

# **SITE MONITORING REPORT / REQUEST FOR CLOSURE**

## **GETTY SERVICE STATION #00358**

**185 Lincoln Avenue  
Pelham, New York**

**NYSDEC Spill # 07-04608 & 12-01984  
T-Environmental Project #2150050-622**

### **Report Prepared For:**

**Mr. Tim Fisher  
Antea Group, on behalf of Getty Properties Corp.  
500 Summit Lake Drive, Suite 150  
Valhalla, New York 10595**

### **Report Prepared By:**

**T-Environmental, Inc.  
72 Gray's Bridge Road  
Brookfield, CT 06804**

## **REPORTING PERIOD – JULY THROUGH SEPTEMBER 2015**

### **INTRODUCTION**

This Site Monitoring Report has been prepared by T-Environmental, Inc. (TEI), on behalf of Getty Properties Corp. (Getty), to summarize the environmental response and monitoring activities conducted at the subject site (Service Station) in accordance with the requirements set forth by the Westchester County Department of Health (WCDOH) and New York State Department of Environmental Conservation (NYSDEC) regarding spill numbers 07-04608 and 12-01984. A map depicting the current site layout is included as **Figure 1**.

### **ENVIRONMENTAL SITE HISTORY**

Tank removal activities for three (3) 2,000-gallon underground storage tanks (USTs) were conducted in July 2007. During excavation activities, one (1) unknown 275-gallon UST was also discovered, and removed on July 30, 2007. NYSDEC spill number 07-04608 was issued following the discovery of petroleum impacted soil during UST removal activities. As directed by the WCDOH, Getty Petroleum Marketing Inc. (GPMI) contracted Tyree to excavate additional petroleum impacted soil from the site. Tyree excavated approximately 592 tons of soil as a remedial effort to remove the source of petroleum impacts.

Soil analytical results indicated that the majority of petroleum impacted soil onsite was removed. However, residual impact remained along the sidewalk and along the west side of the former tank excavation. The remaining soil could not be removed due to the physical constraints of the property, including the city sidewalk and underground utilities (sewer and water).

WCDOH issued a letter dated April 29, 2009, requiring a subsurface investigation on the property to evaluate site conditions related to spill number 07-04608. WCDOH required that at least three (3) groundwater samples be collected from the proximity of the former tank excavation. As part of the investigation, Tyree installed 4 soil borings on the property. Three (3) of the soil borings were completed with 1-inch diameter monitoring wells. Drilling activities were completed on June 11, 2009. Groundwater sampling activities were conducted on July 1, 2009. A subsurface investigation report (S.I.R.) was submitted to Westchester County Department of Health in August 2009, and quarterly groundwater monitoring activities were initiated.

On September 29, 2012, Tyree initiated a Vacuum Enhanced Fluid Recovery (VEFR) Program on well MW-4 to reduce dissolved concentrations of total BTEX. The VEFR events were scheduled once per month. The VEFR events were discontinued when the USTs were removed in May 2013.

During the tank removal activities in May 2013, only pea gravel was encountered surrounding the tanks. The native soil became exposed along the building foundation and beneath the sidewalk area as the pea gravel sloughed into the excavation. No additional impacted soil could be removed during the tank removal activities without jeopardizing structural integrity of the building or sidewalk.

Based on information obtained from the property owner, the project site was planned for re-development, including the demolition of the building. In order to facilitate the excavation of impacted soil, Tyree discussed with WCDOH and the property owner's environmental consultant that excavation activities should take place after the building was demolished.

A remedial soil excavation commenced after the station building was demolished. A total of 464.26 tons of petroleum impacted soil was removed during site activities from February 19-25, 2014. During the previous tank removal activities in July 2007, a total of 592 tons of petroleum impacted soil was excavated for disposal from the tank field, bringing the total of excavated soil to 1,058 tons.

Soil throughout the excavation was removed down to bedrock, and the excavation was extended to the point at which clean endpoint samples were achieved. Endpoint soil samples collected during the February 2014 remedial soil excavation were predominantly non-detect or below CP-51 soil cleanup objectives for VOCs. One endpoint sample collected during tank removal activities in May 2013 (*T3 S. End 5'*) indicated residual petroleum impacts beneath the sidewalk, where xylenes (2,240 ug/kg) and 1,2,4-trimethylbenzene (8,220 ug/kg) exceeded CP-51 soil cleanup objectives. However, these

concentrations were below the Residential (Restricted Use) soil clean up objectives (6 NYCRR Part 375-6.8(b)). This soil could not be excavated due to the proximity to the sidewalk, and the underground power line beneath the sidewalk.

Due to the presence of shallow bedrock across the project site, the WCDOH requested that a bedrock groundwater investigation be conducted on the project site, after the completion of the remedial soil excavation. Three bedrock wells (MW-A, MW-B, and MW-C) were installed in April 2014. Dissolved concentrations of VOCs were detected in the bedrock groundwater in MW-B and MW-C, at concentrations exceeding New York State Groundwater Standards.

On July 22, 2014, liquid phase hydrocarbons (LPH) were detected in MW-B at a thickness of 0.03 feet (ft). Depth to product was 7.75 ft, and depth to water was 7.78 ft. As a response measure, a vacuum truck was dispatched to the site on July 23, 24, and 25 to conduct VEFR events on MW-B for 4 hours each. Each well was gauged during each visit, and LPH was only detected in MW-B. A summary of gauging data and VEFR events is included in the table below. LPH was successfully removed from MW-B, and was not detected after the three (3) VEFR events were completed.

Well ID	Well Gauging Date	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Vacuum Enhanced Fluid Recovery (gallons)
MW-B	7/22/2014	7.75	7.78	0.03	N/A
	7/23/2014	8.51	8.54	0.03	160
	7/24/2014	8.85	8.87	0.02	170
	7/25/2014	9.05	9.07	0.02	160
	7/29/2014	NFP	6.99	0.00	N/A
	8/8/2014	NFP	6.99	0.00	N/A
	8/14/2014	NFP	7.04	0.00	N/A

## **SITE ACTIVITIES – 3<sup>rd</sup> QUARTER 2015**

### **Groundwater Sampling – August 4, 2015**

Monitoring wells MW-A, MW-B, MW-C, and MW-4 were sampled on August 4, 2015. Prior to sampling, each monitoring well was gauged for static water level and then purged of three well volumes or until dry. Once the groundwater within each monitoring well recharged to at least 90 percent of its static water level, groundwater samples were collected.

Samples collected during the August 4, 2015 event were submitted to Con-Test Analytical Laboratories of Longmeadow, Massachusetts, for analysis by EPA method 8260 for BTEX and MTBE.

