

**SITE MANAGEMENT PLAN STATUS REPORT**  
**REPORT PERIOD: March 1, 2015 THROUGH May 31, 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 March 1, 2015 and May 31, 2015 (i.e., the 13th 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 April 23, 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 below.

Six NAPL monitoring and recovery wells located in the OUII L4 monitoring area and one NAPL monitoring and recovery well located in the OUII L2 monitoring area were over drilled and replaced as outlined in the Corrective Action Plan (CAP) Status Report, dated November 2014 (revised January 2015). The replacement wells were developed subsequent to the completion of drilling and well installation activities. Additional information regarding the replacement well installation, well development activities and procedures to assess the NAPL recovery capabilities of these wells are provided below.

Finally, 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 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 May 15, 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 April 20, 2015 is included as Figure 1.

**WELL REPLACEMENT:** On April 24, 2015, existing two-inch diameter wells AI2-3, FA 4-8, FA 4-11, FA 4-12, FA 4-14, FA 4-16, FA 4-18 were over drilled and replaced with four-inch diameter wells. [Note: Since the replacement well were installed in the same locations as there predecessors, the well designations were not changed.] The drilling work was completed by Miller Environmental Group, Inc. and observed and documented by Yu and Associates (Yu).

Information regarding the construction of the replacement monitoring wells is provided on the well construction logs included in Attachment C.

On April 24, 2015, replacement wells AI2-3, FA 4-8, FA 4-11, FA 4-12, FA 4-14, FA 4-16, FA 4-18 were developed by a Yu representative, to remove solids that accumulated in the wells during drilling activities. Due to a high volume of solids, replacement wells FA 4-12 and FA 4-14 were re-developed on April 27, 2015. Details pertaining to the well development activities are summarized on a well development log (refer to Attachment C).

Soil cuttings generated during drilling activities and water/NAPL accumulated during well development activities were containerized in twelve 55-gallon drums. Samples from each drum were collected on April 29, 2014 and submitted to York Analytical Services, Inc. (York) under chain-of-custody control, and tested for polychlorinated biphenyls (PCBs) using USEPA Method 8082. A copy of the report prepared by York is included in Attachment D.

**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 February 28, 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 May 28, 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, three full 55-gallon drums of NAPL that was removed from recovery well RW-1 using a Spill Buster™ between December 18, 2014 and May 28, 2015, was present in the NAPL accumulation area. In addition, spent NRDs and NAPL removed from other wells within OU-II between December 18, 2014 and February 27, 2015 were stored in three 55-gallon drums, and these drums contained a total of approximately 130 gallons NAPL/spent NRDs.

**NAPL/SOIL DISPOSAL RECORDS:** Samples from two full accumulated NAPL drums were collected on April 1, 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 D. These drums were subsequently moved from the OU-II NAPL accumulation area to the Harmon Yard waste accumulation building for disposal.

On June 1, 2015, the two full accumulated NAPL drums, along with the 12 drums containing soil cuttings and/or development water/NAPL (see above) were transported off-site by Freehold Cartage, Inc. and disposed at the Waste Management facility in Model City, New York. The manifest and bill of lading for the June 1, 2015 shipment is included in Attachment E. A manifest and bill of lading for six drums of NAPL recovered during previous report periods is also included in Attachment E. The six drums were shipped off-site on April 10, 2015 by Freehold Cartage, Inc. for disposal at the Waste Management facility in Model City, New York.

**GROUNDWATER SAMPLING AND TESTING:** Groundwater samples were collected from the following monitoring wells on May 19 and 20, 2015 as part of the long-term monitoring program identified in the SMP: VE 1-2, VE 1-4, VE 2-1, VE 3-1, VE 4-11, and DAY-1. A spider diagram showing the locations of these monitoring wells, and presenting a summary of the test results for the groundwater samples collected is included as Figure 3. The parameters detected during the analytical laboratory testing of the groundwater samples collected May 19-20, 2015 are also presented on Table 3 (volatile organic compounds), Table 4 (semi-volatile organic compounds), Table 5 (polychlorinated biphenyls), and Table 6 (metals). The groundwater test results for the samples collected during the previous sampling events (conducted on September 24-25, 2013, and May 27-28, 2014) are also included on the above tables for comparison purposes, and on Figure 3. A copy of the analytical laboratory report prepared by Chemtech Analytical Laboratory in Mountainside, NJ (Chemtech), and executed chain-of-custody documentation for the samples collected during the May 19-20, 2015 monitoring event are included in Attachment F. [Note: The analytical laboratory report was submitted in EQUIS EDD format to the NYSDEC via e-mail on June 18, 2015. The NYSDEC has not confirmed the receipt of the data package as of the writing of this status report.]

**PROBLEMS ENCOUNTERED/RESOLUTION:** The following items were identified for corrective actions during the April 23, 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; and
- 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 around the OU-II areas.

The repairs and maintenance required to resolve the deficiencies identified in the OU-I and OU-II areas will be completed during the implementation of the CAP, which is anticipated to continue during the up-coming report period. The removal process for the debris/materials in the OUII areas is ongoing, and as of the writing of this report, six dumpsters of debris/materials have been removed from the OU I and OUII areas. It is anticipated that the cracks noted in the OU-I asphalt pavement will be sealed when debris/material has been removed to the extent possible.

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

- Curbox installation to repair NAPL monitoring and recovery well AI-16;
- 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 June 1, 2015 and August 31, 2015), that 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 a combination of pumping and NRDs will be used in other locations.

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.

Implementation of the action items identified in March 2014 CAP will continue during the upcoming report period. This work will include NAPL evaluation in replacement wells AI2-3, FA4-8, FA4-11, FA4-12, FA4-14, FA4-16, and FA4-18 in accordance with the following procedures.

1. If present, NRDs will be removed from each well, weighed and the measurement should be recorded. The NRDs will not be replaced during the subsequent evaluation process.
2. If any NAPL remains following the removal of the NRD, it will be removed to the extent possible using a Spill Buddy<sup>TM</sup>, bailers and/or adsorbent materials. The amount of free product removed from each well will be recorded to the nearest 0.1 gallons.
3. Within one week of the completion of Step 2, each of the above listed wells will be monitored to determine the depth to water and depth to free product (if present) to the nearest 0.01 ft. The date/time of measurements, weather conditions, and the depth to water and free product will be recorded for each well. NAPL should not be removed from the well during this, or subsequent, monitoring events. The NAPL evaluation monitoring events will continue on a weekly basis until notified to proceed to Step 4 (i.e., anticipated to be 6 to 8 weeks following the start of the evaluation process).
4. During this step, the accumulated NAPL will be removed from the monitoring wells using a Spill Buddy<sup>TM</sup>, bailers and/or adsorbent material. Following removal, the NAPL recovery rate will be evaluated by measuring the depth to free product and depth to water at regular intervals. The initial measurements will be made 30 minutes and 1 hour following removal. Subsequent measurements will be made at 2 hours, 4 hours and 8 hours following removal.

Depending on the results of the above evaluation, procedures to enhance the recovery of NAPL will be evaluated and implemented in select locations (e.g., installation of a Spill Buster<sup>TM</sup> product-only removal system, or similar).

It is also anticipated that a monitoring well will be installed at the northeastern terminus of the Sheet 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 has initiated discussions with Westchester County to obtain an access agreement to install the off-site monitoring wells identified in the CAP. As of the date of this report, an access agreement has not been established. The off-site well identified in the CAP will be installed when the access agreement is finalized.

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. Currently, it is anticipated that the crack repairs will be started in July 2015.

The next Periodic Review Report (PRR), which will document work completed under the SMP between January 1, 2013 and January 1, 2016, will be completed in or around January 2016.



**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.

LEGEND:

 VE 4-5  
(3.82 ft) Former Vapor Extraxtion (VE), Air Inlet (AI), Forced Air Injection (FA), or existing monitoring well and designation

Groundwater elevation for water level measurement  
made May 20, 2015

**3** 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 Q1-I final cover system

PROJECT MANAGER	<b>RLK</b>	<b>06-20</b>	DATE DRAWN BY _____
CPS	<b>CPSS</b>	<b>06-20</b>	SCALE _____
		<b>As Noted</b>	

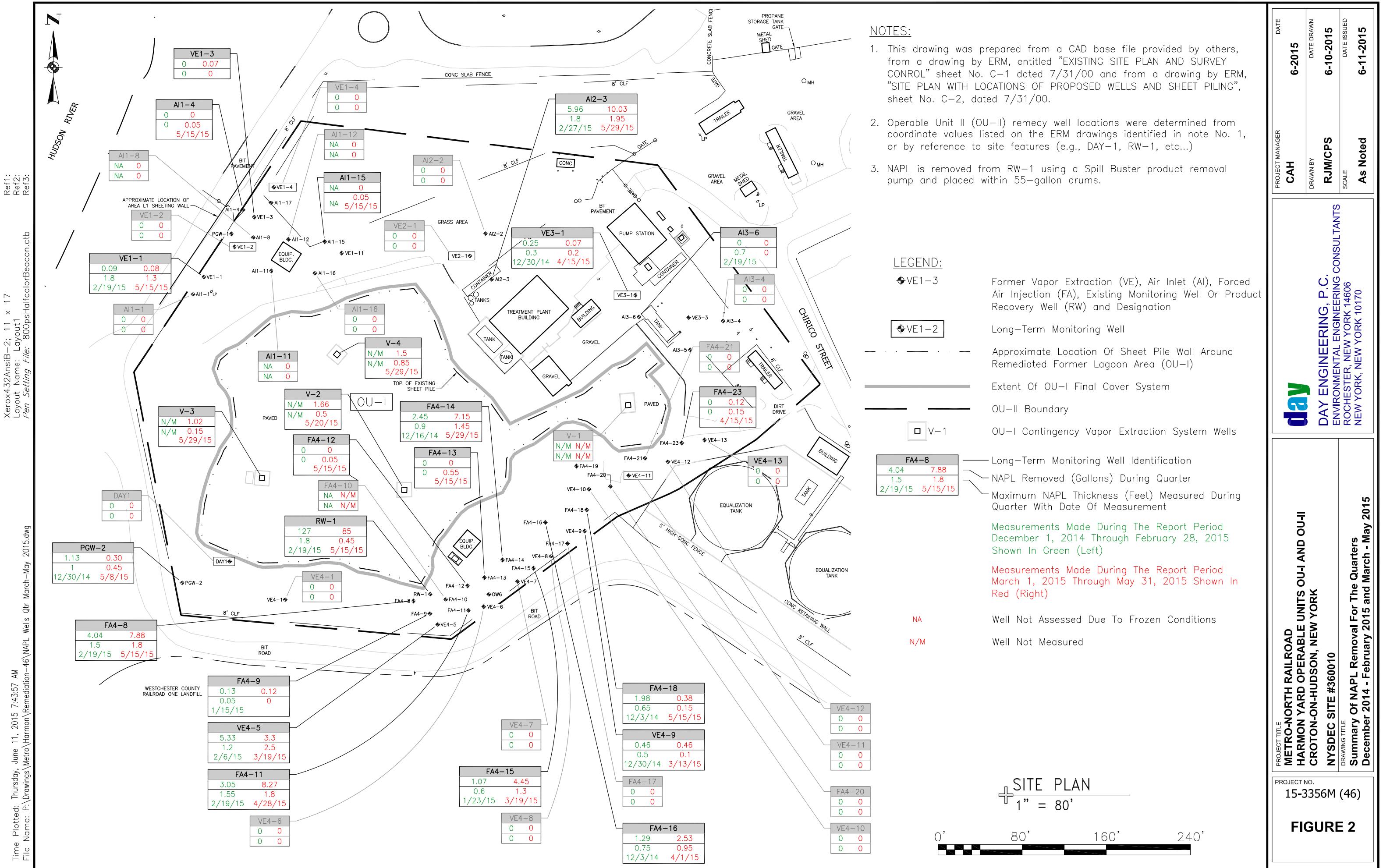
**day** ENGINEERING, P.C.  
ENVIRONMENTAL ENGINEERING CONSULTANTS  
ROCHESTER, NEW YORK 14606  
NEW YORK, NEW YORK 10170

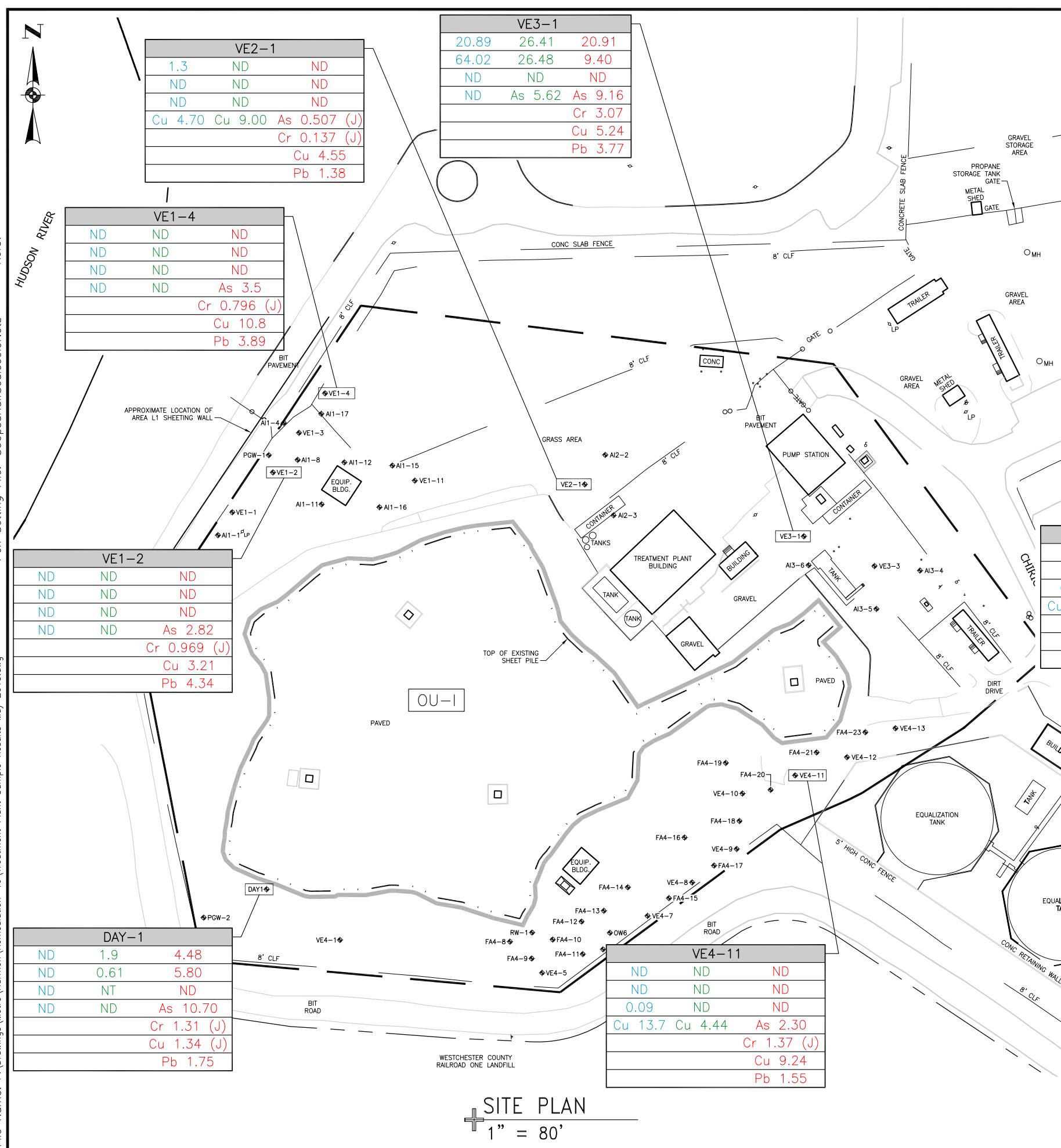
<p>Project Title <b>METRO-NORTH RAIL ROAD HARMON YARD OPERABLE UNITS OU-I AND OU-II CROTON-ON-HUDSON, NEW YORK</b></p> <hr/> <p><b>SITE MANAGEMENT PLAN</b></p>	<p>Drawing Title <b>Groundwater Conour Map: May 20, 2015</b></p>
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Project No.  
10-3231M (46)  
**FIGURE 1**

A horizontal scale bar representing 160 feet. The bar is divided into four equal segments by tick marks at 0, 40, 80, and 160. The first three segments are shaded black, while the fourth segment is white.

## FIGURE 1





**NOTES:**

- 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.
- 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...)

**LEGEND:**

- ◆ VE1-3
- ◆ VE1-2
- Extent Of OU-I Final Cover System
- - - OU-II Boundary
- OU-I Contingency Vapor Extraction System Wells
- ◆ Long-Term Monitoring Well Identification
- ND Total Concentration Of CP51-List VOC's and Chlorobenzene
- NT Total Concentration Of CP51-List SVOC's and 2Methylnaphthalene
- (J) Concentration Of Total PCB's
- Pb Concentration Of Detected Metals (As, Cr, Cu, Pb)

- (J) Estimated Concentration  
 ND Constituents Not Detected  
 NT Not Tested
- Long-Term Monitoring Results For Samples Collected On September 14, 2013 And September 25, 2013 Shown In Blue
- Long-Term Monitoring Results For Samples Collected On May 27, 2014 And May 28, 2014 Shown in Green
- Long-Term Monitoring Results For Samples Collected On May 19, 2015 And May 20, 2015 Shown In Red

**NOTES:**

- All results in ug/L or parts per billion.
- If metals were detected specific metal and concentration are identified.



PROJECT TITLE	METRO-NORTH RAILROAD		
DRAWING TITLE	HARMON YARD OPERABLE UNITS OU-I AND OU-II		
NYSDDEC SITE #	#360010		
DRAWING TITLE	Summary Long-Term Monitoring Results For Samples Collected Sept 24 & 25, 2013, May 27 & 28, 2014 and May 19 & 20, 2015		
PROJECT NO.	15-3356M (46)		
DATE DRAWN	5-2015	DATE ISSUED	6-10-2015
DRAWN BY	RJM/CPS	SCALE	As Noted
PROJECT MANAGER	CAH		
DATE	6-11-2015		
ENVIRONMENTAL ENGINEERING CONSULTANTS	day	ROCHESTER, NEW YORK 14606	NEW YORK, NEW YORK 10170

**FIGURE 3**

Table 1

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

NAPL Removal Totals

Current Report Period: March 1, 2015 - May 31, 2015

OU I		OU II					
		NAPL AREA L1		NAPL AREA L2		NAPL AREA L4	
Well ID	Gallons Removed						
V1	0	AI1-4	0	AI2-2	0	DAY-1	0
V2	1.66	AI1-8	0	AI2-3	10.03	FA4-8	7.88
V3	1.02	AI1-1	0	VE2-1	0	FA4-9	0.12
V4	1.5	AI1-11	0	Total	10.03	FA4-10	0
<b>Total</b>	<b>4.18</b>	AI1-12	0			FA4-11	8.27
		AI1-15	0			FA4-12	0
		AI1-16	0			FA4-13	0
		VE1-1	0.08			FA4-14	7.15
		VE1-2	0			FA4-15	4.45
		VE1-3	0.07			FA4-16	2.53
		VE1-4	0			FA4-17	0
		<b>Total</b>	<b>0.15</b>			FA4-18	0.38
						FA4-19	0
						FA4-20	0
						FA4-21	0
						FA4-23	0.12
						PGW-2	0.3
						RW-1	85
						VE4-1	0
						VE4-5	3.3
						VE4-6	0
						VE4-7	0
						VE4-8	0
						VE4-9	0.46
						VE4-10	0
						VE4-11	0
						VE4-12	0
						VE4-13	0
						<b>Total</b>	<b>119.96</b>

Table 2

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

Historic NAPL Removal Totals  
December 1, 2012 -February 28, 2015

OU I		OU II					
Well ID	Gallons Removed	NAPL AREA L1		NAPL AREA L2		NAPL AREA L4	
		Well ID	Gallons Removed	Well ID	Gallons Removed	Well ID	Gallons Removed
V1	*	AI1-4	0	AI2-2	0.19	DAY-1	0
V2	*	AI1-8	0	AI2-3	52.98	FA4-8	25.5
V3	*	AI1-1	0	VE2-1	0	FA4-9	0.24
V4	*	AI1-11	0.11	Total	<b>53.17</b>	FA4-10	0.13
<b>Total</b>	<b>0</b>	AI1-12	0.05			FA4-11	9.12
		AI1-15	0.19			FA4-12	0
		AI1-16	0			FA4-13	0.88
		VE1-1	3.1			FA4-14	16.88
		VE1-2	0			FA4-15	6.23
		VE1-3	0			FA4-16	4.51
		VE1-4	0			FA4-17	0
		<b>Total</b>	<b>3.45</b>			FA4-18	7.07
NAPL AREA L3							
		AI3-4	0.25			FA4-19	0
		AI3-6	0.25			FA4-20	0
		VE3-1	7.44			FA4-21	0
		<b>Total</b>	<b>7.94</b>			FA4-23	0.47
						PGW-2	3.69
						RW-1	881.7
						VE4-1	0
						VE4-5	74.2
						VE4-6	1.26
						VE4-7	0
						VE4-8	0.04
						VE4-9	4.26
						VE4-10	0.04
						VE4-11	0
						VE4-12	0
						VE4-13	0
						<b>Total</b>	<b>1036.22</b>

\* - Not Recorded

**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 <sup>(1)</sup>	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 [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]	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 [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]	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 [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 [1.0]							
Chlorobenzene	5	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]	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 [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]	0.81 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 [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 [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 [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 [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 [1.0]	ND [10]	ND [10]	ND [10]	ND [10]	ND [1.0]	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 [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 [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 [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]	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 [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]	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 [10]	ND [10]	ND [10]	ND [10]	ND [10]	ND [10]	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 [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]	1.5 J	0.89 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[1.0]	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 [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 [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 [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]	0.77 J							
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]	ND [15]	ND [15]	ND [15]	ND [15]	ND [3.0]	ND [15]	2.1 J	1.35 J						

Compound	Groundwater Standard or Guidance Value <sup>(1)</sup>	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	9/25/13
1,2,4-Trimethylbenzene	5	1.1 J	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	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]					
1,3,5-Trimethylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]					
Benzene	1	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	0.82 J	ND [5.0]	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]
Chlorobenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]					
Ethylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	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]					
Isopropylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	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 [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]					
Naphthalene	10	4.0 J, B	ND [10]	ND [10]	ND [10]	ND [10]	ND [10]	ND [1.0]	1.9 J, B	ND [10]	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]
n-Butylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	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]					
n-Propylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	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 [5.0]	ND [1.0]	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]					
M p- & m- Xylenes	NS	ND [10]	ND [10]	ND [10]	ND [10]	ND [10]	ND [10]	ND [2.0]	ND [10]	ND [2.0]	ND [10]	ND [10]	ND [10]	ND [10]	ND [2.0]	ND [10]	ND [10]					
p-Isopropyltoluene	NS	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	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[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]	
tert-Butylbenzene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	ND [5.0]	ND [5.0]					
Toluene	5	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [5.0]	ND [1.0]	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]					
Xylenes, Total	5	ND [15]	ND [15]	ND [15]	ND [15]	ND [15]	ND [15]	ND [3.0]	ND [15]	0.48 J	ND [15]	ND [15]	ND [15]	ND [15]	ND [15]	ND [3.0]	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 a

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

**BOLD** TTV-2 indicates the reported concentration or reporting limit exceeds the groundwater standard or guidance value

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 <sup>(1)</sup>	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]	<b>ND [26.3]</b>	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	<b>ND [5.13]</b>	<b>ND [5.56]</b>	<b>ND [5.13]</b>	<b>ND [6.25]</b>	<b>ND [0.06]</b>	<b>ND [10.1]</b>	<b>ND [5.13]</b>	<b>ND [5.71]</b>	<b>ND [5.26]</b>	<b>ND [5.88]</b>	<b>ND [0.07]</b>	<b>ND [10.2]</b>	<b>ND [5.13]</b>	<b>ND [6.25]</b>	<b>ND [26.3]</b>	<b>ND [5.56]</b>	<b>ND [0.06]</b>	<b>ND [10.1]</b>	<b>ND [5.13]</b>	<b>ND [5.26]</b>	<b>ND [5.13]</b>	<b>ND [5.88]</b>	<b>0.238</b>	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]	<b>0.112</b>	ND [10]	
Benzo(b)fluoranthene	0.002	<b>ND [5.13]</b>	<b>ND [5.56]</b>	<b>ND [5.13]</b>	<b>ND [6.25]</b>	<b>ND [0.06]</b>	<b>ND [10.1]</b>	<b>ND [5.13]</b>	<b>ND [5.71]</b>	<b>ND [5.26]</b>	<b>ND [5.88]</b>	<b>ND [0.07]</b>	<b>ND [10.2]</b>	<b>ND [5.13]</b>	<b>ND [6.25]</b>	<b>ND [26.3]</b>	<b>ND [5.56]</b>	<b>ND [0.06]</b>	<b>ND [10.1]</b>	<b>ND [5.13]</b>	<b>ND [5.26]</b>	<b>ND [5.13]</b>	<b>ND [5.88]</b>	<b>0.275</b>	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	<b>ND [5.13]</b>	<b>ND [5.56]</b>	<b>ND [5.13]</b>	<b>ND [6.25]</b>	<b>ND [0.06]</b>	<b>ND [10.1]</b>	<b>ND [5.13]</b>	<b>ND [5.71]</b>	<b>ND [5.26]</b>	<b>ND [5.88]</b>	<b>ND [0.07]</b>	<b>ND [10.2]</b>	<b>ND [5.13]</b>	<b>ND [6.25]</b>	<b>ND [26.3]</b>	<b>ND [5.56]</b>	<b>ND [0.06]</b>	<b>ND [10.1]</b>	<b>ND [5.13]</b>	<b>ND [5.26]</b>	<b>ND [5.13]</b>	<b>ND [5.88]</b>	<b>0.262</b>	ND [10]	
Chrysene	0.002	<b>ND [5.13]</b>	<b>ND [5.56]</b>	<b>ND [5.13]</b>	<b>ND [6.25]</b>	<b>ND [0.06]</b>	<b>ND [10.1]</b>	<b>ND [5.13]</b>	<b>ND [5.71]</b>	<b>ND [5.26]</b>	<b>ND [5.88]</b>	<b>ND [0.07]</b>	<b>ND [10.2]</b>	<b>ND [5.13]</b>	<b>ND [6.25]</b>	<b>ND [26.3]</b>	<b>ND [5.56]</b>	<b>ND [0.06]</b>	<b>ND [10.1]</b>	<b>ND [5.13]</b>	<b>ND [5.26]</b>	<b>ND [5.13]</b>	<b>ND [5.88]</b>	<b>0.250</b>	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	<b>ND [5.13]</b>	<b>ND [5.56]</b>	<b>ND [5.13]</b>	<b>ND [6.25]</b>	<b>ND [0.06]</b>	<b>ND [10.1]</b>	<b>ND [5.13]</b>	<b>ND [5.71]</b>	<b>ND [5.26]</b>	<b>ND [5.88]</b>	<b>ND [0.07]</b>	<b>ND [10.2]</b>	<b>ND [5.13]</b>	<b>ND [6.25]</b>	<b>ND [26.3]</b>	<b>ND [5.56]</b>	<b>ND [0.06]</b>	<b>ND [10.1]</b>	<b>ND [5.13]</b>	<b>ND [5.26]</b>	<b>ND [5.13]</b>	<b>ND [5.88]</b>	<b>0.112</b>	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]	ND [5.88]	2.08 J	3.28	ND [10]

Compound	Groundwater Standard or Guidance Value <sup>(1)</sup>	Test Location and Sample Date																							
		VE 4-11																							

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 <sup>(1)</sup>	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.

Table 6

NYSDEC Site #360010  
Harmon Yard Waste Water Area  
OU II

**Summary of Metals**  
**Groundwater Samples**

Compound	Groundwater Standard or Guidance Value <sup>(1)</sup>	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 <sup>(1)</sup>	Test Location and Sample Date																						
		VE 4-11					DAY 1					Field Blank												
		3/27/12	9/11/12	/11/2012 DL	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]	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

**ATTACHMENT A**

**METRO-NORTH RAILROAD HARMON YARD OPERATIONAL UNIT  
OU-I AND OU-II  
INSPECTION RESULTS FOR APRIL 23, 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?

## OU-I Asphalt Cover

**Are there any cracks in the asphalt cover?**

Any geotextile observed?

Is there any surface water ponding on the asphalt cover?

Is there any evidence of settlement?

Is there any elevation difference at the grouted manhole covers?

Settlement or erosion in the area of the perimeter sheet pile wall?

X	
	X
X	
X	
	X
	X

X

Specify the Recommended Corrective Actions and Other Relevant Observations:

Crack sealing will be completed by June 2015. Paving of settled area summer of 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).

Remove and clean tie surround from V-2 and paye.

## **OU-II Areas Around the Asphalt Cover**

Are there any erosion rivulets?

Is there evidence of any washouts or soil slides?

Is the vegetative cover maintained?

Is there debris or other material on the slopes?

Settlement or erosion in the area of the NAPI Area L1 sheet pile wall?

	X
	X
X	
X	
	X

X

Specify the Recommended Corrective Actions and Other Relevant Observations:

Six dumpsters have been filled and removed and process is on-going for clearing of the capped area

## 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.

---

Curb box for L1-AI-1-16 will be installed summer of 2015.

**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 or sump box?

{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. Sediment in the sump box in excess of 6 inches should be removed and sampled before disposal or re-use on-site]

Specify the Recommended Corrective Actions and Other Relevant Observations:

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

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

Are the 55-gallon waste oil disposal drums full?

	x
	x
	x

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.

12 drums were sampled May 22 from the over drilling project

2 were sampled on May 4, 2015 (one NRD drum)

---

**OU-I/OU-II Perimeter Fencing**

Is there any damaged fencing?

	x
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?

Are the gate locks present and in good working condition?

