

SITE MANAGEMENT PLAN STATUS REPORT
REPORT PERIOD: September 1, 2015 THROUGH November 30, 2015
HARMON RAILROAD YARD
OU-I AND OU-II
WESTCHESTER COUNTY, NEW YORK
SITE NO. 3-60-010

SUMMARY OF WORK COMPLETED DURING THE REPORT PERIOD: This report summarizes the remedial actions and monitoring completed between September 1, 2015 and November 30, 2015 (i.e., the 15th Quarter of operation). This document was prepared in accordance with the provisions of 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 (the SMP).

During this report period, an inspection of OU-I and OU-II, including the NAPL Area 1 Sheeting Wall, was completed on September 10, 2015. The results of this inspection are presented in Attachment A. Generally, this inspection revealed that the remedial systems and Engineering Controls (ECs) were functioning as designed. However, the need for several corrective actions was identified during the inspection, and these actions are summarized in the “Problems Encountered/Resolution” section of this report.

An elevation survey was completed on October 15, 2015 to determine the monitoring point elevation for OU-II area replacement wells AI2-3, FA4-8, FA4-11, FA4-12, FA4-14, FA4-16, and FA4-18, the OU-I area piezometers P-1 through P-10, and well WB-9.

The weekly and quarterly NAPL and groundwater monitoring was conducted as outlined in the SMP, with additional monthly monitoring in select wells, as outlined in previous progress reports and/or the March 2014 Corrective Action Plan (the CAP). NAPL was removed from select wells during these periodic monitoring events. The results of the monitoring and NAPL removal conducted during the report period are summarized below.

DEPTH TO GROUNDWATER AND NAPL MEASUREMENTS: During this report period, quarterly monitoring was conducted on November 3, 2015. This monitoring included the measurement of static water levels and the evaluation of NAPL in functioning monitoring wells. The results of this monitoring are summarized on the tables presented in Attachment B. A groundwater contour map developed using static water levels measured on November 3, 2015 is included as Figure 1.

NAPL REMOVAL RECORDS: The depth to groundwater, NAPL thickness measurements and NAPL removal records completed/compiled during this report period are presented on the tables included in Attachment B. A summary of the total amount of NAPL removed from each well during the current report period is attached as Table 1, and a summary of the total amount of NAPL historically removed from each well between December 1, 2012 and August 31, 2015 is attached to this report as Table 2. A spider diagram presenting the maximum NAPL thicknesses and the amount of NAPL removed from the wells monitored is included as Figure 2. This figure shows measurements obtained during the current and preceding report period.

The OU-II NAPL accumulation area was inspected on December 8, 2015. During this inspection, no evidence of leakage/spillage was observed in proximity of the NAPL and NRD collection drums. This inspection also revealed that one 55-gallon drum, containing approximately 30 gallons of NAPL that was removed from recovery well RW-1 using a Spill Buster™ between October 30, 2015 and December 8, 2015, and one 55-gallon drum containing approximately 50 gallons of NAPL that was removed from other OUI and OUII area wells between October 30, 2015 and December 8, 2015, were present in the NAPL accumulation area. In addition, spent NRDs removed from other wells within OU-II between December 18, 2014 and December 8, 2015 were stored in two 55-gallon drums, and these drums contained a total of approximately 90 gallons of spent NRDs.

NAPL/SOIL DISPOSAL RECORDS: Samples from two full accumulated NAPL drums were collected on October 30, 2015 and submitted to York under chain-of-custody control, and tested for PCBs using USEPA Method 8082. A copy of the report prepared by York is included in Attachment C. [Note: Due to re-construction activities currently underway at the Harmon Railroad Yard, the former waste accumulation area is in-operable, and therefore the full accumulated NAPL drums are being temporarily stored in the OUII NAPL accumulation area while awaiting disposal.]

GROUNDWATER SAMPLING AND TESTING: Groundwater sampling and testing was not required during the report period. However, test results for the groundwater samples collected between March 2012 (i.e., the initial quarter completed under the SMP) and May 20, 2015 (the most-recent sampling event), are included for reference purposes in this report as Attachment D. The groundwater test results summarized in Attachment D include volatile organic compounds, semi-volatile organic compounds, polychlorinated biphenyls, and metals.

PROBLEMS ENCOUNTERED/RESOLUTION: The following items were identified for corrective actions during the September 10, 2015 inspection of the OU-I and OU-II areas (refer to Attachment A):

- Evidence of settlement, ponding of surface water, and minor cracking was observed over portions of the OU-I asphalt pavement;
- The well casing for NAPL monitoring and recovery well AI1-16 was noted to be broken at the ground surface;
- The removal of the stacked railroad ties surrounding monitoring and recovery well V-2 had not been completed; and
- Accumulated debris/materials were noted on the slopes in various locations around the OU-II areas.

The repairs and maintenance required to resolve the deficiencies identified in the OU-I and OU-II areas have been initiated and this work is anticipated to continue in the Spring of 2016 as weather permits. The removal process for the debris/materials in the OU-II areas is ongoing, and as of the writing of this report, fifteen dumpsters of debris/materials have been removed from the OU-I and OU-II areas. Sealing of the cracks noted during monitoring events in the OU-I asphalt pavement began on August 29, 2015 and continued through the reporting period. Visual

observations of the crack sealing work completed on December 9, 2015 indicated that greater than 90% of target cracks (i.e., cracks greater than approximately ¼ inch in width) in accessible areas (i.e., not covered by debris or equipment) have been sealed. It is anticipated that the crack sealing work will continue in the Spring of 2016 subsequent to the removal of additional debris/material from the OU-I asphalt pavement.

The following corrective actions are tentatively scheduled for completion during the upcoming report period (i.e., December 2015-February 2016):

- Curbox installation to repair NAPL monitoring and recovery well AI-16;

The following corrective actions are tentatively scheduled for completion during the report period March-May, 2016

- The removal of railroad ties from around monitoring and recovery well V-2 and subsequent placement of asphalt pavement around the well; and
- Pavement (with asphalt) of the OU-I settlement area.

No other problems associated with the remedial systems or ECs requiring repair/modification were identified during the report period.

WORK ANTICIPATED FOR THE UPCOMING REPORT PERIOD AND SCHEDULE:

Currently it is anticipated that during the upcoming reporting period (i.e., between December 1, 2015 and February 29, 2016), NAPL and groundwater monitoring will continue in accordance with the schedule presented in the SMP, as modified by the schedule presented in the March 2014 CAP. It is anticipated that NAPL will continue to be removed from RW-1 using the Spill Buster system and pumping will be used in other locations. Specifically, NAPL will be removed using a Spill Buster (or similar) if the following thicknesses are measured.

