

SITE MANAGEMENT PLAN STATUS REPORT
REPORT PERIOD: APRIL 1, 2021 THROUGH JUNE 30, 2021

HARMON RAILROAD YARD
OU-I AND OU-II
WESTCHESTER COUNTY, NEW YORK
SITE NO. 3-60-010

SUMMARY OF WORK COMPLETED DURING THE REPORTING PERIOD: This status report summarizes the remedial actions and monitoring completed between April 1, 2021 and June 30, 2021 at the Harmon Railroad Yard OU-I and OU-II, Westchester County, New York, NYSDEC Site No. 3-60-010 (the Site). This status report was prepared in accordance with the provisions presented in the document titled *Metro-North Railroad, Harmon Railroad Yard, Westchester, County, New York, Site Management Plan OU-I and OU-II, NYSDEC Site Number: 3-60-010* dated December 2011 as revised November 11, 2012, January 31, 2015, and January 31, 2016 (the SMP). During this report period, depth to free product and groundwater measurements were conducted as outlined in the SMP and free product was removed from select wells. Depth to free product and static water level measurements were also made in off-site monitoring wells that were installed in September 2016.

Metro-North Railroad (MNR) received a letter titled “2020 Site Management Plan Status Reports” from the NYSDEC, dated May 7, 2021. This letter included comments and requests for additional information based on a review of the SMP status reports submitted in 2020. Responses to some of these comments/requests are discussed in this report.

DEPTH TO GROUNDWATER AND FREE PRODUCT MEASUREMENTS: The wells monitored, and the results of this monitoring, are presented on the logs included in Attachment A. A groundwater contour map developed using static water levels measured on May 4, 2021 and May 5, 2021 is included as Figure 1. As shown on Figure 1, groundwater flow at the Site is generally in the direction of OU-I and to the northwest, except in the area of NAPL Area L3 where the flow is to the northeast. There are localized sinks and mounds in other areas, which are attributable to pumping associated with the pumping of the Spill Buster™ systems installed in wells FA4-8 and RW-1, and potentially due to other factors such as the possible plugging of the well screens (e. g., AI1-11, AI3-6, FA4-13, FA4-15, FA4-17, FA4-20, VE4-1). Note: Cleaning/redevelopment and assessment of wells that appear to be plugged is tentatively scheduled to be completed during the upcoming reporting period and the results of this work will be presented in a subsequent SMP Status Report.

FREE PRODUCT REMOVAL RECORDS: During the report period, Spill Buster™ systems (i.e., a pumping system that continuously monitors/removes free product) were used to remove free product in wells RW-1 and FA4-8 and a bailer or portable Spill Buddy™ was used to remove free product from other wells containing free product. [Note: A Spill Buster™ was formerly located in well FA4-17. However, it was removed during the previous report period and parts of the Spill Buster™ were reportedly used to repair the Spill Buster™ located in well RW-1. As such, a Spill Buster™ system is no longer present in well FA4-17 and free product was not removed from well FA4-17 during the current report period.] The well monitoring logs in Attachment A document the amount of free product removed (if any) from specific wells during this report period.

A Spill Buster™ was installed in well AI2-3 in November 2016, and subsequent to its installation approximately 128 gallons of free product was removed in 2016, approximately 301 gallons of free product was removed in 2017, approximately 120 gallons of free product was removed in 2018, and approximately 116 gallons of free product was removed in 2019 from well AI2-3. Between January 1, 2020 through September 30, 2020, approximately 8.2 gallons of free product was removed from well AI2-3. Since October 1, 2020, free product has not been removed from well AI2-3. At the time of this status report, an evaluation of well AI2-3 has not yet been completed. An evaluation of well AI2-3 (e.g., cleaning, redevelopment, etc.) is tentatively scheduled to be completed during the upcoming reporting period. The results of this work will be presented in a subsequent SMP Status Report.

A summary of the amount of free product removed from each well during the current report period is presented in Table 1. The total amount of free product removed from each well during prior report periods (i.e., between December 1, 2012 and March 31, 2021) is summarized in Table 2. A spider diagram presenting the maximum free product thicknesses, and the amount of free product removed from select wells during the current report period (i.e., between April 1, 2021 and June 30, 2021) and the preceding report period (i.e., between January 1, 2021 and March 31, 2021) is included as Figure 2.

The free product removed was placed in 55-gallon drums, which are stored in a waste accumulation area. Prior to removal and disposal of the drums, samples are collected from full 55-gallon drums and submitted to an analytical laboratory for testing of PCBs. On July 29, 2021, a sample of free product was collected from a full drum and submitted to York Analytical Laboratories, Inc. (York) for testing of PCBs. As presented in the report submitted by York (refer to Attachment D), PCBs were not detected at concentrations greater than the method detection limit used by the analytical laboratory in this sample. During the current report period drums were not removed from the Site for off-site disposal. [Note: An unsigned non-hazardous waste disposal manifest for eight drums was included in the SMP Status Report for the period October 1, 2020 through December 31, 2020. A signed copy of this manifest is included in Attachment C.]

Note: On November 2, 2018, a request was submitted to the NYSDEC to change the disposal requirements of the collected free product. Specifically, since PCBs have not been detected in samples of free product removed from OU-II wells at concentrations greater than 50 parts per million (ppm) since August 26, 2002, MNR requested that further disposal of free product collected from OU-II wells be disposed of as non-hazardous petroleum waste provided that waste characterization testing confirms PCB concentrations below 50 ppm. In the event a PCB concentration in excess of 50 ppm is detected in a free product accumulation drum, the contents of the drum would be disposed of as a TSCA regulated waste. NYSDEC approved this request in a letter dated January 4, 2019.

GROUNDWATER SAMPLING AND TESTING: Groundwater sampling and testing of wells located in OU-II was not completed during the report period. However, a summary of the detected constituents in the groundwater samples collected between March 2012 (i.e., the initial quarter completed under the SMP) and June 2020 (the most recent sampling event) are included for reference purposes. The groundwater test results include volatile organic compounds (i.e., Table 3), semi-volatile organic compounds (i.e., Table 4), polychlorinated biphenyls (i.e., Table 5), metals (i.e., Table 6), and per- and polyfluorinated alkyl substances (PFAS) and 1,4-dioxane (i.e., Table 7).

The next groundwater sampling event is scheduled to be completed in August 2021. During this event, samples will be collected from nine on-site monitoring wells (i.e., VE1-2, VE1-4, VE2-1, VE3-1, VE4-

11, DAY-1, FA4-9, VE4-7, and VE4-9) and two off-site monitoring wells (i.e., OUII-C, and OUII-E). These samples will be submitted to an analytical laboratory for testing of volatile organic compounds plus chlorobenzene, semi-volatile organic compounds plus 2-methylnaphthalene, polychlorinated biphenyls, and metals (i.e., arsenic, chromium, lead, and copper). Samples from monitoring wells VE1-4, VE2-1, and VE4-11 will also be tested for PFAS and 1,4-dioxane. In addition, sample of free product (if possible) will be collected from off-site monitoring wells OUII-B, OUII-D, and OUII-F and nearby on-site monitoring wells FA4-16, FA4-11, and PGW-2 for testing of PCBs.

OFF-SITE MONITORING WELLS: Off-Site monitoring wells designated OUII-A through OUII-F were installed between September 20 and 22, 2016 (refer to Figure 1 for locations). Static water level and free product thickness measurements in these monitoring wells commenced on October 4, 2016. The results of the monitoring completed during this report period for these wells are provided in Attachment A. As shown, during the weekly monitoring completed during the report period, free product was observed in monitoring wells OUII-A, OUII-B, OUII-D, and OUII-F. Free product was not detected in wells OUII-C or OUII-E. Table 8 shows the range of static water levels (SWLs) and the free product thickness measured in each of the off-site wells during the monitoring events completed to date and Figure 3 shows the average free product thickness detected in the off-site monitoring wells by report period. Historically, free product has been consistently detected in off-site wells OUII-A, OUII-B, OUII-D, and OUII-F; occasionally detected in off-site well OUII-C; and has not been detected in off-site well OUII-E. As shown on Figure 3, the average amount of free product detected in the off-site wells has generally decreased since monitoring began in 2016.

Hydrographs depicting the groundwater elevation corrected for the presence of free product measured in each off-site monitoring well are provided in Attachment B. The average depth to free product in is also shown on the hydrographs for each off-site monitoring well. As shown on the hydrographs, with the possible exception of well OUII-D where free product levels are relatively consistent, the amount of free product detected appears to decrease when the groundwater elevation increases.

AREA L1 SHEET PILE WALL WELLS: Monitoring well WB-9 is located at the southern terminus of the sheet pile wall installed along the western boundary of Area L1. Monitoring well SP-North is located at the northern terminus of the sheet pile wall in Area L1 (refer to Figure 1). Routine monitoring of WB-9 commenced on November 16, 2016, and on October 4, 2016 for SP-North to evaluate the potential for free product to migrate around the sheet pile wall. To date, free product has only been detected on two occasions in SP-North (i.e., a reported thickness of 0.03 ft. on March 15, 2017, and a reported thickness of 0.11 ft. on March 20, 2020). The validity of these reported free product thickness measurements is questionable (e.g., free product has not been detected in well SP-North subsequent to the March 20, 2020 monitoring event). To date, free product has not been detected in WB-9. The static water level and free product thickness records completed during this report period for these wells are provided in Attachment A.

BI-ANNUAL OU-I AND OU-II INSPECTION: The most recent inspection of OU-I and OU-II was completed on April 19, 2021 by MNR.

PROBLEMS ENCOUNTERED/RESOLUTION: During the April 19, 2021 inspection of the OU-I and OU-II areas, the following item requiring corrective actions were identified.

- Although some work was completed during the previous report periods, additional scrap metal needs to be removed from locations within OU-II on top of the capped area. [Note: Due to Covid-19 reductions in manpower, the scrap removal was delayed.]

No other problems associated with the remedial systems or ECs requiring repair/modification were identified during the report period. A copy of the inspection completed on April 19, 2021 is provided in Attachment C.

WORK ANTICIPATED FOR THE UPCOMING REPORT PERIOD AND SCHEDULE: During the upcoming reporting period (i.e., between July 1, 2021 and September 30, 2021), free product and groundwater monitoring will continue in accordance with the schedule presented in the SMP (i.e., as modified by the schedule presented in the March 2014 CAP). It is anticipated that free product will be removed from wells RW-1 and FA4-8 using the Spill Buster™ system, and possibly in well AI2-3 if the reason for the decreasing amount of free product recovered from this location can be determined and corrected (e.g., a malfunction of the Spill Buster™ currently in AI2-3). If it is determined that the Spill Buster™ in AI2-3 is functional but that limited free product remains in this location, the Spill Buster™ should be installed in a well with higher levels of free product (e.g., FA4-9, FA4-18 or VE4-5) and free product (if present) should be removed from well AI2-3 using a portable Spill Buddy™. Free product detected in other wells (including FA4-17) should be removed using a portable Spill Buddy™, as warranted. The off-site monitoring wells should continue to be monitored on a weekly basis.

Note: If 0.2 ft. or more of free product is measured in a well (including off-site wells OU-II-A through OU-II-F) it should be removed using a Spill Buddy™ or a bailer.

In the event free product drums are filled during the next reporting period, samples should be collected and tested, as outlined in the SMP. Following testing, full free product drums should be transported off the Site and disposed of in accordance with applicable regulations. [Note: If PCB concentrations are below 50 ppm, the drum contents will be disposed of as a non-hazardous petroleum waste. If a PCB concentration in excess of 50 ppm is detected in a free product accumulation drum, the contents of the free product drum will be disposed of as a TSCA regulated waste.]

As shown on Figure 1, based on the static water levels measured during this report period groundwater elevations in some wells were variable and inconsistent with nearby wells. Specifically, the groundwater elevations in wells AI1-11, FA4-13, FA4-15, FA4-17, FA4-20, and VE4-13 are questionable. These wells should be evaluated to assure they are functioning properly, and an updated elevation survey should be completed, if necessary. Wells that are not functioning properly, and that cannot be restored by redevelopment, should be abandoned in accordance with applicable regulations.

The next OU-I/OU-II inspection is due on or about October 31, 2021. The next groundwater sampling and testing will be completed on, or about, August 31, 2021. A SMP status report for the work completed during the upcoming period (i.e., July 1, 2021 through September 30, 2021) will be submitted in October 2021.

If free product is identified in either WB-9 or SP-North additional measurements should be made on subsequent days. In the event free product is confirmed, the free product should be removed with a bailer, and the well(s) checked in subsequent days to assess the presence of free product and the need for additional remedial measures.

A Work Plan to address possible means to limit off-site free product migration, such as enhancing free product collection in NAPL Area L4 wells will be submitted for NYSDEC review. This Work Plan will include a review of available data for the closed landfill located in proximity of the site.

A Periodic Review Report (PRR) for the reporting period January 1, 2019 through January 1, 2022, will be submitted on, or before January 31, 2022. At that time, the SMP will be revised if deemed necessary.

Tables

Table 1:	Free Product Removal Totals: April 1, 2021 through June 30, 2021
Table 2:	Historic Free Product Removal Totals: December 1, 2012 through March 31, 2020
Table 3:	Summary of VOCs: Groundwater Samples
Table 4:	Summary of SVOCs: Groundwater Samples
Table 5:	Summary of PCBs: Groundwater Samples
Table 6:	Summary of Metals: Groundwater Samples
Table 7:	Summary of Emerging Contaminants: Groundwater Samples
Table 8:	Off-Site Wells Static Water Levels and Range of Free Product Thickness

Figures

Figure 1:	Groundwater Contour Map: May 2021
Figure 2:	Summary of Free Product Removal for the Report Periods April 1, 2021 – June 30, 2021 and January 1, 2021 - March 31, 2021
Figure 3:	Average Free Product in Off-Site Wells by Report Period

Attachments

Attachment A:	Well Monitoring Logs and Free Product Removal Records: April 1, 2021 through June 30, 2021
Attachment B:	Off-Site Monitoring Well Hydrographs
Attachment C:	April 19, 2021 Inspection, Signed Manifest
Attachment D:	York Analytical Laboratory Report

\\192.168.0.2\Files\Clients - Major\MNR\Harmon Yard\Remediation (46) Reports\OU I & OU II\OUI-OUII Status Reports\2021-7 Q2 2021 Status Report\Harmon OUI-OUII - SMP STATUS REPORT Qt 2 2021.docx

TABLES

Table 1

**Harmon Railroad Yard
OU-I and OU-II
Westchester County, New York
Site No. 3-60-010**

**Free Product Removal Totals
Current Report Period: April 1, 2021 through June 30, 2021**

OU I	
Well ID	Gallons Removed
V1	0
V2	0
V3	0
V4	0
Total	0

OU II					
Free Product AREA L1		Free Product AREA L2		Free Product AREA L4	
Well ID	Gallons Removed	Well ID	Gallons Removed	Well ID	Gallons Removed
AI1-1	0	AI2-2	0	DAY-1	0
AI1-4	0	AI2-3	0	FA4-8*	14.4
AI1-8	0	VE2-1	0	FA4-9	0
AI1-11	0	Total	0	FA4-10	NM
AI1-12	0			FA4-11	0
AI1-15	0			FA4-12	0
AI1-16	0			FA4-13	0
AI1-17	0			FA4-14	4.63
SP-North	0			FA4-15	0
VE1-1	0			FA4-16	0
VE1-2	0			FA4-17	0.0
VE1-3	0			FA4-18	0
VE1-4	0			FA4-19	NM
WB-9	0			FA4-20	0
Total	0			FA4-21	0
				FA4-23	0
				PGW-2	0
				RW-1*	36.6
				VE4-1	0
				VE4-5	2.38
				VE4-6	0
				VE4-7	0
				VE4-8	0
				VE4-9	0
				VE4-10	0
				VE4-11	0
				VE4-12	0
				VE4-13	0
				Total	58.01

NM = Not measured

*Free product was removed from these wells using a Spill Buster™ system (i.e., a system installed within the well that continuously monitors/removes free product) and from other locations using a portable Spill Buddy™.]