Specify Correction Actions Needed:

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Date of Inspection: 4/23/25

Inspection Completed By: Sara Gianazza

cc: Metro-North Department of Environmental Compliance and Services

RLK4163

**ATTACHMENT B**

**DEPTH TO GROUNDWATER AND NAPL MEASUREMENTS  
AND  
NAPL REMOVAL RECORDS  
FOR  
MEASUREMENTS MADE DURING THE REPORTING PERIOD  
MARCH 1, 2015 THROUGH MAY 31, 2015**

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
5/20/2015	17	17.5	0.5	0	1.5	ADDED NRD
5/29/2015	17.1	17.2	0.1	0.16	0	REPLACED NRD

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
5/20/2015	17.2	17.25	0.05	0.51	0	REPLACED NRD
5/29/2015	17.55	17.7	0.15	0.51	0	REPLACED 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
5/20/2015	16.4	17.1	0.7	0	0.5	
5/29/2015	16.65	17.5	0.85	0	1	

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
5/15/2015	0	10.55	0	0	0	REPLACED NRD

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
5/15/2015	10.6	10.65	0.05	0	0	REPLACED NRD

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
5/15/2015	0	13.8	0	0	0	REPLACED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: AI1-11		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
5/15/2015	0	17.8	0	0	0	REPLACED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: AI1-12		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments
5/15/2015	0	17.4	0	0.12	0	REPLACED NRD

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
5/15/2015	18.9	18.95	0.05	0	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
5/15/2015	0	14.3	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
5/15/2015	9.1	10.4	1.3	0.08	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
5/15/2015	0	9.9	0	0	0	REPLACED NRD

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
5/15/2015	0	9	0	0.07	0	REPLACED NRD

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
5/15/2015	0	10.5	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
5/8/2015	0	15.05	0	0	0	

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
3/3/2015	16.4	18.1	1.7	0.14	0	Replaced NRD
3/13/2015	16.3	18	1.7	0.16	0	Replaced NRD
3/19/2015	0	0	0	0	0	Well Frozen-No Access
3/24/2015	15.8	16.2	0.4	0.15	0.25	Replaced NRD
4/1/2015	15.55	15.95	0.4	0.13	1.25	
4/7/2015	15.65	16	0.35	1.41	0.25	REPLACED NRD
4/15/2015	15.75	16.45	0.7	0.15	0.25	REPLACED NRD
4/22/2015	15.65	15.8	0.15	0.15	0.24	
4/28/2015	15.05	15.65	0.6	0	0.5	
5/8/2015	15.2	16.7	1.5	0	1.25	
5/15/2015	15.2	16.7	1.5	0	0.75	
5/19/2015	15.3	17	1.7	0	1.5	
5/29/2015	15.35	17.3	1.95	0	1.5	

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
5/8/2015	0	11.25	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
5/8/2015	0	13.9	0	0	0	

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
5/8/2015	0	17.2	0	0.12	0	

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
3/13/2015	0	0	0	0	0	Covered by Ice - No Access
4/15/2015	11.15	11.35	0.2	0	0	REPLACED NRD
5/8/2015	0	11.45	0	0.07	0	REMOVED NRD

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
5/15/2015	0	16.4	0	0	0	

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
3/3/2015	14.75	15.7	0.95	0.1	0	Replaced NRD
3/13/2015	0	0	0	0	0	No Access-Well Frozen
3/19/2015	13.6	14.25	0.65	2.01	0.5	Added NRD
3/27/2015	13.65	14	0.35	0.15	0	Replaced NRD
4/1/2015	0	13.6	0	0	0	DID NOT REPLACE NRD
4/7/2015	0	13.65	0	0	0	
4/15/2015	0	13.85	0	0	0	DID NOT REMOVED NRD
4/22/2015	9	9.5	0.5	0.15	0	REMOVED NRD...WELL BE DRILLED OVERSIZED
4/28/2015	16.3	17.05	0.75	0	0.75	
5/8/2015	16.5	18.25	1.75	0.57	0	SPILL BUDDY STOPPED WORKING
5/15/2015	16.4	18.2	1.8	0	1.75	
5/19/2015	16.65	17.95	1.3	0	0.75	
5/29/2015	16.7	18.15	1.45	0	1.15	

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
3/13/2015	0	8.2	0	0	0	Left NRD
4/15/2015	0	8.05	0	0	0	DID NOT REPLACE NRD
5/8/2015	0	8.5	0	0.12	0	REMOVED NRD

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)			Well ID: FA4-10			
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments

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
3/3/2015	8.9	9.6	0.7	-0.03	0	Replaced NRD
3/13/2015	8.7	9.6	0.9	0.14	0	Removed NRD
3/19/2015	8.1	9.1	1	0	0	
3/27/2015	8.1	8.55	0.45	0.13	0.375	Added NRD
4/1/2015	0	7.95	0	0	0	
4/7/2015	8	9.15	1.15	0	0.25	
4/15/2015	8.1	9.5	1.4	0	0.38	
4/22/2015	8	9.5	1.5	0	0.75	
4/28/2015	11.05	12.85	1.8	0	2	
5/8/2015	11.35	12.9	1.55	0.59	0	SPILL BUDY STOPPED WORKING
5/15/2015	11.45	12.9	1.45	0	1.18	
5/19/2015	11.5	13	1.5	0	1.25	
5/29/2015	11.6	13.1	1.5	0	1.25	

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
5/15/2015	14.5	14.55	0.05	0	0	

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
5/15/2015	8.35	8.9	0.55	0	0	CAN NOT PUMP ADDED 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
3/3/2015	11.7	12.45	0.75	0.12	0	Replaced NRD
3/13/2015	11.3	11.95	0.65	0.13	0	Removed NRD
3/19/2015	9.95	10.2	0.25	0	0	
3/27/2015	9.75	10.85	1.1	0	0.25	Added NRD
4/1/2015	10.35	10.65	0.3	0.15	0.15	REPLACED NRD
4/7/2015	9.75	10.8	1.05	0	0.25	REPLACED NRD
4/15/2015	10.3	11.5	1.2	0.13	0.38	REPLACED NRD
4/22/2015	0	10.75	0	0	0	REMOVED NRD
4/28/2015	13.1	13.5	0.4	0	0.5	
5/8/2015	13.1	14.3	1.2	0.59	0	SPILL BUDDY STOPPED WORKING
5/15/2015	13.3	14.5	1.2	0	1.75	
5/19/2015	13.4	14.5	1.1	0	1.25	
5/29/2015	13.45	14.9	1.45	0	1.5	

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
3/3/2015	8.6	8.8	0.2	0.08	0	Replaced NRD
3/13/2015	8.2	8.25	0.05	0.15	0	Replaced NRD
3/19/2015	7.4	8.7	1.3	0.1	0	Replaced NRD
3/27/2015	7.35	7.95	0.6	0.14	0.175	Replaced NRD
4/1/2015	7	7.9	0.9	0.14	0.15	REPLACED NRD
4/7/2015	7.5	8.2	0.7	0.15	0.5	
4/15/2015	7.45	8.3	0.85	0.14	0.25	REPLACED NRD
4/22/2015	7.1	7.8	0.7	0.15	0.38	
4/28/2015	7.65	8.05	0.4	0.15	1.25	
5/8/2015	8.1	8.2	0.1	0.13	0	REPLACED NRD
5/15/2015	8	8.05	0.05	0.14	0	REPLACED NRD
5/19/2015	8	8.05	0.05	0.14	0	REPLACED NRD
5/29/2015	8.1	8.25	0.15	0.13	0	REPLACED NRD

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
3/3/2015	12.1	12.5	0.4	0.12	0	Replaced NRD
3/13/2015	11.56	11.85	0.29	0.11	0	Replaced NRD
3/19/2015	0	11.15	0	0	0	
3/27/2015	10.9	11.5	0.6	0.16	0.75	Replaced NRD
4/1/2015	10.75	11.7	0.95	0.15	0.25	REPLACED NRD
4/7/2015	11.2	11.4	0.2	0.11	0	REPLACED NRD
4/15/2015	11	11.55	0.55	0.13	0.25	REPLACED NRD
4/22/2015	11	11.35	0.35	0.15	0.25	REMOVED NRD WELL BEING OVER DRILLED
4/28/2015	0	14.15	0	0	0	
5/8/2015	14.9	14.95	0.05	0	0	ADDED NRD
5/15/2015	14.5	14.55	0.05	0.1	0	REPLACED NRD
5/19/2015	0	14.6	0	0	0	LEFT NRD
5/29/2015	0	13.7	0	0	0	LEFT NRD IN

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
5/15/2015	0	7.85	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
3/3/2015	10.9	11	0.1	0.01	0	Replaced NRD
3/13/2015	0	10.6	0	0	0	Left NRD
3/19/2015	0	10.1	0	0	0	
3/27/2015	9.7	9.8	0.1	0.13	0	Replaced NRD
4/1/2015	0	9.6	0	0	0	DID NOT REPLACE NRD
4/7/2015	0	9.95	0	0	0	
4/15/2015	0	10.1	0	0	0	DID NOT REPLACE NRD
4/22/2015	9.8	9.9	0.1	0.15	0	REMOVED NRD WELL BEING REDRILLED
4/28/2015	0	12.6	0	0	0	
5/8/2015	0	12.8	0	0	0	
5/15/2015	12.9	13.05	0.15	0	0	ADDED NRD
5/19/2015	13	13.1	0.1	0.09	0	REPLACED NRD
5/29/2015	0	13.4	0	0	0	LEFT NRD IN

Metro-North Railroad NAPL Recovery Report						
Metro-North Yard: Harmon (OU II)				Well ID: FA4-19		
Date	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	NAPL Recovered via NRD (gal)	Additional NAPL Recovered (gal)	Comments

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
5/15/2015	0	11.8	0	0	0	

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
3/13/2015	0	13.95	0	0	0	
4/15/2015	0	14.1	0	0	0	DID NOT REPLACE NRD
5/8/2015	0	14.3	0	0.13	0	REMOVED NRD

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
3/13/2015	0	13.25	0	0	0	
4/15/2015	12.7	12.85	0.15	0	0	ADDED NRD
5/8/2015	0	13.3	0	0.12	0	REMOVED NRD

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
3/13/2015	0	0	0	0	0	No Access - Well Frozen
4/15/2015	5.9	6	0.1	0.16	0	REPLACED NRD
5/8/2015	6.75	7.2	0.45	0.14	0	REPLACED 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
3/3/2015	15.3	15.4	0.1	0	0	
3/13/2015	15	15.1	0.1	0	0	
3/19/2015	14.4	14.55	0.15	0	0	
3/27/2015	14.3	14.4	0.1	0	0	
4/1/2015	14.25	14.3	0.05	0	0	
4/7/2015	0	14.5	0	0	0	
4/15/2015	14.4	14.45	0.05	0	0	2.75 BARRELS FILLED
4/22/2015	14.4	14.45	0.05	0	0	
4/28/2015	14.5	14.55	0.05	0	0	
5/8/2015	14.75	14.8	0.05	0	0	
5/15/2015	14.35	14.8	0.45	0	0	
5/19/2015	14.9	15	0.1	0	0	
5/29/2015	15	15.1	0.1	0	0	3 DRUMS FULL

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
5/15/2015	0	8.4	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
3/3/2015	10.1	10.8	0.7	0	0	Replaced NRD
3/13/2015	9.75	10.7	0.95	0	0	
3/19/2015	7.3	9.8	2.5	0	0	
3/27/2015	9.1	10.1	1	0	0.75	
4/1/2015	9.1	9.55	0.45	0	0.5	
4/7/2015	9.25	9.4	0.15	0	0	
4/15/2015	0	9.55	0	0	0	DID NOT REPLACE NRD
4/22/2015	9.55	9.6	0.05	0.59	0	REPLACED NRD
4/28/2015	0	8.6	0	0	0	
5/8/2015	9.8	9.85	0.05	0	0	REPLACED NRD
5/15/2015	9.95	10	0.05	0.47	0	REPLACED NRD
5/19/2015	9.9	9.95	0.05	0.51	0	REPLACED NRD
5/29/2015	10.1	10.2	0.1	0.48	0	REPLACED NRD

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
5/8/2015	0	6.4	0	0	0	

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
3/13/2015	0	6.95	0	0	0	
4/15/2015	0	7.25	0	0	0	
5/8/2015	0	7.75	0	0	0	

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
3/13/2015	0	7.9	0	0	0	
4/15/2015	0	7.5	0	0	0	
5/8/2015	0	7.9	0	0	0	

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
3/13/2015	7.8	7.9	0.1	0	0	Added NRD
4/15/2015	0	8.7	0	0.46	0	REPLACED NRD
5/8/2015	0	8.35	0	0	0	

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
5/15/2015	0	12.3	0	0	0	

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
5/15/2015	0	13.05	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
5/15/2015	0	13.9	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
5/15/2015	0	12.85	0	0	0	

**ATTACHMENT C**

**MONITORING WELL CONSTRUCTION DIAGRAMS  
AND  
MONITORING WELL DEVELOPMENT LOGS  
FOR  
REPLACEMENT WELLS  
INSTALLED APRIL 24, 2015**



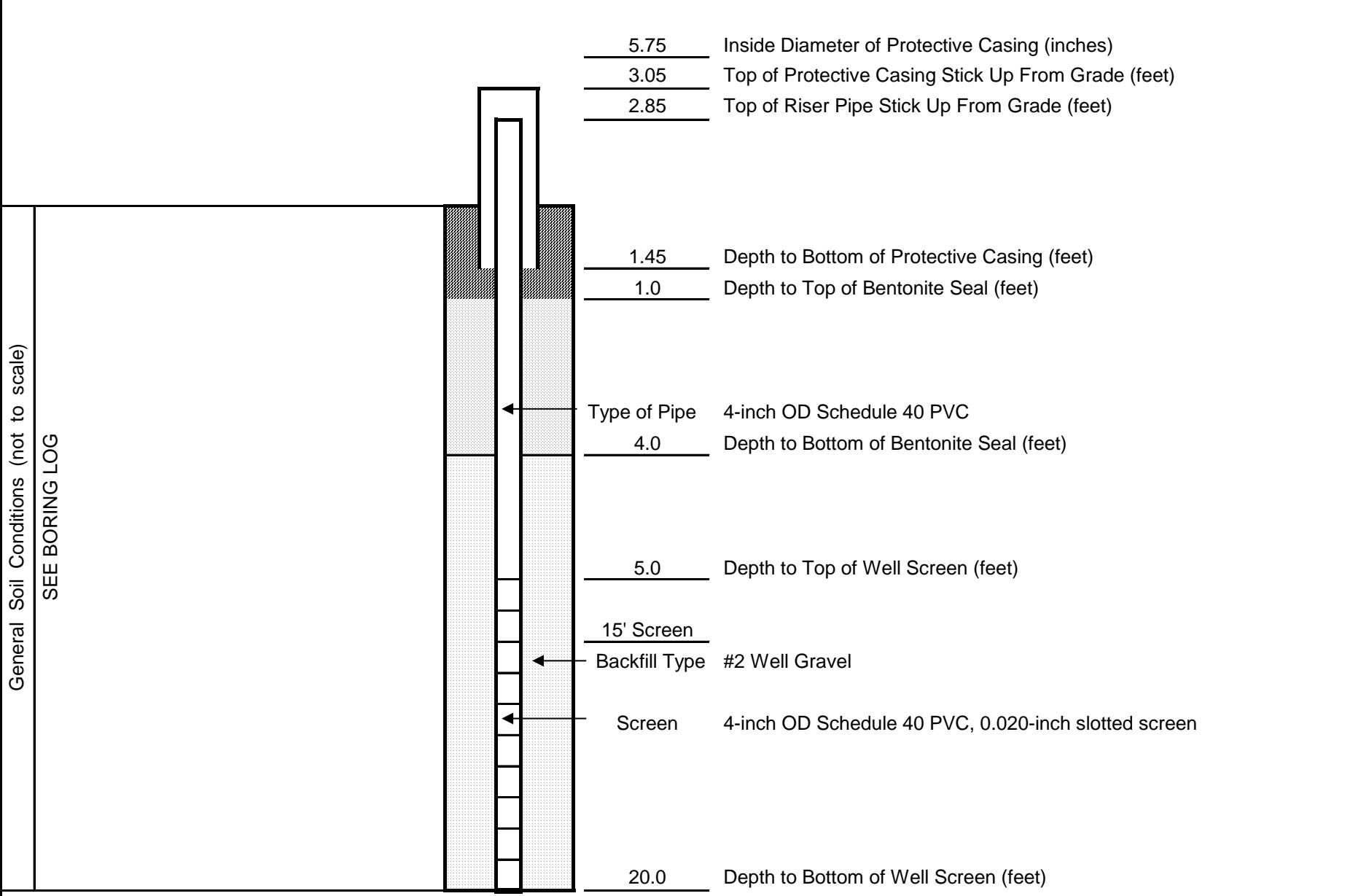
200 Riverfront Boulevard, Elmwood Park, NJ 07407 • Tel: 201-791-0075 • Fax: 201-791-4533

## MONITORING WELL INSTALLATION LOG

PROJECT: Metro North On-Call Environmental Contract  
LOCATION: Harmon Yard

WELL NO.  
AI2-3

Well No. AI2-3  
Installation Date: 4/24/2015  
Drilling Contractor: Miller Env. Group, Inc.  
Foreman: Bob Dubois      Inspector: Craig Diziki  
                                  Checked by: Charles McCusker



Notes:

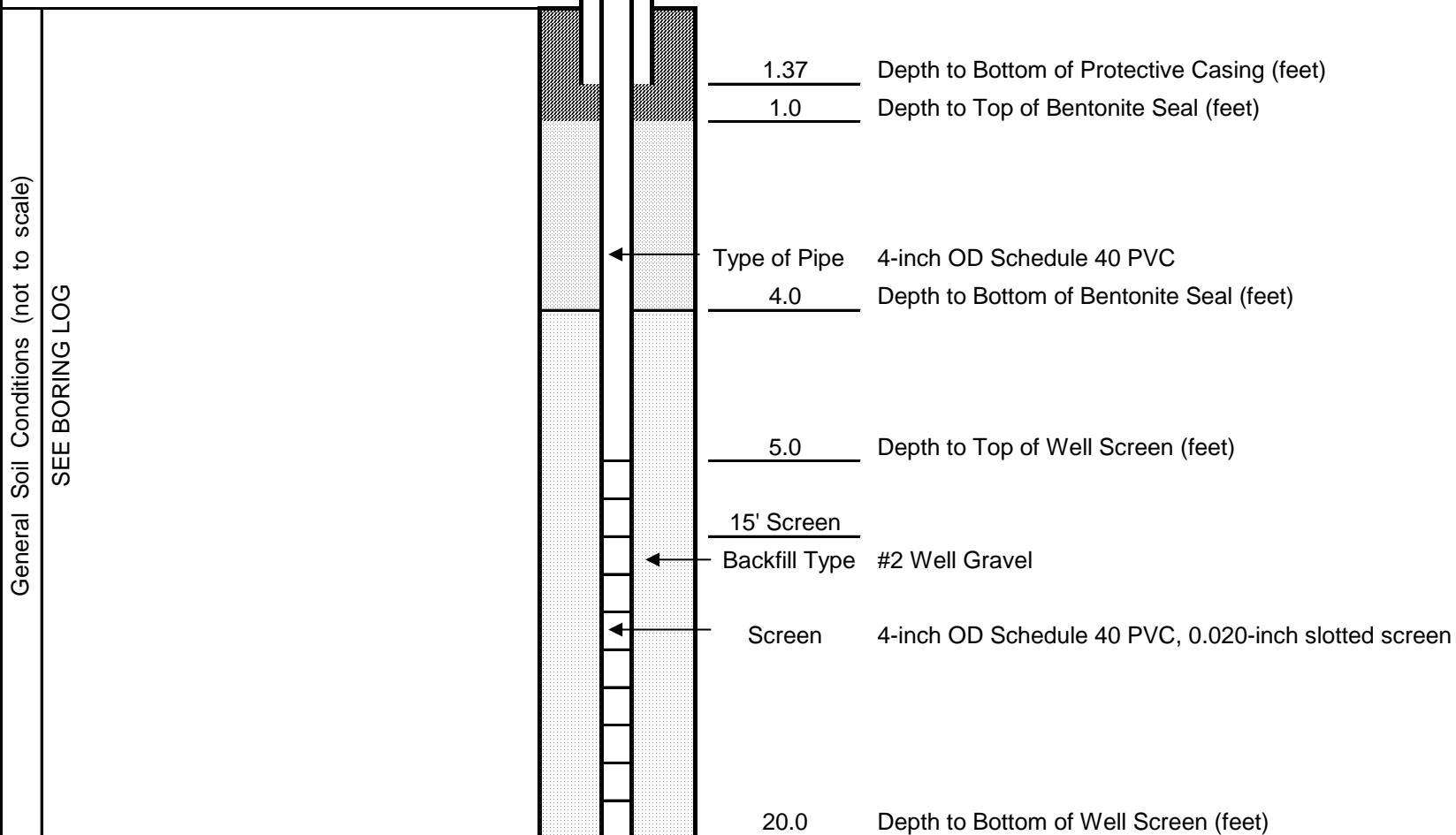
- PID - 0.0 ppm in breathing zone
- 5 Bags of well gravel used.
- Concrete collar installed from top of bentonite seal to grade.

## MONITORING WELL INSTALLATION LOG

**PROJECT:** Metro North On-Call Environmental Contract  
**LOCATION:** Harmon Yard

**WELL NO.**  
**FA4-8**

Well No.	FA4-8
Installation Date:	4/24/2015
Drilling Contractor:	Miller Env. Group, Inc.
Foreman:	Bob Dubois
Inspector:	Craig Diziki
Checked by:	Charles McCusker



Notes:

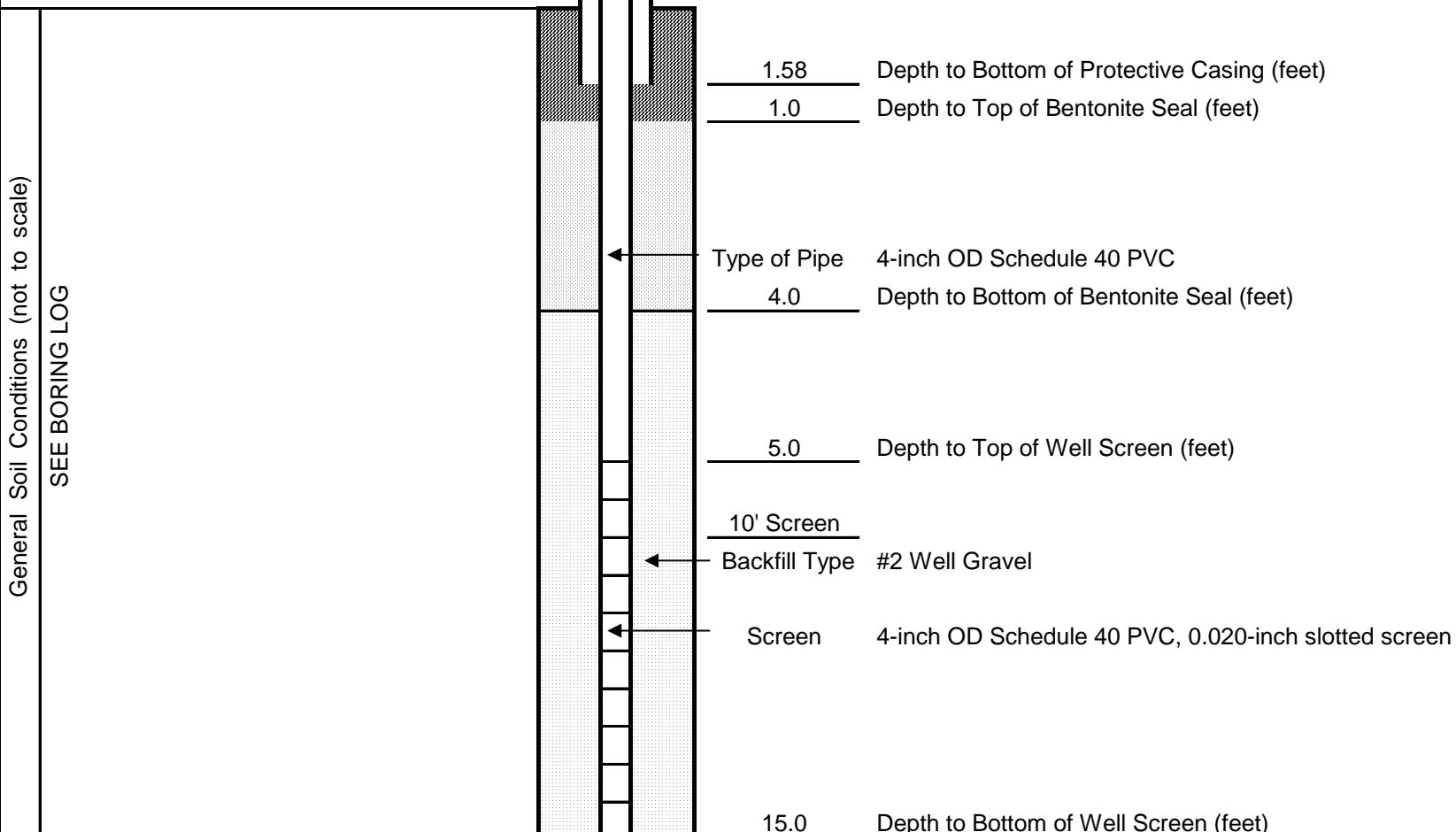
- PID - 0.0 ppm in breathing zone
- 5 Bags of well gravel used
- Concrete collar installed from top of bentonite seal to grade.

## MONITORING WELL INSTALLATION LOG

**PROJECT:** Metro North On-Call Environmental Contract  
**LOCATION:** Harmon Yard

**WELL NO.**  
**FA4-11**

Well No.	<u>FA4-11</u>
Installation Date:	<u>4/24/2015</u>
Drilling Contractor:	<u>Miller Env. Group, Inc.</u>
Foreman:	<u>Bob Dubois</u>
Inspector:	<u>Craig Diziki</u>
Checked by:	<u>Charles McCusker</u>



Notes:

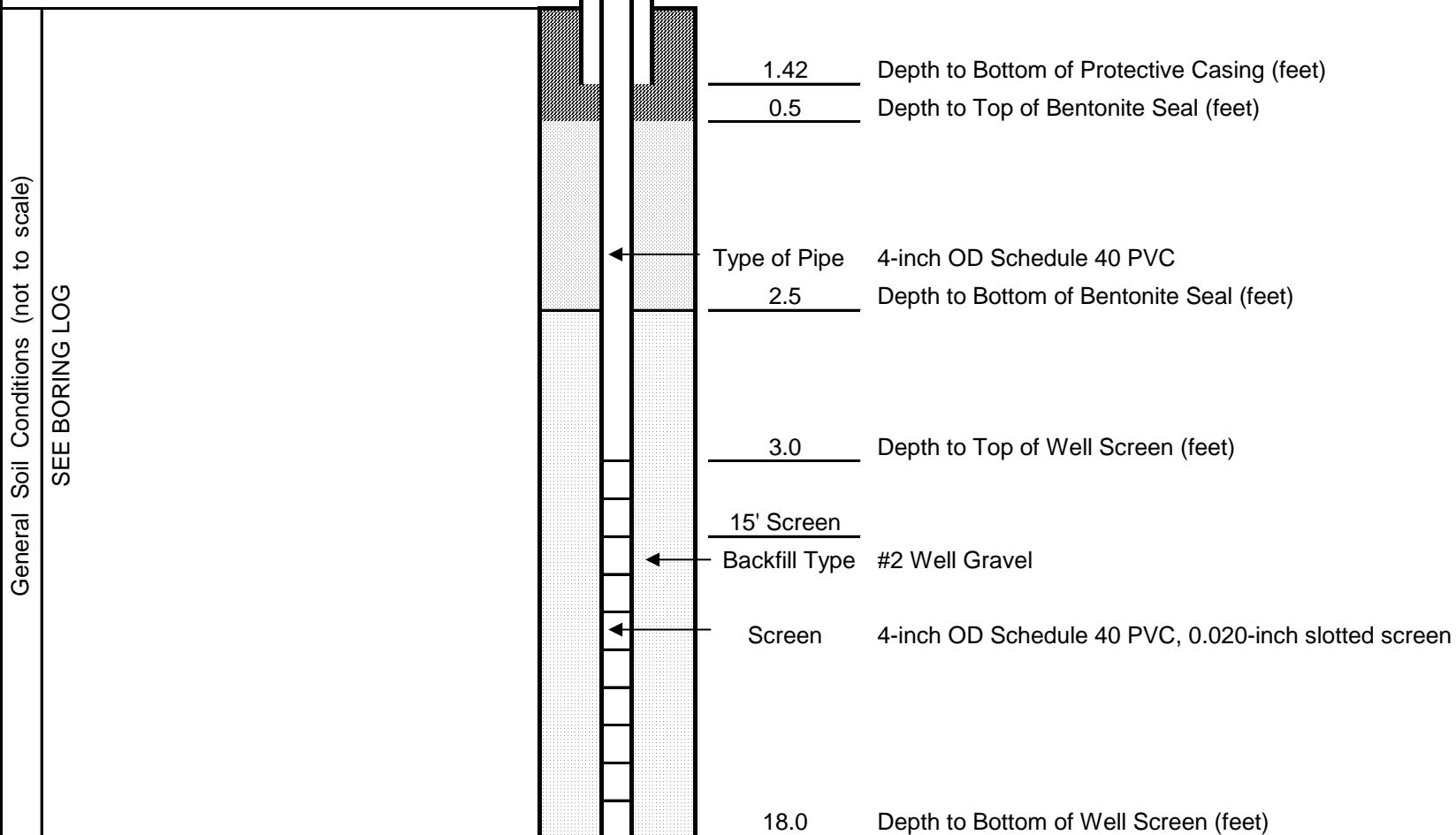
- PID - 0.0 ppm in breathing zone
- 4 Bags of well gravel used
- Concrete collar installed from top of bentonite seal to grade.

## MONITORING WELL INSTALLATION LOG

**PROJECT:** Metro North On-Call Environmental Contract  
**LOCATION:** Harmon Yard

**WELL NO.**  
**FA4-12**

Well No.	<u>FA4-12</u>
Installation Date:	<u>4/24/2015</u>
Drilling Contractor:	<u>Miller Env. Group, Inc.</u>
Foreman:	<u>Bob Dubois</u>
Inspector:	<u>Craig Diziki</u>
Checked by:	<u>Charles McCusker</u>



Notes:

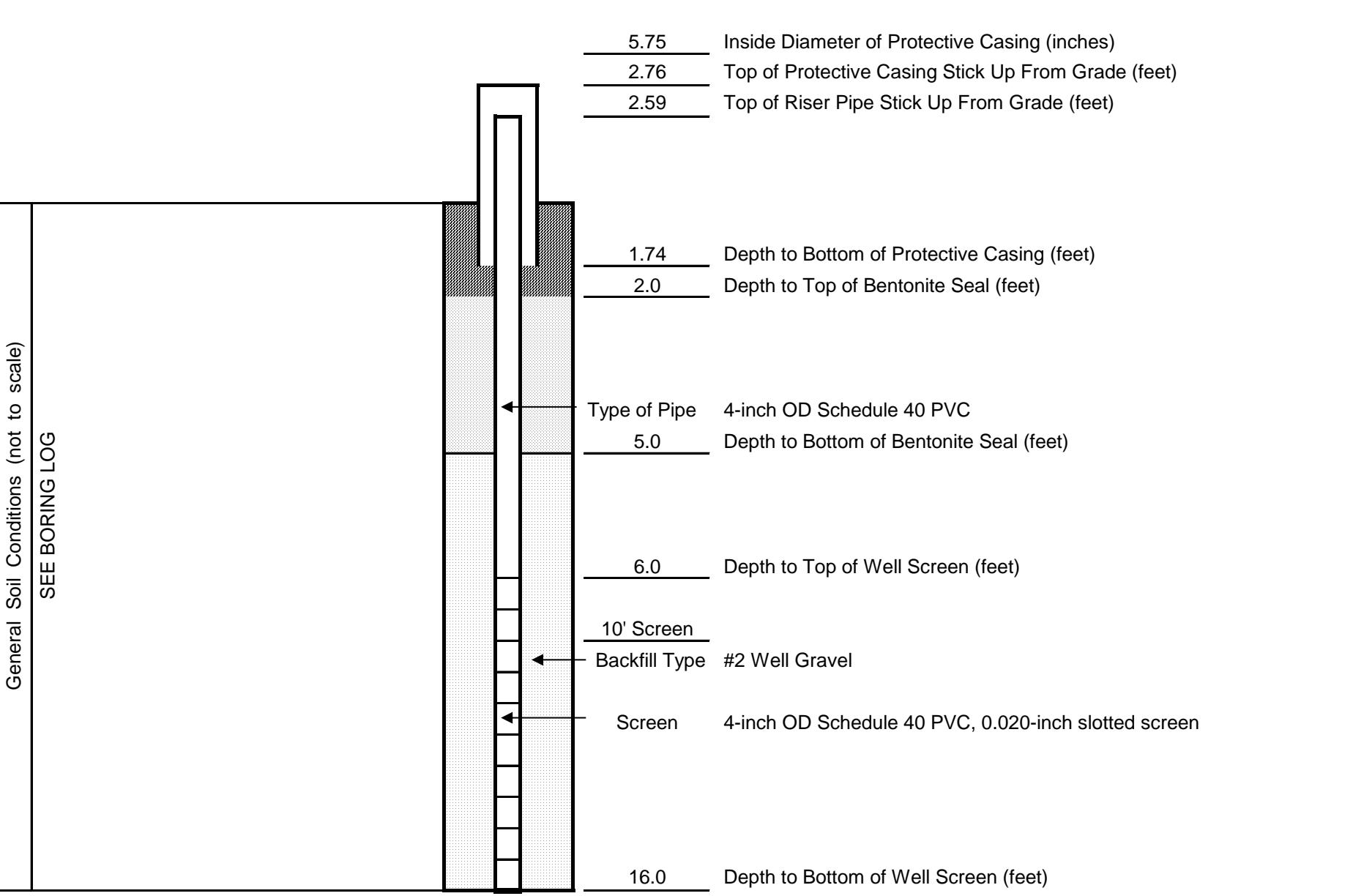
- PID - 0.0 ppm in breathing zone
- 5 Bags of well gravel used
- Concrete collar installed from top of bentonite seal to grade.

