U 1 U	1 UJ 1 U	1 UJ 1 U
9-00-5	1.1.2-Trichloroethane		0.74 U	0.93 U	1 U	1 U	1 U
i-34-3	1,1-Dichloroethane		0.74 U 0.74 U	0.93 U	1 U	1 U	1 U
5-35-4	1,1-Dichloroethene		0.74 U	0.93 U	1 U	1 U	1 U
7-61-6	1,2,3-Trichlorobenzene		0.74 U	0.93 U	1 UJ	1 UJ	1 UJ
20-82-1	1,2,4-Trichlorobenzene		0.74 U	0.93 U	1 U	1 U	1 U
5-12-8	1,2-Dibromo-3-Chloropropane		0.74 U	0.93 U	1 UJ	1 U	1 U
0-12-8 06-93-4	1,2-Dibromo-3-Chioropropane 1,2-Dibromoethane	1	0.74 U 0.74 U	0.93 U 0.93 U	1 UJ 1 U	1 U 1 U	1 U 1 U
5-50-1	1,2-Dichlorobenzene		0.74 U 0.74 U	0.93 U	1 U	1 U	1 U
07-06-2	1,2-Dichloroethane		0.74 U	0.93 U	1 U	1 U	1 U
3-87-5	1,2-Dichloropropane		0.74 U	0.93 U	1 U	1 U	1 U
41-73-1	1,3-Dichlorobenzene	1	0.74 U	0.93 U	1 U	1 U	1 U
)6-46-7	1,4-Dichlorobenzene	1	0.74 U	0.93 U	1 U	1 U	1 U
23-91-1	1,4-Dioxane (P-Dioxane)		15 U	19 U	50 U	50 U	50 U
91-78-6	2-Hexanone		3.7 U	4.7 U	5 U	5 U	5 U
7-64-1	Acetone		12 J	4.7 U	5 UJ	5 U	5 U
-43-2	Benzene		0.74 U	0.93 U	1 U	1 U	1 U
1-97-5	Bromochloromethane		0.74 U	0.93 U	1 U	1 U	1 U
5-27-4	Bromodichloromethane		0.74 U	0.93 U	0.18 Ј	1 U	1 U
5-25-2	Bromoform		0.74 U	0.93 U	1 UJ	1 UJ	1 UJ
4-83-9	Bromomethane		0.74 U	0.93 UJ	1 UJ	1 U	1 U
5-15-0	Carbon Disulfide		0.74 U	0.93 U	1 U	1 U	1 U
6-23-5	Carbon Tetrachloride		0.74 U	0.93 U	1 U	1 U	1 U
08-90-7	Chlorobenzene		0.74 U	0.93 U	1 U	1 U	1 U
5-00-3	Chloroethane		0.74 U	0.93 U	1 U	1 U	1 U
7-66-3	Chloroform		0.74 U	0.93 U	0.38 J	1 U	1 U
4-87-3	Chloromethane		0.74 U	0.93 U	1 U	1 U	1 U
56-59-2	Cis-1,2-Dichloroethylene		0.74 U	0.93 U	1 U	1 U	1 U
0061-01-5	Cis-1,3-Dichloropropene		0.74 U	0.93 U	1 U	1 U	1 U
0-82-7	Cyclohexane		0.74 U	0.93 U	1 U	1 U	1 U
24-48-1	Dibromochloromethane		0.74 U	0.93 U	1 U	1 U	1 U
5-71-8	Dichlorodifluoromethane		0.74 U	0.93 U	1 U	1 U	1 U
00-41-4	Ethylbenzene		0.74 U	0.93 U	1 U	1 U	1 U
79601-23-1	M,P-Xylenes		0.74 U	0.93 U	1 U	1 U	1 U
3-82-8	Isopropylbenzene (Cumene)		0.74 U	0.93 U	1 U	1 U	1 U
9-20-9	Methyl Acetate		3.7 U	4.7 U	5 UJ	5 U	5 U
3-93-3	Methyl Ethyl Ketone (2-Butanone)		2.5 J	4.7 U	5 UJ	5 U	5 U
08-10-1	Methyl Isobutyl Ketone	1	3.7 U	4.7 U	5 U	5 U	5 U
8-87-2	Methylcyclohexane	1	0.74 U	0.93 U	1 U	1 U	1 U
5-09-2	Methylene Chloride		0.74 U	0.93 U	1 U	1 U	1 U
5-47-6	O-Xylene (1,2-Dimethylbenzene)		0.74 U	0.93 U	1 U	1 U	1 U
00-42-5	Styrene		0.74 U	0.93 U	1 U	1 U	1 U
34-04-4	Tert-Butyl Methyl Ether	1	0.74 U	0.93 U	1 U	1 U	1 U
7-18-4	Tetrachloroethylene (PCE)		0.33 J	1.7	1 U	1 U	1 U
08-88-3	Toluene		0.74 U	0.33 J	1 U	1 U	1 U
56-60-5	Trans-1,2-Dichloroethene	1	0.74 U	0.93 U	1 U	1 U	1 U
0061-02-6	Trans-1,3-Dichloropropene	1	0.74 U	0.93 U	1 U	1 U	1 U
9-01-6	Trichloroethylene (TCE)	1	0.74 U	0.93 U	1 U	1 U	1 U
5-69-4	Trichlorofluoromethane	1	0.74 U	0.93 U	1 U	1 U	1 U
5-01-4	Vinyl Chloride	1	0.74 U	0.93 U	1 U	1 U	1 U



					Field Duplicate		
NYSDEC-To 2015 Site Invo Validated Wa		Location ID: Sample ID: Lab Sample Id:	THPMW-01 THPMW-01-20151012 460-102788-1	THPMW-02 THPMW-02-20151013 460-102788-2	THPMW-02 THPMW-102-20151013 460-102788-3	THPMW-03 THPMW-03-20151013 460-102788-4	FIELDQC Trip Blank-20151013 460-102788-5
		Source:	TALED	TALED	TALED	TALED	TALED
		SDG:	4601027881	4601027881	4601027881	4601027881	4601027881
		Matrix:	WATER	WATER	WATER	WATER	WATER
		Sampled: Validated:	10/12/2015 11:25 11/6/2015	10/13/2015 7:00 11/6/2015	10/13/2015 7:15 11/6/2015	10/13/2015 8:15 11/6/2015	10/13/2015 8:15 11/6/2015
CAS NO.	COMPOUND	UNITS:	11/0/2013	11/0/2013	11/0/2013	11/0/2013	11/0/2013
Cristio.	VOLATILES	CIVIIS.					
71-55-6	1,1,1-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	1 U	1 U	1 U
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	1 U	1 U	1 U	1 U	1 U
79-00-5	1,1,2-Trichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U
75-34-3	1,1-Dichloroethane	ug/l	1 U	1 U	1 U	1 U	1 U
75-35-4	1,1-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1 U 1 U	1 U	1 U
96-12-8 106-93-4	1,2-Dibromo-3-Chloropropane 1,2-Dibromoethane	ug/l ug/l	1 U 1 U	1 U 1 U	1 U 1 U	1 U 1 U	1 U 1 U
95-50-1	1,2-Dichlorobenzene	ug/l ug/l	1 U	1 U	1 U	1 U	1 U
107-06-2	1,2-Dichloroethane	ug/l ug/l	1 U	1 U	1 U	1 U	1 U
78-87-5	1,2-Dichloropropane	ug/l	1 U	1 U	1 U	1 U	1 U
541-73-1	1,3-Dichlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U
106-46-7	1,4-Dichlorobenzene	ug/l	1 U	1 U	1 U	1 U	1 U
123-91-1	1,4-Dioxane (P-Dioxane)	ug/l	50 U	50 U	50 U	50 U	50 U
591-78-6	2-Hexanone	ug/l	5 U	5 U	5 U	5 U	5 U
67-64-1	Acetone	ug/l	5 U	15 J	5 UJ	5 U	5 U
71-43-2	Benzene	ug/l	1 U	0.12 J	1 U	1 U	1 U
74-97-5	Bromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U
75-27-4	Bromodichloromethane	ug/l	1 U	1 U	1 U	1 U	1 U
75-25-2	Bromoform	ug/l	1 U	1 U	1 U	1 U	1 U
74-83-9	Bromomethane	ug/l	1 UJ	1 UJ	1 UJ	1 UJ	1 U
75-15-0	Carbon Disulfide	ug/l	1 U	1 U	1 U	1 U	1 U
56-23-5 108-90-7	Carbon Tetrachloride Chlorobenzene	ug/l	1 U 1 U	1 U 1 U	1 U 1 U	1 U 1 U	1 U 1 U
75-00-3	Chloroethane	ug/l ug/l	1 UJ	1 UJ	1 UJ	1 UJ	1 U
67-66-3	Chloroform	ug/l	0.66 J	8.3	8.7	1.2	1 U
74-87-3	Chloromethane	ug/l	1 U	1 U	1 U	1 U	1 U
156-59-2	Cis-1,2-Dichloroethylene	ug/l	2	1 U	1 U	1 U	1 U
10061-01-5	Cis-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U
110-82-7	Cyclohexane	ug/l	1 U	1 U	1 U	1 U	1 U
124-48-1	Dibromochloromethane	ug/l	1 U	1 U	1 U	1 U	1 U
75-71-8	Dichlorodifluoromethane	ug/l	1 U	1 U	1 U	1 U	1 U
100-41-4	Ethylbenzene	ug/l	1 U	0.6 J	0.54 J	1 U	1 U
179601-23-1	M,P-Xylenes	ug/l	1 U	0.38 J	0.42 J	0.34 J	1 U
98-82-8	Isopropylbenzene (Cumene)	ug/l	1 U	0.41 J	1 U	1 U	1 U
79-20-9	Methyl Acetate	ug/l	5 U	5 U	5 U	5 U	5 U
78-93-3 108-10-1	Methyl Ethyl Ketone (2-Butanone) Methyl Isobutyl Ketone	ug/l	5 U 5 U	6.5 J 5 U	5 UJ 5 U	5 U 5 U	5 U 5 U
108-10-1	Methylcyclohexane	ug/l	1 U	0.28 J	1 U	3 U 1 U	1 U
75-09-2	Methylene Chloride	ug/l ug/l	1 U	0.28 J 0.32 J	1 U	1 U	1 U
95-47-6	O-Xylene (1,2-Dimethylbenzene)	ug/l	1 U	2.3	2.4	1 U	1 U
100-42-5	Styrene	ug/l	1 U	1 U	1 U	1 U	1 U
1634-04-4	Tert-Butyl Methyl Ether	ug/l	1 U	0.34 J	0.4 J	1 U	1 U
127-18-4	Tetrachloroethylene (PCE)	ug/l	56	3.1	3.2	10	1 U
108-88-3	Toluene	ug/l	1 U	0.38 J	0.35 J	0.42 J	1 U
156-60-5	Trans-1,2-Dichloroethene	ug/l	1 U	1 U	1 U	1 U	1 U
10061-02-6	Trans-1,3-Dichloropropene	ug/l	1 U	1 U	1 U	1 U	1 U
79-01-6	Trichloroethylene (TCE)	ug/l	0.43 J	1 U	0.26 J	0.5 J	1 U
75-69-4	Trichlorofluoromethane	ug/l	1 U	1 U	1 U	1 U	1 U
75-01-4	Vinyl Chloride	ug/l	1 U	1 U	1 U	1 U	1 U

# APPENDIX B DIG SAFELY NEW YORK TICKETS INFORMATION

File:

#### Ashton, Edward J

From:

ny@occinc.com

Sent:

Friday, September 11, 2015 8:26 AM

To:

onecall1@aquiferdrilling.com

Subject:

Ticket: 152540235

New York 811

Send To: C\_EMAIL

Seq No: 262

Ticket No: 152540235 ROUTINE

Start Date: 9/16/15 Time: 7:00 AM

Lead Time: 20

State: NY

County: KINGS

Place: BROOKLYN

Dig Street: GRAHAM AVE

Address: 152

Nearest Intersecting Street: JOHNSON AVE Second Intersecting Street: MONTROSE AVE

Type of Work

: SOIL BORINGS

Type of Equipment: DRILL RIG

Work Being Done For: PARSONS

In Street:

On Sidewalk: X Private Property: X

Other:

On Property Location if Private:

Front: X Rear: X

Side: X

Location of Work: MARK FRONT REAR AND SIDE OF PRIVATE PROPERTY TO INCLUDE

: ENTIRE LOT AND SIDE WALK FRONTING PROPERTY

Remarks:

Nad: Lat: Lon:

Zone:

ExCoord NW Lat:

40.7083537 Lon:

-73.9450291 SE Lat:

40.7056051 Lon:

-73.9408628

: AQUIFER DRILLING AND TESTING Best Time:

Contact Name: SHAWN MILLER

Phone: (516)616-6026

Field Contact: SHAWN MILLER

Phone: (516)616-6026

Caller Address: 75 EAST 2ND STREET

Fax Phone:

MINEOLA, NY 11501

Email Address: onecall1@aquiferdrilling.com

Additional Operators Notified:

ATTNY01 AT&T CORPORATION

(903)753-3145

BUG **NATIONAL GRID**  (718)270-5735

CBLBH01 CABLEVISION OF BROOKLYN

(800)262-8600

CEB CONSOLIDATED EDISON CO. OF N.Y.

TWCNYCO2 TIME WARNER CABLE - BROOKLYN

(800)778-9140 (800)262-8600

VBK **VERIZON COMMUNICATIONS** 

(855)661-3861

Link To Map for C\_EMAIL: https://urldefense.proofpoint.com/v2/url?u=http-3A\_\_ny.itic.occinc.com\_KN7Z-2DDF2-2DU2Z-2DTAK&d=BQICAw&c=Nwf-

pp4xtYRe0sCRVM8\_LWH54joYF7EKmrYldfxlq10&r=V1IrOCLbclYEx7h8kd24RpwNxrTNg3A1Jult6gjhuB8&m=wZE27G\_WQ2pQX4chO23ZbbXZ3zpKDtHRblAzpIORwIE&s=fmXDsFgLW0P9x3H7neBx9bk3k0L4Gncl2DciYlA0bBY&e=

Original Call Date: 9/11/15 Time: 8:05 AM Op: webusr

IMPORTANT NOTE: YOU MUST CONTACT ANY OTHER UTILITIES DIRECTLY.

