1430 Broadway
10th Floor
New York, NY 10018

212.221.7822 PHONE
212.221.7840 FAX

www.TRCsolutions.com

October 17, 2017

Mr. David Newell
Consultant Manager
New York State Department of Transportation
1220 Washington Avenue
Albany, NY 12232

Attention: Ms. Gretchen Fitzgerald

Re: PIN 8807.31.101
Harrison Sub-Residency Petroleum Spill Area (Spill #94-07349)
5th Quarter Monitoring Report
West Harrison, New York

Dear Ms. Fitzgerald:

TRC Engineers, Inc. (TRC) has prepared the following letter report to present the findings of the groundwater monitoring conducted at the Harrison Sub-Residency Petroleum Spill Area (hereafter referred to as the "Site"). The Harrison Sub-Residency is located at the intersection of New York Route 120 and King Street. The Site is a historic seasonal highway support and salt storage facility which is currently occupied by the Town of Harrison. The New York State Department of Transportation (NYSDOT) document titled "Operation and Maintenance Plan for the Harrison Sub-residency Landfill and Petroleum Spill Area" (hereafter referred to as the "O&M Plan") and dated February 2010 outlines the fifth quarter monitoring program established by the New York State Department of Environmental Conservation (NYSDEC) relating to Spill #94-07349 at the Site. The spill was closed by NYSDEC on October 10, 2002 following the discontinuation of operations of an on-site air sparge/soil vapor extraction system. Only two (2) monitoring wells installed in response to the spill, MW-11 and PC-1, have not been decommissioned by NYSDOT. TRC performed the Site groundwater monitoring of these two wells for the NYSDOT in accordance with TRC's May 2017 approved scope of service.

Groundwater Sampling Activities

On July 10, 2017, TRC mobilized to the Site and conducted reconnaissance of the groundwater monitoring wells. On July 11 and 12, 2017, TRC sampled groundwater to monitor the migration and natural attenuation of the previously documented contaminant plume associated with the historic spill. Figure 1 provides a Site location map and Figure 2 provides a site map of the previously documented spill area. No signs of well damage or tampering were noted during a visual inspection of the wells prior to commencing sampling. Depth to groundwater and total

depth measurements of the monitoring wells were measured with a water level sensing device relative to the top of the inner well casing. No non-aqueous phase liquid was visually observed in the two wells during sampling or detected in the wells with an oil-water interface probe. Additionally, an organic vapor headspace reading was measured at each monitoring well using a photoionization detector (PID). There were no headspace PID detections above background levels at either of the two monitoring wells.

Groundwater in each well was purged utilizing a peristaltic pump and dedicated new tubing and containerized for off-site disposal. During purging, field readings for pH, conductivity, temperature, dissolved oxygen, and turbidity were monitored using a flow-through cell and multi parameter meter and documented. The groundwater sampling logs completed by TRC are provided in Appendix A.

Groundwater samples were immediately collected from each well following stabilization of groundwater conditions from the well purging. Groundwater samples, including one blind duplicate and one equipment blank, were analyzed for the five volatile organic compounds (VOCs) benzene, toluene, ethylbenzene, xylenes (collectively referred to as BTEX), and methyl tert-butyl ether (MTBE) and specified natural attenuation parameters including dissolved iron, dissolved manganese, nitrate, sulfate, total sulfide, total alkalinity, and bicarbonate alkalinity. The groundwater samples for dissolved iron and dissolved manganese were field filtered with dedicated disposable filters prior to preservation.

Groundwater samples were containerized in laboratory supplied jars, labeled, and placed in a chilled cooler for shipment to Hampton-Clarke/Veritech, Inc, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory. Trip blank samples provided by the laboratory with the sample containers also accompanied each sample shipment to the laboratory and were analyzed for Target Compound List VOCs.

Investigation-derived wastes consisting of decontamination water and well purge water were drummed and staged on the Site, pending receipt of the groundwater sample test data and acceptance of the waste profile by the selected wastewater treatment facility Veolia Environment Services (Schenectady, New York). The drummed water was transported off-Site by MC Environmental Services of Queensbury, New York on August 21, 2017 for treatment at the Veolia facility. The investigation-derived waste transport and disposal documentation is provided in Appendix B.

Groundwater Sample Results

Results of the groundwater sample analyses were compared to the NYSDEC Class GA Groundwater Standards or Guidance Values (NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, June 1998) and are summarized in Table 1. A copy of the laboratory sample data report is provided in Appendix C. Appendix C includes laboratory

analytical data from the Harrison Sub-Residency landfill site as both sites were sampled concurrently. A separate letter report is provided for the landfill site monitoring.

Well MW-11 is located downgradient of the spill area and within the previously reported leading edge of the previously identified plume while well PC-1 is located down/sidegradient of the plume. There were no VOCs detected above the laboratory reporting limit. Dissolved iron was detected in both monitoring wells above the corresponding Class GA groundwater standard while dissolved manganese was detected above the corresponding Class GA groundwater standard at PC-1. The table below provides a summary of the exceedances.

Detected Groundwater Concentrations
Greater than Class GA Groundwater Standards

Analyte	NYSDEC Class GA Groundwater Standards (µg/L)	Monitoring Well Identification		
		PC-1 (µg/L)	PC-FD-201707[1] (µg/L)	MW-11 (µg/L)
Iron	300/500[2]	1,400	1,400	370
Manganese	300/500[2]	1,500	1,500	680

Notes:
[1] – FD-01-201707 is a blind duplicate of PC-1-201707
[2] – Standard of 300 ug/L applies to each substance and 500 ug/L applies to the sum of these substances
µg/L – micrograms per liter

Sulfate is the only natural attenuation parameter analyzed with a Class GA Standard (250,000 µg/L). Sulfate was detected in each of the wells below the Class GA Standard. Bicarbonate alkalinity and total alkalinity concentrations ranged from 280 µg/L at MW-11 to 400 µg/L in the blind duplicate sample collected at PC-1. Nitrate was not detected above the laboratory reporting limit in either of the samples collected.

Quality Assurance/Quality Control Sample Results

A duplicate sample (i.e., PC-FD-201707) was collected from groundwater monitoring well PC-1 for quality assurance/quality control (QA/QC) purposes and submitted to the laboratory as a blind duplicate sample (i.e., well number not identified) for the same analyses. The relative percent difference (RPD) between the duplicate sample results is calculated using the following formula:

$$\%\,RPD = \frac{X_1 - X_2}{(X_1 + X_2)/2} * 100\%$$

where, X_1 is the original value (PC-1), and
X_2 is the duplicate value (PC-FD-201707)

Alkalinity and sulfate were the only analytes with concentrations detected which differed between the two samples. The RPD for alkalinity and sulfate were 3% and 9%, respectively. The United

States Department of Environmental Protection suggests that a RPD of 20% as the standard upper limit in field duplicate comparisons.

There were no VOCs detected in the two trip blank samples.

Discussion of Groundwater Sample Results

TRC updated the database of historical groundwater quality data and concentration trend graphs previously prepared by HDR/EPM to support an evaluation of trends in groundwater quality data at the Site over time. The database and corresponding trend graphs are provided in Appendix D of this letter report.

BTEX compounds were not detected above the laboratory reporting limits in the groundwater samples from wells MW-11 or PC-1 during the July 2017 sampling event. Whereas, in the last monitoring event in April 2016, BTEX compounds were detected at a total concentration of 105.82 µg/L at MW-11 and were not detected above the laboratory reporting limits at PC-1. When comparing the down/sidegradient well (PC-1) and downgradient well (MW-11) natural attenuation parameter data, the alkalinity, dissolved iron and dissolved manganese concentrations are generally elevated which is evidence that natural biodegradation continues to occur in the plume. Based on the recent variability of BTEX groundwater concentrations, the current scope of groundwater monitoring at the Harrison Sub-Residency Petroleum Spill Area should continue on a fifth-quarterly basis unless otherwise directed by NYSDEC.

Please contact me at (212) 221-7822 ext. 105 or kmyers@trcsolutions.com with any questions or comments.

Sincerely,

TRC Engineers, Inc.

Kirsten Myers, P.E.
Project Manager

cc: J. Peronto, TRC

Attachments:

Figures

Figure 1 – Site Location Map
Figure 2 – Monitoring Well Location Plan

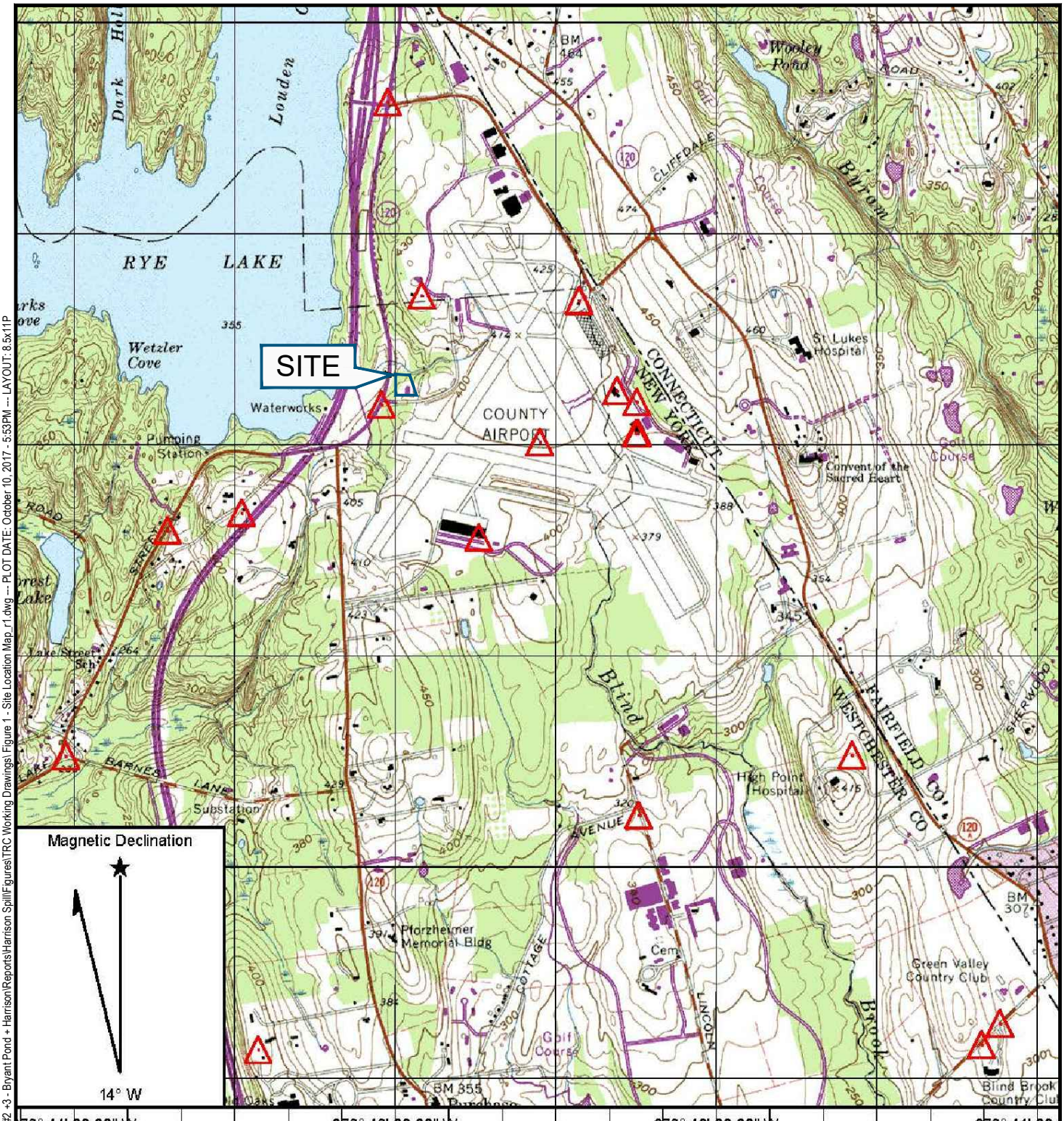
Table

Table 1 – Groundwater Analytical Data Summary

Appendices

Appendix A – Groundwater Sampling Logs
Appendix B – Investigation-Derived Waste Disposal Documentation
Appendix C – Laboratory Analytical Data Report
Appendix D – Groundwater Historical Data and Trend Graphs

FIGURES



Map source: USGS 7.5 min. Quadrangle Series, Glenville, NY
Date: 1/23/2008

Location: 041° 04' 00.92" N 073° 42' 27.38" W NAD 27

TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

PROJECT: **NEW YORK STATE DEPARTMENT OF TRANSPORTATION**
PIN 8807.31.101 - HARRISON SPILL SITE (SPILL #94-07349)
HARRISON SUB-RESIDENCY
WEST HARRISON, NEW YORK

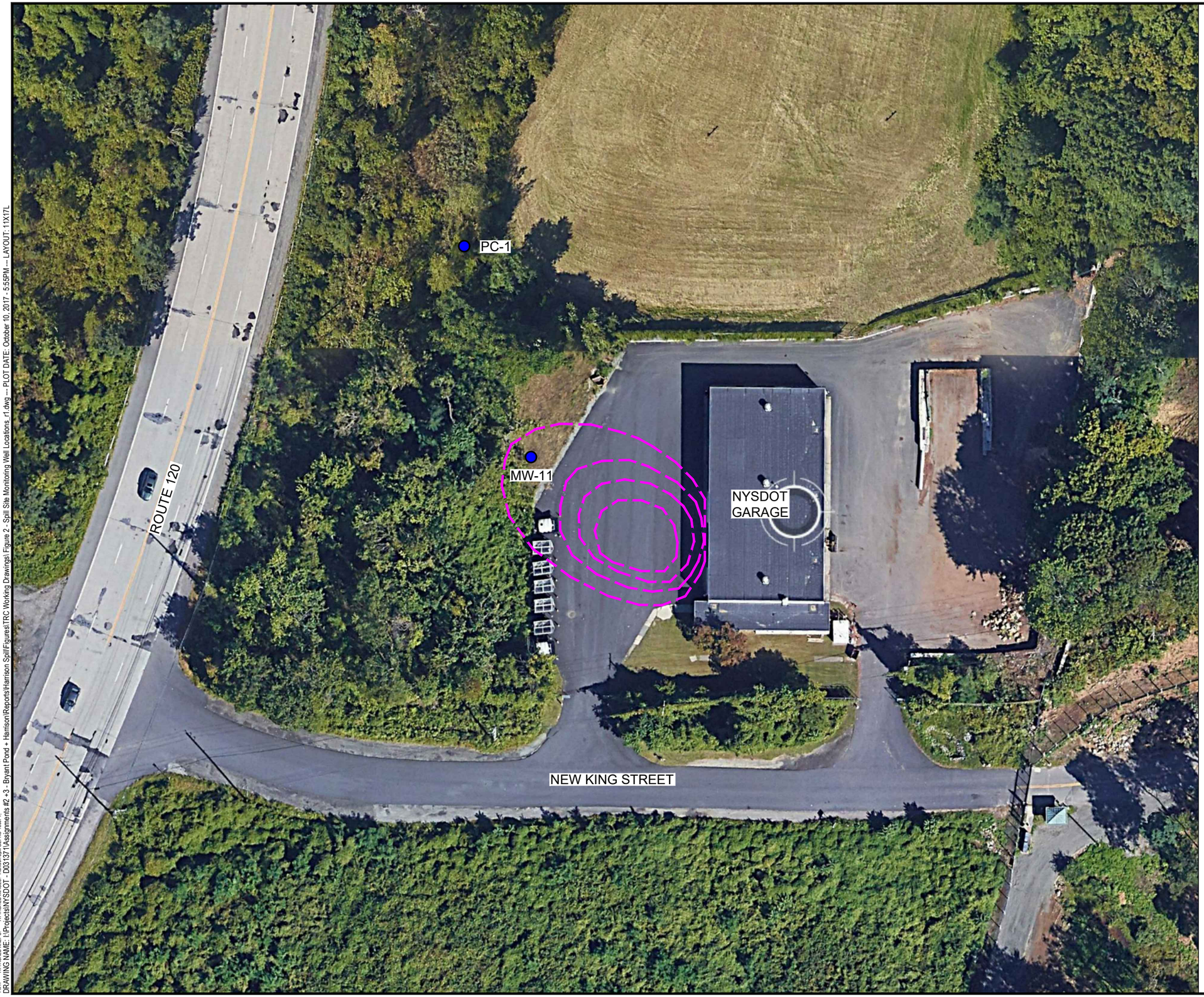
TITLE:

SITE LOCATION MAP

DRAWN BY:	H. DELGADO
CHECKED BY:	A. CHALMERS
APPROVED BY:	K. MYERS
DATE:	OCTOBER 2017
PROJ. NO.:	280089.0001.0000
FILE:	Figure 1 - Site Location Map_r1.dwg

FIGURE 1

8.5x11 --- ATTACHED XREFS: --- ATTACHED IMAGES: Harrison Landfill Figures_Page_1:
DRAWING NAME: i:\Projects\NYSDOT - D031371\Assignments #2 +3 - Bryant Pond + Harrison\Reports\Harrison Spill\Figures\TRC Working Drawings\ Figure 1 - Site Location Map_r1.dwg --- PLOT DATE: October 10, 2017 - 5:53PM --- LAYOUT: 8.5x11P



LEGEND (SYMBOLS NOT TO SCALE):

GP-XX OR MW-XX — GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

APPROXIMATE PLUME LOCATION

N

SOURCES:

- AERIAL IMAGE FROM GOOGLE EARTH PRO, DATED APRIL 16, 2016.
- APPROXIMATE PLUME LOCATION FROM HDR ENGINEERING, INC.

0 50' 100'

SCALE: 1" = 50'
SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF TRANSPORTATION
PIN 8807.31.101 - HARRISON SPILL SITE (SPILL #94-07349)
HARRISON SUB-RESIDENCY
WEST HARRISON, NEW YORK

TITLE:
MONITORING WELL LOCATION MAP

DRAWN BY:	H. DELGADO	PROJ NO.:	280089.0000.0000
CHECKED BY:	A. CHALMERS		
APPROVED BY:	K. MYERS		**FIGURE 2**
DATE:	OCTOBER 2017		

TRC
1430 Broadway
10th Floor
New York, NY 10018
Phone: 212.221.7822

FILE NO.: Figure 2 - Spill Site Monitoring Well Locations_r1.dwg

TABLE

TABLE 1
NYSDOT - Harrison Sub-Residency Petroleum Spill Area
Groundwater Analytical Data Summary
July 2017

	CLIENT ID:	PC-1-201707		PC-FD-2017074		MW-11-201707		TRIP BLANKS[5]	
	LAB ID:	AC98940-001/2		AC98940-003/4		AC98905-017/18		VARIOUS	
	COLLECTION DATE:	7/12/17		7/12/17		7/11/17		7/11/2017 - 7/12/17	
Analyte	**NYSDEC Class GA Standards[1]**	Result	RL	Result	RL	Result	RL	Result	RL
Volatile Organic Compounds (µg/L)									
Benzene	1	ND	0.5	ND	0.5	ND	0.5	ND	0.5
Ethylbenzene	5	ND	1	ND	1	ND	1	ND	1
m&p-Xylenes	5[2]	ND	1	ND	1	ND	1	ND	1
Methyl-t-butyl ether	10	ND	0.5	ND	0.5	ND	0.5	ND	0.5
o-Xylene	5[2]	ND	1	ND	1	ND	1	ND	1
Toluene	5	ND	1	ND	1	ND	1	ND	1
Xylenes (Total)	5[2]	ND	1	ND	1	ND	1	ND	1
Total BTEX	NS	ND	1	ND	1	ND	1	ND	1
Metals (µg/L)									
Iron	300/500[3]	**1,400**	300	**1,400**	300	**370**	300		
Manganese	300/500[3]	**1,500**	40	**1,500**	40	**680**	40		
Natural Attenuation Parameters (µg/L)									
Alkalinity (Total)	NS	390	10	400	10	280	10		
Alkalinity (Bicarbonate)	NS	390	10	400	10	280	10		
Alkalinity (Carbonate)	NS	ND	10	ND	10	ND	10		
Nitrate	NS	ND	1,000	ND	1,000	ND	1,000		
Sulfate	250,000	120,000	20,000	110,000	20,000	8,500	20,000		

Notes:
(1) - NYSDEC Class GA Standards are from Division of Water Technical and Operational Guidance Series (1.1.1), dated June 1998, revised April 2000.
(2) -There is no GA value for total xylenes. The standards for o-xylene, m-xylene, and p-xylene is 5 µg/L
(3) Standard of 300 ug/L applies to each substance and 500 ug/L applies to the sum of these substances
(4) FD-01-201707 is blind duplicate of PC-1-201707

(5) Trip Blanks and dates collected: TB-01-201707 (7/11/17) and TB-02-201707 (7/12/17)
NS - No Standard
ND - Analyte not detected at the listed reporting limit
RL - Reporting Limit
µg/L - micrograms per liter
Shaded and **bolded** values exceed regulatory criteria
Alkalinity values are reported in milligrams of CaCO3 per liter (mg CaCO3/L)

APPENDIX A
GROUNDWATER SAMPLING LOGS

TRC

Groundwater Sampling Data Record Form

Project:	**Project No.:**	**Date/Time:**	**Sheet__of__**
Harrison Landfill	280088	7/10/2017	1 OF 1

TRC Personnel: MS/ JMR

Well Identification: MW-11-201707

WELL INTEGRITY

	YES	NO
Protect. Casing Secure	x	
Concrete Collar Intact	x	
PVC Stick-up Intact	x	
Well Cap Present	x	
Security Lock Present	x	

Protective Casing Stick-up _____ ft. (from Ground)

WELL DIAMETER: [x] 2 inch; [ ] 4 inch; [ ] 6 inch

WELL MATERIAL: [x] PVC; [ ] SS; [ ]

Well Depth (ft.):	18.21
Depth to Water (ft):	10.11

Reference Point: [x] top of riser; [ ] top of casing; [ ] _____

[ ] historical; [ ] measured: [ ] notch; [x] north side; [ ] high pt; [ ] pen mark

Depth of pump intake (ft.): 16

[ ] .16 gal/ft (2 in.); [ ] .65 gal/ft (4 in.); [ ] 1.5 gal/ft (6 in.); [ ] ___ gal/ft (__in.)