## MONITORING WELL INSTALLATION LOG

**PROJECT:** Metro North On-Call Environmental Contract  
**LOCATION:** Harmon Yard

**WELL NO.**  
**FA4-14**

Well No.	<u>FA4-14</u>
Installation Date:	<u>4/24/2015</u>
Drilling Contractor:	<u>Miller Env. Group, Inc.</u>
Foreman:	<u>Bob Dubois</u>
Inspector:	<u>Craig Diziki</u>
Checked by:	<u>Charles McCusker</u>



Notes:

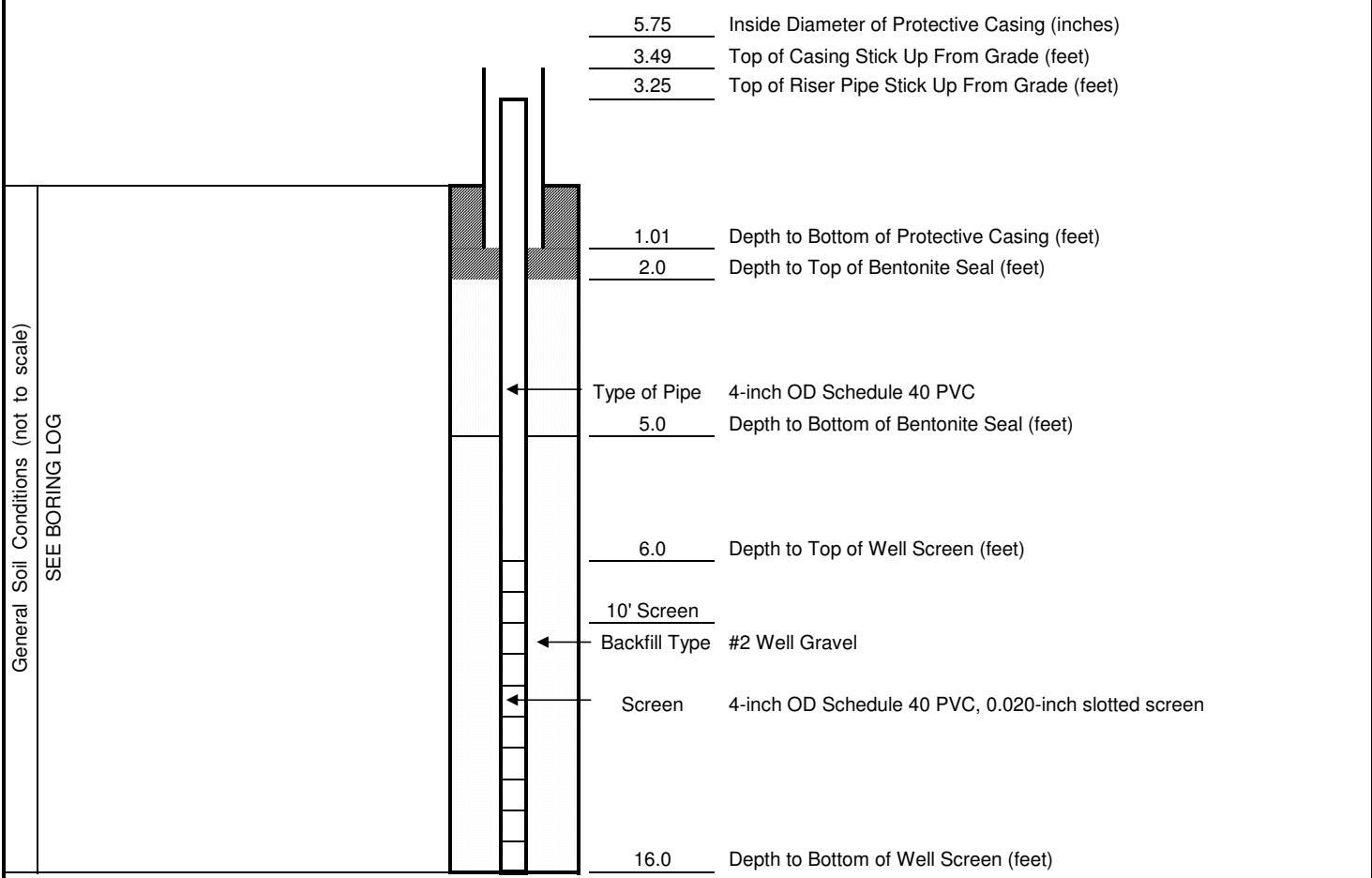
- PID - 0.0 ppm in breathing zone
- 4 Bags of well gravel used
- Concrete collar installed from top of bentonite seal to grade.

## MONITORING WELL INSTALLATION LOG

**PROJECT:** Metro North On-Call Environmental Contract  
**LOCATION:** Harmon Yard

**WELL NO.**  
**FA4-16**

Well No. FA4-16  
 Installation Date: 4/24/2015  
 Drilling Contractor: Miller Env. Group, Inc. Inspector: Craig Diziki  
 Foreman: Bob Dubois Checked by: Charles McCusker



Notes:

PID - 0.0 ppm in breathing zone

4 Bags of well gravel used

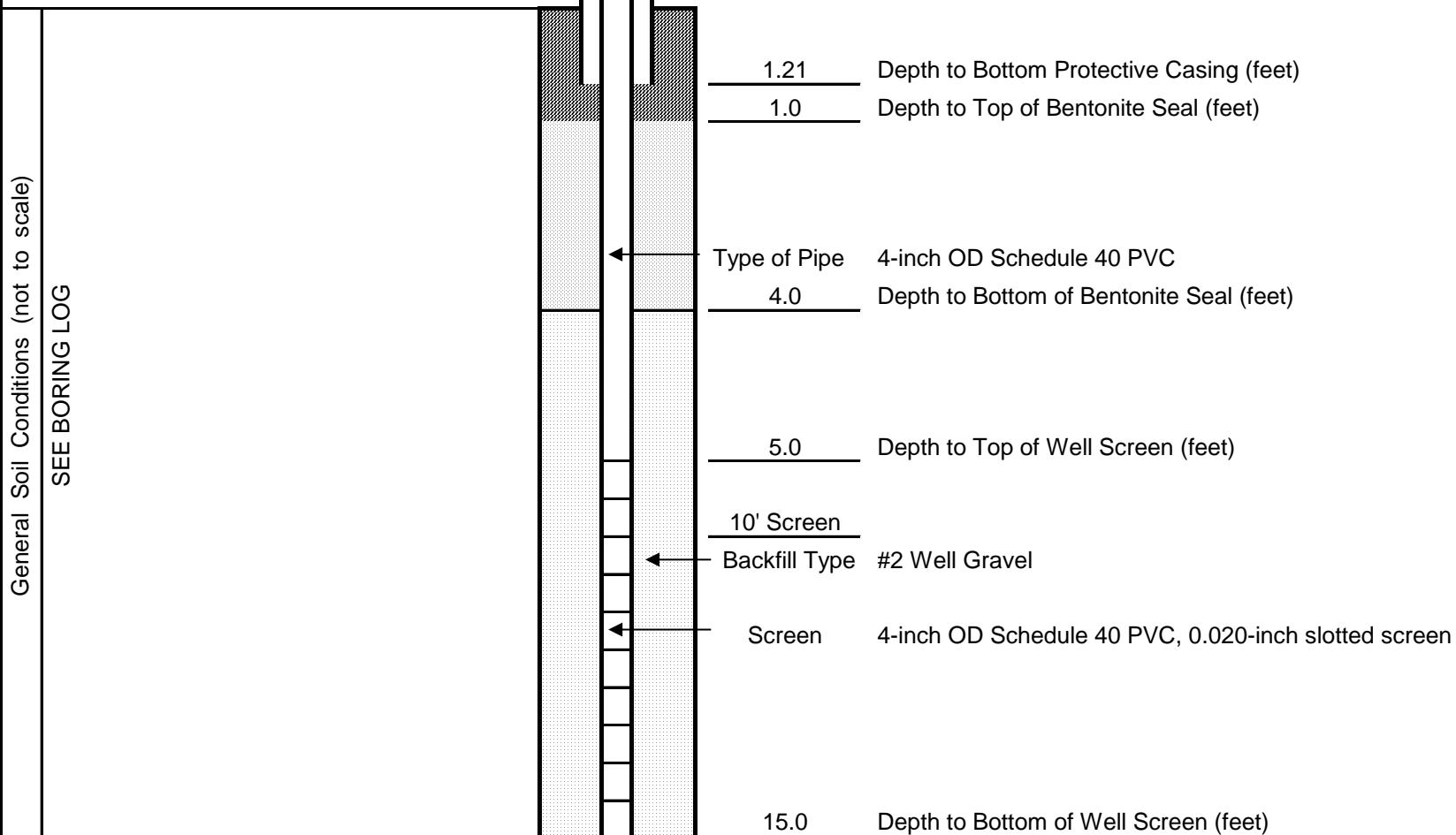
Concrete collar installed from top of bentonite seal to grade.

## MONITORING WELL INSTALLATION LOG

**PROJECT:** Metro North On-Call Environmental Contract  
**LOCATION:** Harmon Yard

**WELL NO.**  
**FA4-18**

Well No.	<u>FA4-18</u>
Installation Date:	<u>4/24/2015</u>
Drilling Contractor:	<u>Miller Env. Group, Inc.</u>
Foreman:	<u>Bob Dubois</u>
Inspector:	<u>Craig Diziki</u>
Checked by:	<u>Charles McCusker</u>



Notes:

- PID - 0.0 ppm in breathing zone
- 4 Bags of well gravel used
- Concrete collar installed from top of bentonite seal to grade.

**WELL DEVELOPMENT DATA - OU-II AREA**  
**HARMON YARD METRO-NORTH RAILROAD**

Well	Well Depth (feet)	Depth to Water Before Development (feet)	Depth to Product Before Development (feet)	Start Time	Depth to Water After Development (feet)	Depth to Product After Development (feet)	Stop Time	Amount Purged (gallons)	Notes
FA4-18	15	12.27	No Product	08:10	12.42	No Product	8:34	12	Initial water coming from pump is turbid (brown). No product evident. PID = 0.0 PPM. Overpumping was complete when water ran clear.
FA4-16	16	13.82	No Product	8:45	14.02	No Product	9:17	6	Initial water coming from pump is slightly turbid (light brown). No product evident. PID = 0.0 PPM. Overpumping was complete when water ran clear.
FA4-14	16	13.00	12.78	9:40 on 4/24/15; 10:15 on 4/27/15	12.87	12.86	10:06 on 4/24/15;11:05 on 4/27/15	17.5	4/24/15: Initial water coming from pump is turbid (orange brown) with evident product. PID= 0.0 ppm. Pump was continually getting clogged. Moved on to attempt FA4-12, but same issue occurred. 4/27/15: Reattempted development with success, water ran clear.
FA4-12	18	14.87	14.86	10:15 on 4/24/15; 11:20 on 4/27/15	13.99	No Product	11:00 on 4/24/15;12:00 on 4/27/15	17	4/24/15: Initial water coming from pump is turbid (dark brown) with evident product. PID= 0.0 ppm. Pump was continually getting clogged. Disposable bailer used for about 20 minutes and electric mini-pump reattempted. Mini-pump still clogged up. 4/27/15: Reattempted development with success, water ran clear.
FA4-11	15	11.92	11.48	11:09	11.89	11.79	11:55	18	Initial water coming from pump is slightly turbid (light brown) with evident product. PID = 0.0 PPM. Development was complete when water ran clear.
FA4-8	20	16.32	16.26	12:15	16.17	No Product	12:55	14	Initial water coming from pump is turbid (brown) with evident product. PID = 0.0 PPM. Development was complete when water ran clear.
AI2-3	20	14.89	14.88	13:30	14.94	No Product	13:47	8	Initial water coming from pump is mostly clear with sheen. PID = 0.0 PPM. Development was complete when water ran clear.

Note: Depth to water and depth to product readings are from the top of the inner casing.

**ATTACHMENT D**

**YORK LABORATORY REPORTS/  
CHAIN-OF-CUSTODY DOCUMENTATION  
FOR  
DRILLING, WELL DEVELOPMENT WASTE  
AND  
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: 05/11/2015  
**Client Project ID: Harmon OU 2 Well Overdrilling**  
York Project (SDG) No.: 15E0092

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 05/11/2015

Client Project ID: Harmon OU 2 Well Overdrilling  
York Project (SDG) No.: 15E0092

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

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## 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 May 04, 2015 and listed below. The project was identified as your project: **Harmon OU 2 Well Overdrilling**.

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.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
15E0092-01	Harmon OU 2 well overdrilling-01	Soil	04/29/2015	05/04/2015
15E0092-02	Harmon OU 2 well overdrilling-02	Soil	04/29/2015	05/04/2015
15E0092-03	Harmon OU 2 well overdrilling-03	Soil	04/29/2015	05/04/2015
15E0092-04	Harmon OU 2 well overdrilling-04	Soil	04/29/2015	05/04/2015
15E0092-05	Harmon OU 2 well overdrilling-05	Oil	04/29/2015	05/04/2015
15E0092-06	Harmon OU 2 well overdrilling-06	Soil	04/29/2015	05/04/2015
15E0092-07	Harmon OU 2 well overdrilling-07	Soil	04/29/2015	05/04/2015
15E0092-08	Harmon OU 2 well overdrilling-08	Soil	04/29/2015	05/04/2015
15E0092-09	Harmon OU 2 well overdrilling-09	Oil	04/29/2015	05/04/2015
15E0092-10	Harmon OU 2 well overdrilling-10	Soil	04/29/2015	05/04/2015
15E0092-11	Harmon OU 2 well overdrilling-11	Oil	04/29/2015	05/04/2015
15E0092-12	Harmon OU 2 well overdrilling-12	Liquid	04/29/2015	05/04/2015

## **General Notes for York Project (SDG) No.: 15E0092**

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:



Date: 05/11/2015

Benjamin Gulizia  
Laboratory Director





*Soil/AI 2-3*

### Sample Information

<u>Client Sample ID:</u> Harmon OU 2 well overdrilling-01	<u>York Sample ID:</u> 15E0092-01
<u>York Project (SDG) No.</u> 15E0092	<u>Client Project ID</u> Harmon OU 2 Well Overdrilling

### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA 3550C

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		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854, CTDoh, NJDEP, PADEP	05/08/2015 12:54	05/11/2015 13:33	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854, CTDoh, NJDEP, PADEP	05/08/2015 12:54	05/11/2015 13:33	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854, CTDoh, NJDEP, PADEP	05/08/2015 12:54	05/11/2015 13:33	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854, CTDoh, NJDEP, PADEP	05/08/2015 12:54	05/11/2015 13:33	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854, CTDoh, NJDEP, PADEP	05/08/2015 12:54	05/11/2015 13:33	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854, CTDoh, NJDEP, PADEP	05/08/2015 12:54	05/11/2015 13:33	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications: NELAC-NY10854, CTDoh, NJDEP, PADEP	05/08/2015 12:54	05/11/2015 13:33	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0180	0.0180	1	EPA 8082A Certifications:	05/08/2015 12:54	05/11/2015 13:33	AMC
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
877-09-8	Surrogate: Tetrachloro-m-xylene	62.1 %	30-140								
2051-24-3	Surrogate: Decachlorobiphenyl	97.5 %	30-140								

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	92.3		%	0.100	0.100	1	SM 2540G Certifications: CTDoh	05/08/2015 07:18	05/08/2015 13:28	KK

### Sample Information

<u>Client Sample ID:</u> Harmon OU 2 well overdrilling-02	<u>York Sample ID:</u> 15E0092-02
<i>Soil/AI 2-3</i>	

### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA 3550C

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		mg/kg dry	0.0173	0.0173	1	EPA 8082A Certifications: NELAC-NY10854, CTDoh, NJDEP, PADEP	05/08/2015 12:54	05/11/2015 13:53	AMC



### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-02

York Sample ID: 15E0092-02

York Project (SDG) No.  
15E0092

Client Project ID  
Harmon OU 2 Well Overdrilling

Matrix  
Soil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0173	0.0173	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 13:53	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0173	0.0173	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 13:53	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0173	0.0173	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 13:53	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0173	0.0173	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 13:53	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0173	0.0173	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 13:53	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0173	0.0173	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 13:53	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0173	0.0173	1	EPA 8082A Certifications:	05/08/2015 12:54	05/11/2015 13:53	AMC
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
877-09-8	Surrogate: Tetrachloro-m-xylene	60.1 %	30-140								
2051-24-3	Surrogate: Decachlorobiphenyl	101 %	30-140								

#### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	96.2		%	0.100	0.100	1	SM 2540G Certifications: CTDOH	05/08/2015 07:18	05/08/2015 13:28	KK

### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-03

York Sample ID: 15E0092-03

York Project (SDG) No.  
15E0092

Client Project ID

Harmon OU 2 Well Overdrilling

Matrix

Collection Date/Time

Date Received

April 29, 2015 3:00 pm

05/04/2015

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA 3550C

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		mg/kg dry	0.0184	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:08	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0184	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:08	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0184	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:08	AMC



### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-03

York Sample ID: 15E0092-03

York Project (SDG) No.  
15E0092

Client Project ID  
Harmon OU 2 Well Overdrilling

Matrix  
Soil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA 3550C

		<u>Log-in Notes:</u>						<u>Sample Notes:</u>			
CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0184	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:08	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0184	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:08	AMC
11097-69-1	<b>Aroclor 1254</b>	<b>0.261</b>		mg/kg dry	0.0184	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:08	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0184	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:08	AMC
1336-36-3	* Total PCBs	0.261		mg/kg dry	0.0184	0.0184	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:08	AMC
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
877-09-8	Surrogate: Tetrachloro-m-xylene	72.4 %		30-140							
2051-24-3	Surrogate: Decachlorobiphenyl	114 %		30-140							

#### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	90.5		%	0.100	0.100	1	SM 2540G Certifications: CTDOH	05/08/2015 07:18	05/08/2015 13:28	KK

### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-04

York Sample ID: 15E0092-04

York Project (SDG) No.  
15E0092

Client Project ID

Matrix

Collection Date/Time

Date Received

April 29, 2015 3:00 pm

05/04/2015

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA 3550C

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		mg/kg dry	0.0199	0.0199	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:23	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0199	0.0199	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:23	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0199	0.0199	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:23	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0199	0.0199	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:23	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0199	0.0199	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:23	AMC



### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-04

York Sample ID: 15E0092-04

York Project (SDG) No.  
15E0092

Client Project ID  
Harmon OU 2 Well Overdrilling

Matrix  
Soil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA 3550C

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11097-69-1	Aroclor 1254	0.181		mg/kg dry	0.0199	0.0199	1	EPA 8082A	05/08/2015 12:54	05/11/2015 14:23	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0199	0.0199	1	EPA 8082A	05/08/2015 12:54	05/11/2015 14:23	AMC
								Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		
1336-36-3	* Total PCBs	0.181		mg/kg dry	0.0199	0.0199	1	EPA 8082A	05/08/2015 12:54	05/11/2015 14:23	AMC
								Certifications:			
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
877-09-8	Surrogate: Tetrachloro-m-xylene	72.4 %	30-140								
2051-24-3	Surrogate: Decachlorobiphenyl	121 %	30-140								

#### Total Solids

Sample Prepared by Method: % Solids Prep

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	83.6		%	0.100	0.100	1	SM 2540G	05/08/2015 07:18	05/08/2015 13:28	KK
								Certifications:	CTDOH		

### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-05

York Sample ID: 15E0092-05

York Project (SDG) No.  
15E0092

Client Project ID

Harmon OU 2 Well Overdrilling

Matrix  
Oil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: Oil Preparation for GC

#### Log-in Notes:

#### Sample Notes:

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		mg/kg	0.988	4.94	1	EPA 8082A	05/11/2015 09:15	05/11/2015 11:57	AMC
								Certifications:	CTDOH,NELAC-NY10854		
11104-28-2	Aroclor 1221	ND		mg/kg	0.988	4.94	1	EPA 8082A	05/11/2015 09:15	05/11/2015 11:57	AMC
								Certifications:	CTDOH,NELAC-NY10854		
11141-16-5	Aroclor 1232	ND		mg/kg	0.988	4.94	1	EPA 8082A	05/11/2015 09:15	05/11/2015 11:57	AMC
								Certifications:	CTDOH,NELAC-NY10854		
53469-21-9	Aroclor 1242	ND		mg/kg	0.988	4.94	1	EPA 8082A	05/11/2015 09:15	05/11/2015 11:57	AMC
								Certifications:	CTDOH,NELAC-NY10854		
12672-29-6	Aroclor 1248	ND		mg/kg	0.988	4.94	1	EPA 8082A	05/11/2015 09:15	05/11/2015 11:57	AMC
								Certifications:	CTDOH,NELAC-NY10854		
11097-69-1	Aroclor 1254	22.0		mg/kg	0.988	4.94	1	EPA 8082A	05/11/2015 09:15	05/11/2015 11:57	AMC
								Certifications:	CTDOH,NELAC-NY10854		
11096-82-5	Aroclor 1260	ND		mg/kg	0.988	4.94	1	EPA 8082A	05/11/2015 09:15	05/11/2015 11:57	AMC
								Certifications:	CTDOH,NELAC-NY10854		



### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-05

York Sample ID: 15E0092-05

York Project (SDG) No.  
15E0092

Client Project ID  
Harmon OU 2 Well Overdrilling

Matrix  
Oil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: Oil Preparation for GC

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1336-36-3	* Total PCBs	22.0		mg/kg	0.988	4.94	1	EPA 8082A Certifications:	05/11/2015 09:15	05/11/2015 11:57	AMC
<b>Surrogate Recoveries</b>											
877-09-8 <i>Surrogate: Tetrachloro-m-xylene</i> Result      Acceptance Range											
2051-24-3 <i>Surrogate: Decachlorobiphenyl</i> 77.0 %      30-150											
2051-24-3 <i>Surrogate: Decachlorobiphenyl</i> 120 %      30-150											

### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-06

York Sample ID: 15E0092-06

York Project (SDG) No.  
15E0092

Client Project ID  
Soil / FA 4-18  
Harmon OU 2 Well Overdrilling

Matrix  
Soil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA 3550C

#### Log-in Notes:

#### Sample Notes:

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		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:38	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:38	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:38	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:38	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:38	AMC
11097-69-1	<b>Aroclor 1254</b>	<b>0.517</b>		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:38	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:38	AMC
1336-36-3	* Total PCBs	<b>0.517</b>		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications:	05/08/2015 12:54	05/11/2015 14:38	AMC
<b>Surrogate Recoveries</b>											
877-09-8 <i>Surrogate: Tetrachloro-m-xylene</i> Result      Acceptance Range											
2051-24-3 <i>Surrogate: Decachlorobiphenyl</i> 67.0 %      30-140											
2051-24-3 <i>Surrogate: Decachlorobiphenyl</i> 112 %      30-140											

#### Total Solids

Sample Prepared by Method: % Solids Prep

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-06

York Sample ID: 15E0092-06

York Project (SDG) No.  
15E0092

Client Project ID  
Harmon OU 2 Well Overdrilling

Matrix  
Soil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

#### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.8		%	0.100	0.100	1	SM 2540G Certifications: CTDOH	05/08/2015 07:18	05/08/2015 13:28	KK

### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-06

York Sample ID: 15E0092-07

York Project (SDG) No.  
15E0092

Client Project ID  
Harmon OU 2 Well Overdrilling

Matrix  
Soil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA 3550C

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		mg/kg dry	0.0242	0.0242	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:53	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0242	0.0242	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:53	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0242	0.0242	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:53	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0242	0.0242	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:53	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0242	0.0242	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:53	AMC
11097-69-1	<b>Aroclor 1254</b>	<b>0.0887</b>		mg/kg dry	0.0242	0.0242	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:53	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0242	0.0242	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:53	AMC
1336-36-3	* Total PCBs	0.0887		mg/kg dry	0.0242	0.0242	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 14:53	AMC

#### Surrogate Recoveries

#### Result

#### Acceptance Range

877-09-8	Surrogate: Tetrachloro-m-xylene	72.9 %	30-140
2051-24-3	Surrogate: Decachlorobiphenyl	108 %	30-140

#### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	68.9		%	0.100	0.100	1	SM 2540G Certifications: CTDOH	05/08/2015 07:18	05/08/2015 13:28	KK



### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-07

York Sample ID: 15E0092-07

York Project (SDG) No.  
15E0092

Client Project ID  
Harmon OU 2 Well Overdrilling

Matrix  
Soil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-08

York Sample ID: 15E0092-08

MIXED FA 4-12  
York Project (SDG) No.  
15E0092

Client Project ID  
Harmon OU 2 Well Overdrilling

Matrix  
Soil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA 3550C

#### Log-in Notes:

#### Sample Notes:

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		mg/kg dry	0.0255	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:09	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0255	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:09	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0255	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:09	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0255	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:09	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0255	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:09	AMC
11097-69-1	Aroclor 1254	0.141		mg/kg dry	0.0255	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:09	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0255	0.0255	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:09	AMC
1336-36-3	* Total PCBs	0.141		mg/kg dry	0.0255	0.0255	1	EPA 8082A Certifications:	05/08/2015 12:54	05/11/2015 15:09	AMC
	Surrogate Recoveries	Result				Acceptance Range					
877-09-8	Surrogate: Tetrachloro-m-xylene	73.9 %				30-140					
2051-24-3	Surrogate: Decachlorobiphenyl	115 %				30-140					

### Total Solids

Sample Prepared by Method: % Solids Prep

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	65.3		%	0.100	0.100	1	SM 2540G Certifications: CTDOH	05/08/2015 07:18	05/08/2015 13:28	KK

### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-09

York Sample ID: 15E0092-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15E0092

Harmon OU 2 Well Overdrilling

Oil

April 29, 2015 3:00 pm

05/04/2015



### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-09

York Sample ID: 15E0092-09

York Project (SDG) No.  
15E0092

Client Project ID  
Harmon OU 2 Well Overdrilling

Matrix  
Oil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

#### Polychlorinated Biphenyls (PCB)

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		mg/kg	0.957	4.78	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:16	AMC
11104-28-2	Aroclor 1221	ND		mg/kg	0.957	4.78	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:16	AMC
11141-16-5	Aroclor 1232	ND		mg/kg	0.957	4.78	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:16	AMC
53469-21-9	Aroclor 1242	ND		mg/kg	0.957	4.78	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:16	AMC
12672-29-6	Aroclor 1248	ND		mg/kg	0.957	4.78	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:16	AMC
11097-69-1	Aroclor 1254	ND		mg/kg	0.957	4.78	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:16	AMC
11096-82-5	Aroclor 1260	ND		mg/kg	0.957	4.78	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:16	AMC
1336-36-3	* Total PCBs	ND		mg/kg	0.957	4.78	1	EPA 8082A Certifications:	05/11/2015 09:15	05/11/2015 12:16	AMC
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
877-09-8	Surrogate: Tetrachloro-m-xylene	80.5 %	30-150								
2051-24-3	Surrogate: Decachlorobiphenyl	123 %	30-150								

### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-10

York Sample ID: 15E0092-10

York Project (SDG) No.  
15E0092

Client Project ID

Harmon OU 2 Well Overdrilling

Matrix

Collection Date/Time

Date Received

April 29, 2015 3:00 pm

05/04/2015

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA 3550C

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		mg/kg dry	0.0220	0.0220	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:28	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0220	0.0220	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:28	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0220	0.0220	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:28	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0220	0.0220	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:28	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0220	0.0220	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:28	AMC
11097-69-1	<b>Aroclor 1254</b>	<b>0.0769</b>		mg/kg dry	0.0220	0.0220	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/08/2015 12:54	05/11/2015 15:28	AMC



### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-10

York Sample ID: 15E0092-10

York Project (SDG) No.  
15E0092

Client Project ID  
Harmon OU 2 Well Overdrilling

Matrix  
Soil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0220	0.0220	1	EPA 8082A Certifications: NELAC-NY10854, CTDOH, NJDEP, PADEP	05/08/2015 12:54	05/11/2015 15:28	AMC
1336-36-3	* Total PCBs	0.0769		mg/kg dry	0.0220	0.0220	1	EPA 8082A Certifications:	05/08/2015 12:54	05/11/2015 15:28	AMC
<b>Surrogate Recoveries</b>											
877-09-8 <i>Surrogate: Tetrachloro-m-xylene</i> 66.0 %      30-140											
2051-24-3 <i>Surrogate: Decachlorobiphenyl</i> 107 %      30-140											

#### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	75.7		%	0.100	0.100	1	SM 2540G Certifications: CTDOH	05/08/2015 07:18	05/08/2015 13:28	KK

### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-11

York Sample ID: 15E0092-11

York Project (SDG) No.  
15E0092

Client Project ID  
Harmon OU 2 Well Overdrilling

Matrix  
Oil

Collection Date/Time  
April 29, 2015 3:00 pm

Date Received  
05/04/2015

#### Polychlorinated Biphenyls (PCB)

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		mg/kg	0.973	4.86	1	EPA 8082A Certifications: CTDOH, NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:36	AMC
11104-28-2	Aroclor 1221	ND		mg/kg	0.973	4.86	1	EPA 8082A Certifications: CTDOH, NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:36	AMC
11141-16-5	Aroclor 1232	ND		mg/kg	0.973	4.86	1	EPA 8082A Certifications: CTDOH, NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:36	AMC
53469-21-9	Aroclor 1242	ND		mg/kg	0.973	4.86	1	EPA 8082A Certifications: CTDOH, NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:36	AMC
12672-29-6	Aroclor 1248	ND		mg/kg	0.973	4.86	1	EPA 8082A Certifications: CTDOH, NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:36	AMC
11097-69-1	<b>Aroclor 1254</b>	<b>19.5</b>		mg/kg	0.973	4.86	1	EPA 8082A Certifications: CTDOH, NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:36	AMC
11096-82-5	Aroclor 1260	ND		mg/kg	0.973	4.86	1	EPA 8082A Certifications: CTDOH, NELAC-NY10854	05/11/2015 09:15	05/11/2015 12:36	AMC
1336-36-3	* Total PCBs	19.5		mg/kg	0.973	4.86	1	EPA 8082A Certifications:	05/11/2015 09:15	05/11/2015 12:36	AMC



### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-11

York Sample ID: 15E0092-11

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0092	Harmon OU 2 Well Overdrilling	Oil	April 29, 2015 3:00 pm	05/04/2015

#### Polychlorinated Biphenyls (PCB)

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
<b>Surrogate Recoveries</b>											
877-09-8 Surrogate: Tetrachloro-m-xylene 82.0 %											
2051-24-3 Surrogate: Decachlorobiphenyl 128 %											
Acceptance Range 30-150											

### Sample Information

Client Sample ID: Harmon OU 2 well overdrilling-12

York Sample ID: 15E0092-12

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
15E0092	Harmon OU 2 Well Overdrilling	Liquid	April 29, 2015 3:00 pm	05/04/2015

#### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: EPA SW846-3510C Low Level

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-01	ug/L	0.0645	0.0645	I	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	05/08/2015 08:14	05/08/2015 13:29	AMC
11104-28-2	Aroclor 1221	ND	HT-01	ug/L	0.0645	0.0645	I	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	05/08/2015 08:14	05/08/2015 13:29	AMC
11141-16-5	Aroclor 1232	ND	HT-01	ug/L	0.0645	0.0645	I	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	05/08/2015 08:14	05/08/2015 13:29	AMC
53469-21-9	Aroclor 1242	ND	HT-01	ug/L	0.0645	0.0645	I	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	05/08/2015 08:14	05/08/2015 13:29	AMC
12672-29-6	Aroclor 1248	ND	HT-01	ug/L	0.0645	0.0645	I	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	05/08/2015 08:14	05/08/2015 13:29	AMC
11097-69-1	Aroclor 1254	ND	HT-01	ug/L	0.0645	0.0645	I	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	05/08/2015 08:14	05/08/2015 13:29	AMC
11096-82-5	Aroclor 1260	ND	HT-01	ug/L	0.0645	0.0645	I	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	05/08/2015 08:14	05/08/2015 13:29	AMC
1336-36-3	* Total PCBs	ND	HT-01	ug/L	0.0645	0.0645	I	EPA 8082A Certifications:	05/08/2015 08:14	05/08/2015 13:29	AMC
<b>Surrogate Recoveries</b>											
877-09-8	Surrogate: Tetrachloro-m-xylene	56.2 %	HT-01		30-120						
2051-24-3	Surrogate: Decachlorobiphenyl	92.5 %	HT-01		30-120						
Acceptance Range 30-120											



## Analytical Batch Summary

**Batch ID:** BE50395

**Preparation Method:** % Solids Prep

**Prepared By:** KK

YORK Sample ID

Client Sample ID

Preparation Date

15E0092-01	Harmon OU 2 well overdrilling	05/08/15
15E0092-02	Harmon OU 2 well overdrilling	05/08/15
15E0092-03	Harmon OU 2 well overdrilling	05/08/15
15E0092-04	Harmon OU 2 well overdrilling	05/08/15
15E0092-06	Harmon OU 2 well overdrilling	05/08/15
15E0092-07	Harmon OU 2 well overdrilling	05/08/15
15E0092-08	Harmon OU 2 well overdrilling	05/08/15
15E0092-10	Harmon OU 2 well overdrilling	05/08/15

**Batch ID:** BE50402

**Preparation Method:** EPA SW846-3510C Low Level

**Prepared By:** KAT

YORK Sample ID

Client Sample ID

Preparation Date

15E0092-12	Harmon OU 2 well overdrilling	05/08/15
BE50402-BLK1	Blank	05/08/15
BE50402-BS1	LCS	05/08/15
BE50402-BSD1	LCS Dup	05/08/15

**Batch ID:** BE50433

**Preparation Method:** EPA 3550C

**Prepared By:** SA

YORK Sample ID

Client Sample ID

Preparation Date

15E0092-01	Harmon OU 2 well overdrilling	05/08/15
15E0092-02	Harmon OU 2 well overdrilling	05/08/15
15E0092-03	Harmon OU 2 well overdrilling	05/08/15
15E0092-04	Harmon OU 2 well overdrilling	05/08/15
15E0092-06	Harmon OU 2 well overdrilling	05/08/15
15E0092-07	Harmon OU 2 well overdrilling	05/08/15
15E0092-08	Harmon OU 2 well overdrilling	05/08/15
15E0092-10	Harmon OU 2 well overdrilling	05/08/15
BE50433-BLK1	Blank	05/08/15
BE50433-BS2	LCS	05/08/15
BE50433-BSD2	LCS Dup	05/08/15

**Batch ID:** BE50484

**Preparation Method:** Oil Preparation for GC

**Prepared By:** AMC

YORK Sample ID

Client Sample ID

Preparation Date

15E0092-05	Harmon OU 2 well overdrilling	05/11/15
15E0092-09	Harmon OU 2 well overdrilling	05/11/15
15E0092-11	Harmon OU 2 well overdrilling	05/11/15
BE50484-BLK1	Blank	05/11/15
BE50484-SRM1	Reference	05/11/15



**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
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**Batch BE50402 - EPA SW846-3510C Low Level**

**Blank (BE50402-BLK1)**

Aroclor 1016	ND	0.0500	ug/L								
Aroclor 1221	ND	0.0500	"								
Aroclor 1232	ND	0.0500	"								
Aroclor 1242	ND	0.0500	"								
Aroclor 1248	ND	0.0500	"								
Aroclor 1254	ND	0.0500	"								
Aroclor 1260	ND	0.0500	"								
Total PCBs	ND	0.0500	"								
Surrogate: Tetrachloro-m-xylene	0.117		"	0.203		57.6	30-120				
Surrogate: Decachlorobiphenyl	0.161		"	0.201		80.1	30-120				

**LCS (BE50402-BS1)**

Aroclor 1016	0.923	0.0500	ug/L	1.00	92.3	40-120					
Aroclor 1260	0.994	0.0500	"	1.00	99.4	40-120					
Surrogate: Tetrachloro-m-xylene	0.126		"	0.203		62.1	30-120				
Surrogate: Decachlorobiphenyl	0.189		"	0.201		94.0	30-120				

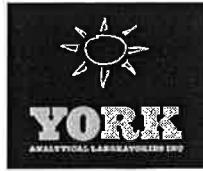
**LCS Dup (BE50402-BSD1)**

Aroclor 1016	0.809	0.0500	ug/L	1.00	80.9	40-120			13.2	30	
Aroclor 1260	0.943	0.0500	"	1.00	94.3	40-120			5.27	30	
Surrogate: Tetrachloro-m-xylene	0.116		"	0.203		57.1	30-120				
Surrogate: Decachlorobiphenyl	0.179		"	0.201		89.1	30-120				

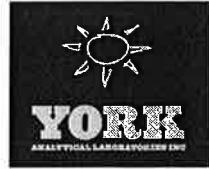
**Batch BE50433 - EPA 3550C**

**Blank (BE50433-BLK1)**

Aroclor 1016	ND	0.0167	mg/kg wet								
Aroclor 1221	ND	0.0167	"								
Aroclor 1232	ND	0.0167	"								
Aroclor 1242	ND	0.0167	"								
Aroclor 1248	ND	0.0167	"								
Aroclor 1254	ND	0.0167	"								
Aroclor 1260	ND	0.0167	"								
Total PCBs	ND	0.0167	"								
Surrogate: Tetrachloro-m-xylene	0.0353		"	0.0677		52.2	30-140				
Surrogate: Decachlorobiphenyl	0.0473		"	0.0670		70.6	30-140				

**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
<b>Batch BE50433 - EPA 3550C</b>											
<b>LCS (BE50433-BS2)</b>											
Aroclor 1016	0.282	0.0167	mg/kg wet	0.333		84.6	40-130				
Aroclor 1260	0.283	0.0167	"	0.333		84.8	40-130				
Surrogate: Tetrachloro-m-xylene	0.0487		"	0.0677		71.9	30-140				
Surrogate: Decachlorobiphenyl	0.0487		"	0.0670		72.6	30-140				
<b>LCS Dup (BE50433-BSD2)</b>											
Aroclor 1016	0.283	0.0167	mg/kg wet	0.333		85.0	40-130		0.542	25	
Aroclor 1260	0.285	0.0167	"	0.333		85.4	40-130		0.752	25	
Surrogate: Tetrachloro-m-xylene	0.0487		"	0.0677		71.9	30-140				
Surrogate: Decachlorobiphenyl	0.0507		"	0.0670		75.6	30-140				
<b>Batch BE50484 - Oil Preparation for GC</b>											
<b>Blank (BE50484-BLK1)</b>											
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	"								
Surrogate: Tetrachloro-m-xylene	18.7		"	20.0		93.5	30-150				
Surrogate: Decachlorobiphenyl	23.1		"	20.0		116	30-150				
<b>Reference (BE50484-SRM1)</b>											
Aroclor 1260	21.5	4.94	mg/kg	17.8		121	19.06-140.6				
Surrogate: Tetrachloro-m-xylene	15.4		"	19.7		78.0	30-150				
Surrogate: Decachlorobiphenyl	22.7		"	19.7		115	30-150				



## Notes and Definitions

- HT-01 This result was reported from an analysis conducted outside of the EPA recommended holding time.
- EXT-EM The sample exhibited emulsion formation during the extraction process. This may affect surrogate recoveries.