#### Ashton, Edward J

From: ny@occinc.com

**Sent:** Friday, September 11, 2015 8:27 AM onecall1@aquiferdrilling.com

Subject: Ticket: 152540245

New York 811

Send To: C\_EMAIL Seq No: 269

Ticket No: 152540245 ROUTINE

Start Date: 9/16/15 Time: 7:00 AM Lead Time: 20

State: NY County: KINGS Place: BROOKLYN

Dig Street: JOHNSON AVE Address:

Nearest Intersecting Street: GRAHAM AVE Second Intersecting Street: HUMBOLDT ST

Type of Work : SOIL BORINGS
Type of Equipment : DRILL RIG
Work Being Done For: PARSONS

In Street: X On Sidewalk: X Private Property: Other: On Property Location if Private: Front: Rear: Side:

Location of Work: MARK STREET AND NORTH SIDE WALK FOR 250 FEET STARTING FROM

: INTERSECTION OF GRAHAM AVE HEADING EAST

Remarks:

Nad: Lat: Lon: Zone:

ExCoord NW Lat: 40.7076597 Lon: -73.9438066 SE Lat: 40.7056888 Lon:

-73.9407722

Company: AQUIFER DRILLING AND TESTING Best Time:
Contact Name: SHAWN MILLER Phone: (516)616-6026
Field Contact: SHAWN MILLER Phone: (516)616-6026

Caller Address: 75 EAST 2ND STREET Fax Phone:

MINEOLA, NY 11501

Email Address: onecall1@aquiferdrilling.com

Additional Operators Notified:

ATTNY01 AT&T CORPORATION (903)753-3145 BUG NATIONAL GRID (718)270-5735

CBLBH01 CABLEVISION OF BROOKLYN (800)262-8600
CEB CONSOLIDATED EDISON CO. OF N.Y (800)778-9140
TWCNYCO2 TIME WARNER CABLE - BROOKLYN (800)262-8600

VBK VERIZON COMMUNICATIONS (855)661-3861

Link To Map for C\_EMAIL: https://urldefense.proofpoint.com/v2/url?u=http-3A\_\_ny.itic.occinc.com\_AU2N-2D2ZD-2DFZ7-2DATW&d=BQICAw&c=Nwf-

pp4xtYRe0sCRVM8\_LWH54joYF7EKmrYldfxlq10&r=V1IrOCLbclYEx7h8kd24RpwNxrTNg3A1Jult6gjhuB8&m=wZE27G\_WQ2pQX4chO23ZbbXZ3zpKDtHRblAzpiORwlE&s=WElheFZB7Cu7nFYl6sdXr-rU9TTtfMhUCM\_-8QHOcBg&e=

Original Call Date: 9/11/15 Time: 8:08 AM Op: webusr

IMPORTANT NOTE: YOU MUST CONTACT ANY OTHER UTILITIES DIRECTLY.

# APPENDIX C BORING AND WELL CONSTRUCTION LOGS

					PARSONS ENGINEERING SCIENCE, INC.	BORING/	Sheet 1 of 2			
	tor <u>ADT,</u>			-	DRILLING RECORD		IPMW-01			
Driller:	Joe M			_		Location Descriptio	n:			
	r: <u>E</u> .Ash			_	PROJECT NAME: NYSDEC Top Hat Cleaners Investigation	See Site Plan				
Rig Typ	e: Geopr	obe 782	2DT	_	PROJECT NUMBER: 449485.02000					
				•						
GROL	INDWAT	ER OBS	SERVAT	IONS		Location Plan	<b>†</b>			
Water					Weather: Partly Cloudy-62'F		Ņ			
	22.5				Trainy Gloddy 621		',			
					Detections Charte Contamber 22, 2015/0720	O Cit- Di				
	10/12/15				Date/Time Start: September 22, 2015/0730	See Site Plan	1			
	0915									
Meas.					Date/Time Finish: September 22, 2015/1550					
From	TOC									
Sample	Sample	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC	COMMENTS			
Depth	I.D.		(inches)	(ppm)						
+3										
+2										
. 4										
+1					Hand cleared from 0 to 5 feet bgs.					
						2-in. Flush mount				
0					(0'-10") Concrete					
		L	L	L	(10"-5') dry,-, brown, FINE-MEDIUM SAND, trace silt, little fine-coarse gravel,		concrete (0'-1' bgs)			
1					trace cobbles. Encountered boulder at approx. 5 feet bgs.		₩_			
					(Fill)					
2					()					
2										
3										
							grout (1'-15' bgs)			
4							<b>4</b>			
							]			
5		10	24	17.5	(5'-7') dry, medium dense, brown, SILT, fine to medium sand, trace brick,					
		11			little fine to medium gravel, no stains or odor. (Fill)					
6		11			,					
		12								
7		8	16	15	(7) ON dry, moditive dense byening FINE TO MEDILIM CAND little site					
/			10	15	(7'-9') dry, medium dense, brown, FINE TO MEDIUM SAND, little silt,					
		9			trace fine gravel and brick, no stains or odor. (Fill)					
8		10								
		11								
9	THPMW-01	20	16	18.2	(9'-11') dry, medium dense, brown, FINE TO MEDIUM SAND, some silt,		Sch. 40 PVC, 2-in. dia.			
	(9-11)	14			trace fine gravel, no stains or odors. (SW/SM)		casing (0'- 20' bgs)			
10	,	12					·			
		15								
11		18	22	15.4	(11'-13') Same as interval (9'-11') with the exception of mica flakes present					
- ' '		15		10.4	and less silt. (SW)					
12			<del>                                     </del>	-	GIGIOGGIL (OVV)					
IΖ		16	1	-						
10		17	- 4	40.0	(40) 4EN 1					
13		29	14	13.8	(13'-15') dry, dense, brown, FINE TO COARSE SAND, some fine to medium gravel,	,				
		23			little coarse gravel, no order or stains. (SW/SP)					
14		21	<u></u>							
		19								
15		25	18	13.1	(15'-17') Same as interval (13'-15') (SW/SP)					
		23					bentonite chips			
16		18	<u> </u>				•			
10			<del>                                     </del>	-			(15'-17.5' bgs)			
17		13	10	10.5	(47) 400 days and another than 1	_	Ц			
17		13	16	12.5	(17'-19') dry to moist, medium dense, brown, FINE TO COARSE SAND,					
4.0		15			trace fine to coarse gravel, no stains or odor. (SW)		Fipro U.S. Silica Sand			
18		14		<u> </u>			(WG#2) (17.5'- 30' bgs)			
					COMMENTS:					
	SAMPLIN	G METH	OD		Collected soil samples THPMW-01 and 101 (duplicate sample) from 9-11 feet bgs and 21-23 fe	eet bas for VOCs via FPA	Method 8260 using			
	SS = SPLIT									
	A = AUGE		ICS		EPA Method 5035. Samples collected at 1100, 1201, and 1400; respectively. MS/MSD collected from 21-23 feet bgs.  Original well location abandoned and moved over to the south approx. 2 feet. Original location had hard object at approximately that could					
			NGO			гнач наги објестатаррго	Annately that COUIG			
	C = COREI	J			not be passed through. Moved to the south to avoid marked out gas lines.					

					PARSONS ENGINEERING SCIENCE, INC.	BORING/	Sheet 2 of 2
	tor <u>ADT, I</u>			-	DRILLING RECORD	WELL NO. T	
Driller:	Joe Mo			-		Location Description	n:
	or: E.Ash			_	PROJECT NAME: NYSDEC Top Hat Cleaners Investigation	See Site Plan	
Rig Typ	e: Geopro	obe 7822	2DT	-	PROJECT NUMBER: 449485.02000		
ODO	INIDVATAT			IONIO		L costion Dian	A
Water	UNDWAT	ER OBS	ERVAII	IONS	Manthers Portly Cloudy CVE	Location Plan	<b>↑</b>
	22.5				Weather: Partly Cloudy-62'F	-	Ŋ
Level Date	10/12/15				Date/Time Start: September 22, 2015/0730	See Site Pla	
Time	0915				Date i illie Start. September 22, 2013/0730	See Site Fla	1
Meas.	0313				Date/Time Finish: September 22, 2015/1550		
From	TOC				Date Filler India		
Sample		SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC	COMMENTS
Depth	I.D.		(inches)				
19		16					
		9	12	11	(19'-21') Same as interval (17'-19'). (SW)		20'
20		6					
		8					
21	THPMW-01	10	14	7.3	(21'-23') Same as interval (19'-21') except less fine to coarse gravel present. (SW)		
	(21-23)	9					Sch. 40 PVC, 2-in. dia.,
22		9					10-slot well screen.
		10					(20'-30' bgs)
23		12	18	11.8	(23'-25') wet, medium dense, brown, FINE TO MEDIUM SAND, trace silt,		
		7			little fine to medium gravel, no odor or stains. (SW/SP)		Fipro U.S. Silica Sand
24		10					(WG#2) (17.5'- 30' bgs)
		11	40		•		
25		12	16	9.2	(25'-26.5') Same as interval (23'-25'). (SW/SP)	1	<b>t</b>
200		10			(26.5'-27') wet, stiff, brown, SILT, some fine to medium sand, trace fine gravel,		
26		4			no odor or stains. (SW/ML)		
27		7	24	6.4	(071.00 FI) O-222- 22 (271.20 FI) (OM/OD)		
		10 3	24	6.4	(27'-28.5') Same as interval (25'-26.5'). (SW/SP)		
28		6			(28.5-29') Same as interval (26.5-29'). (SM/ML)		
20		15					
29		14	4	15.6	(29'-31') wet, dense, brown, FINE TO MEDIUM SAND, no odor or stains.		
		12		10.0	Last two-inches weathered rock. (SM)		
30		16			- Last the means as real (sm)		30'
		18					
31		22	24	11	(31'-32.3') wet, very dense, brown, FINE TO COARSE SAND, little silt,		Natural formation sand that
		11			trace fine gravel, no odor or stains. (SW). Spoon refusal at 32.3 feet bgs.		caved-in (30'- 32.3' bgs)
32		13					
		50/.3				4	
33					Boring Terminated at 32.3 feet bgs.		
L							
34							
- 05							
35							
26					1		
36							
37							
3/					+		
38					†		
- 30					+		
39					†		
					†		
40							
			1	<u>'</u>	COMMENTS:	-	
	SAMPLING	METHO	D		See page 1.		
	SS = SPLIT				_ , v		
	A = AUGEF		GS				
	C = CORED						
-							

Contractor ADT, Inc. Driller: Joe McGill Inspector: E. Ashton					PARSONS ENGINEERING SCIENCE, INC. DRILLING RECORD	Location Description	Sheet 1 of 2  IPMW-02  n:
-	er CME		Rig	•	PROJECT NAME: NYSDEC Top Hat Cleaners Investigation PROJECT NUMBER: 449485.02000	See Site Plan	
CDOL	JNDWAT		NEDV/AT	IONE		Location Plan	
Water	INDVA	EN OB	ENVAI	IONS		LOCALIOII FIAII	T N
Level	17.6				Weather: Party Cloudy-021		Ï
Date	10/12/15				Date/Time Start: September 29, 2015/1245	See Site Plan	1
Time	1200				Date i iliio dia ti	000 0110 110	•
Meas.					Date/Time Finish: September 29, 2015/1700		
	TOC				<u> </u>		
Sample	Sample	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC	COMMENTS
Depth	I.D.		(inches)	(ppm)			
+3							
+2							
+1					Hand cleared from 0 to 5 feet bgs.		
						2-in. Flush mount	
0			1		(0'-8") Concrete		
-					(8"-5") dry, -, brown, FINE TO MEDIUM SAND, trace silt, little fine to coarse gravel,		concrete (0'-1' bgs)
1					trace cobbles. (Fill)		
2							
2							
3							
3							
4							grout (1'-7' bgs)
4							<b>┩</b>
5		2	12	3	(5'-7') dry, loose, brown, FINE TO MEDIUM SAND, little silt, trace fine to		
3		2	12		medium gravel and brick, no odor or stains. (Fill)		
6		2			Theatain grave and brick, no odor or starts. (Till)		
		2					
7		8	24	7.7	(7'-9') dry, medium dense, brown, FINE TO MEDIUM SAND, some silt and		
		11			fine to medium gravel, trace coarse gravel, no odor or stains. (Fill)		
8		11					Sch. 40 PVC, 2-in. dia.
		10					casing (0'- 13' bgs)
9		9	12	4.4	(9'-10') dry, very stiff, brown, SILT, some fine to medium sand, little fine to medium		bentonite chips
		10			gravel, trace coarse gravel, mica flakes present, no odor or stains. (SM)		(7'-10' bgs)
10		19	6	7.5	(10'-12') dry, medium dense, brown, SILT, some fine to medium sand, little fine gravel	,	
		9			no odor or stains. (SM)		
11		7					
10		10	24	10.5	4401440 1		Fipro U.S. Silica Sand
12	THPMW-02	6	24	13.5	(12'-14') dry to moist, stiff, brown, SILT, some fine sand, little fine to coarse gravel,		(WG#2) (10'-24' bgs)
10	(12-14)	7			no odor or stains. (SM/ML).		
13		<u>8</u> 8	-			<del>                                   </del>	
14			<u> </u>	_	(1/1/15) Encountered encountefund at 1/1 has /E0/2 blass assets). Drilled three with	-	O-1- 40 D) (2-2-1
14		-	<del>-</del>	-	(14'-15') Encountered spoon refusal at 14' bgs (50/.3 blow counts). Drilled through object to 15' bgs. Same lithology observed from soil cuttings as seen at 12'-14' bgs.		Sch. 40 PVC, 2-in. dia.,
15		27	0	NA	(15'-17') No recovery. Rock in tip of spoon.		10-slot well screen
٥		11	<del></del>	14/7	The management of the state of		(13'-23' bgs)
16		10					
		10	<del>                                     </del>				
17	THPMW-02	16	24	9.6	(17'-19') moist to wet, very stiff, brown, SILT, some fine to medium sand,		
-	(17-19)	12	T		little fine to medium gravel, trace coarse gravel, no odor or stains. (SM)		
18	` -/	14			More wet than observed on soil at 18'-19' bgs.		
					COMMENTS:		
	SAMPLING	METH	OD		Collected soil samples THPMW-02 from 12-14 feet bgs and 17-19 feet bgs for VOCs via EPA Me	ethod 8260 using EPA Me	thod 5035.
	SS = SPLIT				Original well location had to be moved because well screen broke and filter sand moved into scre		
	A = AUGEF	CUTTIN	IGS		2 feet to the west. Second well location abandoned because auger breaking off in hole at 24 feet		•
	C = CORED	)			break through. Third well location 2 feet from second well location. Encountered rough drilling at		