Height of water column (ft.):	8.1
Volume of Water in Well (gal):	1.32
Total Gallons Purged:	1.39

[Vol. = $r^2h(0.163)$]

Depth to NAPL (ft.):

Thickness of NAPL (ft.):

PID SCREENING (ppmV)

Background	0	
Well Mouth	0	(if required)

FIELD WATER QUALITY MEASUREMENTS

Time	13:40	13:45	13:50	13:55	14:00	14:05	14:10	14:15	
Temp. (C.) - (±10%)	18.82	16.66	16.52	16.28	15.97	15.88	15.81	15.85	
pH (Std.Units) - (± 0.1)	6	6.16	6.01	6	6.01	6.02	6.03	6.04	
ORP (millivolts) - (± 10)	194	135	115	101	98	93	87	84	
Conduct.(mS/cm) - (±3%)	0.803	0.758	0.766	0.722	0.771	0.770	0.771	0.772	
Turb. (NTU) - (± 10%)	14.7	1.1	9.3	9.5	8.8	9.5	10.4	11	
DO (mg/L) - (± 10%)	1.13	0	0	0	0.00	0	0	0	
Depth to water (ft)	11.56	11.76	11.83	11.90	12.15	12.31	12.41	12.42	
Flow (ml/min)	150	150	150	150	150	150	150	150	
Salinity									
Comments									
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Salinity									
Comments									

Pump Type	Purge	Sample
Peristaltic Pump	x	x
Submersible Pump		
Bladder Pump		
Bailer:		

Description of Sampling Equipment

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
	N	HCl	40ml x 3	14:20	MW-11-201707
	N	None	1L x 2	14:20	MW-11-201707
	N	None	5 ml Poly	14:20	MW-11-201707
	Y	HNO3	1L Poly	14:20	MW-11-201707
	N	Zn Acetate	5 mL Poly	14:20	MW-11-201707
	Y	NaOH	200 ml	14:20	MW-11-201707

Remarks:

TRC

Groundwater Sampling Data Record Form

Project:	**Project No.:**	**Date/Time:**	**Sheet__of__**
Harrison Landfill	280088	7/12/2017	1 OF 1

TRC Personnel: MS/ JMR

Well Identification: PC-1-201707

WELL INTEGRITY

	YES	NO
Protect. Casing Secure		x
Concrete Collar Intact	x	
PVC Stick-up Intact		x
Well Cap Present	x	
Security Lock Present		x

Protective Casing Stick-up _____ ft. (from Ground)

WELL DIAMETER: [x] 2 inch; [ ] 4 inch; [ ] 6 inch

WELL MATERIAL: [x] PVC; [ ] SS; [ ]

Well Depth (ft.):	17.81
Depth to Water (ft):	6.46

Reference Point: [x] top of riser; [ ] top of casing; [ ] _____

[ ] historical; [ ] measured: [ ] notch; [x] north side; [ ] high pt; [ ] pen mark

Depth of pump intake (ft.): 16

Height of water column (ft.):	11.35
Volume of Water in Well (gal):	1.85
Total Gallons Purged:	1.32

[Vol. = $r^2h(0.163)$]

[ ] .16 gal/ft (2 in.); [ ] .65 gal/ft (4 in.); [ ] 1.5 gal/ft (6 in.); [ ] ___ gal/ft (__in.)

Depth to NAPL (ft.):

Thickness of NAPL (ft.):

PID SCREENING (ppmV)

Background	0	
Well Mouth	0	(if required)

FIELD WATER QUALITY MEASUREMENTS

Time	10:05	10:10	10:15	10:20	10:25				
Temp. (C.) - (±10%)	18.19	18.63	18.77	18.70	18.66				
pH (Std.Units) - (± 0.1)	6.72	6.72	6.74	6.75	6.76				
ORP (millivolts) - (± 10)	-62	-67	-72	-77	-78				
Conduct.(mS/cm) - (±3%)	1.520	1.530	1.510	1.500	1.500				
Turb. (NTU) - (± 10%)	9.5	8.7	8.6	8.7	8.4				
DO (mg/L) - (± 10%)	0.00	0	0	0	0.00				
Depth to water (ft)	7.35	7.15	7.15	7.10	7.10				
Flow (ml/min)	250	150	150	150	150				
Salinity									
Comments									
Time									
Temp. (C.) - (±10%)									
pH (Std.Units) - (± 0.1)									
ORP (millivolts) - (± 10)									
Conduct.(mS/cm) - (±3%)									
Turb. (NTU) - (± 10%)									
DO (mg/L) - (± 10%)									
Depth to water (ft)									
Flow (ml/min)									
Salinity									
Comments									

Pump Type	Purge	Sample	Description of Sampling Equipment
Peristaltic Pump	x	x	
Submersible Pump			
Bladder Pump			
Bailer:			

Analytical Parameters	Filtered (Y/N)	Preservation	Volume/Containers	Time Collected	Sample ID
	N	HCl	40ml x 3	10:30	PC-1-201707
	N	None	1L x 2	10:30	PC-1-201707
	N	None	5 ml Poly	10:30	PC-1-201707
	Y	HNO3	1L Poly	10:30	PC-1-201707
	Y	NaOH	200 ml	10:30	PC-1-201707

Remarks:

APPENDIX B
WASTE DISPOSAL DOCUMENTATION

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
n/a		800-451-8984	082117 - D2

Received Region 8 CONSTRUCTION UNIT SEP - 6 2017

GENERATOR

5. Generator's Name and Mailing Address
NYS DOT Region 8
Attn: Gretchen Fitzgerald 4 Burnett Blvd.
Poughkeepsie, NY 12603

Generator's Site Address (if different than mailing address)
NY 120 & New King Street
West Harrison, NY 10604

Generator's Phone: 845-431-5826

6. Transporter 1 Company Name: MC Environmental Services, Inc. — U.S. EPA ID Number: NYR000021071

7. Transporter 2 Company Name: Veolia ES Technical Solutions — U.S. EPA ID Number: NJD 080 671369

8. Designated Facility Name and Site Address
Veolia ES Technical Solutions, LLC
4301 Infirmary Road
West Carrollton, OH 45449 USA

U.S. EPA ID Number: OHD093945293

Facility's Phone: 937-859-2207-169

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	Non RCRA, Non DOT-Regulated None None	1	DM	55	G
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
Petroleum-Impacted water
WIP # 153050
Approval #: SRRLFLIQUID-NH
Gas

Emergency Contact: M. Craft - 800-451-8984

Received Region 8 CONSTRUCTION UNIT AUG 17 2017 Fed-X

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Gretchen Fitzgerald — Signature — Month 8 Day 18 Year 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: John Rembla — Signature — Month 8 Day 28 Year 17

Transporter 2 Printed/Typed Name: John Kurdziolek — Signature — Month 8 Day 21 Year 17

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

1H141

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Bonthany Blankenship — Signature — Month 8 Day 29 Year 17

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

VEOLIA
ENVIRONMENTAL SERVICES

SHIPPING DOCUMENT (Continuation Sheet)	21. Generator ID Number	22. Page	23. Shipping Document Tracking Number
	NIA	2	052117-D2

24. Generator's Name: NYS DOT Region 8.

25. Transporter 3 Company Name: Freehold Cartage Inc — U.S. EPA ID Number: NJD054126164

26. Transporter _____ Company Name — U.S. EPA ID Number:

GENERATOR

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Codes

32. Special Handling Instructions and Additional Information

TRANSPORTER

33. Transporter 3 Acknowledgment of Receipt of Shipment
Printed/Typed Name: Henry Patterson — Signature: [signature] — Month: 8 Day: 25 Year: 17

34. Transporter _____ Acknowledgment of Receipt of Shipment
Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

35. Discrepancy

36. Report Management Method Codes (i.e., codes for treatment, disposal, and recycling systems)

DESIGNATED FACILITY TO GENERATOR

APPENDIX C
ANALYTICAL LABORATORY REPORTS

Hampton-Clarke Report Of Analysis

Client: TRC Engineering **HC Project #:** 7071123

Project: Harrison Sub Residency

Sample ID: LMW-2-201707 U **Collection Date: 7/10/2017**
Lab#: AC98905-001 **Receipt Date: 7/11/2017**
Matrix: Aqueous

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	**1**	**mg/l**	**2.0**	**15**

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	2.2	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	2.2	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	2.2	ND
2,4,5-Trichlorophenol	1	ug/l	2.2	ND
2,4,6-Trichlorophenol	1	ug/l	2.2	ND
2,4-Dichlorophenol	1	ug/l	0.87	ND
2,4-Dimethylphenol	1	ug/l	0.54	ND
2,4-Dinitrophenol	1	ug/l	11	ND
2,4-Dinitrotoluene	1	ug/l	2.2	ND
2,6-Dinitrotoluene	1	ug/l	2.2	ND
2-Chloronaphthalene	1	ug/l	2.2	ND
2-Chlorophenol	1	ug/l	2.2	ND
2-Methylnaphthalene	1	ug/l	2.2	ND
2-Methylphenol	1	ug/l	0.54	ND
2-Nitroaniline	1	ug/l	2.2	ND
2-Nitrophenol	1	ug/l	2.2	ND
3&4-Methylphenol	1	ug/l	0.54	ND
3,3'-Dichlorobenzidine	1	ug/l	2.2	ND
3-Nitroaniline	1	ug/l	2.2	ND
4,6-Dinitro-2-methylphenol	1	ug/l	11	ND
4-Bromophenyl-phenylether	1	ug/l	2.2	ND
4-Chloro-3-methylphenol	1	ug/l	2.2	ND
4-Chloroaniline	1	ug/l	0.54	ND
4-Chlorophenyl-phenylether	1	ug/l	2.2	ND
4-Nitroaniline	1	ug/l	2.2	ND
4-Nitrophenol	1	ug/l	2.2	ND
Acenaphthene	1	ug/l	2.2	ND
Acenaphthylene	1	ug/l	2.2	ND
Acetophenone	1	ug/l	2.2	ND
Anthracene	1	ug/l	2.2	ND
Atrazine	1	ug/l	2.2	ND
Benzaldehyde	1	ug/l	2.2	ND
Benzo[a]anthracene	1	ug/l	2.2	ND
Benzo[a]pyrene	1	ug/l	2.2	ND
Benzo[b]fluoranthene	1	ug/l	2.2	ND
Benzo[g,h,i]perylene	1	ug/l	2.2	ND
Benzo[k]fluoranthene	1	ug/l	2.2	ND
bis(2-Chloroethoxy)methane	1	ug/l	2.2	ND
bis(2-Chloroethyl)ether	1	ug/l	0.54	ND
bis(2-Chloroisopropyl)ether	1	ug/l	2.2	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	2.2	ND
Butylbenzylphthalate	1	ug/l	2.2	ND
Caprolactam	1	ug/l	2.2	ND
Carbazole	1	ug/l	2.2	ND
Chrysene	1	ug/l	2.2	ND
Dibenzo[a,h]anthracene	1	ug/l	2.2	ND
Dibenzofuran	1	ug/l	0.54	ND
Diethylphthalate	1	ug/l	2.2	ND
Dimethylphthalate	1	ug/l	2.2	ND
Di-n-butylphthalate	1	ug/l	0.54	ND
Di-n-octylphthalate	1	ug/l	2.2	ND
Fluoranthene	1	ug/l	2.2	ND
Fluorene	1	ug/l	2.2	ND

Hexachlorobenzene	1	ug/l	2.2	ND
Hexachlorobutadiene	1	ug/l	2.2	ND
Hexachlorocyclopentadiene	1	ug/l	2.2	ND
Hexachloroethane	1	ug/l	2.2	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	2.2	ND
Isophorone	1	ug/l	2.2	ND
Naphthalene	1	ug/l	0.54	ND
Nitrobenzene	1	ug/l	2.2	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.54	ND
N-Nitrosodiphenylamine	1	ug/l	2.2	ND
Pentachlorophenol	1	ug/l	11	ND
Phenanthrene	1	ug/l	2.2	ND
Phenol	1	ug/l	2.2	ND
Pyrene	1	ug/l	2.2	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	49.83	50	55	146	100	
Phenol-d5	37.73	100	27	115	38	
Nitrobenzene-d5	46.07	50	51	139	92	
2-Fluorophenol	53.11	100	29	113	53	
2-Fluorobiphenyl	45.02	50	53	129	90	
2,4,6-Tribromophenol	88.33	100	54	149	88	

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND

Sample ID: LMW-2-201707 U **Collection Date: 7/10/2017**
Lab#: AC98905-001 **Receipt Date: 7/11/2017**
Matrix: Aqueous

Tetrachloroethene	1	ug/l	1.0	ND	
Toluene	1	ug/l	1.0	ND	
trans-1,2-Dichloroethene	1	ug/l	1.0	ND	
trans-1,3-Dichloropropene	1	ug/l	1.0	ND	
Trichloroethene	1	ug/l	1.0	ND	
Trichlorofluoromethane	1	ug/l	1.0	ND	
Vinyl chloride	1	ug/l	1.0	ND	
Xylenes (Total)	1	ug/l	1.0	ND	

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	29.15	30	79	111	97	
Dibromofluoromethane	35.88	30	73	131	120	
Bromofluorobenzene	28.81	30	82	112	96	
1,2-Dichloroethane-d4	34.04	30	78	128	113	

Sample ID: LMW-2-201707 F | **Collection Date: 7/10/2017**
Lab#: AC98905-002 | **Receipt Date: 7/11/2017**
Matrix: Aqueous

Cyanide (Water) 9012

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	**1**	**ug/l**	**50**	**85**
Calcium	**1**	**ug/l**	**5000**	**60000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	**1**	**ug/l**	**5000**	**22000**
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**22000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-4-201707 U **Collection Date: 7/10/2017**
Lab#: AC98905-003 **Receipt Date: 7/11/2017**
Matrix: Aqueous

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	**1**	**mg/l**	**2.0**	**16**

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	2.2	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	2.2	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	2.2	ND
2,4,5-Trichlorophenol	1	ug/l	2.2	ND
2,4,6-Trichlorophenol	1	ug/l	2.2	ND
2,4-Dichlorophenol	1	ug/l	0.89	ND
2,4-Dimethylphenol	1	ug/l	0.56	ND
2,4-Dinitrophenol	1	ug/l	11	ND
2,4-Dinitrotoluene	1	ug/l	2.2	ND
2,6-Dinitrotoluene	1	ug/l	2.2	ND
2-Chloronaphthalene	1	ug/l	2.2	ND
2-Chlorophenol	1	ug/l	2.2	ND
2-Methylnaphthalene	1	ug/l	2.2	ND
2-Methylphenol	1	ug/l	0.56	ND
2-Nitroaniline	1	ug/l	2.2	ND
2-Nitrophenol	1	ug/l	2.2	ND
3&4-Methylphenol	1	ug/l	0.56	ND
3,3'-Dichlorobenzidine	1	ug/l	2.2	ND
3-Nitroaniline	1	ug/l	2.2	ND
4,6-Dinitro-2-methylphenol	1	ug/l	11	ND
4-Bromophenyl-phenylether	1	ug/l	2.2	ND
4-Chloro-3-methylphenol	1	ug/l	2.2	ND
4-Chloroaniline	1	ug/l	0.56	ND
4-Chlorophenyl-phenylether	1	ug/l	2.2	ND
4-Nitroaniline	1	ug/l	2.2	ND
4-Nitrophenol	1	ug/l	2.2	ND
Acenaphthene	1	ug/l	2.2	ND
Acenaphthylene	1	ug/l	2.2	ND
Acetophenone	1	ug/l	2.2	ND
Anthracene	1	ug/l	2.2	ND
Atrazine	1	ug/l	2.2	ND
Benzaldehyde	1	ug/l	2.2	ND
Benzo[a]anthracene	1	ug/l	2.2	ND
Benzo[a]pyrene	1	ug/l	2.2	ND
Benzo[b]fluoranthene	1	ug/l	2.2	ND
Benzo[g,h,i]perylene	1	ug/l	2.2	ND
Benzo[k]fluoranthene	1	ug/l	2.2	ND
bis(2-Chloroethoxy)methane	1	ug/l	2.2	ND
bis(2-Chloroethyl)ether	1	ug/l	0.56	ND
bis(2-Chloroisopropyl)ether	1	ug/l	2.2	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	2.2	ND
Butylbenzylphthalate	1	ug/l	2.2	ND
Caprolactam	1	ug/l	2.2	ND
Carbazole	1	ug/l	2.2	ND
Chrysene	1	ug/l	2.2	ND
Dibenzo[a,h]anthracene	1	ug/l	2.2	ND
Dibenzofuran	1	ug/l	0.56	ND
Diethylphthalate	1	ug/l	2.2	ND
Dimethylphthalate	1	ug/l	2.2	ND
Di-n-butylphthalate	1	ug/l	0.56	ND
Di-n-octylphthalate	1	ug/l	2.2	ND
Fluoranthene	1	ug/l	2.2	ND
Fluorene	1	ug/l	2.2	ND
Hexachlorobenzene	1	ug/l	2.2	ND
Hexachlorobutadiene	1	ug/l	2.2	ND
Hexachlorocyclopentadiene	1	ug/l	2.2	ND
Hexachloroethane	1	ug/l	2.2	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	2.2	ND
Isophorone	1	ug/l	2.2	ND
Naphthalene	1	ug/l	0.56	ND
Nitrobenzene	1	ug/l	2.2	ND

Sample ID: LMW-4-201707 U **Collection Date: 7/10/2017**
Lab#: AC98905-003 **Receipt Date: 7/11/2017**
Matrix: Aqueous

N-Nitroso-di-n-propylamine	1	ug/l	0.56	ND	
N-Nitrosodiphenylamine	1	ug/l	2.2	ND	
Pentachlorophenol	1	ug/l	11	ND	
Phenanthrene	1	ug/l	2.2	ND	
Phenol	1	ug/l	2.2	ND	
Pyrene	1	ug/l	2.2	ND	

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	50.75	50	55	146	102	
Phenol-d5	36.40	100	27	115	36	
Nitrobenzene-d5	43.68	50	51	139	87	
2-Fluorophenol	50.70	100	29	113	51	
2-Fluorobiphenyl	43.47	50	53	129	87	
2,4,6-Tribromophenol	92.46	100	54	149	92	

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: LMW-4-201707 U | **Collection Date: 7/10/2017**
Lab#: AC98905-003 | **Receipt Date: 7/11/2017**
Matrix: Aqueous

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.86	30	79	111	96	
Dibromofluoromethane	36.24	30	73	131	121	
Bromofluorobenzene	29.69	30	82	112	99	
1,2-Dichloroethane-d4	34.80	30	78	128	116	

Sample ID: LMW-4-201707 F | **Collection Date: 7/10/2017**
Lab#: AC98905-004 | **Receipt Date: 7/11/2017**
Matrix: Aqueous

Cyanide (Water) 9012

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**1200**
Barium	**1**	**ug/l**	**50**	**180**
Calcium	**1**	**ug/l**	**5000**	**43000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**110000**
Magnesium	**1**	**ug/l**	**5000**	**17000**
Manganese	**1**	**ug/l**	**40**	**12000**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**28000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	**1**	**ug/l**	**2.0**	**4.2**
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	**1**	**ug/l**	**2.0**	**7.0**
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: PC-2-201707 U | **Collection Date: 7/10/2017**
Lab#: AC98905-005 | **Receipt Date: 7/11/2017**
Matrix: Aqueous

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	**1**	**mg/l**	**2.0**	**18**