*	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.







# 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: 05/07/2015

**Client Project ID: Harmon OUII Oil Recovery**  
York Project (SDG) No.: 15E0083

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 05/07/2015  
Client Project ID: Harmon OUII Oil Recovery  
York Project (SDG) No.: 15E0083

**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 May 04, 2015 and listed below. The project was identified as your project: **Harmon OUII 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>
15E0083-01	Harmon OUII recovered oil	Oil	05/01/2015	05/04/2015
15E0083-02	Harmon OUII recovered oil	Oil	05/01/2015	05/04/2015

## General Notes for York Project (SDG) No.: 15E0083

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: 05/07/2015





## Sample Information

Client Sample ID: Harmon OUII recovered oil

York Sample ID: 15E0083-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0083	Harmon OUII Oil Recovery	Oil	May 1, 2015 10:45 am	05/04/2015

### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: Oil Preparation for GC

#### Log-in Notes:

#### Sample Notes:

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		mg/kg	0.917	4.58	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:18	AMC
11104-28-2	Aroclor 1221	ND		mg/kg	0.917	4.58	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:18	AMC
11141-16-5	Aroclor 1232	ND		mg/kg	0.917	4.58	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:18	AMC
53469-21-9	Aroclor 1242	ND		mg/kg	0.917	4.58	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:18	AMC
12672-29-6	Aroclor 1248	ND		mg/kg	0.917	4.58	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:18	AMC
11097-69-1	Aroclor 1254	ND		mg/kg	0.917	4.58	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:18	AMC
11096-82-5	Aroclor 1260	ND		mg/kg	0.917	4.58	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:18	AMC
1336-36-3	* Total PCBs	ND		mg/kg	0.917	4.58	1	EPA 8082A Certifications:	05/06/2015 08:42	05/06/2015 14:18	AMC
Surrogate Recoveries		Result	Acceptance Range								
877-09-8	Surrogate: Tetrachloro-m-xylene	109 %				30-150					
2051-24-3	Surrogate: Decachlorobiphenyl	157 %	GC-Sur r			30-150					

## Sample Information

Client Sample ID: Harmon OUII recovered oil

York Sample ID: 15E0083-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0083	Harmon OUII Oil Recovery	Oil	May 1, 2015 11:00 am	05/04/2015

### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: Oil Preparation for GC

#### Log-in Notes:

#### Sample Notes:

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		mg/kg	0.994	4.97	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:38	AMC
11104-28-2	Aroclor 1221	ND		mg/kg	0.994	4.97	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:38	AMC
11141-16-5	Aroclor 1232	ND		mg/kg	0.994	4.97	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:38	AMC
53469-21-9	Aroclor 1242	ND		mg/kg	0.994	4.97	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:38	AMC
12672-29-6	Aroclor 1248	ND		mg/kg	0.994	4.97	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:38	AMC



## Sample Information

Client Sample ID: Harmon OUII recovered oil

York Sample ID: 15E0083-02

York Project (SDG) No.  
15E0083

Client Project ID  
Harmon OUII Oil Recovery

Matrix  
Oil

Collection Date/Time  
May 1, 2015 11:00 am

Date Received  
05/04/2015

### Polychlorinated Biphenyls (PCB)

Sample Prepared by Method: Oil Preparation for GC

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11097-69-1	Aroclor 1254	ND		mg/kg	0.994	4.97	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:38	AMC
11096-82-5	Aroclor 1260	ND		mg/kg	0.994	4.97	1	EPA 8082A Certifications: CTDOH,NELAC-NY10854	05/06/2015 08:42	05/06/2015 14:38	AMC
1336-36-3	* Total PCBs	ND		mg/kg	0.994	4.97	1	EPA 8082A Certifications:	05/06/2015 08:42	05/06/2015 14:38	AMC
Surrogate Recoveries		Result	Acceptance Range								
877-09-8	Surrogate: Tetrachloro-m-xylene	112 %	30-150								
2051-24-3	Surrogate: Decachlorobiphenyl	149 %	30-150								



## Analytical Batch Summary

**Batch ID:** BE50257

**Preparation Method:** Oil Preparation for GC

**Prepared By:** AMC

YORK Sample ID

Client Sample ID

Preparation Date

15E0083-01	Harmon OUII recovered oil	05/06/15
15E0083-02	Harmon OUII recovered oil	05/06/15
BE50257-BLK1	Blank	05/06/15
BE50257-SRM1	Reference	05/06/15



## 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	RPD Limit	Flag
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#### Batch BE50257 - Oil Preparation for GC

##### Blank (BE50257-BLK1)

Prepared & Analyzed: 05/06/2015

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	"								

Surrogate: Tetrachloro-m-xylene	24.0	"	20.0		120	30-150
Surrogate: Decachlorobiphenyl	27.4	"	20.0		137	30-150

##### Reference (BE50257-SRM1)

Prepared & Analyzed: 05/06/2015

Aroclor 1260	24.0	4.95	mg/kg	17.8	135	19.06-140.6
Surrogate: Tetrachloro-m-xylene	19.5	"	19.8		98.5	30-150
Surrogate: Decachlorobiphenyl	27.2	"	19.8		138	30-150



## Notes and Definitions

GC-Surr Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the alternate surrogate.

*	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  
FAX (203) 357-0166**

## ***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.

York Project No. 15E 0083

<b>YOUR</b> Information		Report To:	Invoice To:	<b>YOUR</b> Project ID	Turn-Around Time	Report Type	
Company: <u>MNR</u>	Company: <u>K. Mc Hale</u>	Company: <u>MNR</u>	Company: <u>Harmon oil</u> <u>oil recovery</u>	Purchase Order No.	RUSH - Same Day	Summary Report	
Address: _____	Address: <u>T. Roszak</u>	Address: _____	Address: _____		RUSH - Next Day	Summary w/ QA Summary	
Phone No. _____	Phone No. _____	Phone No. _____	Phone No. _____		RUSH - Two Day	CT RCP Package	
Contact Person: _____	Attention: <u>J. Antonio</u>	Attention: _____	Attention: _____		RUSH - Three Day	CTRCP DQA/DUE Pkg	
E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	E-Mail Address: _____	Samples from: CT NY NJ	RUSH - Four Day	NY ASP A Package	
						Standard(5-7 Days)	NY ASP B Package
							NJDEP Red. Deliv.
							<u>Electronic Data Deliverables (EDD)</u>
							Simple Excel
							NYSDEC EQIS <input checked="" type="checkbox"/>
							EQuIS (std)
							EZ-EDD (EQuIS)
							NJDEP SRP HazSite EDD
							GIS/KEY (std)
							Other
							York Regulatory Comparison
							Excel Spreadsheet
							Compare to the following Regs. (please fill in):

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
Harmon Out recovered oil	5/1/15 1045 hrs.		# 5-1 test for PCB's	1-ltr. Amber unpreserved
Harmon Out recovered oil	5/1/15 1100 hrs		# 5-2 test for PCB's	1-ltr. Amber unpreserved

Comments	Preservation Check those Applicable	4°C	Frozen	HCl	MeOH	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	Temperature on Receipt
		ZnAc	Ascorbic Acid	Other					
<u>Email To:</u> <u>CSMELT@daymail</u>	Special Instructions	<u>Office</u>		<u>5-4-15</u>		<u>Chris</u>	<u>5-4-15</u>	<u>10:25</u>	
	Field Filtered <input type="checkbox"/>	Samples Relinquished By		Date/Time		Samples Received By		Date/Time	
	Lab to Filter <input type="checkbox"/>					<u>Chris</u>	<u>5/4/15</u>	<u>1840</u>	
		Samples Relinquished By		Date/Time		Samples Received in LAB by		Date/Time	

**ATTACHMENT E**

**BILLS OF LADING AND WASTE MANIFESTS  
FOR  
DRILLING, WELL DEVELOPMENT WASTE  
AND  
ACCUMULATED NAPL**



## ENVIRONMENTAL

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DID: 10541

Form Approved. OMB No. 2050-0039

12

GENERATOR	UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number NYD084006477	2. Page 1 of 1	3. Emergency Response Phone CHIEF DISPATCHER 212-340-2050	4. Manifest Tracking Number <b>009662553 JJK</b>
	5. Generator's Name and Mailing Address METRO NORTH RAILROAD C/O ENVIRONMENTAL DEPT 525 NORTH BROADWAY WHITE PLAINS, NY 10603 Generator's Phone 914-461-0593 ATTN: GAIL SILKE		Generator's Site Address (if different than mailing address) METRO NORTH - CROTON ON HUDSON 1 CROTON POINT AVENUE CROTON ON HUDSON, NY 10520		
INTL	6. Transporter 1 Company Name <b>FREEHOLD CARTAGE, INC.</b>			U.S. EPA ID Number <b>NJD054126164</b>	
	7. Transporter 2 Company Name			U.S. EPA ID Number	
TRANSPORTER	8. Designated Facility Name and Site Address CWM CHEMICAL SERVICES, LLC 1550 BALMER ROAD PO BOX 200 MODEL CITY, NY 14107 Facility's Phone: 716-286-8231			U.S. EPA ID Number <b>NYD049836679</b>	
	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) 1. RQ UN2315, POLYCHLORINATED BIPHENYLIS, LIQUID S, PG III SOLUTION	10. Containers No. 6 Type DM	11. Total Quantity 562	12. Unit Wt./Vol. K
DESIGNATED FACILITY	14. Special Handling Instructions and Additional Information 1. PCB OIL/WATER (BT9569) ERG#171 WTS ORDER # 58002			81448233	
	15. 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. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.				
Generator/Offeror's Printed/Typed Name <i>Robert Sheehan</i>	Signature		Month 10	Day 04	Year 2015
16. International Shipments	<input type="checkbox"/> Import to U.S.	<input type="checkbox"/> Export from U.S.	Port of entry/exit: _____ Date leaving U.S.: _____		
17. Transporter Acknowledgment of Receipt of Materials	Transporter 1 Printed/Typed Name <i>Jay Ketcham</i>			Signature	
	Transporter 2 Printed/Typed Name <i>Jay Ketcham</i>			Signature	
18. Discrepancy					
18a. Discrepancy Indication Space	<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> Full Rejection
18b. Alternate Facility (or Generator)	Manifest Reference Number:				
Facility's Phone:					
18c. Signature of Alternate Facility (or Generator)					
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <i>HIAI</i>	2. <i></i>	3. <i></i>	4. <i></i>		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a.					
Printed/Typed Name <i>Mark Goss</i>	Signature		Month 15	Day 16	Year 2015



## FREEHOLD CARTAGE INC.

P.O. BOX 5010 • FREEHOLD, NJ 07728-5010  
(732) 462-1001 • FAX (732) 308-0924

BILL OF LADING  
FCI EPA ID NO. NJD05412614  
**S 505712**

350 Pigeon Point Road  
New Castle, DE 19720  
Phone: (302) 658-2005  
Fax: (302) 658-6229

175 Bartow Mun. Airport  
Bartow, FL 33830  
Phone: (863) 533-4599  
Fax: (863) 533-1613

5533 Dunham Road  
Maple Heights, OH 44137  
Phone: (330) 835-3473  
Fax: (330) 835-3732

108 Monahan Avenue  
Dunmore, PA 18512  
Phone: (570) 342-7232  
Fax: (570) 342-7367

132 Myrtle Beach Hwy.  
Sumter, SC 29153  
Phone: (803) 773-2611  
Fax: (803) 773-2942

SHIPPER NAME/ADDRESS <i>FCI - FREEHOLD, NJ</i>		PHONE (AREA CODE) TRACTOR      TRAILER			APPOINTMENT TIME		
FCI REP. LOADING (PRINT) <i>Jay B</i>	PROCEDURE <i>Clean</i>	EQUIP. SPOTTED	EQUIP. REMOVED	TIME AT SHIPPER (MILITARY TIME ONLY)		ARRIVAL TIME      DEPARTURE TIME	
COMMENTS OR DELAYS AT SHIPPER				EQUIPMENT USED			

BROKER:		MANIFEST/DOCUMENT NO. <i>007662573JK</i>								
PO#:	WO#:									
(X) HM	PROPER U.S. D.O.T. SHIPPING NAME	U.S. D.O.T. HAZARDOUS CLASS	NA/JN/NO.	PACKING GROUP	NO. CONT.	CONT TYPE	NET QUANTITY	UNIT MEASURE	WASTE NO.	FORM
1					<i>6AM</i>		<i>512</i>	<i>K</i>		
2										
3										

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION NUMBER.

SHIPPER'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The materials described above were consigned to the Transporter named. The consignee can and will accept the shipment and has a valid permit to do so if required. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the shipper is obligated to pay the agreed rate offered to the contractor.

PLEASE PRINT NAME/TITLE	SHIPPER'S SIGNATURE	DATE LOADED <i>4/10/15</i>
	X	MO.      DAY      YR.
I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT.		

CONSIGNEE NAME/ADDRESS <i>Curry</i>		PHONE (AREA CODE) TRACTOR      TRAILER			APPOINTMENT TIME		
FCI REP. UNLOADING (PRINT)	PROCEDURE	EQUIP. SPOTTED	EQUIP. REMOVED	TIME AT CONSIGNEE (MILITARY TIME ONLY)		ARRIVAL TIME      DEPARTURE TIME	
COMMENTS OR DELAYS AT CONSIGNEE				EQUIPMENT USED			
PLEASE PRINT NAME/TITLE	CONSIGNEE SIGNATURE			DATE UNLOADED <i>1/1/15</i>			
	X				MO.      DAY      YR.		

AR H-0257	MD HWH-167	MO H-1490	OH UPW-0190713-OH	TX 40705
CT CT-HW-307	2001-OPV-2335	ND WH-429	OK UPW-0190713-OH	WI 11602
DE DE-HW-203	ME ME-HWT-47	NH TNH-0047	ONTARIO, CANADA A 840943	WV UPW-0190713-OH
DE-SW-203	ME-WOT-47	NJ S-2265	PA PA-AH-0067	
IL UPW-0190713-OH	MI UPW-0190713-OH	15939	QUEBEC, CANADA QC-6ML-047	
MA MA-294	MN UPW-0190713-OH	NY NJ-113	RI RI-535	

White - FCI Original  
Yellow - FCI Billing  
Blue - FCI Office/Customer  
Green - Retained by TSDF  
Gold - Retained by Generator

**S 505712**

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

DID: 33320

Form Approved. OMB No. 2050-0039

GENERATOR	UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number <b>NYD084006477</b>	2. Page 1 of <b>1</b>	3. Emergency Response Phone <b>CHIEF DISPATCHER 212-340-2050</b>	4. Manifest Tracking Number <b>014217576 JJK</b>				
	5. Generator's Name and Mailing Address <b>METRO NORTH RAILROAD C/O ENVIRONMENTAL DEPT 525 NORTH BROADWAY WHITE PLAINS, NY 10603</b> Generator's Phone: <b>914-461-1593 ATTN: GATL STIKE</b>		Generator's Site Address (if different than mailing address) <b>METRO NORTH - CROTON ON HUDSON 1 CROTON POINT AVENUE CROTON ON HUDSON, NY 10520</b>						
TRANSPORTER INT'L	6. Transporter 1 Company Name <b>FREEHOLD CARTAGE, INC.</b>		U.S. EPA ID Number <b>NID054126164</b>						
	7. Transporter 2 Company Name		U.S. EPA ID Number						
DESIGNATED FACILITY	8. Designated Facility Name and Site Address <b>CWM CHEMICAL SERVICES, LLC 1550 BALMER ROAD PO BOX 200 MONEL CITY, NY 14107</b> Facility's Phone: <b>716-205-8231</b>		U.S. EPA ID Number <b>NYD049836679</b>						
	9a. HM		9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) <b>RQ UN2315, POLYCHLORINATED BIPHENYLS, LIQUID, SOLUTION, S, PG III</b>		10. Containers No. <b>14</b> Type <b>DM</b>	11. Total Quantity <b>8400</b>	12. Unit Wt./Vol. <b>K</b>	13. Waste Codes <b>NONE</b>	
X									
X									
X									
X									
14. Special Handling Instructions and Additional Information <b>1. OIL FROM OU-2 (NY297075) ERG#171 WMS# 58785 SEE ATTACHED CONTINUATION SHEET</b>									
15. 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. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.									
Generator's/Officer's Printed/Typed Name <i>[Signature]</i>					Signature		Month <b>06</b>	Day <b>01</b>	Year <b>15</b>
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.					Port of entry/exit: _____ Date leaving U.S.: _____				
Transporter signature (for exports only): _____									
17. Transporter Acknowledgment of Receipt of Materials									
Transporter 1 Printed/Typed Name <i>[Signature]</i>					Signature		Month <b>06</b>	Day <b>01</b>	Year <b>15</b>
Transporter 2 Printed/Typed Name <i>[Signature]</i>					Signature		Month <b>06</b>	Day <b>01</b>	Year <b>15</b>
18. Discrepancy									
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection									
Manifest Reference Number: _____									
18b. Alternate Facility (or Generator) U.S. EPA ID Number									
Facility's Phone: _____									
18c. Signature of Alternate Facility (or Generator)									
Month <b>  </b> Day <b>  </b> Year <b>  </b>									
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)									
1.		2.		3.		4.			
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a									
Printed/Typed Name					Signature		Month <b>  </b>	Day <b>  </b>	Year <b>  </b>



## FREEHOLD CARTAGE INC.

P.O. BOX 5010 • FREEHOLD, NJ 07728-5010  
(732) 462-1001 • FAX (732) 308-0924

BILL OF LADING  
FCI EPA ID NO. NJD054126164

S 531305

350 Pigeon Point Road  
New Castle, DE 19720  
Phone: (302) 658-2005  
Fax: (302) 658-6229

175 Bartow Mun. Airport  
Bartow, FL 33830  
Phone: (863) 533-4599  
Fax: (863) 533-1613

5533 Dunham Road  
Maple Heights, OH 44137  
Phone: (330) 835-3473  
Fax: (330) 835-3732

108 Monahan Avenue  
Dunmore, PA 18512  
Phone: (570) 342-7232  
Fax: (570) 342-7367

132 Myrtle Beach Hwy.  
Sumter, SC 29153  
Phone: (803) 773-2611  
Fax: (803) 773-2942

SHIPPER NAME/ADDRESS <i>Metro North</i>		PHONE (AREA CODE) TRACTOR 719 TRAILER 4869					
FCI REP. LOADING (PRINT) <i>MCrochan</i>	PROCEDURE <i>L/L</i>	EQUIP. SPOTTED	EQUIP. REMOVED	APPOINTMENT TIME <i>10:00</i>		TIME AT SHIPPER <i>10:40</i>	(MILITARY TIME ONLY) <i>12:30</i>
ARRIVAL TIME <i>10:40</i>				DEPARTURE TIME <i>12:30</i>			
COMMENTS OR DELAYS AT SHIPPER				EQUIPMENT USED <i>Set manifest</i>			

BROKER:		MANIFEST/DOCUMENT NO. <i>Set manifest</i>									
PO#:	WO#: <i>1066732.01</i>	PROPER U.S. D.O.T. SHIPPING NAME <i>014217576JK</i>	U.S. D.O.T. HAZARDOUS CLASS	NA/UN/NO.	PACKING GROUP	NO. CONT.	CONT. TYPE	NET QUANTITY <i>(55gal)</i>	UNIT MEASURE	WASTE NO.	FORM
1						14	DM				
2											
3											

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION NUMBER.

SHIPPER'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The materials described above were consigned to the Transporter named. The consignee can and will accept the shipment and has a valid permit to do so if required. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the shipper is obligated to pay the agreed rate offered to the contractor.

PLEASE PRINT NAME/TITLE <i>A</i>	SHIPPER'S SIGNATURE <i>X</i>	I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT.	DATE LOADED <i>6/1/15</i>
MO.	DAY	YR.	

CONSIGNEE NAME/ADDRESS <i>CWM</i>		PHONE (AREA CODE)					
<i>Melton City, NY</i>		TRACTOR	TRAILER	APPOINTMENT TIME <i>:</i>			
FCI REP. UNLOADING (PRINT) <i></i>	PROCEDURE	EQUIP. SPOTTED	EQUIP. REMOVED	TIME AT CONSIGNEE <i>:</i>		(MILITARY TIME ONLY) <i>:</i>	
ARRIVAL TIME <i>:</i>				DEPARTURE TIME <i>:</i>			
COMMENTS OR DELAYS AT CONSIGNEE				EQUIPMENT USED			

PLEASE PRINT NAME/TITLE	CONSIGNEE SIGNATURE <i>X</i>	DATE UNLOADED <i>/ /</i>
MO.	DAY	YR.

AR H-0257	MD HWH-167 2001-OPV-2335	MO H-1490 ND WH-429	OH UPW-0190713-OH OK UPW-0190713-OH	TX 40705
CT CT-HW-307	ME ME-HWT-47 ME-WOT-47	NH TNH-0047	ONTARIO, CANADA A 840943	WI 11602
DE DE-HW-203 DE-SW-203	MI UPW-0190713-OH	NJ S-2265 15939	PA PA-AH-0067	WV UPW-0190713-OH
IL UPW-0190713-OH	MN UPW-0190713-OH	NY NJ-113	QUEBEC, CANADA QC-6ML-047	RI RI-535
MA MA-294				

White - FCI Original  
Yellow - FCI Billing  
Blue - FCI Office/Customer  
Green - Retained by TSDF  
Gold - Retained by Generator

S 531305

**ATTACHMENT F**

**CHEMTECH LABORATORY REPORT  
AND  
CHAIN-OF-CUSTODY DOCUMENTATION  
FOR  
GROUNDWATER SAMPLES COLLECTED  
MAY 19-20, 2015**

## **ANALYTICAL RESULTS SUMMARY**

VOLATILE ORGANICS  
METALS  
GC SEMI-VOLATILES  
SEMI-VOLATILE ORGANICS

**PROJECT NAME : MNR HARMON YARDS LOW-FLOW SAMPLES**

**DAY ENGINEERING, P.C.**  
**1563 Lyell Avenue**

**Rochester, NY - 14606**

**Phone No: 5854540210**

**ORDER ID : G2353**  
**ATTENTION : Raymond Kampff**



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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
FORM S-I

## SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

NYSDEC Sample ID/Code	Laboratory Sample ID/Code	VOA GC/MS (Method #)	BNA GC/MS (Method #)	VOA GC (Method #)	Pest PCBs (Method #)	Metals (Method #)	Other (Method #)
VE1-2	G2353-01	8260-Low	8270D		8082A	6020	
VE1-4	G2353-02	8260-Low	8270D		8082A	6020	
VE2-1	G2353-03	8260-Low	8270D		8082A	6020	
VE3-1	G2353-04	8260-Low	8270D		8082A	6020	
VE4-11	G2353-05	8260-Low	8270D		8082A	6020	
DAY-1	G2353-08	8260-Low	8270D		8082A	6020	
FIELDBLANK	G2353-09	8260-Low	8270D		8082A	6020	

## FORM S-IIa

## SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
G2353-01	Water	05/20/15	05/21/15	05/22/15	05/23/15
G2353-02	Water	05/20/15	05/21/15	05/22/15	05/23/15
G2353-03	Water	05/20/15	05/21/15	05/22/15	05/22/15
G2353-04	Water	05/19/15	05/21/15	05/22/15	05/23/15
G2353-05	Water	05/19/15	05/21/15	05/22/15	05/23/15
G2353-08	Water	05/19/15	05/21/15	05/22/15	05/23/15
G2353-09	Water	05/20/15	05/21/15	05/22/15	05/22/15

\* Details For Test : SVOCMS Group1

## FORM S-IIb

## SAMPLE PREPARATION AND ANALYSIS SUMMARY VOLATILE (VOA) ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
G2353-01	Water	05/20/15	05/21/15		05/26/15
G2353-02	Water	05/20/15	05/21/15		05/26/15
G2353-03	Water	05/20/15	05/21/15		05/26/15
G2353-04	Water	05/19/15	05/21/15		05/26/15
G2353-05	Water	05/19/15	05/21/15		05/26/15
G2353-08	Water	05/19/15	05/21/15		05/26/15
G2353-09	Water	05/20/15	05/21/15		05/26/15

\* Details For Test : VOCMS Group1

## FORM S-IIc

## SAMPLE PREPARATION AND ANALYSIS SUMMARY PESTICIDE/PCB ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
G2353-01	Water	05/20/15	05/21/15	05/26/15	05/26/15
G2353-02	Water	05/20/15	05/21/15	05/26/15	05/26/15
G2353-03	Water	05/20/15	05/21/15	05/26/15	05/26/15
G2353-04	Water	05/19/15	05/21/15	05/26/15	05/27/15
G2353-05	Water	05/19/15	05/21/15	05/26/15	05/26/15
G2353-08	Water	05/19/15	05/21/15	05/26/15	05/26/15
G2353-09	Water	05/20/15	05/21/15	05/26/15	05/26/15

\* Details For Test : PCB Group1

## FORM S-III

## SAMPLE PREPARATION AND ANALYSIS SUMMARY MISCELLANEOUS ORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
G2353-01	Water	8260-Low	5030		
G2353-02	Water	8260-Low	5030		
G2353-03	Water	8260-Low	5030		
G2353-04	Water	8260-Low	5030		
G2353-05	Water	8260-Low	5030		
G2353-06	Water	8260-Low	5030		
G2353-07	Water	8260-Low	5030		
G2353-08	Water	8260-Low	5030		
G2353-09	Water	8260-Low	5030		

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION**

**FORM S-III**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY  
MISCELLANEOUS ORGANIC ANALYSES**

<b>Laboratory Sample ID</b>	<b>Matrix</b>	<b>Analytical Protocol</b>	<b>Extraction Method</b>	<b>Auxiliary Cleanup</b>	<b>Dil/Conc Factor</b>
G2353-01	Water	8270D	3510		
G2353-02	Water	8270D	3510		
G2353-03	Water	8270D	3510		
G2353-04	Water	8270D	3510		
G2353-05	Water	8270D	3510		
G2353-06	Water	8270D	3510		
G2353-07	Water	8270D	3510		
G2353-08	Water	8270D	3510		
G2353-09	Water	8270D	3510		

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION**

**FORM S-III**

**SAMPLE PREPARATION AND ANALYSIS SUMMARY  
MISCELLANEOUS ORGANIC ANALYSES**

<b>Laboratory Sample ID</b>	<b>Matrix</b>	<b>Analytical Protocol</b>	<b>Extraction Method</b>	<b>Auxiliary Cleanup</b>	<b>Dil/Conc Factor</b>
G2353-01	Water	8082A	3510		
G2353-02	Water	8082A	3510		
G2353-03	Water	8082A	3510		
G2353-04	Water	8082A	3510		
G2353-05	Water	8082A	3510		
G2353-06	Water	8082A	3510		
G2353-07	Water	8082A	3510		
G2353-08	Water	8082A	3510		
G2353-09	Water	8082A	3510		

## FORM S-IV

## SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
G2353-01	WATER	Metals Group3	05/21/15	05/27/15	05/28/15
G2353-02	WATER	Metals Group3	05/21/15	05/27/15	05/28/15
G2353-03	WATER	Metals Group3	05/21/15	05/27/15	05/28/15
G2353-04	WATER	Metals Group3	05/21/15	05/27/15	05/28/15
G2353-05	WATER	Metals Group3	05/21/15	05/27/15	05/28/15
G2353-08	WATER	Metals Group3	05/21/15	05/27/15	05/28/15
G2353-09	WATER	Metals Group3	05/21/15	05/27/15	05/28/15

\* Details For Test : Metals Group3

## Cover Page

**Order ID :** G2353

**Project ID :** MNR Harmon Yards Low-Flow Samples

**Client :** Day Engineering, P.C.

**Lab Sample Number**

G2353-01  
G2353-02  
G2353-03  
G2353-04  
G2353-05  
G2353-06  
G2353-07  
G2353-08  
G2353-09

**Client Sample Number**

VE1-2  
VE1-4  
VE2-1  
VE3-1  
VE4-11  
G2353-05MS  
G2353-05MSD  
DAY-1  
FIELDBLANK

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :

**APPROVED**

Date: 6/2/2015  
By Mildred V Reyes, QA/QC Supervisor at 1:33 pm, Jun 09, 2015

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## CASE NARRATIVE

**Day Engineering, P.C.**

**Project Name: MNR Harmon Yards Low-Flow Samples**

**Project # N/A**

**Chemtech Project # G2353**

**Test Name: VOCMS Group1**

**A. Number of Samples and Date of Receipt:**

9 Water samples were received on 05/21/2015.

**B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Metals Group3, PCB Group1, SVOCMS Group1 and VOCMS Group1. This data package contains results for VOCMS Group1.