0	ADT 1				PARSONS ENGINEERING SCIENCE, INC.	BORING/	Sheet 2 of 2
	tor ADT, I				DRILLING RECORD		1PMW-02
Driller:	Joe Mo r: E. Asht				DDO JECT NAME: NIVODEC Ton List Classical investigation	Location Description	n:
			Dia		PROJECT NAME: NYSDEC Top Hat Cleaners Investigation PROJECT NUMBER: 449485.02000	See Site Plan	
Rig Type: CME 55 Track Rig					PROJECT NOMBER: 445403.02000		
GRO	JNDWATE	R OBS	ERVATI	ONS		Location Plan	<b></b>
Water					Weather: Partly Cloudy-62'F		Ņ
Level	17.6						
Date	10/12/15				Date/Time Start: September 29, 2015/1245	See Site Plan	1
Time	1200						
Meas.					Date/Time Finish: September 29, 2015/1700		
From	TOC						
Sample	Sample I.D.	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC	COMMENTS
Depth 19	I.D.	18	(inches)	(ppm)			5. H.O.O., O. I.
13		23	12	8.8	l (19'-20') Same as interval 17'-19' bgs. (SM)		Fipro U.S. Silica Sand (WG#2) (10'-24' bgs)
20		21	12	0.0	(10 20) Curile with (0 10 10 10 10 10 10 10 10 10 10 10 10 10		(WG#2) (10-24 bgs)
		8	18	12.5	(20'-22') moist to wet, hard, brown, SILT, some fine sand, little fine to medium		
21		12			gravel, no odor or stains. (SM)	1	
		24			·		Sch. 40 PVC, 2-in. dia.,
22		15					10-slot well screen
		17	20	9	(22'-24') Same as interval 20'-22' bgs. (SM)		(13'-23' bgs)
23		20					
		20					
24		25		7.0			24'
25		27	9	7.8	(24'-25') Same as interval 20'-22' bgs. (SM)		
25		31	20	21.2	(051 071) 0 1 001 0011 (014)		
26		18 24	20	21.2	(25'-27') Same as interval 20'-22' bgs. (SM)		Natural Formation
20		15					(24'-30')
27		12					
		10	16	25.9	(27'-29') Same as interval 20'-22' bgs. (SM)		
28		10		20.0	(27 25) cano as martar 25 22 593. (5.11)		
		7					
29		7					
		10	12	15.1	(29'-30') Same as interval 20'-22' bgs except more wet and less silt and		
30		15			more fine to medium, sand, trace coarse gravel. Pre-dominantly silt. (SM)		30'
					Boring Terminated at 30 feet bgs.		
31							
22							
32							
33							
133							
34							
					†		
35							
36							
37							
20							
38							
39							
39							
40							
<del>-</del>					COMMENTS:		<u> </u>
	SAMPLING	METHO	D		See page 1.		
	SS = SPLIT S		_				
	A = AUGER		GS				
	C = CORED						

Contractor ADT, Inc. Driller: Joe McGill Inspector: E. Ashton					PARSONS ENGINEERING SCIENCE, INC. DRILLING RECORD  PROJECT NAME: NYSDEC Top Hat Cleaners Investigation	BORING/ WELL NO. TH Location Description See Site Plan	Sheet 1 of 2 IPMW-03	
	e CME		Rig		PROJECT NUMBER: 449485.02000	OGO GREET TOP		
GROUNDWATER OBSERVATIONS				IONS		Location Plan		
Water	INDWAT	EN OB	ENVAI	IONS	Weather: Partly Cloudy-70'F	Location Flair	Ť	
Level	18.20				realita.		Ϊ	
Date	10/12/15				Date/Time Start: September 24, 2015/1400	See Site Plan	ı	
Time	1430							
Meas.					Date/Time Finish: September 25, 2015/1245			
	TOC		_					
Sample	Sample I.D.	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC	COMMENTS	
Depth +3	1.D.		(inches)	(ppm)				
. 0								
+2								
+1					Hand cleared from 0 to 5 feet bgs.			
						2-in. Flush mount		
0					(0'-8") Concrete			
1					(8"-5") dry, -, brown, FINE TO MEDIUM SAND, some silt & fine to medium		concrete (0'-1' bgs)	
1			-		gravel, little boulders & concrete, fragments of brick, no odor or stains. (Fill)		■-	
2					no odor or starns. (Fin)			
3								
							grout (1'-7' bgs)	
4								
5		6	12		(5'-7') dry, medium dense, brown, FINE TO MEDIUM SAND, little silt, trace fine to			
•		6			medium gravel and concrete, no odor or stains. (Fill)			
6		8						
7		18 30	18	17.5	(7-9') dry, medium dense, brown, FINE TO MEDIUM SAND, some silt and			
1		13	10	17.5	fine to medium gravel, trace coarse gravel, no odor or stains. (Fill)			
8		14			The to meating raver, trace coarse graver, no odor or stains. (1111)		Sch. 40 PVC, 2-in. dia.	
		49					casing (0'- 13' bgs)	
9		33	12	19.8	(9'-10') dry to moist very dense, brown, FINE TO MEDIUM SAND, some silt,		bentonite chips	
		34			little fine to medium gravel, trace coarse gravel, no odor or stains. (Fill)		(7'-9.5' bgs)	
10		5	18	17.5	(10'-12') dry to moist, medium dense, brown, FINE TO MEDIUM SAND, some			
44		6			silt, little fine to coarse gravel, no odor or stains. (SM)			
11		8						
12		9 10	18	19.1	(12'-14') dry to moist, medium dense, brown, FINE TO MEDIUM SAND, some silt,		Fipro U.S. Silica Sand (WG#2) (9.5'-23.9' bgs)	
14		10	-10		little fine to coarse gravel, no odor or stains. (SM)		(**G#2) (3.3-23.9 DgS)	
13		13			(9.07)			
		13						
14	THPMW-03	18	12	23.5	(14'-15') Same as interval 12'-14' bgs. (SM)		Sch. 40 PVC, 2-in. dia.,	
4-	(14-15)	15	6.	4- ·			10-slot well screen	
15	THPMW-03	6	24		(15-17) dry to moist, very stiff, brown, SILT, some fine to medium sand, little fine to		(13'-23' bgs)	
16	(15-17)	13			medium gravel, trace coarse gravel, no odor or stains. (SM)			
16		11 10						
17		17	20	17.9	(17'-18') wet, dense, brown, FINE TO MEDIUM SAND, some silt, little day, trace			
.,		14			fine to coarse gravel, no odor or stains. (SM/SC)			
18		25			(18'-19') moist to wet, hard, brown, SILT, some fine to medium sand, little fine to			
		_			COMMENTS:			
	SAMPLING	METH	DD		Collected soil samples THPMW-03 from 14-15 feet bgs and 15-17 feet bgs for VOCs via EPA Me	ethod 8260 using EPA Me	thod 5035.	
	SS = SPLIT	SPOON						
	A = AUGEF		IGS					
	C = CORED	)						

					PARSONS ENGINEERING SCIENCE, INC.	BORING/	Sheet 2 of 2
	tor ADT, I				DRILLING RECORD		IPMW-03
Driller:	Joe M c					Location Descriptio	n:
	r: E. Asht		<u> </u>	•	PROJECT NAME: NYSDEC Top Hat Cleaners Investigation	See Site Plan	
Rig i yp	ex CME5	5 Irack	Rig		PROJECT NUMBER: 449485.02000		
CDO	JNDWATE		EDV/ATI	ONC		Location Plan	<u> </u>
Water	JNDWATE	ER UBSI	ERVAII	ONS	Westhern Portly Cloudy 70/E	Location Plan	<b>↑</b>
	10.00				Weather: Partly Cloudy-70'F	1	Ŋ
Level	18.20 10/12/15				Detections Starts Contamber 24, 2015/1400	See Site Plar	,
Date					Date/Time Start: September 24, 2015/1400	See Site Plan	1
Time	1430				Detections Finish O OF CONFINE		
Meas.	TOC				Date/Time Finish: September 25, 2015/1245		
From Sample		SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC	COMMENTS
Depth	I.D.	JF1	(inches)		FIELD IDENTIFICATION OF MATERIAL	SCHEWATIC	COMMENTS
19	1.5.	26	(mana)	(PPIII)	medium gravel, no odor or stains. (SM/Till)		Fipro U.S. Silica Sand
		17	10	21.9	(19-21') wet, very stiff, brown, SILT, some fine to medium sand, little fine		(WG#2) (9.5'-23.9' bgs)
20		14	10	21.5	to coarse gravel, no odor or stains. (SM/Till)		(WG#2) (9.5-23.9 bgs)
		20			Course graves, no oder or starre. (GW// Till)		
21		16				<b>│</b>	
		10	14	10 /	(21'-23') wet, very stiff, brown, SILT, some fine to medium sand, little fine to coarse		0-1- 40 0 40 0 1
22		10	14	13.4			Sch. 40 PVC, 2-in. dia.,
		17			gravel, no odor or stains. (SM/Till)		10-slot well screen
23		24					(13'-23' bgs)
		13	6	23.5	(23'-23.9') moist to wet, hard, brown, SILT, some fine to medium sand, little fine to		
24		50/.5	0	25.5	coarse gravel, no odor or stains. (SM/Till).		00.01
24		307.3			Boring Terminated at 23.9 feet bgs.		23.9'
25					Doming Terminated at 25.5 feet bys.		
26					Spoon refusal at 23.9 feet bgs. Fragments of rock in tip of spoon.		
20					Attempted to drill through zone with no success. Could not advance further		
27					in borehole. Discussed with Parsons PM and it was decided to install well		
28					from 13 to 23 feet bgs. Water identified at 17 to 19 feet bgs.		
20							
29							
29							
30							
30							
31							
31							
32							
32							
33							
- 33							
34							
<i>3</i> 4							
35							
- 33							
36							
- 50							
37							
- 57							
38							
- 50							
39							
- 55							
40							
<u></u>					COMMENTS:	1	1
	SAMPLING	METUO	ח				
	SS = SPLIT S				See page 1.		
	A = AUGER		29				
	C = CORED	COTTING					
	J JOINED						

					PARSONS ENGINEERING SCIENCE, INC.	BORING/ Sheet 1 of 1		
	tor <u>ADT, I</u>			•	DRILLING RECORD		IPMW-04	
Driller:		Johnson	1	•	DDO IFOT NAME. NIVODEO Tore list Observed by continuing	Location Description	า:	
-	r: E.Ash e: Geopro		Λ <b>Λ</b>	•	PROJECT NAME: NYSDEC Top Hat Cleaners Investigation PROJECT NUMBER: 449485.02000	See Site Plan		
i wy i yp	<del>с</del> <u>Сворго</u>	JUC 4201	VI		1100E01 110111 E11. 443405.02000	1		
GROL	JNDWATI	ER OBS	ERVAT	IONS		Location Plan	<b>A</b>	
Water					Weather: Partly Cloudy-70'F		Ņ	
	NA						1	
	NA				Date/Time Start: September 25, 2015/1340	See Site Plan		
	NA				<b>-</b>			
Meas. From	NA				Date/Time Finish: September 29, 2015/1600	-		
	Sample	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC	COMMENTS	
Depth	I.D.	G I	(inches)		THE DIDENTIFICATION OF MATERIAL	CONLINATIO	OCIVINILIATO	
+3			,					
+2								
+1					Hand cleared from 0 to 5 feet bgs.			
0					(0'-6") Concrete			
0					(6"-12") dry, -, brown, FINE TO COARSE SAND, some brick and fine to coarse			
1					gravel, no odor or stains. (Fill)			
					(12"-15") concrete			
2					(15"-5") dry, -, brown, FINE TO COARSE SAND, some brick and fine to coarse			
					gravel, no odor or stains. (Fill)			
3								
4								
4								
5		NA	4	13.1	(5'-6') dry, -, brown, FINE TO COARSE SAND, some fine to medium gravel,			
		14/3	-		trace brick, no odor or stains. (Fill).			
6					Encountered refusal at approx. 6 feet bgs. Attempted to drill/break through it.			
					No success. Offset twice from original drilling location; 1) 2.5 feet to the west and			
7					2.5 feet to the east. At each location, refusal was encountered			
					and break through was unsuccessful. Refusal encountered at 4.9 feet bgs			
8					and 6 feet bgs, respectively. Used various drilling tools to attempt break through.			
9					Spoke with Parsons PM and NYSDEC PM and it was decided that no well will be installed in court yard behind Top Hat Cleaners. Boreholes backfilled with			
3					soil cuttings and concrete cap place over borehole.			
10					son danings and contract day place over bolidion.			
11								
40								
12								
13								
ıs								
14								
15								
16								
17								
1/								
18								
-			<u>.                                    </u>	<u> </u>	COMMENTS:			
	SAMPLING	METHO	DD		No soil samples for analysis.			
	SS = SPLIT	SPOON						
	A = AUGER		GS					
	C = CORED							

#### APPENDIX D

#### WELL DEVELOPMENT LOGS

Page 1 of 2

SITE NAME PROJECT		at Cleaners Investiç	,		
WELL NUM	IBER: THPMW-01		WEATHE	R: Cloudy-7	70's
DATE:	9/28/2015 and 9/30/15		TIME:	0915 and 10	
DEVELOPE				of ADT, Inc	
	Danial Johnson			of ADT, Inc	<u>).                                    </u>
DESCRIPT	ION OF WELL				
	Depth:	30 feet TOC		Diameter:	2-inch
	en Depth:	20 to 30 feet	bgs	ı	
Deve	elopment Method:	Waterra Pum	p & Whale Pump with o	ledicate tubing	
GROHNDW	/ATER PURGING				
	atic Water Level:	22.	5		
One We	II Volume:				10 Volumes
2-	-Inch Casing:	7.5 Fee	et of Water x 0.16 Gallo	ns/Foot = 1.	2 Gallons 12 gals/min
3-	-Inch Casing:	Fee	et of Water x 0.36 Gallo	ns/Foot =	Gallons
4-	-Inch Casing:	Fee	et of Water x 0.65 Gallo	ns/Foot =	Gallons
Malaura	of annual desired	00	0-11	_	
	of groundwater purged: Device: Waterra Pump & Whale	80 Bump with dodies	Gallon	IS	
	/ater Disposition (e.g., contained		55 gal. drum		
r dige vv	rater Disposition (e.g., contained	).	oo gai. urum		
FIELD M	MEASUREMENTS				
	T				T
Time	Temp.	pН	Conductivity	Turbidity	_
	(Degrees C)		(mS/cm)	(NTUs)	Comments
0915 (9/28/15)	NA	NA	NA	NA	Surging well with PVC surge block
0925 (9/28/15)	NA	NA	NA	NA	Start development
0935 (9/28/15)	20.50	7.50	5.59	> 4,000	Initial measurement turbid
0940 (9/28/15)	NA	NA	NA	NA	Water stopped. Hole in tubing/replaced
0955 (9/28/15)	NA	NA NA	NA	NA	Restarted Pump
0333 (3/20/13)	IVA	INA	TVA	TVA	Purged dry, check valve clogged
1000 (9/28/15)	NA	NA	NA	NA	with fines.
1020 (9/28/15)	20.15	7.02	6.32	> 4,000	Steady flow established
1100 (9/28/15)	NA	NA	NA	NA	Check valve clogged with fines.
1120 (0/20/15)	20.69	6.70	6 94	> 4.000	Water appears to becoming less
1130 (9/28/15)	20.68	6.79	6.84	> 4,000	turbid
	20.20	6.69	6.32	3,567	
1145 (9/28/15)		6.53	5.77	3,675	
1215 (9/28/15)	20.35				
1215 (9/28/15)	20.39	6.59	5.47	3,338	Stannad dayalanment Demoved
1145 (9/28/15) 1215 (9/28/15) 1230 (9/28/15) 1245 (9/28/15)			5.47	3,338 3,243	Stopped development. Removed 30 gals. (9-28-15)

Page 2 of 2

SITE NAME:	NYSDEC Top Hat Cle 1UMBER: 449485.02000	eaners Investigat	ion				
PROJECT N	UMBER: 449485.02000						
WELL NUME	9/28/2015 and 9/30/15		WEATHE	Cloudy-70 0915 and 10	0's 45		
DEVELOPE	R: Carmine NaVarra  Danial Johnson			of ADT, Inc. ADT, Inc.			
	Daniai Johnson			OI AD1, INC.			
Time	Temp. (Degrees C)	pН	Conductivity (mS/cm)	Turbidity (NTUs)	Comments		
On 9/30/15, put	whale pump into well and developed	d further.					
045 (9/30/15)	NA	NA	NA	NA	Started development		
110 (9/30/15)	21.69	6.35	4.97	2,274			
140 (9/30/15)	21.28	6.89	5.03	13.0			
215 (9/30/15)	21.83	6.86	4.86	17.9	Stopped development. Removed 50 gals.		