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	2.1	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	2.1	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	2.1	ND
2,4,5-Trichlorophenol	1	ug/l	2.1	ND
2,4,6-Trichlorophenol	1	ug/l	2.1	ND
2,4-Dichlorophenol	1	ug/l	0.85	ND
2,4-Dimethylphenol	1	ug/l	0.53	ND
2,4-Dinitrophenol	1	ug/l	11	ND
2,4-Dinitrotoluene	1	ug/l	2.1	ND
2,6-Dinitrotoluene	1	ug/l	2.1	ND
2-Chloronaphthalene	1	ug/l	2.1	ND
2-Chlorophenol	1	ug/l	2.1	ND
2-Methylnaphthalene	1	ug/l	2.1	ND
2-Methylphenol	1	ug/l	0.53	ND
2-Nitroaniline	1	ug/l	2.1	ND
2-Nitrophenol	1	ug/l	2.1	ND
3&4-Methylphenol	1	ug/l	0.53	ND
3,3'-Dichlorobenzidine	1	ug/l	2.1	ND
3-Nitroaniline	1	ug/l	2.1	ND
4,6-Dinitro-2-methylphenol	1	ug/l	11	ND
4-Bromophenyl-phenylether	1	ug/l	2.1	ND
4-Chloro-3-methylphenol	1	ug/l	2.1	ND
4-Chloroaniline	1	ug/l	0.53	ND
4-Chlorophenyl-phenylether	1	ug/l	2.1	ND
4-Nitroaniline	1	ug/l	2.1	ND
4-Nitrophenol	1	ug/l	2.1	ND
Acenaphthene	1	ug/l	2.1	ND
Acenaphthylene	1	ug/l	2.1	ND
Acetophenone	1	ug/l	2.1	ND
Anthracene	1	ug/l	2.1	ND
Atrazine	1	ug/l	2.1	ND
Benzaldehyde	1	ug/l	2.1	ND
Benzo[a]anthracene	1	ug/l	2.1	ND
Benzo[a]pyrene	1	ug/l	2.1	ND
Benzo[b]fluoranthene	1	ug/l	2.1	ND
Benzo[g,h,i]perylene	1	ug/l	2.1	ND
Benzo[k]fluoranthene	1	ug/l	2.1	ND
bis(2-Chloroethoxy)methane	1	ug/l	2.1	ND
bis(2-Chloroethyl)ether	1	ug/l	0.53	ND
bis(2-Chloroisopropyl)ether	1	ug/l	2.1	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	2.1	ND
Butylbenzylphthalate	1	ug/l	2.1	ND
Caprolactam	1	ug/l	2.1	ND
Carbazole	1	ug/l	2.1	ND
Chrysene	1	ug/l	2.1	ND
Dibenzo[a,h]anthracene	1	ug/l	2.1	ND
Dibenzofuran	1	ug/l	0.53	ND
Diethylphthalate	1	ug/l	2.1	ND
Dimethylphthalate	1	ug/l	2.1	ND
Di-n-butylphthalate	1	ug/l	0.53	ND
Di-n-octylphthalate	1	ug/l	2.1	ND
Fluoranthene	1	ug/l	2.1	ND
Fluorene	1	ug/l	2.1	ND
Hexachlorobenzene	1	ug/l	2.1	ND
Hexachlorobutadiene	1	ug/l	2.1	ND
Hexachlorocyclopentadiene	1	ug/l	2.1	ND
Hexachloroethane	1	ug/l	2.1	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	2.1	ND
Isophorone	1	ug/l	2.1	ND
Naphthalene	1	ug/l	0.53	ND
Nitrobenzene	1	ug/l	2.1	ND

N-Nitroso-di-n-propylamine	1	ug/l	0.53	ND	
N-Nitrosodiphenylamine	1	ug/l	2.1	ND	
Pentachlorophenol	1	ug/l	11	ND	
Phenanthrene	1	ug/l	2.1	ND	
Phenol	1	ug/l	2.1	ND	
Pyrene	1	ug/l	2.1	ND	

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	49.97	50	55	146	100	
Phenol-d5	34.30	100	27	115	34	
Nitrobenzene-d5	43.35	50	51	139	87	
2-Fluorophenol	48.94	100	29	113	49	
2-Fluorobiphenyl	43.67	50	53	129	87	
2,4,6-Tribromophenol	88.53	100	54	149	89	

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: PC-2-201707 U
Lab#: AC98905-005
Matrix: Aqueous

Collection Date: 7/10/2017
Receipt Date: 7/11/2017

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.76	30	79	111	96	
Dibromofluoromethane	36.23	30	73	131	121	
Bromofluorobenzene	29.23	30	82	112	97	
1,2-Dichloroethane-d4	35.00	30	78	128	117	

Sample ID: PC-2-201707 F | **Collection Date: 7/10/2017**
Lab#: AC98905-006 | **Receipt Date: 7/11/2017**
Matrix: Aqueous

Cyanide (Water) 9012

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	**1**	**ug/l**	**50**	**140**
Calcium	**1**	**ug/l**	**5000**	**84000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**62000**
Magnesium	**1**	**ug/l**	**5000**	**20000**
Manganese	**1**	**ug/l**	**40**	**10000**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**36000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SW-4-201707 U **Collection Date: 7/11/2017**
Lab#: AC98905-007 **Receipt Date: 7/11/2017**
Matrix: Aqueous

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	**1**	**mg/l**	**2.0**	**10**

Cyanide (Water) 9012

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	**1**	**mg caco3/l**	**6.6**	**110**

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	2.2	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	2.2	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	2.2	ND
2,4,5-Trichlorophenol	1	ug/l	2.2	ND
2,4,6-Trichlorophenol	1	ug/l	2.2	ND
2,4-Dichlorophenol	1	ug/l	0.89	ND
2,4-Dimethylphenol	1	ug/l	0.56	ND
2,4-Dinitrophenol	1	ug/l	11	ND
2,4-Dinitrotoluene	1	ug/l	2.2	ND
2,6-Dinitrotoluene	1	ug/l	2.2	ND
2-Chloronaphthalene	1	ug/l	2.2	ND
2-Chlorophenol	1	ug/l	2.2	ND
2-Methylnaphthalene	1	ug/l	2.2	ND
2-Methylphenol	1	ug/l	0.56	ND
2-Nitroaniline	1	ug/l	2.2	ND
2-Nitrophenol	1	ug/l	2.2	ND
3&4-Methylphenol	1	ug/l	0.56	ND
3,3'-Dichlorobenzidine	1	ug/l	2.2	ND
3-Nitroaniline	1	ug/l	2.2	ND
4,6-Dinitro-2-methylphenol	1	ug/l	11	ND
4-Bromophenyl-phenylether	1	ug/l	2.2	ND
4-Chloro-3-methylphenol	1	ug/l	2.2	ND
4-Chloroaniline	1	ug/l	0.56	ND
4-Chlorophenyl-phenylether	1	ug/l	2.2	ND
4-Nitroaniline	1	ug/l	2.2	ND
4-Nitrophenol	1	ug/l	2.2	ND
Acenaphthene	1	ug/l	2.2	ND
Acenaphthylene	1	ug/l	2.2	ND
Acetophenone	1	ug/l	2.2	ND
Anthracene	1	ug/l	2.2	ND
Atrazine	1	ug/l	2.2	ND
Benzaldehyde	1	ug/l	2.2	ND
Benzo[a]anthracene	1	ug/l	2.2	ND
Benzo[a]pyrene	1	ug/l	2.2	ND
Benzo[b]fluoranthene	1	ug/l	2.2	ND
Benzo[g,h,i]perylene	1	ug/l	2.2	ND
Benzo[k]fluoranthene	1	ug/l	2.2	ND
bis(2-Chloroethoxy)methane	1	ug/l	2.2	ND
bis(2-Chloroethyl)ether	1	ug/l	0.56	ND
bis(2-Chloroisopropyl)ether	1	ug/l	2.2	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	2.2	ND
Butylbenzylphthalate	1	ug/l	2.2	ND
Caprolactam	1	ug/l	2.2	ND
Carbazole	1	ug/l	2.2	ND
Chrysene	1	ug/l	2.2	ND
Dibenzo[a,h]anthracene	1	ug/l	2.2	ND
Dibenzofuran	1	ug/l	0.56	ND
Diethylphthalate	1	ug/l	2.2	ND

Sample ID: SW-4-201707 U **Collection Date: 7/11/2017**
Lab#: AC98905-007 **Receipt Date: 7/11/2017**
Matrix: Aqueous

Dimethylphthalate	1	ug/l	2.2	ND	
Di-n-butylphthalate	1	ug/l	0.56	ND	
Di-n-octylphthalate	1	ug/l	2.2	ND	
Fluoranthene	1	ug/l	2.2	ND	
Fluorene	1	ug/l	2.2	ND	
Hexachlorobenzene	1	ug/l	2.2	ND	
Hexachlorobutadiene	1	ug/l	2.2	ND	
Hexachlorocyclopentadiene	1	ug/l	2.2	ND	
Hexachloroethane	1	ug/l	2.2	ND	
Indeno[1,2,3-cd]pyrene	1	ug/l	2.2	ND	
Isophorone	1	ug/l	2.2	ND	
Naphthalene	1	ug/l	0.56	ND	
Nitrobenzene	1	ug/l	2.2	ND	
N-Nitroso-di-n-propylamine	1	ug/l	0.56	ND	
N-Nitrosodiphenylamine	1	ug/l	2.2	ND	
Pentachlorophenol	1	ug/l	11	ND	
Phenanthrene	1	ug/l	2.2	ND	
Phenol	1	ug/l	2.2	ND	
Pyrene	1	ug/l	2.2	ND	

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	49.23	50	55	146	98	
Phenol-d5	36.47	100	27	115	36	
Nitrobenzene-d5	44.19	50	51	139	88	
2-Fluorophenol	51.37	100	29	113	51	
2-Fluorobiphenyl	43.31	50	53	129	87	
2,4,6-Tribromophenol	86.90	100	54	149	87	

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**260**
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**34000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**980**
Magnesium	**1**	**ug/l**	**5000**	**9500**
Manganese	**1**	**ug/l**	**40**	**700**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**13000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND

Sample ID: SW-4-201707 U **Collection Date: 7/11/2017**
Lab#: AC98905-007 **Receipt Date: 7/11/2017**
Matrix: Aqueous

1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.55	30	79	111	95	
Dibromofluoromethane	36.95	30	73	131	123	
Bromofluorobenzene	29.82	30	82	112	99	
1,2-Dichloroethane-d4	34.58	30	78	128	115	

Sample ID: SD-4-201707 **Collection Date: 7/11/2017**
Lab#: AC98905-009 **Receipt Date: 7/11/2017**
Matrix: Sediment/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**68**

Chloride (Soil) 9056A

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	29	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.35	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.12	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.049	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.049	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.049	ND
2,4,5-Trichlorophenol	1	mg/kg	0.049	ND
2,4,6-Trichlorophenol	1	mg/kg	0.049	ND
2,4-Dichlorophenol	1	mg/kg	0.012	ND
2,4-Dimethylphenol	1	mg/kg	0.012	ND
2,4-Dinitrophenol	1	mg/kg	0.25	ND
2,4-Dinitrotoluene	1	mg/kg	0.049	ND
2,6-Dinitrotoluene	1	mg/kg	0.049	ND
2-Chloronaphthalene	1	mg/kg	0.049	ND
2-Chlorophenol	1	mg/kg	0.049	ND
2-Methylnaphthalene	1	mg/kg	0.049	ND
2-Methylphenol	1	mg/kg	0.012	ND
2-Nitroaniline	1	mg/kg	0.049	ND
2-Nitrophenol	1	mg/kg	0.049	ND
3&4-Methylphenol	1	mg/kg	0.012	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.049	ND
3-Nitroaniline	1	mg/kg	0.049	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.25	ND
4-Bromophenyl-phenylether	1	mg/kg	0.049	ND
4-Chloro-3-methylphenol	1	mg/kg	0.049	ND
4-Chloroaniline	1	mg/kg	0.012	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.049	ND
4-Nitroaniline	1	mg/kg	0.049	ND
4-Nitrophenol	1	mg/kg	0.049	ND
Acenaphthene	1	mg/kg	0.049	ND
Acenaphthylene	1	mg/kg	0.049	ND
Acetophenone	1	mg/kg	0.049	ND
Anthracene	1	mg/kg	0.049	ND
Atrazine	1	mg/kg	0.049	ND
Benzaldehyde	1	mg/kg	0.049	ND
Benzo[a]anthracene	1	mg/kg	0.049	ND
Benzo[a]pyrene	1	mg/kg	0.049	ND
Benzo[b]fluoranthene	1	mg/kg	0.049	ND
Benzo[g,h,i]perylene	1	mg/kg	0.049	ND
Benzo[k]fluoranthene	1	mg/kg	0.049	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.049	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.012	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.049	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.049	ND
Butylbenzylphthalate	1	mg/kg	0.049	ND
Caprolactam	1	mg/kg	0.049	ND
Carbazole	1	mg/kg	0.049	ND
Chrysene	1	mg/kg	0.049	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.049	ND
Dibenzofuran	1	mg/kg	0.012	ND
Diethylphthalate	1	mg/kg	0.049	ND

Dimethylphthalate	1	mg/kg	0.049	ND	
Di-n-butylphthalate	1	mg/kg	0.012	ND	
Di-n-octylphthalate	1	mg/kg	0.049	ND	
Fluoranthene	1	mg/kg	0.049	ND	
Fluorene	1	mg/kg	0.049	ND	
Hexachlorobenzene	1	mg/kg	0.049	ND	
Hexachlorobutadiene	1	mg/kg	0.049	ND	
Hexachlorocyclopentadiene	1	mg/kg	0.12	ND	
Hexachloroethane	1	mg/kg	0.049	ND	
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.049	ND	
Isophorone	1	mg/kg	0.049	ND	
Naphthalene	1	mg/kg	0.012	ND	
Nitrobenzene	1	mg/kg	0.049	ND	
N-Nitroso-di-n-propylamine	1	mg/kg	0.012	ND	
N-Nitrosodiphenylamine	1	mg/kg	0.049	ND	
Pentachlorophenol	1	mg/kg	0.25	ND	
Phenanthrene	1	mg/kg	0.049	ND	
Phenol	1	mg/kg	0.049	ND	
Pyrene	1	mg/kg	0.049	ND	

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	54.04	50	58	148	108	
Phenol-d5	87.10	100	49	129	87	
Nitrobenzene-d5	42.62	50	52	129	85	
2-Fluorophenol	84.55	100	43	128	85	
2-Fluorobiphenyl	46.87	50	58	125	94	
2,4,6-Tribromophenol	107.04	100	54	145	107	

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**290**	**11000**
Barium	**1**	**mg/kg**	**15**	**130**
Calcium	**1**	**mg/kg**	**1500**	**15000**
Chromium	**1**	**mg/kg**	**7.4**	**29**
Cobalt	**1**	**mg/kg**	**3.7**	**7.6**
Copper	**1**	**mg/kg**	**7.4**	**11**
Iron	**1**	**mg/kg**	**290**	**27000**
Lead	**1**	**mg/kg**	**7.4**	**13**
Magnesium	**1**	**mg/kg**	**740**	**12000**
Manganese	**1**	**mg/kg**	**15**	**1900**
Nickel	**1**	**mg/kg**	**7.4**	**22**
Potassium	**1**	**mg/kg**	**740**	**2000**
Sodium	1	mg/kg	370	ND
Vanadium	**1**	**mg/kg**	**15**	**39**
Zinc	**1**	**mg/kg**	**15**	**81**

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.2	ND
Arsenic	**1**	**mg/kg**	**0.29**	**2.0**
Beryllium	1	mg/kg	0.29	ND
Cadmium	1	mg/kg	0.59	ND
Selenium	1	mg/kg	2.9	ND
Silver	1	mg/kg	0.29	ND
Thallium	1	mg/kg	0.59	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.07	mg/kg	0.0031	ND
1,1,2,2-Tetrachloroethane	1.07	mg/kg	0.0031	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.07	mg/kg	0.0031	ND
1,1,2-Trichloroethane	1.07	mg/kg	0.0031	ND
1,1-Dichloroethane	1.07	mg/kg	0.0031	ND
1,1-Dichloroethene	1.07	mg/kg	0.0031	ND
1,2,3-Trichlorobenzene	1.07	mg/kg	0.0031	ND
1,2,4-Trichlorobenzene	1.07	mg/kg	0.0031	ND
1,2-Dibromo-3-chloropropane	1.07	mg/kg	0.0031	ND
1,2-Dibromoethane	1.07	mg/kg	0.0016	ND
1,2-Dichlorobenzene	1.07	mg/kg	0.0031	ND

Sample ID: SD-4-201707 **Collection Date: 7/11/2017**
Lab#: AC98905-009 **Receipt Date: 7/11/2017**
Matrix: Sediment/Encore

1,2-Dichloroethane	1.07	mg/kg	0.0031	ND
1,2-Dichloropropane	1.07	mg/kg	0.0031	ND
1,3-Dichlorobenzene	1.07	mg/kg	0.0031	ND
1,4-Dichlorobenzene	1.07	mg/kg	0.0031	ND
1,4-Dioxane	1.07	mg/kg	0.16	ND
2-Butanone	1.07	mg/kg	0.0031	ND
2-Hexanone	1.07	mg/kg	0.0031	ND
4-Methyl-2-pentanone	1.07	mg/kg	0.0031	ND
Acetone	1.07	mg/kg	0.016	ND
Benzene	1.07	mg/kg	0.0016	ND
Bromochloromethane	1.07	mg/kg	0.0031	ND
Bromodichloromethane	1.07	mg/kg	0.0031	ND
Bromoform	1.07	mg/kg	0.0031	ND
Bromomethane	1.07	mg/kg	0.0031	ND
Carbon disulfide	1.07	mg/kg	0.0031	ND
Carbon tetrachloride	1.07	mg/kg	0.0031	ND
Chlorobenzene	1.07	mg/kg	0.0031	ND
Chloroethane	1.07	mg/kg	0.0031	ND
Chloroform	1.07	mg/kg	0.0031	ND
Chloromethane	1.07	mg/kg	0.0031	ND
cis-1,2-Dichloroethene	1.07	mg/kg	0.0031	ND
cis-1,3-Dichloropropene	1.07	mg/kg	0.0031	ND
Cyclohexane	1.07	mg/kg	0.0031	ND
Dibromochloromethane	1.07	mg/kg	0.0031	ND
Dichlorodifluoromethane	1.07	mg/kg	0.0031	ND
Ethylbenzene	1.07	mg/kg	0.0016	ND
Isopropylbenzene	1.07	mg/kg	0.0016	ND
m&p-Xylenes	1.07	mg/kg	0.0016	ND
Methyl Acetate	1.07	mg/kg	0.0031	ND
Methylcyclohexane	1.07	mg/kg	0.0031	ND
Methylene chloride	1.07	mg/kg	0.0031	ND
Methyl-t-butyl ether	1.07	mg/kg	0.0016	ND
o-Xylene	1.07	mg/kg	0.0016	ND
Styrene	1.07	mg/kg	0.0031	ND
Tetrachloroethene	1.07	mg/kg	0.0031	ND
Toluene	1.07	mg/kg	0.0016	ND
trans-1,2-Dichloroethene	1.07	mg/kg	0.0031	ND
trans-1,3-Dichloropropene	1.07	mg/kg	0.0031	ND
Trichloroethene	1.07	mg/kg	0.0031	ND
Trichlorofluoromethane	1.07	mg/kg	0.0031	ND
Vinyl chloride	1.07	mg/kg	0.0031	ND
Xylenes (Total)	1.07	mg/kg	0.0016	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	27.64	30	68	122	92	
Dibromofluoromethane	34.09	30	63	140	114	
Bromofluorobenzene	30.29	30	64	129	101	
1,2-Dichloroethane-d4	36.55	30	63	143	122	

Sample ID: SW-2-201707 U **Collection Date: 7/11/2017**
Lab#: AC98905-010 **Receipt Date: 7/11/2017**
Matrix: Aqueous

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	**1**	**mg/l**	**2.0**	**7.0**

Cyanide (Water) 9012

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	**1**	**mg caco3/l**	**6.6**	**110**

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	2.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	2.0	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	2.0	ND
2,4,5-Trichlorophenol	1	ug/l	2.0	ND
2,4,6-Trichlorophenol	1	ug/l	2.0	ND
2,4-Dichlorophenol	1	ug/l	0.80	ND
2,4-Dimethylphenol	1	ug/l	0.50	ND
2,4-Dinitrophenol	1	ug/l	10	ND
2,4-Dinitrotoluene	1	ug/l	2.0	ND
2,6-Dinitrotoluene	1	ug/l	2.0	ND
2-Chloronaphthalene	1	ug/l	2.0	ND
2-Chlorophenol	1	ug/l	2.0	ND
2-Methylnaphthalene	1	ug/l	2.0	ND
2-Methylphenol	1	ug/l	0.50	ND
2-Nitroaniline	1	ug/l	2.0	ND
2-Nitrophenol	1	ug/l	2.0	ND
3&4-Methylphenol	1	ug/l	0.50	ND
3,3'-Dichlorobenzidine	1	ug/l	2.0	ND
3-Nitroaniline	1	ug/l	2.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	10	ND
4-Bromophenyl-phenylether	1	ug/l	2.0	ND
4-Chloro-3-methylphenol	1	ug/l	2.0	ND
4-Chloroaniline	1	ug/l	0.50	ND
4-Chlorophenyl-phenylether	1	ug/l	2.0	ND
4-Nitroaniline	1	ug/l	2.0	ND
4-Nitrophenol	1	ug/l	2.0	ND
Acenaphthene	1	ug/l	2.0	ND
Acenaphthylene	1	ug/l	2.0	ND
Acetophenone	1	ug/l	2.0	ND
Anthracene	1	ug/l	2.0	ND
Atrazine	1	ug/l	2.0	ND
Benzaldehyde	1	ug/l	2.0	ND
Benzo[a]anthracene	1	ug/l	2.0	ND
Benzo[a]pyrene	1	ug/l	2.0	ND
Benzo[b]fluoranthene	1	ug/l	2.0	ND
Benzo[g,h,i]perylene	1	ug/l	2.0	ND
Benzo[k]fluoranthene	1	ug/l	2.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	2.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.50	ND
bis(2-Chloroisopropyl)ether	1	ug/l	2.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	2.0	ND
Butylbenzylphthalate	1	ug/l	2.0	ND
Caprolactam	1	ug/l	2.0	ND
Carbazole	1	ug/l	2.0	ND
Chrysene	1	ug/l	2.0	ND
Dibenzo[a,h]anthracene	1	ug/l	2.0	ND
Dibenzofuran	1	ug/l	0.50	ND
Diethylphthalate	1	ug/l	2.0	ND