- 2-inch diameter wells: 0.8 ft. or more
- 4-inch diameter wells: 0.2 ft. or more
- 6-inch diameter wells: 0.1 ft. or more

Note: The use of NRDs for NAPL recovery in the OU-I and OU-II monitoring and recovery wells will be discontinued at this time, pending an evaluation of the removal options described above. NRDs remaining in the OU-I/ OU-II monitoring and recovery wells will be removed and placed in the 55-gallon drums dedicated for recovered NAPL NRDs. The two 55-gallon drums currently located in the OU-II area, dedicated for recovered NAPL NRDs will be sampled for testing and subsequently disposed in accordance with applicable regulations.

It is anticipated that during upcoming quarter samples of NAPL will be collected and tested from full NAPL drums, as outlined in the SMP. The full NAPL drums will subsequently be transported off the Site and disposed of in accordance with applicable regulations.

Procedures to enhance the recovery of NAPL in replacement wells AI2-3, FA4-11, and/or FA4-14 will continue to be evaluated. Pending the results of this evaluation, it is anticipated that modifications to NAPL removal in these locations (e.g., installation of a Spill Buster™ product-only removal system, or similar) will be initiated in the Spring 2016.

It is also anticipated that a monitoring well will be installed at the northeastern terminus of the Sheet Pile Wall in Area L1 to assess whether NAPL is present in this area and to serve as a long-term NAPL monitoring point to confirm that NAPL from Area L1 is not migrating off-site in this area. [Note: A monitoring well that was installed during the remedial evaluation phase of the OU-I area (i.e., WB-9) was identified at the southwestern terminus of the sheet pile wall. This well was redeveloped on April 23, 2015 and found to be functioning (i.e., the initial depth to water was measured at 6.37 ft. below ground surface, and following removal of 10 gallons of water the depth to water was measured at 6.35 ft. below ground surface). As such, this well will serve as a long-term monitoring point to confirm that NAPL from Area L1 is not migrating off-site in this location.]

MNR is the process of negotiating an access agreement with Westchester County to install the off-site monitoring wells identified in the CAP. As of the date of this report, an access agreement has not been finalized. However, it is anticipated that this agreement will be finalized during the upcoming reporting period. Installation of the off-site monitoring wells will likely commence in Spring 2016, or earlier depending on weather conditions.

Removal/disposal of the accumulated materials on the OU-I cover will continue to be inventoried and disposed of or relocated as necessary to facilitate the repair of cracks in the asphalt cover.

It is anticipated that the crack repairs will continue in the Spring of 2016.

A Periodic Review Report (PRR), which will document work completed under the SMP between January 1, 2013 and January 1, 2016, will be submitted on or before March 1, 2016.

Last Date Saved: 18 Dec 2015 Document Path: \\mings\mnr\mnr_Data\mnr\Harmon Yard\OU1_COU2\Remediation_OU1_OU2\11032015.mxd



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 4-5 (5.27 ft)
Former Vapor Extraxtion (VE), Air Inlet (AI), Forced Air Injection (FA), or existing monitoring well and designation
- 4.0
Groundwater elevation for water level measurement made November 03, 2015
- 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)
- Extent of OU-I final cover system
- Extent of OU-I final cover system



PROJECT MANAGER	RLK	DATE	12-2015
DRAWN BY	CPS	DATE DRAWN	12-2015
SCALE	As Noted	DATE ISSUED	12-18-2015

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

Groundwater Conour Map: November 03, 2015

Project No.
 15-3356M (46)

FIGURE 1

Time Plotted: Friday, December 18, 2015 2:26:43 PM
 File Name: P:\Drawings\Metro\Harmon\Remediation-46\NAPL Wells Qtr Sept-Nov 2015.dwg
 Xerox432AnsiB-2; 11 x 17
 Layout Name: Layout1
 Pen Setting File: 800psHalfColorBeacon.ctb



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 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, or by reference to site features (e.g., DAY-1, RW-1, etc...)
3. NAPL is removed from RW-1 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
- OU-I Contingency Vapor Extraction System Wells
- FA4-8 Long-Term Monitoring Well Identification
- NAPL Removed (Gallons) During Quarter
- Maximum NAPL Thickness (Feet) Measured During Quarter With Date Of Measurement
- Measurements Made During The Report Period June 1, 2015 Through August 31, 2015 Shown In Green (Left)
- Measurements Made During The Report Period September 1, 2015 Through November 30, 2015 Shown In Red (Right)
- N/M Well Not Measured

SITE PLAN
 1" = 80'



PROJECT MANAGER	DATE
CAH	12-2015
DRAWN BY	DATE DRAWN
RJM/CPS	12-9-2015
SCALE	DATE ISSUED
As Noted	12-9-2015

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**

DRAWING TITLE
**Summary Of NAPL Removal For The Quarters
 June - August 2015 and September - November 2015**

PROJECT NO.
 15-3356M (46)

FIGURE 2

ATTACHMENT A

METRO-NORTH RAILROAD HARMON YARD OPERATIONAL UNIT

OU-I AND OU-II

INSPECTION RESULTS FOR SEPTEMBER 10, 2015

**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		X
Any geotextile observed?		X	
Is there any surface water ponding on the asphalt cover?	X		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:

Crack repair began on 8/29/15 and will continue through the Fall until complete. (photo attached)

Paving of small area of settlement north of OUI catch basin scheduled for October 2015.

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).

Work to remove and clean tie surround from V2 still pending and will begin when pavement work is scheduled

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		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:

Continue removal of scrap and surplus equipment from the vegetated areas. 15 plus dumpsters have been used so far.

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.

Recommend that L1-AI-1-16 should have a curb box installed

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.

7/22/15 drums sampled and replaced (Refer to previous status report)

OU-I/OU-II Perimeter Fencing

Is there any damaged fencing?