Page 1 of 1

	NUMBER: 449485.02000	0			
WELL NUM	BER: THPMW-02		WEATH	IER: Cloudy-	70'0
DATE:	9/30/2015 and 10/1/15		TIME:	All Day Acti	
DATE	9/30/2013 and 10/1/13			All Day Act	ivity
DEVELOPE	:R: Danial Johnson			of ADT, In	c.
	Ed Ashton			of Parsons	
	ON OF WELL	00.6		<b>D</b>	2: 1
	Depth:	23 feet TOC		Diameter:	2-inch
	en Depth:	13 to 23 feet b	•	_	
Deve	lopment Method:	waterra Pum	o & Bailer with dedica	<u>te</u> d rope and tub	ın <u>g</u>
GROUNDW	ATER PURGING				
Initial Sta	atic Water Level:	13.1	10		
One Wel	I Volume:				10 Volumes
2-	Inch Casing:	<u>9.9</u> Fee	t of Water x 0.16 Gal	lons/Foot = 1	.58 Gallons 15.84 gals/min
3-	Inch Casing:	Fee	t of Water x 0.36 Gal	lons/Foot =	Gallons
4-	Inch Casing:	Fee	t of Water x 0.65 Gal	lons/Foot =	Gallons
	of groundwater purged:	<u>17.5</u>		ons	
	Device: Waterra Pump & Ba				
	ater Disposition (e.g., contai	ned):	55 gal. drum		
Purge W					
	IEASUREMENTS				
	Temp.	pH	Conductivity	Turbidity	1
FIELD M		рН	Conductivity (mS/cm)	Turbidity (NTUs)	Comments
FIELD M	Temp.	рН		1	Comments Started development with Waterra
FIELD M Time  340 (9/30/15)	Temp.	pH NA		1	
FIELD M Time  340 (9/30/15) 350 (9/30/15)	Temp. (Degrees C)		(mS/cm)	(NTUs)	Started development with Waterra
FIELD M Time  340 (9/30/15)	Temp. (Degrees C)	NA NA	(mS/cm)	(NTUs)	Started development with Waterra pump  Well dry.
FIELD M Time  340 (9/30/15) 350 (9/30/15)	Temp. (Degrees C) NA 23.50	NA 9.05 NA	(mS/cm)  NA  0.259  NA	(NTUs) NA >4,000 NA	Started development with Waterra pump  Well dry. Pump well dry again. Switched to
FIELD M Time  340 (9/30/15) 350 (9/30/15) 420 (9/30/15) 430 (9/30/15)	Temp. (Degrees C) NA 23.50	NA 9.05	(mS/cm)  NA  0.259	(NTUs) NA >4,000	Started development with Waterra pump  Well dry.  Pump well dry again. Switched to bailer for development
FIELD M Time  340 (9/30/15) 350 (9/30/15) 420 (9/30/15)	Temp. (Degrees C) NA 23.50 NA	NA 9.05 NA NA	(mS/cm)  NA  0.259  NA  NA	(NTUs) NA >4,000 NA NA	Started development with Waterra pump  Well dry.  Pump well dry again. Switched to bailer for development  Added potable water to well,
FIELD M Time  340 (9/30/15) 350 (9/30/15) 420 (9/30/15) 430 (9/30/15)	Temp. (Degrees C) NA 23.50	NA 9.05 NA	(mS/cm)  NA  0.259  NA	(NTUs) NA >4,000 NA	Started development with Waterra pump  Well dry.  Pump well dry again. Switched to bailer for development  Added potable water to well, surged, and purged dry
FIELD M Time  340 (9/30/15) 350 (9/30/15) 420 (9/30/15) 430 (9/30/15) 510 (9/30/15) 545 (9/30/15)	Temp. (Degrees C) NA 23.50 NA	NA 9.05 NA NA	(mS/cm)  NA  0.259  NA  NA	(NTUs) NA >4,000 NA NA	Started development with Waterra pump  Well dry.  Pump well dry again. Switched to bailer for development  Added potable water to well,
FIELD M Time  340 (9/30/15) 350 (9/30/15) 420 (9/30/15) 430 (9/30/15) 510 (9/30/15)	Temp. (Degrees C)  NA 23.50  NA  NA	NA 9.05 NA NA	(mS/cm)  NA  0.259  NA  NA  NA	(NTUs)  NA >4,000  NA  NA  NA	Started development with Waterra pump  Well dry.  Pump well dry again. Switched to bailer for development  Added potable water to well, surged, and purged dry  Added potable water to well,
FIELD M Time  340 (9/30/15) 350 (9/30/15) 420 (9/30/15) 430 (9/30/15) 510 (9/30/15) 545 (9/30/15) 515 (9/30/15)	Temp. (Degrees C)  NA 23.50  NA  NA	NA 9.05 NA NA	(mS/cm)  NA  0.259  NA  NA  NA	(NTUs)  NA >4,000  NA  NA  NA	Started development with Waterra pump  Well dry. Pump well dry again. Switched to bailer for development Added potable water to well, surged, and purged dry Added potable water to well, surged, and purged dry
FIELD M Time  340 (9/30/15) 350 (9/30/15) 420 (9/30/15) 430 (9/30/15) 510 (9/30/15) 545 (9/30/15)	Temp. (Degrees C)  NA 23.50  NA  NA  NA	NA 9.05 NA NA NA	(mS/cm)  NA  0.259  NA  NA  NA  NA	(NTUs)  NA >4,000  NA  NA  NA	Started development with Waterra pump  Well dry. Pump well dry again. Switched to bailer for development  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well,
FIELD M Time  340 (9/30/15) 350 (9/30/15) 420 (9/30/15) 430 (9/30/15) 510 (9/30/15) 545 (9/30/15) 545 (9/30/15)	Temp. (Degrees C)  NA 23.50  NA  NA  NA	NA 9.05 NA NA NA	(mS/cm)  NA  0.259  NA  NA  NA  NA	(NTUs)  NA >4,000  NA  NA  NA	Started development with Waterra pump  Well dry. Pump well dry again. Switched to bailer for development  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry
FIELD M Time  340 (9/30/15) 350 (9/30/15) 420 (9/30/15) 430 (9/30/15) 510 (9/30/15) 545 (9/30/15) 515 (9/30/15)	Temp. (Degrees C)  NA 23.50  NA  NA  NA  NA  NA	NA 9.05 NA NA NA NA NA NA	(mS/cm)  NA  0.259  NA  NA  NA  NA  NA  NA	NA >4,000 NA NA NA NA NA	Started development with Waterra pump  Well dry. Pump well dry again. Switched to bailer for development  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well,
FIELD M Time  340 (9/30/15) 350 (9/30/15) 420 (9/30/15) 430 (9/30/15) 510 (9/30/15) 545 (9/30/15) 545 (9/30/15)	Temp. (Degrees C)  NA 23.50  NA  NA  NA  NA	NA 9.05 NA NA NA NA NA	(mS/cm)  NA  0.259  NA  NA  NA  NA	(NTUs)  NA >4,000  NA  NA  NA  NA	Started development with Waterra pump  Well dry. Pump well dry again. Switched to bailer for development  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry
FIELD M Time  340 (9/30/15) 350 (9/30/15) 420 (9/30/15) 430 (9/30/15) 510 (9/30/15) 545 (9/30/15) 545 (9/30/15)	Temp. (Degrees C)  NA 23.50  NA  NA  NA  NA  NA	NA 9.05 NA NA NA NA NA NA	(mS/cm)  NA  0.259  NA  NA  NA  NA  NA  NA	NA >4,000 NA NA NA NA NA	Started development with Waterra pump  Well dry. Pump well dry again. Switched to bailer for development  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Well dry.
FIELD M Time  340 (9/30/15) 350 (9/30/15) 420 (9/30/15) 430 (9/30/15) 510 (9/30/15) 545 (9/30/15) 545 (9/30/15) 710 (9/30/15) 710 (9/30/15)	Temp. (Degrees C)  NA 23.50  NA  NA  NA  NA  NA  NA  NA  NA  NA  N	NA 9.05 NA	(mS/cm)  NA  0.259  NA  NA  NA  NA  NA  NA  NA  NA  NA  N	NA >4,000 NA	Started development with Waterra pump  Well dry. Pump well dry again. Switched to bailer for development  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Added potable water to well, surged, and purged dry  Well dry.  Added potable water to well, surged, and purged dry
FIELD M Time  340 (9/30/15) 350 (9/30/15) 320 (9/30/15) 330 (9/30/15) 345 (9/30/15) 345 (9/30/15) 345 (9/30/15) 345 (9/30/15) 346 (10/1/15) 340 (10/1/15)	Temp. (Degrees C)  NA 23.50  NA  NA  NA  NA  NA  NA	NA 9.05 NA	(mS/cm)  NA  0.259  NA  NA  NA  NA  NA  NA  NA  NA  NA  N	NA >4,000 NA	Started development with Waterra pump  Well dry. Pump well dry again. Switched to bailer for development Added potable water to well, surged, and purged dry Added potable water to well, surged, and purged dry Added potable water to well, surged, and purged dry Added potable water to well, surged, and purged dry Added potable water to well, surged, and purged dry Added potable water to well, surged, and purged dry Well dry. Added potable water to well, surged, and purged dry

SITE NAME	:	NYSDEC Top Hat Cle	eaners Investigat	ion				
PROJECT N	IUMBER:	449485.02000						
WELL NUM	BER: THP	MW-03		WEATHE	<b>ER:</b> Cloudy-7	0's		
DATE:	9/30/2 <mark>015</mark> a	nd 10/1/15		TIME:	All Day Activ			
DEVELOPE	-	al Johnson shton			of ADT, Inc of Parsons	·		
	Eu A	SHIOH			oi <u>Paisoiis</u>			
DESCRIPTION	ON OF WEL	L						
Total	Depth:		23 feet TOC		Diameter:	2-inch		
	n Depth:		13 to 23 feet bg		<del>-</del>			
Devel	opment Meti	hod:	Waterra Pump 8	& Bailer with dedicate	ed rope and tubir	ng		
GROUNDW	ATER PURG	iing						
	tic Water Lev		14.8					
One Well	l Volume:					10 Volumes		
2-1	Inch Casing:		8.2 Feet of	of Water x 0.16 Gallo	ons/Foot = 1.3	3 Gallons <u>13 gals/min</u>		
2-Inch Casing: 3-Inch Casing: 4-Inch Casing:  Volume of groundwater purged: Purging Device: Waterra Pump & Bailer with		Feet of Water x 0.36 Gallons/Foot = Gallons						
4-1	Inch Casing:		Feet o	of Water x 0.65 Gallo	ons/Foot =	Gallons		
Volumo o	of aroundwate	or purgod:	13.5	Gallor	ne.			
	•	. •			15			
		on (e.g., contained):	- шошношно порос	55 gal. drum				
	·	,						
FIELD M	EASUREME	NTS						
Time	Temp.		рН	Conductivity	Turbidity			
	(Degrees	s C)		(mS/cm)	(NTUs)	Comments		
2040 (0/20/45)			l	l	l	Started development with Waterra		
940 (9/30/15) 950 (9/30/15)	NA		NA	NA	NA	pump		
951 (9/30/15)	24.61 NA		6.40	0.339	>4,000	Mall day. E gala gamayad		
1010 (9/30/15)	NA		NA	NA	NA	Well dry. 5 gals removed.		
	NA		NA	NA	NA	Restart pump		
1015 (9/30/15)						Well dry. Pump rate, even at		
						slowest speed to much for well recharge rate. Will use bailer to		
	NA		NA	NA	NA	continue development		
1030 (9/30/15)	NA		NA	NA.	NIA	Well dry again.		
050 (9/30/15)	NA		NA	NA	NA	A little water in bottom of well.		
,	NA		NA	NA	NA	Surged well and purged dry.		
410 (9/30/15)	22.43		8.80	0.341	>4,000	Purged dry		
1540 (0)00(45)						Added potable water to well,		
1510 (9/30/15)	NA		NA	NA	NA	surged, and purged dry Added potable water to well,		
1530 (9/30/15)	NA		NA	NA	NA	surged, and purged dry		
630 (9/30/15)	22.47		8.59	0.231	>4,000	Purged dry		
						Added potable water to well,		
1710 (9/30/15)	NA		NA	NA	NA	surged, and purged dry. Removed ten gals total for day.		
		rater to well to assist in				d with potable water many times.		
on arour io, duu	lea potable w	rator to well to assist III	and development	vven rormanon tigi	it and was surge	a with potable water many times.		
C:\mydocs\templat	te\THPMW-03.xl	sx	PAF	RSONS		10/27/2015		

Page 2 of 2

		<b>DEVELO</b> : 1	0201.	,	
SITE NAME:	NYSDEC Top Hat Cluumber: 449485.02000	eaners Investigat	ion		
PROJECT N	UMBER: 449485.02000				
WELL NUME	BER: THPMW-03		WEATHE	R: Cloudy-70	n's
DATE:	9/30/2015 and 10/1/15		TIME:	All Day Activi	ity
DEVELOPE				of ADT, Inc.	_
	Ed Ashton			of Parsons	
Time	Temp.	pН	Conductivity	Turbidity	
	(Degrees C)	•	(mS/cm)	(NTUs)	Comments
On 10/1/15, add	ed more potable water to well, surge	ed, and purged di	ry. Removed 3.5 ga	ls total	
740 (10/1/15)				>1,000	
0800 (10/1/15)		NA			Added potable water to well, surged, and purged dry
,					