Groundwater elevation data and groundwater analytical data are tabulated on **Table 1** and **2**, respectively. A hydrograph plotting the change in groundwater elevations over time is presented as **Graph 1**. BTEX concentrations over time are presented on **Graph 2**. Since

February 2014 dissolved BTEX has remained low relative to historical dissolved groundwater concentrations. On **Graph 1** the MW-B BTEX trendline illustrates the trend of decreasing dissolved concentrations. Concentrations will likely continue to decrease since the source of petroleum impacts in soil was removed during remedial excavations in 2014. Dissolved MTBE concentrations over time are presented on **Graph 3**.

### **Laboratory Analytical Results – August 4, 2015 - Groundwater Sampling**

Laboratory analytical results associated with the August 4, 2015 groundwater sampling event indicate the following compounds of concern (COCs) exceeded NYSDEC groundwater standards:

<b>MW-A</b>	none
<b>MW-B</b>	benzene (45 parts per billion (ppb)), ethylbenzene (1,200 ppb), and total xylenes (694 ppb)
<b>MW-C</b>	toluene (6.8 ppb), ethylbenzene (72 ppb), and total xylenes (96.1 ppb)
<b>MW-4</b>	ethylbenzene (52 ppb), and total xylenes (115 ppb)

Historical groundwater analytical results are summarized in **Table 2** and are plotted in **Graph 2** (Total BTEX: Concentration vs. Time). A groundwater data map for the August 4, 2015 sampling event is included as **Figure 1**. A copy of the original laboratory analytical data package is included in **Appendix A**.

### **REQUEST FOR CLOSURE**

As part of a continued remedial action plan, Tyree previously recommended that monitoring wells MW-A, MW-B, MW-C, and MW-4 be included in a post-remediation groundwater monitoring program to track the VOC concentrations in response to the source removal actions. With the source of petroleum impacts substantially excavated from the project site, residual impacts exist in the dissolved-phase within the bedrock beneath the site.

The low ratio of benzene to xylenes in groundwater can generally indicate that the impacts are aged, and should continue to degrade by natural attenuation, particularly in response to the source removal of the impacted soil in February 2014. BTEX concentrations have overall shown a downward trend since post-remediation monitoring began in April 2014. An anomalous rebound in Total BTEX concentrations was observed in MW-B during the 1<sup>st</sup> and 2<sup>nd</sup> Quarter 2015 events. The Total BTEX concentrations exhibited in this report suggest that remaining impacts in groundwater will continue to display a downward trend. During the same timeframe benzene concentrations in all of the monitoring wells have decreased to below laboratory method detection limits or significantly below the historically elevated concentrations.

Based on source removal, the decreasing groundwater trends, and the low concentrations observed at the site, TEI recommends no further action, and requests closure for spill numbers 07-04608 and 12-01984.

## **SUMMARY OF UPCOMING EVENTS**

### **Next Groundwater**

**Sampling Event -**

Suspended pending NFA response

**Next Report Submittal Date -**

Suspended pending NFA response

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Graph 2 Total BTEX: Concentration Trend vs. Time

Graph 3 MTBE: Concentration vs. Time

## **LIST OF FIGURES**

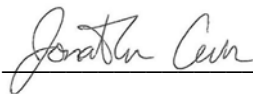
Figure 1 Groundwater Data Map – August 4, 2015

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Appendix A Laboratory Analytical Reports – August 4, 2015

### **Report Prepared By:**

**T-ENVIRONMENTAL, INC.**



Jonathan Curran  
Environmental Project Manager

## **Tables**

**TABLE 1.**  
**SUMMARY OF GROUNDWATER ELEVATION GAUGING DATA**

GETTY SERVICE STATION # 00358  
185 Lincoln Avenue  
Pelham, NY

(All measurements are in decimal feet)

Well ID	Well Gauging Date	Top of Well Casing	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Relative Groundwater Elevation (ft)
MW-A	4/22/2014	100.94	6.98	NFP	0.00	93.96
	6/3/2014	100.94	5.59	NFP	0.00	95.35
	8/14/2014	100.94	6.48	NFP	0.00	94.46
	11/3/2014	100.94	6.72	NFP	0.00	94.22
	2/17/2015	100.94	4.24	NFP	0.00	96.70
	5/5/2015	100.94	5.14	NFP	0.00	95.80
	8/4/2015	100.94	6.96	NFP	0.00	93.98
MW-B	4/22/2014	100.93	7.40	NFP	0.00	93.53
	6/3/2014	100.93	7.68	NFP	0.00	93.25
	7/22/2014	100.93	7.78	7.75	0.03	93.15
	7/23/2014	100.93	8.54	8.51	0.03	92.39
	7/24/2014	100.93	8.87	8.85	0.02	92.06
	7/25/2014	100.93	9.07	9.05	0.02	91.86
	7/29/2014	100.93	6.99	NFP	0.00	93.94
	8/8/2014	100.93	6.99	NFP	0.00	93.94
	8/14/2014	100.93	7.04	NFP	0.00	93.89
	11/3/2014	100.93	7.15	NFP	0.00	93.78
	2/17/2015	100.93	6.63	NFP	0.00	94.30
	5/5/2015	100.93	7.73	NFP	0.00	93.20
8/4/2015	100.93	7.32	NFP	0.00	93.61	
MW-C	4/22/2014	101.89	2.80	NFP	0.00	99.09
	6/3/2014	101.89	3.88	NFP	0.00	98.01
	8/14/2014	101.89	4.90	NFP	0.00	96.99
	11/3/2014	101.89	5.37	NFP	0.00	96.52
	2/17/2015	101.89	3.38	NFP	0.00	98.51
	5/5/2015	101.89	3.31	NFP	0.00	98.58
	8/4/2015	101.89	5.76	NFP	0.00	96.13
MW-4	7/1/2009	NS	3.48	NFP	0.00	NC
	2/22/2010	NS	4.14	NFP	0.00	NC
	5/19/2010	NS	4.27	NFP	0.00	NC
	8/31/2010	NS	6.99	NFP	0.00	NC
	11/15/2010	NS	6.34	NFP	0.00	NC
	2/11/2011	NS	2.68	NFP	0.00	NC
	5/12/2011	NS	3.90	NFP	0.00	NC
	8/17/2011	NS	5.36	NFP	0.00	NC
	11/15/2011	NS	4.13	NFP	0.00	NC
	2/21/2012	NS	4.40	NFP	0.00	NC
	5/16/2012	NS	4.24	NFP	0.00	NC
	8/23/2012	NS	6.19	NFP	0.00	NC
	11/26/2012	NS	5.48	NFP	0.00	NC
	2/13/2013	NS	2.96	NFP	0.00	NC
	8/8/2013	NS	5.98	NFP	0.00	NC
	4/22/2014	NS	NG	NFP	0.00	NC
	6/3/2014	NS	4.22	NFP	0.00	NC
	8/14/2014	NS	NG	NFP	0.00	NC
11/3/2014	NS	5.97	NFP	0.00	NC	
2/17/2015	NS	3.83	NFP	0.00	NC	
5/5/2015	NS	3.36	NFP	0.00	NC	
8/4/2015	NS	5.84	NFP	0.00	NC	