**C. Analytical Techniques:**

The analysis performed on instrument MSVOA\_N were done using GC column RXI-624SIL MS 30m 0.25mm 1.4 um. Cat#13868. The analysis of VOCMS Group1 was based on method 8260-Low.

**D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

The RPD recoveries met criteria .

The Blank Spike met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

**E. Additional Comments:**

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

**F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

---

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_

**APPROVED***By Mildred V Reyes, QA/QC Supervisor at 1:33 pm, Jun 09, 2015*



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

## CASE NARRATIVE

**Day Engineering, P.C.**

**Project Name: MNR Harmon Yards Low-Flow Samples**

**Project # N/A**

**Chemtech Project # G2353**

**Test Name: SVOCMS Group1**

**A. Number of Samples and Date of Receipt:**

9 Water samples were received on 05/21/2015.

**B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Metals Group3, PCB Group1, SVOCMS Group1 and VOCMS Group1. This data package contains results for SVOCMS Group1.

**C. Analytical Techniques:**

The samples were analyzed on instrument BNA\_F using GC Column RTX-5 which is 20 meters, 0.18 mm ID, 0.36 um dfThe samples were analyzed on instrument BNA\_G using GC Column RXI-5 SILMS which is 30 meters, 0.25 mm ID, 0.50 um df, Catalog # 13638-124.The analysis of SVOCMS Group1 was based on method 8270D and extraction was done based on method 3510.

**D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

The RPD recoveries met criteria .

The Blank Spike met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

**E. Additional Comments:**

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

**F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

---

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signatur

**APPROVED***By Mildred V Reyes, QA/QC Supervisor at 1:33 pm, Jun 09, 2015*

## CASE NARRATIVE

**Day Engineering, P.C.**

**Project Name: MNR Harmon Yards Low-Flow Samples**

**Project # N/A**

**Chemtech Project # G2353**

**Test Name: PCB Group1**

**A. Number of Samples and Date of Receipt:**

9 Water samples were received on 05/21/2015.

**B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Metals Group3, PCB Group1, SVOCMS Group1 and VOCMS Group1. This data package contains results for PCB Group1.

**C. Analytical Techniques:**

The analyses were performed on instrument GCECD\_P. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11.The analysis of PCB Group1s was based on method 8082A and extraction was done based on method 3510.

**D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for VE3-1 [Decachlorobiphenyl(2) - 35%]. As per Method per column one surrogate is allowed to fail. No further corrective action was taken.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

The RPD recoveries met criteria .

The Blank Spike met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

**E. Additional Comments:**

**F. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

---

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature

**APPROVED***By Mildred V Reyes, QA/QC Supervisor at 1:33 pm, Jun 09, 2015*



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

## CASE NARRATIVE

**Day Engineering, P.C.**

**Project Name:** MNR Harmon Yards Low-Flow Samples

**Project #** N/A

**Chemtech Project #** G2353

**Test Name:** Metals Group3

**A. Number of Samples and Date of Receipt:**

9 Water samples were received on 05/21/2015.

**B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Metals Group3, PCB Group1, SVOCMS Group1 and VOCMS Group1. This data package contains results for Metals Group3.

**C. Analytical Techniques:**

The analysis of Metals Group3 was based on method 6020 and digestion based on method 3010 (waters).

**D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

**E. Additional Comments:**

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I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_

**APPROVED**

*By Mildred V Reyes, QA/QC Supervisor at 1:33 pm, Jun 09, 2015*

**LAB CHRONICLE**

<b>OrderID:</b> G2353	<b>OrderDate:</b> 5/21/2015 3:04:05 PM
<b>Client:</b> Day Engineering, P.C.	<b>Project:</b> MNR Harmon Yards Low-Flow Samples
<b>Contact:</b> Raymond Kampff	<b>Location:</b> F52

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
G2353-01	VE1-2	Water	VOCMS Group1	8260-Low	05/20/15		05/21/15	
G2353-02	VE1-4	Water	VOCMS Group1	8260-Low	05/20/15		05/21/15	
G2353-03	VE2-1	Water	VOCMS Group1	8260-Low	05/20/15		05/21/15	
G2353-04	VE3-1	Water	VOCMS Group1	8260-Low	05/19/15		05/21/15	
G2353-05	VE4-11	Water	VOCMS Group1	8260-Low	05/19/15		05/21/15	
G2353-08	DAY-1	Water	VOCMS Group1	8260-Low	05/19/15		05/21/15	
G2353-09	FIELDBLANK	Water	VOCMS Group1	8260-Low	05/20/15		05/21/15	

A

B

C

D

E

F

G

**Hit Summary Sheet  
SW-846**

**SDG No.:** G2353  
**Client:** Day Engineering, P.C.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
<b>Client ID:</b> VE3-1									
G2353-04	VE3-1	Water	Toluene	0.77	J	0.2	0.2	1	ug/L
G2353-04	VE3-1	Water	Chlorobenzene	2.70		0.2	0.2	1	ug/L
G2353-04	VE3-1	Water	Ethyl Benzene	0.40	J	0.2	0.2	1	ug/L
G2353-04	VE3-1	Water	m/p-Xylenes	0.56	J	0.4	0.4	2	ug/L
G2353-04	VE3-1	Water	o-Xylene	0.97	J	0.2	0.2	1	ug/L
G2353-04	VE3-1	Water	n-propylbenzene	0.42	J	0.2	0.2	1	ug/L
G2353-04	VE3-1	Water	1,3,5-Trimethylbenzene	1.70		0.2	0.2	1	ug/L
G2353-04	VE3-1	Water	1,2,4-Trimethylbenzene	3.60		0.2	0.2	1	ug/L
G2353-04	VE3-1	Water	p-Isopropyltoluene	0.79	J	0.2	0.2	1	ug/L
G2353-04	VE3-1	Water	Naphthalene	9.00		0.2	0.2	1	ug/L
<b>Total Voc :</b>				20.91					
<b>Total Concentration:</b>				20.91					
<b>Client ID:</b> DAY-1									
G2353-08	DAY-1	Water	Benzene	0.53	J	0.2	0.2	1	ug/L
G2353-08	DAY-1	Water	Toluene	0.40	J	0.2	0.2	1	ug/L
G2353-08	DAY-1	Water	Ethyl Benzene	0.27	J	0.2	0.2	1	ug/L
G2353-08	DAY-1	Water	o-Xylene	0.48	J	0.2	0.2	1	ug/L
G2353-08	DAY-1	Water	n-propylbenzene	0.37	J	0.2	0.2	1	ug/L
G2353-08	DAY-1	Water	1,2,4-Trimethylbenzene	0.43	J	0.2	0.2	1	ug/L
G2353-08	DAY-1	Water	Naphthalene	2.00		0.2	0.2	1	ug/L
<b>Total Voc :</b>				4.48					
<b>Total Concentration:</b>				4.48					

# SAMPLE DATA

## Report of Analysis

Client:	Day Engineering, P.C.			Date Collected:	05/20/15	
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:	05/21/15	
Client Sample ID:	VE1-2			SDG No.:	G2353	
Lab Sample ID:	G2353-01			Matrix:	Water	
Analytical Method:	SW8260			% Moisture:	100	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024398.D	1		05/26/15 16:33	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
103-65-1	n-propylbenzene	1	U	0.2	0.2	1	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
99-87-6	p-Isopropyltoluene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
91-20-3	Naphthalene	1	U	0.2	0.2	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	50.8		61 - 141		102%	SPK: 50
1868-53-7	Dibromofluoromethane	46.8		69 - 133		94%	SPK: 50
2037-26-5	Toluene-d8	50.7		65 - 126		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	60.2		58 - 135		120%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	644321	7.87				
540-36-3	1,4-Difluorobenzene	1228750	8.78				
3114-55-4	Chlorobenzene-d5	1371040	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	640827	13.56				

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE1-2	SDG No.:	G2353
Lab Sample ID:	G2353-01	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	RXI-624	ID :	0.25
		Final Vol:	5000 uL
		Test:	VOCMS Group1
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024398.D	1		05/26/15 16:33	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

## Report of Analysis

Client:	Day Engineering, P.C.			Date Collected:	05/20/15	
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:	05/21/15	
Client Sample ID:	VE1-4			SDG No.:	G2353	
Lab Sample ID:	G2353-02			Matrix:	Water	
Analytical Method:	SW8260			% Moisture:	100	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024399.D	1		05/26/15 17:01	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
103-65-1	n-propylbenzene	1	U	0.2	0.2	1	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
99-87-6	p-Isopropyltoluene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
91-20-3	Naphthalene	1	U	0.2	0.2	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	53.1		61 - 141		106%	SPK: 50
1868-53-7	Dibromofluoromethane	47.9		69 - 133		96%	SPK: 50
2037-26-5	Toluene-d8	51.1		65 - 126		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	61.4		58 - 135		123%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	619942	7.87				
540-36-3	1,4-Difluorobenzene	1185970	8.79				
3114-55-4	Chlorobenzene-d5	1345970	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	646742	13.56				

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE1-4	SDG No.:	G2353
Lab Sample ID:	G2353-02	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	RXI-624	ID :	0.25
		Final Vol:	5000 uL
		Test:	VOCMS Group1
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024399.D	1		05/26/15 17:01	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

## Report of Analysis

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE2-1	SDG No.:	G2353
Lab Sample ID:	G2353-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	RXI-624	ID :	0.25
		Final Vol:	5000 uL
		Test:	VOCMS Group1
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024400.D	1		05/26/15 17:29	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
103-65-1	n-propylbenzene	1	U	0.2	0.2	1	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
99-87-6	p-Isopropyltoluene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
91-20-3	Naphthalene	1	U	0.2	0.2	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	54.2		61 - 141		108%	SPK: 50
1868-53-7	Dibromofluoromethane	48.5		69 - 133		97%	SPK: 50
2037-26-5	Toluene-d8	50.6		65 - 126		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	61.6		58 - 135		123%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	603154	7.87				
540-36-3	1,4-Difluorobenzene	1161260	8.79				
3114-55-4	Chlorobenzene-d5	1320990	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	627951	13.56				

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE2-1	SDG No.:	G2353
Lab Sample ID:	G2353-03	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	RXI-624	ID :	0.25
		Final Vol:	5000 uL
		Test:	VOCMS Group1
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024400.D	1		05/26/15 17:29	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

## Report of Analysis

Client:	Day Engineering, P.C.			Date Collected:	05/19/15	
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:	05/21/15	
Client Sample ID:	VE3-1			SDG No.:	G2353	
Lab Sample ID:	G2353-04			Matrix:	Water	
Analytical Method:	SW8260			% Moisture:	100	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:	uL			Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024406.D	1		05/26/15 20:18	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
108-88-3	Toluene	0.77	J	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	2.7		0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.4	J	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	0.56	J	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.97	J	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
103-65-1	n-propylbenzene	0.42	J	0.2	0.2	1	ug/L
108-67-8	1,3,5-Trimethylbenzene	1.7		0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	3.6		0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
99-87-6	p-Isopropyltoluene	0.79	J	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
91-20-3	Naphthalene	9		0.2	0.2	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	53.4		61 - 141		107%	SPK: 50
1868-53-7	Dibromofluoromethane	47		69 - 133		94%	SPK: 50
2037-26-5	Toluene-d8	50.9		65 - 126		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	65.4		58 - 135		131%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	631166	7.89				
540-36-3	1,4-Difluorobenzene	1248240	8.8				
3114-55-4	Chlorobenzene-d5	1437700	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	762643	13.56				

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE3-1	SDG No.:	G2353
Lab Sample ID:	G2353-04	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	RXI-624	ID :	0.25
		Final Vol:	5000 uL
		Test:	VOCMS Group1
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024406.D	1		05/26/15 20:18	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

## Report of Analysis

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE4-11	SDG No.:	G2353
Lab Sample ID:	G2353-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	RXI-624	ID :	0.25
		Final Vol:	5000 uL
		Test:	VOCMS Group1
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024401.D	1		05/26/15 17:57	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
103-65-1	n-propylbenzene	1	U	0.2	0.2	1	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
99-87-6	p-Isopropyltoluene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
91-20-3	Naphthalene	1	U	0.2	0.2	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	55		61 - 141		110%	SPK: 50
1868-53-7	Dibromofluoromethane	47.2		69 - 133		94%	SPK: 50
2037-26-5	Toluene-d8	50.1		65 - 126		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	61.4		58 - 135		123%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	598188	7.87				
540-36-3	1,4-Difluorobenzene	1198360	8.79				
3114-55-4	Chlorobenzene-d5	1337540	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	636928	13.56				

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE4-11	SDG No.:	G2353
Lab Sample ID:	G2353-05	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	RXI-624	ID :	0.25
		Final Vol:	5000 uL
		Test:	VOCMS Group1
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024401.D	1		05/26/15 17:57	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

## Report of Analysis

Client:	Day Engineering, P.C.			Date Collected:	05/19/15	
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:	05/21/15	
Client Sample ID:	DAY-1			SDG No.:	G2353	
Lab Sample ID:	G2353-08			Matrix:	Water	
Analytical Method:	SW8260			% Moisture:	100	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:	uL			Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024405.D	1		05/26/15 19:49	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
71-43-2	Benzene	0.53	J	0.2	0.2	1	ug/L
108-88-3	Toluene	0.4	J	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	0.27	J	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	0.48	J	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
103-65-1	n-propylbenzene	0.37	J	0.2	0.2	1	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	0.43	J	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
99-87-6	p-Isopropyltoluene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
91-20-3	Naphthalene	2		0.2	0.2	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	54.1		61 - 141		108%	SPK: 50
1868-53-7	Dibromofluoromethane	47.2		69 - 133		94%	SPK: 50
2037-26-5	Toluene-d8	50.8		65 - 126		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	64.6		58 - 135		129%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	629079	7.86				
540-36-3	1,4-Difluorobenzene	1244740	8.78				
3114-55-4	Chlorobenzene-d5	1434350	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	707032	13.56				

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	DAY-1	SDG No.:	G2353
Lab Sample ID:	G2353-08	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	RXI-624	ID :	0.25
		Final Vol:	5000 uL
		Test:	VOCMS Group1
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024405.D	1		05/26/15 19:49	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

## Report of Analysis

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	FIELDBLANK	SDG No.:	G2353
Lab Sample ID:	G2353-09	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	RXI-624	ID :	0.25
		Final Vol:	5000 uL
		Test:	VOCMS Group1
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024397.D	1		05/26/15 16:06	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
103-65-1	n-propylbenzene	1	U	0.2	0.2	1	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
99-87-6	p-Isopropyltoluene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
91-20-3	Naphthalene	1	U	0.2	0.2	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	50.2		61 - 141		100%	SPK: 50
1868-53-7	Dibromofluoromethane	46.1		69 - 133		92%	SPK: 50
2037-26-5	Toluene-d8	49.4		65 - 126		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	57.5		58 - 135		115%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	609198	7.87				
540-36-3	1,4-Difluorobenzene	1150280	8.79				
3114-55-4	Chlorobenzene-d5	1260400	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	579431	13.56				

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	FIELDBLANK	SDG No.:	G2353
Lab Sample ID:	G2353-09	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	RXI-624	ID :	0.25
		Final Vol:	5000 uL
		Test:	VOCMS Group1
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024397.D	1		05/26/15 16:06	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

# QC SUMMARY

**Surrogate Summary**SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: SW8260-Low

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery	Limits	
						Qual	Low
G2353-01	VE1-2	1,2-Dichloroethane-d4	50	50.79	102	61	141
		Dibromofluoromethane	50	46.83	94	69	133
		Toluene-d8	50	50.67	101	65	126
		4-Bromofluorobenzene	50	60.22	120	58	135
G2353-02	VE1-4	1,2-Dichloroethane-d4	50	53.06	106	61	141
		Dibromofluoromethane	50	47.87	96	69	133
		Toluene-d8	50	51.06	102	65	126
		4-Bromofluorobenzene	50	61.44	123	58	135
G2353-03	VE2-1	1,2-Dichloroethane-d4	50	54.22	108	61	141
		Dibromofluoromethane	50	48.47	97	69	133
		Toluene-d8	50	50.62	101	65	126
		4-Bromofluorobenzene	50	61.63	123	58	135
G2353-04	VE3-1	1,2-Dichloroethane-d4	50	53.38	107	61	141
		Dibromofluoromethane	50	46.99	94	69	133
		Toluene-d8	50	50.91	102	65	126
		4-Bromofluorobenzene	50	65.38	131	58	135
G2353-05	VE4-11	1,2-Dichloroethane-d4	50	54.98	110	61	141
		Dibromofluoromethane	50	47.25	94	69	133
		Toluene-d8	50	50.07	100	65	126
		4-Bromofluorobenzene	50	61.4	123	58	135
G2353-06MS	VE4-11MS	1,2-Dichloroethane-d4	50	52.44	105	61	141
		Dibromofluoromethane	50	47.61	95	69	133
		Toluene-d8	50	48.35	97	65	126
		4-Bromofluorobenzene	50	48.69	97	58	135
G2353-07MSD	VE4-11MSD	1,2-Dichloroethane-d4	50	54.11	108	61	141
		Dibromofluoromethane	50	49.18	98	69	133
		Toluene-d8	50	50.7	101	65	126
		4-Bromofluorobenzene	50	50.21	100	58	135
G2353-08	DAY-1	1,2-Dichloroethane-d4	50	54.11	108	61	141
		Dibromofluoromethane	50	47.19	94	69	133
		Toluene-d8	50	50.81	102	65	126
		4-Bromofluorobenzene	50	64.59	129	58	135
G2353-09	FIELDBLANK	1,2-Dichloroethane-d4	50	50.19	100	61	141
		Dibromofluoromethane	50	46.1	92	69	133
		Toluene-d8	50	49.41	99	65	126
		4-Bromofluorobenzene	50	57.48	115	58	135
VN0526WBL01	VN0526WBL01	1,2-Dichloroethane-d4	50	50.99	102	61	141
		Dibromofluoromethane	50	46.73	93	69	133
		Toluene-d8	50	50.13	100	65	126
		4-Bromofluorobenzene	50	57.69	115	58	135
VN0526WBS01	VN0526WBS01	1,2-Dichloroethane-d4	50	55.78	112	61	141
		Dibromofluoromethane	50	50.42	101	69	133
		Toluene-d8	50	50.69	101	65	126
		4-Bromofluorobenzene	50	49.23	98	58	135

**Matrix Spike/Matrix Spike Duplicate Summary  
SW-846**SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: SW8260-Low

Parameter	Spike	Sample Result	Result	Units	Rec		RPD Qual	Limits			RPD
					Rec	Qual		Low	High		
<b>Lab Sample ID :</b>	<b>G2353-06MS</b>	<b>Client Sample ID :</b>	<b>VE4-11MS</b>					<b>Datafile :</b>			<b>VN024407.D</b>
Methyl tert-butyl Ether	50	0	57	ug/L	114			60	145		
Benzene	50	0	50.9	ug/L	102			62	134		
Toluene	50	0	50.6	ug/L	101			68	129		
Chlorobenzene	50	0	49	ug/L	98			68	126		
Ethyl Benzene	50	0	50.3	ug/L	101			61	131		
m/p-Xylenes	100	0	98.9	ug/L	99			64	125		
o-Xylene	50	0	51.8	ug/L	104			65	126		
Isopropylbenzene	50	0	42.3	ug/L	85			58	132		
N-propylbenzene	50	0	42.3	ug/L	85			64	126		
1,3,5-Trimethylbenzene	50	0	42	ug/L	84			59	127		
tert-Butylbenzene	50	0	42.7	ug/L	85			65	138		
1,2,4-Trimethylbenzene	50	0	42.5	ug/L	85			54	133		
Sec-butylbenzene	50	0	42.5	ug/L	85			65	125		
p-Isopropyltoluene	50	0	42	ug/L	84			64	124		
n-Butylbenzene	50	0	42.1	ug/L	84			62	127		
Naphthalene	50	0	55	ug/L	110			56	136		

**Matrix Spike/Matrix Spike Duplicate Summary  
SW-846**SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: SW8260-Low

Parameter	Spike	Sample Result	Result	Units	Rec		RPD Qual	Limits			RPD	
					Rec	Qual		Low	High			
<b>Lab Sample ID :</b>	<b>G2353-07MSD</b>	<b>Client Sample ID :</b>	<b>VE4-11MSD</b>					<b>Datafile :</b>	<b>VN024408.D</b>			<b>E</b>
Methyl tert-butyl Ether	50	0	58.8	ug/L	118	3		60	145		20	<b>F</b>
Benzene	50	0	52.5	ug/L	105	3		62	134		20	<b>G</b>
Toluene	50	0	51.5	ug/L	103	2		68	129		20	
Chlorobenzene	50	0	49.7	ug/L	99	1		68	126		20	
Ethyl Benzene	50	0	51.2	ug/L	102	2		61	131		20	
m/p-Xylenes	100	0	100	ug/L	100	1		64	125		20	
o-Xylene	50	0	52.3	ug/L	105	1		65	126		20	
Isopropylbenzene	50	0	49.6	ug/L	99	16		58	132		20	
N-propylbenzene	50	0	49.2	ug/L	98	15		64	126		20	
1,3,5-Trimethylbenzene	50	0	49.6	ug/L	99	17		59	127		20	
tert-Butylbenzene	50	0	49.8	ug/L	100	15		65	138		20	
1,2,4-Trimethylbenzene	50	0	49.2	ug/L	98	15		54	133		20	
Sec-butylbenzene	50	0	48.6	ug/L	97	13		65	125		20	
p-Isopropyltoluene	50	0	49.3	ug/L	99	16		64	124		20	
n-Butylbenzene	50	0	48.2	ug/L	96	14		62	127		20	
Naphthalene	50	0	64.8	ug/L	130	16		56	136		20	

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary  
SW-846**SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: SW8260-Low

Datafile : VN024390.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits		
								Low	High	RPD
<b>VN0526WBS01</b>	Methyl tert-butyl Ether	20	23.1	ug/L	116			72	136	
	Benzene	20	21.4	ug/L	107			75	125	
	Toluene	20	20.6	ug/L	103			74	125	
	Chlorobenzene	20	20.5	ug/L	103			76	123	
	Ethyl Benzene	20	20.9	ug/L	104			75	126	
	m/p-Xylenes	40	41.1	ug/L	103			74	126	
	o-Xylene	20	21.4	ug/L	107			73	127	
	Isopropylbenzene	20	20.7	ug/L	104			70	127	
	N-propylbenzene	20	20.6	ug/L	103			71	126	
	1,3,5-Trimethylbenzene	20	20.5	ug/L	103			71	127	
	tert-Butylbenzene	20	20.6	ug/L	103			66	129	
	1,2,4-Trimethylbenzene	20	20.7	ug/L	104			69	130	
	Sec-butylbenzene	20	20.6	ug/L	103			72	126	
	p-Isopropyltoluene	20	20.2	ug/L	101			71	125	
	n-Butylbenzene	20	19.7	ug/L	99			68	128	
	Naphthalene	20	22.1	ug/L	111			62	130	

## VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VN0526WBL01

Lab Name: CHEMTECHContract: DAYE02Lab Code: CHEM Case No.: G2353SAS No.: G2353 SDG No.: G2353Lab File ID: VN024389.DLab Sample ID: VN0526WBL01Date Analyzed: 05/26/2015Time Analyzed: 11:49GC Column: RXI-624 ID: 0.25 (mm)Heated Purge: (Y/N) NInstrument ID: MSVOA\_N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VN0526WBS01	VN0526WBS01	VN024390.D	05/26/2015
FIELDBLANK	G2353-09	VN024397.D	05/26/2015
VE1-2	G2353-01	VN024398.D	05/26/2015
VE1-4	G2353-02	VN024399.D	05/26/2015
VE2-1	G2353-03	VN024400.D	05/26/2015
VE4-11	G2353-05	VN024401.D	05/26/2015
DAY-1	G2353-08	VN024405.D	05/26/2015
VE3-1	G2353-04	VN024406.D	05/26/2015
VE4-11MS	G2353-06MS	VN024407.D	05/26/2015
VE4-11MSD	G2353-07MSD	VN024408.D	05/26/2015

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	DAYE02
Lab Code:	CHEM	Case No.:	G2353
Lab File ID:	VN024344.D	SAS No.:	G2353
Instrument ID:	MSVOA_N	BFB Injection Date:	05/22/2015
GC Column:	RXI-624 ID: 0.25 (mm)	BFB Injection Time:	10:26
		Heated Purge:	Y/N
			N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.2
75	30.0 - 60.0% of mass 95	51.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0 ( 0.0 ) 1
174	50.0 - 100.0% of mass 95	75.4
175	5.0 - 9.0% of mass 174	5.7 ( 7.5 ) 1
176	95.0 - 101.0% of mass 174	73.7 ( 97.8 ) 1
177	5.0 - 9.0% of mass 176	5.1 ( 6.9 ) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC001	VSTDICC001	VN024345.D	05/22/2015	11:13
VSTDICC005	VSTDICC005	VN024346.D	05/22/2015	11:40
VSTDICC020	VSTDICC020	VN024347.D	05/22/2015	12:13
VSTDICCC050	VSTDICCC050	VN024348.D	05/22/2015	12:41
VSTDICC100	VSTDICC100	VN024349.D	05/22/2015	13:11
VSTDICC200	VSTDICC200	VN024350.D	05/22/2015	13:38

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name:	CHEMTECH	Contract:	DAYE02
Lab Code:	CHEM	Case No.:	G2353
Lab File ID:	VN024387.D	BFB Injection Date:	05/26/2015
Instrument ID:	MSVOA_N	BFB Injection Time:	10:06
GC Column:	RXI-624 ID: 0.25 (mm)	Heated Purge:	Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.9
75	30.0 - 60.0% of mass 95	53.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.4 ( 0.5 ) 1
174	50.0 - 100.0% of mass 95	77.3
175	5.0 - 9.0% of mass 174	6 ( 7.8 ) 1
176	95.0 - 101.0% of mass 174	75.1 ( 97.2 ) 1
177	5.0 - 9.0% of mass 176	4.8 ( 6.5 ) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VN024388.D	05/26/2015	10:46
VN0526WBL01	VN0526WBL01	VN024389.D	05/26/2015	11:49
VN0526WBS01	VN0526WBS01	VN024390.D	05/26/2015	12:50
FIELDBLANK	G2353-09	VN024397.D	05/26/2015	16:06
VE1-2	G2353-01	VN024398.D	05/26/2015	16:33
VE1-4	G2353-02	VN024399.D	05/26/2015	17:01
VE2-1	G2353-03	VN024400.D	05/26/2015	17:29
VE4-11	G2353-05	VN024401.D	05/26/2015	17:57
DAY-1	G2353-08	VN024405.D	05/26/2015	19:49
VE3-1	G2353-04	VN024406.D	05/26/2015	20:18
VE4-11MS	G2353-06MS	VN024407.D	05/26/2015	20:46
VE4-11MSD	G2353-07MSD	VN024408.D	05/26/2015	21:13

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: DAYE02  
 Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG No.: G2353  
 Lab File ID: VN024388.D Date Analyzed: 05/26/2015  
 Instrument ID: MSVOA\_N Time Analyzed: 10:46  
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	741674	7.87	1265840	8.78	1152880	11.61
	1483350	8.37	2531690	9.28	2305750	12.11
	370837	7.37	632922	8.28	576438	11.11
EPA SAMPLE NO.						
VE1-2	644321	7.87	1228746	8.78	1371043	11.61
VE1-4	619942	7.87	1185972	8.79	1345968	11.61
VE2-1	603154	7.87	1161256	8.79	1320985	11.61
VE3-1	631166	7.89	1248235	8.80	1437698	11.61
VE4-11	598188	7.87	1198356	8.79	1337539	11.61
VE4-11MS	660291	7.87	1196824	8.79	1106158	11.61
VE4-11MSD	702157	7.87	1255985	8.79	1154219	11.61
DAY-1	629079	7.86	1244743	8.78	1434352	11.61
FIELDBLANK	609198	7.87	1150281	8.79	1260403	11.61
VN0526WBL01	610444	7.87	1164075	8.79	1265725	11.61
VN0526WBS01	673896	7.87	1196786	8.79	1081529	11.61

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: DAYE02  
 Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353  
 Lab File ID: VN024388.D Date Analyzed: 05/26/2015  
 Instrument ID: MSVOA\_N Time Analyzed: 10:46  
 GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS4 AREA #	RT #				
12 HOUR STD	531536	13.56				
	1063070	14.06				
	265768	13.06				
EPA SAMPLE NO.						
VE1-2	640827	13.56				
VE1-4	646742	13.56				
VE2-1	627951	13.56				
VE3-1	762643	13.56				
VE4-11	636928	13.56				
VE4-11MS	586979	13.56				
VE4-11MSD	533552	13.56				
DAY-1	707032	13.56				
FIELDBLANK	579431	13.56				
VN0526WBL01	579851	13.56				
VN0526WBS01	484142	13.56				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

A  
B  
C  
D  
E  
F  
G

# QC SAMPLE

# DATA

## Report of Analysis

Client:	Day Engineering, P.C.			Date Collected:	
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:	
Client Sample ID:	VN0526WBL01			SDG No.:	G2353
Lab Sample ID:	VN0526WBL01			Matrix:	Water
Analytical Method:	SW8260			% Moisture:	100
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID :	0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024389.D	1		05/26/15 11:49	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
1634-04-4	Methyl tert-butyl Ether	1	U	0.35	0.5	1	ug/L
71-43-2	Benzene	1	U	0.2	0.2	1	ug/L
108-88-3	Toluene	1	U	0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	1	U	0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	1	U	0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	2	U	0.4	0.4	2	ug/L
95-47-6	o-Xylene	1	U	0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	1	U	0.2	0.2	1	ug/L
103-65-1	n-propylbenzene	1	U	0.2	0.2	1	ug/L
108-67-8	1,3,5-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	1	U	0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	1	U	0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	1	U	0.2	0.2	1	ug/L
99-87-6	p-Isopropyltoluene	1	U	0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	1	U	0.2	0.2	1	ug/L
91-20-3	Naphthalene	1	U	0.2	0.2	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	51		61 - 141		102%	SPK: 50
1868-53-7	Dibromofluoromethane	46.7		69 - 133		93%	SPK: 50
2037-26-5	Toluene-d8	50.1		65 - 126		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	57.7		58 - 135		115%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	610444	7.87				
540-36-3	1,4-Difluorobenzene	1164080	8.79				
3114-55-4	Chlorobenzene-d5	1265730	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	579851	13.56				

A  
B  
C  
D  
E  
F  
G

**Report of Analysis**

Client:	Day Engineering, P.C.			Date Collected:	
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:	
Client Sample ID:	VN0526WBL01			SDG No.:	G2353
Lab Sample ID:	VN0526WBL01			Matrix:	Water
Analytical Method:	SW8260			% Moisture:	100
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:				Test:	VOCMS Group1
GC Column:	RXI-624	ID :	0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024389.D	1		05/26/15 11:49	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

## Report of Analysis

Client:	Day Engineering, P.C.			Date Collected:	
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:	
Client Sample ID:	VN0526WBS01			SDG No.:	G2353
Lab Sample ID:	VN0526WBS01			Matrix:	Water
Analytical Method:	SW8260			% Moisture:	100
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID :	0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024390.D	1		05/26/15 12:50	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
1634-04-4	Methyl tert-butyl Ether	23.1		0.35	0.5	1	ug/L
71-43-2	Benzene	21.4		0.2	0.2	1	ug/L
108-88-3	Toluene	20.6		0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	20.5		0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	20.9		0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	41.1		0.4	0.4	2	ug/L
95-47-6	o-Xylene	21.4		0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	20.7		0.2	0.2	1	ug/L
103-65-1	n-propylbenzene	20.6		0.2	0.2	1	ug/L
108-67-8	1,3,5-Trimethylbenzene	20.5		0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	20.6		0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	20.7		0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	20.6		0.2	0.2	1	ug/L
99-87-6	p-Isopropyltoluene	20.2		0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	19.7		0.2	0.2	1	ug/L
91-20-3	Naphthalene	22.1		0.2	0.2	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	55.8		61 - 141		112%	SPK: 50
1868-53-7	Dibromofluoromethane	50.4		69 - 133		101%	SPK: 50
2037-26-5	Toluene-d8	50.7		65 - 126		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.2		58 - 135		98%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	673896	7.87				
540-36-3	1,4-Difluorobenzene	1196790	8.79				
3114-55-4	Chlorobenzene-d5	1081530	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	484142	13.56				