Sample ID: SW-2-201707 U **Collection Date: 7/11/2017**
Lab#: AC98905-010 **Receipt Date: 7/11/2017**
Matrix: Aqueous

Dimethylphthalate	1	ug/l	2.0	ND	
Di-n-butylphthalate	1	ug/l	0.50	ND	
Di-n-octylphthalate	1	ug/l	2.0	ND	
Fluoranthene	1	ug/l	2.0	ND	
Fluorene	1	ug/l	2.0	ND	
Hexachlorobenzene	1	ug/l	2.0	ND	
Hexachlorobutadiene	1	ug/l	2.0	ND	
Hexachlorocyclopentadiene	1	ug/l	2.0	ND	
Hexachloroethane	1	ug/l	2.0	ND	
Indeno[1,2,3-cd]pyrene	1	ug/l	2.0	ND	
Isophorone	1	ug/l	2.0	ND	
Naphthalene	1	ug/l	0.50	ND	
Nitrobenzene	1	ug/l	2.0	ND	
N-Nitroso-di-n-propylamine	1	ug/l	0.50	ND	
N-Nitrosodiphenylamine	1	ug/l	2.0	ND	
Pentachlorophenol	1	ug/l	10	ND	
Phenanthrene	1	ug/l	2.0	ND	
Phenol	1	ug/l	2.0	ND	
Pyrene	1	ug/l	2.0	ND	

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	43.33	50	55	146	87	
Phenol-d5	42.29	100	27	115	42	
Nitrobenzene-d5	34.62	50	51	139	69	
2-Fluorophenol	48.59	100	29	113	49	
2-Fluorobiphenyl	36.06	50	53	129	72	
2,4,6-Tribromophenol	69.70	100	54	149	70	

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**36000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**650**
Magnesium	**1**	**ug/l**	**5000**	**9900**
Manganese	**1**	**ug/l**	**40**	**370**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**10000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND

Sample ID: SW-2-201707 U **Collection Date: 7/11/2017**
Lab#: AC98905-010 **Receipt Date: 7/11/2017**
Matrix: Aqueous

1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.78	30	79	111	96	
Dibromofluoromethane	36.21	30	73	131	121	
Bromofluorobenzene	29.50	30	82	112	98	
1,2-Dichloroethane-d4	34.48	30	78	128	115	

Sample ID: SD-2-201707 **Collection Date: 7/11/2017**
Lab#: AC98905-012 **Receipt Date: 7/11/2017**
Matrix: Sediment/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**12**

Chloride (Soil) 9056A

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	170	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	2.0	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.69	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.28	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.28	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.28	ND
2,4,5-Trichlorophenol	1	mg/kg	0.28	ND
2,4,6-Trichlorophenol	1	mg/kg	0.28	ND
2,4-Dichlorophenol	1	mg/kg	0.069	ND
2,4-Dimethylphenol	1	mg/kg	0.069	ND
2,4-Dinitrophenol	1	mg/kg	1.4	ND
2,4-Dinitrotoluene	1	mg/kg	0.28	ND
2,6-Dinitrotoluene	1	mg/kg	0.28	ND
2-Chloronaphthalene	1	mg/kg	0.28	ND
2-Chlorophenol	1	mg/kg	0.28	ND
2-Methylnaphthalene	1	mg/kg	0.28	ND
2-Methylphenol	1	mg/kg	0.069	ND
2-Nitroaniline	1	mg/kg	0.28	ND
2-Nitrophenol	1	mg/kg	0.28	ND
3&4-Methylphenol	1	mg/kg	0.069	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.28	ND
3-Nitroaniline	1	mg/kg	0.28	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	1.4	ND
4-Bromophenyl-phenylether	1	mg/kg	0.28	ND
4-Chloro-3-methylphenol	1	mg/kg	0.28	ND
4-Chloroaniline	1	mg/kg	0.069	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.28	ND
4-Nitroaniline	1	mg/kg	0.28	ND
4-Nitrophenol	1	mg/kg	0.28	ND
Acenaphthene	1	mg/kg	0.28	ND
Acenaphthylene	1	mg/kg	0.28	ND
Acetophenone	1	mg/kg	0.28	ND
Anthracene	1	mg/kg	0.28	ND
Atrazine	1	mg/kg	0.28	ND
Benzaldehyde	1	mg/kg	0.28	ND
Benzo[a]anthracene	1	mg/kg	0.28	ND
Benzo[a]pyrene	1	mg/kg	0.28	ND
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.28**	**0.41**
Benzo[g,h,i]perylene	1	mg/kg	0.28	ND
Benzo[k]fluoranthene	1	mg/kg	0.28	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.28	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.069	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.28	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.28	ND
Butylbenzylphthalate	1	mg/kg	0.28	ND
Caprolactam	1	mg/kg	0.28	ND
Carbazole	1	mg/kg	0.28	ND
Chrysene	**1**	**mg/kg**	**0.28**	**0.30**
Dibenzo[a,h]anthracene	1	mg/kg	0.28	ND
Dibenzofuran	1	mg/kg	0.069	ND
Diethylphthalate	1	mg/kg	0.28	ND

Dimethylphthalate	1	mg/kg	0.28	ND	
Di-n-butylphthalate	1	mg/kg	0.069	ND	
Di-n-octylphthalate	1	mg/kg	0.28	ND	
Fluoranthene	**1**	**mg/kg**	**0.28**	**0.41**	
Fluorene	1	mg/kg	0.28	ND	
Hexachlorobenzene	1	mg/kg	0.28	ND	
Hexachlorobutadiene	1	mg/kg	0.28	ND	
Hexachlorocyclopentadiene	1	mg/kg	0.65	ND	
Hexachloroethane	1	mg/kg	0.28	ND	
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.28	ND	
Isophorone	1	mg/kg	0.28	ND	
Naphthalene	1	mg/kg	0.069	ND	
Nitrobenzene	1	mg/kg	0.28	ND	
N-Nitroso-di-n-propylamine	1	mg/kg	0.069	ND	
N-Nitrosodiphenylamine	1	mg/kg	0.28	ND	
Pentachlorophenol	1	mg/kg	1.4	ND	
Phenanthrene	1	mg/kg	0.28	ND	
Phenol	1	mg/kg	0.28	ND	
Pyrene	**1**	**mg/kg**	**0.28**	**0.49**	

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	37.19	50	58	148	74	
Phenol-d5	107.22	100	49	129	107	
Nitrobenzene-d5	36.67	50	52	129	73	
2-Fluorophenol	89.59	100	43	128	90	
2-Fluorobiphenyl	33.43	50	58	125	67	
2,4,6-Tribromophenol	82.34	100	54	145	82	

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**1700**	**20000**
Barium	**1**	**mg/kg**	**83**	**1100**
Calcium	**1**	**mg/kg**	**8300**	**26000**
Chromium	**1**	**mg/kg**	**42**	**53**
Cobalt	**1**	**mg/kg**	**21**	**23**
Copper	**1**	**mg/kg**	**42**	**80**
Iron	**1**	**mg/kg**	**1700**	**110000**
Lead	**1**	**mg/kg**	**42**	**100**
Magnesium	**1**	**mg/kg**	**4200**	**10000**
Manganese	**2**	**mg/kg**	**170**	**52000**
Nickel	**1**	**mg/kg**	**42**	**45**
Potassium	1	mg/kg	4200	ND
Sodium	1	mg/kg	2100	ND
Vanadium	1	mg/kg	83	ND
Zinc	**1**	**mg/kg**	**83**	**520**

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	6.7	ND
Arsenic	**1**	**mg/kg**	**1.7**	**16**
Beryllium	2	mg/kg	3.3	ND
Cadmium	1	mg/kg	3.3	ND
Selenium	1	mg/kg	17	ND
Silver	1	mg/kg	1.7	ND
Thallium	1	mg/kg	3.3	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.77	mg/kg	0.030	ND
1,1,2,2-Tetrachloroethane	1.77	mg/kg	0.030	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.77	mg/kg	0.030	ND
1,1,2-Trichloroethane	1.77	mg/kg	0.030	ND
1,1-Dichloroethane	1.77	mg/kg	0.030	ND
1,1-Dichloroethene	1.77	mg/kg	0.030	ND
1,2,3-Trichlorobenzene	1.77	mg/kg	0.030	ND
1,2,4-Trichlorobenzene	1.77	mg/kg	0.030	ND
1,2-Dibromo-3-chloropropane	1.77	mg/kg	0.030	ND
1,2-Dibromoethane	1.77	mg/kg	0.015	ND
1,2-Dichlorobenzene	1.77	mg/kg	0.030	ND

Sample ID: SD-2-201707 **Collection Date: 7/11/2017**
Lab#: AC98905-012 **Receipt Date: 7/11/2017**
Matrix: Sediment/Encore

1,2-Dichloroethane	1.77	mg/kg	0.030	ND
1,2-Dichloropropane	1.77	mg/kg	0.030	ND
1,3-Dichlorobenzene	1.77	mg/kg	0.030	ND
1,4-Dichlorobenzene	1.77	mg/kg	0.030	ND
1,4-Dioxane	1.77	mg/kg	1.5	ND
2-Butanone	1.77	mg/kg	0.030	ND
2-Hexanone	1.77	mg/kg	0.030	ND
4-Methyl-2-pentanone	1.77	mg/kg	0.030	ND
Acetone	1.77	mg/kg	0.15	ND
Benzene	1.77	mg/kg	0.015	ND
Bromochloromethane	1.77	mg/kg	0.030	ND
Bromodichloromethane	1.77	mg/kg	0.030	ND
Bromoform	1.77	mg/kg	0.030	ND
Bromomethane	1.77	mg/kg	0.030	ND
Carbon disulfide	1.77	mg/kg	0.030	ND
Carbon tetrachloride	1.77	mg/kg	0.030	ND
Chlorobenzene	1.77	mg/kg	0.030	ND
Chloroethane	1.77	mg/kg	0.030	ND
Chloroform	1.77	mg/kg	0.030	ND
Chloromethane	1.77	mg/kg	0.030	ND
cis-1,2-Dichloroethene	1.77	mg/kg	0.030	ND
cis-1,3-Dichloropropene	1.77	mg/kg	0.030	ND
Cyclohexane	1.77	mg/kg	0.030	ND
Dibromochloromethane	1.77	mg/kg	0.030	ND
Dichlorodifluoromethane	1.77	mg/kg	0.030	ND
Ethylbenzene	1.77	mg/kg	0.015	ND
Isopropylbenzene	1.77	mg/kg	0.015	ND
m&p-Xylenes	1.77	mg/kg	0.015	ND
Methyl Acetate	1.77	mg/kg	0.030	ND
Methylcyclohexane	1.77	mg/kg	0.030	ND
Methylene chloride	1.77	mg/kg	0.030	ND
Methyl-t-butyl ether	1.77	mg/kg	0.015	ND
o-Xylene	1.77	mg/kg	0.015	ND
Styrene	1.77	mg/kg	0.030	ND
Tetrachloroethene	1.77	mg/kg	0.030	ND
Toluene	1.77	mg/kg	0.015	ND
trans-1,2-Dichloroethene	1.77	mg/kg	0.030	ND
trans-1,3-Dichloropropene	1.77	mg/kg	0.030	ND
Trichloroethene	1.77	mg/kg	0.030	ND
Trichlorofluoromethane	1.77	mg/kg	0.030	ND
Vinyl chloride	1.77	mg/kg	0.030	ND
Xylenes (Total)	1.77	mg/kg	0.015	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.95	30	68	122	96	
Dibromofluoromethane	31.02	30	63	140	103	
Bromofluorobenzene	32.62	30	64	129	109	
1,2-Dichloroethane-d4	35.50	30	63	143	118	

Sample ID: SW-1-201707 U **Collection Date: 7/11/2017**
Lab#: AC98905-013 **Receipt Date: 7/11/2017**
Matrix: Aqueous

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	**1**	**mg/l**	**2.0**	**5.4**

Cyanide (Water) 9012

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	**1**	**mg caco3/l**	**6.6**	**120**

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	2.1	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	2.1	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	2.1	ND
2,4,5-Trichlorophenol	1	ug/l	2.1	ND
2,4,6-Trichlorophenol	1	ug/l	2.1	ND
2,4-Dichlorophenol	1	ug/l	0.84	ND
2,4-Dimethylphenol	1	ug/l	0.53	ND
2,4-Dinitrophenol	1	ug/l	11	ND
2,4-Dinitrotoluene	1	ug/l	2.1	ND
2,6-Dinitrotoluene	1	ug/l	2.1	ND
2-Chloronaphthalene	1	ug/l	2.1	ND
2-Chlorophenol	1	ug/l	2.1	ND
2-Methylnaphthalene	1	ug/l	2.1	ND
2-Methylphenol	1	ug/l	0.53	ND
2-Nitroaniline	1	ug/l	2.1	ND
2-Nitrophenol	1	ug/l	2.1	ND
3&4-Methylphenol	1	ug/l	0.53	ND
3,3'-Dichlorobenzidine	1	ug/l	2.1	ND
3-Nitroaniline	1	ug/l	2.1	ND
4,6-Dinitro-2-methylphenol	1	ug/l	11	ND
4-Bromophenyl-phenylether	1	ug/l	2.1	ND
4-Chloro-3-methylphenol	1	ug/l	2.1	ND
4-Chloroaniline	1	ug/l	0.53	ND
4-Chlorophenyl-phenylether	1	ug/l	2.1	ND
4-Nitroaniline	1	ug/l	2.1	ND
4-Nitrophenol	1	ug/l	2.1	ND
Acenaphthene	1	ug/l	2.1	ND
Acenaphthylene	1	ug/l	2.1	ND
Acetophenone	1	ug/l	2.1	ND
Anthracene	1	ug/l	2.1	ND
Atrazine	1	ug/l	2.1	ND
Benzaldehyde	1	ug/l	2.1	ND
Benzo[a]anthracene	1	ug/l	2.1	ND
Benzo[a]pyrene	1	ug/l	2.1	ND
Benzo[b]fluoranthene	1	ug/l	2.1	ND
Benzo[g,h,i]perylene	1	ug/l	2.1	ND
Benzo[k]fluoranthene	1	ug/l	2.1	ND
bis(2-Chloroethoxy)methane	1	ug/l	2.1	ND
bis(2-Chloroethyl)ether	1	ug/l	0.53	ND
bis(2-Chloroisopropyl)ether	1	ug/l	2.1	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	2.1	ND
Butylbenzylphthalate	1	ug/l	2.1	ND
Caprolactam	1	ug/l	2.1	ND
Carbazole	1	ug/l	2.1	ND
Chrysene	1	ug/l	2.1	ND
Dibenzo[a,h]anthracene	1	ug/l	2.1	ND
Dibenzofuran	1	ug/l	0.53	ND
Diethylphthalate	1	ug/l	2.1	ND

Sample ID: SW-1-201707 U **Collection Date: 7/11/2017**
Lab#: AC98905-013 **Receipt Date: 7/11/2017**
Matrix: Aqueous

Dimethylphthalate	1	ug/l	2.1	ND	
Di-n-butylphthalate	1	ug/l	0.53	ND	
Di-n-octylphthalate	1	ug/l	2.1	ND	
Fluoranthene	1	ug/l	2.1	ND	
Fluorene	1	ug/l	2.1	ND	
Hexachlorobenzene	1	ug/l	2.1	ND	
Hexachlorobutadiene	1	ug/l	2.1	ND	
Hexachlorocyclopentadiene	1	ug/l	2.1	ND	
Hexachloroethane	1	ug/l	2.1	ND	
Indeno[1,2,3-cd]pyrene	1	ug/l	2.1	ND	
Isophorone	1	ug/l	2.1	ND	
Naphthalene	1	ug/l	0.53	ND	
Nitrobenzene	1	ug/l	2.1	ND	
N-Nitroso-di-n-propylamine	1	ug/l	0.53	ND	
N-Nitrosodiphenylamine	1	ug/l	2.1	ND	
Pentachlorophenol	1	ug/l	11	ND	
Phenanthrene	1	ug/l	2.1	ND	
Phenol	1	ug/l	2.1	ND	
Pyrene	1	ug/l	2.1	ND	

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	49.14	50	55	146	98	
Phenol-d5	29.29	100	27	115	29	
Nitrobenzene-d5	46.89	50	51	139	94	
2-Fluorophenol	42.23	100	29	113	42	
2-Fluorobiphenyl	44.58	50	53	129	89	
2,4,6-Tribromophenol	85.47	100	54	149	85	

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**39000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**1400**
Magnesium	**1**	**ug/l**	**5000**	**11000**
Manganese	**1**	**ug/l**	**40**	**1300**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**9000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND

Sample ID: SW-1-201707 U **Collection Date: 7/11/2017**
Lab#: AC98905-013 **Receipt Date: 7/11/2017**
Matrix: Aqueous

1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.66	30	79	111	96	
Dibromofluoromethane	37.17	30	73	131	124	
Bromofluorobenzene	30.33	30	82	112	101	
1,2-Dichloroethane-d4	35.79	30	78	128	119	

Sample ID: SD-1-201707 **Collection Date: 7/11/2017**
Lab#: AC98905-015 **Receipt Date: 7/11/2017**
Matrix: Sediment/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**48**

Chloride (Soil) 9056A

Analyte	DF	Units	RL	Result
Chloride	1	mg/kg	42	ND

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.50	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.17	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.069	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.069	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.069	ND
2,4,5-Trichlorophenol	1	mg/kg	0.069	ND
2,4,6-Trichlorophenol	1	mg/kg	0.069	ND
2,4-Dichlorophenol	1	mg/kg	0.017	ND
2,4-Dimethylphenol	1	mg/kg	0.017	ND
2,4-Dinitrophenol	1	mg/kg	0.35	ND
2,4-Dinitrotoluene	1	mg/kg	0.069	ND
2,6-Dinitrotoluene	1	mg/kg	0.069	ND
2-Chloronaphthalene	1	mg/kg	0.069	ND
2-Chlorophenol	1	mg/kg	0.069	ND
2-Methylnaphthalene	1	mg/kg	0.069	ND
2-Methylphenol	1	mg/kg	0.017	ND
2-Nitroaniline	1	mg/kg	0.069	ND
2-Nitrophenol	1	mg/kg	0.069	ND
3&4-Methylphenol	1	mg/kg	0.017	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.069	ND
3-Nitroaniline	1	mg/kg	0.069	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.35	ND
4-Bromophenyl-phenylether	1	mg/kg	0.069	ND
4-Chloro-3-methylphenol	1	mg/kg	0.069	ND
4-Chloroaniline	1	mg/kg	0.017	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.069	ND
4-Nitroaniline	1	mg/kg	0.069	ND
4-Nitrophenol	1	mg/kg	0.069	ND
Acenaphthene	1	mg/kg	0.069	ND
Acenaphthylene	1	mg/kg	0.069	ND
Acetophenone	1	mg/kg	0.069	ND
Anthracene	1	mg/kg	0.069	ND
Atrazine	1	mg/kg	0.069	ND
Benzaldehyde	1	mg/kg	0.069	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.069**	**0.095**
Benzo[a]pyrene	**1**	**mg/kg**	**0.069**	**0.12**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.069**	**0.19**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.069**	**0.11**
Benzo[k]fluoranthene	1	mg/kg	0.069	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.069	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.017	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.069	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.069	ND
Butylbenzylphthalate	1	mg/kg	0.069	ND
Caprolactam	1	mg/kg	0.069	ND
Carbazole	1	mg/kg	0.069	ND
Chrysene	**1**	**mg/kg**	**0.069**	**0.13**
Dibenzo[a,h]anthracene	1	mg/kg	0.069	ND
Dibenzofuran	1	mg/kg	0.017	ND
Diethylphthalate	1	mg/kg	0.069	ND