Notes:

NP - No Product

Dry - Insufficient Water Yield

NS - Not Surveyed

NC - Not Calculated

<b>TABLE 2.</b> <b>SUMMARY OF QUARTERLY GROUNDWATER ANALYTICAL RESULTS</b>  GETTY SERVICE STATION # 00358 185 Lincoln Avenue Pelham, NY							
Well ID	Sample Collection Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Total Xylenes (ppb)	Total BTEX (ppb)	MTBE (ppb)
MW-A	4/22/2014	<MDL	<MDL	<MDL	<MDL	ND	<MDL
	6/3/2014	<MDL	<MDL	<MDL	<MDL	ND	<MDL
	8/14/2014	<MDL	<MDL	<MDL	<MDL	ND	<MDL
	11/3/2014	<MDL	<MDL	<MDL	<MDL	ND	<MDL
	2/17/2015	<MDL	<MDL	<MDL	<MDL	ND	<MDL
	5/5/2015	<MDL	<MDL	<MDL	<MDL	ND	<MDL
	8/4/2015	<MDL	<MDL	<MDL	<MDL	ND	<MDL
MW-B	4/22/2014	119	68.9	1,830	1,380	3,397.9	<MDL
	6/3/2014	63.0	32.0	1,500	880	2,475	<MDL
	8/14/2014	86.5	39.4	1,280	1,020	2,425.9	<MDL
	11/3/2014	14	4.7	300	141	459.7	9
	2/17/2015	68	31	960	597	1,656	<MDL
	5/5/2015	<MDL	<MDL	1,400	1,158	2,558	<MDL
	8/4/2015	45	<25	1,200	694	1,939	<25
MW-C	4/22/2014	2.6	24.2	202	361	589.8	<MDL
	6/3/2014	3.3	14.0	130	223	370.3	<MDL
	8/14/2014	0.57	9.5	117	170	297.1	<MDL
	11/3/2014	<MDL	4.6	11	106.7	122.3	<MDL
	2/17/2015	<MDL	7.4	120	183	310.4	<MDL
	5/5/2015	<MDL	<MDL	100	160	260.0	<MDL
MW-4	7/1/2009	240	440	850	4,790	6,320	<MDL
	2/22/2010	591	685	1,580	10,800	13,656	<MDL
	5/19/2010	210	957	149	5,320	6,636	<MDL
	8/31/2010	211	269	836	5,160	6,476	<MDL
	11/15/2010	137	295	1,520	6,860	8,812	<MDL
	2/11/2011	95.2	100	457	2,690	3,342	<MDL
	5/12/2011	100	71.7	810	4,040	5,021	<MDL
	8/17/2011	76.6	83.4	753	3,070	3,983	<MDL
	11/15/2011	119	140	1,170	7,070	8,499	<MDL
	2/21/2012	97.7	1,530	137	9,650	11,415	<MDL
	5/16/2012	75.5	891	93.5	4,950	6,010	<MDL
	8/23/2012	83.5	117	1,270	5,200	6,671	2.4
	11/26/2012	36.7	54.0	370	1,240	1,701	4.70
	2/13/2013	31.0	16.3	339	1,170	1,556	38.3
	8/8/2013	46.1	38.5	328	1,210	1,623	5.70
	4/22/2014	NS	NS	NS	NS	NS	NS
	6/3/2014	3.4	1.9	16.0	70.0	91.3	<MDL
	8/14/2014	NS	NS	NS	NS	NS	NS
	11/3/2014	<MDL	<MDL	78	252	330	<MDL
	2/17/2015	5.8	3.7	120	214	343.5	<MDL
5/5/2015	<MDL	1.6	65	250	316.6	<MDL	
8/4/2015	<2.0	<MDL	52	115	167	<MDL	
NYSDEC Groundwater Standards		1	5	5	5	No NYSDEC Groundwater Standard Listed	10

Notes:

NA - Well Not Accessible

NS - Not Sampled

ND - Not Detected

DRY - Well Not Sampled, Insufficient Water Yield

LPH - Liquid Phase Hydrocarbons

(Bold Value) - Concentration exceeds NYSDEC groundwater standard

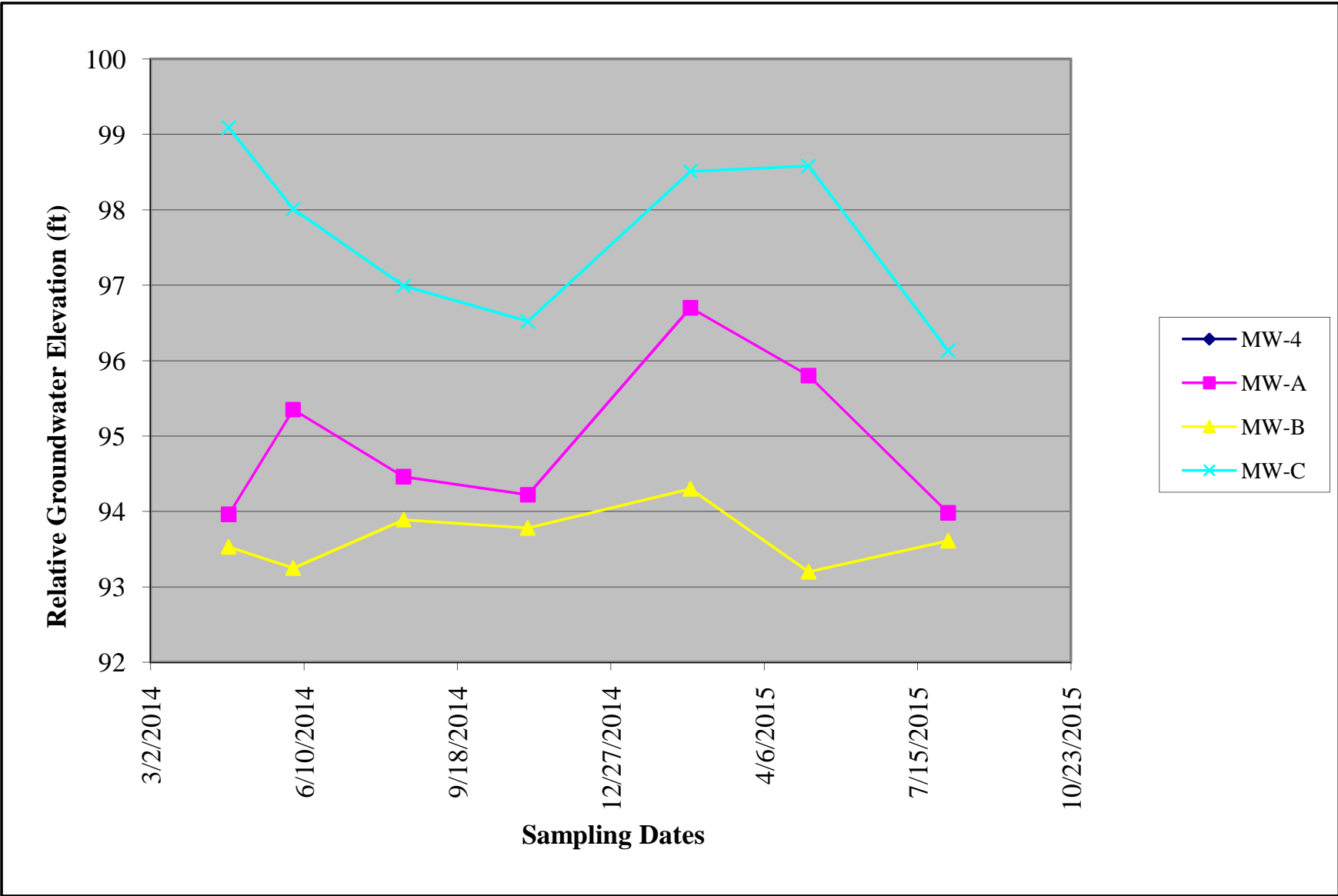
<MDL - Below Method Detection Limit



## **Graphs**

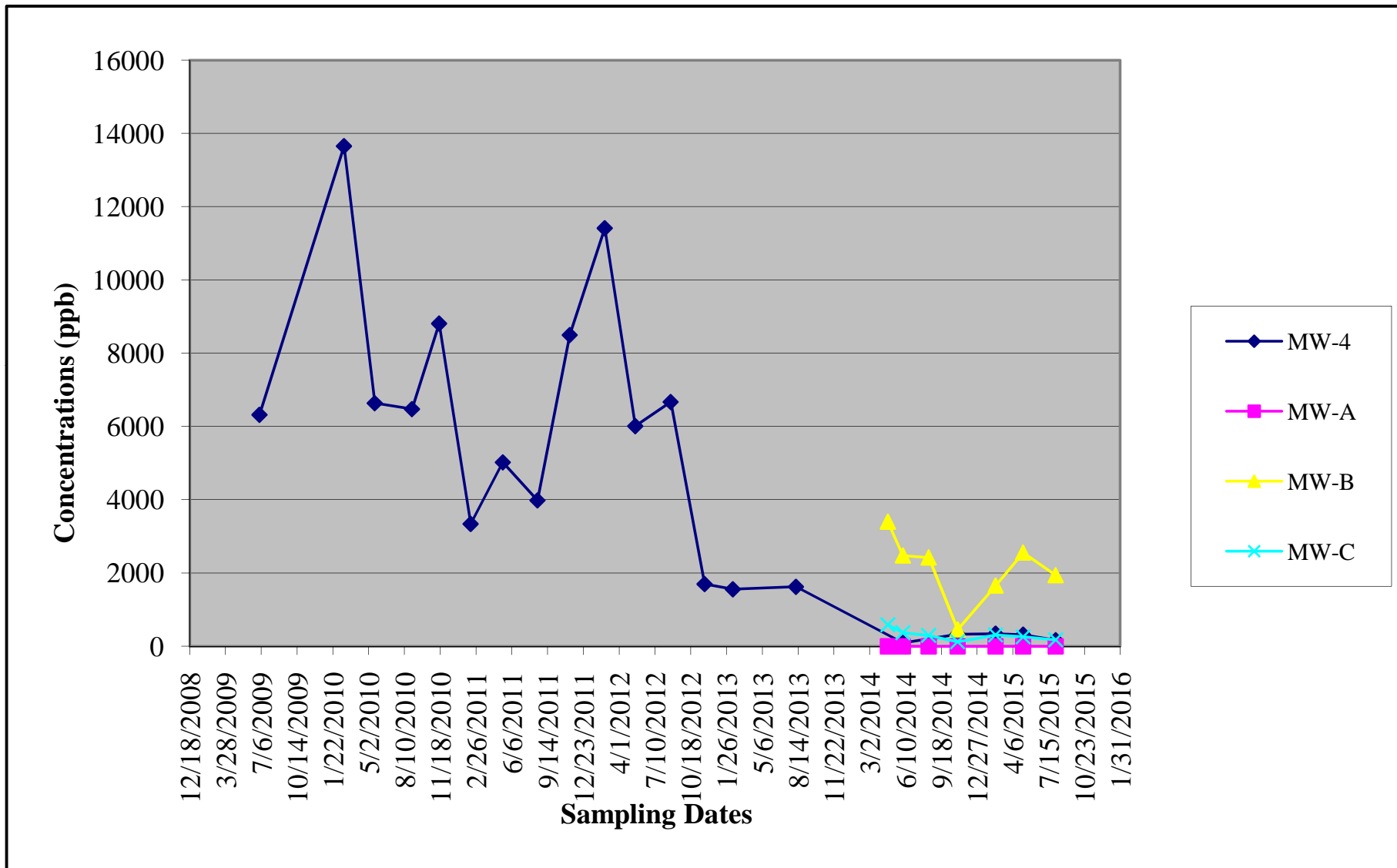
**GRAPH 1.**  
**HYDROGRAPH: RELATIVE GROUNDWATER ELEVATION VS. TIME**

GETTY #00358 185 LINCOLN AVENUE PELHAM, NEW YORK



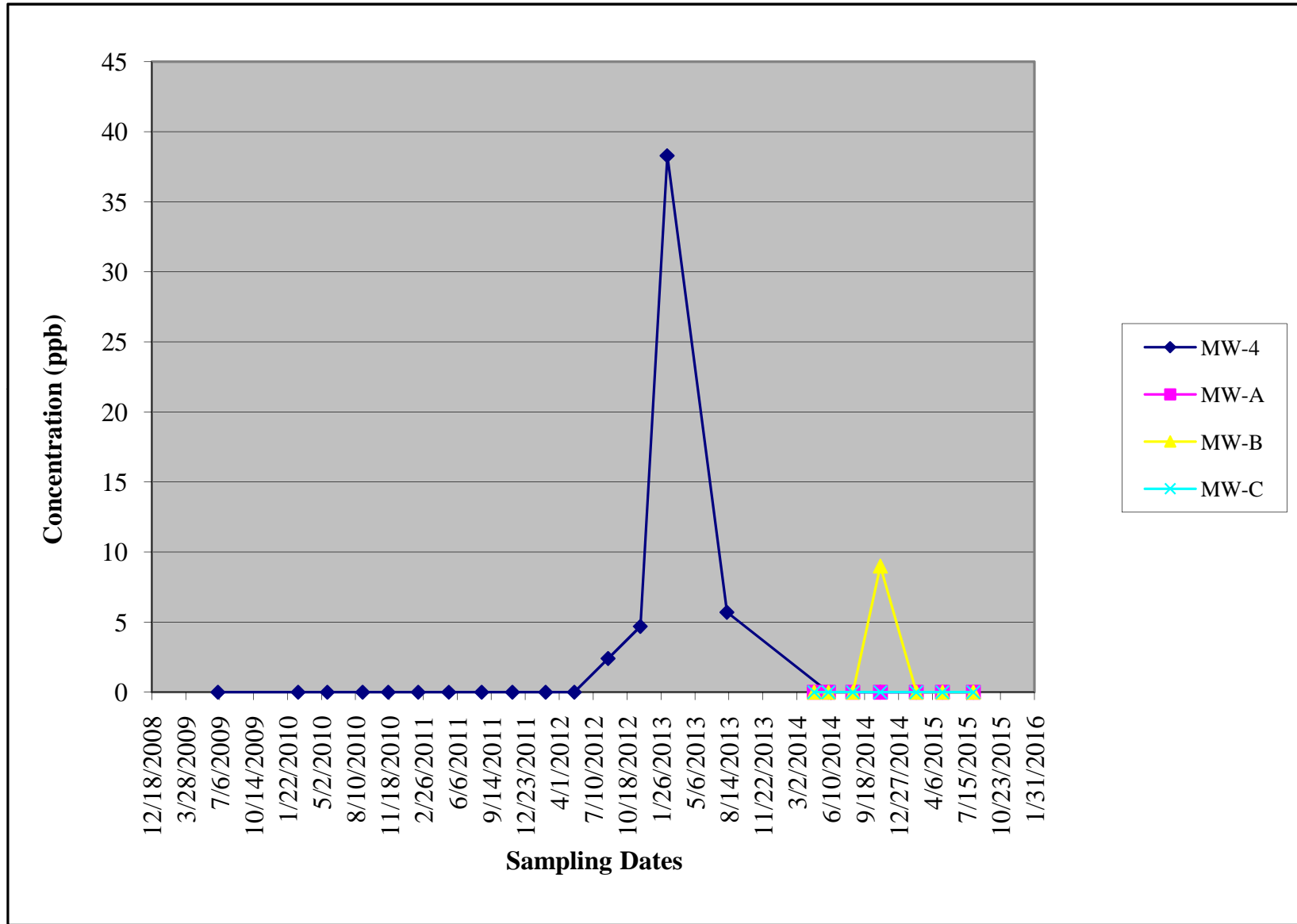