## APPENDIX E PHOTOGRAPHIC LOG

#### SITE CHARACTERIZATION REPORT TOP HAT DRY CLEANERS BROOKLYN, NEW YORK

#### **NYSDEC**









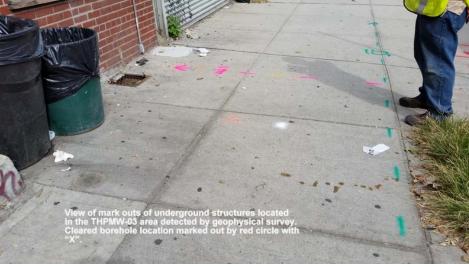
**PARSONS** 

#### SITE CHARACTERIZATION REPORT TOP HAT DRY CLEANERS BROOKLYN, NEW YORK

#### **NYSDEC**

File:



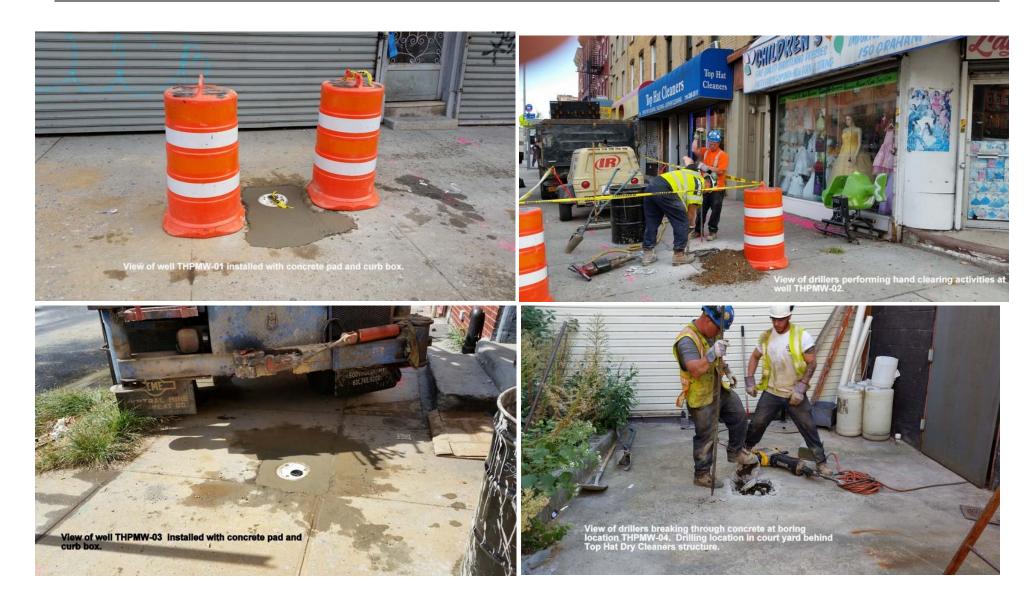






**PARSONS** 

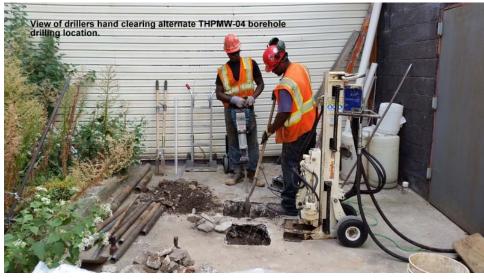
#### **NYSDEC**



File:









**PARSONS** 

File: P:\NYSDEC Program\449485 - WA #21 - Top Hat Cleaners Site Characterization\9.0 Reports\Top Hat Report\Appendices\Appendices\Appendix G - Photo Log\Photos.Docx

Rev: #0 Date: January 21, 2016 Printed copies of this document are uncontrolled copies

#### SITE CHARACTERIZATION REPORT TOP HAT DRY CLEANERS BROOKLYN, NEW YORK

#### **NYSDEC**

File:







**PARSONS** 

P:\NYSDEC Program\449485 - WA #21 - Top Hat Cleaners Site Characterization\9.0 Reports\Top Hat Report\Appendices\Appendics\Appendix G - Photo Log\Photos.Docx

#### SITE CHARACTERIZATION REPORT TOP HAT DRY CLEANERS BROOKLYN, NEW YORK

#### **NYSDEC**





#### **APPENDIX F**

#### GROUNDWATER MONITORING WELLS SURVEY DATA

#### **Borbas Surveying & Mapping, LLC**

402 Main Street, Boonton, New Jersey 07005 Phone (973) 316-8743 Fax (973) 402-6627 www.borbas.com

#### MONITORING WELL CHART

Top Hat Cleaners
152 Graham Avenue
Borough of Brooklyn, Kings County, New York

October 27, 2015

Monitor Well ID	Grade Elev	Outer Casing	Inner Casing	Northing	Easting	Latitude North	Longitude West	Survey Date
THPMW-01	28.4	28.38	27.71	196862.2	1000044.7	40°42'25.21"	73°56'34.91"	10/12/2015
THPMW-02	27.3	27.26	26.85	196753.4	1000056.7	40°42'24.14"	73°56'34.76"	10/12/2015
THPMW-03	27.8	27.82	27.48	196758.4	1000185.0	40°42'24.19"	73°56'33.09"	10/12/2015
Soil Boring ID								
THPMW-04A	29.3	-	-	196794.9	1000149.2	40°42'24.55"	73°56'33.56"	10/12/2015
THPMW-04B	29.3	-	-	196792.7	1000149.4	40°42'24.53"	73°56'33.55"	10/12/2015
THPMW-04C	29.3	-	-	196790.7	1000149.5	40°42'24.51"	73°56'33.55"	10/12/2015
		•	`	`	`	`		
		•	`	`	`	`		

#### Notes:

- 1. The horizontal datum is the New York Long Island State Plane Coordinate System NAD 83 determined by differential GPS on October 12, 2015 using the NGS CORS system, Reference Station NYBK.
- 2. The vertical datum is the North American Vertical Datum of 1988 (NAVD88) Geoid 12A determined by differential GPS observations from the NGS CORS network on October 12, 2015. Benchmark: Reference Station: NYBK (orthometric height = 54.3776').
- 3. All coordinates and elevations shown hereon are in U.S. Survey Feet.

John D. Beattie New York Professional Land Surveyor 050958-1 October 27, 2015

# APPENDIX G GROUNDWATER SAMPLING LOGS

					LOW	/ FLOW V	VELL SAME	PLING RE	CORD	-				
Site Name:		Top Hat C	leaners		=	Well ID:	т	HPMW-01		Well Dia	meter:	2	2Incl	nes
Samplers:	Ed Ashton Monitored Natural Attenuation Sample										N			
Purging D	<u>Data</u>						(7			WATER VOLUI				
							= (To	otal Depth of V		th To Water) x Ca				
									(30 - 2	22.5) x 0.16 x 3 =	3.60 min. vol:	s to be pu	urged	
	Peristaltic							1-inch=0.04		1.5-inch=0.092			3-inch=0.3	
Method:	Low Flow			Date/Time:	10/12	/15-0915	_	4-inch=0.64	4	6-inch=1.4	8-inch	=2.5	10-inch=	4
Time 24 hr.	DTW ft.	Pump Rate ml/min.	Vol. gal.	<b>Temp</b> °C	pH	Redox mv	Spec. Cond. mS/cm	<b>Turbidity</b> NTU	<b>DC</b> mg			Comme	ents	
9:15	22.50	110	NA	NA	NA	NA	NA	NA	N/	٨		start pur	rging	
9:25	22.55	110	NA	19.40	7.04	84.00	0.00	91.20	6.6	8				
9:50	22.58	110	NA	18.70	7.18	123.00	4.29	5.30	6.6	2				
9:55	22.58	110	NA	18.62	6.99	151.00	4.42	5.60	6.7	4				
10:05	22.60	110	NA	18.72	6.81	173.00	4.45	12.90	6.9	4				
10:15	22.61	110	NA	18.77	6.76	191.00	4.46	8.70	8.6	0				
10:20	NA	NA	NA	NA	NA	NA	NA	NA	N/	A Tubin	g came apart.	Stopped p	oump and resta	rted at 10:2
10:30	22.62	110	NA	18.77	6.85	193.00	4.50	0.00	6.9	7				
10:45	22.62	110	NA	18.98	6.86	206.00	4.48	0.00	6.3	1				
11:00	22.62	110	NA	19.05	6.90	211.00	4.50	0.00	6.7	1				
11:05	22.62	110	NA	19.06	6.91	213.00	4.50	0.00	7.0	7				
11:10	22.62	110	NA	19.09	6.91	214.00	4.49	0.00	6.6	3				
11:15	22.62	110	NA	19.12	6.91	215.00	4.50	0.00	6.7	9				
11:20	22.62	110	NA	19.13	6.91	216.00	4.50	0.00	6.7	1				
11:21	NA	NA	4.50	NA	NA	NA	NA	NA	NA	٨		Stopped p	urging.	
Sampling	Data			ltic Pump	_									
ield Param	neters	Method:	Lov	v Flow	-	Date/Time:	10/1	2/15 @1125		T	otal Volume	of Water	purged:	4.5 gal
		RRIBA		1	пусп т	ST KITS		Г			SAMPLE	CET		
рŀ		6.91	<u> </u>	Alkalinit			NA NA		Param	neter E	ottle	Pre	es.	Method
Spec. Cond	d.(mS/cm)	4.50	0	Carbon (mg		NA			TCL V	OCs 3-40ml	glass vial	Н	CI	EPA 826
Turbidity	y (NTU)	0.0		Ferrous Ire		NA		ŀ						
DO (m	mg/L)	6.7		Manganes	se (mg/L)	NA								
Redox	(mv)	216.	0	Hydroger (mg		NA								
Temp	o.(°C)	19.1	3	-		-								
				* NOTE * HA		are only require	d for MNA							

**PARSONS** 

				LOW	/ FLOW V	VELL SA	MPLING RE	CORD				
Site Name:	Top Hat C	Cleaners		Well ID: THPMW-02						2 Inches		
Samplers:				='			uation Sample S	et (Y/N)?		N		
Purging Data								WAT	ER VOLUME CA	LCULATION		
						=	(Total Depth of V	Vell - Depth To V	Vater) x Casing V	olume per Foot x	3 well vols	
								(23 - 17.6) x	0.16 x 3 = 2.59 m	in. vols to be purg	ged	
	Pump	-					1-inch=0.04			2-inch=0.16	3-inch=0.36	
Method: Low Flow	V	-	Date/Time:	10/12	/15-1200		4-inch=0.64	4 6	inch=1.4	8-inch=2.5	10-inch=4	
Time DTW 24 hr. ft.	Pump Rate ml/min.	Vol. gal.	Temp °C	pH	Redox mv	Spec. Cor mS/cm	nd. Turbidity  NTU	mg/l	-	Commer	nts	
12:00 17.60	105	NA NA	NA	NA	NA	NA	NA	NA NA		Start purgir	ng.	
12:08 18.00	105	NA	23.89	6.63	198.00	0.318	287.00	2.23				
12:15 18.20	105	NA	24.11	6.33	185.00	0.315	109.00	1.44				
12:20 18.44	105	NA	24.50	6.12	175.00	0.311	45.20	1.11				
12:30 18.88	105	NA	25.31	6.05	165.00	0.325	29.00	1.11				
12:40 19.08	105	NA	25.14	5.71	179.00	0.317	23.60	1.86				
12:50 19.70	105	NA	27.02	5.67	144.00	0.307	16.40	1.02				
13:00 20.10	105	NA	27.58	5.51	133.00	0.312	15.80	0.78				
13:10 20.58	105	NA	28.08	7.54	108.00	0.452	25.80	0.50				
13:20 20.95	105	NA	28.30	6.14	123.00	0.454	22.10	0.11				
13:30 21.30	105	NA NA	28.53	6.07	130.00	0.494	21.70	0.00	D.		ahar alaman d	
13:35 NA 13:42 NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	PI	Pumped stopped. Valve clogged.  Re-started pump		
13:45 21.50	105	NA NA	28.95	7.33	127.00	0.552	29.40	2.73		Ne-started p	ourip	
13:50 21.82	105	NA NA	29.38	6.75	126.00	0.546	24.20	0.51				
13:55 22.40	105	NA	29.67	7.09	125.00	0.537	24.20	0.27				
14:00 22.80	NA	3.50	NA	NA	NA	NA	NA	NA		Well purged	dry.	
											<u> </u>	
Sampling Data		Peristaltic	Pump									
Field Parameters	Method:		v Flow		Date/Time:		10/13/15-0700		Total Vo	lume of Water p	urged: 3.5	
НС	RRIBA			HACH TE	ST KITS		Ī		S.	AMPLE SET		
pН	6.62	2	Alkalinit		NA			Parameter	Bottle	Pres	. Method	
Spec. Cond.(mS/cm)	0.61	6	Carbon (mg		NA			TCL VOCs	3-40mL glass v	vial HCI	EPA 8260	
Turbidity (NTU)	158.	0	Ferrous Iro		NA							
DO (mg/L)	4.8	-	Manganes	se (mg/L)	NA							
Redox (mv)	262.	0	Hydroger (mg		NA							
Temp.(°C)	19.3	4			-							
Comments: Sample II			analysis wells	i.	are only required		-					

Sample slighty turbid with no odor or sheen.