Free product was removed from other locations using a portable Spill Buddy™

Table 2

Harmon Railroad Yard
 OU-I and OU-II
 Westchester County, New York
 Site No. 3-60-010

Historic Free Product Removal Totals (i.e., Prior to Current Report Period)
 December 1, 2012 - March 31, 2021

OU I	
Well ID	Gallons Removed
V1	5.18
V2	5.235
V3	19.08
V4	152.85
Total	182.345

OU II					
Free Product AREA L1		Free Product AREA L2		Free Product AREA L4	
Well ID	Gallons Removed	Well ID	Gallons Removed	Well ID	Gallons Removed
AI1-1	0.03	AI2-2	1.63	DAY-1	0
AI1-4	0.04	AI2-3	871.23	FA4-8	496.06
AI1-8	0.06	VE2-1	0	FA4-9	3.48
AI1-11	0.122	Total	872.86	FA4-10	0.13
AI1-12	0.18			FA4-11	143.52
AI1-15	0.38			FA4-12	9.67
AI1-16	0			FA4-13	101.8
AI1-17	9.14			FA4-14	247.54
VE1-1	14.86			FA4-15	66.14
VE1-2	0.01			FA4-16	64.43
VE1-3	0.1			FA4-17	66.45
VE1-4	0			FA4-18	106.25
Total	24.852			FA4-19	0
				FA4-20	0
				FA4-21	0.54
				FA4-23	1.17
				PGW-2	22.58
				RW-1	1585.4
				VE4-1	0
				VE4-5	202.05
				VE4-6	2.26
				VE4-7	0.08
				VE4-8	2.92
				VE4-9	9.41
				VE4-10	4.93
				VE4-11	1
				VE4-12	0
				VE4-13	0
				Total	3137.81

Table 3
 NYSDEC Site #360010
 Harmon Yard Waste Water Area
 OU II

Summary of Volatile Organic Compounds
 Groundwater Samples

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																																		
		VE 1-2														VE 1-4										VE 2-1										
		3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	5/17/16	8/2/17	11/27/18	9/10/19	6/3/20	3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	5/18/16	8/2/17	11/27/18	9/10/19	6/3/20	3/28/12	9/12/12	4/2/13	9/24/13	5/28/14	5/20/15	5/18/16	8/3/17	11/28/18	9/11/19	6/3/20	DUP	
1,2,4-Trimethylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.11]	ND [0.11]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.11]	ND [0.11]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.11]	ND [0.11]	ND [0.11]	ND [0.11]	6/3/2020
1,3,5-Trimethylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.14]	ND [0.14]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.14]	ND [0.14]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.14]	ND [0.14]	ND [0.14]	ND [0.14]	
Benzene	1	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.10]	ND [0.10]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.10]	ND [0.10]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.10]	ND [0.10]	ND [0.10]	ND [0.10]	
Chlorobenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	NT	ND [0.080]	ND [0.080]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	NT	ND [0.080]	ND [0.080]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	NT	ND [0.080]	ND [0.080]	ND [0.080]	ND [0.080]	
Ethylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.080]	ND [0.080]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.080]	ND [0.080]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.080]	ND [0.080]	ND [0.080]	ND [0.080]	
Isopropylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.13]	ND [0.13]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.13]	ND [0.13]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.13]	ND [0.13]	ND [0.13]	ND [0.13]	
Methyl tert-butyl ether (MTBE)	10	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.070]	ND [0.070]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.070]	ND [0.070]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.070]	ND [0.070]	ND [0.070]	ND [0.070]	
Naphthalene	10	1.7 J, B	ND [10]	1.4 J	ND [10]	ND [10]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	NT	NT	0.93 J, B	ND [10]	ND [10]	ND [10]	ND [10]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	NT	NT	ND [10]	ND [10]	ND [10]	1.3 J, B	1.3 J, B	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	NT	NT	NT	
n-Butylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [0.12]	ND [0.12]	
n-Propylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.11]	ND [0.11]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.11]	ND [0.11]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.11]	ND [0.11]	ND [0.11]	ND [0.11]	
o-Xylene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.13]	ND [0.13]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.13]	ND [0.13]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.13]	ND [0.13]	ND [0.13]	ND [0.13]	
p- & m- Xylenes	NS	ND [10]	ND [10]	ND [10]	ND [10]	ND [10]	ND [2.0]	ND [1.0]	ND [2.0]	ND [0.50]	ND [0.20]	ND [0.20]	ND [10]	ND [10]	ND [10]	ND [10]	ND [2.0]	ND [2.0]	ND [2.0]	ND [0.50]	ND [0.20]	ND [0.20]	ND [10]	ND [10]	ND [10]	ND [10]	ND [10]	ND [2.0]	ND [2.0]	ND [2.0]	ND [0.50]	ND [0.20]	ND [0.20]	ND [0.20]	ND [0.20]	
p-Isopropyltoluene	NS	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [0.12]	ND [0.12]	
sec-Butylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [0.12]	ND [0.12]	
tert-Butylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.11]	ND [0.11]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.11]	ND [0.11]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.11]	ND [0.11]	ND [0.11]	ND [0.11]	
Toluene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	2.1	0.48 J	ND [0.20]	ND [0.12]	ND [0.12]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	23.7	ND [0.20]	0.56 J	ND [0.12]	ND [0.12]		
Xylenes, Total	5	ND [15]	ND [15]	ND [15]	ND [15]	ND [15]	ND [3.0]	ND [3.0]	ND [0.60]	ND [0.33]	ND [0.33]	ND [15]	ND [15]	ND [15]	ND [15]	ND [3.0]	ND [3.0]	ND [3.0]	ND [0.60]	ND [0.33]	ND [0.33]	ND [15]	ND [15]	ND [15]	ND [15]	ND [15]	ND [3.0]	ND [3.0]	ND [3.0]	ND [0.60]	ND [0.33]	ND [0.33]	ND [0.33]	ND [0.33]		

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																																			
		VE 3-1														VE 4-11										DAY 1											
		3/27/12	9/11/12	4/2/13	9/25/13	5/28/14	5/19/15	5/18/16	8/3/17	11/28/18	9/11/19	6/3/20	3/27/12	9/11/12	9/11/12 DUP	4/2/13	9/24/13	5/27/14	5/19/15	5/17/16	8/2/17	11/27/18	9/10/19	6/3/20	3/27/12	9/11/12	4/2/13	9/24/13	5/27/14	5/19/15	5/17/16	8/2/17	11/27/18	9/10/2019	6/3/2020		
1,2,4-Trimethylbenzene	5	3.4 J	2.6 J	ND [5.0]	5.1	5.1	3.60	6.4	3.9	4.5	5.2	3.6	1.1 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	0.78	ND [0.11]	ND [0.11]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]		
1,3,5-Trimethylbenzene	5	1.9 J	1.2 J	ND [5.0]	2.0 J	2.2 J	1.70	2.7	1.9	2	2.7	1.9	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.14]	ND [0.14]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	
Benzene	1	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.40]	ND [0.10]	ND [0.10]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.10]	ND [0.10]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]		
Chlorobenzene	5	2.6 J	2.4 J	ND [5.0]	3.6 J	2.5 J	2.70	3.6	3.5	NT	2.9	2.4	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	NT	ND [0.080]	ND [0.080]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	NT	ND [0.080]	ND [0.080]	ND [0.080]	ND [0.080]		
Ethylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	0.81 J	0.40 J	0.48 J	0.34 J	0.62 J	0.39 J	0.33 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.080]	ND [0.080]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	0.27 J	ND [1.0]	0.28 J	ND [0.080]	ND [0.080]	
Isopropylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	0.46 J	0.31 J	0.42 EJ	0.42 J	0.28 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.13]	ND [0.13]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	0.39 J	0.22 J	0.41 EJ	ND [0.13]	ND [0.13]		
Methyl tert-butyl ether (MTBE)	10	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.40]	ND [0.070]	ND [0.070]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.070]	ND [0.070]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.070]	ND [0.070]	ND [0.070]	ND [0.070]		
Naphthalene	10	5.6 J, B	6.6 J	ND [10]	9.3 J	10	9.00	9.4	6.2	8	NT	NT	4.0 J, B	ND [10]	ND [10]	ND [10]	ND [10]	ND [1.0]	ND [1.0]	ND [1.0]	2.9	NT	NT	1.9 J, B	ND [10]	ND [10]	ND [10]	1.9 J	2.00	3.50	ND [1.0]	1.8 J	NT	NT			
n-Butylbenzene	5	1.1 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	0.52 J	0.74 J	0.53 J	1.1	ND [0.12]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	0.37 J	0.79 J	0.31 J	0.40 J	0.59 J	ND [0.12]
n-Propylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	0.42 J	0.76 J	0.53 J	0.74 J	0.83 J	0.49 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	0.22 J	ND [0.11]	ND [0.11]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	0.25 J	0.59	0.86 J	ND [0.11]		
o-Xylene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	1.0 J	0.97 J	1.3	0.96 J	1.3	1.1	0.91 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.13]	ND [0.13]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	0.48 J	ND [1.0]	0.25 J	0.59	ND [0.13]	ND [0.13]
p- & m- Xylenes	NS	ND [10]	ND [10]	ND [10]	ND [10]	ND [10]	1.1	0.56 J	0.75 J	0.55 J	ND [1.0]	0.71 J	ND [0.20]	ND [10]	ND [10]	ND [10]	ND [10]	ND [2.0]	ND [2.0]	ND [2.0]	ND [0.50]	ND [0.20]	ND [0.20]	ND [10]	ND [10]	ND [10]	ND [10]	ND [10]	ND [10]	ND [2.0]	ND [2.0]	ND [0.50]	ND [0.20]	ND [0.20]	ND [0.20]		
p-Isopropyltoluene	NS	1.5 J	ND [5.0]	ND [5.0]	0.89 J	1.6 J	0.79 J	ND [1.0]	0.69 J	ND [0.40]	1	0.66 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [1.0]	ND [1.0]	ND [0.20]	ND [0.12]	ND [0.12]	ND [0.12]			

Table 4
NYSDEC Site #360010
Harmon Yard Waste Water Area
OU II

Summary of Semi-Volatile Organic Compounds
Groundwater Samples

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																																		
		VE 1-2														VE 1-4										VE 2-1										
		3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	5/17/16	8/2/17	11/27/18	9/10/19	6/3/20	3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	5/18/16	8/2/17	11/27/18	9/10/19	6/3/20	3/28/12	9/12/12	4/2/13	9/24/13	5/28/14	5/20/15	5/18/16	8/3/17	11/28/18	9/11/19	6/3/20	6/3/20	
2-Methylnaphthalene	NS	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [5.88]	ND [10.1]	ND [10.2]	ND [10.1]	ND [2.91]	ND [2.50]	ND [2.30]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [6.67]	ND [10.2]	ND [10.2]	ND [10.1]	ND [2.83]	ND [2.50]	ND [2.30]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [5.88]	ND [10.1]	ND [10]	ND [10.1]	ND [2.83]	ND [2.50]	ND [2.30]	ND [2.30]	
Acenaphthene	20	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	0.663	ND [2.80]	ND [2.00]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	0.554	ND [2.80]	ND [2.00]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.80]	ND [2.00]	ND [2.00]	
Acenaphthylene	NS	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	0.0947	ND [2.70]	ND [2.10]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	0.164	ND [2.70]	ND [2.10]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.70]	ND [2.10]	ND [2.10]	
Anthracene	50	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	0.189	ND [2.50]	ND [2.50]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	0.0821	ND [2.50]	ND [2.50]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.50]	ND [2.50]	ND [2.50]	
Benzo(a)anthracene	0.002	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	ND [0.0526]	ND [2.30]	ND [1.90]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	ND [0.0513]	ND [2.30]	ND [1.90]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.30]	ND [1.90]	ND [1.90]	
Benzo(a)pyrene	ND	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	ND [0.0526]	ND [2.40]	ND [2.00]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	0.0513 J	ND [2.40]	ND [2.00]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.40]	ND [2.00]	ND [2.00]	
Benzo(b)fluoranthene	0.002	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	ND [0.0526]	ND [2.30]	ND [1.90]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	0.0615	ND [2.30]	ND [1.90]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.30]	ND [1.90]	ND [1.90]	
Benzo(g,h,i)perylene	NS	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	ND [0.0526]	ND [2.60]	ND [1.60]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	0.0513 J	ND [2.60]	ND [1.60]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.60]	ND [1.60]	ND [1.60]	
Benzo(k)fluoranthene	0.002	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	ND [0.0526]	ND [2.30]	ND [1.80]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	ND [0.0513]	ND [2.30]	ND [1.80]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.30]	ND [1.80]	ND [1.80]	
Chrysene	0.002	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	ND [0.0526]	ND [2.40]	ND [1.90]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	0.133	ND [2.40]	ND [1.90]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.40]	ND [1.90]	ND [1.90]	
Dibenzo(a,h)anthracene	NS	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	ND [0.0526]	ND [2.60]	ND [1.90]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	ND [0.0513]	ND [2.60]	ND [1.90]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.60]	ND [1.90]	ND [1.90]	
Fluoranthene	50	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	0.0842	ND [2.90]	ND [2.50]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	0.256	ND [2.90]	ND [2.50]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.90]	ND [2.50]	ND [2.50]	
Fluorene	50	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	1.47	ND [2.50]	ND [2.40]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	0.451	ND [2.50]	ND [2.40]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.50]	ND [2.40]	ND [2.40]	
Indeno(1,2,3-cd)pyrene	0.002	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	ND [0.0526]	ND [3.30]	ND [3.30]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	ND [0.0513]	ND [3.30]	ND [3.30]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [3.30]	ND [3.20]	ND [3.20]	
Naphthalene	10	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	NT	ND [10.1]	0.0526 J	ND [2.50]	ND [1.80]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	NT	ND [10.1]	ND [0.0513]	ND [2.50]	ND [1.80]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	NT	NT	ND [0.0513]	ND [2.50]	ND [1.80]	ND [1.80]	
Phenanthrene	50	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	0.0842	ND [2.50]	ND [2.00]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	ND [10.1]	0.503	ND [2.50]	ND [2.00]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.50]	ND [2.00]	ND [2.00]	
Pyrene	50	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [10.2]	ND [10.1]	0.295	ND [2.50]	ND [1.40]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [10.2]	2.8 J	ND [10.1]	1.10	ND [2.50]	ND [1.40]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [10]	ND [10.1]	ND [0.0513]	ND [2.50]	ND [1.40]	ND [1.40]

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																																	
		VE 3-1														VE 4-11																			
		3/27/12	9/11/12	4/2/13	9/25/13	5/28/14	5/19/15	5/18/16	8/3/17	8/3/17	11/28/18	9/11/19	6/3/20	3/27/12	9/11/12	9/11/12 DUP	4/2/13	9/24/13	5/27/14	5/19/15	5/17/16	8/2/17	11/27/18	9/10/19	6/3/2020	3/27/12	9/11/12	9/11/12 DUP	4/2/13	9/24/13	5/27/14	5/19/15	5/17/16	8/2/17	11/27/18
2-Methylnaphthalene	NS	ND [5.13]	ND [5.26]	ND [5.13]	12	4.30 J	ND [10]	34.7	30.1	30.1	36.3	ND [2.50]	ND [2.30]	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [6.06]	ND [10.3]	ND [10]	ND [10]	ND [2.91]	ND [2.50]	ND [2.30]										
Acenaphthene	20	ND [5.13]	ND [5.26]	ND [5.13]	9.26	ND [0.06]	3.600 J	4.7 J	5.9 J	5.9 J	6.66	5.00 J	ND [2.00]	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [10]	ND [10]	ND [0.0526]	ND [2.70]	ND [2.10]										
Acenaphthylene	NS	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	ND [0.06]	ND [10]	ND [10]	ND [10.1]	ND [10.1]	1.29	ND [2.70]	ND [2.10]	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [10]	ND [10]	ND [0.0526]	ND [2.70]	ND [2.10]										
Anthracene	50	ND [5.13]	ND [5.26]	ND [5.13]	3.44 J	ND [0.06]	ND [10]	ND [10]	ND [10.1]	ND [10.1]	2.35	ND [2.50]	ND [2.50]	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [10]	ND [10]	ND [0.0526]	ND [2.50]	ND [2.50]										
Benzo(a)anthracene	0.002	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.238	ND [10]	ND [10]	ND [10.1]	ND [10.1]	0.0821	ND [2.30]	ND [1.90]	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [10]	ND [10]	ND [0.0526]	ND [2.30]	ND [1.90]										
Benzo(a)pyrene	ND	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.112	ND [10]	ND [10]	ND [10.1]	ND [10.1]	ND [0.0513]	ND [2.40]	ND [2.00]	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [10]	ND [10]	ND [0.0526]	ND [2.40]	ND [2.00]										
Benzo(b)fluoranthene	0.002	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.275	ND [10]	ND [10]	ND [10.1]	ND [10.1]	0.0718	ND [2.30]	ND [1.90]	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [10]	ND [10]	ND [0.0526]	ND [2.30]	ND [1.90]										
Benzo(g,h,i)perylene	NS	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.100	ND [10]	ND [10]	ND [10.1]	ND [10.1]	ND [0.0513]	ND [2.60]	ND [1.60]	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [10]	ND [10]	ND [0.0526]	ND [2.60]	ND [1.60]										
Benzo(k)fluoranthene	0.002	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.262	ND [10]	ND [10]	ND [10.1]	ND [10.1]	0.0718	ND [2.30]	ND [1.80]	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [10]	ND [10]	ND [0.0526]	ND [2.30]	ND [1.80]										
Chrysene	0.002	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.250	ND [10]	ND [10]	ND [10.1]	ND [10.1]	0.185	ND [2.40]	ND [1.90]	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [10]	ND [10]	ND [0.0526]	ND [2.40]	ND [1.90]										
Dibenzo(a,h)anthracene	NS	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	ND [0.06]	ND [10]	ND [10]	ND [10.1]	ND [10.1]	ND [0.0513]	ND [2.60]	ND [1.90]	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [10]	ND [10]	ND [0.0526]	ND [2.60]	ND [1.90]										
Fluoranthene	50																																		