**GRAPH 2.**  
**TOTAL BTEX: CONCENTRATION VS. TIME**

GETTY #00358 185 LINCOLN AVENUE PELHAM, NEW YORK



**GRAPH 3.**  
**MTBE: CONCENTRATION VS. TIME**

GETTY #00358 185 LINCOLN AVENUE PELHAM, NEW YORK

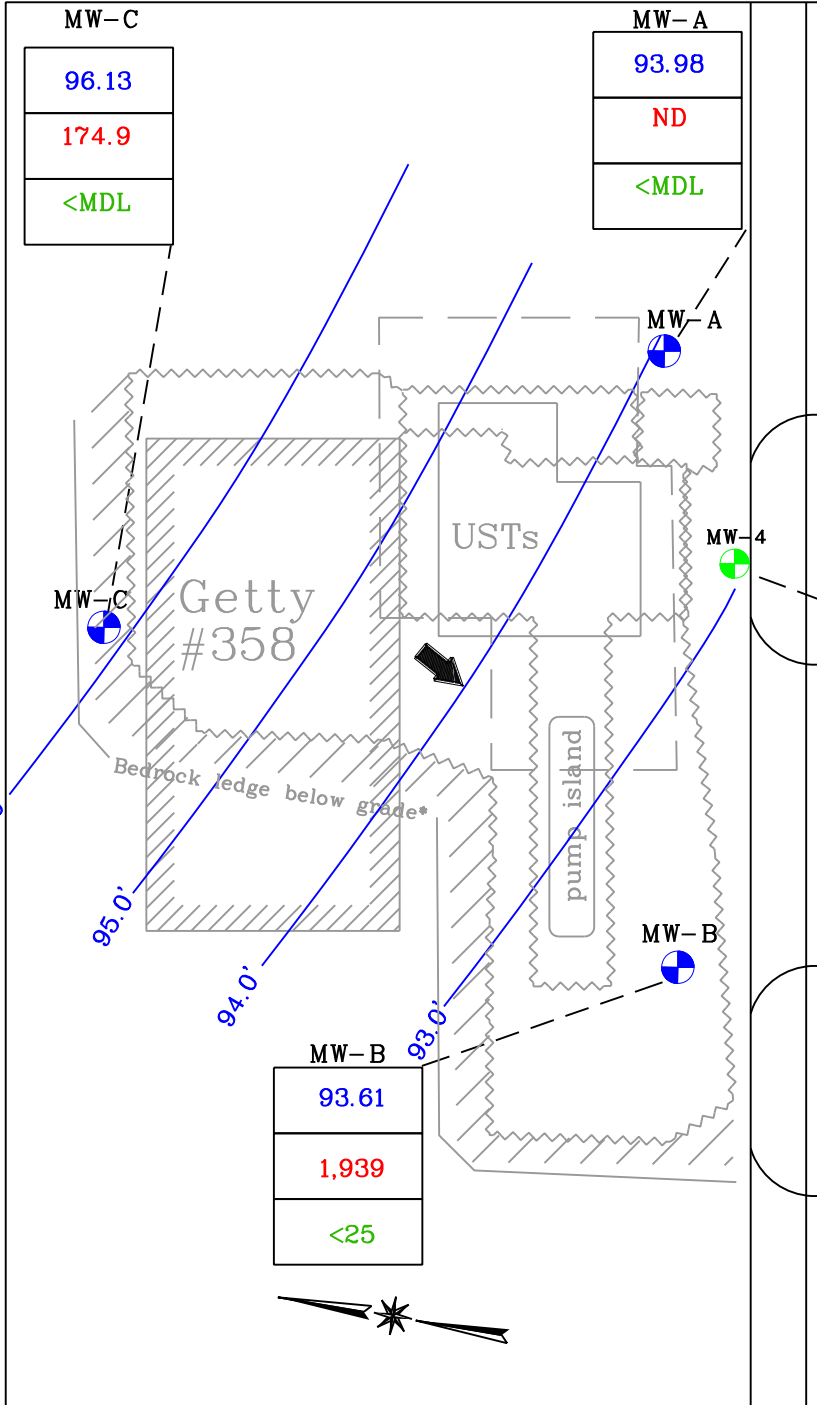


**Figure**

# Legend

94.22	Relative Groundwater Elevation (ft)
ND	Total BTEX Concentration (ug/l)
<MDL	MTBE Concentration (ug/l)

- ND Not Detected
- NSD No Survey Data
- NG Not Gauged
- NS Not Sampled
- <MDL Less than method detection limits
- 95.0' Relative Groundwater Elevation Contour
- Generalized GW Flow Direction