Dimethylphthalate	1	mg/kg	0.069	ND	
Di-n-butylphthalate	1	mg/kg	0.017	ND	
Di-n-octylphthalate	1	mg/kg	0.069	ND	
Fluoranthene	**1**	**mg/kg**	**0.069**	**0.17**	
Fluorene	1	mg/kg	0.069	ND	
Hexachlorobenzene	1	mg/kg	0.069	ND	
Hexachlorobutadiene	1	mg/kg	0.069	ND	
Hexachlorocyclopentadiene	1	mg/kg	0.16	ND	
Hexachloroethane	1	mg/kg	0.069	ND	
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.069**	**0.086**	
Isophorone	1	mg/kg	0.069	ND	
Naphthalene	1	mg/kg	0.017	ND	
Nitrobenzene	1	mg/kg	0.069	ND	
N-Nitroso-di-n-propylamine	1	mg/kg	0.017	ND	
N-Nitrosodiphenylamine	1	mg/kg	0.069	ND	
Pentachlorophenol	1	mg/kg	0.35	ND	
Phenanthrene	1	mg/kg	0.069	ND	
Phenol	1	mg/kg	0.069	ND	
Pyrene	**1**	**mg/kg**	**0.069**	**0.20**	

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	52.58	50	58	148	105	
Phenol-d5	75.55	100	49	129	76	
Nitrobenzene-d5	38.38	50	52	129	77	
2-Fluorophenol	73.03	100	43	128	73	
2-Fluorobiphenyl	41.73	50	58	125	83	
2,4,6-Tribromophenol	101.58	100	54	145	102	

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**420**	**28000**
Barium	**1**	**mg/kg**	**21**	**330**
Calcium	**1**	**mg/kg**	**2100**	**8100**
Chromium	**1**	**mg/kg**	**10**	**68**
Cobalt	**1**	**mg/kg**	**5.2**	**24**
Copper	**1**	**mg/kg**	**10**	**54**
Iron	**1**	**mg/kg**	**420**	**78000**
Lead	**1**	**mg/kg**	**10**	**52**
Magnesium	**1**	**mg/kg**	**1000**	**9600**
Manganese	**1**	**mg/kg**	**21**	**5800**
Nickel	**1**	**mg/kg**	**10**	**47**
Potassium	**1**	**mg/kg**	**1000**	**5400**
Sodium	1	mg/kg	520	ND
Vanadium	**1**	**mg/kg**	**21**	**99**
Zinc	**1**	**mg/kg**	**21**	**180**

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.7	ND
Arsenic	**1**	**mg/kg**	**0.42**	**6.2**
Beryllium	**1**	**mg/kg**	**0.42**	**0.50**
Cadmium	1	mg/kg	0.83	ND
Selenium	1	mg/kg	4.2	ND
Silver	1	mg/kg	0.42	ND
Thallium	1	mg/kg	0.83	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.975	mg/kg	0.0041	ND
1,1,2,2-Tetrachloroethane	0.975	mg/kg	0.0041	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.975	mg/kg	0.0041	ND
1,1,2-Trichloroethane	0.975	mg/kg	0.0041	ND
1,1-Dichloroethane	0.975	mg/kg	0.0041	ND
1,1-Dichloroethene	0.975	mg/kg	0.0041	ND
1,2,3-Trichlorobenzene	0.975	mg/kg	0.0041	ND
1,2,4-Trichlorobenzene	0.975	mg/kg	0.0041	ND
1,2-Dibromo-3-chloropropane	0.975	mg/kg	0.0041	ND
1,2-Dibromoethane	0.975	mg/kg	0.0020	ND
1,2-Dichlorobenzene	0.975	mg/kg	0.0041	ND

Sample ID: SD-1-201707 | **Collection Date: 7/11/2017**
Lab#: AC98905-015 | **Receipt Date: 7/11/2017**
Matrix: Sediment/Encore

1,2-Dichloroethane	0.975	mg/kg	0.0041	ND
1,2-Dichloropropane	0.975	mg/kg	0.0041	ND
1,3-Dichlorobenzene	0.975	mg/kg	0.0041	ND
1,4-Dichlorobenzene	0.975	mg/kg	0.0041	ND
1,4-Dioxane	0.975	mg/kg	0.20	ND
2-Butanone	0.975	mg/kg	0.0041	ND
2-Hexanone	0.975	mg/kg	0.0041	ND
4-Methyl-2-pentanone	0.975	mg/kg	0.0041	ND
Acetone	0.975	mg/kg	0.020	ND
Benzene	0.975	mg/kg	0.0020	ND
Bromochloromethane	0.975	mg/kg	0.0041	ND
Bromodichloromethane	0.975	mg/kg	0.0041	ND
Bromoform	0.975	mg/kg	0.0041	ND
Bromomethane	0.975	mg/kg	0.0041	ND
Carbon disulfide	0.975	mg/kg	0.0041	ND
Carbon tetrachloride	0.975	mg/kg	0.0041	ND
Chlorobenzene	0.975	mg/kg	0.0041	ND
Chloroethane	0.975	mg/kg	0.0041	ND
Chloroform	0.975	mg/kg	0.0041	ND
Chloromethane	0.975	mg/kg	0.0041	ND
cis-1,2-Dichloroethene	0.975	mg/kg	0.0041	ND
cis-1,3-Dichloropropene	0.975	mg/kg	0.0041	ND
Cyclohexane	0.975	mg/kg	0.0041	ND
Dibromochloromethane	0.975	mg/kg	0.0041	ND
Dichlorodifluoromethane	0.975	mg/kg	0.0041	ND
Ethylbenzene	0.975	mg/kg	0.0020	ND
Isopropylbenzene	0.975	mg/kg	0.0020	ND
m&p-Xylenes	0.975	mg/kg	0.0020	ND
Methyl Acetate	0.975	mg/kg	0.0041	ND
Methylcyclohexane	0.975	mg/kg	0.0041	ND
Methylene chloride	0.975	mg/kg	0.0041	ND
Methyl-t-butyl ether	0.975	mg/kg	0.0020	ND
o-Xylene	0.975	mg/kg	0.0020	ND
Styrene	0.975	mg/kg	0.0041	ND
Tetrachloroethene	0.975	mg/kg	0.0041	ND
Toluene	0.975	mg/kg	0.0020	ND
trans-1,2-Dichloroethene	0.975	mg/kg	0.0041	ND
trans-1,3-Dichloropropene	0.975	mg/kg	0.0041	ND
Trichloroethene	0.975	mg/kg	0.0041	ND
Trichlorofluoromethane	0.975	mg/kg	0.0041	ND
Vinyl chloride	0.975	mg/kg	0.0041	ND
Xylenes (Total)	0.975	mg/kg	0.0020	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	26.47	30	68	122	88	
Dibromofluoromethane	31.56	30	63	140	105	
Bromofluorobenzene	30.32	30	64	129	101	
1,2-Dichloroethane-d4	30.39	30	63	143	101	

Sample ID: TB-1-201707 | **Collection Date: 7/11/2017**
Lab#: AC98905-016 | **Receipt Date: 7/11/2017**
Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	29.17	30	79	111	97	
Dibromofluoromethane	36.25	30	73	131	121	
Bromofluorobenzene	30.05	30	82	112	100	
1,2-Dichloroethane-d4	34.35	30	78	128	115	

Sample ID: MW-11-201707 U | **Collection Date: 7/11/2017**
Lab#: AC98905-017 | **Receipt Date: 7/11/2017**
Matrix: Aqueous

Alkalinity-Bicarbonate (SM2320B-97)

Analyte	DF	Units	RL	Result
Alkalinity	**1**	**mg caco3/l**	**10**	**280**

Alkalinity-Carbonate (SM2320B-97)

Analyte	DF	Units	RL	Result
Alkalinity	1	mg caco3/l	10	ND

Alkalinity-Total (SM2320B-97)

Analyte	DF	Units	RL	Result
Alkalinity	**1**	**mg caco3/l**	**10**	**280**

BTEX & Extra Compunds (8260)

Analyte	DF	Units	RL	Result
Benzene	1	ug/l	0.50	ND
Ethylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	29.06	30	79	111	97	
Dibromofluoromethane	35.51	30	73	131	118	
Bromofluorobenzene	29.43	30	82	112	98	
1,2-Dichloroethane-d4	35.19	30	78	128	117	

Nitrate-N (Water) 300.0

Analyte	DF	Units	RL	Result
Nitrate	1	mg/l	1.0	ND

Sulfate (Water) 300.0

Analyte	DF	Units	RL	Result
Sulfate	**1**	**mg/l**	**2.0**	**8.5**

Sample ID: MW-11-201707 F
Lab#: AC98905-018
Matrix: Aqueous

Collection Date: 7/11/2017
Receipt Date: 7/11/2017

Metals Pair 6010

Analyte	DF	Units	RL	Result
Iron	1	ug/l	300	370
Manganese	1	ug/l	40	680

Sample ID: SW-FD-201707 U **Collection Date: 7/11/2017**
Lab#: AC98905-019 **Receipt Date: 7/11/2017**
Matrix: Aqueous

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	**1**	**mg/l**	**2.0**	**6.9**

Cyanide (Water) 9012

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Hardness 200.7

Analyte	DF	Units	RL	Result
Hardness	**1**	**mg caco3/l**	**6.6**	**120**

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	2.0	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	2.0	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	2.0	ND
2,4,5-Trichlorophenol	1	ug/l	2.0	ND
2,4,6-Trichlorophenol	1	ug/l	2.0	ND
2,4-Dichlorophenol	1	ug/l	0.80	ND
2,4-Dimethylphenol	1	ug/l	0.50	ND
2,4-Dinitrophenol	1	ug/l	10	ND
2,4-Dinitrotoluene	1	ug/l	2.0	ND
2,6-Dinitrotoluene	1	ug/l	2.0	ND
2-Chloronaphthalene	1	ug/l	2.0	ND
2-Chlorophenol	1	ug/l	2.0	ND
2-Methylnaphthalene	1	ug/l	2.0	ND
2-Methylphenol	1	ug/l	0.50	ND
2-Nitroaniline	1	ug/l	2.0	ND
2-Nitrophenol	1	ug/l	2.0	ND
3&4-Methylphenol	1	ug/l	0.50	ND
3,3'-Dichlorobenzidine	1	ug/l	2.0	ND
3-Nitroaniline	1	ug/l	2.0	ND
4,6-Dinitro-2-methylphenol	1	ug/l	10	ND
4-Bromophenyl-phenylether	1	ug/l	2.0	ND
4-Chloro-3-methylphenol	1	ug/l	2.0	ND
4-Chloroaniline	1	ug/l	0.50	ND
4-Chlorophenyl-phenylether	1	ug/l	2.0	ND
4-Nitroaniline	1	ug/l	2.0	ND
4-Nitrophenol	1	ug/l	2.0	ND
Acenaphthene	1	ug/l	2.0	ND
Acenaphthylene	1	ug/l	2.0	ND
Acetophenone	1	ug/l	2.0	ND
Anthracene	1	ug/l	2.0	ND
Atrazine	1	ug/l	2.0	ND
Benzaldehyde	1	ug/l	2.0	ND
Benzo[a]anthracene	1	ug/l	2.0	ND
Benzo[a]pyrene	1	ug/l	2.0	ND
Benzo[b]fluoranthene	1	ug/l	2.0	ND
Benzo[g,h,i]perylene	1	ug/l	2.0	ND
Benzo[k]fluoranthene	1	ug/l	2.0	ND
bis(2-Chloroethoxy)methane	1	ug/l	2.0	ND
bis(2-Chloroethyl)ether	1	ug/l	0.50	ND
bis(2-Chloroisopropyl)ether	1	ug/l	2.0	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	2.0	ND
Butylbenzylphthalate	1	ug/l	2.0	ND
Caprolactam	1	ug/l	2.0	ND
Carbazole	1	ug/l	2.0	ND
Chrysene	1	ug/l	2.0	ND
Dibenzo[a,h]anthracene	1	ug/l	2.0	ND
Dibenzofuran	1	ug/l	0.50	ND
Diethylphthalate	1	ug/l	2.0	ND

Sample ID: SW-FD-201707 U **Collection Date: 7/11/2017**
Lab#: AC98905-019 **Receipt Date: 7/11/2017**
Matrix: Aqueous

Dimethylphthalate	1	ug/l	2.0	ND	
Di-n-butylphthalate	1	ug/l	0.50	ND	
Di-n-octylphthalate	1	ug/l	2.0	ND	
Fluoranthene	1	ug/l	2.0	ND	
Fluorene	1	ug/l	2.0	ND	
Hexachlorobenzene	1	ug/l	2.0	ND	
Hexachlorobutadiene	1	ug/l	2.0	ND	
Hexachlorocyclopentadiene	1	ug/l	2.0	ND	
Hexachloroethane	1	ug/l	2.0	ND	
Indeno[1,2,3-cd]pyrene	1	ug/l	2.0	ND	
Isophorone	1	ug/l	2.0	ND	
Naphthalene	1	ug/l	0.50	ND	
Nitrobenzene	1	ug/l	2.0	ND	
N-Nitroso-di-n-propylamine	1	ug/l	0.50	ND	
N-Nitrosodiphenylamine	1	ug/l	2.0	ND	
Pentachlorophenol	1	ug/l	10	ND	
Phenanthrene	1	ug/l	2.0	ND	
Phenol	1	ug/l	2.0	ND	
Pyrene	1	ug/l	2.0	ND	

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	44.12	50	55	146	88	
Phenol-d5	35.44	100	27	115	35	
Nitrobenzene-d5	42.85	50	51	139	86	
2-Fluorophenol	48.72	100	29	113	49	
2-Fluorobiphenyl	43.22	50	53	129	86	
2,4,6-Tribromophenol	83.17	100	54	149	83	

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**240**
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**36000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**430**
Magnesium	**1**	**ug/l**	**5000**	**10000**
Manganese	**1**	**ug/l**	**40**	**240**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**10000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND

Sample ID: SW-FD-201707 U **Collection Date: 7/11/2017**
Lab#: AC98905-019 **Receipt Date: 7/11/2017**
Matrix: Aqueous

1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.33	30	79	111	94	
Dibromofluoromethane	32.84	30	73	131	109	
Bromofluorobenzene	28.60	30	82	112	95	
1,2-Dichloroethane-d4	32.28	30	78	128	108	

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

CHAIN OF CUSTODY RECORD

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Project # (Lab Use Only): 7071123

Customer Information

1a) Customer: TRC
Address: 1430 Broadway
New York, NY 10018
1b) Email/Cell/Fax/Ph: kmyers@trcsolutions.com
1c) Send Invoice to: "
1d) Send Report to: "

Project Information

2a) Project: West Harrison Sub Residency NYSDOT
2b) Project Mgr: Kirsten Myers
2c) Project Location (City/State): Harrison, NY
2d) Quote/PO # (If Applicable):

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ (NY, circled) PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA (circled)	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓ Batch #: AC58905

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water, S - Soil, A - Air
GW - Ground Water, SL - Sludge
WW - Waste Water, OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	VO ~~10~~ 15	BNA ~~20~~ 15	TAL Met (Field Filt)	CN (Field Filt)	Chloride	% Solids	Hardness	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001/002	LMW-2-201707	GW	7/10	1225		X	X	X	X	X	X			3			1	3		1		
003/004	LMW-4-201707	GW	7/10	1410		X	X	X	X	X	X			3			1	3		1		
005/006	PC-2-201707	GW	7/10	1530		X	X	X	X	X	X			3			1	3		1		
007/008	SW-4-201707	SW	7/11	~~1015~~ 1010		X	X	X	X	X	X		X	3			1	3		1		
009/~~010~~	SD-4-201707	SED	7/11	1015		X	X	X	X	X	X	X		2		3						
010/011 ~~011/012~~	SW-~~3~~2-201707	SW	7/11	1110		X	X	X	X	X	X		X	3			1	3		1		
012 ~~013/014~~	SD-2-201707	SED	7/11	1115		X	X	X	X	X	X	X		2		3						
013/014 ~~015/016~~	SW-1-201707	SW	7/11	1210		X	X	X	X	X	X		X	3			1	3		1		
015 ~~017/018~~	~~SED~~ SD-1-201707	SED	7/11	1215		X	X	X	X	X	X	X		2		3						
016 ~~019~~	TB-1-201707	TB					X											3				Trip Blank

10) Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	7/11	14:30
[signature]	[signature]	7/11/17	15:50

11) Sampler (print name): James Robinson   Date: 7/11/17

Additional Notes
Please Batch all Harrison Sub Res Samples on single lab report

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.0, 2.1, 3.1, 2.4

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ]   FSP#

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
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Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 707123

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ (NY) PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP (CatA)	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer:
Address: SEE Pg 1
1b) Email/Cell/Fax/Ph:
1c) Send Invoice to:
1d) Send Report to:

Project Information

2a) Project:
2b) Project Mgr: See Pg 1
2c) Project Location (City/State):
2d) Quote/PO # (If Applicable):

FOR LAB USE ONLY ↓

Batch # AC98905

===> Check If Contingent ===>

Matrix Codes

DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis *(specify methods & parameter lists)*

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	VO BTEX + MTBE	Fe, Mn (Field Filt)	Alkalinity Bicarb Alk	NO3 + Sulfate	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other: Zn Acet	9) Comments
017/018	MW-11-20707	GW	7/11	1415		X	X	X	X	X	4				3		1	1	

10) Relinquished by:	Accepted by:	Date	Time
		7/11/17	14:30
		7/11/17	15:50

11) Sampler (print name): James Robinson Date: 7/11/17

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 4.0°C

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

Hampton-Clarke Report Of Analysis

Client: TRC Engineering **HC Project #:** 7071123

Project: Harrison Sub Residency

Sample ID: PC-1-201707 U **Collection Date: 7/12/2017**
Lab#: AC98940-001 **Receipt Date: 7/12/2017**
Matrix: Aqueous

Alkalinity-Bicarbonate (SM2320B-97)

Analyte	DF	Units	RL	Result
Alkalinity	**1**	**mg caco3/l**	**10**	**390**

Alkalinity-Carbonate (SM2320B-97)

Analyte	DF	Units	RL	Result
Alkalinity	1	mg caco3/l	10	ND

Alkalinity-Total (SM2320B-97)

Analyte	DF	Units	RL	Result
Alkalinity	**1**	**mg caco3/l**	**10**	**390**

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	**10**	**mg/l**	**20**	**260**

Nitrate-N (Water) 300.0

Analyte	DF	Units	RL	Result
Nitrate	1	mg/l	1.0	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	2.2	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	2.2	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	2.2	ND
2,4,5-Trichlorophenol	1	ug/l	2.2	ND
2,4,6-Trichlorophenol	1	ug/l	2.2	ND
2,4-Dichlorophenol	1	ug/l	0.89	ND
2,4-Dimethylphenol	1	ug/l	0.56	ND
2,4-Dinitrophenol	1	ug/l	11	ND
2,4-Dinitrotoluene	1	ug/l	2.2	ND
2,6-Dinitrotoluene	1	ug/l	2.2	ND
2-Chloronaphthalene	1	ug/l	2.2	ND
2-Chlorophenol	1	ug/l	2.2	ND
2-Methylnaphthalene	1	ug/l	2.2	ND
2-Methylphenol	1	ug/l	0.56	ND
2-Nitroaniline	1	ug/l	2.2	ND
2-Nitrophenol	1	ug/l	2.2	ND
3&4-Methylphenol	1	ug/l	0.56	ND
3,3'-Dichlorobenzidine	1	ug/l	2.2	ND
3-Nitroaniline	1	ug/l	2.2	ND
4,6-Dinitro-2-methylphenol	1	ug/l	11	ND
4-Bromophenyl-phenylether	1	ug/l	2.2	ND
4-Chloro-3-methylphenol	1	ug/l	2.2	ND
4-Chloroaniline	1	ug/l	0.56	ND
4-Chlorophenyl-phenylether	1	ug/l	2.2	ND
4-Nitroaniline	1	ug/l	2.2	ND
4-Nitrophenol	1	ug/l	2.2	ND
Acenaphthene	1	ug/l	2.2	ND
Acenaphthylene	1	ug/l	2.2	ND
Acetophenone	1	ug/l	2.2	ND
Anthracene	1	ug/l	2.2	ND
Atrazine	1	ug/l	2.2	ND
Benzaldehyde	1	ug/l	2.2	ND
Benzo[a]anthracene	1	ug/l	2.2	ND
Benzo[a]pyrene	1	ug/l	2.2	ND
Benzo[b]fluoranthene	1	ug/l	2.2	ND
Benzo[g,h,i]perylene	1	ug/l	2.2	ND

Benzo[k]fluoranthene	1	ug/l	2.2	ND
bis(2-Chloroethoxy)methane	1	ug/l	2.2	ND
bis(2-Chloroethyl)ether	1	ug/l	0.56	ND
bis(2-Chloroisopropyl)ether	1	ug/l	2.2	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	2.2	ND
Butylbenzylphthalate	1	ug/l	2.2	ND
Caprolactam	1	ug/l	2.2	ND
Carbazole	1	ug/l	2.2	ND
Chrysene	1	ug/l	2.2	ND
Dibenzo[a,h]anthracene	1	ug/l	2.2	ND
Dibenzofuran	1	ug/l	0.56	ND
Diethylphthalate	1	ug/l	2.2	ND
Dimethylphthalate	1	ug/l	2.2	ND
Di-n-butylphthalate	1	ug/l	0.56	ND
Di-n-octylphthalate	1	ug/l	2.2	ND
Fluoranthene	1	ug/l	2.2	ND
Fluorene	1	ug/l	2.2	ND
Hexachlorobenzene	1	ug/l	2.2	ND
Hexachlorobutadiene	1	ug/l	2.2	ND
Hexachlorocyclopentadiene	1	ug/l	2.2	ND
Hexachloroethane	1	ug/l	2.2	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	2.2	ND
Isophorone	1	ug/l	2.2	ND
Naphthalene	1	ug/l	0.56	ND
Nitrobenzene	1	ug/l	2.2	ND
N-Nitroso-di-n-propylamine	1	ug/l	0.56	ND
N-Nitrosodiphenylamine	1	ug/l	2.2	ND
Pentachlorophenol	1	ug/l	11	ND
Phenanthrene	1	ug/l	2.2	ND
Phenol	1	ug/l	2.2	ND
Pyrene	1	ug/l	2.2	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	55.12	50	55	146	110	
Phenol-d5	34.46	100	27	115	34	
Nitrobenzene-d5	39.96	50	51	139	80	
2-Fluorophenol	51.10	100	29	113	51	
2-Fluorobiphenyl	45.51	50	53	129	91	
2,4,6-Tribromophenol	90.94	100	54	149	91	