Table 5
 NYSDEC Site #360010
 Harmon Yard Waste Water Area
 OU II

Summary of Polychlorinated Biphenyls (PCBs)
 Groundwater Samples

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																																
		VE 1-2												VE 1-4								VE 2-1												
		3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	5/17/16	8/2/17	11/27/18	9/10/19	6/3/20	3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	5/18/16	8/2/17	11/27/18	9/10/19	6/3/20	3/28/12	9/12/12	4/2/13	9/24/13	5/28/14	5/20/15	5/18/16	8/3/17	11/28/18	9/11/19	6/4/20
Aroclor 1016	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.096]	ND [0.5]	ND [0.505]	ND [0.0513]	ND [0.093]	ND [0.12]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.098]	ND [0.51]	ND [0.502]	ND [0.0513]	ND [0.093]	ND [0.12]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.097]	ND [0.505]	ND [0.507]	ND [0.0513]	ND [0.093]	ND [0.12]
Aroclor 1221	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.1]	ND [0.5]	ND [0.505]	ND [0.0513]	ND [0.13]	ND [0.17]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.102]	ND [0.51]	ND [0.502]	ND [0.0513]	ND [0.13]	ND [0.17]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.101]	ND [0.505]	ND [0.507]	ND [0.0513]	ND [0.13]	ND [0.17]
Aroclor 1232	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.1]	ND [0.5]	ND [0.505]	ND [0.0513]	ND [0.18]	ND [0.14]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.0102]	ND [0.51]	ND [0.502]	ND [0.0513]	ND [0.18]	ND [0.14]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.101]	ND [0.505]	ND [0.507]	ND [0.0513]	ND [0.18]	ND [0.14]
Aroclor 1242	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.089]	ND [0.5]	ND [0.505]	ND [0.0513]	ND [0.18]	ND [0.11]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.091]	ND [0.51]	ND [0.502]	ND [0.0513]	ND [0.18]	ND [0.11]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.09]	ND [0.505]	ND [0.507]	ND [0.0513]	ND [0.18]	ND [0.11]
Aroclor 1248	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.1]	ND [0.5]	ND [0.505]	ND [0.0513]	ND [0.12]	ND [0.097]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.091]	ND [0.51]	ND [0.502]	ND [0.0513]	ND [0.12]	ND [0.097]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.101]	ND [0.505]	ND [0.507]	ND [0.0513]	ND [0.12]	ND [0.097]
Aroclor 1254	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.044]	ND [0.5]	ND [0.505]	ND [0.0513]	ND [0.12]	ND [0.11]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.045]	ND [0.51]	ND [0.502]	ND [0.0513]	ND [0.12]	ND [0.11]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.044]	ND [0.505]	ND [0.507]	ND [0.0513]	ND [0.12]	ND [0.11]
Aroclor 1260	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.081]	ND [0.5]	ND [0.505]	ND [0.0513]	ND [0.14]	ND [0.12]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.083]	ND [0.51]	ND [0.502]	ND [0.0513]	ND [0.14]	ND [0.12]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.082]	ND [0.505]	ND [0.507]	ND [0.0513]	ND [0.14]	ND [0.12]
Aroclor 1262	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.081]	ND [0.5]	ND [0.505]	ND [0.0513]	ND [0.19]	ND [0.097]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.083]	ND [0.51]	ND [0.502]	ND [0.0513]	ND [0.19]	ND [0.097]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.082]	ND [0.505]	ND [0.507]	ND [0.0513]	ND [0.19]	ND [0.097]
Aroclor 1268	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.081]	ND [0.5]	ND [0.505]	ND [0.0513]	ND [0.14]	ND [0.13]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.083]	ND [0.51]	ND [0.502]	ND [0.0513]	ND [0.14]	ND [0.13]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.082]	ND [0.505]	ND [0.507]	ND [0.0513]	ND [0.14]	ND [0.13]
Total PCBs	0.09	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.1]	ND [0.5]	ND [0.505]	ND [0.0513]	ND	ND	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.102]	ND [0.51]	ND [0.502]	ND [0.0513]	ND	ND	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.101]	ND [0.505]	ND [0.507]	ND [0.0513]	ND	ND

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																						
		VE 3-1												VE 4-11										
		3/27/12	9/11/12	4/2/13	9/25/13	5/28/14	5/19/15	5/18/16	8/3/17	11/28/18	9/11/19	6/3/20	3/27/12	9/11/12	9/11/12 DUP	4/2/13	9/24/13	5/27/14	5/19/15	5/17/16	8/2/17	11/27/18	9/10/19	6/3/20
Aroclor 1016	NS	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.096]	ND [0.505]	ND [0.505]	ND [0.0513]	ND [0.093]	ND [0.12]	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.099]	ND [0.5]	ND [0.506]	ND [0.0513]	ND [0.093]	ND [0.12]
Aroclor 1221	NS	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.1]	ND [0.505]	ND [0.505]	ND [0.0513]	ND [0.13]	ND [0.17]	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.103]	ND [0.5]	ND [0.506]	ND [0.0513]	ND [0.13]	ND [0.17]
Aroclor 1232	NS	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.1]	ND [0.505]	ND [0.505]	ND [0.0513]	ND [0.18]	ND [0.14]	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.103]	ND [0.5]	ND [0.506]	ND [0.0513]	ND [0.18]	ND [0.14]
Aroclor 1242	NS	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.089]	ND [0.505]	ND [0.505]	ND [0.0513]	ND [0.18]	ND [0.11]	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.092]	ND [0.5]	ND [0.506]	ND [0.0513]	ND [0.18]	ND [0.11]
Aroclor 1248	NS	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.1]	ND [0.505]	ND [0.505]	ND [0.0513]	ND [0.12]	ND [0.097]	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.103]	ND [0.5]	ND [0.506]	ND [0.0513]	ND [0.12]	ND [0.097]
Aroclor 1254	NS	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.044]	ND [0.505]	ND [0.505]	ND [0.0513]	ND [0.12]	ND [0.11]	ND [0.0513]	0.0805	0.0786	ND [0.0500]	0.0928	ND [0.0588]	ND [0.045]	0.914	0.711	ND [0.0513]	0.29J	ND [0.11]
Aroclor 1260	NS	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.081]	ND [0.505]	ND [0.505]	ND [0.0513]	ND [0.14]	ND [0.12]	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.084]	ND [0.5]	ND [0.506]	ND [0.0513]	ND [0.14]	ND [0.12]
Aroclor 1262	NS	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.081]	ND [0.505]	ND [0.505]	ND [0.0513]	ND [0.19]	ND [0.097]	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.084]	ND [0.5]	ND [0.506]	ND [0.0513]	ND [0.19]	ND [0.097]
Aroclor 1268	NS	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.081]	ND [0.505]	ND [0.505]	ND [0.0513]	ND [0.14]	ND [0.13]	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.084]	ND [0.5]	ND [0.506]	0.0747	ND [0.14]	ND [0.13]
Total PCBs	0.09	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.1]	ND [0.505]	ND [0.505]	ND [0.0513]	ND	ND	ND [0.0513]	0.0805	0.0786	ND [0.0500]	0.0928	ND [0.0588]	ND [0.103]	0.914	0.711	0.0747	0.29J	ND

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																	
		DAY 1												Field Blank					
		3/27/12	9/11/12	4/2/13	9/24/13	5/27/14	5/19/15	5/17/16	8/2/17	11/27/18	9/11/19	6/3/20	3/28/12	9/12/12	4/2/13	9/25/13	5/20/15	11/28/18	9/11/19
Aroclor 1016	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.098]	ND [0.51]	ND [0.504]	ND [0.0513]	ND [0.093]	ND [0.12]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.097]	ND [0.0513]	ND [0.093]
Aroclor 1221	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.102]	ND [0.51]	ND [0.504]	ND [0.0513]	ND [0.13]	ND [0.17]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.101]	ND [0.0513]	ND [0.13]
Aroclor 1232	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.102]	ND [0.51]	ND [0.504]	ND [0.0513]	ND [0.18]	ND [0.14]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.101]	ND [0.0513]	ND [0.18]
Aroclor 1242	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.091]	ND [0.51]	ND [0.504]	ND [0.0513]	ND [0.18]	ND [0.11]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.09]	ND [0.0513]	ND [0.18]
Aroclor 1248	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.102]	ND [0.51]	ND [0.504]	ND [0.0513]	ND [0.12]	ND [0.097]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.101]	ND [0.0513]	ND [0.12]
Aroclor 1254	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.045]	ND [0.51]	ND [0.504]	ND [0.0513]	ND [0.12]	ND [0.11]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.044]	ND [0.0513]	ND [0.12]
Aroclor 1260	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.083]	ND [0.51]	ND [0.504]	ND [0.0513]	ND [0.14]	ND [0.12]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.082]	ND [0.0513]	ND [0.14]
Aroclor 1262	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.083]	ND [0.51]	ND [0.504]	ND [0.0513]	ND [0.19]	ND [0.097]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.082]	ND [0.0513]	ND [0.19]
Aroclor 1268	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.083]	ND [0.51]	ND [0.504]	ND [0.0513]	ND [0.14]	ND [0.13]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.082]	ND [0.0513]	ND [0.14]
Total PCBs	0.09	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.102]	ND [0.51]	ND [0.504]	ND [0.0513]	ND	ND	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.101]	ND [0.0513]	ND

Notes:
 All results and groundwater standards/guidance values are in parts per billion (ppb)
 (1) = Groundwater standard or guidance value as referenced in NYSDEC TOGS 1.1.1 dated June 1998 as amended in January 1999, April 2000, and June 2004.
 ND [Reporting Limit] = Not Detected at a concentration greater than the reporting limit shown in brackets
 NS = No Standard
BOLD TYPE indicates the concentration exceeds the groundwater standard for total PCBs

Table 6
NYSDEC Site #360010
Harmon Yard Waste Water Area
OU II

Summary of Metals
Groundwater Samples

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																					
		VE 1-2											VE 1-4										
		3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	5/17/16	8/2/17	11/27/18	9/10/19	6/3/20	3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	5/18/16	8/2/17	11/27/18	9/10/19	6/3/20
Arsenic	25	ND [10]	ND [4.0]	ND [4.0]	ND [4.0]	ND [4.0]	2.82	4.71	1.57	ND [1.11]	ND [0.68]	ND [2.38]	ND [10]	ND [4.0]	ND [4.0]	ND [4.0]	ND [4.0]	3.5	36.5	1.21	1.22	ND [0.68]	ND [2.38]
Chromium	50	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	0.969 J	1.71 JN*	0.85 JN	ND [1.11]	ND [1.33]	1.53 J	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	0.796 J	139 N*	1.62 JN	1.26	ND [1.33]	1.24 J
Copper	200	ND [5]	ND [5]	ND [5]	ND [3]	ND [3]	3.21	21.5 N	4.48	5.52	9.93 J	28.2	ND [5]	ND [5]	ND [5]	ND [3]	ND [3]	10.8	6060 N	48	57.3	5.01 J	5.31 J
Lead	25	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	4.34	7.76	1.56*	2.32	22.2	31.2	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	3.89	1690	14.7*	17.8	14.4	20.7

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																							
		VE 2-1												VE 3-1											
		3/28/12	9/12/12	4/2/13	9/24/13	5/28/14	5/20/15	5/18/16	8/3/17	11/28/18	9/11/19	6/4/20	DUP	3/27/12	9/11/12	4/2/13	9/25/13	5/28/14	5/19/15	5/18/16	8/3/17	11/28/18	9/11/19	6/3/20	
Arsenic	25	ND [10]	ND [4.0]	ND [4.0]	ND [4.0]	ND [4.0]	0.507 J	0.42 J	0.92 J	ND [1.11]	ND [0.68]	ND [2.38]	ND [2.38]	ND [10]	4.71	6.03	ND [4.0]	5.62	9.16	16.5	19.1	26.9	ND [0.68]	ND [2.38]	
Chromium	50	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	0.137 J	0.65 JN*	0.73 JN	ND [1.11]	ND [1.33]	ND [0.81]	NF [0.81]	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	3.07	5.62 N*	5.35 N	6.34	ND [1.33]	2.44 J	
Copper	200	ND [5]	6.72	5.56	4.70	9.00	4.55	3.5 N	3.48	10.70	3.74 J	4.92 J	4.47 J	ND [5]	ND [5]	ND [5]	ND [3]	ND [3]	5.24	6.73 N	9.65	10.50	21.70	3.97 J	
Lead	25	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	1.38	0.3 J	0.17 J*	ND [1.11]	8.83	23.3	23.3	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	3.77	1.44	2.71 *	3.59	9.18	9.64	

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																							
		VE 4-11													DAY 1										
		3/27/12	9/11/12	11/2012 DU	4/2/13	9/24/13	5/27/14	5/19/15	5/17/16	8/2/17	11/27/18	9/10/19	6/3/20	3/27/12	9/11/12	4/2/13	9/24/13	5/27/14	5/19/15	5/17/16	8/2/17	11/27/18	9/10/19	6/3/20	
Arsenic	25	ND [10]	ND [4.0]	ND [4.0]	ND [4.0]	ND [4.0]	ND [4.0]	2.3	0.76 J	1.67	ND [1.11]	ND [0.68]	ND [2.38]	ND [10]	12.5	ND [4.0]	ND [4.0]	ND [4.0]	10.7	10.6	10.8	12.4	ND [0.68]	ND [2.38]	
Chromium	50	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	1.37 J	0.66 JN*	0.81 JN	ND [1.11]	ND [1.33]	ND [0.81]	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	1.31 J	1.44 JN*	0.95 JN	ND [1.11]	ND [1.33]	3.38 J	
Copper	200	7.64	10.1	8.7	ND [5]	13.7	4.44	9.24	9.02 N	7.24	ND [1.11]	9.00 J	5.53 J	ND [5]	ND [5]	ND [5]	ND [3]	ND [3]	1.34 J	2.77 N	2.99	1.57	7.79 J	3.40 J	
Lead	25	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	1.55	0.19 J	0.66 J*	ND [1.11]	11.6	24.4	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	1.75	0.15 J	0.41 J*	ND [1.11]	3.80 J	ND [1.25]	

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date								
		Field Blank								
		3/28/12	9/12/12	4/2/13	9/25/13	5/20/15	11/28/18	9/11/19	6/4/20	
Arsenic	25	ND [10]	ND [4.0]	ND [4.0]	ND [4.0]	ND [1.0]	ND [1.11]	ND [0.68]	ND [2.38]	
Chromium	50	ND [5]	ND [5]	ND [5]	ND [5]	0.431 J	ND [1.11]	ND [1.33]	ND [0.81]	
Copper	200	ND [5]	ND [5]	ND [5]	17.3	80	ND [1.11]	ND [0.49]	ND [1.23]	
Lead	25	ND [3]	ND [3]	ND [3]	ND [3]	1.6	ND [1.11]	ND [1.43]	ND [1.25]	

Notes:

All results and groundwater standards/guidance values are in parts per billion (ppb)

(1) = Groundwater standard or guidance value as referenced in NYSDEC TOGS 1.1.1 dated June 1998 as amended in January 1999, April 2000, and June 2004.