**Report of Analysis**

Client:	Day Engineering, P.C.			Date Collected:	
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:	
Client Sample ID:	VN0526WBS01			SDG No.:	G2353
Lab Sample ID:	VN0526WBS01			Matrix:	Water
Analytical Method:	SW8260			% Moisture:	100
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group1
GC Column:	RXI-624	ID :	0.25	Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024390.D	1		05/26/15 12:50	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

## Report of Analysis

Client:	Day Engineering, P.C.			Date Collected:	05/19/15	
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:	05/21/15	
Client Sample ID:	VE4-11MS			SDG No.:	G2353	
Lab Sample ID:	G2353-06MS			Matrix:	Water	
Analytical Method:	SW8260			% Moisture:	100	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:	uL			Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024407.D	1		05/26/15 20:46	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
1634-04-4	Methyl tert-butyl Ether	57		0.35	0.5	1	ug/L
71-43-2	Benzene	50.9		0.2	0.2	1	ug/L
108-88-3	Toluene	50.6		0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	49		0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	50.3		0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	98.9		0.4	0.4	2	ug/L
95-47-6	o-Xylene	51.8		0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	42.3		0.2	0.2	1	ug/L
103-65-1	n-propylbenzene	42.3		0.2	0.2	1	ug/L
108-67-8	1,3,5-Trimethylbenzene	42		0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	42.7		0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	42.5		0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	42.5		0.2	0.2	1	ug/L
99-87-6	p-Isopropyltoluene	42		0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	42.1		0.2	0.2	1	ug/L
91-20-3	Naphthalene	55		0.2	0.2	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	52.4		61 - 141		105%	SPK: 50
1868-53-7	Dibromofluoromethane	47.6		69 - 133		95%	SPK: 50
2037-26-5	Toluene-d8	48.4		65 - 126		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.7		58 - 135		97%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	660291	7.87				
540-36-3	1,4-Difluorobenzene	1196820	8.79				
3114-55-4	Chlorobenzene-d5	1106160	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	586979	13.56				

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE4-11MS	SDG No.:	G2353
Lab Sample ID:	G2353-06MS	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	RXI-624	ID :	0.25
		Final Vol:	5000 uL
		Test:	VOCMS Group1
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024407.D	1		05/26/15 20:46	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

## Report of Analysis

Client:	Day Engineering, P.C.			Date Collected:	05/19/15	
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:	05/21/15	
Client Sample ID:	VE4-11MSD			SDG No.:	G2353	
Lab Sample ID:	G2353-07MSD			Matrix:	Water	
Analytical Method:	SW8260			% Moisture:	100	
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000	uL
Soil Aliquot Vol:	uL			Test:	VOCMS Group1	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024408.D	1		05/26/15 21:13	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
1634-04-4	Methyl tert-butyl Ether	58.8		0.35	0.5	1	ug/L
71-43-2	Benzene	52.5		0.2	0.2	1	ug/L
108-88-3	Toluene	51.5		0.2	0.2	1	ug/L
108-90-7	Chlorobenzene	49.7		0.2	0.2	1	ug/L
100-41-4	Ethyl Benzene	51.2		0.2	0.2	1	ug/L
179601-23-1	m/p-Xylenes	100		0.4	0.4	2	ug/L
95-47-6	o-Xylene	52.3		0.2	0.2	1	ug/L
98-82-8	Isopropylbenzene	49.6		0.2	0.2	1	ug/L
103-65-1	n-propylbenzene	49.2		0.2	0.2	1	ug/L
108-67-8	1,3,5-Trimethylbenzene	49.6		0.2	0.2	1	ug/L
98-06-6	tert-Butylbenzene	49.8		0.2	0.2	1	ug/L
95-63-6	1,2,4-Trimethylbenzene	49.2		0.2	0.2	1	ug/L
135-98-8	sec-Butylbenzene	48.6		0.2	0.2	1	ug/L
99-87-6	p-Isopropyltoluene	49.3		0.2	0.2	1	ug/L
104-51-8	n-Butylbenzene	48.2		0.2	0.2	1	ug/L
91-20-3	Naphthalene	64.8		0.2	0.2	1	ug/L
<b>SURROGATES</b>							
17060-07-0	1,2-Dichloroethane-d4	54.1		61 - 141		108%	SPK: 50
1868-53-7	Dibromofluoromethane	49.2		69 - 133		98%	SPK: 50
2037-26-5	Toluene-d8	50.7		65 - 126		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.2		58 - 135		100%	SPK: 50
<b>INTERNAL STANDARDS</b>							
363-72-4	Pentafluorobenzene	702157	7.87				
540-36-3	1,4-Difluorobenzene	1255990	8.79				
3114-55-4	Chlorobenzene-d5	1154220	11.61				
3855-82-1	1,4-Dichlorobenzene-d4	533552	13.56				

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE4-11MSD	SDG No.:	G2353
Lab Sample ID:	G2353-07MSD	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
GC Column:	RXI-624	ID :	0.25
		Final Vol:	5000 uL
		Test:	VOCMS Group1
		Level :	LOW

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VN024408.D	1		05/26/15 21:13	VN052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

# CALIBRATION

# SUMMARY

## VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH  
 Lab Code: CHEM Case No.: G2353  
 Instrument ID: MSVOA\_N  
 Heated Purge: (Y/N) N  
 GC Column: RXI-624 ID: 0.25 (mm)

Contract: DAYE02  
 SAS No.: G2353 SDG No.: G2353  
 Calibration Date(s): 05/22/2015 05/22/2015  
 Calibration Time(s): 11:13 13:38

LAB FILE ID:		RRF001 = VN024345.D	RRF005 = VN024346.D	RRF020 = VN024347.D	RRF050 = VN024348.D	RRF100 = VN024349.D	RRF200 = VN024350.D	RRF	% RSD
COMPOUND		RRF001	RRF005	RRF020	RRF050	RRF100	RRF200		
Methyl tert-butyl Ether		1.695	1.788	1.604	1.797	1.751	1.847	1.747	5
Benzene		1.547	1.574	1.420	1.539	1.509	1.538	1.521	3.5
Toluene		0.881	0.960	0.890	0.930	0.932	0.949	0.924	3.4
Chlorobenzene		1.190	1.154	1.020	1.052	1.060	1.083	1.093	6
Ethyl Benzene		1.941	1.927	1.803	1.899	1.928	1.966	1.911	3
m/p-Xylenes		0.697	0.710	0.668	0.691	0.707	0.722	0.699	2.7
o-Xylene		0.626	0.681	0.641	0.675	0.688	0.705	0.669	4.5
Isopropylbenzene		4.103	4.090	3.797	4.036	4.000	4.143	4.028	3.1
n-propylbenzene		4.711	4.814	4.595	4.767	4.814	4.962	4.777	2.6
1,3,5-Trimethylbenzene		3.244	3.440	3.117	3.217	3.220	3.311	3.258	3.3
tert-Butylbenzene		2.573	2.782	2.516	2.709	2.724	2.803	2.684	4.3
1,2,4-Trimethylbenzene		3.294	3.547	3.115	3.289	3.283	3.372	3.317	4.2
sec-Butylbenzene		3.760	4.056	3.761	3.947	4.007	4.126	3.943	3.9
p-Isopropyltoluene		3.059	3.419	3.125	3.241	3.339	3.406	3.265	4.6
n-Butylbenzene		3.342	3.182	2.890	3.046	3.142	3.202	3.134	4.9
Naphthalene		2.355	2.039	2.248	2.661	2.743	2.894	2.490	13.2
1,2-Dichloroethane-d4			0.710	0.770	0.750	0.705	0.735	0.734	3.7
Dibromofluoromethane			0.295	0.329	0.320	0.308	0.310	0.312	4.1
Toluene-d8			1.162	1.391	1.330	1.298	1.307	1.298	6.5
4-Bromofluorobenzene			0.433	0.479	0.460	0.465	0.467	0.461	3.6

\* Compounds with required minimum RRF and maximum %RSD values.  
 All other compounds must meet a minimum RRF of 0.010.  
 RRF of 1,4-Dioxane = Value should be divide by 1000.

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: DAYE02  
 Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG No.: G2353  
 Instrument ID: MSVOA\_N Calibration Date/Time: 05/26/2015 10:46  
 Lab File ID: VN024388.D Init. Calib. Date(s): 05/22/2015 05/22/2015  
 Heated Purge: (Y/N) N Init. Calib. Time(s): 11:13 13:38  
 GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Methyl tert-butyl Ether	1.747	1.916		9.67	20
Benzene	1.521	1.571		3.29	20
Toluene	0.924	0.960		3.9	20
Chlorobenzene	1.093	1.089	0.3	-0.37	20
Ethyl Benzene	1.911	2.000		4.66	20
m/p-Xylenes	0.699	0.728		4.15	20
o-Xylene	0.669	0.719		7.47	20
Isopropylbenzene	4.028	4.132		2.58	20
n-propylbenzene	4.777	4.992		4.5	20
1,3,5-Trimethylbenzene	3.258	3.317		1.81	20
tert-Butylbenzene	2.684	2.748		2.38	20
1,2,4-Trimethylbenzene	3.317	3.368		1.54	20
sec-Butylbenzene	3.943	4.114		4.31	20
p-Isopropyltoluene	3.265	3.389		3.8	20
n-Butylbenzene	3.134	3.267		4.24	20
Naphthalene	2.490	2.741		10.08	20
1,2-Dichloroethane-d4	0.734	0.774		5.45	20
Dibromofluoromethane	0.312	0.311		-0.32	20
Toluene-d8	1.298	1.345		3.62	20
4-Bromofluorobenzene	0.461	0.481		4.34	20

All other compounds must meet a minimum RRF of 0.010.  
 RRF of 1,4-Dioxane = Value should be divide by 1000.

**LAB CHRONICLE**

<b>OrderID:</b> G2353	<b>OrderDate:</b> 5/21/2015 3:04:05 PM
<b>Client:</b> Day Engineering, P.C.	<b>Project:</b> MNR Harmon Yards Low-Flow Samples
<b>Contact:</b> Raymond Kampff	<b>Location:</b> F52

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
G2353-01	VE1-2	Water			05/20/15			05/21/15
			SVOCMS Group1	8270D		05/22/15	05/23/15	
G2353-02	VE1-4	Water			05/20/15			05/21/15
			SVOCMS Group1	8270D		05/22/15	05/23/15	
G2353-03	VE2-1	Water			05/20/15			05/21/15
			SVOCMS Group1	8270D		05/22/15	05/22/15	
G2353-04	VE3-1	Water			05/19/15			05/21/15
			SVOCMS Group1	8270D		05/22/15	05/23/15	
G2353-05	VE4-11	Water			05/19/15			05/21/15
			SVOCMS Group1	8270D		05/22/15	05/23/15	
G2353-08	DAY-1	Water			05/19/15			05/21/15
			SVOCMS Group1	8270D		05/22/15	05/23/15	
G2353-09	FIELDBLANK	Water			05/20/15			05/21/15
			SVOCMS Group1	8270D		05/22/15	05/22/15	



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

**Hit Summary Sheet  
SW-846**

**SDG No.:** G2353

**Client:** Day Engineering, P.C.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	VE3-1							
G2353-04	VE3-1	WATER	Acenaphthene	3.600	J	0.21	1	10
G2353-04	VE3-1	WATER	Fluorene	3.200	J	0.31	1	10
G2353-04	VE3-1	WATER	Phenanthrene	2.600	J	0.26	1	10
		<b>Total Svoc :</b>		<b>9.40</b>				
		<b>Total Concentration:</b>		<b>9.40</b>				
Client ID :	DAY-1							
G2353-08	DAY-1	WATER	Acenaphthene	2.500	J	0.21	1	10.2
G2353-08	DAY-1	WATER	Fluorene	3.300	J	0.32	1	10.2
		<b>Total Svoc :</b>		<b>5.80</b>				
		<b>Total Concentration:</b>		<b>5.80</b>				

# SAMPLE DATA

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE1-2	SDG No.:	G2353
Lab Sample ID:	G2353-01	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990	Units:	mL
Soil Aliquot Vol:		uL	
Extraction Type :		Decanted :	N
Injection Volume :		GPC Factor :	1.0
		GPC Cleanup :	N
		PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017270.D	1	05/22/15 12:18	05/23/15 07:22	PB83561

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
91-57-6	2-Methylnaphthalene	10.1	U	0.32	1	10.1	ug/L
208-96-8	Acenaphthylene	10.1	U	0.71	1	10.1	ug/L
83-32-9	Acenaphthene	10.1	U	0.21	1	10.1	ug/L
86-73-7	Fluorene	10.1	U	0.31	1	10.1	ug/L
85-01-8	Phenanthrene	10.1	U	0.26	1	10.1	ug/L
120-12-7	Anthracene	10.1	U	0.16	1	10.1	ug/L
206-44-0	Fluoranthene	10.1	U	0.4	1	10.1	ug/L
129-00-0	Pyrene	10.1	U	0.2	1	10.1	ug/L
56-55-3	Benzo(a)anthracene	10.1	U	0.16	1	10.1	ug/L
218-01-9	Chrysene	10.1	U	0.18	1	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	10.1	U	0.29	1	10.1	ug/L
207-08-9	Benzo(k)fluoranthene	10.1	U	0.18	1	10.1	ug/L
50-32-8	Benzo(a)pyrene	10.1	U	0.14	1	10.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.1	U	0.15	1	10.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.1	U	0.42	1	10.1	ug/L
191-24-2	Benzo(g,h,i)perylene	10.1	U	0.29	1	10.1	ug/L
<b>SURROGATES</b>							
4165-60-0	Nitrobenzene-d5	85.5		36 - 131		85%	SPK: 100
321-60-8	2-Fluorobiphenyl	91		39 - 131		91%	SPK: 100
1718-51-0	Terphenyl-d14	72.7		23 - 130		73%	SPK: 100
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	35508		7.68			
1146-65-2	Naphthalene-d8	150822		10.47			
15067-26-2	Acenaphthene-d10	87198		14.33			
1517-22-2	Phenanthrene-d10	183123		17.08			
1719-03-5	Chrysene-d12	200961		21.27			
1520-96-3	Perylene-d12	191563		23.52			

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15			
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15			
Client Sample ID:	VE1-2	SDG No.:	G2353			
Lab Sample ID:	G2353-01	Matrix:	Water			
Analytical Method:	SW8270	% Moisture:	100			
Sample Wt/Vol:	990	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group1	
Extraction Type :		Decanted :	N	Level :	LOW	
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017270.D	1	05/22/15 12:18	05/23/15 07:22	PB83561

CAS Number	Parameter	Cone.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE1-4	SDG No.:	G2353
Lab Sample ID:	G2353-02	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	980	Units:	mL
Soil Aliquot Vol:		uL	
Extraction Type :		Decanted :	N
Injection Volume :		GPC Factor :	1.0
		GPC Cleanup :	N
		PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017271.D	1	05/22/15 12:18	05/23/15 07:57	PB83561

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
91-57-6	2-Methylnaphthalene	10.2	U	0.33	1	10.2	ug/L
208-96-8	Acenaphthylene	10.2	U	0.71	1	10.2	ug/L
83-32-9	Acenaphthene	10.2	U	0.21	1	10.2	ug/L
86-73-7	Fluorene	10.2	U	0.32	1	10.2	ug/L
85-01-8	Phenanthrene	10.2	U	0.27	1	10.2	ug/L
120-12-7	Anthracene	10.2	U	0.16	1	10.2	ug/L
206-44-0	Fluoranthene	10.2	U	0.41	1	10.2	ug/L
129-00-0	Pyrene	10.2	U	0.2	1	10.2	ug/L
56-55-3	Benzo(a)anthracene	10.2	U	0.16	1	10.2	ug/L
218-01-9	Chrysene	10.2	U	0.18	1	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	10.2	U	0.3	1	10.2	ug/L
207-08-9	Benzo(k)fluoranthene	10.2	U	0.18	1	10.2	ug/L
50-32-8	Benzo(a)pyrene	10.2	U	0.14	1	10.2	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.2	U	0.15	1	10.2	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.2	U	0.43	1	10.2	ug/L
191-24-2	Benzo(g,h,i)perylene	10.2	U	0.3	1	10.2	ug/L
<b>SURROGATES</b>							
4165-60-0	Nitrobenzene-d5	86.2		36 - 131		86%	SPK: 100
321-60-8	2-Fluorobiphenyl	89.9		39 - 131		90%	SPK: 100
1718-51-0	Terphenyl-d14	69.8		23 - 130		70%	SPK: 100
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	32302		7.68			
1146-65-2	Naphthalene-d8	135776		10.47			
15067-26-2	Acenaphthene-d10	80446		14.33			
1517-22-2	Phenanthrene-d10	167224		17.08			
1719-03-5	Chrysene-d12	184650		21.27			
1520-96-3	Perylene-d12	185259		23.52			

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15			
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15			
Client Sample ID:	VE1-4	SDG No.:	G2353			
Lab Sample ID:	G2353-02	Matrix:	Water			
Analytical Method:	SW8270	% Moisture:	100			
Sample Wt/Vol:	980	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group1	
Extraction Type :		Decanted :	N	Level :	LOW	
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017271.D	1	05/22/15 12:18	05/23/15 07:57	PB83561

CAS Number	Parameter	Cone.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE2-1	SDG No.:	G2353
Lab Sample ID:	G2353-03	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990	Units:	mL
Soil Aliquot Vol:		uL	
Extraction Type :		Decanted :	N
Injection Volume :		GPC Factor :	1.0
		GPC Cleanup :	N
		PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF079441.D	1	05/22/15 12:18	05/22/15 19:03	PB83561

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
91-57-6	2-Methylnaphthalene	10.1	U	0.32	1	10.1	ug/L
208-96-8	Acenaphthylene	10.1	U	0.71	1	10.1	ug/L
83-32-9	Acenaphthene	10.1	U	0.21	1	10.1	ug/L
86-73-7	Fluorene	10.1	U	0.31	1	10.1	ug/L
85-01-8	Phenanthrene	10.1	U	0.26	1	10.1	ug/L
120-12-7	Anthracene	10.1	U	0.16	1	10.1	ug/L
206-44-0	Fluoranthene	10.1	U	0.4	1	10.1	ug/L
129-00-0	Pyrene	10.1	U	0.2	1	10.1	ug/L
56-55-3	Benzo(a)anthracene	10.1	U	0.16	1	10.1	ug/L
218-01-9	Chrysene	10.1	U	0.18	1	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	10.1	U	0.29	1	10.1	ug/L
207-08-9	Benzo(k)fluoranthene	10.1	U	0.18	1	10.1	ug/L
50-32-8	Benzo(a)pyrene	10.1	U	0.14	1	10.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.1	U	0.15	1	10.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.1	U	0.42	1	10.1	ug/L
191-24-2	Benzo(g,h,i)perylene	10.1	U	0.29	1	10.1	ug/L
<b>SURROGATES</b>							
4165-60-0	Nitrobenzene-d5	91.4		36 - 131		91%	SPK: 100
321-60-8	2-Fluorobiphenyl	93.8		39 - 131		94%	SPK: 100
1718-51-0	Terphenyl-d14	84.2		23 - 130		84%	SPK: 100
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	65648	7.05				
1146-65-2	Naphthalene-d8	269874	8.63				
15067-26-2	Acenaphthene-d10	130895	10.8				
1517-22-2	Phenanthrene-d10	249525	12.63				
1719-03-5	Chrysene-d12	235286	15.91				
1520-96-3	Perylene-d12	239725	17.65				

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15			
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15			
Client Sample ID:	VE2-1	SDG No.:	G2353			
Lab Sample ID:	G2353-03	Matrix:	Water			
Analytical Method:	SW8270	% Moisture:	100			
Sample Wt/Vol:	990	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group1	
Extraction Type :		Decanted :	N	Level :	LOW	
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF079441.D	1	05/22/15 12:18	05/22/15 19:03	PB83561

CAS Number	Parameter	Cone.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

**Report of Analysis**

Client:	Day Engineering, P.C.			Date Collected:	05/19/15	
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:	05/21/15	
Client Sample ID:	VE3-1			SDG No.:	G2353	
Lab Sample ID:	G2353-04			Matrix:	Water	
Analytical Method:	SW8270			% Moisture:	100	
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:	uL			Test:	SVOCMS Group1	
Extraction Type :	Decanted : N			Level :	LOW	
Injection Volume :	GPC Factor : 1.0			GPC Cleanup :	N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017259.D	1	05/22/15 12:18	05/23/15 01:01	PB83561

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
91-57-6	2-Methylnaphthalene	10	U	0.32	1	10	ug/L
208-96-8	Acenaphthylene	10	U	0.7	1	10	ug/L
83-32-9	Acenaphthene	3.6	J	0.21	1	10	ug/L
86-73-7	Fluorene	3.2	J	0.31	1	10	ug/L
85-01-8	Phenanthrene	2.6	J	0.26	1	10	ug/L
120-12-7	Anthracene	10	U	0.16	1	10	ug/L
206-44-0	Fluoranthene	10	U	0.4	1	10	ug/L
129-00-0	Pyrene	10	U	0.2	1	10	ug/L
56-55-3	Benzo(a)anthracene	10	U	0.16	1	10	ug/L
218-01-9	Chrysene	10	U	0.18	1	10	ug/L
205-99-2	Benzo(b)fluoranthene	10	U	0.29	1	10	ug/L
207-08-9	Benzo(k)fluoranthene	10	U	0.18	1	10	ug/L
50-32-8	Benzo(a)pyrene	10	U	0.14	1	10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	0.15	1	10	ug/L
53-70-3	Dibenzo(a,h)anthracene	10	U	0.42	1	10	ug/L
191-24-2	Benzo(g,h,i)perylene	10	U	0.29	1	10	ug/L
<b>SURROGATES</b>							
4165-60-0	Nitrobenzene-d5	74.7		36 - 131		75%	SPK: 100
321-60-8	2-Fluorobiphenyl	71.8		39 - 131		72%	SPK: 100
1718-51-0	Terphenyl-d14	67.3		23 - 130		67%	SPK: 100
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	37836	7.68				
1146-65-2	Naphthalene-d8	149496	10.47				
15067-26-2	Acenaphthene-d10	98677	14.34				
1517-22-2	Phenanthrene-d10	203649	17.09				
1719-03-5	Chrysene-d12	201169	21.27				
1520-96-3	Perylene-d12	199770	23.52				

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15			
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15			
Client Sample ID:	VE3-1	SDG No.:	G2353			
Lab Sample ID:	G2353-04	Matrix:	Water			
Analytical Method:	SW8270	% Moisture:	100			
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group1	
Extraction Type :		Decanted :	N	Level :	LOW	
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017259.D	1	05/22/15 12:18	05/23/15 01:01	PB83561

CAS Number	Parameter	Cone.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE4-11	SDG No.:	G2353
Lab Sample ID:	G2353-05	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	970	Units:	mL
Soil Aliquot Vol:		uL	
Extraction Type :		Decanted :	N
Injection Volume :		GPC Factor :	1.0
		GPC Cleanup :	N
		PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017260.D	1	05/22/15 12:18	05/23/15 01:36	PB83561

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
91-57-6	2-Methylnaphthalene	10.3	U	0.33	1	10.3	ug/L
208-96-8	Acenaphthylene	10.3	U	0.72	1	10.3	ug/L
83-32-9	Acenaphthene	10.3	U	0.22	1	10.3	ug/L
86-73-7	Fluorene	10.3	U	0.32	1	10.3	ug/L
85-01-8	Phenanthrene	10.3	U	0.27	1	10.3	ug/L
120-12-7	Anthracene	10.3	U	0.16	1	10.3	ug/L
206-44-0	Fluoranthene	10.3	U	0.41	1	10.3	ug/L
129-00-0	Pyrene	10.3	U	0.21	1	10.3	ug/L
56-55-3	Benzo(a)anthracene	10.3	U	0.16	1	10.3	ug/L
218-01-9	Chrysene	10.3	U	0.19	1	10.3	ug/L
205-99-2	Benzo(b)fluoranthene	10.3	U	0.3	1	10.3	ug/L
207-08-9	Benzo(k)fluoranthene	10.3	U	0.19	1	10.3	ug/L
50-32-8	Benzo(a)pyrene	10.3	U	0.14	1	10.3	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.3	U	0.15	1	10.3	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.3	U	0.43	1	10.3	ug/L
191-24-2	Benzo(g,h,i)perylene	10.3	U	0.3	1	10.3	ug/L
<b>SURROGATES</b>							
4165-60-0	Nitrobenzene-d5	89.4		36 - 131		89%	SPK: 100
321-60-8	2-Fluorobiphenyl	98.3		39 - 131		98%	SPK: 100
1718-51-0	Terphenyl-d14	68.9		23 - 130		69%	SPK: 100
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	32946	7.69				
1146-65-2	Naphthalene-d8	136298	10.47				
15067-26-2	Acenaphthene-d10	78741	14.33				
1517-22-2	Phenanthrene-d10	167033	17.08				
1719-03-5	Chrysene-d12	178800	21.27				
1520-96-3	Perylene-d12	177725	23.52				

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15			
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15			
Client Sample ID:	VE4-11	SDG No.:	G2353			
Lab Sample ID:	G2353-05	Matrix:	Water			
Analytical Method:	SW8270	% Moisture:	100			
Sample Wt/Vol:	970	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group1	
Extraction Type :		Decanted :	N	Level :	LOW	
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017260.D	1	05/22/15 12:18	05/23/15 01:36	PB83561

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

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MDL = Method Detection Limit

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E = Value Exceeds Calibration Range

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B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	DAY-1	SDG No.:	G2353
Lab Sample ID:	G2353-08	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	980	Units:	mL
Soil Aliquot Vol:		uL	
Extraction Type :		Decanted :	N
Injection Volume :		GPC Factor :	1.0
		GPC Cleanup :	N
		PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017263.D	1	05/22/15 12:18	05/23/15 03:20	PB83561

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
91-57-6	2-Methylnaphthalene	10.2	U	0.33	1	10.2	ug/L
208-96-8	Acenaphthylene	10.2	U	0.71	1	10.2	ug/L
83-32-9	Acenaphthene	2.5	J	0.21	1	10.2	ug/L
86-73-7	Fluorene	3.3	J	0.32	1	10.2	ug/L
85-01-8	Phenanthrene	10.2	U	0.27	1	10.2	ug/L
120-12-7	Anthracene	10.2	U	0.16	1	10.2	ug/L
206-44-0	Fluoranthene	10.2	U	0.41	1	10.2	ug/L
129-00-0	Pyrene	10.2	U	0.2	1	10.2	ug/L
56-55-3	Benzo(a)anthracene	10.2	U	0.16	1	10.2	ug/L
218-01-9	Chrysene	10.2	U	0.18	1	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	10.2	U	0.3	1	10.2	ug/L
207-08-9	Benzo(k)fluoranthene	10.2	U	0.18	1	10.2	ug/L
50-32-8	Benzo(a)pyrene	10.2	U	0.14	1	10.2	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.2	U	0.15	1	10.2	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.2	U	0.43	1	10.2	ug/L
191-24-2	Benzo(g,h,i)perylene	10.2	U	0.3	1	10.2	ug/L
<b>SURROGATES</b>							
4165-60-0	Nitrobenzene-d5	87.1		36 - 131		87%	SPK: 100
321-60-8	2-Fluorobiphenyl	90.9		39 - 131		91%	SPK: 100
1718-51-0	Terphenyl-d14	70.6		23 - 130		71%	SPK: 100
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	32611		7.68			
1146-65-2	Naphthalene-d8	138592		10.47			
15067-26-2	Acenaphthene-d10	83582		14.34			
1517-22-2	Phenanthrene-d10	178186		17.09			
1719-03-5	Chrysene-d12	200156		21.28			
1520-96-3	Perylene-d12	184301		23.53			

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15			
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15			
Client Sample ID:	DAY-1	SDG No.:	G2353			
Lab Sample ID:	G2353-08	Matrix:	Water			
Analytical Method:	SW8270	% Moisture:	100			
Sample Wt/Vol:	980	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group1	
Extraction Type :		Decanted :	N	Level :	LOW	
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017263.D	1	05/22/15 12:18	05/23/15 03:20	PB83561

CAS Number	Parameter	Cone.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

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() = Laboratory InHouse Limit

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	FIELDBLANK	SDG No.:	G2353
Lab Sample ID:	G2353-09	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990	Units:	mL
Soil Aliquot Vol:		uL	
Extraction Type :		Decanted :	N
Injection Volume :		GPC Factor :	1.0
		GPC Cleanup :	N
		PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF079448.D	1	05/22/15 12:18	05/22/15 22:22	PB83561

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
91-57-6	2-Methylnaphthalene	10.1	U	0.32	1	10.1	ug/L
208-96-8	Acenaphthylene	10.1	U	0.71	1	10.1	ug/L
83-32-9	Acenaphthene	10.1	U	0.21	1	10.1	ug/L
86-73-7	Fluorene	10.1	U	0.31	1	10.1	ug/L
85-01-8	Phenanthrene	10.1	U	0.26	1	10.1	ug/L
120-12-7	Anthracene	10.1	U	0.16	1	10.1	ug/L
206-44-0	Fluoranthene	10.1	U	0.4	1	10.1	ug/L
129-00-0	Pyrene	10.1	U	0.2	1	10.1	ug/L
56-55-3	Benzo(a)anthracene	10.1	U	0.16	1	10.1	ug/L
218-01-9	Chrysene	10.1	U	0.18	1	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	10.1	U	0.29	1	10.1	ug/L
207-08-9	Benzo(k)fluoranthene	10.1	U	0.18	1	10.1	ug/L
50-32-8	Benzo(a)pyrene	10.1	U	0.14	1	10.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10.1	U	0.15	1	10.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	10.1	U	0.42	1	10.1	ug/L
191-24-2	Benzo(g,h,i)perylene	10.1	U	0.29	1	10.1	ug/L
<b>SURROGATES</b>							
4165-60-0	Nitrobenzene-d5	83		36 - 131		83%	SPK: 100
321-60-8	2-Fluorobiphenyl	89.7		39 - 131		90%	SPK: 100
1718-51-0	Terphenyl-d14	85.9		23 - 130		86%	SPK: 100
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	72018		7.05			
1146-65-2	Naphthalene-d8	290888		8.63			
15067-26-2	Acenaphthene-d10	137983		10.8			
1517-22-2	Phenanthrene-d10	271515		12.63			
1719-03-5	Chrysene-d12	258036		15.91			
1520-96-3	Perylene-d12	252415		17.61			

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15			
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15			
Client Sample ID:	FIELDBLANK	SDG No.:	G2353			
Lab Sample ID:	G2353-09	Matrix:	Water			
Analytical Method:	SW8270	% Moisture:	100			
Sample Wt/Vol:	990	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group1	
Extraction Type :		Decanted :	N	Level :	LOW	
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF079448.D	1	05/22/15 12:18	05/22/15 22:22	PB83561

CAS Number	Parameter	Cone.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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E = Value Exceeds Calibration Range

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() = Laboratory InHouse Limit

QC  
SUMMARY

**Surrogate Summary****SW-846**SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: 8270D

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Limits (%)	
						Qual	Low
G2353-01	VE1-2	Nitrobenzene-d5	100	85.46	85	36	131
		2-Fluorobiphenyl	100	91.01	91	39	131
		Terphenyl-d14	100	72.73	73	23	130
G2353-02	VE1-4	Nitrobenzene-d5	100	86.15	86	36	131
		2-Fluorobiphenyl	100	89.91	90	39	131
		Terphenyl-d14	100	69.77	70	23	130
G2353-03	VE2-1	Nitrobenzene-d5	100	91.39	91	36	131
		2-Fluorobiphenyl	100	93.80	94	39	131
		Terphenyl-d14	100	84.17	84	23	130
G2353-04	VE3-1	Nitrobenzene-d5	100	74.72	75	36	131
		2-Fluorobiphenyl	100	71.81	72	39	131
		Terphenyl-d14	100	67.27	67	23	130
G2353-05	VE4-11	Nitrobenzene-d5	100	89.41	89	36	131
		2-Fluorobiphenyl	100	98.27	98	39	131
		Terphenyl-d14	100	68.90	69	23	130
G2353-06MS	VE4-11MS	Nitrobenzene-d5	100	86.17	86	36	131
		2-Fluorobiphenyl	100	93.58	94	39	131
		Terphenyl-d14	100	60.41	60	23	130
G2353-07MSD	VE4-11MSD	Nitrobenzene-d5	100	87.18	87	36	131
		2-Fluorobiphenyl	100	93.40	93	39	131
		Terphenyl-d14	100	60.70	61	23	130
G2353-08	DAY-1	Nitrobenzene-d5	100	87.05	87	36	131
		2-Fluorobiphenyl	100	90.89	91	39	131
		Terphenyl-d14	100	70.62	71	23	130
G2353-09	FIELDBLANK	Nitrobenzene-d5	100	82.98	83	36	131
		2-Fluorobiphenyl	100	89.73	90	39	131
		Terphenyl-d14	100	85.94	86	23	130
PB83561BL	PB83561BL	Nitrobenzene-d5	100	77.58	78	36	131
		2-Fluorobiphenyl	100	80.75	81	39	131
		Terphenyl-d14	100	78.31	78	23	130
PB83561BS	PB83561BS	Nitrobenzene-d5	100	76.71	77	36	131
		2-Fluorobiphenyl	100	78.93	79	39	131
		Terphenyl-d14	100	76.06	76	23	130