Sulfate (Water) 300.0

Analyte	DF	Units	RL	Result
Sulfate	**10**	**mg/l**	**20**	**120**

Sulfide-Total (SM4500-S2F-11)

Analyte	DF	Units	RL	Result
Sulfide (Total)	1	mg/l	2	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND

Sample ID: PC-1-201707 U | **Collection Date: 7/12/2017**
Lab#: AC98940-001 | **Receipt Date: 7/12/2017**
Matrix: Aqueous

Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.89	30	79	111	96	
Dibromofluoromethane	35.61	30	73	131	119	
Bromofluorobenzene	29.32	30	82	112	98	
1,2-Dichloroethane-d4	35.33	30	78	128	118	

Sample ID: PC-1-201707 F | **Collection Date: 7/12/2017**
Lab#: AC98940-002 | **Receipt Date: 7/12/2017**
Matrix: Aqueous

Cyanide (Water) 9012

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**210**
Barium	**1**	**ug/l**	**50**	**180**
Calcium	**1**	**ug/l**	**5000**	**170000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**1400**
Magnesium	**1**	**ug/l**	**5000**	**24000**
Manganese	**1**	**ug/l**	**40**	**1500**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**6300**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**160000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: PC-FD-201707 U | **Collection Date: 7/12/2017**
Lab#: AC98940-003 | **Receipt Date: 7/12/2017**
Matrix: Aqueous

Alkalinity-Bicarbonate (SM2320B-97)

Analyte	DF	Units	RL	Result
Alkalinity	**1**	**mg caco3/l**	**10**	**400**

Alkalinity-Carbonate (SM2320B-97)

Analyte	DF	Units	RL	Result
Alkalinity	1	mg caco3/l	10	ND

Alkalinity-Total (SM2320B-97)

Analyte	DF	Units	RL	Result
Alkalinity	**1**	**mg caco3/l**	**10**	**400**

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	**10**	**mg/l**	**20**	**260**

Nitrate-N (Water) 300.0

Analyte	DF	Units	RL	Result
Nitrate	1	mg/l	1.0	ND

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	2.2	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	2.2	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	2.2	ND
2,4,5-Trichlorophenol	1	ug/l	2.2	ND
2,4,6-Trichlorophenol	1	ug/l	2.2	ND
2,4-Dichlorophenol	1	ug/l	0.89	ND
2,4-Dimethylphenol	1	ug/l	0.56	ND
2,4-Dinitrophenol	1	ug/l	11	ND
2,4-Dinitrotoluene	1	ug/l	2.2	ND
2,6-Dinitrotoluene	1	ug/l	2.2	ND
2-Chloronaphthalene	1	ug/l	2.2	ND
2-Chlorophenol	1	ug/l	2.2	ND
2-Methylnaphthalene	1	ug/l	2.2	ND
2-Methylphenol	1	ug/l	0.56	ND
2-Nitroaniline	1	ug/l	2.2	ND
2-Nitrophenol	1	ug/l	2.2	ND
3&4-Methylphenol	1	ug/l	0.56	ND
3,3'-Dichlorobenzidine	1	ug/l	2.2	ND
3-Nitroaniline	1	ug/l	2.2	ND
4,6-Dinitro-2-methylphenol	1	ug/l	11	ND
4-Bromophenyl-phenylether	1	ug/l	2.2	ND
4-Chloro-3-methylphenol	1	ug/l	2.2	ND
4-Chloroaniline	1	ug/l	0.56	ND
4-Chlorophenyl-phenylether	1	ug/l	2.2	ND
4-Nitroaniline	1	ug/l	2.2	ND
4-Nitrophenol	1	ug/l	2.2	ND
Acenaphthene	1	ug/l	2.2	ND
Acenaphthylene	1	ug/l	2.2	ND
Acetophenone	1	ug/l	2.2	ND
Anthracene	1	ug/l	2.2	ND
Atrazine	1	ug/l	2.2	ND
Benzaldehyde	1	ug/l	2.2	ND
Benzo[a]anthracene	1	ug/l	2.2	ND
Benzo[a]pyrene	1	ug/l	2.2	ND
Benzo[b]fluoranthene	1	ug/l	2.2	ND
Benzo[g,h,i]perylene	1	ug/l	2.2	ND
Benzo[k]fluoranthene	1	ug/l	2.2	ND
bis(2-Chloroethoxy)methane	1	ug/l	2.2	ND
bis(2-Chloroethyl)ether	1	ug/l	0.56	ND
bis(2-Chloroisopropyl)ether	1	ug/l	2.2	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	2.2	ND
Butylbenzylphthalate	1	ug/l	2.2	ND
Caprolactam	1	ug/l	2.2	ND
Carbazole	1	ug/l	2.2	ND

Chrysene	1	ug/l	2.2	ND	
Dibenzo[a,h]anthracene	1	ug/l	2.2	ND	
Dibenzofuran	1	ug/l	0.56	ND	
Diethylphthalate	1	ug/l	2.2	ND	
Dimethylphthalate	1	ug/l	2.2	ND	
Di-n-butylphthalate	1	ug/l	0.56	ND	
Di-n-octylphthalate	1	ug/l	2.2	ND	
Fluoranthene	1	ug/l	2.2	ND	
Fluorene	1	ug/l	2.2	ND	
Hexachlorobenzene	1	ug/l	2.2	ND	
Hexachlorobutadiene	1	ug/l	2.2	ND	
Hexachlorocyclopentadiene	1	ug/l	2.2	ND	
Hexachloroethane	1	ug/l	2.2	ND	
Indeno[1,2,3-cd]pyrene	1	ug/l	2.2	ND	
Isophorone	1	ug/l	2.2	ND	
Naphthalene	1	ug/l	0.56	ND	
Nitrobenzene	1	ug/l	2.2	ND	
N-Nitroso-di-n-propylamine	1	ug/l	0.56	ND	
N-Nitrosodiphenylamine	1	ug/l	2.2	ND	
Pentachlorophenol	1	ug/l	11	ND	
Phenanthrene	1	ug/l	2.2	ND	
Phenol	1	ug/l	2.2	ND	
Pyrene	1	ug/l	2.2	ND	

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	53.98	50	55	146	108	
Phenol-d5	28.27	100	27	115	28	
Nitrobenzene-d5	42.66	50	51	139	85	
2-Fluorophenol	42.82	100	29	113	43	
2-Fluorobiphenyl	45.75	50	53	129	91	
2,4,6-Tribromophenol	88.35	100	54	149	88	

Sulfate (Water) 300.0

Analyte	DF	Units	RL	Result
Sulfate	**10**	**mg/l**	**20**	**110**

Sulfide-Total (SM4500-S2F-11)

Analyte	DF	Units	RL	Result
Sulfide (Total)	1	mg/l	2	ND

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND

Sample ID: PC-FD-201707 U **Collection Date: 7/12/2017**
Lab#: AC98940-003 **Receipt Date: 7/12/2017**
Matrix: Aqueous

Chlorobenzene	1	ug/l	1.0	ND	
Chloroethane	1	ug/l	1.0	ND	
Chloroform	1	ug/l	1.0	ND	
Chloromethane	1	ug/l	1.0	ND	
cis-1,2-Dichloroethene	1	ug/l	1.0	ND	
cis-1,3-Dichloropropene	1	ug/l	1.0	ND	
Cyclohexane	1	ug/l	1.0	ND	
Dibromochloromethane	1	ug/l	1.0	ND	
Dichlorodifluoromethane	1	ug/l	1.0	ND	
Ethylbenzene	1	ug/l	1.0	ND	
Isopropylbenzene	1	ug/l	1.0	ND	
m&p-Xylenes	1	ug/l	1.0	ND	
Methyl Acetate	1	ug/l	1.0	ND	
Methylcyclohexane	1	ug/l	1.0	ND	
Methylene chloride	1	ug/l	1.0	ND	
Methyl-t-butyl ether	1	ug/l	0.50	ND	
o-Xylene	1	ug/l	1.0	ND	
Styrene	1	ug/l	1.0	ND	
Tetrachloroethene	1	ug/l	1.0	ND	
Toluene	1	ug/l	1.0	ND	
trans-1,2-Dichloroethene	1	ug/l	1.0	ND	
trans-1,3-Dichloropropene	1	ug/l	1.0	ND	
Trichloroethene	1	ug/l	1.0	ND	
Trichlorofluoromethane	1	ug/l	1.0	ND	
Vinyl chloride	1	ug/l	1.0	ND	
Xylenes (Total)	1	ug/l	1.0	ND	

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	29.19	30	79	111	97	
Dibromofluoromethane	34.57	30	73	131	115	
Bromofluorobenzene	28.82	30	82	112	96	
1,2-Dichloroethane-d4	35.43	30	78	128	118	

Sample ID: PC-FD-201707 F | **Collection Date: 7/12/2017**
Lab#: AC98940-004 | **Receipt Date: 7/12/2017**
Matrix: Aqueous

Cyanide (Water) 9012

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	**1**	**ug/l**	**50**	**170**
Calcium	**1**	**ug/l**	**5000**	**170000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**1400**
Magnesium	**1**	**ug/l**	**5000**	**23000**
Manganese	**1**	**ug/l**	**40**	**1500**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**6100**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**150000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: PC-3-201707 U | **Collection Date: 7/12/2017**
Lab#: AC98940-005 | **Receipt Date: 7/12/2017**
Matrix: Aqueous

Chloride (Water) 300.0

Analyte	DF	Units	RL	Result
Chloride	**10**	**mg/l**	**20**	**230**

Semivolatile Organics (no search) 8270

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	ug/l	2.2	ND
1,2,4,5-Tetrachlorobenzene	1	ug/l	2.2	ND
2,3,4,6-Tetrachlorophenol	1	ug/l	2.2	ND
2,4,5-Trichlorophenol	1	ug/l	2.2	ND
2,4,6-Trichlorophenol	1	ug/l	2.2	ND
2,4-Dichlorophenol	1	ug/l	0.89	ND
2,4-Dimethylphenol	1	ug/l	0.56	ND
2,4-Dinitrophenol	1	ug/l	11	ND
2,4-Dinitrotoluene	1	ug/l	2.2	ND
2,6-Dinitrotoluene	1	ug/l	2.2	ND
2-Chloronaphthalene	1	ug/l	2.2	ND
2-Chlorophenol	1	ug/l	2.2	ND
2-Methylnaphthalene	1	ug/l	2.2	ND
2-Methylphenol	1	ug/l	0.56	ND
2-Nitroaniline	1	ug/l	2.2	ND
2-Nitrophenol	1	ug/l	2.2	ND
3&4-Methylphenol	1	ug/l	0.56	ND
3,3'-Dichlorobenzidine	1	ug/l	2.2	ND
3-Nitroaniline	1	ug/l	2.2	ND
4,6-Dinitro-2-methylphenol	1	ug/l	11	ND
4-Bromophenyl-phenylether	1	ug/l	2.2	ND
4-Chloro-3-methylphenol	1	ug/l	2.2	ND
4-Chloroaniline	1	ug/l	0.56	ND
4-Chlorophenyl-phenylether	1	ug/l	2.2	ND
4-Nitroaniline	1	ug/l	2.2	ND
4-Nitrophenol	1	ug/l	2.2	ND
Acenaphthene	1	ug/l	2.2	ND
Acenaphthylene	1	ug/l	2.2	ND
Acetophenone	1	ug/l	2.2	ND
Anthracene	1	ug/l	2.2	ND
Atrazine	1	ug/l	2.2	ND
Benzaldehyde	1	ug/l	2.2	ND
Benzo[a]anthracene	1	ug/l	2.2	ND
Benzo[a]pyrene	1	ug/l	2.2	ND
Benzo[b]fluoranthene	1	ug/l	2.2	ND
Benzo[g,h,i]perylene	1	ug/l	2.2	ND
Benzo[k]fluoranthene	1	ug/l	2.2	ND
bis(2-Chloroethoxy)methane	1	ug/l	2.2	ND
bis(2-Chloroethyl)ether	1	ug/l	0.56	ND
bis(2-Chloroisopropyl)ether	1	ug/l	2.2	ND
bis(2-Ethylhexyl)phthalate	1	ug/l	2.2	ND
Butylbenzylphthalate	1	ug/l	2.2	ND
Caprolactam	1	ug/l	2.2	ND
Carbazole	1	ug/l	2.2	ND
Chrysene	1	ug/l	2.2	ND
Dibenzo[a,h]anthracene	1	ug/l	2.2	ND
Dibenzofuran	1	ug/l	0.56	ND
Diethylphthalate	1	ug/l	2.2	ND
Dimethylphthalate	1	ug/l	2.2	ND
Di-n-butylphthalate	1	ug/l	0.56	ND
Di-n-octylphthalate	1	ug/l	2.2	ND
Fluoranthene	1	ug/l	2.2	ND
Fluorene	1	ug/l	2.2	ND
Hexachlorobenzene	1	ug/l	2.2	ND
Hexachlorobutadiene	1	ug/l	2.2	ND
Hexachlorocyclopentadiene	1	ug/l	2.2	ND
Hexachloroethane	1	ug/l	2.2	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	2.2	ND
Isophorone	1	ug/l	2.2	ND
Naphthalene	1	ug/l	0.56	ND
Nitrobenzene	1	ug/l	2.2	ND

N-Nitroso-di-n-propylamine	1	ug/l	0.56	ND
N-Nitrosodiphenylamine	1	ug/l	2.2	ND
Pentachlorophenol	1	ug/l	11	ND
Phenanthrene	1	ug/l	2.2	ND
Phenol	1	ug/l	2.2	ND
Pyrene	1	ug/l	2.2	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	49.78	50	55	146	100	
Phenol-d5	30.64	100	27	115	31	
Nitrobenzene-d5	37.65	50	51	139	75	
2-Fluorophenol	44.78	100	29	113	45	
2-Fluorobiphenyl	41.06	50	53	129	82	
2,4,6-Tribromophenol	80.08	100	54	149	80	

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: PC-3-201707 U
Lab#: AC98940-005
Matrix: Aqueous

Collection Date: 7/12/2017
Receipt Date: 7/12/2017

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.37	30	79	111	95	
Dibromofluoromethane	34.85	30	73	131	116	
Bromofluorobenzene	28.46	30	82	112	95	
1,2-Dichloroethane-d4	34.24	30	78	128	114	

Sample ID: PC-3-201707 F | **Collection Date: 7/12/2017**
Lab#: AC98940-006 | **Receipt Date: 7/12/2017**
Matrix: Aqueous

Cyanide (Water) 9012

Analyte	DF	Units	RL	Result
Cyanide	1	mg/l	0.020	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	**1**	**ug/l**	**50**	**140**
Calcium	**1**	**ug/l**	**5000**	**72000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**350**
Magnesium	**1**	**ug/l**	**5000**	**19000**
Manganese	**1**	**ug/l**	**40**	**240**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**5600**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**81000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: TB-2-201707 **Collection Date: 7/12/2017**
Lab#: AC98940-007 **Receipt Date: 7/12/2017**
Matrix: Aqueous

Volatile Organics (no search) 8260

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.36	30	79	111	95	
Dibromofluoromethane	35.43	30	73	131	118	
Bromofluorobenzene	29.16	30	82	112	97	
1,2-Dichloroethane-d4	34.94	30	78	128	116	

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992
A Women-Owned, Disadvantaged, Small Business Enterprise

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 7071123
Page 1 of 2

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Customer Information

1a) Customer: TRC
Address: 1430 Broadway
New York, NY 10018
1b) Email/Cell/Fax/Ph: Kmyers@trcsolutions.com
1c) Send Invoice to: " "
1d) Send Report to: " "

Project Information

2a) Project: West Harrison Sub Residency NYSDOT
2b) Project Mgr: Kirsten Myers
2c) Project Location (City/State): Harrison, NY
2d) Quote/PO # (If Applicable):

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ (NY circled) PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP (CatA circled)	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓
Batch #: AC68905

Matrix Codes
DW - Drinking Water; S - Soil; A - Air
GW - Ground Water; SL - Sludge
WW - Waste Water; OL - Oil
OT - Other (please specify under item 9, Comments)

===> Check If Contingent ===> | <=== Check If Contingent <===

7) Analysis (specify methods & parameter lists)

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	Time	Composite (C)	Grab (G)	VO ~~10~~ 15	BNA ~~20~~ 15	TAL Met (Field Filt)	CN (Field Filt)	Chloride	% Solids	Hardness	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001/002	LMW-2-201707	GW	7/10	1225		X	X	X	X	X	X			3			1	3		1		
003/004	LMW-4-201707	GW	7/10	1410		X	X	X	X	X	X			3			1	3		1		
005/006	PC-2-201707	GW	7/10	1530		X	X	X	X	X	X			5			1	3		1		
007/008	SW-4-201707	SW	7/11	~~1015~~ 1010		X	X	X	X	X	X		X	3			1	3		1		
009/~~010~~	SD-4-201707	SED	7/11	1015		X	X	X	X	X	X	X		2		3						
010/011 ~~011/012~~	SW-~~3~~2-201707	SW	7/11	1110		X	X	X	X	X	X		X	3			1	5		1		
012 ~~013/014~~	SD-2-201707	SED	7/11	1115		X	X	X	X	X	X	X		2		3						
013/014 ~~015/016~~	SW-1-201707	SW	7/11	1210		X	X	X	X	X	X		X	3			1	3		1		
015 ~~017/018~~	~~SED~~ SD-1-201707	SED	7/11	1215		X	X	X	X	X	X	X		2		3						
016 ~~019~~	TB-1-201707	TB					X											3				Trip Blank

10) Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	7/11	14:30
[signature]	[signature]	7/11/17	15:50

11) Sampler (print name): James Robinson Date: 7/11/17

Additional Notes
Please Batch all Harrison Sub Res Samples on single lab report

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
[ ] BN or BNA (8270D SIM)
[ ] VOC (8260C SIM or 8011)
[ ] SPLP (BN, BNA, Metals)
[ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
[ ] NJDEP GWQS
[ ] NJDEP SRS
[ ] NJDEP SPLP
[ ] Other (specify):

Check if applicable:
[ ] Project-Specific Reporting Limits
[ ] High Contaminant Concentrations
[ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.0, 2.1, 3.1, 2.4

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
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Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
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Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 707123

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ (NY) PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP (CatA)	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer:
Address: SEE Pg 1
1b) Email/Cell/Fax/Ph:
1c) Send Invoice to:
1d) Send Report to:

Project Information

2a) Project:
2b) Project Mgr: See Pg 1
2c) Project Location (City/State):
2d) Quote/PO # (If Applicable):

FOR LAB USE ONLY ↓

Batch # AC98905

===> Check If Contingent ===>

Matrix Codes

DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis *(specify methods & parameter lists)*

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	VO BTEX + MTBE	Fe, Mn (Field Filt)	Alkalinity Bicarb Alk	NO3 + Sulfate	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other: Zn Acet	9) Comments
017/018	MW-11-20707	GW	7/11	1415		X	X	X	X	X	4				3		1	1	