ND (Method Detection Limit) [Reporting Limit] = Not Detected at a concentration greater than the reporting limit shown in brackets

NS = No Standard

J = Estimated Concentration

N = Indicates the spiked sample recovery is not within control limits

* = Indicates that the duplicate analysis is not within control limits

Table 7
Emerging Contaminant Testing
Harmon OU-2

Compound	Guidance Values ¹	Test Location and Sample Date																							
		VE 1-2		VE 1-4				VE 2-1				VE 3-1				VE 4-11				DAY 1		Field Blank			
		8/2/17	8/2/17	11/27/18	9/10/19	6/3/20	8/2/17	11/28/18	DUP (11/28/18)	9/11/19	DUP (9/11/19)	6/4/20	DUP (6/4/20)	8/2/17	8/2/17	11/27/18	9/10/19	6/3/20	8/2/17	2017	2018	FB91119	FB6420		
Perfluoroheptanoic acid (PFHpA)	100	ND [0.79]	7.7	45	12.9	12	4	ND [2.0]	ND [2.0]	ND [10]	ND [10]	3.3 J	3.0 J	3.3	ND [0.81]	ND [2.0]	ND [10]	ND [4.3]	5.4	ND [0.67]	ND [2.0]	ND [10]	ND [4.4]		
Perfluorooctanoic acid (PFOA)	10	5.2	29	50	51.3	15	7.7	ND [2.0]	ND [2.0]	ND [10]	ND [10]	4.4	6.9	5.6	ND [0.75]	ND [2.0]	ND [10]	ND [1.7]	18	ND [0.62]	ND [2.0]	ND [10]	ND [1.8]		
Perfluorononanoic acid (PFNA)	100	1.3 J	2.8	7.1	ND [10]	4.1 J	2.6	ND [2.0]	ND [2.0]	ND [10]	ND [10]	2.3 J	2.8 J	1.1 J	ND [0.66]	ND [2.0]	ND [10]	ND [4.3]	2.4	ND [0.54]	ND [2.0]	ND [10]	ND [4.4]		
Perfluorodecanoic acid (PFDA)	100	ND [0.43]	ND [0.43]	4.1	ND [10]	1.3 J	0.76 J	ND [2.0]	ND [2.0]	ND [10]	ND [10]	ND [4.5]	ND [4.5]	ND [0.44]	ND [0.44]	ND [2.0]	ND [10]	ND [4.3]	ND [0.44]	ND [0.37]	ND [2.0]	ND [10]	ND [4.4]		
Perfluoroundecanoic acid (PFUnA)	100	ND [0.73]	ND [0.73]	ND [2.0]	ND [10]	ND [4.5]	ND [0.74]	ND [2.0]	ND [2.0]	ND [10]	ND [10]	ND [4.5]	ND [4.5]	ND [0.75]	ND [0.75]	ND [2.0]	ND [10]	ND [4.3]	ND [0.75]	ND [0.62]	ND [2.0]	ND [10]	ND [4.4]		
Perfluorododecanoic acid (PFDoA)	100	1.2 J	ND [0.57]	ND [2.0]	ND [10]	ND [4.5]	ND [0.58]	ND [2.0]	ND [2.0]	ND [10]	ND [10]	ND [4.5]	ND [4.5]	ND [0.75]	1.4 J	ND [2.0]	ND [10]	ND [4.3]	ND [0.58]	ND [0.49]	ND [2.0]	ND [10]	ND [4.4]		
Perfluorotridecanoic acid (PFTrIA)	100	ND [0.54]	ND [0.54]	ND [2.0]	ND [10]	ND [4.5]	ND [0.54]	ND [2.0]	ND [2.0]	ND [10]	ND [10]	ND [4.5]	ND [4.5]	ND [0.59]	ND [0.56]	ND [2.0]	ND [10]	ND [4.3]	ND [0.55]	ND [0.46]	ND [2.0]	ND [10]	ND [4.4]		
Perfluorotetradecanoic acid (PFTeA)	100	ND [0.20]	ND [0.19]	ND [2.0]	ND [10]	ND [4.5]	0.27 J B	ND [2.0]	ND [2.0]	ND [10]	ND [10]	ND [4.5]	ND [4.5]	ND [0.55]	ND [0.20]	ND [2.0]	ND [10]	ND [4.3]	ND [0.20]	ND [0.17]	ND [2.0]	ND [10]	ND [4.4]		
Perfluorohexanesulfonic acid (PFHxS)	100	7.4	9.7	11	20.3	5.3	24	3.4	5.4	ND [10]	ND [10]	11	14	2	39	ND [2.0]	10.5	6.8	5.0	ND [0.72]	ND [2.0]	ND [10]	ND [4.4]		
Perfluoroheptanesulfonic acid (PFHpS)	100	ND [0.70]	0.77 J	2.2	ND [10]	0.80 J	ND [0.70]	ND [2.0]	ND [2.0]	ND [10]	ND [10]	0.89 J	0.73 J	ND [0.72]	ND [0.72]	ND [2.0]	ND [10]	ND [4.3]	ND [0.71]	ND [0.59]	ND [2.0]	ND [10]	ND [4.4]		
Perfluorooctanesulfonic acid (PFOS)	10	37	62	43	63.3	34	55	16	21	42.9	38.2	56	60	14	7.2	4.2	ND [10]	5.2	16	ND [1.1]	ND [2.0]	ND [10]	ND [1.8]		
Perfluorodecanesulfonic acid (PFDS)	100	ND [1.2]	ND [1.2]	ND [2.0]	ND [10]	ND [4.5]	ND [1.2]	ND [2.0]	ND [2.0]	ND [10]	ND [10]	ND [4.5]	ND [4.5]	ND [1.2]	ND [1.2]	ND [2.0]	ND [10]	ND [4.3]	ND [1.2]	ND [1.0]	ND [2.0]	ND [10]	ND [4.4]		
Perfluorooctane Sulfonamide (FOSA)	100	ND [0.63]	ND [0.62]	ND [2.0]	ND [10]	ND [4.5]	3.9 J	ND [2.0]	ND [2.0]	ND [10]	ND [10]	ND [4.5]	ND [4.5]	ND [0.64]	ND [0.64]	ND [2.0]	ND [10]	ND [4.3]	ND [0.64]	ND [0.53]	ND [2.0]	ND [10]	ND [4.4]		
Perfluorobutanoic acid (PFBA)	100	ND [22]	ND [22]	10	13.4	ND [4.5]	54 J B CI	ND [2.0]	ND [2.0]	ND [10]	ND [10]	2.0 J	3.1 J	2200 B CI	ND [23]	ND [2.0]	ND [10]	ND [4.3]	2000 B CI	ND [0.38]	ND [2.0]	ND [10]	ND [4.4]		
Perfluoropentanoic acid (PFPeA)	100	ND [48]	ND [48]	93	14.6	10	ND [49]	ND [2.0]	ND [2.0]	ND [10]	ND [10]	ND [4.5]	ND [4.5]	ND [50]	ND [50]	ND [10]	ND [4.3]	4600 CI	ND [0.82]	ND [2.0]	ND [10]	ND [4.4]			
Perfluorohexanoic acid (PFHxA)	100	ND [39]	ND [38]	50	14.2	8.8 J	ND [39]	ND [2.0]	ND [2.0]	ND [10]	ND [10]	ND [9.2]	ND [9.2]	ND [39]	ND [40]	5.7	ND [10]	ND [9.2]	ND [39]	ND [0.65]	ND [2.0]	ND [10]	ND [9.2]		
Perfluorobutanesulfonic acid (PFBS)	100	ND [45]	ND [45]	13	ND [10]	3.2 J	ND [45]	ND [2.0]	ND [2.0]	ND [10]	ND [10]	2.0 J	1.9 J	ND [46]	ND [46]	15	ND [10]	ND [4.3]	ND [46]	ND [0.76]	ND [2.0]	ND [10]	ND [4.4]		
6:2 Fluorotelomersulfonate (6:2 FTS)	100	NT	NT	50	ND [25]	0.85 J	NT	ND [2.0]	ND [2.0]	ND [10]	ND [25]	ND [4.5]	ND [4.5]	NT	NT	ND [2.0]	ND [25]	ND [4.3]	NT	NT	ND [2.0]	ND [25]	ND [4.4]		
8:2 Fluorotelomersulfonate (8:2 FTS)	100	NT	NT	5.3	ND [10]	0.38 J	NT	ND [2.0]	ND [2.0]	ND [10]	ND [10]	ND [4.5]	ND [4.5]	NT	NT	ND [2.0]	ND [10]	ND [4.3]	NT	NT	ND [2.0]	ND [10]	ND [4.4]		
NMeFOSAA	100	NT	NT	ND [2.0]	ND [10]	ND [4.5]	NT	ND [2.0]	ND [2.0]	ND [10]	ND [10]	ND [4.5]	ND [4.5]	NT	NT	ND [2.0]	ND [10]	ND [4.3]	NT	NT	ND [2.0]	ND [10]	ND [4.4]		
NEtFOSAA	100	NT	NT	ND [2.0]	ND [10]	ND [4.5]	NT	ND [2.0]	ND [2.0]	ND [10]	ND [10]	ND [4.5]	ND [4.5]	NT	NT	ND [2.0]	ND [10]	ND [4.3]	NT	NT	ND [2.0]	ND [10]	ND [4.4]		
PFOA & PFOS		42.2	91	93	114.6	49	62.7	16	21	42.9	38.2	60.4	66.9	19.6	7.2	4.2	-	-	34	ND	ND	ND	ND		
Maximum PFAS (not inc PFOA/PFOS)		7.4	9.7	93	20.3	12	24	3.4	5.4	0	0	11	14	3.3	39	15	10.5	6.8	5.4	ND	ND	ND	ND		
Total PFAS	500	49.6	111.2	383.7	190	95.73	93.3	19.4	26.4	42.9	38.2	81.89	92.43	24.9	46.2	24.9	10.5	12	46.8	ND	ND	ND	ND		
1,4-Dioxane		NT	NT	ND [200]	ND [200]	ND [90]	NT	ND [200]	ND [200]	ND [200]	NT	ND [90]	ND [90]	NT	NT	ND [200]	ND [200]	ND [90]	NT	NT	ND [200]	NT	ND [90]		

Notes:

All results are in nanograms per liter (ng/L) or parts per trillion (ppt)

ND [Reporting Limit] = Not Detected at a concentration greater than the reporting limit shown in brackets

NT = Not Tested

J = Estimated Concentration

B = Compound was found in the blank and samples

CI = The peak identified in the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias

¹ Per- and polyfluoroalkyl substances (PFAS) guidance values, as specified in the NYSDEC document titled *Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs*, dated January 2021

Table 8
NYSDEC Site #360010
Harmon Yard Waste Water Area

Off-Site Monitoring Wells (OUII-A to OUII-F)
Depth to Static Water Levels and Range of Free Product Thickness

Date Range		OUII-A	OUII-B	OUII-C	OUII-D	OUII-E	OUII-F
October 4, 2016 - November 30, 2016	Depth to Static Water Level	4.58-5.04	4.36-5.04	4.58-5.18	4.40-4.97	4.55-5.05	2.87-5.09
	Range of Free Product Thickness (ft.)	0.7-3.0	1.3-3.2	0	1.9-3.0	0	0.0-1.3
	Average Free Product Thickness (ft.)	2.3	2.5	0	2.5	0	0.68
December 1, 2016 - February 28, 2017	Depth to Static Water Level	5.53-6.19	5.58-6.11	5.99-6.76	5.47-5.96	5.56-6.18	5.8-7.02
	Range of Free Product Thickness (ft.)	0.0-0.55	0.0-0.96	0	1.65-2.15	0	0-0.93
	Average Free Product Thickness (ft.)	0.36	0.39	0	1.8	0	0.29
March 1, 2017 - May 31, 2017	Depth to Static Water Level	5.56-6.86	5.46-6.89	5.53-7.45	5.3-6.77	5.57-6.89	5.27-8.05
	Range of Free Product Thickness (ft.)	0.0-0.94	0.08-1.97	0.0-1.24	0.0-1.84	0	0.0-0.28
	Average Free Product Thickness (ft.)	0.29	1.1	0.099	1.3	0	0.043
June 1, 2017 - July 31, 2017	Depth to Static Water Level	5.37-6.28	5.12-6.13	4.82-6.31	5.19-6.18	5.28-6.26	4.43-6.69
	Range of Free Product Thickness (ft.)	0.04-1.28	0.68-1.7	0	0.5-1.85	0	0-0.26
	Average Free Product Thickness (ft.)	1.3	1.7	0	1.9	0	0.26
September 1, 2017 - November 30, 2017	Depth to Static Water Level	9.36-9.82	9.28-9.84	9.18-9.59	9.57-9.93	9.44-9.82	7.19-7.82
	Range of Free Product Thickness (ft.)	0.67-2.01	1.39-2.36	0-1.82	1.78-2.24	0	0.40-2.78
	Average Free Product Thickness (ft.)	1.3	1.9	0.12	2.0	0	2.0
December 1, 2017 - February 28, 2018	Depth to Static Water Level	8.31-10.00	8.20-10.02	7.25-9.81	8.46-10.18	8.34-10.07	4.18-8.11
	Range of Free Product Thickness (ft.)	0-2.26	0-2.71	0	0.48-2.37	0	0.35-3.19
	Average Free Product Thickness (ft.)	1.1	1.9	0	1.8	0	1.9
March 1, 2018 - May 31, 2018	Depth to Static Water Level	7.75-8.54	7.77-9.11	6.85-8.09	7.97-8.76	7.92-8.52	3.87-5.61
	Range of Free Product Thickness (ft.)	0-0.59	0-1.36	0	0.02-1.88	0	0.01-0.24
	Average Free Product Thickness (ft.)	0.15	0.90	0	0.94	0	0.1
June 1, 2018 - August 31, 2018	Depth to Static Water Level	8.15-9.15	7.96-9.20	7.41-8.96	8.10-9.32	8.24-9.37	4.43-6.81
	Range of Free Product Thickness (ft.)	0-0.24	0.02-1.38	0	0.1-1.67	0	0-0.04
	Average Free Product Thickness (ft.)	0.084	1.0	0	1.1	0	0.009
September 1, 2018 - November 30, 2018	Depth to Static Water Level	7.18-8.63	7.31-8.56	6.56-8.09	7.12-8.81	7.62-8.69	3.29-5.91
	Range of Free Product Thickness (ft.)	0-0.26	0-1.75	0	0-1.37	0	0-0.03
	Average Free Product Thickness (ft.)	0.043	0.44	0	0.37	0	0.011
January 1, 2019 - May 31, 2019	Depth to Static Water Level	6.61-7.82	6.83-7.86	6.15-7.38	6.12-7.59	6.92-7.89	2.72-4.86
	Range of Free Product Thickness (ft.)	0-0.02	0.86-2.80	0	0-0.62	0	0
	Average Free Product Thickness (ft.)	0.009	1.6	0	0.10	0	0
June 1, 2019 - September 30, 2019	Depth to Static Water Level	6.97-8.95	7.08-8.93	8.50-8.62	6.58-9.01	7.26-9.03	3.45-6.78
	Range of Free Product Thickness (ft.)	0-0.12	0-1.86	0	0-1.27	0	0-0.01
	Average Free Product Thickness (ft.)	0.009	0.65	0	0.91	0	0.002
October 1, 2019 - December 31, 2019	Depth to Static Water Level	7.50-9.07	7.40-9.05	6.75-9.00	7.50-9.36	7.75-9.30	3.85-9.65
	Range of Free Product Thickness (ft.)	0-0.57	0-1.06	0	0.25-1.50	0	0-0.15
	Average Free Product Thickness (ft.)	0.21	0.3	0	0.81	0	0.03
January 1, 2020 - March 31, 2020	Depth to Static Water Level	6.96-8.30	7.25-8.18	6.86-9.35	7.09-8.36	7.71-8.35	3.96-5.46
	Range of Free Product Thickness (ft.)	0.07-1.38	0-0.48	0	0-0.7	0	0-0.24
	Average Free Product Thickness (ft.)	0.3	0.27	0	0.17	0	0.08
April 1, 2020 - June 30, 2020	Depth to Static Water Level	7.65-8.71	7.50-8.57	7.18-8.61	7.12-8.89	7.79-8.81	4.10-8.53
	Range of Free Product Thickness (ft.)	0-0.01	0.27-0.58	0-0.01	0-1.2	0	0.01-0.44
	Average Free Product Thickness (ft.)	0.004	0.40	0.001	0.35	0	0.20
July 1, 2020 - September 30, 2020	Depth to Static Water Level	8.72-9.24	8.56-9.11	8.49-9.17	8.86-9.42	8.95-9.43	6.70-7.29
	Range of Free Product Thickness (ft.)	0.04-1.05	0.24-0.96	0	0.05-1.56	0	0.01-0.60
	Average Free Product Thickness (ft.)	0.43	0.62	0	0.99	0	0.13
October 1, 2020 - December 31, 2020	Depth to Static Water Level	8.12-9.21	7.91-9.05	7.46-9.50	7.66-9.41	8.22-9.33	4.67-7.18
	Range of Free Product Thickness (ft.)	0-0.30	0-0.59	0	0-1.42	0	0.03-1.54
	Average Free Product Thickness (ft.)	0.086	0.14	0	0.34	0	0.70
January 1, 2021 - March 31, 2021	Depth to Static Water Level	7.45-8.40	7.33-8.64	7.08-8.49	6.69-8.65	7.78-8.52	4.03-6.04
	Range of Free Product Thickness (ft.)	0-0.1	0-0.07	0-0.01	0-0.27	0	0.03-0.54
	Average Free Product Thickness (ft.)	0.001	0.01	0.00	0.05	0	0.28
April 1, 2021 - June 30, 2021	Depth to Static Water Level	7.91-8.78	7.67-8.63	7.32-8.50	7.12-8.70	8.15-8.91	4.27-6.02
	Range of Free Product Thickness (ft.)	0-0.1	0.01-0.37	0	0-0.70	0	0.04-0.56
	Average Free Product Thickness (ft.)	0.001	0.15	0	0.099	0	0.31

Note:

Depth to Static Water Level in feet above mean sea level corrected for the presence of Free Product based on the following relationship:

$$\text{Corrected SWL (ft. bgs)} = \text{Measured SWL (ft. bgs)} - 0.85 \times \text{Measured Free Product Thickness (ft.)}$$

FIGURES

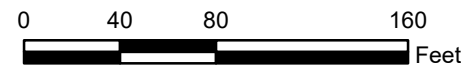


NOTES:

1. This drawing was prepared from a CAD base file provides by others, from a drawing by ERM, entitled "EXISTING SITE PLAN AND SURVEY CONTROL" sheet No. C-1 dated 7/31/00 and from a drawing by ERM, "SITE PLAN WITH LOCATIONS OF PROPOSED WELLS AND SHEET PILING", sheet No. C-2, dated 7/31/00.
2. Operable Unit II (OU-II) remedy well locations were determined from coordinate values listed on the ERM drawings identified in note No. 1.