					LOV	I LOW V	VELL SAI	WII EII TO IXE	00.12				
Site Name:		Top Hat C	leaners			Well ID:		THP	MW-03		_	2	Inches
Samplers:		Ed As	hton			Monitored N	atural Attenu	uation Sample Se	et (Y/N)?	_	N		
Purging Data							=	(Total Depth of V		ATER VOLUME ( o Water) x Casing			vols
									(23 - 18.35	5) x 0.16 x 3 = 2.23	3 min. vols t	o be purged	
	Peristaltic	Pump						1-inch=0.04	1 1.	.5-inch=0.092	2-inch=0.	16 3-incl	n=0.36
	Low Flow			Date/Time:	10/12	/15-1430	_	4-inch=0.64		6-inch=1.4	8-inch=2.		nch=4
Time	DTW	Pump Rate	Vol.	Temp	рН	Redox	Spec. Con	d. Turbidity	DO			omments	
24 hr.	ft.	ml/min.	gal.	°C		mv	mS/cm	NTU	mg/l				
14:30	18.20 18.62	100	NA NA	NA 23.54	NA 7.71	NA 161.00	NA 0.963	NA 1110.00	NA 3.34		S	tart purging.	
14:40	18.85	100	NA NA	33.54	7.71	161.00 164.00	0.863	962.00	1.97				
14:50	19.00	100	NA NA	33.28	7.65	152.00	0.853	510.00	1.59				
14:55	19.14	100	NA NA	33.09	7.59	77.00	0.854	480.00	1.70				
15:00	19.14	100	NA NA	32.90	7.54	45.00	0.859	364.00	1.64				
15:05	19.45	100	NA	32.74	7.50	23.00	0.863	241.00	1.54	+			
15:10	19.62	100	NA	32.58	7.45	21.00	0.863	146.00	2.62				
15:15	19.75	100	NA	32.50	7.44	26.00	0.860	81.20	1.42				
15:20	19.90	100	NA	32.38	7.38	38.00	0.859	92.90	1.17				
15:25	20.00	100	NA	32.22	7.43	56.00	0.857	78.00	1.79				
15:30	20.16	100	NA	31.98	7.41	74.00	0.842	74.00	2.83				
15:35	20.35	100.00	NA	31.66	7.47	96.00	0.848	52.80	2.80				
15:40	20.45	100	NA	31.51	7.42	106.00	0.850	61.60	2.80				
15:45	20.70	100	NA	31.20	7.41	123.00	0.852	56.90	2.89				
15:50	21.00	NA	NA	NA	NA	NA	NA	NA	NA	F	Pumped well of	dry. Removed 2.5	50 gals.
ampling	<u>Data</u>		Peristaltic	Pump									
ield Param	eters	Method:	Lov	v Flow	•	Date/Time:	1	10/13/15-0815		Total	Volume of \	Nater purged:	2.5
		RRIBA		1	HACH TE	ST KITS		Γ			SAMPLE SE	=т	
рŀ		6.98	3	Alkalinit		NA NA		•	Parameter	Bottle		Pres.	Method
Spec. Cond	d.(mS/cm)	0.89	7	Carbon I		ioxide NA		ŀ	TCL VOCs	3-40mL gla	ss vial	HCI	EPA 8260
Turbidity	(NTU)	117.	0	Ferrous Iro		NA							
DO (m	ng/L)	2.6		Manganes	se (mg/L)	NA							
Redox	(mv)	237.	0	Hydrogen (mg.		NA							
Temp	.(°C)	19.8	0	-		ı							
				* NOTE * HAC analysis wells.		re only required	for MNA				,		
								-					

File:

# APPENDIX H

INVESTIGATION DERIVED WASTE MANIFESTS



# **NON-HAZARDOUS SOLID WASTE**

	BILL OF LADING Page 1 of 1		r Emer	gency	Number (	908)	354-0210
	Generator's Name and Mailing Address NYSDEC 625 BROADWAY 12TH FLOOR Albany, NY 12233	:		BO	L   GRAHAM AT		
	Generator's Phone ( (518) 402-9813				klyn NY J		
	Transporter 1 Company Name					4.01	7 F. F.
	CLEAN VENTURE INC.			State	e Trans. ID-NJDE		/55
	Transporter 2 Company Name			Tran	1000074000000000	1797//	3) 355-5800
	Designated Facility Name and Site Address 10.	US EPA ID Number			e Trans. ID-NJD	<u> </u>	`
	Cycle Chem Inc.				Decal N	100.5	
	217 South First Street Elizabeth, NJ 07206	D101012121010	0.4.6		isporter's Phone lity's Phone (		355-5800
			Contair		Total	Unit	
	US DOT Description (Including Proper Shipping Name, Hazard Class or Divis ID Number and Packing Group)	A STATE OF THE PARTY OF THE PAR	No.	Туре	Quantity	Wt/Vol	Waste No.
	a. Non-DOT CHEMICAL PROCESS SOLID Non-RCF	£5.	00	Dry	500	P	1027
G	b. Non-DOT CHEMICAL PROCESS LIQUID Non-RO	CRA					ID72
N			01	DM	1	B	
R	c. Non-DOT CHEMICAL PROCESS SOLID Non-RCI	AS					ID27
T							
R	d.						
							2
	J. Additional Descriptions for Materials Listed Above						
	Mary a grant of the first and the control of the co						
	а. С.						
	b. d. CCI Generator # and Product Codes: 975500/931440/180572,	/325508 (1)PC	<del>01-1 S</del>	bīL (	2)RBM002	-2 LI	auids —
	(3)PCO1-3 DEBRIS/PPE		3× 1	-5	. ,		
			フヘ -	) /			
	GENERATOR'S CERTIFICATION: I hereby declare that the contents of classified, packed, marked, and labeled, and are in all respects in proper or regulations and are non-hazardous by USEPA & applicable state regulation	ondition for transport by hig	and accura hway accor	tely desc ding to a	ribed above by pplicable internat	proper shi ional and	pping name and are national government
	PLACARDS REQUIRED	•	PLAC SUPP	ARDS LIED	VES U	NO- FURN	IISHED BY CARRIER
	Printed/Typed Name	Signature	Tofile	,		ı	Month Day Year タンナ15
TRA	Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name	Signature					Month Day Year
N	TrAVIP DOMA.	7-	1-	)	-	i	9 2215
POR	Transporter 2 Acknowledgement of Receipt of Materials	12:					
TRANSPORTER	Printed/Typed Name	Signature				1	Month Day Year
FA							
CI							
LIT	Facility Owner or Operator: Certification of receipt of hazardous materials of	Y					
Ý	Printed/Typed Name	Signature				1	Month Day Year

7					
Clean Venture, Inc. Trip	Ticket #: 1818		r: DOMNI,TRAVIS		
		[Trucl	c: \$T114		
Start Date: 9/22/2015	Start Time:	900	End Date:	17/18	End Time:
Start Miles:	Start City:		End Miles:		End City: "Sreet 1770
298 244	1 4 400 1	16784			
Site Name & Address:	Order #: 0			Broke	st.
CYCLE CHEM - ELIZA				- Fronc	
217 South First Street	5¢ 111 (14)				
		V			
ELIZABETH,NJ/ 07206	(Union)				
Contact: Connolly/Hugh	es		Trailer/RO:		
Phone: 908-355-5800 (	Cell: 908-246-2513	3	Begin Empty	Trl1:	Trl2:
Time in:		Time out:			Date:
Manifest/BOL #:	Part of the second		Signature:		
Site Name & Address:	Order #: 1914	REF: 49	779-1 (6134)	Broke	er: PARSONS
NYSDEC TOP HAT CL					e way- on site 1500- 1700, amouth of
152 Graham Ave	Litterto		drums genera	ted may t	pe different than what is scheduled.
Brooklyn,NY/Kin 11206	()				
Contact: Ed Ashton			Trailer/RO:		
Phone: 315-679-1170 (	Cell:		Live Load	Trl1:	Trl2:
	3×5	50			
Time in:		Time out:			Date: // 34/1/3
Marriaguipol //					
Manifest/BOL #:	0330		Signature:	\	
Site Name & Address:	Order #: 1914	REF: 49	779-1 (6134)	Broke	er: PARSONS
CYCLE CHEM - ELIZA	BETH (R)				
217 South First Street					
ELIZABETH,NJ/ 07206				1	
Contact: Connolly/Hugh			Trailer/RO:	T-14	T-10
Phone: 908-355-5800	Cell: 908-246-251	3	Live Unload	Trl1:	Trl2:
Time in:		Time out:			Date:
Manifort/DOL #			Cianatura		
Manifest/BOL #:			Signature:		



# NON-HAZARDOUS SOLID WASTE

	BILL OF LADING	age i of .	far	2:	1 Hour	c Emer	genc)	v Number (	(906)	354-02.	l0
	Generator's Name and Mailing Address NYSI 625 BROADWAY 12TH FLOOR Albany, NY 12233 Generator's Phone (518) 402-98						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	OL       GRAHAM AV			
	Transporter 1 Company Name CLEAN VENTURE INC.						Stat	te Trans. ID-NJDE	DE 16	75.5	
1	Transporter 2 Company Name						Sia	Decal N		1-1-1	
	6						Trai	nsporter's Phone	(90	8) 355-4	)B(()
	Designated Facility Name and Site Address	1	10.	US EPA ID	Number		Stat	te Trans. ID-NJDE	PE		
	Cycle Chem Inc. 217 South First Street							Decal N	0		
	Elizabeth, NJ 07206	. 1	J. J. D.	0,0,2,	2.0.0.	0.4.6		nsporter's Phone	( 1081.	355-580(	)
ŀ				V V 2	0 0	Contai		,			of .
	US DOT Description (Including Proper Shipping No ID Number and Packing G	ame, Hazard Class o Froup)	or Division,			No.	Type	Total Quantity	Unit Wt/Vol	Waste N	0.
	a. Non-DOT CHEMICAL PROCESS	SOLID Non-	RCRA			01	Dry	300	P	ID27	
-	ь. Non-DOT CHEMICAL PROCESS 1	IQUID Nor	n-RCRA						,	ID72	
A F	c. Non-DOT CHEMICAL PROCESS :	OLID Non-	-RCRA							ID27	
R -	d.			v v							
	J. Additional Descriptions for Materials Listed Above									4	
	b. CCI Generator # and Product Codes: 975500/3	o. 031440/180	573/32	:5509	(1)PC(	01-1-8	OIL	(2)REM002	-2 LI	QUIDS -	
	(3)PC01-3 DEBRIS/PPE					1×	55				
	GENERATOR'S CERTIFICATION: I hereby decidassified, packed, marked, and labeled, and are i regulations and are non-hazardous by USEPA & a	all respects in pro-	per conditi	consignment on for transp	are fully a ort by high	and accura hway accor	tely describing to a	cribed above by p pplicable internati	roper sh onal and	ipping name a national gove	nd are rnment
		PLACARDS REQUIRED	S			PLAC SUPP	ARDS LIED	☐ YES ☐	NO- FURI	NISHED BY CAR	RIER
	Printed/Typed Name  Acknowledgement of Receipt of Ma	nariale .	Sign	nature 📈 🕳	S	2				Month Day	Year 15
TRANSO OR TER	Printed/Typed Name	mnl	Sign	nature /		70	_	ar.		Month Day イ ナ3	Year
D R	Transporter 2 Acknowledgement of Receipt of Ma Printed/Typed Name	terials	Sign	nature						Month Day	Year
FAC	, miled ryped mane		Oigi			Ø.	¥			Worth Day	r ear
	Facility Owner or Operator: Certification of receipt	of hazardous mater	rials covere	ed by this ma	nifest.						
Y	Printed/Typed Name		Sign	nature						Month Day	Year
	COPY 1 - WHITE - GENERATOR COPY	2 - PINK - TRAN				FORMATI BLUE - Cy		ST BE LEGIBLE m COPY		LL COPIES	LITY

cvcc Clean Venture, Inc. <b>Tri</b>	Ticket #: 1847		r: DOMNI,TRAVIS		
Start Date: 9/23/2015	Start Time:	Truck	End Date:		
	16	6 PM		14/1	End Time:
Start Miles:	Start City:	of the form	End Miles:		End City:
Site Name & Address:	Order #: 0	:		Broke	er:
CYCLE CHEM - ELIZA	BETH (R)				
217 South First Street		1			
ELIZABETH,NJ/ 07206	(Union)				
Contact: Connolly/Hugl			Trailer/RO:		
Phone: 908-355-5800			Begin Empty	Trl1:	Tri2:
Time in:		Time out:			Date:
Manifest/BQL #:			Signature:		
Site Name & Address:	Order #: 1945	REF: 497	779-1 (6134)	Broke	er: PARSONS
NYSDEC TOP HAT CL	EANERS				ne way- on site 1500- 1700. amouth of
152 Graham Ave			drums genera	ted may i	be different than what is scheduled.
Brooklyn,NY/Kin 11206					
Contact: Ed Ashton			Trailer/RO:		
Phone: 315-679-1170	Cell:		Live Load	Trl1:	Trl2:
	1× 5	55			
Time in: 3-/5		Time out:			Date: 7723775
Manifest/BOL #: ///	331		Signature:	<u> </u>	
Site Name & Address:	Order #: 1945	REF: 497	779-1 (6134)	Brok	er: PARSONS
CYCLE CHEM - ELIZA	BETH (R)				
217 South First Street					
ELIZABETH,NJ/ 07206	(Union)				
Contact: Connolly/Hug			Trailer/RO:		
Phone: 908-355-5800	· ·	3	Live Unload	Trl1:	Trl2:
Time in:		Time out:			Date:
Manifest/BQL #:			Signature:		



## **NON-HAZARDOUS SOLID WASTE**

BILL OF LADING	Hour Emer	gency	Number	(808)	304-021	U			
Generator's Name and Mailing Address NYSDEC 625 BROADWAY 12TH FLOOR		BC	1	TT	1 1	1			
Albany, NY 12233			GRAHAM AV	V H					
Generator's Phone ( (518) 402-9813		Brooklyn NY 11206							
Transporter 1 Company Name		State Trans. ID-NJDEPE 16755							
CLEAN VENTURE INC.  Transporter 2 Company Name		State	e Trans. ID-NJDI Decal N		/55				
Transportor 2 company Name		Tran	sporter's Phone		3) 355-5	800			
Designated Facility Name and Site Address 10. US EPA ID	Number	State	e Trans, ID-NJDI	EPE					
Cycle Chem Inc.			Decal N						
217 South First Street   Elizabeth, NJ 07206   N J D 0 0 2 2	21010101416		isporter's Phone		) 855~5800				
	Contai		Total	Unit					
US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)	No.	Туре	Quantity	Wt/Vol	Waste No	0.			
a. Non-DOT CHEMICAL PROCESS SOLID Non-RCRA					1027				
	02	OM	400	P					
в b. Non-DOT CHEMICAL PROCESS LIQUID Non-RCRA				1	ID72				
N E	01	Ora	30	6					
R Non-DOT CHÉMICAL PROCESS SOLID Non-RCRA	UI	Din	J*		ID27				
T TOTAL DOT OTHER THOUSE SOUTH									
0 R									
d.									
J. Additional Descriptions for Materials Listed Above									
a. c.	3	-							
b. d. CCI Generator # and Product Codes: 975500/931440/180574/325510		ATT (	OVERMONE	O T T/	MIT DO				
CCI Generator # and Product Codes: 979900/931440/180574/325310	(I)POUL-I D	VIL (	Z JREMOUZ:	-4 hi	ANID				
TOTAL OF DELETION AND ADDRESS OF THE PROPERTY	3×55	-1							
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment classified, packed, marked, and labeled, and are in all respects in proper condition for transp	are fully and accura	tely describing to ap	ribed above by poplicable internat	proper shi	pping name ai	nd are			
regulations and are non-hazardous by USEPA & applicable state regulations.									
PLACARDS	PLAC	ARDS	YES L	NO- FURN	ISHED BY CARE	RIER			
REQUIRED Company	SUPP	LIED							
Printed/Typed Name Signature X S	1 Oute			,	Month Day	Year			
Transporter 1 Acknowledgement of Receipt of Materials	y c su -	•			101	13			
Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Transporter 2 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  Signature  Signature		> _	_		Month Day	Year			
Transporter 2 Acknowledgement of Receipt of Materials					1 24	15			
Printed/Typed Name Signature					Month Day	Year			
R									
F									
A									
L									
Facility Owner or Operator: Certification of receipt of hazardous materials covered by this ma	nifest.				Month Day	Verr			
Y Printed/Typed Name Signature				1	Month Day	Year			