	X
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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:

Date of Inspection: 9/10/15

Inspection Completed By: S. Gianazza

cc: Metro-North Department of Environmental Compliance and Services



Sealing of asphalt cap began
on 8/29/15 and will
continue through Fall 2015

ATTACHMENT B

**DEPTH TO GROUNDWATER AND NAPL MEASUREMENTS
AND
NAPL REMOVAL RECORDS
FOR
MEASUREMENTS MADE DURING THE REPORTING PERIOD
SEPTEMBER 1, 2015 THROUGH NOVEMBER 30, 2015**

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: P1		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	14.5	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: P2		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	14.35	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: P3		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	14.7	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: P4		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	14.3	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: P5		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	15.1	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: P6		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	4.8	0	0	0	WELL HOLE IS COMPROMISED AND CAN NOT REPAIR

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: P7		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	14.65	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: P8		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	14.3	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: P9		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	14.3	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: P10		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	14.2	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: V1		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	0	16.5	0	0	0	
9/11/2015	0	16	0	0	0	
9/17/2015	0	15.6	0	0	0	
9/25/2015	0	16.7	0	0	0	
9/30/2015	0	16.7	0	0	0	
10/7/2015	0	16.75	0	0	0	
10/14/2015	0	16.75	0	0	0	
10/21/2015	16.8	16.9	0.1	0	0	
10/29/2015	0	17.1	0	0	0	LEFT NRD
11/3/2015	0	17.1	0	0	0	LEFT NRD IN
11/13/2015	17.2	17.25	0.05	0.55	0	REPLACED NRD
11/18/2015	0	17.2	0	0	0	LEFT NRD IN
11/25/2015	0	17.35	0	0	0	TRACE LEFT NRD IN

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: V2		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	0	17.6	0	0	0	
9/11/2015	0	17.6	0	0	0	LEFT NRD IN
9/17/2015	0	17.6	0	0	0	TRACE OF OIL
9/25/2015	17.65	17.8	0.15	0	0.75	
9/30/2015	0	17.65	0	0	0	LEFT NRD IN
10/7/2015	0	17.6	0	0	0	LEFT NRD IN
10/14/2015	0	17.6	0	0	0	
10/21/2015	0	17.6	0	0	0	TRACE
10/29/2015	17.6	17.65	0.05	0.36	0	REPLACED NRD
11/3/2015	0	17.6	0	0	0	LEFT NRD IN
11/13/2015	0	17.6	0	0	0	
11/18/2015	17.65	17.7	0.05	0.36	0	REPLACED NRD
11/25/2015	0	17.6	0	0	0	LEFT NRD IN

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: V3		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	17.65	17.7	0.05	0.62	0	REPLACED NRD
9/11/2015	17.8	17.89	0.09	0.63	0	CHANGED NRD
9/17/2015	17.45	17.5	0.05	0.54	0	REPLACED NRD
9/25/2015	17.8	17.85	0.05	0	0	LEFT NRD IN
9/30/2015	17.8	17.95	0.15	0.57	0	REPLACED NRD
10/7/2015	17.45	17.6	0.15	0.59	0	REPLACED NRD
10/14/2015	17.5	17.55	0.05	0.56	0	
10/21/2015	17.85	17.9	0.05	0.62	0	REPLACED NRD
10/29/2015	18	18.1	0.1	0.55	0	REPLACED NRD
11/3/2015	17.75	17.85	0.1	0.57	0	REPLACED NRD
11/13/2015	18.05	18.3	0.25	0.56	0	REPLACED NRD
11/18/2015	18.1	18.65	0.55	0.56	0	REPLACED NRD
11/25/2015	18.05	18.7	0.65	0.6	0.38	REMOVED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU I)				Well ID: V4		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	16.8	17.5	0.7	0	0.75	
9/11/2015	16.55	17.2	0.65	0	0.6	
9/17/2015	16.55	17.48	0.93	0	0.5	
9/25/2015	16.7	18	1.3	0	0.78	
9/30/2015	16.65	17.65	1	0	0.8	
10/7/2015	16.4	17	0.6	0	0.8	
10/14/2015	16.5	17.4	0.9	0	0	
10/21/2015	16.8	17.85	1.05	0	1	
10/29/2015	16.85	17.4	0.55	0	0.75	
11/3/2015	16.8	17.8	1	0	0.75	
11/13/2015	16.9	17.8	0.9	0	1	
11/18/2015	17.1	18.3	1.2	0	1.25	
11/25/2015	17	18.05	1.05	0	1.12	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: AI1-1		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	11.8	0	0	0	LEFT NRD IN

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: AI1-4		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	11.1	11.15	0.05	0	0	LEFT NRD IN

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: AI1-8		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	14.2	0	0	0	Left NRD in

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: A11-11		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	18.1	0	0	0	LEFT NRD IN

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: A11-12		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	17.8	0	0	0	LEFT NRD IN

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: A11-15		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	18.35	18.6	0.25	0.09	0	REPLACED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: A11-16		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	14.65	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE1-1		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	9.5	9.9	0.4	0.06	0	REPLACED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE1-2		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	10.25	0	0	0	LEFT NRD IN

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE1-3		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	9.45	0	0	0	LEFT NRD IN

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE1-4		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	10.95	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: AI2-2		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	15.7	0	0	0	TRACE

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: AI2-3		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	15.6	18.05	2.45	0	2.75	
9/11/2015	15.55	18.05	2.5	0	2.5	
9/17/2015	15.65	18.1	2.45	0	4.1	
9/25/2015	15.7	18.4	2.7	0	1	
9/30/2015	15.7	18.5	2.8	0	2.2	
10/7/2015	15.6	17.85	2.25	0	0	
10/14/2015	15.65	18.2	2.55	0	2.35	
10/21/2015	15.75	18.5	2.75	0	2.5	
10/29/2015	15.7	18.4	2.7	0	2.75	
11/3/2015	15.75	18.3	2.55	0	2.65	
11/13/2015	15.8	18.55	2.75	0	2.55	
11/18/2015	15.85	18.6	2.75	0	3	
11/25/2015	15.7	18	2.3	0	2.35	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE2-1		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	12.1	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: AI3-4		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	14.4	15.2	0.8	0	0	INSTALLED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: AI3-6		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	17.3	18.4	1.1	0	0.25	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE3-1		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	11.8	12.9	1.1	0	0.85	
10/29/2015	11.9	13.6	1.7	0	1.5	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: DAY-1		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	17.4	0	0	0	TRACE