MW-4
NSD
167
<MDL

Lincoln Avenue

Young Avenue

# Legend

- Proposed Well Location PW-1 (pink circle)
- 1- inch Monitoring Well MW-4 (green circle with crosshair)
- Bedrock Monitoring Well MW-A (blue circle with crosshair)
- GW flow direction (thick black arrow)
- Bedrock ledge below grade\* (hatched pattern)
- 2007 Excavation Extent (dashed line)
- 2013 Excavation Extent (dotted line)
- 2014 Excavation Extent (wavy line)

## T-ENVIRONMENTAL, INC.

TITLE	Groundwater Data Map August 05, 2015	
	SITE: Getty Service Station # 00358	SCALE
	LOCATION: 185 Lincoln Avenue Pelham, New York	1" = 21.5 ft
CLIENT: Getty Reality Corp.	PLATE	Figure 1
DRW BY: HS	10/15/15	

## **Appendix A**

Laboratory Analytical Reports

August 14, 2015

John Liddon  
T-Environmental, Inc. - CT  
72 Gray's Bridge Road  
Brookfield, CT 06804

Project Location: 185 Lincoln Ave., Pelham, NY  
Client Job Number:  
Project Number: Getty 358  
Laboratory Work Order Number: 15H0312

Enclosed are results of analyses for samples received by the laboratory on August 7, 2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Lisa A. Worthington", is written over a light gray rectangular background.

Lisa A. Worthington  
Project Manager



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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

T-Environmental, Inc. - CT  
72 Gray's Bridge Road  
Brookfield, CT 06804  
ATTN: John Liddon

REPORT DATE: 8/14/2015

PURCHASE ORDER NUMBER:

PROJECT NUMBER:     Getty 358

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER:     15H0312

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION:     185 Lincoln Ave., Pelham, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-A	15H0312-01	Ground Water		SW-846 8260C	
MW-B	15H0312-02	Ground Water		SW-846 8260C	
MW-C	15H0312-03	Ground Water		SW-846 8260C	
MW-4	15H0312-04	Ground Water		SW-846 8260C	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SW-846 8260C

Qualifications:

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

15H0312-03[MW-C], 15H0312-04[MW-4]

Methyl tert-Butyl Ether (MTBE)

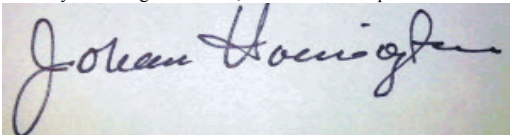
15H0312-02[MW-B]

Toluene

15H0312-02[MW-B]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Johanna K. Harrington

Manager, Laboratory Reporting

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: 185 Lincoln Ave., Pelham, NY

Sample Description:

Work Order: 15H0312

Date Received: 8/7/2015

Field Sample #: MW-A

Sampled: 8/4/2015 12:40

Sample ID: 15H0312-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/15	8/14/15 5:56	LBD
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	8/13/15	8/14/15 5:56	LBD
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	8/13/15	8/14/15 5:56	LBD
Toluene	ND	1.0	µg/L	1		SW-846 8260C	8/13/15	8/14/15 5:56	LBD
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	8/13/15	8/14/15 5:56	LBD
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	8/13/15	8/14/15 5:56	LBD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4	104		70-130				8/14/15 5:56		
Toluene-d8	98.3		70-130				8/14/15 5:56		
4-Bromofluorobenzene	94.7		70-130				8/14/15 5:56		

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: 185 Lincoln Ave., Pelham, NY

Sample Description:

Work Order: 15H0312

Date Received: 8/7/2015

Field Sample #: MW-B

Sampled: 8/4/2015 13:10

Sample ID: 15H0312-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzene	45	25	µg/L	25		SW-846 8260C	8/13/15	8/14/15 9:03	LBD
Ethylbenzene	1200	25	µg/L	25		SW-846 8260C	8/13/15	8/14/15 9:03	LBD
Methyl tert-Butyl Ether (MTBE)	ND	25	µg/L	25	RL-11	SW-846 8260C	8/13/15	8/14/15 9:03	LBD
Toluene	ND	25	µg/L	25	RL-11	SW-846 8260C	8/13/15	8/14/15 9:03	LBD
m+p Xylene	650	50	µg/L	25		SW-846 8260C	8/13/15	8/14/15 9:03	LBD
o-Xylene	44	25	µg/L	25		SW-846 8260C	8/13/15	8/14/15 9:03	LBD
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4	96.7		70-130			8/14/15 9:03			
Toluene-d8	102		70-130			8/14/15 9:03			
4-Bromofluorobenzene	102		70-130			8/14/15 9:03			

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: 185 Lincoln Ave., Pelham, NY

Sample Description:

Work Order: 15H0312

Date Received: 8/7/2015

Field Sample #: MW-C

Sampled: 8/4/2015 13:35

Sample ID: 15H0312-03

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzene	ND	5.0	µg/L	5		SW-846 8260C	8/14/15	8/14/15 13:23	EEH
Ethylbenzene	72	5.0	µg/L	5		SW-846 8260C	8/14/15	8/14/15 13:23	EEH
Methyl tert-Butyl Ether (MTBE)	ND	5.0	µg/L	5		SW-846 8260C	8/14/15	8/14/15 13:23	EEH
Toluene	6.8	5.0	µg/L	5		SW-846 8260C	8/14/15	8/14/15 13:23	EEH
m+p Xylene	87	10	µg/L	5		SW-846 8260C	8/14/15	8/14/15 13:23	EEH
o-Xylene	9.1	5.0	µg/L	5		SW-846 8260C	8/14/15	8/14/15 13:23	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4	99.7		70-130				8/14/15 13:23		
Toluene-d8	98.6		70-130				8/14/15 13:23		
4-Bromofluorobenzene	101		70-130				8/14/15 13:23		

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: 185 Lincoln Ave., Pelham, NY

Sample Description:

Work Order: 15H0312

Date Received: 8/7/2015

Field Sample #: MW-4

Sampled: 8/4/2015 11:55

Sample ID: 15H0312-04

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzene	ND	2.0	µg/L	2		SW-846 8260C	8/14/15	8/14/15 12:57	EEH
Ethylbenzene	52	2.0	µg/L	2		SW-846 8260C	8/14/15	8/14/15 12:57	EEH
Methyl tert-Butyl Ether (MTBE)	ND	2.0	µg/L	2		SW-846 8260C	8/14/15	8/14/15 12:57	EEH
Toluene	ND	2.0	µg/L	2		SW-846 8260C	8/14/15	8/14/15 12:57	EEH
m+p Xylene	81	4.0	µg/L	2		SW-846 8260C	8/14/15	8/14/15 12:57	EEH
o-Xylene	34	2.0	µg/L	2		SW-846 8260C	8/14/15	8/14/15 12:57	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
1,2-Dichloroethane-d4	98.8		70-130				8/14/15 12:57		
Toluene-d8	98.9		70-130				8/14/15 12:57		
4-Bromofluorobenzene	100		70-130				8/14/15 12:57		

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**Sample Extraction Data****Prep Method: SW-846 5030B-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15H0312-01 [MW-A]	B128521	5	5.00	08/13/15
15H0312-02 [MW-B]	B128521	0.2	5.00	08/13/15

**Prep Method: SW-846 5030B-SW-846 8260C**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
15H0312-03 [MW-C]	B128613	1	5.00	08/14/15
15H0312-04 [MW-4]	B128613	2.5	5.00	08/14/15



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B128521 - SW-846 5030B</b>										
<b>Blank (B128521-BLK1)</b>										
Prepared & Analyzed: 08/13/15										
Benzene	ND	1.0	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	25.5		µg/L	25.0		102	70-130			
Surrogate: Toluene-d8	24.8		µg/L	25.0		99.3	70-130			
Surrogate: 4-Bromofluorobenzene	24.0		µg/L	25.0		95.9	70-130			
<b>LCS (B128521-BS1)</b>										
Prepared & Analyzed: 08/13/15										
Benzene	10.3	1.0	µg/L	10.0		103	70-130			
Ethylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Methyl tert-Butyl Ether (MTBE)	10.0	1.0	µg/L	10.0		100	70-130			
Toluene	10.5	1.0	µg/L	10.0		105	70-130			
m+p Xylene	21.8	2.0	µg/L	20.0		109	70-130			
o-Xylene	10.7	1.0	µg/L	10.0		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.6		µg/L	25.0		98.3	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	25.8		µg/L	25.0		103	70-130			
<b>LCS Dup (B128521-BSD1)</b>										
Prepared & Analyzed: 08/13/15										
Benzene	10.2	1.0	µg/L	10.0		102	70-130	1.17	25	
Ethylbenzene	10.4	1.0	µg/L	10.0		104	70-130	0.670	25	
Methyl tert-Butyl Ether (MTBE)	10.2	1.0	µg/L	10.0		102	70-130	1.88	25	
Toluene	10.5	1.0	µg/L	10.0		105	70-130	0.0953	25	
m+p Xylene	21.7	2.0	µg/L	20.0		108	70-130	0.414	25	
o-Xylene	10.7	1.0	µg/L	10.0		107	70-130	0.280	25	
Surrogate: 1,2-Dichloroethane-d4	24.6		µg/L	25.0		98.3	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	26.8		µg/L	25.0		107	70-130			
<b>Batch B128613 - SW-846 5030B</b>										
<b>Blank (B128613-BLK1)</b>										
Prepared & Analyzed: 08/14/15										
Benzene	ND	1.0	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	24.3		µg/L	25.0		97.3	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0		99.9	70-130			
Surrogate: 4-Bromofluorobenzene	24.8		µg/L	25.0		99.3	70-130			

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL**

**Volatile Organic Compounds by GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B128613 - SW-846 5030B</b>										
<b>LCS (B128613-BS1)</b>										
Prepared & Analyzed: 08/14/15										
Benzene	10.6	1.0	µg/L	10.0		106	70-130			
Ethylbenzene	11.0	1.0	µg/L	10.0		110	70-130			
Methyl tert-Butyl Ether (MTBE)	10.1	1.0	µg/L	10.0		101	70-130			
Toluene	10.6	1.0	µg/L	10.0		106	70-130			
m+p Xylene	21.4	2.0	µg/L	20.0		107	70-130			
o-Xylene	10.6	1.0	µg/L	10.0		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.4		µg/L	25.0		97.4	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.6		µg/L	25.0		98.4	70-130			
<b>LCS Dup (B128613-BSD1)</b>										
Prepared & Analyzed: 08/14/15										
Benzene	10.6	1.0	µg/L	10.0		106	70-130	0.189	25	
Ethylbenzene	10.6	1.0	µg/L	10.0		106	70-130	4.63	25	
Methyl tert-Butyl Ether (MTBE)	10.0	1.0	µg/L	10.0		100	70-130	0.794	25	
Toluene	10.4	1.0	µg/L	10.0		104	70-130	2.39	25	
m+p Xylene	21.2	2.0	µg/L	20.0		106	70-130	1.13	25	
o-Xylene	10.6	1.0	µg/L	10.0		106	70-130	0.849	25	
Surrogate: 1,2-Dichloroethane-d4	25.0		µg/L	25.0		100	70-130			
Surrogate: Toluene-d8	25.0		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0		98.6	70-130			

**FLAG/QUALIFIER SUMMARY**

- \* QC result is outside of established limits.
  - † Wide recovery limits established for difficult compound.
  - ‡ Wide RPD limits established for difficult compound.
  - # Data exceeded client recommended or regulatory level
- Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.  
No results have been blank subtracted unless specified in the case narrative section.
- RL-11 Elevated reporting limit due to high concentration of target compounds.

**CERTIFICATIONS**

**Certified Analyses included in this Report**

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
Benzene	CT,NH,NY,ME,VA,NJ
Ethylbenzene	CT,NH,NY,ME,VA,NJ
Methyl tert-Butyl Ether (MTBE)	CT,NH,NY,ME,VA,NJ
Toluene	CT,NH,NY,ME,VA,NJ
m+p Xylene	CT,NH,ME,VA
o-Xylene	CT,NH,ME,VA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2016
CT	Connecticut Department of Public Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2016
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2016
RI	Rhode Island Department of Health	LAO00112	12/30/2015
NC	North Carolina Div. of Water Quality	652	12/31/2015
NJ	New Jersey DEP	MA007 NELAP	09/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2016
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2016
WA	State of Washington Department of Ecology	C2065	02/23/2016
ME	State of Maine	2011028	06/9/2017
VA	Commonwealth of Virginia	460217	12/14/2015
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015



Phone: 413-525-2332  
 Fax: 413-525-6405  
 Email: info@contestlabs.com  
 www.contestlabs.com

# CHAIN OF CUSTODY RECORD

39 Spruce Street  
 East Longmeadow, MA 01028

Page \_\_\_\_\_ of \_\_\_\_\_

Rev 04.05.12

Company Name: Tyree Environmental  
 Address: 72 Gays Bridge Rd  
Brookfield, CT 06804  
 Attention: Son Curran / Harry Sudwischel  
185 Lincoln Ave  
 Project Location: Betty 358  
Pelham, NY  
 Sampled By: Pat H.