Clean Venture, Inc. Trip	Ticket #: 1876		MI,TRAVIS		
		Truck: ST1			
Start Date: 9/24/2015	Start Time:	30 PA	nd Date:	1041	End Time:
Start Miles: Z	Start City: 3	osklyn E	nd Miles:		End City:
Site Name & Address:	Order #: 0	: <del>(1-3-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1</del>		Broker	r:
CYCLE CHEM - ELIZAB 217 South First Street	BETH (R)				
217 Coddi i list Glicet					
ELIZABETH,NJ/ 07206 (	(Union)				
Contact: Connolly/Hughe			Trailer/RO:		
Phone: 908-355-5800 C	ell: 908-246-2513		Begin Empty	Trl1:	Trl2:
Time in:		Time out:			Date:
Manifest/BOL #:			Signature:		
			,,,,,,	, , , , , ,	
	[ O-1# 1071	DEC. 40770.4.46	124)	Danks	- DARCONG
Site Name & Address:  NYSDEC TOP HAT CLE	Order #: 1974	REF: 49779-1 (6			e way- on site 1500- 1700. amoutn of
152 Graham Ave	EANERS		drums genera	ted may b	be different than what is scheduled.
102 Granani 7.00					
Brooklyn, NY/Kin 11206	0				
Contact: Ed Ashton			Trailer/RQ:	Tald.	T-10
Phone: 315-679-1170 C	Cell:		Live Load	Trl1:	Trl2:
	· · · · · · · · · · · · · · · · · · ·				
Time in: /////		Time out:			Date:
Manifest/BOL #: ///	222		Signature:		
176	332		X		
	Order #: 1074	REF: 49779-1 (6	124)	Broke	er: PARSONS
Site Name & Address:	Order #: 1974	REF. 49779-1 (0	134)	DIOKE	a. PAROUNO
CYCLE CHEM - ELIZAGE 217 South First Street	SEIH(K)				
217 Soduit iist Street					
ELIZABETH,NJ/ 07206	(Union)				Tablesia lan Se
Contact: Connolly/Hugh			Trailer/RO:		T-10
Phone: 908-355-5800 (	Cell: 908-246-2513	3	Live Unload	Trl1:	Tri2:
Time in:	A the same of the	Time out:			Date:
Manifest/BQL #:			Signature:		



# **NON-HAZARDOUS SOLID WASTE**

	BILL OF LADING  Page 1 of 1	24 Hou	r Emer	gency	Number (	808)	354-0210			
	Generator's Name and Mailing Address NYSDEC 625 BROADWAY 12TH FLOOR Albany, NY 12233				L O /		0333			
	Generator's Phone ( (518) 402-9813				klyn NY 1					
	Transporter 1 Company Name			4.0755						
	CLEAN VENTURE INC. Transporter 2 Company Name			State	e Trans. ID-NJDE Decal N	A CONTRACTOR OF THE PARTY OF TH	/55			
	Transporter 2 Company Name			Tran	sporter's Phone (	1 19 29 7	3) 355-5800			
	Designated Facility Name and Site Address 10.	US EPA ID Number		State	e Trans. ID-NJDE	PE				
	Cycle Chem Inc. 217 South First Street				Decal N	7/22	1			
		D00022200	0 4 6	Tran Faci	sporter's Phone (	08)	355-5800			
	US DOT Description (Including Proper Shipping Name, Hazard Class or Divi ID Number and Packing Group)		Contain No.	Type	Total Quantity	Unit Wt/Vol	Waste No.			
	a. Non-DOT CHEMICAL PROCESS SOLID Non-RC	KA	01	DM	500	P	ID27			
G E	b. Non-DOT CHEMICAL PROCESS LIQUID Non-R	CRA				1	ID72			
N										
R	c. Non-DOT CHEMICAL PROCESS SOLID Non-RC	RA			<del></del>		ID27			
A										
OR					F 72					
1	d.									
			S .				-			
	J. Additional Descriptions for Materials Listed Above									
	a. C.									
	a. O.		***************************************							
	b. d. CCI Generator # and Product Codes: 975500/931440/180575	7325511 7112C	01-1-9	ATT.	2 IRRMOO2-	-9 T.T	antre -			
	(3)PC01-3 DEBRIS/PPE	, chect (1).c	CP ada - ula - 8m	"You" sake absented — N	. L. / 10.20 10 10 10 10 10 10 10 10 10 10 10 10 10	heal abodiete	Tada Dai - ada - 40.7° Pari			
	GENERATOR'S CERTIFICATION: I hereby declare that the contents of classified, packed, marked, and labeled, and are in all respects in proper cregulations and are non-hazardous by USEPA & applicable state regulation	condition for transport by hig	and accura hway accor	tely describing to a	ribed above by poplicable internati	roper shi onal and	pping name and are national government			
		. 1								
	PLACARDS REQUIRED	NA	PLAC SUPP	ARDS LIED	VES V	NO- FURN	ISHED BY CARRIER			
	Printed/Typed Name	Signature		•			Month Day Year			
T	Transporter 1 Acknowledgement of Receipt of Materials	Xo and		AND THE SERVICE STATES	CO AND THE PROPERTY OF THE PRO		1123/13			
RAN	Printed/Typed Name	Signature 4	12	- 11	0		Month Day Year			
SP	GILBERTO VELEZ	/ Club	u(h)	Ve	8		9/25/15			
TRANSPORTER	Transporter 2 Acknowledgement of Receipt of Materials  Printed/Typed Name	Signature					Month Day Year			
R										
_										
FAC										
L	1									
T	Facility Owner or Operator: Certification of receipt of hazardous materials of Printed/Typed Name	covered by this manifest.  Signature					Month Day Year			
Y	- Intest () pos realis	9.144.0								

					/3
Clean Venture, Inc. Trip	Ticket #: 190	2 Driver: VEI	EZ,GILBERTO	<b>O</b>	
Start Date: 9/25/2015	Start Time:		nd Date:	7	End Time:
Start Miles:	Start City:		nd Miles:	A 1111	End City:
				<u> </u>	
Site Name & Address:	Order #: 0			Broke	er:
CYCLE CHEM - ELIZA	BETH (R)				
217 South First Street					
ELIZABETH,NJ/ 07206	(Union)				
Contact: Connolly/Hugh			Trailer/RO:		
Phone: 908-355-5800 (			Begin Empty	Trl1:	Trl2:
	7011. 000 2-10 2010		Dog.iii Ellipty		THZ,
Time in:		Time out:			Date:
Manifest/BOL #:			Signature:		
<u>L</u>			<u> </u>		
Site Name & Address:	Order #: 1996	REF: 49779-1 (6	134)	Broke	er: PARSONS
NYSDEC TOP HAT CLI					e way- on site 1500- 1700. amouth of
152 Graham Ave			drums generate	ed may b	be different than what is scheduled.
Brooklyn, NY/Kin 11206	0				
Contact: Ed Ashton			Trailer/RO:		
Phone: 315-679-1170 (	Cell:		Live Load	Trl1:	Trl2:
WATT		nh 1.11	-,		
STANT	1004	V/V /XS	)		The second secon
Time in: //-/5-A	M	Time out:	00= PP	7.	Date: 7/32 / 1/2
Manifest/BQL #: /L			Signature:	0	
(B)	CH OIX	0333	Olgriature.	0	And the state of t
Site Name & Address:	Order #: 1996	REF: 49779-1 (6	134)	Broke	er: PARSONS
CYCLE CHEM - ELIZAE	BETH (R)				
217 South First Street					
ELIZABETH, NJ/ 07206	(Union)				
Contact: Connolly/Hugh			Trailer/RO:		aidh r
Phone: 908-355-5800 C	Cell: 908-246-2513	3	Live Unload	Trl1:	Trl2:
Time in:		Time out:			Date:
Manifest/BOL #:			Signature:		



# NON-HAZARDOUS SOLID WASTE

BILL OF LADING  Page 1 of 1	Z4 Hou	'Emery	Remor	Number (	(808)	354-021(	
Generator's Name and Mailing Address NYSDEC 625 BROADWAY 12TH FLOOR Albany, NY 12233 Generator's Phone ( 518) 402-9813			100000000000000000000000000000000000000	L       GRAHAM AT			
Transporter 1 Company Name CLEAN VENTURE INC.			State	Trans. ID-NJDE	DE 16	75.F.	
Transporter 2 Company Name			State	Decal N			
Transporter 2 company realic			Tran	sporter's Phone	7.73731	355-5	800
Designated Facility Name and Site Address 10.	US EPA ID Number		State	e Trans. ID-NJDI	EPE		
Cycle Chem Inc.				Decal N	10		
217 South First Street		0 1 6	Tran	sporter's Phone	( 000	) SEE_ESOO	
Elizabeth, NJ 07206	D0002200			lity's Phone (	000)	000-0000	
US DOT Description (Including Proper Shipping Name, Hazard Class or Div ID Number and Packing Group)	rision,	Contair No.	Type	Total Quantity	Unit Wt/Vol	Waste No	
a [Non-DOT CHEMICAL PROCESS SOLID Non-RC		140.	туре			ID27	
						IDEC	
GE b. Non-DOT CHEMICAL PROCESS LIQUID Non-R	CKA			,		ID72	
N E		01	DM	60	6		
R ST. TOW CHENTON'S DECOREC COLUMN NOV. DO	RA	00				ID27	
A C. NON-DOI CHEMICAL PROCESS SOLID NON-NC		-					
R d.							
J. Additional Descriptions for Materials Listed Above							
a. C.							
b. d. d. CCI Generator # and Product Codes: 975500/931440/180571	1/325507 (1)PC	01-1 8	OIL	(2)REM002	-2 LI	QUIDS	
(S)FOOL O DEDICIDATE	2×55×	9					
GENERATOR'S CERTIFICATION: I hereby declare that the contents of classified, packed, marked, and labeled, and are in all respects in proper regulations and are non-hazardous by USEPA & applicable state regulations.	condition for transport by hig	and accura hway accor	tely describing to a	ribed above by pplicable interna	proper sh tional and	ipping name ar national goveri	nd are nment
PLACARDS REQUIRED		PLAC SUPP	ARDS LIED	☐ YES ☐	NO- FURN	ISHED BY CARR	
Printed/Typed Name	Signature	1				Month Day	Year
Transport Andrews de Propins de Marie d	1 Engl					100	15
Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Transporter 2 Acknowledgement of Receipt of Materials  Printed/Typed Name  Printed/Typed Name	Signature					Month Day	Year
is I ravip Donui	1	0		_	1	1 28	15
Transporter 2 Acknowledgement of Receipt of Materials		- 12					
Printed/Typed Name	Signature					Month Day	Year
Ŕ							
F A C							
Facility Owner or Operator: Certification of receipt of hazardous materials	covered by this manifest.						
T Printed/Typed Name	Signature					Month Day	Year
	SIGNATURE AND IN	IFOD!::-	1011 1411	CTDE LEGIS	F 633 1	L CODIEC	

cvcc					
Clean Venturé, Inc. Trip	Ticket #: 1938	Driver: D	OMNI,TRAVIS	1.314.05	
Start Date: 9/28/2015	Start Time: / //	5 1822	End Date:	115	End Time:
Start Miles: //	Start City:	10	End Miles:	4	End City:
NIA	7000		$\mathcal{L}_{I}$	#	Line Sity.
Site Name & Address:	Order #: 0			Broker	
CYCLE CHEM - ELIZAB			<del>, , , , , , , , , , , , , , , , , , , </del>	Dione	
217 South First Street		1			
ELIZABETH,NJ/ 07206 (			T! (DO:		
Contact: Connolly/Hughe Phone: 908-355-5800 C			Trailer/RO:  Begin Empty	Trl1:	Trl2;
Friorie: 900-333-3600 C	eii. 906-246-2515	<del></del>	Degin Empty	- Tu I.	1112.
Time in:				-	Davis
Time in:		Time out:			Date:
Manifest/BOL #:	1		Signature:		
Site Name & Address:	Order #: 2032	REF: 49779-1	(6134)	Broker	r: PARŞONS
NYSDEC TOP HAT CLE	ANERS		call contact who	en on the	way- on site 1500- 1700. amouth of
152 Graham Ave			drums generate	ed may be	e different than what is scheduled.
Brooklyn,NY/Kin 11206 (	1 1 2 2	- m			
Contact: Ed Ashton	1 12	7	Trailer/RO:		
Phone: 315-679-1170 C	ell:		Live Load	Trl1:	Tri2:
THICK WEBL	1945 -				
Time in:		Time out:		NAME OF TAXABLE PARTY.	Date:
					<b>1 1 1 1 1 1 1 1 1 1</b>
Manifest/BQL #:	03 1703	79"	Signature:		1
•					
Site Name & Address:	Order #: 2032	REF: 49779-1	(6134)	Broke	r: PARSONS
CYCLE CHEM - ELIZAB	BETH (R)				
217 South First Street					
ELIZABETH,NJ/ 07206 (	(Union)				
Contact: Connolly/Hughe			Trailer/RQ:		
Phone: 908-355-5800 C			Live Unload	Trl1:	Tri2:
		and the second s		7	
			and the second		
Time in:		Time out:	147		Date:
Manifest/BOL #:			Şignature:		
Maintood by Lit.			Gigilature.		