10) Relinquished by:	Accepted by:	Date	Time
		7/11/17	14:30
		7/11/17	15:50

11) Sampler (print name): James Robinson Date: 7/11/17

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 4.0°C

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

APPENDIX D
PARAMETER TREND ANALYSIS

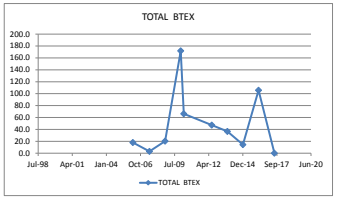
APPENDIX D

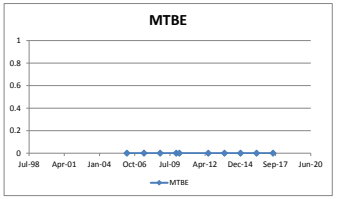
MONITORING WELL HISTORICAL DATA SUMMARY

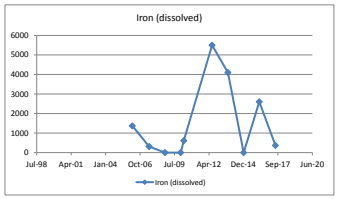
May 2000 to July 2017

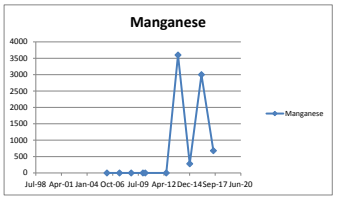
Harrison Sub-Residency Spill Site

WELL ID: MW 11	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE								ND	ND	ND	ND	ND	ND	♦	ND	ND	ND	10
Benzene								ND	ND	0.88	0.88	ND	1.9	2.7	ND	0.82	ND	1
Toluene								1 J	ND	1	2.9	ND	ND	1.2	ND	ND	ND	5
Ethylbenzene								10	3J	13	130	53	32	24	13	93	ND	5
m,p-Xylene								7	ND	3.8	35	12	11	6.2	1.4	9.9	ND	5[2]
O-Xylene								ND	ND	1.6	3.1	1.2	2.3	2.4	ND	2.1	ND	5[2]
Xylenes (total)								7	ND	5.4	38.1	13.2	13.3	8.6	1.4	12	ND	5[2]
TOTAL BTEX								18	3	20.28	**171.88**	66.2	47.2	36.5	14.4	**105.82**	ND	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene								♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene								♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride								♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium								♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)								**174,000**	**23,400**	♦	♦	♦	♦	4100	♦	♦	♦	300/500[3]
Iron (dissolved)								**1370**	**307**	ND	ND	**610**	**5500**	**4100**	ND	**2600**	**370**	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead								♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)								0.98	240	ND	ND	ND	ND	ND	ND	ND	ND	NS
Sulfate (ug/L)								57,000	15,000	19	9	14,000	3,300	3,500	20,000	8,000	8,500	250,000
TOC (ug/L)								♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)								♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)								230,000	140,000	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)								3.70	5.45	3.30	3.01	16.25	5.03	8.30	8.70	3.02	1.13	NS

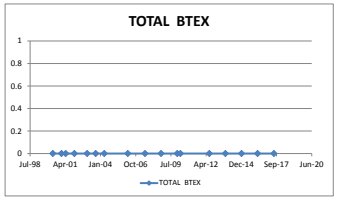


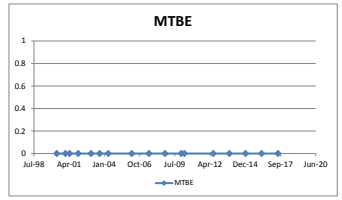


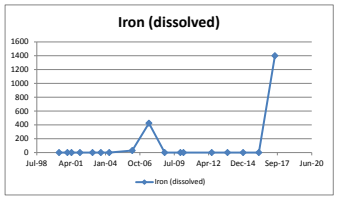


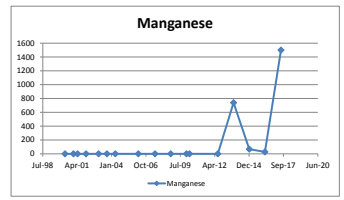


WELL ID: PC-1								(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	♦	♦	♦	♦	♦	♦	♦	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10
Benzene	♦	♦	♦	♦	♦	♦	♦	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Toluene	♦	♦	♦	♦	♦	♦	♦	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Ethylbenzene	♦	♦	♦	♦	♦	♦	♦	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
m,p-Xylene	♦	♦	♦	♦	♦	♦	♦	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5[2]
O-Xylene	♦	♦	♦	♦	♦	♦	♦	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5[2]
Xylenes (total)	♦	♦	♦	♦	♦	♦	♦	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5[2]
TOTAL BTEX	♦	♦	♦	♦	♦	♦	♦	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	♦	♦	♦	♦	♦	♦	♦	**599**	**952**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	♦	♦	♦	♦	♦	♦	♦	28.6	**425**	ND	ND	ND	ND	ND	ND	ND	**1400**	300/500[3]
Manganese	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	740	67	28	**1500**	300/500[3]
Lead	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	♦	♦	♦	♦	♦	♦	♦	50	ND*	ND	ND	ND	ND	ND	ND	ND	ND	NS
Sulfate (ug/L)	♦	♦	♦	♦	♦	♦	♦	5000	37,000	34	36	13,000	1,400	2,100	24,000	12,000	120,000	250,000
TOC (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	♦	♦	♦	♦	♦	♦	♦	10,000	35,000	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	♦	♦	♦	♦	♦	♦	♦	2.72	3.02	4.1	1.92	16.57	5.13	3.11	4.3	0.13	0	NS









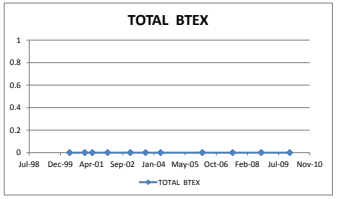
APPENDIX D

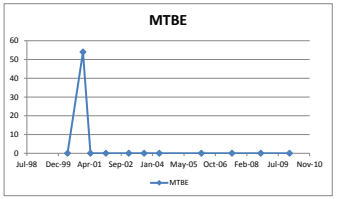
MONITORING WELL HISTORICAL DATA SUMMARY

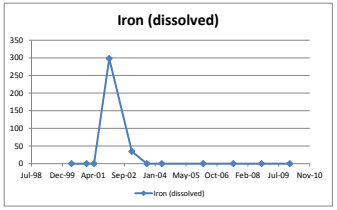
May 2000 to July 2017

Harrison Sub-Residency Spill Site

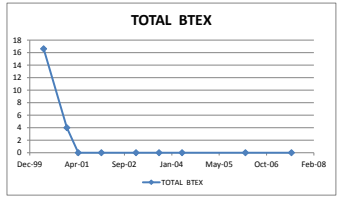
WELL ID: MW 1	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	ND	54	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	10
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	1
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	5
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	5
m,p-Xylene	ND	ND	-	-	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	5[2]
O-Xylene	ND	ND	-	-	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	7,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	**27,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	ND	♦	207	**3,760**	264	♦	♦	**5810**	**4840**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	ND	♦	ND	298	35	85.1 B	56.5 B	58 B	96.1 B	ND	ND	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	4,100	♦	**11,000**	3,000	7,700	6,200	6,800	6,200	6,900	2,500	2,700	♦	♦	♦	♦	♦	♦	
Sulfate (ug/L)	15,000	♦	13,000	17,000	15,000	17,000	14,000	17,000	13,000	17,000	21,000	♦	♦	♦	♦	♦	♦	NS
TOC (ug/L)	4,000	♦	9,000	8,000	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	97,400	♦	59,000	42,000	30,000	16,000	45,000 H	56,000	73,000	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	3.6	1.97	6.42	8.3	2.5	3.89	4.2	5.9	7.36	5.10	3.45	♦	♦	♦	♦	♦	♦	NS

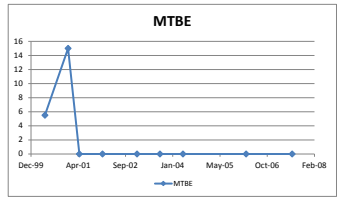


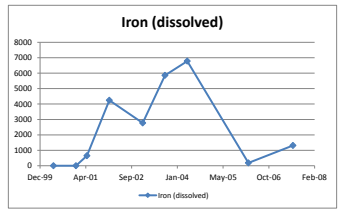




WELL ID: MW 2	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	5.5	15	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	10
Benzene	2.1	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	1
Toluene	8.0	2	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
Ethylbenzene	2.7	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
m,p-Xylene	ND	-	-	-	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
O-Xylene	3.8	-	-	-	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	3.8	2	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX	16.6	4	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	10,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	**22,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	♦	♦	**6,330**	**75,600**	**10,400**	♦	♦	**3780**	**12,800**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	♦	♦	**646**	**4,240**	**2,770**	**5,860**	**6,780**	187	**1,310**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	♦	♦	ND	ND *	81	58	70	230	87	♦	♦	♦	♦	♦	♦	♦	♦	
Sulfate (ug/L)	♦	♦	14,000	150,000	25,000	15,000	15,000	26,000	9,700	♦	♦	♦	♦	♦	♦	♦	♦	NS
TOC (ug/L)	♦	♦	17,000	18,000	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	♦	♦	49,000	40,000	23,000	33,000	43,000 H	46,000	51,000	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	2.6	3.08	4.23	3.6	1.5	1.07	1.3	1.7	3.03	♦	♦	♦	♦	♦	♦	♦	♦	NS







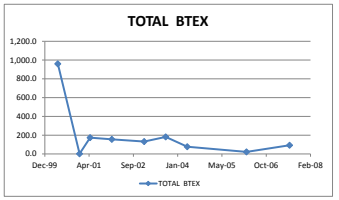
APPENDIX D

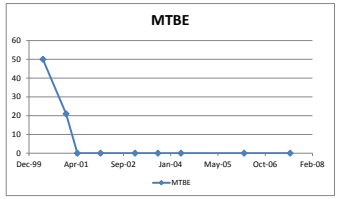
MONITORING WELL HISTORICAL DATA SUMMARY

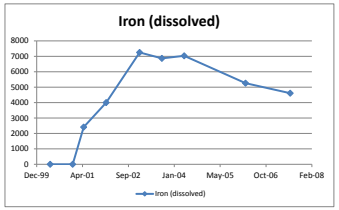
May 2000 to July 2017

Harrison Sub-Residency Spill Site

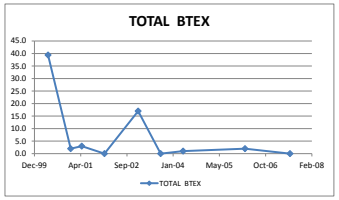
WELL ID: MW 3	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	**50**	21	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	**10**
Benzene	64	ND	2	3	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	**1**
Toluene	21	ND	2	3	ND	ND	ND	ND	1J	♦	♦	♦	♦	♦	♦	♦	♦	**5**
Ethylbenzene	350	ND	ND	40	82	120	61	ND	82	♦	♦	♦	♦	♦	♦	♦	♦	**5**
m,p-Xylene	460	-	-	-	44	56	15	20	10	♦	♦	♦	♦	♦	♦	♦	♦	**5[2]**
O-Xylene	65	-	-	-	6	5	1 J	2J	ND	♦	♦	♦	♦	♦	♦	♦	♦	**5[2]**
Xylenes (total)	525	2	170	110	50	61	16	22	10	♦	♦	♦	♦	♦	♦	♦	♦	**5[2]**
TOTAL BTEX	**960.0**	2	**174**	**156**	**132**	**181**	77	22	93	♦	♦	♦	♦	♦	♦	♦	♦	**NS**
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene	♦		ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**NS**
Napthalene	**160**		4 J	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**NS**
Metals (ug/L)																		
Chloride	24,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**250,000**
Sodium	**43,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**20,000**
Iron (total)	**18,000**	♦	**8,880**	**35,100**	**14,400**	♦	♦	**20,800**	**17,200**	♦	♦	♦	♦	♦	♦	♦	♦	**300/500[3]**
Iron (dissolved)	ND	♦	**2,410**	**4,000**	**7,250**	**6,870**	**7,030**	**5,260**	**4,610**	♦	♦	♦	♦	♦	♦	♦	♦	**300/500[3]**
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	**300/500[3]**
Lead	8	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**25**
Other																		
Nitrogen, Nitrate (ug/L)	ND	♦	ND	ND *	ND	ND	ND	32	ND	♦	♦	♦	♦	♦	♦	♦	♦	
Sulfate (ug/L)	ND	♦	18,000	24,000	27,000	6,500	7,300	14,000	ND	♦	♦	♦	♦	♦	♦	♦	♦	**NS**
TOC (ug/L)	10,000	♦	27,000	70,000	6,300	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**250,000**
Petroleum Hydrocarbons (ug/L)	9,200	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**NS**
Carbon Dioxide (ug/L)	105,000	♦	48,000	70,000	45,000	84,000	51,000 H	61,000	65,000	♦	♦	♦	♦	♦	♦	♦	♦	**NS**
Dissolved Oxygen (mg/L)	2.1	2.93	1.89	3.0	1.1	1.36	1.04	1.26	1.33	♦	♦	♦	♦	♦	♦	♦	♦	**NS**

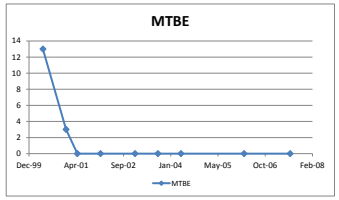


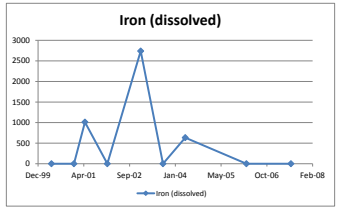




WELL ID: MW 4	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	13	3	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	**10**
Benzene	4.4	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	**1**
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	**5**
Ethylbenzene	22	2	2	ND	16	ND	1 J	2J	ND	♦	♦	♦	♦	♦	♦	♦	♦	**5**
m,p-Xylene	♦	-	-	-	1	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	**5[2]**
O-Xylene	♦	-	-	-	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	**5[2]**
Xylenes (total)	13	ND	1	ND	1	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	**5[2]**
TOTAL BTEX	39.4	2	3	ND	17	ND	1	2	ND	♦	♦	♦	♦	♦	♦	♦	♦	**NS**
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**NS**
Napthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**NS**
Metals (ug/L)																		
Chloride	8,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**250,000**
Sodium	**22,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**20,000**
Iron (total)	♦	♦	**1,360**	**1,330**	**3,480**	♦	♦	**307**	**14,600**	♦	♦	♦	♦	♦	♦	♦	♦	**300/500[3]**
Iron (dissolved)	♦	♦	**1,010**	ND	**2,740**	61.0 B	**635**	55.1 B	199B	♦	♦	♦	♦	♦	♦	♦	♦	**300/500[3]**
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	**300/500[3]**
Lead	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**25**
Other																		
Nitrogen, Nitrate (ug/L)	♦	♦	ND	3,200	ND	2400	530	450	960	♦	♦	♦	♦	♦	♦	♦	♦	
Sulfate (ug/L)	♦	♦	15,000	22,000	21,000	18,000	13,000	13,000	13,000	♦	♦	♦	♦	♦	♦	♦	♦	**NS**
TOC (ug/L)	♦	♦	14,000	13,000	44,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**250,000**
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	**NS**
Carbon Dioxide (ug/L)	♦	♦	55,000	40,000	55,000	21,000	65,000 H	98,000	91,000	♦	♦	♦	♦	♦	♦	♦	♦	**NS**
Dissolved Oxygen (mg/L)	3.5	2.35	4.29	3.9	0.82	1.42	2	1.6	2.97	♦	♦	♦	♦	♦	♦	♦	♦	**NS**







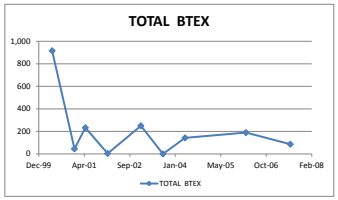
APPENDIX D

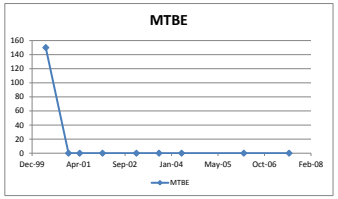
MONITORING WELL HISTORICAL DATA SUMMARY

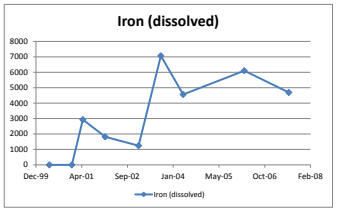
May 2000 to July 2017

Harrison Sub-Residency Spill Site

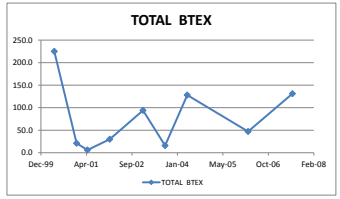
WELL ID: MW 5	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	**150**	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	10
Benzene	14	ND	1	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	1
Toluene	32	2	2	ND	2	ND	ND	1J	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
Ethylbenzene	410	ND	ND	ND	150	ND	99	140	75	♦	♦	♦	♦	♦	♦	♦	♦	5
m,p-Xylene	♦	-	-	-	93	ND	42	46	12	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
O-Xylene	♦	-	-	-	5	ND	2 J	3J	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	460	43	230	4	98	ND	44	49	12	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX	**916**	45	**233**	4	**250**	ND	**143**	**190**	87	♦	♦	♦	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene			10	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	60,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	**32,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	♦	♦	**9,630**	**3,910**	**4,500**	♦	♦	**9770**	**9,830**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	♦	♦	**2,930**	**1,820**	**1,240**	**7,070**	**4,560**	**6,100**	**4,690**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	♦	♦	ND	620	210	ND	ND	220	29	♦	♦	♦	♦	♦	♦	♦	♦	
Sulfate (ug/L)	♦	♦	17,000	12,000	16,000	42,000	8,500	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	NS
TOC (ug/L)	♦	♦	23,000	14,000	12,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	♦	♦	68,000	12,000	28,000	100,000	73,000 H	74,000	ND	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	3.4	3.09	6.12	9.0	1.6	1.19	1.73	1.23	1.52	♦	♦	♦	♦	♦	♦	♦	♦	NS

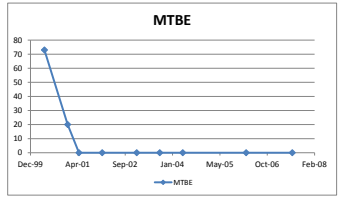


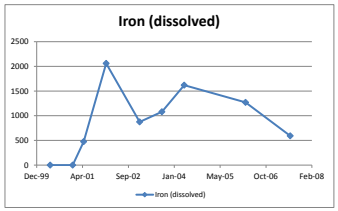




WELL ID: MW 6	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	**73**	20	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	10
Benzene	7.9	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	1
Toluene	7	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
Ethylbenzene	98	ND	ND	3	61	ND	88	16	100	♦	♦	♦	♦	♦	♦	♦	♦	5
m,p-Xylene	♦	-	-	-	30	14	37	27	28	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
O-Xylene	♦	-	-	-	2	1	3 J	4J	3J	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	112	21	6	27	33	16	40	31	31	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX	**224.9**	21	6	30	94	16	**128**	47	**131**	♦	♦	♦	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	40,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	**33,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	♦	♦	**1,720**	**2,410**	**2,750**	♦	♦	**4610**	**5,630**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	♦	♦	**475**	**2,060**	**874**	**1,080**	**1,620**	**1,270**	**593**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	♦	♦	ND	ND *	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	NS
Sulfate (ug/L)	♦	♦	17,000	19,000	22,000	10,000	7,400	7,200	ND	♦	♦	♦	♦	♦	♦	♦	♦	250,000
TOC (ug/L)	♦	♦	17,000	25,000	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	♦	♦	60,000	32,000	27,000	33,000	48,000	45,000	49,000	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	3.1	6.05	4.I	3.5	0.89	1.41	2.9	3.3	1.57	♦	♦	♦	♦	♦	♦	♦	♦	NS







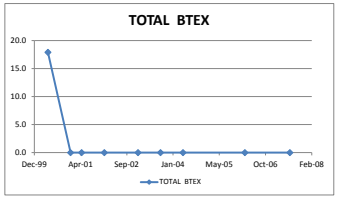
APPENDIX D

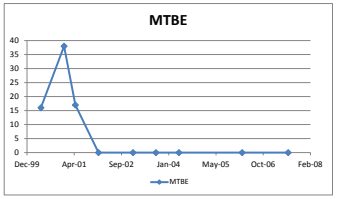
MONITORING WELL HISTORICAL DATA SUMMARY

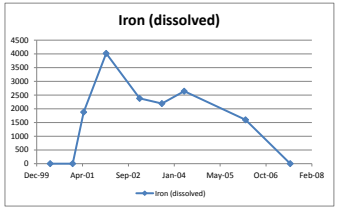
May 2000 to July 2017

Harrison Sub-Residency Spill Site

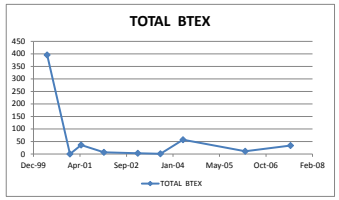
WELL ID: MW 7	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	16	38	17	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	10
Benzene	3.4	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	1
Toluene	4	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
Ethylbenzene	5.7	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
m,p-Xylene	♦	-	-	-	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
O-Xylene	♦	-	-	-	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	4.8	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX	17.9	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	40,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	**35,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	♦	♦	**2,700**	**30,000**	**3,080**	♦	♦	**3960**	**18,000**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	♦	♦	**1,880**	**4,020**	**2,380**	**2,190**	**2,640**	**1,600**	165B	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	♦	♦	ND	ND*	150	ND	160	330	ND	♦	♦	♦	♦	♦	♦	♦	♦	NS
Sulfate (ug/L)	♦	♦	15,000	38,000	20,000	8,200	13,000	11,000	7,400	♦	♦	♦	♦	♦	♦	♦	♦	250,000
TOC (ug/L)	♦	♦	16,000	21,000	11,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	♦	♦	78,000	35,000	37,000	27,000	42,000	63,000	41,000	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	3.2	3.12	4.43	3.4	1.0	2.2	1.8	2.0	2.66	♦	♦	♦	♦	♦	♦	♦	♦	NS