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-8		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	17.15	17.75	0.6	0	0.5	
9/11/2015	17.1	17.7	0.6	0	0.5	
9/17/2015	17.25	17.55	0.3	0	0.5	
9/25/2015	17.3	17.7	0.4	0	0	
9/30/2015	17.3	17.75	0.45	0.07	0.25	REMOVED NRD
10/7/2015	17.1	17.55	0.45	0	0.5	
10/14/2015	17.2	17.6	0.4	0	0.26	
10/21/2015	17.4	17.55	0.15	0	0	
10/29/2015	17.65	17.7	0.05	0.51	0	REPLACED NRD
11/3/2015	0	17.6	0	0	0	LEFT NRD IN
11/13/2015	17.8	17.95	0.15	0.54	0	REPLACED NRD
11/18/2015	17.75	17.8	0.05	0.57	0	REPLACED NRD
11/25/2015	17.65	17.7	0.05	0.57	0	REPLACED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-9		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	0	9.1	0	0	0	
10/29/2015	9.35	9.4	0.05	0	0	INSTALLED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-11		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	11.9	13.5	1.6	0	1.25	
9/11/2015	11.9	13.7	1.8	0	1.5	
9/17/2015	11.95	13.85	1.9	0	1.5	
9/25/2015	12	14.05	2.05	0	1.5	
9/30/2015	12	14.15	2.15	0	1.5	
10/7/2015	11.85	14.05	2.2	0	1.55	
10/14/2015	11.95	13.95	2	0	1.5	
10/21/2015	12.05	14.15	2.1	0	0.8	
10/29/2015	12	14.1	2.1	0	1.75	
11/3/2015	12	14.2	2.2	0	1.75	
11/13/2015	12.05	14.3	2.25	0	2	
11/18/2015	12.1	14.3	2.2	0	1.5	
11/25/2015	11.95	14	2.05	0	1.14	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-12		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	14.9	16.65	1.75	0	1.5	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-13		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	9.2	10.25	1.05	0.13	0	REPLACED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-14		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	13.8	14.7	0.9	0	1	
9/11/2015	13.95	14.5	0.55	0	0.55	
9/17/2015	13.95	14.4	0.45	0	0.25	
9/25/2015	14.5	14.75	0.25	0	0.6	
9/30/2015	14	14.5	0.5	0	0.5	
10/7/2015	13.9	14.55	0.65	0	0.65	
10/14/2015	13.95	14.65	0.7	0	0.75	
10/21/2015	14.05	14.85	0.8	0	0.85	
10/29/2015	13.95	15.25	1.3	0	1.25	
11/3/2015	13.95	15	1.05	0	1.25	
11/13/2015	13.9	15.8	1.9	0	2	
11/18/2015	14	15.85	1.85	0	2	
11/25/2015	13.9	15.65	1.75	0	1.75	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-15		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	8.5	8.85	0.35	0.14	0	REPLACED NRD
9/11/2015	8.55	9.1	0.55	0.13	0.25	REPLACED NRD
9/17/2015	8.5	9.4	0.9	0.14	0	TRACE OF OIL THAT WAS NOT PUMPED, REMOVED NRD
9/25/2015	8	9.8	1.8	0	0.01	
9/30/2015	8.5	9.5	1	0.12	0.38	REMOVED NRD
10/7/2015	7.9	9.6	1.7	0	0.3	
10/14/2015	7.98	9.55	1.57	0	0.35	
10/21/2015	8	10.1	2.1	0	0.65	
10/29/2015	8	10	2	0	0.75	
11/3/2015	8	9.9	1.9	0	0.75	
11/13/2015	8.05	10.15	2.1	0	0.75	
11/18/2015	8.1	10.3	2.2	0	0.75	
11/25/2015	8	9.7	1.7	0	0.65	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-16		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	14.9	15.3	0.4	0	0.35	
9/11/2015	15	15.2	0.2	0.1	0	REMOVED NRD
9/17/2015	15.05	15.25	0.2	0.29	0	TRACE OF OIL NOT REMOVED, REMOVED NRD
9/25/2015	15.1	15.3	0.2	0	0	
9/30/2015	15.1	15.35	0.25	0	0.15	
10/7/2015	15	15.5	0.5	0	0.25	
10/14/2015	15.05	15.2	0.15	0	0	
10/21/2015	15.15	15.5	0.35	0	0.25	
10/29/2015	15.15	15.45	0.3	0	0	INSTALLED NRD
11/3/2015	15.3	15.35	0.05	0.53	0	REPLACED NRD
11/13/2015	15.35	15.4	0.05	0.53	0	REPLACED NRD
11/18/2015	0	15.45	0	0	0	LEFT NRD IN
11/25/2015	15.35	15.4	0.05	0.58	0	REPLACED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-17		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	8.7	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-18		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	13.4	13.45	0.05	0.11	0	
9/11/2015	13.5	13.55	0.05	0.09	0	REMOVED NRD
9/17/2015	13.5	13.6	0.1	0.09	0	TRACE OF OIL DID NOT REMOVED, REMOVED NRD
9/25/2015	13.55	13.7	0.15	0	0	
9/30/2015	13.55	13.75	0.2	0	0.12	
10/7/2015	13.45	13.9	0.45	0	0.35	
10/14/2015	13.5	13.9	0.4	0	0.45	
10/21/2015	13.65	13.8	0.15	0	0.3	
10/29/2015	13.6	13.8	0.2	0	0	INSTALLED NRD
11/3/2015	13.85	13.9	0.05	0.54	0	REPLACED NRD
11/13/2015	0	13.95	0	0	0	
11/18/2015	14	14.5	0.5	0.61	0	REPLACED NRD
11/25/2015	13.9	13.95	0.05	0.56	0	REPLACED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-20		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	12.65	0	0	0	TRACE