**Matrix Spike/Matrix Spike Duplicate Summary  
SW-846**SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: SW8270D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	High	Limits RPD
<b>Lab Sample ID:</b>	<b>G2353-06MS</b>	<b>Client Sample ID:</b>	<b>VE4-11MS</b>						<b>DataFile:</b>	<b>BG017261.D</b>	
2-Methylnaphthalene	51	0	45.1	ug/L	88				38	146	
Acenaphthylene	51	0	49.8	ug/L	98				40	141	
Acenaphthene	51	0	50.9	ug/L	100				37	146	
Fluorene	51	0	49.5	ug/L	97				39	144	
Phenanthrene	51	0	50.3	ug/L	99				40	147	
Anthracene	51	0	50.2	ug/L	98				41	146	
Fluoranthene	51	0	48.3	ug/L	95				42	146	
Pyrene	51	0	46	ug/L	90				41	149	
Benzo(a)anthracene	51	0	49.3	ug/L	97				41	147	
Chrysene	51	0	49.5	ug/L	97				44	144	
Benzo(b)fluoranthene	51	0	48.9	ug/L	96				40	150	
Benzo(k)fluoranthene	51	0	50.6	ug/L	99				40	147	
Benzo(a)pyrene	51	0	51	ug/L	100				42	147	
Indeno(1,2,3-cd)pyrene	51	0	48.7	ug/L	95				30	166	
Dibenz(a,h)anthracene	51	0	49.4	ug/L	97				23	172	
Benzo(g,h,i)perylene	51	0	49.9	ug/L	98				27	167	

**Matrix Spike/Matrix Spike Duplicate Summary  
SW-846**SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: SW8270D

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	High	Limits RPD
<b>Lab Sample ID:</b> G2353-07MSD		<b>Client Sample ID:</b> VE4-11MSD						<b>DataFile:</b>	<b>BG017262.D</b>		
2-Methylnaphthalene	50.5	0	46.8	ug/L	93	6			38	146	20
Acenaphthylene	50.5	0	49.3	ug/L	98	0			40	141	20
Acenaphthene	50.5	0	49.6	ug/L	98	2			37	146	20
Fluorene	50.5	0	49.6	ug/L	98	1			39	144	20
Phenanthrene	50.5	0	50.3	ug/L	100	1			40	147	20
Anthracene	50.5	0	50.4	ug/L	100	2			41	146	20
Fluoranthene	50.5	0	49	ug/L	97	2			42	146	20
Pyrene	50.5	0	46.1	ug/L	91	1			41	149	20
Benzo(a)anthracene	50.5	0	48.4	ug/L	96	1			41	147	20
Chrysene	50.5	0	49.3	ug/L	98	1			44	144	20
Benzo(b)fluoranthene	50.5	0	50.1	ug/L	99	3			40	150	20
Benzo(k)fluoranthene	50.5	0	50.2	ug/L	99	0			40	147	20
Benzo(a)pyrene	50.5	0	50.8	ug/L	101	1			42	147	20
Indeno(1,2,3-cd)pyrene	50.5	0	48.6	ug/L	96	1			30	166	20
Dibenz(a,h)anthracene	50.5	0	50	ug/L	99	2			23	172	20
Benzo(g,h,i)perylene	50.5	0	50.9	ug/L	101	3			27	167	20

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary  
SW-846**SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: 8270DDataFile: BG017254.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		
									Qual	Low	High
PB83561BS	2-Methylnaphthalene	50	38.1	ug/L	76					63	110
	Acenaphthylene	50	40	ug/L	80					65	110
	Acenaphthene	50	39.9	ug/L	80					66	114
	Fluorene	50	40.3	ug/L	81					66	112
	Phenanthrene	50	41.4	ug/L	83					68	112
	Anthracene	50	41.8	ug/L	84					69	112
	Fluoranthene	50	43.5	ug/L	87					67	115
	Pyrene	50	39.2	ug/L	78					67	116
	Benzo(a)anthracene	50	40.5	ug/L	81					64	117
	Chrysene	50	40.8	ug/L	82					65	116
	Benzo(b)fluoranthene	50	41.1	ug/L	82					62	122
	Benzo(k)fluoranthene	50	43.2	ug/L	86					60	123
	Benzo(a)pyrene	50	43	ug/L	86					65	118
	Indeno(1,2,3-cd)pyrene	50	40.8	ug/L	82					50	133
	Dibenz(a,h)anthracene	50	40.3	ug/L	81					45	150
	Benzo(g,h,i)perylene	50	41.6	ug/L	83					64	123

4B

## SEMITRIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB83561BL

Lab Name: CHEMTECHContract: DAYE02Lab Code: CHEMCase No.: G2353SAS No.: G2353 SDG NO.: G2353Lab File ID: BG017253.DLab Sample ID: PB83561BLInstrument ID: BNA\_GDate Extracted: 05/22/2015Matrix: (soil/water) waterDate Analyzed: 05/22/2015Level: (low/med) LOWTime Analyzed: 19:31

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB83561BS	PB83561BS	BG017254.D	05/22/2015
VE4-11MS	G2353-06MS	BG017261.D	05/23/2015
VE4-11MSD	G2353-07MSD	BG017262.D	05/23/2015
DAY-1	G2353-08	BG017263.D	05/23/2015
VE2-1	G2353-03	BF079441.D	05/22/2015
FIELDBLANK	G2353-09	BF079448.D	05/22/2015
VE3-1	G2353-04	BG017259.D	05/23/2015
VE4-11	G2353-05	BG017260.D	05/23/2015
VE1-2	G2353-01	BG017270.D	05/23/2015
VE1-4	G2353-02	BG017271.D	05/23/2015

COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: <u>CHEMTECH</u>	Contract: <u>DAYE02</u>
Lab Code: <u>CHEM</u>	SAS No.: <u>G2353</u> SDG NO.: <u>G2353</u>
Lab File ID: <u>BF078849.D</u>	DFTPP Injection Date: <u>04/30/2015</u>
Instrument ID: <u>BNA_F</u>	DFTPP Injection Time: <u>13:32</u>

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	43.3
68	Less than 2.0% of mass 69	0.8 ( 2 ) 1
69	Mass 69 relative abundance	39.2
70	Less than 2.0% of mass 69	0.0 ( 0.0 ) 1
127	10.0 - 80.0% of mass 198	50.8
197	Less than 2.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 60.0% of mass 198	24.3
365	Greater than 1% of mass 198	3.2
441	Present, but less than mass 443	15.6
442	Greater than 50% of mass 198	98.3
443	15.0 - 24.0% of mass 442	18.6 ( 18.9 ) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC080	SSTDICC080	BF078850.D	04/30/2015	15:35
SSTDICC060	SSTDICC060	BF078851.D	04/30/2015	16:04
SSTDICC050	SSTDICC050	BF078852.D	04/30/2015	16:32
SSTDICCC040	SSTDICCC040	BF078853.D	04/30/2015	17:01
SSTDICC025	SSTDICC025	BF078854.D	04/30/2015	17:30
SSTDICC010	SSTDICC010	BF078855.D	04/30/2015	17:58
SSTDICC2.5	SSTDICC2.5	BF078856.D	04/30/2015	18:27

5B

**SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK**  
**DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: CHEMTECHContract: DAYE02Lab Code: CHEMSAS No.: G2353 SDG NO.: G2353Lab File ID: BF079430.DDFTPP Injection Date: 05/22/2015Instrument ID: BNA\_FDFTPP Injection Time: 12:28

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	38.9
68	Less than 2.0% of mass 69	0.5 ( 1.3 ) 1
69	Mass 69 relative abundance	34.9
70	Less than 2.0% of mass 69	0.0 ( 0.0 ) 1
127	10.0 - 80.0% of mass 198	49.8
197	Less than 2.0% of mass 198	0.4
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 60.0% of mass 198	23.6
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	13.8
442	Greater than 50% of mass 198	87.8
443	15.0 - 24.0% of mass 442	17.2 ( 19.6 ) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF079431.D	05/22/2015	14:11
VE2-1	G2353-03	BF079441.D	05/22/2015	19:03
FIELDBLANK	G2353-09	BF079448.D	05/22/2015	22:22

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: <u>CHEMTECH</u>	Contract: <u>DAYE02</u>
Lab Code: <u>CHEM</u>	SAS No.: <u>G2353</u> SDG NO.: <u>G2353</u>
Lab File ID: <u>BG017100.D</u>	DFTPP Injection Date: <u>05/13/2015</u>
Instrument ID: <u>BNA_G</u>	DFTPP Injection Time: <u>11:07</u>

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	48.4
68	Less than 2.0% of mass 69	0.0 ( 0.0 ) 1
69	Mass 69 relative abundance	47.2
70	Less than 2.0% of mass 69	0.0 ( 0.0 ) 1
127	10.0 - 80.0% of mass 198	53.1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.9
275	10.0 - 60.0% of mass 198	27
365	Greater than 1% of mass 198	6.3
441	Present, but less than mass 443	13
442	Greater than 50% of mass 198	82.3
443	15.0 - 24.0% of mass 442	15.9 ( 19.4 ) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC2.5	SSTDICC2.5	BG017101.D	05/13/2015	11:42
SSTDICC010	SSTDICC010	BG017102.D	05/13/2015	12:16
SSTDICC025	SSTDICC025	BG017103.D	05/13/2015	12:51
SSTDICCC040	SSTDICCC040	BG017104.D	05/13/2015	13:25
SSTDICC050	SSTDICC050	BG017105.D	05/13/2015	14:00
SSTDICC060	SSTDICC060	BG017106.D	05/13/2015	14:35
SSTDICC080	SSTDICC080	BG017107.D	05/13/2015	15:10

5B

**SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK**  
**DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: CHEMTECHContract: DAYE02Lab Code: CHEMSAS No.: G2353 SDG No.: G2353Lab File ID: BG017241.DDFTPP Injection Date: 05/22/2015Instrument ID: BNA\_GDFTPP Injection Time: 10:39

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	48.2
68	Less than 2.0% of mass 69	0.0 ( 0.0 ) 1
69	Mass 69 relative abundance	46.7
70	Less than 2.0% of mass 69	0.2 ( 0.5 ) 1
127	10.0 - 80.0% of mass 198	54.3
197	Less than 2.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	30.8
365	Greater than 1% of mass 198	5.8
441	Present, but less than mass 443	13
442	Greater than 50% of mass 198	82.2
443	15.0 - 24.0% of mass 442	15.5 ( 18.9 ) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BG017242.D	05/22/2015	12:22
PB83561BL	PB83561BL	BG017253.D	05/22/2015	19:31
PB83561BS	PB83561BS	BG017254.D	05/22/2015	20:06

5B

**SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK**  
**DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: CHEMTECHContract: DAYE02Lab Code: CHEMSAS No.: G2353 SDG No.: G2353Lab File ID: BG017257.DDFTPP Injection Date: 05/22/2015Instrument ID: BNA\_GDFTPP Injection Time: 23:52

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	52.3
68	Less than 2.0% of mass 69	0.3 ( 0.6 ) 1
69	Mass 69 relative abundance	51.1
70	Less than 2.0% of mass 69	0.0 ( 0.0 ) 1
127	10.0 - 80.0% of mass 198	54.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 60.0% of mass 198	28.5
365	Greater than 1% of mass 198	5.4
441	Present, but less than mass 443	10.1
442	Greater than 50% of mass 198	74.5
443	15.0 - 24.0% of mass 442	13.6 ( 18.2 ) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BG017258.D	05/23/2015	00:26
VE3-1	G2353-04	BG017259.D	05/23/2015	01:01
VE4-11	G2353-05	BG017260.D	05/23/2015	01:36
VE4-11MS	G2353-06MS	BG017261.D	05/23/2015	02:10
VE4-11MSD	G2353-07MSD	BG017262.D	05/23/2015	02:45
DAY-1	G2353-08	BG017263.D	05/23/2015	03:20
VE1-2	G2353-01	BG017270.D	05/23/2015	07:22
VE1-4	G2353-02	BG017271.D	05/23/2015	07:57

8B

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH  
Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG No.: G2353  
EPA Sample No.: SSTDCCC040 Date Analyzed: 05/22/2015  
Lab File ID: BF079431.D Time Analyzed: 14:11  
Instrument ID: BNA\_F GC Column: RTX-5 ID: 0.18 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	55108	7.05	230365	8.63	108962	10.80
UPPER LIMIT	110216	7.55	460730	9.13	217924	11.3
LOWER LIMIT	27554	6.55	115183	8.13	54481	10.3
EPA SAMPLE NO.						
01 VE2-1	65648	7.05	269874	8.63	130895	10.8
02 FIELDBLANK	72018	7.05	290888	8.63	137983	10.8

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8C

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG No.: G2353

EPA Sample No.: SSTDCCCC040 Date Analyzed: 05/22/2015

Lab File ID: BF079431.D Time Analyzed: 14:11

Instrument ID: BNA\_F GC Column: RTX-5 ID: 0.18 (mm)

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	205961	12.64	209966	15.97	212516	17.85
UPPER LIMIT	411922	13.14	419932	16.47	425032	18.35
LOWER LIMIT	102981	12.14	104983	15.47	106258	17.35
EPA SAMPLE NO.						
01 VE2-1	249525	12.63	235286	15.91	239725	17.65
02 FIELD BLANK	271515	12.63	258036	15.91	252415	17.61

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8B

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH  
Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG No.: G2353  
EPA Sample No.: SSTDCCC040 Date Analyzed: 05/22/2015  
Lab File ID: BG017242.D Time Analyzed: 12:22  
Instrument ID: BNA\_G GC Column: RXI-5 ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	40954	7.68	182298	10.47	112555	14.34
	81908	8.18	364596	10.97	225110	14.84
	20477	7.18	91149	9.97	56277.5	13.84
EPA SAMPLE NO.						
01	PB83561BL	32333	7.68	126925	10.47	76453
02	PB83561BS	32380	7.68	128379	10.47	79556

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8C

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG No.: G2353

EPA Sample No.: SSTDCCCC040 Date Analyzed: 05/22/2015

Lab File ID: BG017242.D Time Analyzed: 12:22

Instrument ID: BNA\_G GC Column: RXI-5 ID: 0.25 (mm)

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	242589	17.08	282725	21.27	272024	23.52
UPPER LIMIT	485178	17.58	565450	21.77	544048	24.02
LOWER LIMIT	121295	16.58	141363	20.77	136012	23.02
EPA SAMPLE NO.						
01 PB83561BL	170965	17.08	194845	21.26	193373	23.51
02 PB83561BS	172943	17.08	202618	21.27	197876	23.52

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8B

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH  
 Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG No.: G2353  
 EPA Sample No.: SSTDCCC040 Date Analyzed: 05/23/2015  
 Lab File ID: BG017258.D Time Analyzed: 00:26  
 Instrument ID: BNA\_G GC Column: RXI-5 ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	43166	7.68	183017	10.47	113403	14.33
UPPER LIMIT	86332	8.18	366034	10.97	226806	14.83
LOWER LIMIT	21583	7.18	91508.5	9.97	56701.5	13.83
EPA SAMPLE NO.						
01 VE1-4	32302	7.68	135776	10.47	80446	14.33
02 VE3-1	37836	7.68	149496	10.47	98677	14.34
03 VE4-11	32946	7.69	136298	10.47	78741	14.33
04 VE4-11MS	35251	7.68	149819	10.47	86818	14.34
05 VE4-11MSD	34548	7.68	144958	10.47	87027	14.33
06 DAY-1	32611	7.68	138592	10.47	83582	14.34
07 VE1-2	35508	7.68	150822	10.47	87198	14.33

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

8C

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG No.: G2353

EPA Sample No.: SSTDCCCC040 Date Analyzed: 05/23/2015

Lab File ID: BG017258.D Time Analyzed: 00:26

Instrument ID: BNA\_G GC Column: RXI-5 ID: 0.25 (mm)

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	241757	17.08	277004	21.27	269748	23.52
UPPER LIMIT	483514	17.58	554008	21.77	539496	24.02
LOWER LIMIT	120879	16.58	138502	20.77	134874	23.02
EPA SAMPLE NO.						
01 VE1-4	167224	17.08	184650	21.27	185259	23.52
02 VE3-1	203649	17.09	201169	21.27	199770	23.52
03 VE4-11	167033	17.08	178800	21.27	177725	23.52
04 VE4-11MS	184190	17.08	204220	21.27	197537	23.52
05 VE4-11MSD	184343	17.08	204799	21.27	193933	23.52
06 DAY-1	178186	17.09	200156	21.28	184301	23.53
07 VE1-2	183123	17.08	200961	21.27	191563	23.52

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

QC SAMPLE  
DATA

**Report of Analysis**

Client:	Day Engineering, P.C.			Date Collected:		
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:		
Client Sample ID:	PB83561BL			SDG No.:	G2353	
Lab Sample ID:	PB83561BL			Matrix:	water	
Analytical Method:	SW8270			% Moisture:	100	
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:	uL			Test:	SVOCMS Group1	
Extraction Type :				Decanted :	N	Level :
Injection Volume :				GPC Factor :	1.0	GPC Cleanup : N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017253.D	1	05/22/15 12:18	05/22/15 19:31	PB83561

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
91-57-6	2-Methylnaphthalene	10	U	0.32	1	10	ug/L
208-96-8	Acenaphthylene	10	U	0.7	1	10	ug/L
83-32-9	Acenaphthene	10	U	0.21	1	10	ug/L
86-73-7	Fluorene	10	U	0.31	1	10	ug/L
85-01-8	Phenanthrene	10	U	0.26	1	10	ug/L
120-12-7	Anthracene	10	U	0.16	1	10	ug/L
206-44-0	Fluoranthene	10	U	0.4	1	10	ug/L
129-00-0	Pyrene	10	U	0.2	1	10	ug/L
56-55-3	Benzo(a)anthracene	10	U	0.16	1	10	ug/L
218-01-9	Chrysene	10	U	0.18	1	10	ug/L
205-99-2	Benzo(b)fluoranthene	10	U	0.29	1	10	ug/L
207-08-9	Benzo(k)fluoranthene	10	U	0.18	1	10	ug/L
50-32-8	Benzo(a)pyrene	10	U	0.14	1	10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	10	U	0.15	1	10	ug/L
53-70-3	Dibenzo(a,h)anthracene	10	U	0.42	1	10	ug/L
191-24-2	Benzo(g,h,i)perylene	10	U	0.29	1	10	ug/L
<b>SURROGATES</b>							
4165-60-0	Nitrobenzene-d5	77.6		36 - 131		78%	SPK: 100
321-60-8	2-Fluorobiphenyl	80.8		39 - 131		81%	SPK: 100
1718-51-0	Terphenyl-d14	78.3		23 - 130		78%	SPK: 100
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	32333		7.68			
1146-65-2	Naphthalene-d8	126925		10.47			
15067-26-2	Acenaphthene-d10	76453		14.34			
1517-22-2	Phenanthrene-d10	170965		17.08			
1719-03-5	Chrysene-d12	194845		21.26			
1520-96-3	Perylene-d12	193373		23.51			

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:				
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:				
Client Sample ID:	PB83561BL	SDG No.:	G2353			
Lab Sample ID:	PB83561BL	Matrix:	water			
Analytical Method:	SW8270	% Moisture:	100			
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group1	
Extraction Type :		Decanted :	N	Level :	LOW	
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017253.D	1	05/22/15 12:18	05/22/15 19:31	PB83561

CAS Number	Parameter	Cone.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

**Report of Analysis**

Client:	Day Engineering, P.C.			Date Collected:		
Project:	MNR Harmon Yards Low-Flow Samples			Date Received:		
Client Sample ID:	PB83561BS			SDG No.:	G2353	
Lab Sample ID:	PB83561BS			Matrix:	water	
Analytical Method:	SW8270			% Moisture:	100	
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:	uL			Test:	SVOCMS Group1	
Extraction Type :				Decanted :	N	Level :
Injection Volume :				GPC Factor :	1.0	GPC Cleanup : N PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017254.D	1	05/22/15 12:18	05/22/15 20:06	PB83561

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
91-57-6	2-Methylnaphthalene	38.1		0.32	1	10	ug/L
208-96-8	Acenaphthylene	40		0.7	1	10	ug/L
83-32-9	Acenaphthene	39.9		0.21	1	10	ug/L
86-73-7	Fluorene	40.3		0.31	1	10	ug/L
85-01-8	Phenanthrene	41.4		0.26	1	10	ug/L
120-12-7	Anthracene	41.8		0.16	1	10	ug/L
206-44-0	Fluoranthene	43.5		0.4	1	10	ug/L
129-00-0	Pyrene	39.2		0.2	1	10	ug/L
56-55-3	Benzo(a)anthracene	40.5		0.16	1	10	ug/L
218-01-9	Chrysene	40.8		0.18	1	10	ug/L
205-99-2	Benzo(b)fluoranthene	41.1		0.29	1	10	ug/L
207-08-9	Benzo(k)fluoranthene	43.2		0.18	1	10	ug/L
50-32-8	Benzo(a)pyrene	43		0.14	1	10	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	40.8		0.15	1	10	ug/L
53-70-3	Dibenzo(a,h)anthracene	40.3		0.42	1	10	ug/L
191-24-2	Benzo(g,h,i)perylene	41.6		0.29	1	10	ug/L
<b>SURROGATES</b>							
4165-60-0	Nitrobenzene-d5	76.7		36 - 131		77%	SPK: 100
321-60-8	2-Fluorobiphenyl	78.9		39 - 131		79%	SPK: 100
1718-51-0	Terphenyl-d14	76.1		23 - 130		76%	SPK: 100
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	32380		7.68			
1146-65-2	Naphthalene-d8	128379		10.47			
15067-26-2	Acenaphthene-d10	79556		14.33			
1517-22-2	Phenanthrene-d10	172943		17.08			
1719-03-5	Chrysene-d12	202618		21.27			
1520-96-3	Perylene-d12	197876		23.52			

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:				
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:				
Client Sample ID:	PB83561BS	SDG No.:	G2353			
Lab Sample ID:	PB83561BS	Matrix:	water			
Analytical Method:	SW8270	% Moisture:	100			
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group1	
Extraction Type :		Decanted :	N	Level :	LOW	
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017254.D	1	05/22/15 12:18	05/22/15 20:06	PB83561

CAS Number	Parameter	Cone.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE4-11MS	SDG No.:	G2353
Lab Sample ID:	G2353-06MS	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	980	Units:	mL
Soil Aliquot Vol:		uL	
Extraction Type :		Decanted :	N
Injection Volume :		GPC Factor :	1.0
		GPC Cleanup :	N
		PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017261.D	1	05/22/15 12:18	05/23/15 02:10	PB83561

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
91-57-6	2-Methylnaphthalene	45.1		0.33	1	10.2	ug/L
208-96-8	Acenaphthylene	49.8		0.71	1	10.2	ug/L
83-32-9	Acenaphthene	50.9		0.21	1	10.2	ug/L
86-73-7	Fluorene	49.5		0.32	1	10.2	ug/L
85-01-8	Phenanthrene	50.3		0.27	1	10.2	ug/L
120-12-7	Anthracene	50.2		0.16	1	10.2	ug/L
206-44-0	Fluoranthene	48.3		0.41	1	10.2	ug/L
129-00-0	Pyrene	46		0.2	1	10.2	ug/L
56-55-3	Benzo(a)anthracene	49.3		0.16	1	10.2	ug/L
218-01-9	Chrysene	49.5		0.18	1	10.2	ug/L
205-99-2	Benzo(b)fluoranthene	48.9		0.3	1	10.2	ug/L
207-08-9	Benzo(k)fluoranthene	50.6		0.18	1	10.2	ug/L
50-32-8	Benzo(a)pyrene	51		0.14	1	10.2	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	48.7		0.15	1	10.2	ug/L
53-70-3	Dibenzo(a,h)anthracene	49.4		0.43	1	10.2	ug/L
191-24-2	Benzo(g,h,i)perylene	49.9		0.3	1	10.2	ug/L
<b>SURROGATES</b>							
4165-60-0	Nitrobenzene-d5	86.2		36 - 131		86%	SPK: 100
321-60-8	2-Fluorobiphenyl	93.6		39 - 131		94%	SPK: 100
1718-51-0	Terphenyl-d14	60.4		23 - 130		60%	SPK: 100
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	35251		7.68			
1146-65-2	Naphthalene-d8	149819		10.47			
15067-26-2	Acenaphthene-d10	86818		14.34			
1517-22-2	Phenanthrene-d10	184190		17.08			
1719-03-5	Chrysene-d12	204220		21.27			
1520-96-3	Perylene-d12	197537		23.52			

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15			
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15			
Client Sample ID:	VE4-11MS	SDG No.:	G2353			
Lab Sample ID:	G2353-06MS	Matrix:	Water			
Analytical Method:	SW8270	% Moisture:	100			
Sample Wt/Vol:	980	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group1	
Extraction Type :		Decanted :	N	Level :	LOW	
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017261.D	1	05/22/15 12:18	05/23/15 02:10	PB83561

CAS Number	Parameter	Cone.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE4-11MSD	SDG No.:	G2353
Lab Sample ID:	G2353-07MSD	Matrix:	Water
Analytical Method:	SW8270	% Moisture:	100
Sample Wt/Vol:	990	Units:	mL
Soil Aliquot Vol:		uL	
Extraction Type :		Decanted :	N
Injection Volume :		GPC Factor :	1.0
		GPC Cleanup :	N
		PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017262.D	1	05/22/15 12:18	05/23/15 02:45	PB83561

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
91-57-6	2-Methylnaphthalene	46.8		0.32	1	10.1	ug/L
208-96-8	Acenaphthylene	49.3		0.71	1	10.1	ug/L
83-32-9	Acenaphthene	49.6		0.21	1	10.1	ug/L
86-73-7	Fluorene	49.6		0.31	1	10.1	ug/L
85-01-8	Phenanthrene	50.3		0.26	1	10.1	ug/L
120-12-7	Anthracene	50.4		0.16	1	10.1	ug/L
206-44-0	Fluoranthene	49		0.4	1	10.1	ug/L
129-00-0	Pyrene	46.1		0.2	1	10.1	ug/L
56-55-3	Benzo(a)anthracene	48.4		0.16	1	10.1	ug/L
218-01-9	Chrysene	49.3		0.18	1	10.1	ug/L
205-99-2	Benzo(b)fluoranthene	50.1		0.29	1	10.1	ug/L
207-08-9	Benzo(k)fluoranthene	50.2		0.18	1	10.1	ug/L
50-32-8	Benzo(a)pyrene	50.8		0.14	1	10.1	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	48.6		0.15	1	10.1	ug/L
53-70-3	Dibenzo(a,h)anthracene	50		0.42	1	10.1	ug/L
191-24-2	Benzo(g,h,i)perylene	50.9		0.29	1	10.1	ug/L
<b>SURROGATES</b>							
4165-60-0	Nitrobenzene-d5	87.2		36 - 131		87%	SPK: 100
321-60-8	2-Fluorobiphenyl	93.4		39 - 131		93%	SPK: 100
1718-51-0	Terphenyl-d14	60.7		23 - 130		61%	SPK: 100
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	34548		7.68			
1146-65-2	Naphthalene-d8	144958		10.47			
15067-26-2	Acenaphthene-d10	87027		14.33			
1517-22-2	Phenanthrene-d10	184343		17.08			
1719-03-5	Chrysene-d12	204799		21.27			
1520-96-3	Perylene-d12	193933		23.52			

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15			
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15			
Client Sample ID:	VE4-11MSD	SDG No.:	G2353			
Lab Sample ID:	G2353-07MSD	Matrix:	Water			
Analytical Method:	SW8270	% Moisture:	100			
Sample Wt/Vol:	990	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:			uL	Test:	SVOCMS Group1	
Extraction Type :		Decanted :	N	Level :	LOW	
Injection Volume :		GPC Factor :	1.0	GPC Cleanup :	N	PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BG017262.D	1	05/22/15 12:18	05/23/15 02:45	PB83561

CAS Number	Parameter	Cone.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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U = Not Detected

LOQ = Limit of Quantitation

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G2353

# CALIBRATION

# SUMMARY

## SEMOVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECHContract: DAYE02Lab Code: CHEM Case No.: G2353SAS No.: G2353 SDG No.: G2353Instrument ID: BNA\_FCalibration Date(s): 04/30/2015 04/30/2015Calibration Time(s): 15:35 18:27

LAB FILE ID: RRF080 = BF078850.D RRF040 = BF078853.D			RRF060 = BF078851.D RRF025 = BF078854.D			RRF050 = BF078852.D RRF010 = BF078855.D		
COMPOUND	RRF080	RRF060	RRF050	RRF040	RRF025	RRF010	RRF	% RSD
2-Fluorophenol	1.189	1.114	1.163	1.130	1.146	1.240	1.162	3.6
Phenol-d6	1.581	1.523	1.499	1.435	1.544	1.673	1.536	4.9
Nitrobenzene-d5	0.361	0.352	0.340	0.332	0.346	0.372	0.348	4.2
2-Methylnaphthalene	0.685	0.639	0.641	0.633	0.656	0.695	0.660	3.7
2-Fluorobiphenyl	1.288	1.293	1.358	1.373	1.516	1.626	1.436	9.9
Acenaphthylene	2.097	1.891	1.958	1.911	2.067	2.245	2.036	6.1
Acenaphthene	1.209	1.104	1.164	1.161	1.216	1.358	1.214	7.0
Fluorene	1.435	1.333	1.356	1.335	1.470	1.616	1.440	7.5
2,4,6-Tribromophenol	0.240	0.216	0.221	0.216	0.214	0.226	0.216	8.3
Phenanthrone	1.112	1.079	1.079	1.071	1.111	1.186	1.119	4.6
Anthracene	1.167	1.061	1.053	1.042	1.095	1.187	1.098	5.2
Fluoranthene	1.235	1.126	1.133	1.119	1.176	1.245	1.166	4.6
Pyrene	1.159	1.097	1.148	1.080	1.172	1.249	1.152	4.8
Terphenyl-d14	0.807	0.751	0.788	0.781	0.859	0.953	0.835	8.9
Benzo(a)anthracene	1.173	1.035	1.076	1.037	1.092	1.177	1.095	5.3
Chrysene	1.021	0.960	1.006	0.965	1.038	1.176	1.053	9.4
Benzo(b)fluoranthene	1.092	1.084	1.101	1.067	1.037	1.130	1.095	3.5
Benzo(k)fluoranthene	1.075	0.969	1.020	1.036	1.132	1.214	1.060	8.4
Benzo(a)pyrene	1.031	0.971	1.002	0.978	1.006	1.068	1.008	3.3
Indeno(1,2,3-cd)pyrene	1.477	1.345	1.339	1.272	1.336	1.380	1.342	5.6
Dibenzo(a,h)anthracene	1.129	1.060	1.071	1.045	1.065	1.102	1.071	3.2
Benzo(g,h,i)perylene	1.121	1.061	1.062	1.033	1.051	1.123	1.074	3.2

All other compounds must meet a minimum RRF of 0.010.

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## SEMOVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECHContract: DAYE02Lab Code: CHEM Case No.: G2353SAS No.: G2353 SDG No.: G2353Instrument ID: BNA\_GCalibration Date(s): 05/13/2015 05/13/2015Calibration Time(s): 11:42 15:10

LAB FILE ID: RRF2.5 = BG017101.D RRF040 = BG017104.D			RRF010 = BG017102.D RRF050 = BG017105.D			RRF025 = BG017103.D RRF060 = BG017106.D		
COMPOUND	RRF2.5	RRF010	RRF025	RRF040	RRF050	RRF060	RRF	% RSD
2-Fluorophenol	1.149	1.242	1.103	1.179	1.058	1.057	1.127	6.0
Phenol-d6	1.546	1.689	1.542	1.665	1.512	1.519	1.582	4.5
Nitrobenzene-d5	0.433	0.448	0.421	0.442	0.409	0.400	0.428	4.4
2-Methylnaphthalene	0.855	0.827	0.750	0.766	0.733	0.725	0.776	6.2
2-Fluorobiphenyl	1.467	1.426	1.329	1.399	1.277	1.283	1.363	5.3
Acenaphthylene	2.090	2.020	1.888	2.029	1.849	1.827	1.953	5.1
Acenaphthene	1.224	1.193	1.116	1.176	1.085	1.095	1.154	4.7
Fluorene	1.594	1.558	1.482	1.579	1.423	1.441	1.518	4.5
2,4,6-Tribromophenol	0.260	0.238	0.232	0.248	0.225	0.234	0.242	5.4
Phenanthrone	1.057	1.117	1.000	1.071	0.955	0.975	1.031	5.5
Anthracene	1.076	1.132	1.030	1.071	0.972	0.974	1.045	5.5
Fluoranthene	1.338	1.370	1.210	1.269	1.136	1.138	1.239	7.4
Pyrene	1.258	1.325	1.234	1.263	1.177	1.127	1.227	5.2
Terphenyl-d14	1.049	1.053	0.977	0.984	0.905	0.859	0.960	8.0
Benzo(a)anthracene	1.227	1.221	1.129	1.185	1.085	1.044	1.146	6.0
Chrysene	1.125	1.141	1.054	1.096	1.009	0.975	1.068	5.6
Benzo(b)fluoranthene	1.239	1.200	1.109	1.164	1.117	1.125	1.166	4.4
Benzo(k)fluoranthene	1.151	1.198	1.050	1.140	1.064	1.042	1.107	5.3
Benzo(a)pyrene	1.112	1.116	1.015	1.081	1.031	1.035	1.071	4.0
Indeno(1,2,3-cd)pyrene	1.250	1.330	1.240	1.324	1.226	1.206	1.277	4.8
Dibenzo(a,h)anthracene	1.137	1.125	1.028	1.104	1.065	1.067	1.099	4.4
Benzo(g,h,i)perylene	1.063	1.073	0.997	1.046	0.989	0.988	1.035	4.1

All other compounds must meet a minimum RRF of 0.010.