LEGEND:

- VE 4-6 (7.42 ft) Former Vapor Extraction (VE), Air Inlet (AI), Forced Air Injection (FA), or existing monitoring well and designation
- Groundwater elevation for water level measurement made June 2021
- Off-site monitoring well installed September 2016
- Existing monitoring well near the southern terminus of the sheet pile wall in NAPL Area L1
- 4.0 Groundwater contour
- Apparent groundwater flow direction
- OU-II NAPL area boundaries
- Approximate location of sheet pile wall around remediated former lagoon area (OU-I)
- Approximate location of L1 sheet pile wall
- Extent of OU-I final cover system
- OU-II Boundary



PROJECT MANAGER	RLK	DATE	08-2021
DRAWN BY	CPS	DATE DRAWN	08-2021
SCALE	As Noted	DATE ISSUED	08-04-2021

day
DAY ENGINEERING, P.C.
 ENVIRONMENTAL ENGINEERING CONSULTANTS
 ROCHESTER, NEW YORK 14606
 NEW YORK, NEW YORK 10170

Project Title
**METRO-NORTH RAIL ROAD
 HARMON YARD OPERABLE UNITS OU-I AND OU-II
 CROTON-ON-HUDSON, NEW YORK**

Drawing Title
SITE MANAGEMENT PLAN

Project No.
21-3602M

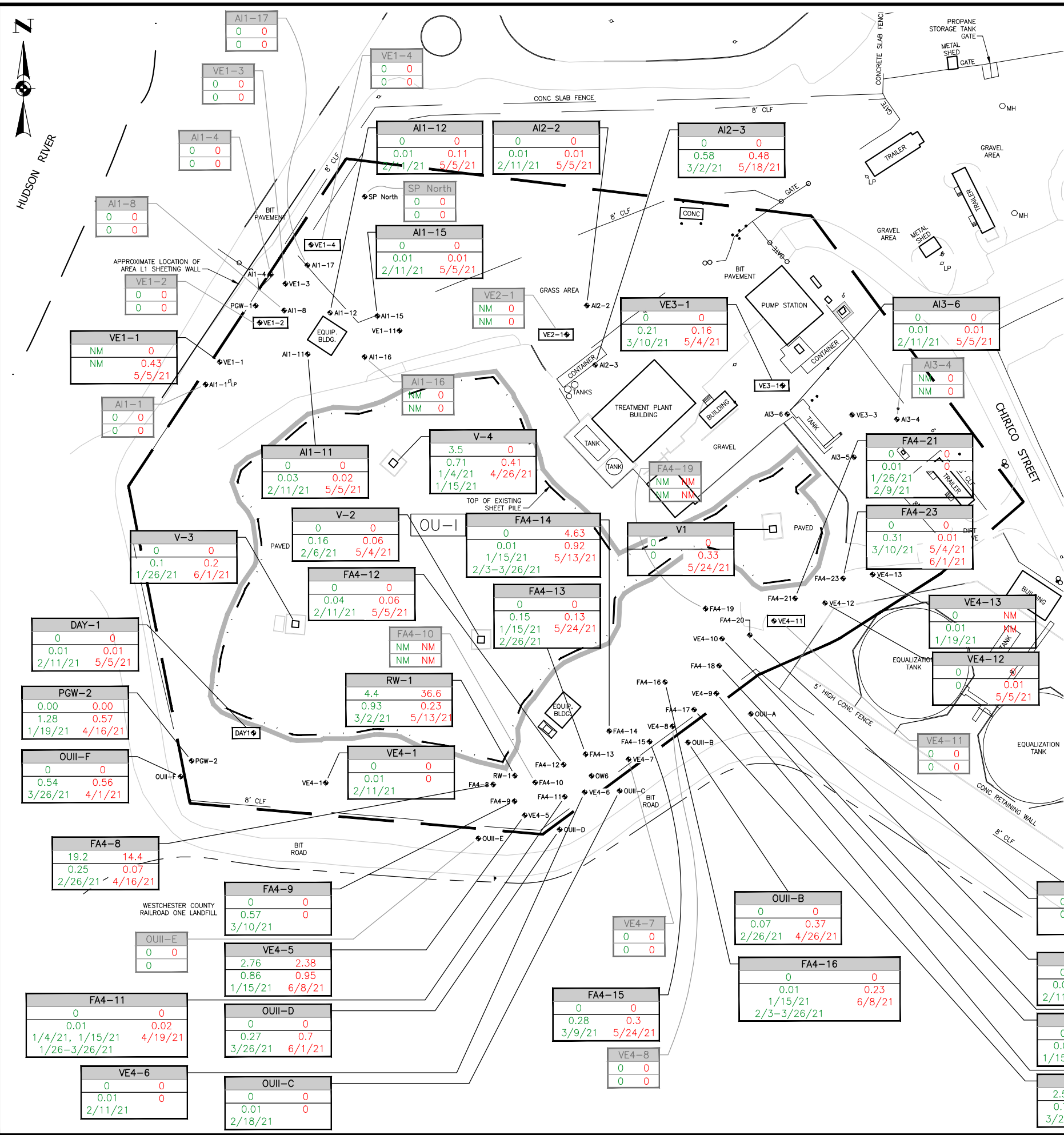
Groundwater Contour Map: May 2021

FIGURE 1

Document Path: \\mrgis1\NMR\MNR_Documents\GIS_Data\NMR\Harmon Yard\OU1_OU2\Remediation_OU1_OU2_20210504.mxd
 Last Date Saved: 06 Aug 2021

Ref1: Xerox432AnsiB-2; 11 x 17
 Ref2: Layout1
 Ref3: Pen Setting File: 800psHalfcolorBeacon.ctb

Time Plotted: Friday, August 06, 2021 10:55:23 AM
 File Name: U:\McPhee\Drawings\Metro\Harmon\Remediation-46\NAPL Wells Period Apr-June 2021.dwg



NOTES:

1. This drawing was prepared from a CAD base file provided by others, from a drawing by ERM, entitled "EXISTING SITE PLAN AND SURVEY CONROL" sheet No. C-1 dated 7/31/00 and from a drawing by ERM, "SITE PLAN WITH LOCATIONS OF PROPOSED WELLS AND SHEET PILING", sheet No. C-2, dated 7/31/00.
2. Operable Unit II (OU-II) remedy well locations were determined from coordinate values listed on the ERM drawings identified in note No. 1, or by reference to site features (e.g., DAY-1, RW-1, etc...)
3. Free Product is removed from RW-1, AI2-3, FA4-8 and FA4-17 using a Spill Buster product removal pump and placed within 55-gallon drums.

LEGEND:

- ◆ VE1-3 Former Vapor Extraction (VE), Air Inlet (AI), Forced Air Injection (FA), Existing Monitoring Well Or Product Recovery Well (RW) and Designation
- ◆ VE1-2 Long-Term Monitoring Well
- - - - - Approximate Location Of Sheet Pile Wall Around Remediated Former Lagoon Area (OU-I)
- ▬ Extent Of OU-I Final Cover System
- ▬ OU-II Boundary
- V-1 OU-I Contingency Vapor Extraction System Wells
- FA4-8 Long-Term Monitoring Well Identification
- Free Product Removed (Gallons) During Report Period
- Maximum Free Product Thickness (Feet) Measured During Report Period With Date Of Measurement
- Measurements Made During The Report Period January 1, 2021 Through March 31, 2021 Shown In Green (Left)
- Measurements Made During The Report Period April 1, 2021 Through June 30, 2021 Shown In Red (Right)
- NM Well Not Measured

SITE PLAN

1" = 80'



DATE	8/2021
PROJECT MANAGER	HMM
DATE DRAWN	8/4/2021
DRAWN BY	RJM/CPS/TW
DATE ISSUED	8/4/2021
SCALE	As Noted

day
 DAY ENGINEERING, P.C.
 ENVIRONMENTAL ENGINEERING CONSULTANTS
 ROCHESTER, NEW YORK 14606
 NEW YORK, NEW YORK 10170

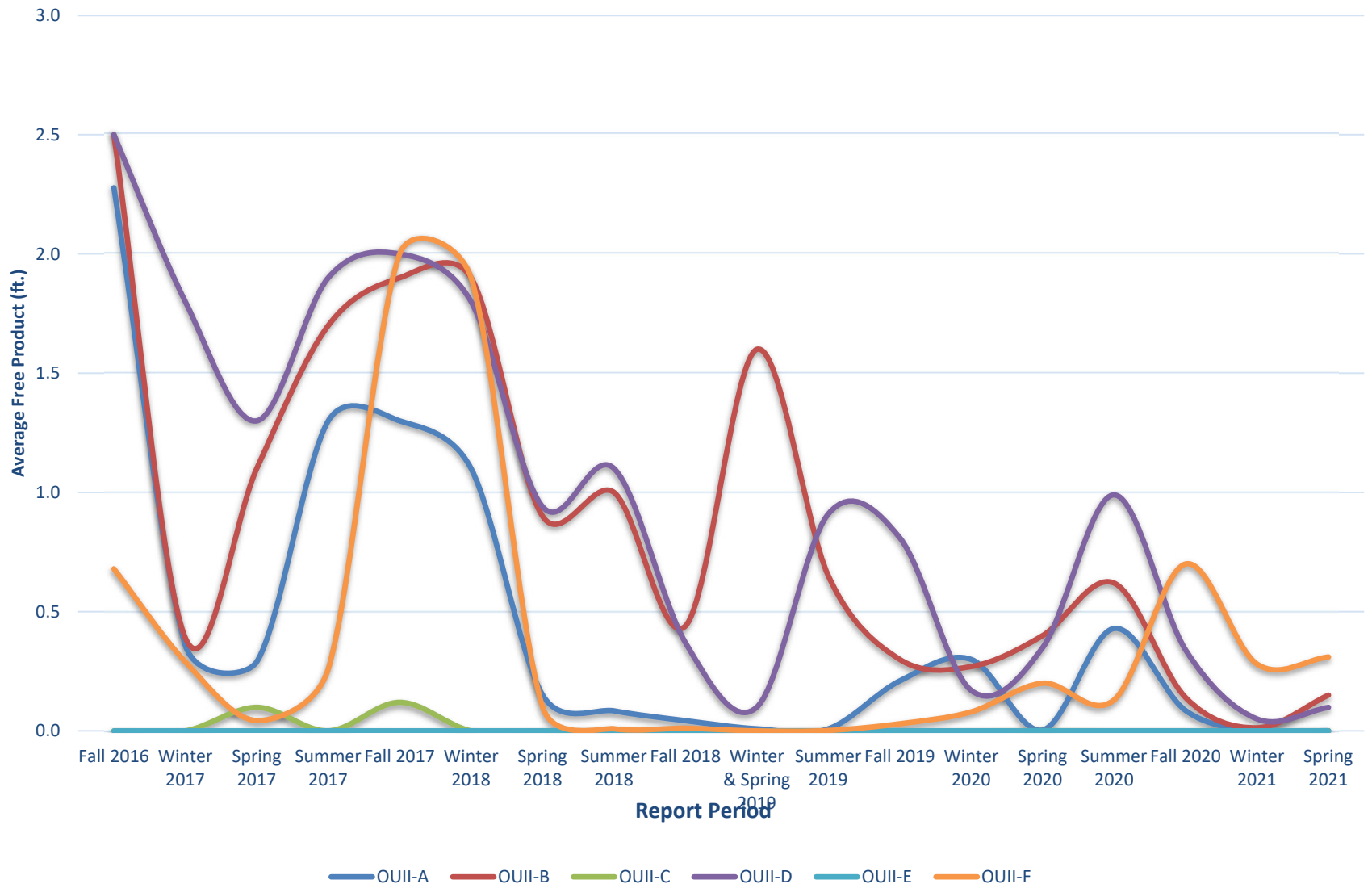
PROJECT TITLE
 METRO-NORTH RAILROAD
 HARMON YARD OPERABLE UNITS OU-I AND OU-II
 CROTON-ON-HUDSON, NEW YORK
 NYSDEC SITE #360010

PROJECT NO.
 21-3602M

DRAWING TITLE
 Summary Of Free Product Removal For The Report Periods
 January - March 2021 and April - June 2021

FIGURE 2

Figure 3: Average Free Product in Off-Site Wells by Report Period



ATTACHMENT A

**Well Monitoring Logs and Free Product Removal Records
April 1, 2021 through June 30, 2021**

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: P1 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	13.68	0.00	0.00	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I)		Well ID: P2	Diameter: 2 in.		
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	13.62	0.00	0.00	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: P3 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	13.62	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I)		Well ID: P4		Diameter: 2 in.	
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	13.51	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: P5 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	4.45	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: P6 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
Not measured					

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: P7 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	3.99	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I)		Well ID: P8	Diameter: 2 in.		
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	13.61	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I)		Well ID: P9	Diameter: 2 in.		
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	13.66	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I)		Well ID: P10		Diameter: 2 in.	
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	13.48	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I)		Well ID: V-1		Diameter: 4 in.	
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/4/2021	-	15.98	0	0	
5/24/2021	16.42	16.75	0.33	0	
6/1/2021	-	16.15	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I)		Well ID: V-2		Diameter: 4 in.	
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/4/2021	17.29	17.35	0.06	0	
6/1/2021	17.55	17.56	0.01	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I)		Well ID: V-3		Diameter: 4 in.	
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/4/2021	17.11	17.15	0.04	0	
6/1/2021	16.81	17.01	0.2	0	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: V-4 Diameter: 4 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	15.88	16.25	0.37	0	
4/5/2021	15.95	16.3	0.35	0	
4/16/2021	16.05	16.33	0.28	0	
4/19/2021	16	16.35	0.35	0	
4/26/2021	16.15	16.56	0.41	0	
5/4/2021	16.51	16.91	0.4	0	
5/13/2021	16.25	16.61	0.36	0	
5/18/2021	16.38	16.74	0.36	0	
6/1/2021	16.3	16.56	0.26	0	
6/8/2021	16.2	16.55	0.35	0	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: AI1-1 Diameter: 2 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	11.21	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: AI1-4 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	10.48	0	0	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: AI1-8 Diameter: 2 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	13.61	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: A11-11 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	13.95	13.97	0.02	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: AI1-12 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	17.31	17.42	0.11	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: AI1-15 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	18.7	18.71	0.01	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: A11-16 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	14.01	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: A11-17 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	12.25	0	0	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: SP-North Diameter: 1 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	-	9.42	0	0	
4/16/2021	-	9.5	0	0	
4/19/2021	-	9.48	0	0	
4/26/2021	-	9.68	0	0	
5/4/2021	-	9.66	0	0	
5/13/2021	-	9.79	0	0	
5/19/2021	-	9.85	0	0	
5/24/2021	-	9.89	0	0	
6/1/2021	-	9.58	0	0	
6/8/2021	-	9.73	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: VE-1-1 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	9.05	9.48	0.43	0.00	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: VE-1-2 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	10.05	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: VE-1-3 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	8.71	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: VE-1-4 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	10.30	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: WB-9 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	8.75	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: AI2-2 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	15.00	15.01	0.01	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: AI2-3 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments*
4/1/2021	15.05	15.25	0.2	0	Drum- 1.08
4/5/2021	14.95	15.02	0.07	0	Drum- 0.92
4/16/2021	15.15	15.52	0.37	0	Drum- 1.12
4/19/2021	14.98	15.32	0.34	0	Drum- 1.12
4/26/2021	15.32	15.77	0.45	0	Drum- 1.13
5/4/2021	16.02	16.25	0.23	0	Drum- 1.31
5/5/2021	16.02	16.25	0.23	0	
5/13/2021	15.35	15.59	0.24	0	Drum- 1.29
5/18/2021	15.3	15.78	0.48	0	Drum-1.30
5/24/2021	15.5	15.72	0.22	0	Drum-1.30
6/1/2021	15.51	15.61	0.1	0	Drum-1.36
6/8/2021	16.02	16.15	0.13	0	Drum- 1.32

*Measured height of Free Product accumulated in drum. Height of drum is assumed to be 2.5 ft and equal to approximately 50 gallons. Comment on 3/26/2021 stated '1.10 ft'. Free Product not recovered during reporting period.