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-21		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	0	14.65	0	0	0	LEFT NRD IN
10/29/2015	0	14.8	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-23		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	13.6	13.65	0.05	0.11	0	REPLACED NRD
10/29/2015	0	13.9	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: PGW-2		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	7.9	8.5	0.6	0.12	0	REPLACED NRD
10/29/2015	7.9	9.2	1.3	0.16	0.5	REMOVED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: RW-1		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	15.3	15.35	0.05	0	0	2 DRUMS FULL
9/11/2015	15.25	15.5	0.25	0	0	2.25 DRUMS FULL
9/17/2015	15.35	15.5	0.15	0	0	
9/25/2015	15.5	15.6	0.1	0	0	
9/30/2015	15.6	15.9	0.3	0	0	
10/7/2015	15.3	15.4	0.1	0	0	
10/14/2015	15.4	15.45	0.05	0	0	
10/21/2015	15.5	15.6	0.1	0	0	
10/29/2015	15.3	16.35	1.05	0	1.5	
11/3/2015	15.45	15.5	0.05	0	0	
11/13/2015	15.5	15.8	0.3	0	0	
11/18/2015	15.55	15.75	0.2	0	0	
11/25/2015	15.4	15.45	0.05	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE4-1		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	10.2	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE4-5		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	10.35	10.85	0.5	0.5	0.45	
9/11/2015	10.1	11.45	1.35	0	1	
9/17/2015	10.2	11.45	1.25	0	1	
9/25/2015	10.3	11.75	1.45	0	1.2	
9/30/2015	10.25	11.45	1.2	0	0.85	
10/7/2015	10.15	11.35	1.2	0	0.85	
10/14/2015	10.15	11.5	1.35	0	1	
10/21/2015	10.3	11.75	1.45	0	1	
10/29/2015	10.25	11.7	1.45	0	1.25	
11/3/2015	10.25	11.4	1.15	0	1	
11/13/2015	10.3	11.9	1.6	0	1.35	
11/18/2015	10.35	11.55	1.2	0	1	
11/25/2015	10.15	11.4	1.25	0	1	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE4-6		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	7.2	0	0	0	TRACE

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE4-7		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	0	8.45	0	0	0	LEFT NRD IN
10/27/2015	0	8.6	0	0	0	LEFT NRD IN

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE4-8		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	0	8.7	0	0	0	TRACE OF OIL
10/29/2015	8.85	8.95	0.1	0	0	LEFT NRD IN

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE4-9		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
9/2/2015	9.75	9.8	0.05	0.5	0	REPLACED NRD
10/29/2015	0	9	0	0	0	TRACE

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE4-10		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	10.15	10.3	0.15	0	0	INSTALLED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE4-11		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	14.45	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE4-12		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	15.4	0	0	0	

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: VE4-13		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
11/3/2015	0	13.4	0	0	0	

ATTACHMENT C

**YORK LABORATORY REPORTS/
CHAIN-OF-CUSTODY DOCUMENTATION
FOR
ACCUMULATED NAPL**



Technical Report

prepared for:

Metro North Commuter Railroad
Env. Dept. c/o Yardmaster, 24 Fisher Lane
White Plains NY, 10603
Attention: Mr. Ken McHale, Ass't. Director

Report Date: 11/18/2015
Client Project ID: Harmon OU 2 Oil Recovery
York Project (SDG) No.: 15K0431

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 11/18/2015
Client Project ID: Harmon OU 2 Oil Recovery
York Project (SDG) No.: 15K0431

Metro North Commuter Railroad
Env. Dept. c/o Yardmaster, 24 Fisher Lane
White Plains NY, 10603
Attention: Mr. Ken McHale, Ass't. Director

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 November 11, 2015 and listed below. The project was identified as your project: **Harmon OU 2 Oil Recovery**.

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 Notes 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 attachment to 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>
15K0431-01	Harmon OU II Recovered Oil #10-1	Oil	10/30/2015	11/11/2015
15K0431-02	Harmon OU II Recovered Oil #10-2	Oil	10/30/2015	11/11/2015
15K0431-03	Harmon OU II Recovered Oil #10-3	Oil	10/30/2015	11/11/2015
15K0431-04	Harmon OU II Recovered Oil #10-4	Oil	10/30/2015	11/11/2015

General Notes for York Project (SDG) No.: 15K0431

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 samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 11/18/2015





Sample Information

Client Sample ID: Harmon OU II Recovered Oil #10-1

York Sample ID: 15K0431-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15K0431	Harmon OU 2 Oil Recovery	Oil	October 30, 2015 10:30 am	11/11/2015

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Oil Preparation for GC

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 02:01	AMC
11104-28-2	Aroclor 1221	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 02:01	AMC
11141-16-5	Aroclor 1232	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 02:01	AMC
53469-21-9	Aroclor 1242	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 02:01	AMC
12672-29-6	Aroclor 1248	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 02:01	AMC
11097-69-1	Aroclor 1254	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 02:01	AMC
11096-82-5	Aroclor 1260	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 02:01	AMC
1336-36-3	* Total PCBs	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications:	11/16/2015 11:26	11/18/2015 02:01	AMC
Surrogate Recoveries		Result	Acceptance Range								
877-09-8	Surrogate: Tetrachloro-m-xylene	75.0 %	HT-PC B	30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	91.0 %	HT-PC B	30-150							

Sample Information

Client Sample ID: Harmon OU II Recovered Oil #10-2

York Sample ID: 15K0431-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15K0431	Harmon OU 2 Oil Recovery	Oil	October 30, 2015 10:30 am	11/11/2015

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Oil Preparation for GC

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 02:25	AMC
11104-28-2	Aroclor 1221	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 02:25	AMC
11141-16-5	Aroclor 1232	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 02:25	AMC
53469-21-9	Aroclor 1242	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 02:25	AMC



Sample Information

Client Sample ID: Harmon OU II Recovered Oil #10-2

York Sample ID: 15K0431-02

Table with 5 columns: York Project (SDG) No., Client Project ID, Matrix, Collection Date/Time, Date Received. Values: 15K0431, Harmon OU 2 Oil Recovery, Oil, October 30, 2015 10:30 am, 11/11/2015

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Oil Preparation for GC

Main data table for PCB analysis with columns: CAS No., Parameter, Result, Flag, Units, LOD/MDL, LOQ, Dilution, Reference Method, Date/Time Prepared, Date/Time Analyzed, Analyst. Includes surrogate recoveries for Tetrachloro-m-xylene and Decachlorobiphenyl.

Sample Information

Client Sample ID: Harmon OU II Recovered Oil #10-3

York Sample ID: 15K0431-03

Table with 5 columns: York Project (SDG) No., Client Project ID, Matrix, Collection Date/Time, Date Received. Values: 15K0431, Harmon OU 2 Oil Recovery, Oil, October 30, 2015 10:30 am, 11/11/2015

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Oil Preparation for GC

Main data table for PCB analysis with columns: CAS No., Parameter, Result, Flag, Units, LOD/MDL, LOQ, Dilution, Reference Method, Date/Time Prepared, Date/Time Analyzed, Analyst. Includes surrogate recoveries.