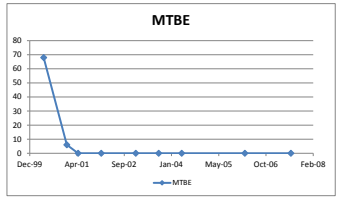


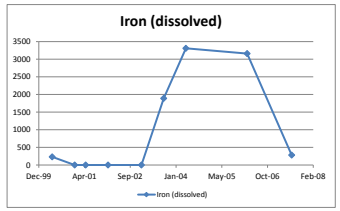




WELL ID: MW 8	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	**68**	6	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	10
Benzene	110	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	1
Toluene	26	ND	2	ND	ND	ND	2 J	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
Ethylbenzene	60	ND	ND	ND	2	1	41	2J	27	♦	♦	♦	♦	♦	♦	♦	♦	5
m,p-Xylene	160	-	-	-	1	ND	12	7	5	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
O-Xylene	40	-	-	-	ND	ND	2 J	2J	2J	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	200	ND	34	7	1	ND	14	9	7	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX	**396**	ND	36	7	3	1	57	11	34	♦	♦	♦	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene	♦		ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene	**34**		ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	5,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	**63,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	**8,600**	♦	**545**	**4,370**	**3,320**	♦	♦	**7160**	**4,070**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	230	♦	ND	48.7 B	ND	**1,890**	**3,310**	**3,160**	282	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	33	♦	ND	ND *	190	ND	ND	120	28	♦	♦	♦	♦	♦	♦	♦	♦	NS
Sulfate (ug/L)	ND	♦	31,000	ND	ND	ND	3,800	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	250,000
TOC (ug/L)	12,000	♦	21,000	25,000	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)	7,600	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	264,000	♦	37,000	22,000	19,000	30,000	56,000	55,000	42,000	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	1.5	6.3	4.6	4.5	0.89	0.88	2.18	3.13	1.96	♦	♦	♦	♦	♦	♦	♦	♦	NS







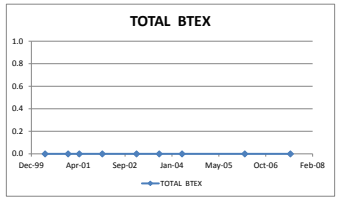
APPENDIX D

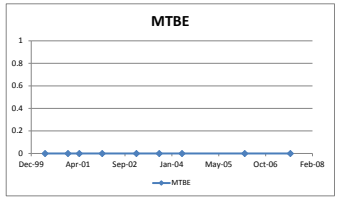
MONITORING WELL HISTORICAL DATA SUMMARY

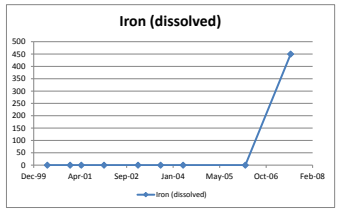
May 2000 to July 2017

Harrison Sub-Residency Spill Site

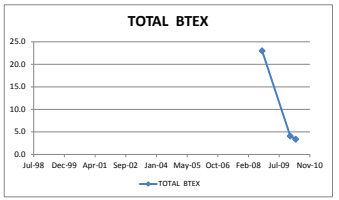
WELL ID: MW 9	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	10
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	1
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
m,p-Xylene	♦	-	-	-	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
O-Xylene	♦	-	-	-	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX	ND	ND	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene			2 J	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	**260,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	**160,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	♦	♦	**4,570**	**7,870**	**12,600**	♦	♦	232	**16,000**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	♦	♦	ND	ND	ND	32.2 B	ND	44.9 B	**450**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	♦	♦	ND	690	340	730	870	770	1,100	♦	♦	♦	♦	♦	♦	♦	♦	NS
Sulfate (ug/L)	♦	♦	21,000	23,000	19,000	12,000	12,000	17,000	19,000	♦	♦	♦	♦	♦	♦	♦	♦	250,000
TOC (ug/L)	♦	♦	18,000	15,000	9,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	♦	♦	ND	ND *	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	3.3	7.5	5.49	12.3	6.30	3.65	7.60	8.20	6.65	♦	♦	♦	♦	♦	♦	♦	♦	NS

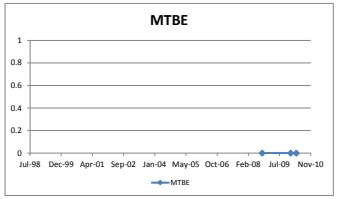


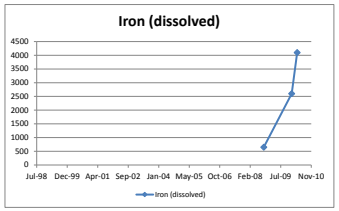




WELL ID: MW 12	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE										ND	ND	ND	♦	♦	♦	♦	♦	10
Benzene										ND	ND	ND	♦	♦	♦	♦	♦	1
Toluene										ND	ND	ND	♦	♦	♦	♦	♦	5
Ethylbenzene										23	4.1	3.4	♦	♦	♦	♦	♦	5
m,p-Xylene										ND	ND	ND	♦	♦	♦	♦	♦	5[2]
O-Xylene										ND	ND	ND	♦	♦	♦	♦	♦	5[2]
Xylenes (total)										ND	ND	ND	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX										23	4.1	3.4	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene										♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene										♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride										♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium										♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)										♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)										**650**	**2600**	**4100**	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead										♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)										ND	0.35	ND	♦	♦	♦	♦	♦	NS
Sulfate (ug/L)										5.6	19.0	13,000	♦	♦	♦	♦	♦	250,000
TOC (ug/L)										♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)										♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)										♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)										1.10	2.61	4.51	♦	♦	♦	♦	♦	NS







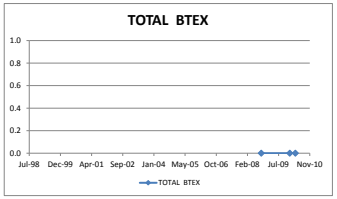
APPENDIX D

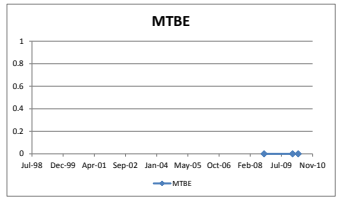
MONITORING WELL HISTORICAL DATA SUMMARY

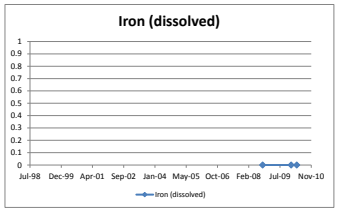
May 2000 to July 2017

Harrison Sub-Residency Spill Site

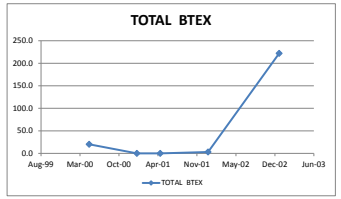
WELL ID: MW 13	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE										ND	ND	ND	♦	♦	♦	♦	♦	10
Benzene										ND	ND	ND	♦	♦	♦	♦	♦	1
Toluene										ND	ND	ND	♦	♦	♦	♦	♦	5
Ethylbenzene										ND	ND	ND	♦	♦	♦	♦	♦	5
m,p-Xylene										ND	ND	ND	♦	♦	♦	♦	♦	5[2]
O-Xylene										ND	ND	ND	♦	♦	♦	♦	♦	5[2]
Xylenes (total)										ND	ND	ND	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX										ND	ND	ND	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene										♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene										♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride										♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium										♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)										♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)										♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead										♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)										0.46	1.5	1300	♦	♦	♦	♦	♦	NS
Sulfate (ug/L)										13	23	25,000	♦	♦	♦	♦	♦	250,000
TOC (ug/L)										♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)										♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)										♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)										1.80	5.87	5.87	♦	♦	♦	♦	♦	NS

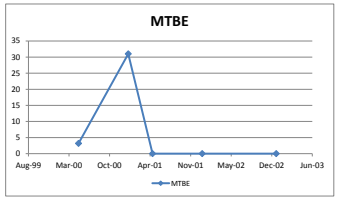


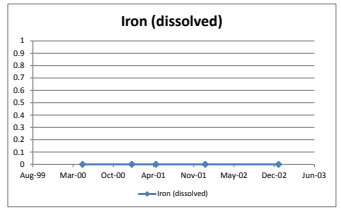




WELL ID: SP 1	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	3.2	31	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	10
Benzene	1.4	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	1
Toluene	3.7	ND	ND	ND	60	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	5
Ethylbenzene	4.0	ND	ND	2	22	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	5
m,p-Xylene	8.1	-	-	-	100	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
O-Xylene	2.9	-	-	-	42	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	11.0	ND	ND	1	140	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX	20.1	ND	ND	3	**222**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	16,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	**45,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	♦	♦	**3,940**	**3,720**	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	♦	♦	52.1 B	68.0 B	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	♦	♦	ND*	160	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Sulfate (ug/L)	♦	♦	48,000	46,000	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
TOC (ug/L)	♦	♦	25,000	17,000	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	♦	♦	18,000	19,000	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	4.6	9.66	4.6	2.3	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS







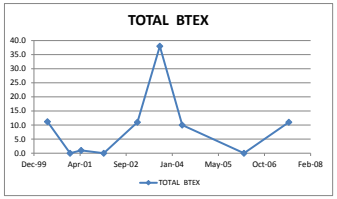
APPENDIX D

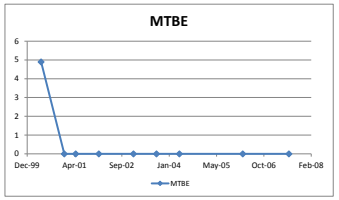
MONITORING WELL HISTORICAL DATA SUMMARY

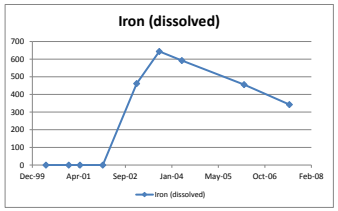
May 2000 to July 2017

Harrison Sub-Residency Spill Site

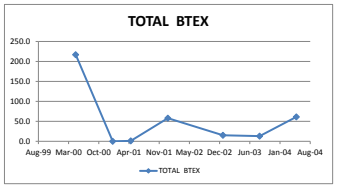
WELL ID: MW 10 B	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	4.9	♦	ND	NA	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	10
Benzene	2.1	♦	ND	NA	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	1
Toluene	ND	♦	ND	NA	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
Ethylbenzene	ND	♦	1	NA	9	23	8	ND	9	♦	♦	♦	♦	♦	♦	♦	♦	5
m,p-Xylene	3.5	♦	-	NA	2	15	2 J	ND	2J	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
O-Xylene	5.6	♦	-	NA	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	9.1	♦	ND	NA	2	15	2 J	ND	2	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX	11.2	♦	1	NA	11	38	10	ND	11	♦	♦	♦	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene			ND	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene			ND	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	34,000	♦	♦	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	**27,000**	♦	♦	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	♦	♦	**1,080**	NA	**1,190**	♦	♦	**1460**	**1,880**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	♦	♦	32.8 B	NA	**462**	**644**	**592**	**456**	**343**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	♦	♦	♦	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	♦	♦	ND*	NA	ND	ND	120	ND	120	♦	♦	♦	♦	♦	♦	♦	♦	NS
Sulfate (ug/L)	♦	♦	27,000	NA	19,000	9,000	12,000	12,000	8,100	♦	♦	♦	♦	♦	♦	♦	♦	250,000
TOC (ug/L)	♦	♦	14,000	NA	9,400	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	NA	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	♦	♦	39,000	NA	39,000	25,000	32,000	25,000	14,000	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	4.7		4.91	NA	2.0	2.9	2.4	1.1	5.35	♦	♦	♦	♦	♦	♦	♦	♦	NS

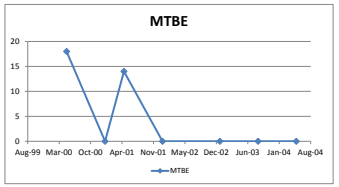


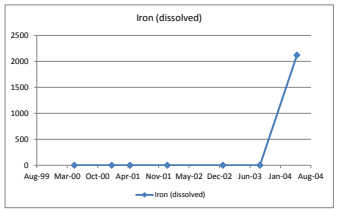




WELL ID: SP 2	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	18	♦	14	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	1
Benzene	19	♦	ND	7	7	5	2 J	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	5
Toluene	25	♦	ND	6	2	2	4 J	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	5
Ethylbenzene	110	♦	1	42	ND	5	42	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	5
m,p-Xylene	52	♦	-	-	4	1	13	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
O-Xylene	11	♦	-	-	2	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	63	♦	ND	3	6	1	13	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
TOTAL BTEX	**217.0**	♦	**1**	58	15	13	61	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	
Semi-volatile Org.(ug/L)																		NS
2-Methylnaphthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	
Metals (ug/L)																		
Chloride	36,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	**75,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	♦	♦	**9,750**	**7,590**	**2,700**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	♦	♦	ND	126 B	ND	166 B	**2,120**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	♦	♦	ND*	100	ND	37	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Sulfate (ug/L)	♦	♦	26,000	64,000	18,000	7,900	7,200	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
TOC (ug/L)	♦	♦	17,000	29,000	14,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	♦	♦	36,000	42,000	38,000	37,000	58,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	2.5	♦	3.1	4.0	1.0	1.47	1.7	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS







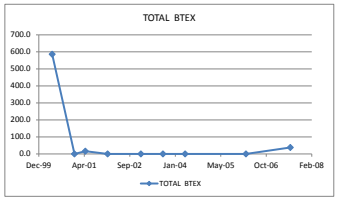
APPENDIX D

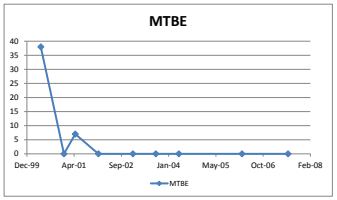
MONITORING WELL HISTORICAL DATA SUMMARY

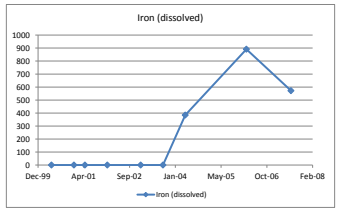
May 2000 to July 2017

Harrison Sub-Residency Spill Site

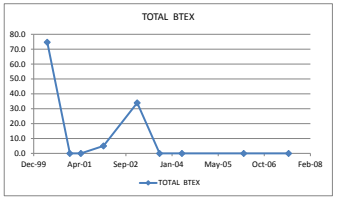
WELL ID: SP 3	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	38	♦	7	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	10
Benzene	110	♦	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	1
Toluene	39	♦	1	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
Ethylbenzene	200	♦	ND	ND	ND	ND	ND	ND	31	♦	♦	♦	♦	♦	♦	♦	♦	5
m,p-Xylene	180	♦	-	-	ND	ND	ND	ND	4J	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
O-Xylene	57	♦	-	-	ND	ND	ND	ND	3J	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	237	♦	15	ND	ND	ND	ND	ND	7	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX	**586.0**	♦	16	ND	ND	ND	ND	ND	38	♦	♦	♦	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene			ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	6,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	**38,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	♦	♦	**2,970**	**1,060**	133 B	♦	♦	**3380**	**3,170**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	♦	♦	ND	ND	ND	116 B	**384**	**891**	**572**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	♦	♦	ND*	100	ND	25	66	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	NS
Sulfate (ug/L)	♦	♦	56,000	16,000	19,000	5,900	22,000	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	250,000
TOC (ug/L)	♦	♦	11,000	18,000	41,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	♦	♦	11,000	11,000	20,000	19,000	26,000	57,000	32,000	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	3.4	♦	4.21	5.7	1.1	1.7	2.2	1.05	3.27	♦	♦	♦	♦	♦	♦	♦	♦	NS

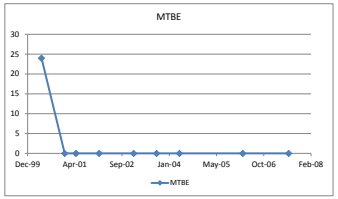


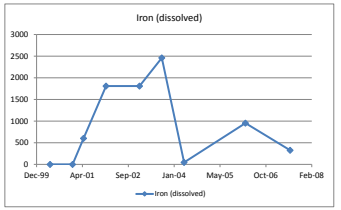




WELL ID: SP 4	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	24	♦	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	10
Benzene	24	♦	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	1
Toluene	3.8	♦	ND	ND	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
Ethylbenzene	35	♦	ND	3	26	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5
m,p-Xylene	9.5	♦	-	-	8	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
O-Xylene	2.4	♦	-	-	ND	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	11.9	♦	ND	2	8	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX	**74.7**	♦	ND	5	34	ND	ND	ND	ND	♦	♦	♦	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene		♦	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene		♦	ND	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	16,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	**24,000**	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	♦	♦	**3,790**	**5,350**	**2,490**	♦	♦	**10,400**	**25,400**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	♦	♦	**602**	**1,810**	**1,810**	**2,460**	44.5	**953**	**326**	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)	♦	♦	ND*	ND*	ND	ND	150	200	ND	♦	♦	♦	♦	♦	♦	♦	♦	NS
Sulfate (ug/L)	♦	♦	34,000	22,000	37,000	26,000	8,400	24,000	13,000	♦	♦	♦	♦	♦	♦	♦	♦	250,000
TOC (ug/L)	♦	♦	14,000	24,000	11,000	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	♦	♦	39,000	24,000	31,000	26,000	23,000	39,000	ND	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	4.2	♦	6.89	4.2	2.4	6.2	3.4	3.8	5.6	♦	♦	♦	♦	♦	♦	♦	♦	NS







APPENDIX D

MONITORING WELL HISTORICAL DATA SUMMARY

May 2000 to July 2017

Harrison Sub-Residency Spill Site

WELL ID: GP 2	BASELINE (May 2000)	(Jan 2001)	(May 2001)	(Jan 2002)	(Jan 2003)	(Sept 2003)	(May 2004)	(Oct 2005)/ (Mar 2006)	(July 2007)	(Oct 2008)	(Jan 2010)	(Apr 2011)	(July 2012)	(Oct 2013)	(Jan 2015)	(April 2016)	(July 2017)	NYSDEC CLASS GA STANDARDS[1]
	May-00	Jan-01	May-01	Jan-02	Jan-03	Sep-03	May-04	Mar-06	1-Jul	Oct-08	Jan-10	Apr-10	Jul-12	Oct-13	Jan-15	Apr-16	Jul-17	
Volatile Organics (ug/L)																		
MTBE	♦	♦	♦	♦	3	ND	ND	♦	♦	♦	♦	ND	♦	♦	♦	♦	♦	10
Benzene	♦	♦	♦	♦	ND	ND	ND	♦	♦	♦	♦	ND	♦	♦	♦	♦	♦	1
Toluene	♦	♦	♦	♦	ND	ND	ND	♦	♦	♦	♦	ND	♦	♦	♦	♦	♦	5
Ethylbenzene	♦	♦	♦	♦	ND	ND	ND	♦	♦	♦	♦	ND	♦	♦	♦	♦	♦	5
m,p-Xylene	♦	♦	♦	♦	ND	ND	ND	♦	♦	♦	♦	ND	♦	♦	♦	♦	♦	5[2]
O-Xylene	♦	♦	♦	♦	ND	ND	ND	♦	♦	♦	♦	ND	♦	♦	♦	♦	♦	5[2]
Xylenes (total)	♦	♦	♦	♦	ND	ND	ND	♦	♦	♦	♦	ND	♦	♦	♦	♦	♦	5[2]
TOTAL BTEX	♦	♦	♦	♦	3	ND	ND	♦	♦	♦	♦	ND	♦	♦	♦	♦	♦	NS
Semi-volatile Org.(ug/L)																		
2-Methylnaphthalene	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Napthalene	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Metals (ug/L)																		
Chloride	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	250,000
Sodium	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	20,000
Iron (total)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	300/500[3]
Iron (dissolved)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	ND	♦	♦	♦	♦	♦	300/500[3]
Manganese								♦	♦	♦	♦	♦	♦	3600	280	3000	680	300/500[3]
Lead	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	25
Other																		
Nitrogen, Nitrate (ug/L)		♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	ND	♦	♦	♦	♦	♦	NS
Sulfate (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	21,000	♦	♦	♦	♦	♦	250,000
TOC (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Petroleum Hydrocarbons (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Carbon Dioxide (ug/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	NS
Dissolved Oxygen (mg/L)	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	16.79	♦	♦	♦	♦	♦	NS

Notes:
(1) - NYSDEC Class GA Standards are from Division of Water Technical and Operational Guidance Series (1.1.1), dated June 1998, revised April 2000.
(2) -There is no GA value for total xylenes. The standards for o-xylene, m-xylene, and p-xylene is 5 µg/L
(3) Standard of 300 ug/L applies to each substance and 500 ug/L applies to the sum of these substances
NS = No Standard
ND = Analyte not detected at the listed reporting limit
♦ = Not Analyzed
B = Concentration below the reporting limit equal to or above the detection limit.
J = Concentration below the reporting limit.
H = Analyzed outside of the holding time.
* Nitrogen, Nitrate was analyzed outside the recommended holding time for this sample and therefore the analytical results may be biased low.