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: VE2-1 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	11.12	0.00	0	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: AI3-4 Diameter: 2 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	13.59	0	0	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: A13-5 Diameter: 2 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
Not measured					

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: AI3-6 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	16.48	16.49	0.01	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: VE3-1 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/4/2021	13.78	13.94	0.16	0	
6/1/2021	13.81	13.82	0.01	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: DAY-1 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	16.15	16.16	0.01	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: FA4-8 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments*
4/1/2021	16.95	16.96	0.01	0	DRUM- 1.98
4/5/2021	16.98	16.99	0.01	0	Drum- 2.02
4/16/2021	17.21	17.28	0.07	0	Drum- 2.10
4/19/2021	17.12	17.13	0.01	0	Drum- 2.11
4/26/2021	17.39	17.4	0.01	0	Drum- 2.18
5/4/2021	16.5	16.52	0.02	0	Drum- 2.28
5/13/2021	18.08	18.09	0.01	0	
5/18/2021	17.78	17.79	0.01	0	Drum- 0.07
5/24/2021	18.02	18.04	0.02	0	Drum- 3.00
6/1/2021	16.91	16.92	0.01	0	Drum- 0.20
6/8/2021	17.68	17.69	0.01	0	Drum- 0.2

*Measured height of Free Product accumulated in drum. Height of drum is assumed to be 2.5 ft and equal to approximately 50 gallons. Comment on 3/26/2021 stated 'drum 1.98 ft'. Total amount of Free Product Recovered = 14.4 gallons from pump

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: FA4-9 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/4/2021	7.6	7.62	0.02	0	
6/1/2021	8.40	8.41	0.01	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: FA4-10 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
Not measured					

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: FA4-11 Diameter: 4 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	10.03	10.04	0.01	0	
4/5/2021	10.38	10.39	0.01	0	
4/16/2021	10.44	10.45	0.01	0	
4/19/2021	10.42	10.44	0.02	0	
4/26/2021	10.92	10.93	0.01	0	
5/4/2021	11.15	11.16	0.01	0	
5/5/2021	11.15	11.16	0.01	0	
5/13/2021	11.1	11.11	0.01	0	
5/18/2021	11.35	11.36	0.01	0	
5/24/2021	11.45	11.46	0.01	0	
6/1/2021	11.08	11.09	0.01	0	
6/8/2021	11.08	11.09	0.01	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: FA4-12 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	14.26	14.32	0.06	0	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: FA4-13R Diameter: 4 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	9.75	9.76	0.01	0	
4/5/2021	10.01	10.07	0.06	0	
4/16/2021	10.15	10.19	0.04	0	
4/19/2021	10.39	10.4	0.01	0	
4/26/2021	10.45	10.49	0.04	0	
5/4/2021	10.7	10.71	0.01	0	
5/5/2021	10.7	10.71	0.01	0	
5/13/2021	11.79	11.8	0.01	0	
5/18/2021	10.88	10.97	0.09	0	
5/24/2021	10.9	11.03	0.13	0	
6/1/2021	10.71	10.72	0.01	0	
6/8/2021	10.82	10.83	0.01	0	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: FA4-14 Diameter: 4 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	12.54	12.82	0.28	0	
4/2/2021	12.74	13.06	0.32	0	
4/16/2021	12.95	13.38	0.43	0	
4/19/2021	12.81	13.28	0.47	0	
4/26/2021	13.08	13.88	0.8	1.13	
5/4/2021	13.15	13.35	0.2	0	
5/13/2021	13.3	14.22	0.92	1.25	
5/19/2021	13.34	14.22	0.88	1.25	
5/24/2021	14.52	14.59	0.07	0	
6/1/2021	13.65	13.91	0.26	0	
6/8/2021	13.29	13.82	0.53	1	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: FA4-15R Diameter: 4 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	9.32	9.58	0.26	0	
4/5/2021	9.58	9.78	0.2	0	
4/19/2021	9.71	9.72	0.01	0	
4/26/2021	10.09	10.15	0.06	0	
5/4/2021	10.19	10.22	0.03	0	
5/5/2021	10.19	10.22	0.03	0	
5/13/2021	10.3	10.48	0.18	0	
5/24/2021	10.38	10.68	0.3	0	
6/1/2021	10.25	10.32	0.07	0	
6/8/2021	10.33	10.51	0.18	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: FA4-16 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	13.68	13.69	0.01	0	
4/5/2021	13.78	13.79	0.01	0	
4/16/2021	14.08	14.09	0.01	0	
4/19/2021	14.01	14.02	0.01	0	
4/26/2021	14.13	14.18	0.05	0	
5/4/2021	14.3	14.31	0.01	0	
5/13/2021	14.38	14.45	0.07	0	
5/19/2021	14.45	14.48	0.03	0	
5/24/2021	15.01	15.03	0.02	0	
6/1/2021	14.39	14.45	0.06	0	
6/8/2021	14.45	14.68	0.23	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: FA4-17R Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	10.71	11.15	0.44	0	
4/16/2021	11.05	11.33	0.28	0	
4/19/2021	10.95	11.32	0.37	0	
4/26/2021	11.33	11.68	0.35	0	
5/4/2021	11.4	11.55	0.15	0	
5/13/2021	11.58	11.93	0.35	0	
5/19/2021	11.58	11.83	0.25	0	
5/24/2021	12.03	12.25	0.22	0	
6/1/2021	11.55	11.68	0.13	0	
6/8/2021	11.62	11.91	0.29	0	

*Measured height of Free Product accumulated in drum. Spill Buster™ formerly located in well, removed in 2020. No comments during current report period re. installation of Spill Buster or drum measurements.

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: FA4-18 Diameter: 4 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	12.11	12.48	0.37	0	
4/16/2021	12.42	12.73	0.31	0	
4/19/2021	12.35	12.65	0.3	0	
4/26/2021	12.62	13.08	0.46	0	
5/4/2021	12.72	13.05	0.33	0	
5/13/2021	12.85	13.22	0.37	0	
5/19/2021	12.88	13.15	0.27	0	
5/24/2021	12.95	13.25	0.3	0	
6/1/2021	12.9	13.16	0.26	0	
6/8/2021	12.88	13.18	0.3	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: FA4-19 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
Not measured					

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: FA4-20 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	12.85	12.86	0.01	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: FA4-21 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/4/2021	-	13.65	0	0	
6/1/2021	-	13.72	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: FA4-23 Diameter: 2 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/4/2021	13.00	13.01	0.01	0	
6/1/2021	13.00	13.01	0.01	0	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: PGW-2 Diameter: 2 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	5.06	5.25	0.19	0	
4/16/2021	5.68	6.25	0.57	0	
4/19/2021	5.55	6.05	0.5	0	
4/26/2021	6.27	6.75	0.48	0	
5/4/2021	6.55	6.9	0.35	0	
5/13/2021	6.71	6.8	0.09	0	
5/19/2021	6.85	6.98	0.13	0	
5/24/2021	6.89	6.99	0.1	0	
6/1/2021	6.42	6.53	0.11	0	
6/8/2021	6.7	6.8	0.1	0	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: RW-1 Diameter: 6 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments*
4/1/2021	15.33	15.34	0.01	0	
4/16/2021	15.99	16.02	0.03	0	Drum- 1.67
4/19/2021	15.84	15.85	0.01	0	Drum- 1.70
4/26/2021	15.84	15.88	0.04	0	Drum- 1.96
5/4/2021	14.7	14.71	0.01	0	Drum- 2.40
5/13/2021	15.98	16.21	0.23	0	Drum-0.98
5/19/2021	16.15	16.16	0.01	0	Drum- 0.49
5/24/2021	16.28	16.29	0.01	0	Drum- 1.00
6/1/2021	14.81	14.82	0.01	0	Drum-1.52
6/8/2021	16	16.02	0.02	0	

*Measured height of Free Product accumulated in drum. Height of drum is assumed to be approximately 2.5 ft and equal to approximately 50 gallons. Comment on 3/26/2021 stated 'drum 1.28 ft'. Total amount of Free Product Recovered = 36.6 gallons.

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: VE4-1 Diameter: 4 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	8.00	0.00	0	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: VE4-5 Diameter: 4 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	9	9.32	0.32	0	
4/16/2021	9.25	9.58	0.33	0	
4/19/2021	9.05	9.42	0.37	0	
4/26/2021	9.48	9.96	0.48	0	
5/4/2021	9.55	9.98	0.43	0	
5/13/2021	9.65	10.25	0.6	1.13	
5/19/2021	9.85	10.29	0.44	0	
5/24/2021	9.92	10.38	0.46	0	
6/1/2021	9.85	10.12	0.27	0	
6/8/2021	9.55	10.5	0.95	1.25	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: VE4-6 Diameter: 4 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	7.12	0.00	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: VE4-7 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/4/2021	-	8.72	0	0	
6/1/2021	-	7.25	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: VE4-8 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	8.06	0	0	
6/1/2021	-	8.36	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: VE4-9 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/4/2021	-	8.25	0	0	
6/1/2021	7.51	8.06	0.55	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: VE4-10 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	12.29	12.35	0.06	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: VE4-11 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	-	13.41	0	0	

Metro-North Railroad Free Product Recovery Report

Metro-North Yard: Harmon (OU I) Well ID: VE4-12 Diameter: 4 in.

Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
5/5/2021	13.71	13.72	0.01	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU I) Well ID: VE4-13 Diameter: 4 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
Not measured					

OFF-SITE WELLS

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU II) Well ID: OUII-A Diameter: 1 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	-	7.91	0	0	
4/16/2021	-	8.38	0	0	
4/19/2021	-	8.45	0	0	
4/26/2021	-	8.49	0	0	
5/4/2021	-	8.52	0	0	
5/13/2021	-	8.48	0	0	
5/19/2021	-	8.59	0	0	
5/24/2021	-	8.62	0	0	
6/1/2021	-	8.78	0	0	
6/8/2021	8.75	8.76	0.01	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU II) Well ID: OUII-B Diameter: 1 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	7.67	7.68	0.01	0	
4/16/2021	8.15	8.32	0.17	0	
4/19/2021	8.12	8.33	0.21	0	
4/26/2021	8.28	8.65	0.37	0	
5/4/2021	8.38	8.55	0.17	0	
5/13/2021	8.29	8.42	0.13	0	
5/19/2021	8.33	8.49	0.16	0	
5/24/2021	8.51	8.52	0.01	0	
6/1/2021	8.55	8.66	0.11	0	
6/8/2021	8.61	8.75	0.14	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU II) Well ID: OUII-C Diameter: 1 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	-	7.32	0	0	
4/16/2021	-	8.07	0	0	
4/19/2021	-	8.06	0	0	
4/26/2021	-	8.32	0	0	
5/4/2021	-	8.38	0	0	
5/13/2021	-	8.22	0	0	
5/19/2021	-	8.36	0	0	
5/24/2021	-	8.5	0	0	
6/1/2021	-	8.32	0	0	
6/8/2021	-	8.48	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU II) Well ID: OUII-D Diameter: 1 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	-	7.12	0	0	
4/16/2021	-	8.42	0	0	
4/19/2021	-	8.53	0	0	
4/26/2021	-	8.52	0	0	
5/4/2021	8.68	8.78	0.1	0	
5/13/2021	8.45	8.49	0.04	0	
5/19/2021	8.53	8.57	0.04	0	
5/24/2021	8.55	8.6	0.05	0	
6/1/2021	8.31	9.01	0.7	0	
6/8/2021	8.68	8.74	0.06	0	

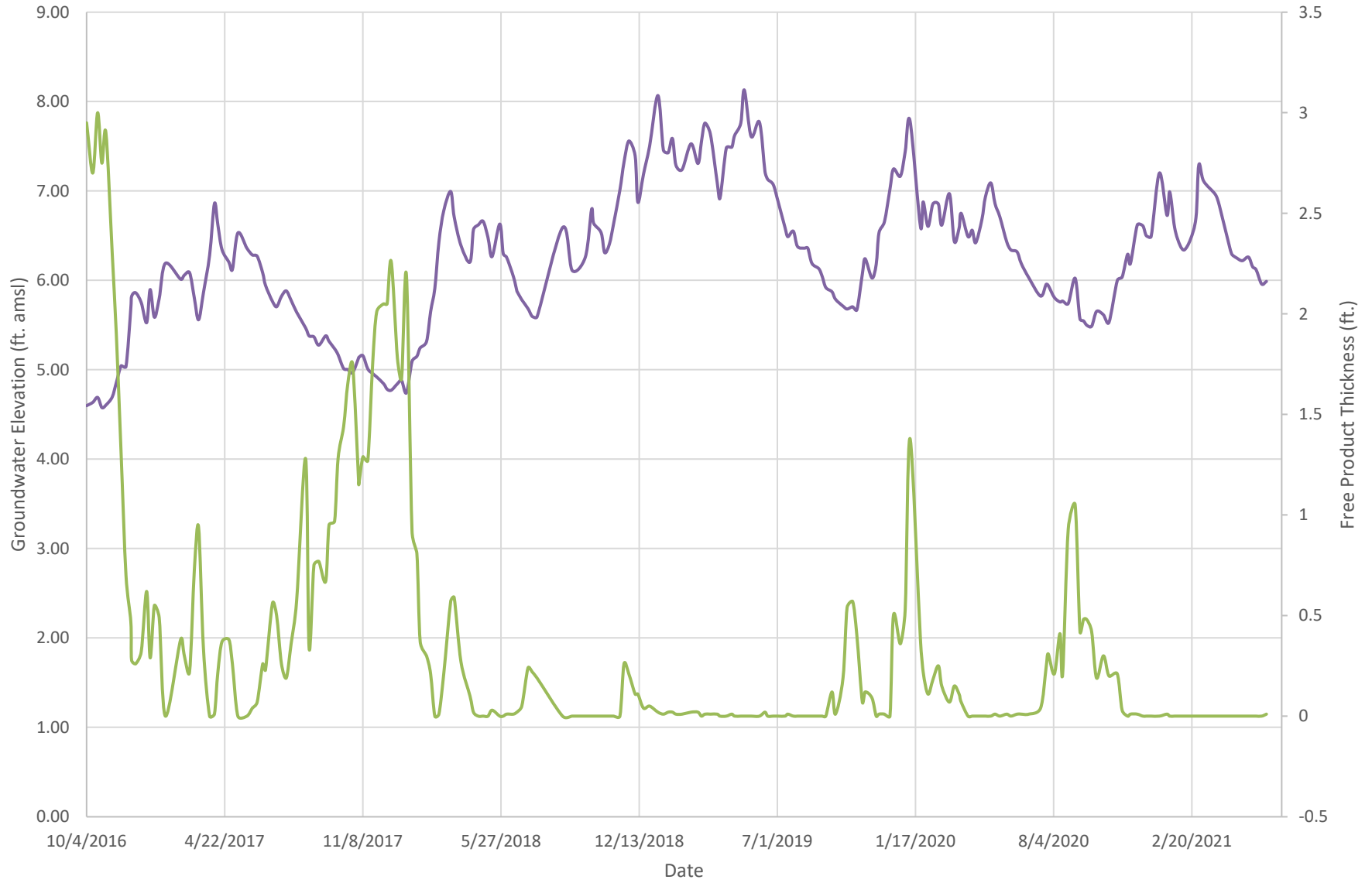
Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU II) Well ID: OUII-E Diameter: 1 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	-	8.15	0	0	
4/16/2021	-	8.48	0	0	
4/19/2021	-	8.55	0	0	
4/26/2021	-	8.58	0	0	
5/4/2021	-	8.74	0	0	
5/13/2021	-	8.78	0	0	
5/19/2021	-	8.83	0	0	
5/24/2021	-	8.91	0	0	
6/1/2021	-	8.89	0	0	
6/8/2021	-	8.88	0	0	