Sample Information

Client Sample ID: Harmon OU II Recovered Oil #10-3

York Sample ID: 15K0431-03

<u>York Project (SDG) No.</u> 15K0431	<u>Client Project ID</u> Harmon OU 2 Oil Recovery	<u>Matrix</u> Oil	<u>Collection Date/Time</u> October 30, 2015 10:30 am	<u>Date Received</u> 11/11/2015
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Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Oil Preparation for GC

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
877-09-8	Surrogate: Tetrachloro-m-xylene	76.5 %	HT-PC B		30-150						
2051-24-3	Surrogate: Decachlorobiphenyl	90.5 %	HT-PC B		30-150						

Sample Information

Client Sample ID: Harmon OU II Recovered Oil #10-4

York Sample ID: 15K0431-04

<u>York Project (SDG) No.</u> 15K0431	<u>Client Project ID</u> Harmon OU 2 Oil Recovery	<u>Matrix</u> Oil	<u>Collection Date/Time</u> October 30, 2015 10:30 am	<u>Date Received</u> 11/11/2015
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Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Oil Preparation for GC

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 03:38	AMC
11104-28-2	Aroclor 1221	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 03:38	AMC
11141-16-5	Aroclor 1232	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 03:38	AMC
53469-21-9	Aroclor 1242	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 03:38	AMC
12672-29-6	Aroclor 1248	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 03:38	AMC
11097-69-1	Aroclor 1254	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 03:38	AMC
11096-82-5	Aroclor 1260	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	11/16/2015 11:26	11/18/2015 03:38	AMC
1336-36-3	* Total PCBs	ND	HT-PC B	mg/kg	1.00	5.00	1	EPA 8082A Certifications:	11/16/2015 11:26	11/18/2015 03:38	AMC

Surrogate Recoveries

Result

Acceptance Range

877-09-8	Surrogate: Tetrachloro-m-xylene	78.0 %	HT-PC B		30-150						
2051-24-3	Surrogate: Decachlorobiphenyl	93.0 %	HT-PC B		30-150						



Notes and Definitions

HT-PCB This sample was extracted outside of the CTDEP RCP or other State recommended holding time. The US EPA per SW-846 has issued a revision extending PCB hold time to 1 year or longer.

*	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
120 RESEARCH DR.
STRATFORD, CT 06615
(203) 325-1371
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Field Chain-of-Custody Record

NOTE: York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

Page of
York Project No. 15K0431

YOUR INFORMATION Company: <u>MNR</u> Address: _____ Phone No. _____ Contact Person: _____ E-Mail Address: _____		Report To: Company: <u>Sara Gianazza</u> Address: _____ Phone No. _____ Attention: <u>S. Antonio</u> E-Mail Address: _____		Invoice To: Company: <u>MNR</u> Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		YOUR PROJECT ID <u>Harmon Oil II</u> <u>Oil Recovery</u> Purchase Order No. _____		Turn-Around Time RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> Standard (5-7 Days) <input type="checkbox"/>		Report Type Summary Report _____ Summary w/ QA Summary _____ CT RCP Package _____ CTRCP DQA/DUE Pkg _____ NY ASP A Package _____ NY ASP B Package _____ NJDEP Red. Deliv. _____ <u>Electronic Data Deliverables (EDD)</u> Simple Excel _____ NYSDEC EQulS <input checked="" type="checkbox"/> EQulS (std) _____ EZ-EDD (EQulS) _____ NJDEP SRP HazSite EDD _____ GIS/KEY (std) _____ Other _____ York Regulatory Comparison _____ Excel Spreadsheet _____ Compare to the following Regs. (please fill in): _____	
Volatiles 8260 full 624 STARS list BTEX MTBE TCL list TAGM list CT RCP list Arom. only Halog. only App. IX list 8021B list		Semi-Vols. Pest/PCB/Herb 8270 or 625 STARS list BN Only Acids Only PAH list TAGM list CT RCP list TCL list NJDEP list App. IX TCLP BNA SPLP or TCLP		Metals RCRA8 PPI 13 list TAL CTI 15 list TAGM list NJDEP list Total Dissolved SPLP or TCLP Indus. Metals LIST Below		Full Lists Pri. Poll. TCL Ogriks TAL MatCN Full TCLP Full App. IX Part 360-Route Air TO 14A Air TO 15 Air STARS Air VPH Air TICs Methane Helium		Misc. Corrosivity Reactivity Ignitability Flash Point Sieve Anal. Heterotrophs TOX BTUlb. Aquatic Tox. NYDEP Sewer TOC NYDEP Sewer Asbestos Silica			
Matrix Codes S - soil Other - specify (oil, etc.) WW - wastewater GW - groundwater DW - drinking water Air-A - ambient air Air-SV - soil vapor		Choose Analyses Needed from the Menu Above and Enter Below <u># 10-1 Test for PCBs</u> <u># 10-2 Test for PCBs</u> <u># 10-3 Test for PCBs</u> <u># 10-4 Test for PCBs</u>		Sample Matrix _____ _____ _____ _____ _____		Container Description(s) <u>1-ltr Amber</u> <u>unpreserved</u> <u>"</u> <u>"</u> <u>"</u> <u>"</u> <u>"</u>					

Sample Identification <u>Harmon Oil II</u> <u>Recovered oil</u> <u>"</u> <u>"</u> <u>"</u> <u>"</u> <u>"</u>		Date/Time Sampled <u>10/30/15</u> <u>10:30 am</u> <u>10/30/15</u> <u>10:30 am</u> <u>10/30/15</u> <u>10:30 am</u> <u>10/30/15</u> <u>10:30 am</u>		Preservation Check those Applicable Special Instructions Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>		Temperature on Receipt <u>39.0</u>	
Comments <u>mail To:</u> <u>melt@daymail.net</u> <u>gianazza@mnr.org</u> <u>Joseph@MNR.ORG</u>		4°C _____ Frozen _____ ZnAc _____ HCl _____ MeOH _____ Ascorbic Acid _____ HNO₃ _____ H₂O _____ NaOH _____ Other _____		Samples Relinquished By <u>[Signature]</u> <u>11/15/15</u> Date/Time		Samples Received By <u>[Signature]</u> <u>11/15/15</u> Date/Time	
Samples Relinquished By _____ Date/Time _____		Samples Received in LAB by _____ Date/Time _____		Samples Received By _____ Date/Time _____		Samples Received in LAB by _____ Date/Time _____	