# **NON-HAZARDOUS SOLID WASTE**

B	ILL OF LADING Page 1 of 1 24 Hour	· Emer	gency	Number	(908)	354-	0210	J	
	Generator's Name and Mailing Address NYSDEC	olemen et samba	DO	<u> </u>			240		
6	25 BROADWAY 12TH FLOOR		BC	) L					
	lbany, NY 12233		152	GRAHAM A	VE.				
1 100000	Generator's Phone ( (518) 402-9813		Broo	klyn NY	11206				
	Transporter 1 Company Name								
C	LEAN VENTURE INC.		Stat	e Trans. ID-NJC	EPE 16	755			
	Transporter 2 Company Name		200	Decal			-		
			Trar	sporter's Phone	(90	8) 35	5-58	800	
	Designated Facility Name and Site Address 10. US EPA ID Number		Stat	e Trans. ID-NJD	EPE				
	ycle Chem Inc.			Decal					
10000	17 South First Street	0 4 0		sporter's Phone		)	000		
E	lizabeth, NJ 07206 [N J D 0 0 2 2 0 0		_	lity's Phone ((	900))	300-0	CUU		
	US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)	Contai No.	Type	Total Quantity	Unit Wt/Vol	7 1000	ste No	).	
a.	Non-DOT CHEMICAL PROCESS SOLID Non-RCRA	01	Om	600	P	ID27			
b.	Non-DOT CHEMICAL PROCESS LIQUID Non-RCRA					ID72			
		03	on	150	Con				
C.	Non-DOT CHEMICAL PROCESS SOLID Non-RCRA					ID27			
d.									
J.	Additional Descriptions for Materials Listed Above								
a.	с.	7.							
	d. Cl Generator # and Product Codes: 975500/931440/180927/325798 (1)PCC 3)PC01-3 DEBRIS/PPE		•	(Z)REM002	2-2 LI	QUIDE	)		
Ì	5×.	551	P						
	GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by hig regulations and are non-hazardous by USEPA & applicable state regulations.	and accura	ately desc ording to a	cribed above by pplicable interna	proper sh ational and	nipping na d national	ime an govern	nd ar nmer	
	PLACARDS REQUIRED		CARDS PLIED	L YES L	NO- FUR	NISHED BY	CARR	RIER	
	Printed/Typed Name  Ed Ashtan  Signature	/_	-			Month A	Day	Yes 19	
	Transporter 1 Acknowledgement of Receipt of Materials					-1			
	Printed/Typed Name Signature	^	~			Month	Day	Yea	
	1-1)- / Mui	20	Pi	mai		9	29	13	
	Transporter 2 Acknowledgement of Receipt of Materials		,			1	,		
	Printed/Typed Name Signature					Month	Day	Ye	
_	Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest.								
	Printed/Typed Name Signature					Month	Day	Ye	

cvcc		6	
Clean Venturé, Inc. Trip Ticket #: 198	Driver: DON Truck: ST11		
Start Date: 9/29/2015 Start Time:		nd Date:	End Time:
Start Miles: Start City:	Er	nd Miles:	End City:
Start Only: Poly		id ivines.	Life Oity.
Site Name & Address: Order #: 0		Brok	(er:
CYCLE CHEM - ELIZABETH (R)	F 14 - 44 - 44 - 44 - 44 - 44 - 44 -		
217 South First Street			
ELIZABETH,NJ/ 07206 (Union)			
Contact: Connolly/Hughes		Trailer/RO:	
Phone: 908-355-5800 Cell: 908-246-2513	3	Begin Empty Trl1:	Trl2:
Time in:	Time out:		Date:
Manifest/BOL #:		Signature:	
Site Name & Address: Order #: 2078	REF: 49779-1 (61	34) Brok	ker: PARSONS
NYSDEC TOP HAT CLEANERS			he way- on site 1500- 1700. amouth of be different than what is scheduled.
152 Graham Ave		general de la company	
Brooklyn,NY/Kin 11206 ()			
Contact: Ed Ashton		Trailer/RO:	
Phone: 315-679-1170 Cell:		Live Load Trl1:	Trl2:
A CONTRACTOR OF THE PARTY OF TH	5×55 ~		
Time in: h pm	Time out:		Date:
Manifest/BQL #:		Signature:	
10438		\ <u></u>	and the second second
	255 40370 4 40	(O.)	L DADCONG
Site Name & Address: Order #: 2078	REF: 49779-1 (6	134) Bro	ker: PARSONS
CYCLE CHEM - ELIZABETH (R) 217 South First Street			
217 Sogui First Street			
ELIZABETH,NJ/ 07206 (Union)			
Contact: Connolly/Hughes		Trailer/RQ:	T-10.
Phone: 908-355-5800 Cell: 908-246-251	3	Live Unload Trl1:	Trl2:
Time in:	Time out:		Date:
Manifest/BOL #:		Signature:	



# NON-HAZARDOUS SOLID WASTE

BILL OF LADING	a adada w a	genc?	NULL	(800)	354-UZI			
Generator's Name and Mailing Address NYSDEC		00						
625 BROADWAY 12TH FLOOR	BC							
Albany, NY 12233		152	GRAHAM A	VE.				
	Brooklyn NY 11206							
Generator's Phone ( (518) 402–9813  Transporter 1 Company Name		10100	22 d 17 21 21 21					
	State Trans. ID-NJDEPE 16755							
CLEAN VENTURE INC.	Decal No Transporter's Phone ( (308) 355-580							
Transporter 2 Company Name								
					0) 000"	35.		
Designated Facility Name and Site Address 10. US EPA ID Number		Stat	e Trans. ID-NJD	EPE				
Cycle Chem Inc.			Decal	No				
217 South First Street		Transporter's Phone ( )						
Elizabeth, NJ 07206   N J D 0 0 2 2 0 0	0 4 6	Fac	lity's Phone (	908)	355-5800	)		
	Contai		Total	Unit				
US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)	No.	Туре	Quantity	Wt/Vol	Waste N	0.		
DOD COUNTRY TO COURSE COLLD No. DCDA	110.	1,700			1027			
a. Non-DOT CHEMICAL PROCESS SOLID NON-RORA					ada shir' danid T			
TO THE CONTRACT PROPERTY OF THE PARTY OF THE				_	1D72			
b. Non-DOT CHEMICAL PROCESS LIQUID Non-RCRA					11/64			
	03	DM	10	R	-			
		V ///						
c. Non-DOT CHÉMICAL PROCESS SOLID Non-RCRA					IDZ7			
2								
d.								
d <sup>A</sup>								
L. Additional Department for Materials Listed Above								
J. Additional Descriptions for Materials Listed Above								
a. C.								
b. d.					OTTENO			
b. CCI Generator # and Product Codes: 975500/931440/180928/325799 (1)FC	301-1	ULL	(Z)KEMUU2	;-Z bl	GULLID			
(3)PCO1-3 DEBRIS/PPE								
( T. ) T T. D. T. M.		1	_ `_					
(0)1001	3	155						
	3	45 5	P					
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.	and accura	ately des	cribed above by	proper sh ational and	nipping name a d national gove	and a		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his	y and accurately and according to the property of the property	ately des	cribed above by	ational and	nipping name a I national gove	rnme		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	NISHED BY CAR	RIER		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	national gove	RIER		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	NISHED BY CAR	RIER		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	NISHED BY CAR  Month Day	RIER Ye		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	NISHED BY CAR	RIER		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature  Transporter 1 Acknowledgement of Receipt of Materials	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	NISHED BY CAR  Month Day	RIER		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature  Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  Signature	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	NISHED BY CAR  Month Day	RIER		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature  Transporter 1 Acknowledgement of Receipt of Materials	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	NISHED BY CAR  Month Day	YOU		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature  Signature  Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  Transporter 2 Acknowledgement of Receipt of Materials	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	Month Day  Month Day  Month Day	Y		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature  Signature  Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  Transporter 2 Acknowledgement of Receipt of Materials	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	Month Day  Month Day  Month Day	Y		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature  Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  Signature  Transporter 2 Acknowledgement of Receipt of Materials	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	Month Day  Month Day  Month Day	Y		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature  Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  Signature  Transporter 2 Acknowledgement of Receipt of Materials	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	Month Day  Month Day  Month Day	Y		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature  Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  Signature  Transporter 2 Acknowledgement of Receipt of Materials	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	Month Day  Month Day  Month Day	Y		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature  Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  Signature  Transporter 2 Acknowledgement of Receipt of Materials	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	Month Day  Month Day  Month Day	YOU		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature  Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  Signature  Signature  Signature  Signature  Signature  Signature  Signature	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	Month Day  Month Day  Month Day	Ye		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature  Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  Signature  Signature  Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest.	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	Month Day  Month Day  Month Day	rnme		
GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully classified, packed, marked, and labeled, and are in all respects in proper condition for transport by his regulations and are non-hazardous by USEPA & applicable state regulations.  PLACARDS REQUIRED  Printed/Typed Name  Signature  Transporter 1 Acknowledgement of Receipt of Materials  Printed/Typed Name  Signature  Signature  Signature  Finted/Typed Name  Signature  Signature  Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest.	y and accurately and according to the property of the property	ately des ording to a	pribed above by	ational and	Month Day  Month Day  Month Day  Month Day  Month Day	Ye /		

Clean Venture, Inc. Trip	Ticket #: 2032	Driver: DC	MNI,TRAVIS	******************************	
picari veriale, inc. Trip	110KGt #. 2002	Truck: ŞT			
Start Date: 9/30/2015	Start Time:		End Date:	13	End Time:
Start Miles:	Start City:		nd Miles:	1.1.	End City:
Site Name & Address:	Order #: 0	:		Brok	ker:
CYCLE CHEM - ELIZAB 217 South First Street	BEIH (R)				
217 Godin First Street					
ELIZABETH, NJ/ 07206	(Union)				
Contact: Connolly/Hugh			Trailer/RO:		
Phone: 908-355-5800 C	Cell: 908-246-2513		Begin Empty	Trl1:	Tri2:
and the second					
Time in:	115	Time out:			Date:
Manifest/BOL #:			Signature:		
			<u> </u>		
Site Name & Address:	Order #: 2126	REF: 50006-1 (6	6134)	Brok	er: RETAIL ENVIRONMENTAL
SPEEDWAY 7824			see map for dr		MPLIANCE  Ition. you can sign "on behalf of" generator
285 East 233rd St					
BRONX,NY/ 10470 ()					pe
Contact: Mike Matri			Trailer/RQ:		
Phone: Cell:			Live Load	Trl1:	Trl2:
Time in:		Time out:			
Time III.		ine out.	TA PA		Date:
Manifest/BOL #:			Signature:		
	115			1 -	
Site Name & Address:	Order #; 2126	REF: 50006-1 (6	6134)	Broke	er: RETAIL ENVIRONMENTAL
CYCLE CHEM - ELIZAB	BETH (R)			CON	IPLIANCE
217 South First Street	TOP	HAT 11-	PANO PO		
	- 15+ 7/1	THE AUT,	13x		
ELIZABETH,NJ/ 07206 (	(Union)	p. 4.32 mm			
Contact: Connolly/Hughe	I I - white	400	Trailer/RO:		
Phone: 908-355-5800 C	eii: 908-246-2513		Live Unload	Trl1:	Trl2:
	3×5	50			
Time in:	] [T	ime out:			Date:
1 7 2 22					Date.
Manifest/BOL #:			Signature:		



# NON-HAZARDOUS SOLID WASTE

BILL OF LADING Page 1 of	1 24	Hour Emer	gency	Number	(808)	354-021	)
Generator's Name and Mailing Address NYSDEC			DO	1		1 1	
625 BROADWAY 12TH FLOOR			BC	L			
Albany, NY 12233	152 GRAHAM AVE.						
Generator's Phone ( (518) 402-9813	Brooklyn NY 11206						
Transporter 1 Company Name							
CLEAN VENTURE INC.	State Trans. ID-NJDEPE 16755						
Transporter 2 Company Name				Decal			
			Tran	sporter's Phone	e (908	3) 355-5	800
Designated Facility Name and Site Address	10. US EPA ID Nu	mber	Stat	e Trans. ID-NJE	DEPE		
Cycle Chem Inc.				Decal	No		
217 South First Street				sporter's Phone		)	
Elizabeth, NJ 07206	[N]J[D]0[0[2]2]	0 0 0 0 4 6	Fac	lity's Phone (	$(908)_{1}$	355-5800	
	ss or Division.	Conta	ners	Total	Unit	Waste No	,
US DOT Description (Including Proper Shipping Name, Hazard Cla ID Number and Packing Group)	,	No.	Туре	Quantity	Wt/Vol		
a. Non-DOT CHEMICAL PROCESS LIQUID 1	Non-RCRA	01	PM	20	C	1072	
b.							
С.							
0.							
d.							
u.							
J. Additional Descriptions for Materials Listed Above							
а. С.							
u.	2.4						
b. d.				77 T (C			
b. CCI Generator # and Product Codes: 975500/931440/1	81191/326063 (	1)REM002-	کانا ک	ULUD			
		145	15				
		) L	9				
		- ( II d	estalu dos	orihad above h	v proper s	ninning name a	and are
GENERATOR'S CERTIFICATION: I hereby declare that the or classified, packed, marked, and labeled, and are in all respects i regulations and are non-hazardous by USEPA & applicable state.		nt by mgmway acc	orumg to	applicable inter	1	d national gove	
PLAC REQU			CARDS PLIED	AES I	NO- FOR		Year
Printed/Typed Name & Ed Ashta	Signature	Ef O	ML	ex		Month Day	15
Transporter 1 Acknowledgement of Receipt of Materials		7				Mand D	V
Printed/Typed Name	Signature			> _	24	Month Day	Yea
Trave Doming			1 3			101-	15
Transporter 2 Acknowledgement of Receipt of Materials						Month Day	Yea
Printed/Typed Name	Signature					world Day	160
		-					
	materials covered by this ma	nifest.					· V
Facility Owner or Operator: Certification of receipt of hazardous						14. 4	
Facility Owner or Operator: Certification of receipt of hazardous Printed/Typed Name	Signature					Month Day	Yea

cvcc					edista de la				
Clean Venturé, Inc. Trip	Ticket #: 2324			MNI,TRAVIS			- Sertinaria	**************************************	
Start Date: 10/13/2015	Ctort T	<u>I</u>	ruck: ST1	The same of the sa					
Start Date: 10/13/2015	Start Time:	AS PM	E	nd Date:	1/2/	14	End Tir	ne:	
Start Miles:	Start City:			nd Miles:		-	End Cit	ty:	
240 - 30	734		l L						
Cito Nama 9 Address	Order #: 0				5.1			- married by Married	
Site Name & Address:			-		Brok	er:	-0.655	<u> </u>	
CYCLE CHEM - ELIZAB 217 South First Street	EIM(R)								
217 South First Street									
ELIZABETH,NJ/ 07206 (	Union)								
Contact: Connolly/Hughe				Trailer/RO:					
Phone: 908-355-5800 C		3		Begin Empty	Trl1:			Trl2:	
							San Million	nach.	
Time in:		C. Investories							
Time III.		Time out				Date			
Manifest/BOL #:				Signature:					
							_		
Site Name & Address:	Order #: 2415	REF	: 49799-2 (6		Brok	er: PAR	SQ#S		
NYSDEC TOP HAT CLE	ANERS			1500- 1700			2		
152 Graham Ave									
Brooklyn,NY/Kin 11206 (									
Contact: Ed Ashton				Trailer/RO:			-835	491814	
Phone: 315-679-1170 C	ell:			Live Load	Trl1:			Trl2:	
1 Hone, 313-079-1170 O			<del></del>	The Load		<del></del>	<del>meieck</del>	1112, j	
		1	1-2-						
	498.							- K-77 K-7	
Time in:		Time out				Date	10/17	112	
Manifest/BQL #:				Signature:					
19165	743	1 6		Oignature.		- James	MAN,	steam)	
Site Name & Address:	Order #: 2415	REF	: 49799-2 (6	5134)	Brok	er: PAR	SONS		
CYCLE CHEM - ELIZAB	ETH (R)								
217 South First Street									
ELIZADETILALI/ 07000 /							÷		
ELIZABETH,NJ/ 07206 (				TuelleriDO			HIG	1982	
Contact: Connolly/Hughe				Trailer/RO:	- 14				
Phone: 908-355-5800 C	ell: 908-246-2513	3	<del> </del>	Live Unload	Trl1:		<del></del>	Trl2:	
Trailers .							183500	294.00	
Time in:		Time out:				Date			
						Ļ			
Manifest/BQL #:				Signature:					

1000

File:

#### **APPENDIX I**

# AIR MONITORING DATA LOGS (DATA PROVIDED ON DISK)