Metro-North Railroad Free Product Recovery Report					
Metro-North Yard: Harmon (OU II) Well ID: OUII-F Diameter: 1 in.					
Date	Depth to Free Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Free Product Recovered (gal)	Comments
4/1/2021	4.19	4.75	0.56	0	
4/16/2021	5.39	5.85	0.46	0	
4/19/2021	5.4	5.9	0.5	0	
4/26/2021	5.55	6.1	0.55	0	
5/4/2021	5.92	6.33	0.41	0	
5/13/2021	5.89	5.93	0.04	0	
5/19/2021	5.96	6.08	0.12	0	
5/24/2021	6.01	6.09	0.08	0	
6/8/2021	5.9	5.95	0.05	0	

ATTACHMENT B

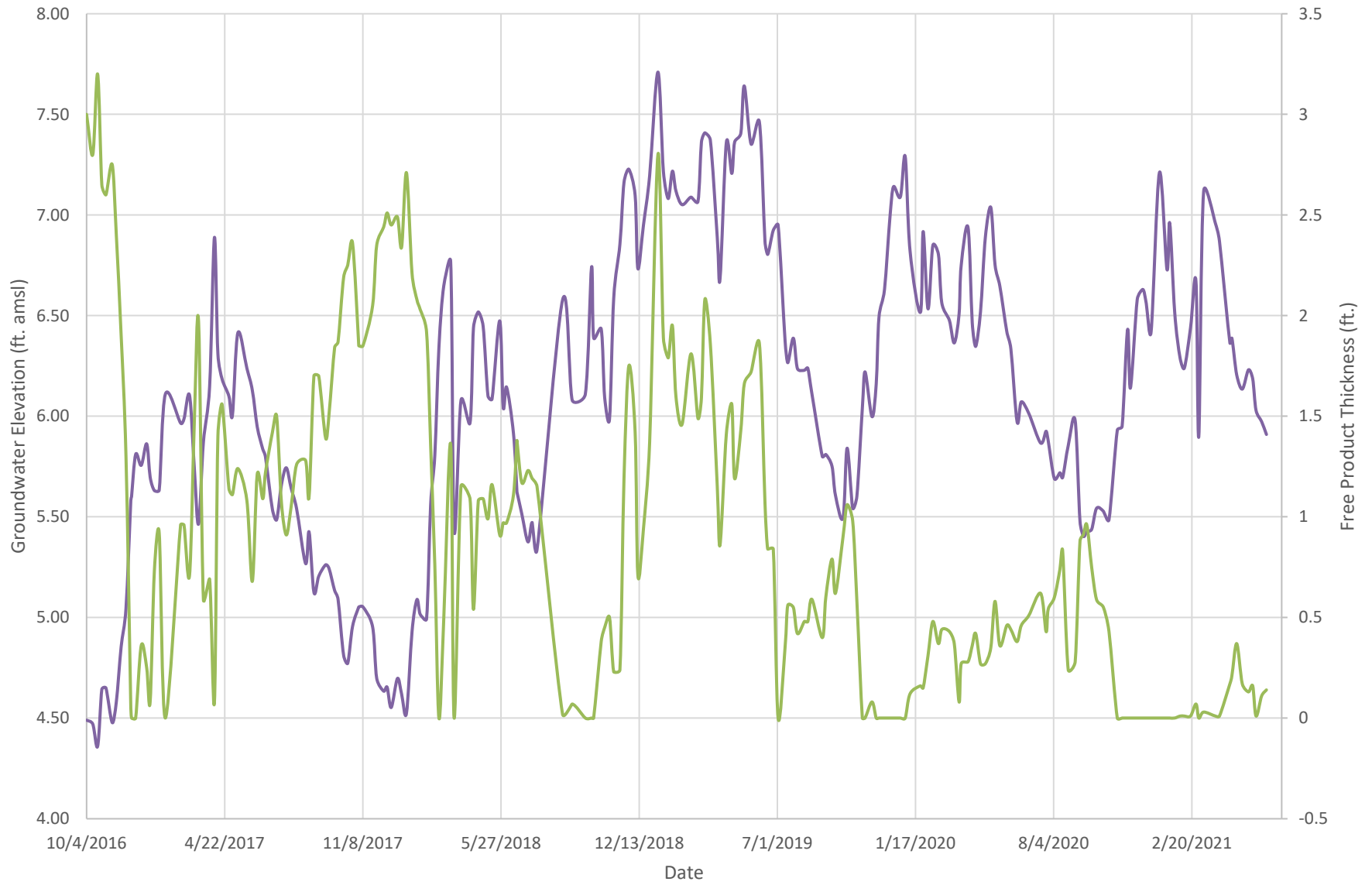
Off-Site Monitoring Well Hydrographs

OUII-A Hydrograph



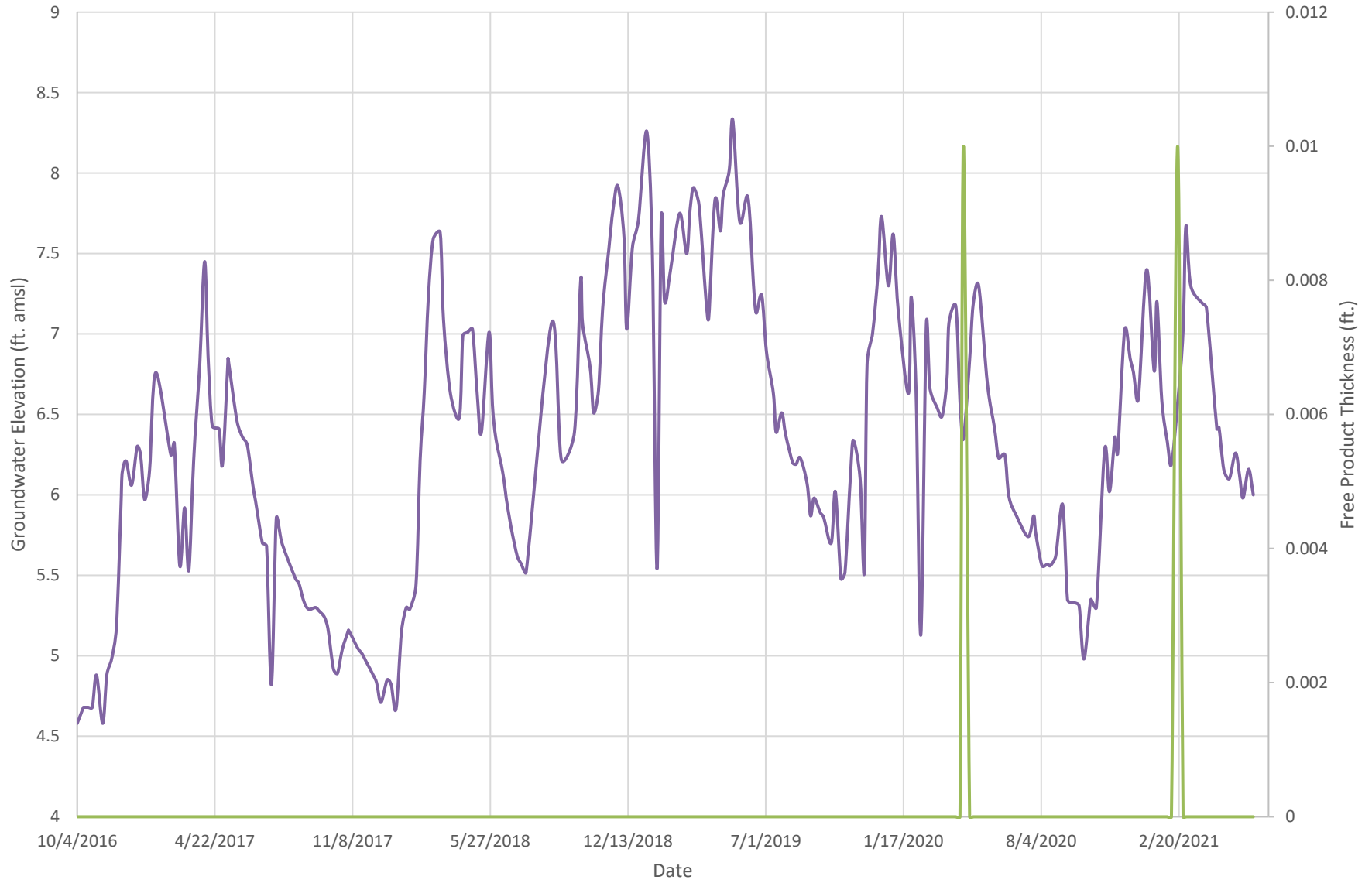
— Groundwater Elevation — Free Product Thickness (ft)

OUII-B Hydrograph



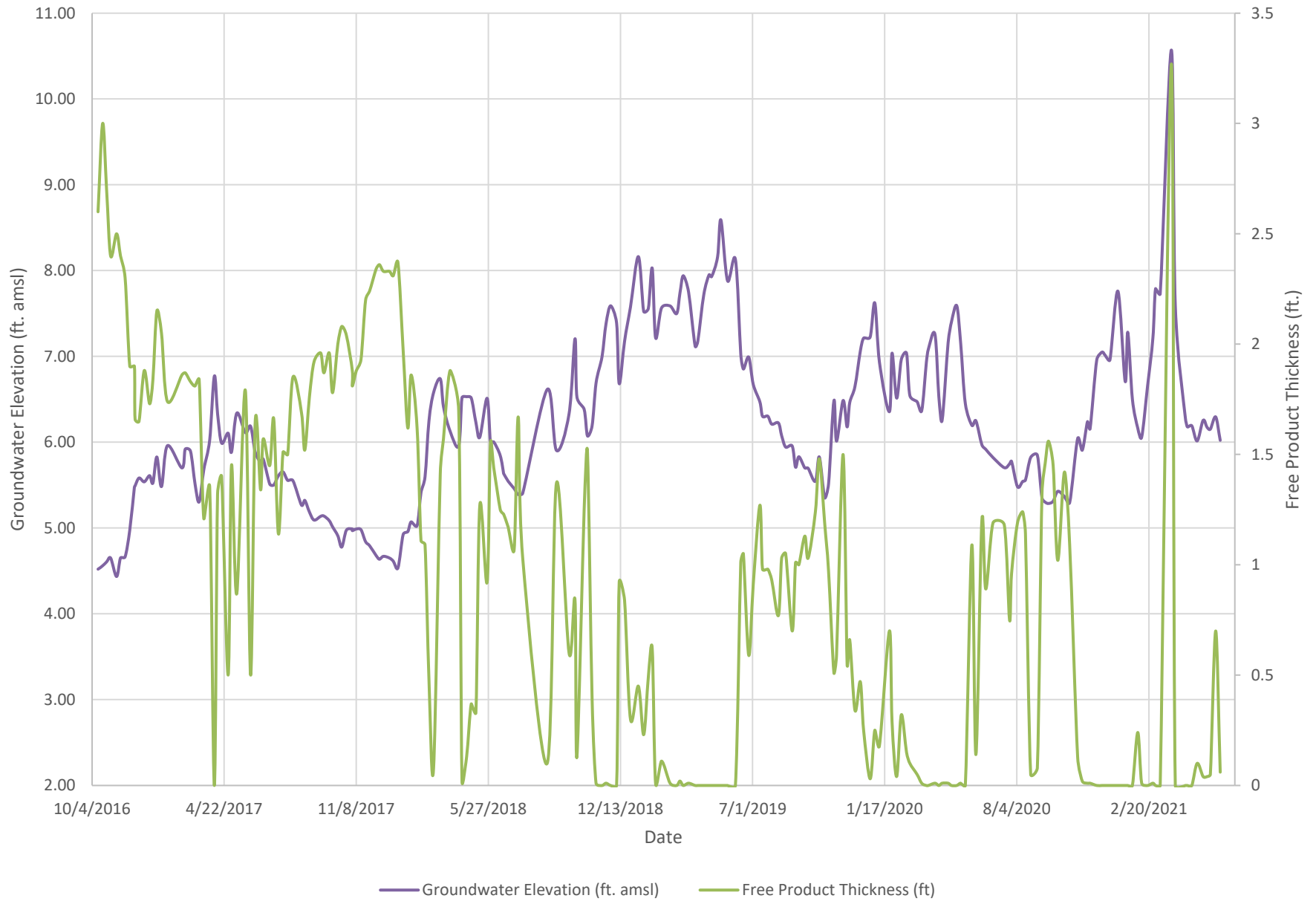
— Groundwater Elevation (ft. amsl) — Free Product Thickness (ft.)

OUII-C Hydrograph

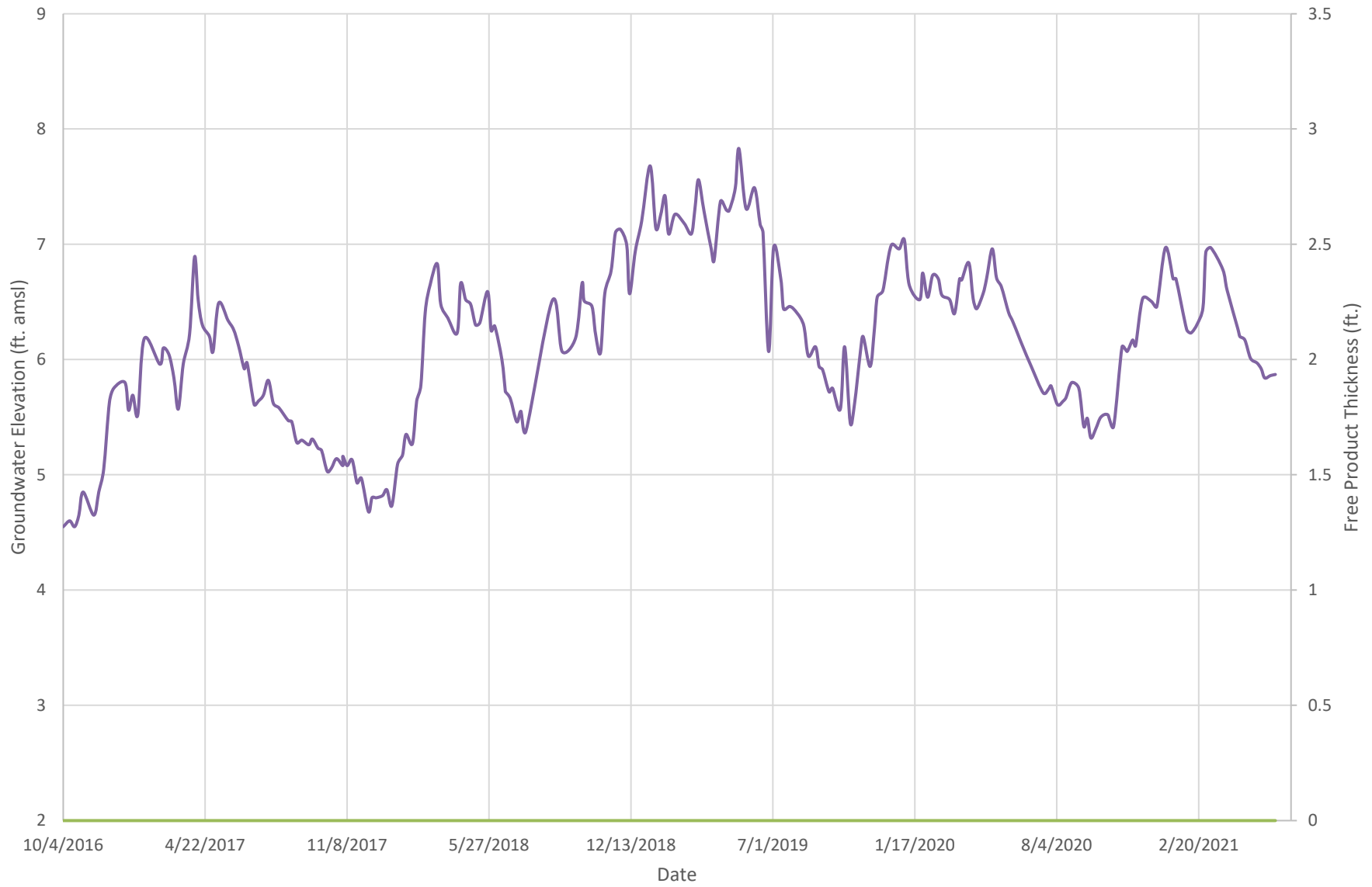


— Groundwater Elevation (ft. amsl) — Free Product Thickness (ft.)