ATTACHMENT D
GROUNDWATER TEST RESULT SUMMARY

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						VE 3-1									
		3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	3/28/12	9/12/12	4/2/13	9/24/13	5/28/14	5/20/15	3/27/12	9/11/12	4/2/13	9/25/13	5/28/14	5/19/15				
1,2,4-Trimethylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	3.4 J	2.6 J	ND [5.0]	5.1	5.1	3.60				
1,3,5-Trimethylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	1.9 J	1.2 J	ND [5.0]	2.0 J	2.2 J	1.70				
Benzene	1	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]																
Chlorobenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	2.6 J	2.4 J	ND [5.0]	3.6 J	2.5 J	2.70								
Ethylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	0.81 J	0.40 J															
Isopropylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]																
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 [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]																
Naphthalene	10	1.7 J, B	ND [10]	1.4 J	ND [10]	ND [10]	ND [1.0]	0.93 J, B	ND [10]	ND [10]	ND [10]	ND [10]	ND [1.0]	ND [10]	ND [10]	ND [10]	1.3 J,B	1.3 J,B	ND [1.0]	5.6 J, B	6.6 J	ND [10]	9.3 J	10	9.00				
n-Butylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	1.1 J	ND [5.0]	ND [1.0]															
n-Propylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	0.42 J																
o-Xylene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	1.0 J	0.97 J															
p- & m- Xylenes	NS	ND [10]	ND [10]	ND [10]	ND [10]	ND [10]	ND [2.0]	ND [10]	ND [2.0]	ND [10]	ND [2.0]	ND [10]	1.1 J	0.56 J															
p-Isopropyltoluene	NS	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	1.5 J	ND [5.0]	ND [5.0]	0.89 J	1.6 J	0.79 J												
sec-Butylbenzene	5	ND[5.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND [1.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND [1.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND [1.0]	ND[5.0]	ND [1.0]								
tert-Butylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]																
Toluene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	0.77 J																
Xylenes, Total	5	ND [15]	ND [15]	ND [15]	ND [15]	ND [15]	ND [3.0]	ND [15]	ND [3.0]	ND [15]	ND [3.0]	ND [15]	2.1 J	1.35 J															

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																			
		VE 4-11							DAY 1					Field Blank					Trip Blank		
		3/27/12	9/11/12	/11/12 DU	4/2/13	9/24/13	5/27/14	5/19/15	3/27/12	9/11/12	4/2/13	9/24/13	5/27/14	5/19/15	3/28/12	9/12/12	4/2/13	9/25/13	5/20/15	9/12/12	4/2/13
1,2,4-Trimethylbenzene	5	1.1 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	0.43 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]
1,3,5-Trimethylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	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 [5.0]	0.82 J	ND [5.0]	ND [5.0]	ND [5.0]	0.53 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]
Chlorobenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]
Ethylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	0.27 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]
Isopropylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]
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 [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]
Naphthalene	10	4.0 J, B	ND [10]	ND [10]	ND [10]	ND [10]	ND [1.0]	1.9 J, B	ND [10]	ND [10]	ND [10]	1.9 J	2.00	ND [10]	ND [10]	ND [10]	ND [10]	ND [1.0]	ND [10]	ND [10]	ND [10]
n-Butylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	0.37 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]
n-Propylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]
o-Xylene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	0.48 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]
M p- & m- Xylenes	NS	ND [10]	ND [10]	ND [10]	ND [10]	ND [10]	ND [2.0]	ND [10]	ND [10]	ND [10]	ND [10]	ND [10]	ND [2.0]	ND [10]	ND [10]	ND [10]	ND [10]	ND [2.0]	ND [10]	ND [10]	ND [10]
p-Isopropyltoluene	NS	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]
sec-Butylbenzene	5	ND[5.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND [1.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND [1.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND[5.0]	ND [1.0]	ND[5.0]	ND[5.0]	ND[5.0]
tert-Butylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]
Toluene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	0.40 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]
Xylenes, Total	5	ND [15]	ND [15]	ND [15]	ND [15]	ND [15]	ND [3.0]	ND [15]	ND [15]	ND [15]	ND [15]	ND [15]	0.48 J	ND [15]	ND [15]	ND [15]	ND [15]	ND [3.0]	ND [15]	ND [15]	ND [15]

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
J = Estimated concentration.
B = Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.
BOLD TYPE indicates the reported concentration or reporting limit exceeds the groundwater standard or guidance value

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						VE 3-1						
		3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	3/28/12	9/12/12	4/2/13	9/24/13	5/28/14	5/20/15	3/27/12	9/11/12	4/2/13	9/25/13	5/28/14	5/19/15	
2-Methylnaphthalene	NS	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [5.88]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [6.67]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [5.88]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	12	4.30 J	ND [10]	
Acenaphthene	20	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	9.26	ND [0.06]	3.600 J	
Acenaphthylene	NS	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	ND [0.06]	ND [10]	
Anthracene	50	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	3.44 J	ND [0.06]	ND [10]	
Benzo(a)anthracene	0.002	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.238	ND [10]	
Benzo(a)pyrene	ND	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.112	ND [10]	
Benzo(b)fluoranthene	0.002	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.275	ND [10]	
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 [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.100	ND [10]	
Benzo(k)fluoranthene	0.002	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.262	ND [10]	
Chrysene	0.002	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.250	ND [10]	
Dibenzo(a,h)anthracene	NS	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	ND [0.06]	ND [10]	
Fluoranthene	50	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	1.94 J	ND [0.06]	ND [10]	
Fluorene	50	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	2.85 J	ND [5.13]	12.3	6.75	3.200 J	
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 [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	0.112	ND [10]	
Naphthalene	10	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	ND [5.88]	ND [0.06]	ND [10]	
Phenanthrene	50	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	2.41 J	1.87 J	23	10.8	2.600 J	
Pyrene	50	ND [5.13]	ND [5.56]	ND [5.13]	ND [6.25]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.71]	ND [5.26]	ND [5.88]	ND [0.07]	ND [10.2]	ND [5.13]	ND [6.25]	ND [26.3]	ND [5.56]	ND [0.06]	ND [10.1]	ND [5.13]	ND [5.26]	ND [5.13]	2.08 J	3.28	ND [10]	