Telephone: (203) 740-8500  
 Project # Betty 358  
 Client PO# \_\_\_\_\_

Project Proposal Provided? (for billing purposes)  
 yes  no  
 proposal date \_\_\_\_\_

Con-Test Lab ID <small>(laboratory use only)</small>	Client Sample ID / Description	Collection		Composite	Grab	Matrix Code	Conc Code
		Beginning Date/Time	Ending Date/Time				
01	MW-A	8/4/15	12:40	X	X	GW	U
02	MW-B	↓	13:10	X	X	GW	U
03	MW-C	↓	13:35	X	X	GW	U
04	MW-D	↓	11:55	X	X	GW	U

DATA DELIVERY (check all that apply)  
 FAX  EMAIL  WEBSITE  
 PDF  EXCEL  GIS  
 OTHER  
 "Enhanced Data Package"

Comments: Please prepare an EPP for comparing results with NYSDEC by regulation standards (Tags + TQM)

Relinquished by: (signature) [Signature] Date/Time: 8/4/15  
 Received by: (signature) [Signature] Date/Time: 8/7/15  
 Relinquished by: (signature) [Signature] Date/Time: 14:35  
 Received by: (signature) [Signature] Date/Time: 18:00  
 Relinquished by: (signature) [Signature] Date/Time: 5:10 8/7/15  
 Received by: (signature) [Signature] Date/Time: 18:00

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

# of Containers	** Preservation	*** Container Code
3	A	V

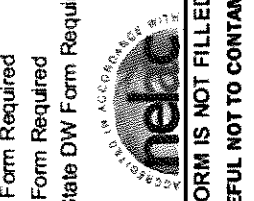
ANALYSIS REQUESTED

Disolved Metals	*** Cont. Code:	** Preservation
<input type="radio"/> Field Filtered	A=amber glass	
<input type="radio"/> Lab to Filter	G=glass	
	P=plastic	
	ST=sterile	
	V= Vial	
	S=summa can	
	T=tedlar bag	
	O=Other	
	**preservation	
	I = Iced	
	H = HCL	
	M = Methanol	
	N = Nitric Acid	
	S = Sulfuric Acid	
	B = Sodium bisulfate	
	X = Na hydroxide	
	T = Na thiosulfate	
	O = Other	
	*Matrix Code:	
	GW= groundwater	
	WW= wastewater	
	DW= drinking water	
	A = air	
	S = soil/solid	
	SL = sludge	
	O = other	

Is your project MCP or RCP ?

MCP Form Required  
 RCP Form Required  
 MA State DW Form Required PWSID # \_\_\_\_\_

Accredited  
 NELAC & AIHA-LAP, LLC  
 WBE/DBE Certified



MASSACHUSETTS  
 CONNECTICUT  
 OTHER: NYSDEC

Detection Limit Requirements  
 Massachusetts: \_\_\_\_\_  
 Connecticut: \_\_\_\_\_  
 Other: \_\_\_\_\_

Turnaround #  
 7-Day  
 10-Day  
 Other 5  
 RUSH!  
 24-Hr  48-Hr  
 72-Hr  14-Day  
 Require lab approval

Date/Time: 8/4/15  
 Date/Time: 14:35  
 Date/Time: 18:00  
 Date/Time: 18:00

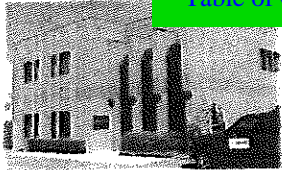
Relinquished by: (signature) [Signature] Date/Time: 8/4/15  
 Received by: (signature) [Signature] Date/Time: 8/7/15  
 Relinquished by: (signature) [Signature] Date/Time: 14:35  
 Received by: (signature) [Signature] Date/Time: 18:00  
 Relinquished by: (signature) [Signature] Date/Time: 5:10 8/7/15  
 Received by: (signature) [Signature] Date/Time: 18:00

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

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Table of Contents

39 Spruce St.  
 East Longmeadow, MA. 01028  
 P: 413-525-2332  
 F: 413-525-6405  
 www.contestlabs.com



**Sample Receipt Checklist**

CLIENT NAME: Tyree RECEIVED BY: KB DATE: 8/7/15

- 1) Was the chain(s) of custody relinquished and signed?  Yes No No CoC Included
- 2) Does the chain agree with the samples?  Yes No  
 If not, explain: \_\_\_\_\_
- 3) Are all the samples in good condition?  Yes No  
 If not, explain: \_\_\_\_\_

4) How were the samples received:  
 On Ice  Direct from Sampling  Ambient  In Cooler(s)   
 Were the samples received in Temperature Compliance of (2-6°C)?  Yes No N/A  
 Temperature °C by Temp blank \_\_\_\_\_ Temperature °C by Temp gun 5.7°

- 5) Are there Dissolved samples for the lab to filter? Yes  No   
 Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_
- 6) Are there any RUSH or SHORT HOLDING TIME samples? Yes  No   
 Who was notified \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

7) Location where samples are stored:  Permission to subcontract samples? Yes No  
 (Walk-in clients only) if not already approved  
 Client Signature: \_\_\_\_\_

- 8) Do all samples have the proper Acid pH: Yes No  N/A \_\_\_\_\_
- 9) Do all samples have the proper Base pH: Yes No  N/A \_\_\_\_\_
- 10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No  N/A

Containers received at Con-Test			
	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	12	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar	
Encore		Other	

Laboratory Comments: \_\_\_\_\_

40 mL vials: # HCl 12 # Methanol \_\_\_\_\_  
 Doc# 277 # Bisulfate \_\_\_\_\_ # DI Water \_\_\_\_\_  
 Rev. 4 August 2013 # Thiosulfate \_\_\_\_\_ Unpreserved \_\_\_\_\_

Time and Date Frozen: \_\_\_\_\_

**Login Sample Receipt Checklist**

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False)	Comment
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	T	
21) Samples do not require splitting or compositing.	T	

Doc #277 Rev. 4 August 2013

Who notified of False statements?

Log-In Technician Initials: KB

Date/Time: 8/7/15

Date/Time: 18:00