OUII-D Hydrograph

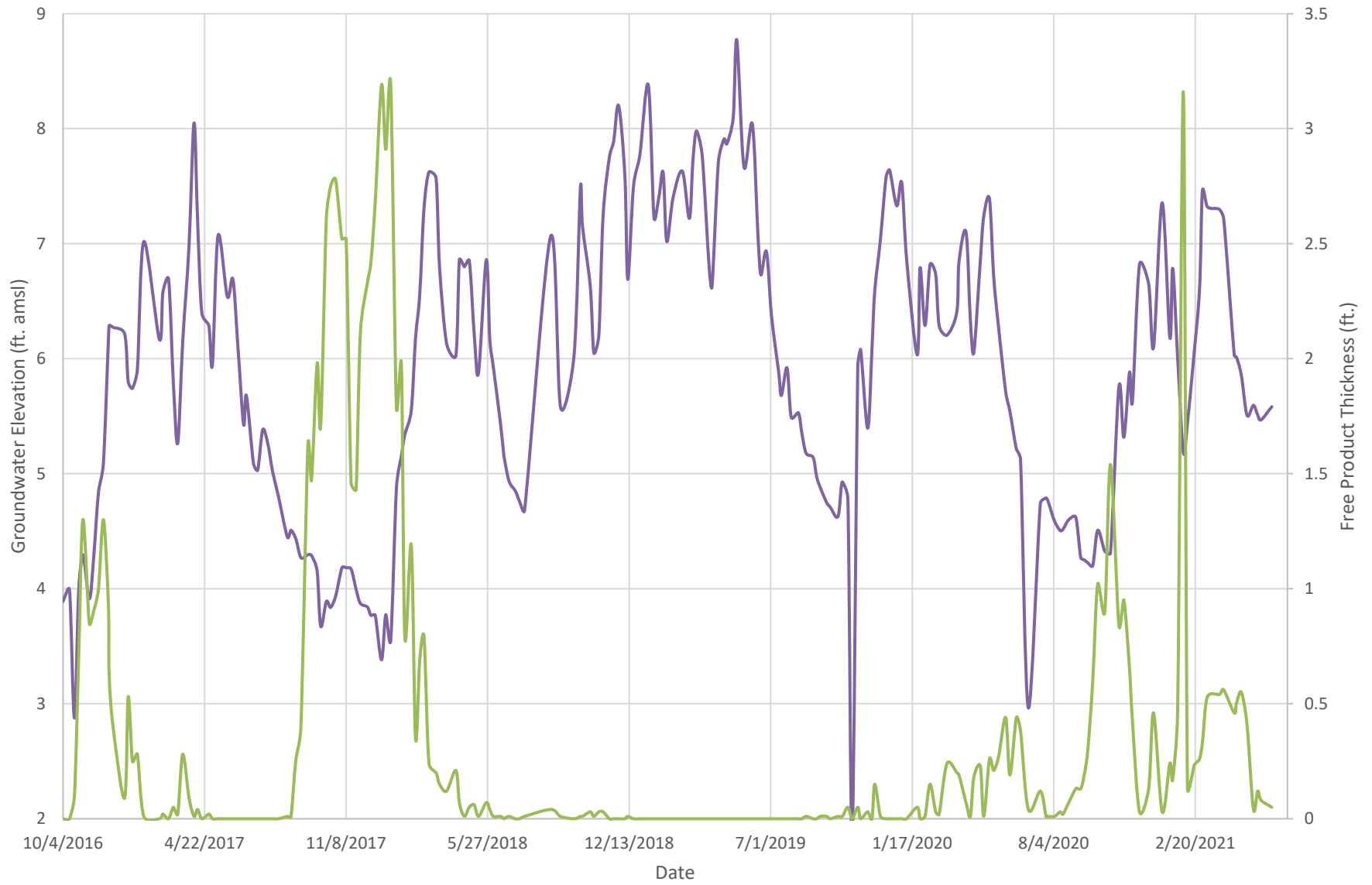


OUII-E Hydrograph



— Groundwater Elevation (ft. amsl) — Free Product Thickness (ft.)

OUII-F Hydrograph



— Groundwater Elevation (ft. amsl) — Free Product Thickness (ft.)

ATTACHMENT C

**April 19, 2021 Inspection
Signed Manifest**

**Metro-North Railroad Harmon Yard Operational Unit OU-I and OU-II
Inspection Form
NYSDEC Site Number 3-60-010**

*Note the location(s) of the inspection findings described below on the attached site sketch.
Also attach copies of photographs to document conditions observed at the time of this inspection
and show the location/orientation of the photographs taken on the site sketch.*

	Yes	No	Corrective Action Needed?
<u>OU-I Asphalt Cover</u>			
Are there any cracks in the asphalt cover?		x	
Any geotextile observed?		x	
Is there any surface water ponding on the asphalt cover?		X	
Is there any evidence of settlement?		X	
Is there any elevation difference at the grouted manhole covers?		x	
Settlement or erosion in the area of the perimeter sheet pile wall?		x	

Specify the Recommended Corrective Actions and Other Relevant Observations:

OU-I Contingency Air-Inlet/Vapor Extraction Well Clusters

Describe the condition of the protective covers and the well clusters. Also, provide other relevant observations, and include photographs (if warranted).

Good condition

OU-II Areas Around the Asphalt Cover

Are there any erosion rivulets?		x	
Is there evidence of any washouts or soil slides?		x	
Is the vegetative cover maintained?		X	
Is there debris or other material on the slopes?		X	
Settlement or erosion in the area of the NAPL Area L1 sheet pile wall?		x	

Specify the Recommended Corrective Actions and Other Relevant Observations:

Dumpster on site to continue removal of scrap metal.

OU-II Monitoring and Product Removal Wells

Describe condition of monitoring wells and protective casings noting wells that require repairs. If warranted include photographs of wells and note the location of the photograph and well on the site sketch.

Monitoring wells and protective casings in good condition.

OU-I/OU-II Drainage Channels

Is there any exposed geotextile in the drainage channel?

	X
	X
	X

If so, is the exposed geotextile damaged?

Is there significant sedimentation in the drainage channel?

{The rip rap drainage channel is located adjacent to the asphalt cover so there should be minimal sedimentation, and any significant sedimentation should be investigated to determine its source and cause.}

Specify the Recommended Corrective Actions and Other Relevant Observations:

Yes	No	Corrective Action Needed?
-----	----	------------------------------

OU-I/OU-II Waste Accumulation Drums and Tank

Is the 500-gallon waste oil disposal AST full? **REMOVED – N/A**

	X
	X
	X

Are the 55-gallon waste oil disposal drums full?

Is the 55-gallon NRD disposal drum full?

Evidence of spillage/leakage in the area of disposal vessels?

Explain when the drums and AST were last sampled, and attach copies of test results (if available). Identify when the drums and AST last emptied/replaced and list disposal facilities/dates (if known). Provide additional information as warranted.

8 Drums disposed of Dec 2020. See attached manifest.

OU-I/OU-II Perimeter Fencing

Is there any damaged fencing?

	X
--	---

--

Is there any vegetation close to the exterior of the fence that should be removed to eliminate a means for access to the Site over the fence?

	X
X	

Are the gate locks present and in good working condition?

Specify Correction Actions Needed:

N/A

Date of Inspection: 4/19/21

Inspection Completed By: S. Gianazza

cc: Metro-North Department of Environmental Compliance and Services



NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number
NYD084006477

2. Page 1 of
1

3. Emergency Response Phone
CHIEF DISPATCHER
212-340-2050

4. Waste Tracking Number
86198F

5. Generator's Name and Mailing Address
METRO NORTH RAILROAD
C/O ENVIRONMENTAL DEPT
525 NORTH BROADWAY
WHITE PLAINS, NY 10603

Generator's Site Address (if different than mailing address)
METRO NORTH RAILROAD-HARMON YD
100 CROTON HARMON YARDS
CROTON ON HUDSON, NY 10520

Generator's Phone: 914-461-0427 ATTN:MICHAEL LEMOINE

6. Transporter 1 Company Name
FREEHOLD CARTAGE, INC.

U.S. EPA ID Number
NJD054126164

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
EQ DETROIT, INC.
1923 FREDERICK
DETROIT, MI 48211

U.S. EPA ID Number
MID980991566

Facility's Phone: 313-347-1300

9. Waste Shipping Name and Description

10. Containers

11. Total Quantity

12. Unit Wt./Vol.

1. NON-REGULATED MATERIAL (OIL/WATER)

No.

Type

8

DM

3200
EST

P

021L

2.

3.

4.

13. Special Handling Instructions and Additional Information

1.) WASTE OIL/WATER ITEM 17 (KF051050) (55 GAL) WTS ORDER # 86198

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/Offor's Printed/Typed Name

Karen Miele for Metro North Railroad

Signature

Karen Miele

Month Day Year
12 2 20

15. International Shipments

Import to U.S.

Export from U.S.

Port of entry/exit:

Transporter Signature (for exports only):

Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Brian Kohr

Signature

BK

Month Day Year
12 2 20

Transporter 2 Printed/Typed Name

Signature

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space

Quantity

Type

Residue

Partial Rejection

Full Rejection

17b. Alternate Facility (or Generator)

Manifest Reference Number:

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

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

Printed/Typed Name

Kori Mobley

Signature

K. P. D.

Month Day Year
12 4 20

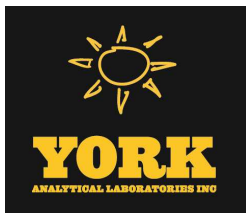
GENERATOR

INT'L
TRANSPORTER

DESIGNATED FACILITY

ATTACHMENT D

York Analytical Laboratory Report



Technical Report

prepared for:

Metro North Commuter Railroad

525 North Broadway
White Plains NY, 10603
Attention: Sara Gianazza

Report Date: 07/08/2021

Client Project ID: OUII Recovery Oil Well # AI2-3 #2

York Project (SDG) No.: 21F1394

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371



132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 07/08/2021
Client Project ID: OUII Recovery Oil Well # AI2-3 #2
York Project (SDG) No.: 21F1394

Metro North Commuter Railroad
525 North Broadway
White Plains NY, 10603
Attention: Sara Gianazza

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on June 30, 2021 and listed below. The project was identified as your project: **OUII Recovery Oil Well # AI2-3 #2**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
21F1394-01	Well No. AI2-3 No. 2	Oil	06/29/2021	06/30/2021

General Notes for York Project (SDG) No.: 21F1394

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: 

Cassie L. Mosher
Laboratory Manager

Date: 07/08/2021





Sample Information

Client Sample ID: Well No. AI2-3 No. 2

York Sample ID: 21F1394-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21F1394	OUII Recovery Oil Well # AI2-3 #2	Oil	June 29, 2021 1:00 pm	06/30/2021

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Oil Preparation for GC

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg	4.91	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	07/08/2021 10:50	07/08/2021 14:29	BJ
11104-28-2	Aroclor 1221	ND		mg/kg	4.91	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	07/08/2021 10:50	07/08/2021 14:29	BJ
11141-16-5	Aroclor 1232	ND		mg/kg	4.91	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	07/08/2021 10:50	07/08/2021 14:29	BJ
53469-21-9	Aroclor 1242	ND		mg/kg	4.91	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	07/08/2021 10:50	07/08/2021 14:29	BJ
12672-29-6	Aroclor 1248	ND		mg/kg	4.91	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	07/08/2021 10:50	07/08/2021 14:29	BJ
11097-69-1	Aroclor 1254	ND		mg/kg	4.91	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	07/08/2021 10:50	07/08/2021 14:29	BJ
11096-82-5	Aroclor 1260	ND		mg/kg	4.91	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	07/08/2021 10:50	07/08/2021 14:29	BJ
1336-36-3	* Total PCBs	ND		mg/kg	4.91	1	EPA 8082A Certifications:	07/08/2021 10:50	07/08/2021 14:29	BJ

Surrogate Recoveries		Result	Acceptance Range
877-09-8	Surrogate: Tetrachloro-m-xylene	92.0 %	30-150
2051-24-3	Surrogate: Decachlorobiphenyl	98.0 %	30-150



Analytical Batch Summary

Batch ID: BG10341

Preparation Method: Oil Preparation for GC

Prepared By: BCJ

YORK Sample ID	Client Sample ID	Preparation Date
21F1394-01	Well No. AI2-3 No. 2	07/08/21
BG10341-BLK1	Blank	07/08/21
BG10341-SRM1	Reference	07/08/21



Polychlorinated Biphenyls by GC/ECD - Quality Control Data
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	-----------------	-------	-------------	----------------	------	-------------	------	-----	-----------	------

Batch BG10341 - Oil Preparation for GC

Blank (BG10341-BLK1)

Prepared & Analyzed: 07/08/2021

Aroclor 1016	ND	5.00	mg/kg								
Aroclor 1221	ND	5.00	"								
Aroclor 1232	ND	5.00	"								
Aroclor 1242	ND	5.00	"								
Aroclor 1248	ND	5.00	"								
Aroclor 1254	ND	5.00	"								
Aroclor 1260	ND	5.00	"								
Total PCBs	ND	5.00	"								
<i>Surrogate: Tetrachloro-m-xylene</i>	27.8		"	20.0		139	30-150				
<i>Surrogate: Decachlorobiphenyl</i>	21.2		"	20.0		106	30-150				

Reference (BG10341-SRM1)

Prepared & Analyzed: 07/08/2021

Aroclor 1260	103	5.00	mg/kg	100		103	19.06-140.6				
<i>Surrogate: Tetrachloro-m-xylene</i>	20.1		"	20.0		100	30-150				
<i>Surrogate: Decachlorobiphenyl</i>	20.5		"	20.0		102	30-150				

Batch Y1G0831 - BG10242

Aroclor Reference (Y1G0831-ARC1)

Prepared & Analyzed: 07/08/2021

<i>Surrogate: Tetrachloro-m-xylene</i>	0.219		ug/mL	0.200		110					
<i>Surrogate: Decachlorobiphenyl</i>	0.175		"	0.200		87.5					



Sample and Data Qualifiers Relating to This Work Order

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.



YORK Analytical Laboratories, Inc.
 120 Research Drive
 Stratford, CT 06615
 clientservices@yorklab.com
 www.yorklab.com



Field Chain-of-Custody Record

YORK Project No.
 21F1394

Page ___ of ___

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YOUR INFORMATION		Report To:		Invoice To:		YOUR Project Number		Turn-Around Time	
Company: mnr	Company: Tom Roszak	Company: mnr	Company: mnr	YOUR Project Name		oil well # AI 2-3 #2		RUSH - Next Day	
Address:	Address: Henry McKeel	Address:	Address:	YOUR Project Name		oil well # AI 2-3 #2		RUSH - Two Day	
Phone:	Phone:	Phone:	Phone:	YOUR Project Name		oil well # AI 2-3 #2		RUSH - Three Day	
Contact:	Contact:	Contact:	Contact:	YOUR Project Name		oil well # AI 2-3 #2		RUSH - Four Day	
E-mail:	E-mail:	E-mail:	E-mail:	YOUR Project Name		oil well # AI 2-3 #2		Standard (5-7 Day)	

Matrix Codes

S - soil / solid	<input type="checkbox"/>	Summary Report	Standard Excel EDD
GW - groundwater	<input type="checkbox"/>	QA Report	EQulS (Standard)
DW - drinking water	<input type="checkbox"/>	NY ASP A Package	<u>NYSEDEC EQUIS</u>
WW - wastewater	<input type="checkbox"/>	NY ASP B Package	NJDEP SRP HazSite
O - Oil ; Other	<input type="checkbox"/>		Other:

Sample Identification

Well # AI 2-3 #2

Samples Collected by (print your name above and sign below)
 Justin Jamison

Analysis Requested

CT RCP Standard Excel EDD
 CT RCP DQA/DUE EQulS (Standard)
 NJDEP Reduced Deliverables NYSEDEC EQUIS
 NJDKQP NJDEP SRP HazSite

Report / EDD Type (circle selections)

Summary Report Standard Excel EDD
 QA Report EQulS (Standard)
 NY ASP A Package NYSEDEC EQUIS
 NY ASP B Package NJDEP SRP HazSite

Container Description

1 LR Amber
 Unpreserved

Comments: Email To:
 esmelt@zaimail.com
 Henry McKeel@mar.org

Preservation: (check all that apply)
 HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___ ZnAc ___
 Ascorbic Acid ___ Other: ___

Relinquished by / Company

6-30-21 8:11	6-30-21 8:11	6-30-21 8:11
OFFICE	Chive	Chive
Received by / Company	Samples Relinquished by / Company	Samples Relinquished by / Company
Date/Time	Date/Time	Date/Time

Received at Lab

6-30-21 1624	6-30-21 1624
Temp. Received at Lab	Temp. Received at Lab
1.1	1.1

Degrees C