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																	
		VE 4-11						DAY 1					FB						
		3/27/12	9/11/12	11/12 DU	4/2/13	9/24/13	5/27/14	5/19/15	3/27/12	9/11/12	4/2/13	9/24/13	5/27/14	5/19/15	3/28/12	9/12/12	4/2/13	9/25/13	5/20/15
2-Methylnaphthalene	NS	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [6.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [5.88]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Acenaphthene	20	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	2.500 J	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Acenaphthylene	NS	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Anthracene	50	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Benzo(a)anthracene	0.002	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Benzo(a)pyrene	ND	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Benzo(b)fluoranthene	0.002	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Benzo(g,h,i)perylene	NS	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Benzo(k)fluoranthene	0.002	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Chrysene	0.002	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Dibenzo(a,h)anthracene	NS	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Fluoranthene	50	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Fluorene	50	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	3.300 J	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Indeno(1,2,3-cd)pyrene	0.002	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Naphthalene	10	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	0.141	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Phenanthrene	50	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	0.471	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]
Pyrene	50	ND [5.13]	ND [5.71]	ND [6.06]	ND [25.0]	ND [6.67]	ND [0.06]	ND [10.3]	ND [5.13]	ND [5.56]	ND [5.13]	ND [12.1]	ND [0.06]	ND [10.2]	ND [5.13]	ND [5.26]	ND [5.26]	ND [5.56]	ND [10.1]

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

J = Estimated Concentration

BOLD TYPE indicates the concentration or reporting limit exceeds the groundwater standard or guidance value

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						VE 3-1					
		3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	3/28/12	9/12/12	4/2/13	9/24/13	5/28/14	5/20/15	3/27/12	9/11/12	4/2/13	9/25/13	5/28/14	5/19/15
Aroclor 1016	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.51]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.505]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.5]
Aroclor 1221	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.51]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.505]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.5]
Aroclor 1232	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.51]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.505]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.5]
Aroclor 1242	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.51]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.505]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.5]
Aroclor 1248	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.51]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.505]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.5]
Aroclor 1254	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.51]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.505]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.5]
Aroclor 1260	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.51]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.505]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.5]
Aroclor 1262	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.51]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.505]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.5]
Aroclor 1268	NS	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.51]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.505]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.5]
Total PCBs	0.09	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0606]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0625]	ND [0.0606]	ND [0.51]	ND [0.0513]	ND [0.0571]	ND [0.0526]	ND [0.0667]	ND [0.0625]	ND [0.505]	ND [0.0513]	ND [0.0513]	ND [0.0526]	ND [0.0588]	ND [0.0625]	ND [0.5]

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																	
		VE 4-11						DAY 1						Field Blank					
		3/27/12	9/11/12	9/11/12 DUP	4/2/13	9/24/13	5/27/14	5/19/15	3/27/12	9/11/12	4/2/13	9/24/13	5/27/14	5/19/15	3/28/12	9/12/12	4/2/13	9/25/13	5/20/15
Aroclor 1016	NS	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.51]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.505]
Aroclor 1221	NS	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.51]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.505]
Aroclor 1232	NS	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.51]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.505]
Aroclor 1242	NS	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.51]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.505]
Aroclor 1248	NS	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.51]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.505]
Aroclor 1254	NS	ND [0.0513]	0.0805	0.0786	ND [0.0500]	0.0928	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.51]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.505]
Aroclor 1260	NS	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.51]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.505]
Aroclor 1262	NS	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.51]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.505]
Aroclor 1268	NS	ND [0.0513]	ND [0.0625]	ND [0.0690]	ND [0.0500]	ND [0.0667]	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.51]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.505]
Total PCBs	0.09	ND [0.0513]	0.0805	0.0786	ND [0.0500]	0.0928	ND [0.0588]	ND [0.5]	ND [0.0513]	ND [0.0556]	ND [0.0526]	ND [0.0625]	NT	ND [0.51]	ND [0.0513]	ND [0.0556]	ND [0.0513]	ND [0.0645]	ND [0.505]

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

**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						VE 2-1						VE 3-1					
		3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	3/27/12	9/12/12	4/2/13	9/25/13	5/27/14	5/20/15	3/28/12	9/12/12	4/2/13	9/24/13	5/28/14	5/20/15	3/27/12	9/11/12	4/2/13	9/25/13	5/28/14	5/19/15
Arsenic	25	ND [10]	ND [4.0]	ND [4.0]	ND [4.0]	ND [4.0]	2.82	ND [10]	ND [4.0]	ND [4.0]	ND [4.0]	ND [4.0]	3.5	ND [10]	ND [4.0]	ND [4.0]	ND [4.0]	ND [4.0]	0.507 J	ND [10]	4.71	6.03	ND [4.0]	5.62	9.16
Chromium	50	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	0.969 J	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	0.796 J	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	0.137 J	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	3.07
Copper	200	ND [5]	ND [5]	ND [5]	ND [3]	ND [3]	3.21	ND [5]	ND [5]	ND [5]	ND [3]	ND [3]	10.8	ND [5]	6.72	5.56	4.70	9.00	4.55	ND [5]	ND [5]	ND [5]	ND [3]	ND [3]	5.24
Lead	25	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	4.34	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	3.89	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	1.38	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	3.77

Compound	Groundwater Standard or Guidance Value ⁽¹⁾	Test Location and Sample Date																	
		VE 4-11							DAY 1							Field Blank			
		3/27/12	9/11/12	11/2012 DU	4/2/13	9/24/13	5/27/14	5/19/15	3/27/12	9/11/12	4/2/13	9/24/13	5/27/14	5/19/15	3/28/12	9/12/12	4/2/13	9/25/13	5/20/15
Arsenic	25	ND [10]	ND [4.0]	ND [4.0]	ND [4.0]	ND [4.0]	ND [4.0]	2.3	ND [10]	12.5	ND [4.0]	ND [4.0]	ND [4.0]	10.7	ND [10]	ND [4.0]	ND [4.0]	ND [4.0]	ND [1.0]
Chromium	50	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	1.37 J	ND [5]	ND [5]	ND [5]	ND [5]	ND [5]	1.31 J	ND [5]	ND [5]	ND [5]	ND [5]	0.431 J
Copper	200	7.64	10.1	8.7	ND [5]	13.7	4.44	9.24	ND [5]	ND [5]	ND [5]	ND [3]	ND [3]	1.34 J	ND [5]	ND [5]	ND [5]	17.3	80
Lead	25	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	1.55	ND [3]	ND [3]	ND [3]	ND [3]	ND [3]	1.75	ND [3]	ND [3]	ND [3]	ND [3]	1.6

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