Form VI SV-1

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## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	CHEMTECH		Contract:	DAYE02	
Lab Code:	CHEM	Case No.:	G2353	SAS No.:	G2353
Instrument ID:	BNA_F		Calibration Date/Time: 05/22/2015 14:11		
Lab File ID:	BF079431.D		Init. Calib. Date(s):	04/30/2015	04/30/2015
EPA Sample No.:	SSTDCCC040		Init. Calib. Time(s):	15:35	18:27
GC Column:	RTX-5	ID: 0.18	(mm)		

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.162	1.279		10.1	
Phenol-d6	1.536	1.633		6.3	
Nitrobenzene-d5	0.348	0.368		5.7	
2-Methylnaphthalene	0.660	0.719		8.9	
2-Fluorobiphenyl	1.436	1.510		5.2	
Acenaphthylene	2.036	2.216		8.8	
Acenaphthene	1.214	1.249		2.9	20.0
Fluorene	1.440	1.516		5.3	
2,4,6-Tribromophenol	0.216	0.231		6.9	
Phenanthrrene	1.119	1.187		6.1	
Anthracene	1.098	1.205		9.7	
Fluoranthene	1.166	1.229		5.4	20.0
Pyrene	1.152	1.276		10.8	
Terphenyl-d14	0.835	0.895		7.2	
Benzo(a)anthracene	1.095	1.194		9.0	
Chrysene	1.053	1.138		8.1	
Benzo(b)fluoranthene	1.095	1.155		5.5	
Benzo(k)fluoranthene	1.060	1.213		14.4	
Benzo(a)pyrene	1.008	1.132		12.3	20.0
Indeno(1,2,3-cd)pyrene	1.342	1.453		8.3	
Dibenzo(a,h)anthracene	1.071	1.193		11.4	
Benzo(g,h,i)perylene	1.074	1.175		9.4	

All other compounds must meet a minimum RRF of 0.010.

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## SEMOVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: DAYE02  
 Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG No.: G2353  
 Instrument ID: BNA\_G Calibration Date/Time: 05/22/2015 12:22  
 Lab File ID: BG017242.D Init. Calib. Date(s): 05/13/2015 05/13/2015  
 EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 11:42 15:10  
 GC Column: RXI-5 ID: 0.25 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.127	1.106		-1.9	
Phenol-d6	1.582	1.485		-6.1	
Nitrobenzene-d5	0.428	0.407		-4.9	
2-Methylnaphthalene	0.776	0.688		-11.3	
2-Fluorobiphenyl	1.363	1.296		-4.9	
Acenaphthylene	1.953	1.841		-5.7	
Acenaphthene	1.154	1.074		-6.9	20.0
Fluorene	1.518	1.399		-7.8	
2,4,6-Tribromophenol	0.242	0.221		-8.7	
Phenanthrrene	1.031	0.986		-4.4	
Anthracene	1.045	1.009		-3.4	
Fluoranthene	1.239	1.220		-1.5	20.0
Pyrene	1.227	1.063		-13.4	
Terphenyl-d14	0.960	0.849		-11.6	
Benzo(a)anthracene	1.146	1.064		-7.2	
Chrysene	1.068	1.004		-6.0	
Benzo(b)fluoranthene	1.166	1.102		-5.5	
Benzo(k)fluoranthene	1.107	1.069		-3.4	
Benzo(a)pyrene	1.071	1.020		-4.8	20.0
Indeno(1,2,3-cd)pyrene	1.277	1.193		-6.6	
Dibenzo(a,h)anthracene	1.099	1.046		-4.8	
Benzo(g,h,i)perylene	1.035	0.985		-4.8	

All other compounds must meet a minimum RRF of 0.010.

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## SEMOVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: DAYE02  
 Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG No.: G2353  
 Instrument ID: BNA\_G Calibration Date/Time: 05/23/2015 00:26  
 Lab File ID: BG017258.D Init. Calib. Date(s): 05/13/2015 05/13/2015  
 EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 11:42 15:10  
 GC Column: RXI-5 ID: 0.25 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.127	1.061		-5.9	
Phenol-d6	1.582	1.462		-7.6	
Nitrobenzene-d5	0.428	0.415		-3.0	
2-Methylnaphthalene	0.776	0.699		-9.9	
2-Fluorobiphenyl	1.363	1.302		-4.5	
Acenaphthylene	1.953	1.838		-5.9	
Acenaphthene	1.154	1.080		-6.4	20.0
Fluorene	1.518	1.389		-8.5	
2,4,6-Tribromophenol	0.242	0.218		-9.9	
Phenanthrrene	1.031	0.978		-5.1	
Anthracene	1.045	0.990		-5.3	
Fluoranthene	1.239	1.207		-2.6	20.0
Pyrene	1.227	1.070		-12.8	
Terphenyl-d14	0.960	0.853		-11.1	
Benzo(a)anthracene	1.146	1.079		-5.8	
Chrysene	1.068	1.009		-5.5	
Benzo(b)fluoranthene	1.166	1.103		-5.4	
Benzo(k)fluoranthene	1.107	1.089		-1.6	
Benzo(a)pyrene	1.071	1.037		-3.2	20.0
Indeno(1,2,3-cd)pyrene	1.277	1.216		-4.8	
Dibenzo(a,h)anthracene	1.099	1.055		-4.0	
Benzo(g,h,i)perylene	1.035	1.000		-3.4	

All other compounds must meet a minimum RRF of 0.010.

**LAB CHRONICLE**

<b>OrderID:</b> G2353	<b>OrderDate:</b> 5/21/2015 3:04:05 PM
<b>Client:</b> Day Engineering, P.C.	<b>Project:</b> MNR Harmon Yards Low-Flow Samples
<b>Contact:</b> Raymond Kampff	<b>Location:</b> F52

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
G2353-01	VE1-2	Water		PCB Group1	8082A	05/20/15		05/21/15
G2353-02	VE1-4	Water		PCB Group1	8082A	05/20/15	05/26/15	05/21/15
G2353-03	VE2-1	Water		PCB Group1	8082A	05/20/15	05/26/15	05/21/15
G2353-04	VE3-1	Water		PCB Group1	8082A	05/19/15	05/26/15	05/21/15
G2353-05	VE4-11	Water		PCB Group1	8082A	05/19/15	05/26/15	05/21/15
G2353-08	DAY-1	Water		PCB Group1	8082A	05/19/15	05/26/15	05/21/15
G2353-09	FIELDBLANK	Water		PCB Group1	8082A	05/20/15	05/26/15	05/21/15

A

B

C

D

E

F

G

**Hit Summary Sheet  
SW-846**

SDG No.:

Order ID:

Client:

Project ID:

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Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :								

**Total Concentration:**

# SAMPLE DATA

## Report of Analysis

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE1-2	SDG No.:	G2353
Lab Sample ID:	G2353-01	Matrix:	Water
Analytical Method:	SW8082A	% Moisture:	100 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	PCB Group1
Extraction Type:		Injection Volume :	
GPC Factor :	1.0	PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009875.D	1	05/26/15 08:38	05/26/15 17:03	PB83570

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.5	U	0.096	0.1	0.5	ug/L
11104-28-2	Aroclor-1221	0.5	U	0.1	0.1	0.5	ug/L
11141-16-5	Aroclor-1232	0.5	U	0.1	0.1	0.5	ug/L
53469-21-9	Aroclor-1242	0.5	U	0.089	0.1	0.5	ug/L
12672-29-6	Aroclor-1248	0.5	U	0.1	0.1	0.5	ug/L
11097-69-1	Aroclor-1254	0.5	U	0.044	0.1	0.5	ug/L
37324-23-5	Aroclor-1262	0.5	U	0.081	0.1	0.5	ug/L
11100-14-4	Aroclor-1268	0.5	U	0.081	0.1	0.5	ug/L
11096-82-5	Aroclor-1260	0.5	U	0.081	0.1	0.5	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	15.7		35 - 137		79%	SPK: 20
2051-24-3	Decachlorobiphenyl	13.5		40 - 135		68%	SPK: 20

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates &gt;25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

**Report of Analysis**

Client: Day Engineering, P.C. Date Collected: 05/20/15  
 Project: MNR Harmon Yards Low-Flow Samples Date Received: 05/21/15  
 Client Sample ID: VE1-4 SDG No.: G2353  
 Lab Sample ID: G2353-02 Matrix: Water  
 Analytical Method: SW8082A % Moisture: 100 Decanted:  
 Sample Wt/Vol: 980 Units: mL Final Vol: 10000 uL  
 Soil Aliquot Vol: uL Test: PCB Group1  
 Extraction Type: Injection Volume :  
 GPC Factor : 1.0 PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009876.D	1	05/26/15 08:38	05/26/15 17:18	PB83570

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.51	U	0.098	0.102	0.51	ug/L
11104-28-2	Aroclor-1221	0.51	U	0.102	0.102	0.51	ug/L
11141-16-5	Aroclor-1232	0.51	U	0.102	0.102	0.51	ug/L
53469-21-9	Aroclor-1242	0.51	U	0.091	0.102	0.51	ug/L
12672-29-6	Aroclor-1248	0.51	U	0.102	0.102	0.51	ug/L
11097-69-1	Aroclor-1254	0.51	U	0.045	0.102	0.51	ug/L
37324-23-5	Aroclor-1262	0.51	U	0.083	0.102	0.51	ug/L
11100-14-4	Aroclor-1268	0.51	U	0.083	0.102	0.51	ug/L
11096-82-5	Aroclor-1260	0.51	U	0.083	0.102	0.51	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	16.5		35 - 137		82%	SPK: 20
2051-24-3	Decachlorobiphenyl	14.7		40 - 135		73%	SPK: 20

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## Report of Analysis

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE2-1	SDG No.:	G2353
Lab Sample ID:	G2353-03	Matrix:	Water
Analytical Method:	SW8082A	% Moisture:	100 Decanted:
Sample Wt/Vol:	990 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	PCB Group1
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009877.D	1	05/26/15 08:38	05/26/15 17:33	PB83570

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.505	U	0.097	0.101	0.505	ug/L
11104-28-2	Aroclor-1221	0.505	U	0.101	0.101	0.505	ug/L
11141-16-5	Aroclor-1232	0.505	U	0.101	0.101	0.505	ug/L
53469-21-9	Aroclor-1242	0.505	U	0.09	0.101	0.505	ug/L
12672-29-6	Aroclor-1248	0.505	U	0.101	0.101	0.505	ug/L
11097-69-1	Aroclor-1254	0.505	U	0.044	0.101	0.505	ug/L
37324-23-5	Aroclor-1262	0.505	U	0.082	0.101	0.505	ug/L
11100-14-4	Aroclor-1268	0.505	U	0.082	0.101	0.505	ug/L
11096-82-5	Aroclor-1260	0.505	U	0.082	0.101	0.505	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	19		35 - 137		95%	SPK: 20
2051-24-3	Decachlorobiphenyl	14.5		40 - 135		72%	SPK: 20

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## Report of Analysis

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE3-1	SDG No.:	G2353
Lab Sample ID:	G2353-04	Matrix:	Water
Analytical Method:	SW8082A	% Moisture:	100
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:		uL	
Extraction Type:			Injection Volume :
GPC Factor :	1.0	PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009891.D	1	05/26/15 08:38	05/27/15 11:09	PB83570

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.5	U	0.096	0.1	0.5	ug/L
11104-28-2	Aroclor-1221	0.5	U	0.1	0.1	0.5	ug/L
11141-16-5	Aroclor-1232	0.5	U	0.1	0.1	0.5	ug/L
53469-21-9	Aroclor-1242	0.5	U	0.089	0.1	0.5	ug/L
12672-29-6	Aroclor-1248	0.5	U	0.1	0.1	0.5	ug/L
11097-69-1	Aroclor-1254	0.5	U	0.044	0.1	0.5	ug/L
37324-23-5	Aroclor-1262	0.5	U	0.081	0.1	0.5	ug/L
11100-14-4	Aroclor-1268	0.5	U	0.081	0.1	0.5	ug/L
11096-82-5	Aroclor-1260	0.5	U	0.081	0.1	0.5	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	14.4		35 - 137		72%	SPK: 20
2051-24-3	Decachlorobiphenyl	8.04		40 - 135		40%	SPK: 20

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() = Laboratory InHouse Limit

G2353

## Report of Analysis

Client: Day Engineering, P.C. Date Collected: 05/19/15  
 Project: MNR Harmon Yards Low-Flow Samples Date Received: 05/21/15  
 Client Sample ID: VE4-11 SDG No.: G2353  
 Lab Sample ID: G2353-05 Matrix: Water  
 Analytical Method: SW8082A % Moisture: 100 Decanted:  
 Sample Wt/Vol: 970 Units: mL Final Vol: 10000 uL  
 Soil Aliquot Vol: uL Test: PCB Group1  
 Extraction Type: Injection Volume :  
 GPC Factor : 1.0 PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009879.D	1	05/26/15 08:38	05/26/15 18:04	PB83570

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.515	U	0.099	0.103	0.515	ug/L
11104-28-2	Aroclor-1221	0.515	U	0.103	0.103	0.515	ug/L
11141-16-5	Aroclor-1232	0.515	U	0.103	0.103	0.515	ug/L
53469-21-9	Aroclor-1242	0.515	U	0.092	0.103	0.515	ug/L
12672-29-6	Aroclor-1248	0.515	U	0.103	0.103	0.515	ug/L
11097-69-1	Aroclor-1254	0.515	U	0.045	0.103	0.515	ug/L
37324-23-5	Aroclor-1262	0.515	U	0.084	0.103	0.515	ug/L
11100-14-4	Aroclor-1268	0.515	U	0.084	0.103	0.515	ug/L
11096-82-5	Aroclor-1260	0.515	U	0.084	0.103	0.515	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	17.1		35 - 137		85%	SPK: 20
2051-24-3	Decachlorobiphenyl	15		40 - 135		75%	SPK: 20

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## Report of Analysis

Client: Day Engineering, P.C. Date Collected: 05/19/15  
 Project: MNR Harmon Yards Low-Flow Samples Date Received: 05/21/15  
 Client Sample ID: DAY-1 SDG No.: G2353  
 Lab Sample ID: G2353-08 Matrix: Water  
 Analytical Method: SW8082A % Moisture: 100 Decanted:  
 Sample Wt/Vol: 980 Units: mL Final Vol: 10000 uL  
 Soil Aliquot Vol: uL Test: PCB Group1  
 Extraction Type: Injection Volume :  
 GPC Factor : 1.0 PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009882.D	1	05/26/15 08:38	05/26/15 18:50	PB83570

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.51	U	0.098	0.102	0.51	ug/L
11104-28-2	Aroclor-1221	0.51	U	0.102	0.102	0.51	ug/L
11141-16-5	Aroclor-1232	0.51	U	0.102	0.102	0.51	ug/L
53469-21-9	Aroclor-1242	0.51	U	0.091	0.102	0.51	ug/L
12672-29-6	Aroclor-1248	0.51	U	0.102	0.102	0.51	ug/L
11097-69-1	Aroclor-1254	0.51	U	0.045	0.102	0.51	ug/L
37324-23-5	Aroclor-1262	0.51	U	0.083	0.102	0.51	ug/L
11100-14-4	Aroclor-1268	0.51	U	0.083	0.102	0.51	ug/L
11096-82-5	Aroclor-1260	0.51	U	0.083	0.102	0.51	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	16.1		35 - 137		81%	SPK: 20
2051-24-3	Decachlorobiphenyl	16.5		40 - 135		83%	SPK: 20

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\* = Values outside of QC limits

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() = Laboratory InHouse Limit

## Report of Analysis

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	FIELDBLANK	SDG No.:	G2353
Lab Sample ID:	G2353-09	Matrix:	Water
Analytical Method:	SW8082A	% Moisture:	100
Sample Wt/Vol:	990	Units:	mL
Soil Aliquot Vol:		uL	
Extraction Type:			Injection Volume :
GPC Factor :	1.0	PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009883.D	1	05/26/15 08:38	05/26/15 19:05	PB83570

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.505	U	0.097	0.101	0.505	ug/L
11104-28-2	Aroclor-1221	0.505	U	0.101	0.101	0.505	ug/L
11141-16-5	Aroclor-1232	0.505	U	0.101	0.101	0.505	ug/L
53469-21-9	Aroclor-1242	0.505	U	0.09	0.101	0.505	ug/L
12672-29-6	Aroclor-1248	0.505	U	0.101	0.101	0.505	ug/L
11097-69-1	Aroclor-1254	0.505	U	0.044	0.101	0.505	ug/L
37324-23-5	Aroclor-1262	0.505	U	0.082	0.101	0.505	ug/L
11100-14-4	Aroclor-1268	0.505	U	0.082	0.101	0.505	ug/L
11096-82-5	Aroclor-1260	0.505	U	0.082	0.101	0.505	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	19.2		35 - 137		96%	SPK: 20
2051-24-3	Decachlorobiphenyl	11.6		40 - 135		58%	SPK: 20

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Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

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# QC SUMMARY

## Surrogate Summary

SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: 8082A

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PP009805.D	PIBLK-PP009805.D	Tetrachloro-m-xylene	1	20	21.76	109	35	35	137
		Decachlorobiphenyl	1	20	22.78	114	40	40	135
		Tetrachloro-m-xylene	2	20	21.81	109	35	35	137
I.BLK-PP009871.D	PIBLK-PP009871.D	Decachlorobiphenyl	2	20	22.44	112	40	40	135
		Tetrachloro-m-xylene	1	20	23.76	119	35	35	137
		Decachlorobiphenyl	1	20	21.65	108	40	40	135
I.BLK-PP009871.D	PIBLK-PP009871.D	Tetrachloro-m-xylene	2	20	24.87	124	35	35	137
		Decachlorobiphenyl	2	20	19.85	99	40	40	135
		Tetrachloro-m-xylene	1	20	18.32	92	35	35	137
PB83570BL	PB83570BL	Decachlorobiphenyl	1	20	18.05	90	40	40	135
		Tetrachloro-m-xylene	2	20	18.71	94	35	35	137
		Decachlorobiphenyl	2	20	16.81	84	40	40	135
PB83570BS	PB83570BS	Tetrachloro-m-xylene	1	20	17.76	89	35	35	137
		Decachlorobiphenyl	1	20	17.33	87	40	40	135
		Tetrachloro-m-xylene	2	20	17.75	89	35	35	137
G2353-01	VE1-2	Decachlorobiphenyl	2	20	16.26	81	40	40	135
		Tetrachloro-m-xylene	1	20	15.72	79	35	35	137
		Decachlorobiphenyl	1	20	13.51	68	40	40	135
G2353-02	VE1-4	Tetrachloro-m-xylene	2	20	16.51	83	35	35	137
		Decachlorobiphenyl	2	20	12.22	61	40	40	135
		Tetrachloro-m-xylene	1	20	16.48	82	35	35	137
G2353-03	VE2-1	Decachlorobiphenyl	1	20	14.68	73	40	40	135
		Tetrachloro-m-xylene	2	20	16.83	84	35	35	137
		Decachlorobiphenyl	2	20	13.19	66	40	40	135
G2353-05	VE4-11	Tetrachloro-m-xylene	1	20	18.98	95	35	35	137
		Decachlorobiphenyl	1	20	14.47	72	40	40	135
		Tetrachloro-m-xylene	2	20	19.64	98	35	35	137
G2353-06MS	VE4-11MS	Decachlorobiphenyl	2	20	13.14	66	40	40	135
		Tetrachloro-m-xylene	1	20	17.07	85	35	35	137
		Decachlorobiphenyl	1	20	15.02	75	40	40	135
G2353-07MSD	VE4-11MSD	Tetrachloro-m-xylene	2	20	17.27	86	35	35	137
		Decachlorobiphenyl	2	20	13.68	68	40	40	135
		Tetrachloro-m-xylene	1	20	18.66	93	35	35	137
G2353-08	DAY-1	Decachlorobiphenyl	1	20	15.3	77	40	40	135
		Tetrachloro-m-xylene	2	20	18.23	91	35	35	137
		Decachlorobiphenyl	2	20	14.01	70	40	40	135
G2353-08	DAY-1	Tetrachloro-m-xylene	1	20	18.32	92	35	35	137
		Decachlorobiphenyl	1	20	15.5	78	40	40	135
		Tetrachloro-m-xylene	2	20	17.67	88	35	35	137
G2353-08	DAY-1	Decachlorobiphenyl	2	20	14.21	71	40	40	135
		Tetrachloro-m-xylene	1	20	16.1	81	35	35	137
		Decachlorobiphenyl	1	20	16.51	83	40	40	135
G2353-08	DAY-1	Tetrachloro-m-xylene	2	20	15.99	80	35	35	137

## Surrogate Summary

SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: 8082A

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
G2353-08	DAY-1	Decachlorobiphenyl	2	20	14.63	73		40	135
G2353-09	FIELDBLANK	Tetrachloro-m-xylene	1	20	19.15	96		35	137
		Decachlorobiphenyl	1	20	11.6	58		40	135
		Tetrachloro-m-xylene	2	20	19.17	96		35	137
		Decachlorobiphenyl	2	20	10.6	53		40	135
I.BLK-PP009886.D	PIBLK-PP009886.D	Tetrachloro-m-xylene	1	20	24.7	124		35	137
		Decachlorobiphenyl	1	20	22.84	114		40	135
		Tetrachloro-m-xylene	2	20	25.58	128		35	137
		Decachlorobiphenyl	2	20	21.34	107		40	135
I.BLK-PP009889.D	PIBLK-PP009889.D	Tetrachloro-m-xylene	1	20	24.34	122		35	137
		Decachlorobiphenyl	1	20	22.79	114		40	135
		Tetrachloro-m-xylene	2	20	25.22	126		35	137
		Decachlorobiphenyl	2	20	21.88	109		40	135
G2353-04	VE3-1	Tetrachloro-m-xylene	1	20	14.35	72		35	137
		Decachlorobiphenyl	1	20	8.04	40		40	135
		Tetrachloro-m-xylene	2	20	14.35	72		35	137
		Decachlorobiphenyl	2	20	7.09	35	*	40	135
I.BLK-PP009899.D	PIBLK-PP009899.D	Tetrachloro-m-xylene	1	20	25.39	127		35	137
		Decachlorobiphenyl	1	20	23.42	117		40	135
		Tetrachloro-m-xylene	2	20	25.98	130		35	137
		Decachlorobiphenyl	2	20	22.04	110		40	135

**Matrix Spike/Matrix Spike Duplicate Summary**

SW-846

SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: 8082A

DataFile : PP009880.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	High	RPD
Client Sample ID:	VE4-11MS											
G2353-06MS	AR1016	2	0	2.2	ug/L	110				65	145	
	AR1260	2	0	1.8	ug/L	90				65	145	

**Matrix Spike/Matrix Spike Duplicate Summary**

SW-846

SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: 8082A

DataFile : PP009881.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	High	RPD
Client Sample ID:	VE4-11MSD											
G2353-07MSD	AR1016	2	0	2	ug/L	100		10		65	145	20
	AR1260	2	0	1.7	ug/L	85		6		65	145	20

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary****SW-846**SDG No.: G2353Client: Day Engineering, P.C.Analytical Method: 8082A

Datafile : PP009874.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD	Limits	Low	High	RPD
PB83570BS	AR1016	2	2.1	ug/L	105				56	149		
	AR1260	2	1.8	ug/L	90				66	147		

4C

## PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB83570BL

Lab Name: CHEMTECH

Contract: DAYE02

Lab Code: CHEM

Case No.: G2353

SAS No.: G2353 SDG NO.: G2353

Lab Sample ID: PB83570BL

Lab File ID: PP009873.D

Matrix: (soil/water) Water

Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N

Date Extracted: 05/26/2015

Date Analyzed (1): 05/26/2015

Date Analyzed (2): 05/26/2015

Time Analyzed (1): 16:32

Time Analyzed (2): 16:32

Instrument ID (1): ECD\_P

Instrument ID (2): ECD\_P

GC Column (1): ZB-MR1 ID: 0.32 (mm)

GC Column (2): ZB-MR2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB EXTRACTION	DATE ANALYZED 1	DATE ANALYZED 2
PB83570BS	PB83570BS	PP009874.D	05/26/2015	05/26/2015
VE1-2	G2353-01	PP009875.D	05/26/2015	05/26/2015
VE1-4	G2353-02	PP009876.D	05/26/2015	05/26/2015
VE2-1	G2353-03	PP009877.D	05/26/2015	05/26/2015
VE4-11	G2353-05	PP009879.D	05/26/2015	05/26/2015
VE4-11MS	G2353-06MS	PP009880.D	05/26/2015	05/26/2015
VE4-11MSD	G2353-07MSD	PP009881.D	05/26/2015	05/26/2015
DAY-1	G2353-08	PP009882.D	05/26/2015	05/26/2015
FIELDBLANK	G2353-09	PP009883.D	05/26/2015	05/26/2015
VE3-1	G2353-04	PP009891.D	05/27/2015	05/27/2015

COMMENTS:

# CALIBRATION

# SUMMARY

**RETENTION TIMES OF INITIAL CALIBRATION**

Contract: DAYE02  
Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353  
Instrument ID: ECD\_P Calibration Date(s): 05/21/2015 05/21/2015  
Calibration Times: 15:47 16:48

GC Column: ZB-MR1 ID: 0.32 (mm)

LAB FILE ID:	RT 1000 =	<u>PP009806.D</u>	RT 750 =	<u>PP009807.D</u>
	RT 500 =	<u>PP009808.D</u>	RT 250 =	<u>PP009809.D</u>
			RT 050 =	<u>PP009810.D</u>

COMPOUND	RT 1000	RT 750	RT 500	RT 250	RT 050	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016-1 (1)	5.07	5.07	5.07	5.07	5.07	5.07	4.97	5.17
Aroclor-1016-2 (2)	5.41	5.41	5.41	5.41	5.41	5.41	5.31	5.51
Aroclor-1016-3 (3)	5.51	5.51	5.51	5.51	5.51	5.51	5.41	5.61
Aroclor-1016-4 (4)	5.80	5.80	5.80	5.80	5.80	5.80	5.70	5.90
Aroclor-1016-5 (5)	5.94	5.94	5.94	5.94	5.94	5.94	5.84	6.04
Aroclor-1260-1 (1)	6.92	6.92	6.92	6.92	6.92	6.92	6.82	7.02
Aroclor-1260-2 (2)	7.46	7.46	7.46	7.46	7.46	7.46	7.36	7.56
Aroclor-1260-3 (3)	7.76	7.76	7.76	7.76	7.76	7.76	7.66	7.86
Aroclor-1260-4 (4)	8.07	8.07	8.07	8.07	8.07	8.07	7.97	8.17
Aroclor-1260-5 (5)	8.37	8.37	8.37	8.37	8.37	8.37	8.27	8.47
Decachlorobiphenyl	9.74	9.74	9.74	9.74	9.74	9.74	9.64	9.84
Tetrachloro-m-xylene	4.18	4.18	4.18	4.18	4.18	4.18	4.08	4.28

**RETENTION TIMES OF INITIAL CALIBRATION**

Contract: DAYE02

Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353

Instrument ID: ECD\_P Calibration Date(s): 05/21/2015 05/21/2015

Calibration Times: 15:47 16:48

GC Column: ZB-MR2 ID: 0.32 (mm)

LAB FILE ID:	RT 1000 =	<u>PP009806.D</u>	RT 750 =	<u>PP009807.D</u>
	RT 500 =	<u>PP009808.D</u>	RT 250 =	<u>PP009809.D</u>
			RT 050 =	<u>PP009810.D</u>

COMPOUND	RT 1000	RT 750	RT 500	RT 250	RT 050	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016-1 (1)	4.17	4.17	4.17	4.17	4.17	4.17	4.07	4.27
Aroclor-1016-2 (2)	4.57	4.57	4.57	4.57	4.57	4.57	4.47	4.67
Aroclor-1016-3 (3)	4.62	4.62	4.62	4.61	4.62	4.61	4.51	4.71
Aroclor-1016-4 (4)	4.66	4.65	4.65	4.65	4.66	4.65	4.55	4.75
Aroclor-1016-5 (5)	4.82	4.82	4.82	4.82	4.82	4.82	4.72	4.92
Aroclor-1260-1 (1)	5.83	5.83	5.83	5.83	5.83	5.83	5.73	5.93
Aroclor-1260-2 (2)	6.01	6.01	6.01	6.01	6.01	6.01	5.91	6.11
Aroclor-1260-3 (3)	6.33	6.33	6.33	6.33	6.33	6.33	6.23	6.43
Aroclor-1260-4 (4)	6.86	6.86	6.86	6.86	6.86	6.86	6.76	6.96
Aroclor-1260-5 (5)	7.20	7.20	7.20	7.20	7.20	7.20	7.10	7.30
Decachlorobiphenyl	8.18	8.18	8.18	8.18	8.18	8.18	8.08	8.28
Tetrachloro-m-xylene	3.33	3.33	3.33	3.33	3.33	3.33	3.23	3.43

**CALIBRATION FACTOR OF INITIAL CALIBRATION**

Contract: DAYE02  
Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353  
Instrument ID: ECD\_P Calibration Date(s): 05/21/2015 05/21/2015  
Calibration Times: 15:47 16:48  
GC Column: ZB-MR1 ID: 0.32 (mm)

LAB FILE ID:		CF 1000 =	<u>PP009806.D</u>	CF 750 =	<u>PP009807.D</u>		
CF 500 =	<u>PP009808.D</u>	CF 250 =	<u>PP009809.D</u>	CF 050 =	<u>PP009810.D</u>		
COMPOUND	CF 1000	CF 750	CF 500	CF 250	CF 050	CF	% RSD
Aroclor-1016-1 (1)	826402	890136	898820	950068	933600	899805	5
Aroclor-1016-2 (2)	1054035	1147989	1160652	1227152	1229200	1163806	6
Aroclor-1016-3 (3)	890408	968247	979684	1043360	977480	971836	6
Aroclor-1016-4 (4)	835306	905847	918032	965420	781740	881269	8
Aroclor-1016-5 (5)	915888	984948	988850	1061752	986860	987660	5
Aroclor-1260-1 (1)	1674437	1795959	1838814	2011372	2073200	1878756	9
Aroclor-1260-2 (2)	2389144	2583433	2592210	2791532	2795580	2630380	6
Aroclor-1260-3 (3)	1741313	1903529	1939362	2048148	1979700	1922410	6
Aroclor-1260-4 (4)	3610805	3886527	3937462	4084672	4392120	3982317	7
Aroclor-1260-5 (5)	2338924	2486743	2524694	2629024	2916360	2579149	8
Decachlorobiphenyl	30818070	33451920	33736380	35689960	36259400	33991146	6
Tetrachloro-m-xylene	37398220	39870587	39834160	40637080	40059000	39559809	3

## CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: DAYE02

Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353

Instrument ID: ECD\_P Calibration Date(s): 05/21/2015 05/21/2015

Calibration Times: 15:47 16:48

GC Column: ZB-MR2 ID: 0.32 (mm)

LAB FILE ID:		CF 1000 =	<u>PP009806.D</u>	CF 750 =	<u>PP009807.D</u>			
CF 500 =	<u>PP009808.D</u>	CF 250 =	<u>PP009809.D</u>	CF 050 =	<u>PP009810.D</u>			
COMPOUND		CF 1000	CF 750	CF 500	CF 250	CF 050	CF	% RSD
Aroclor-1016-1	(1)	1576156	1699468	1700440	1756736	1771720	1700904	5
Aroclor-1016-2	(2)	1671409	1788129	1802676	1872176	1828200	1792518	4
Aroclor-1016-3	(3)	1263992	1360180	1381648	1456580	1492820	1391044	6
Aroclor-1016-4	(4)	1567788	1689096	1709658	1795164	1847440	1721829	6
Aroclor-1016-5	(5)	1735145	1840147	1849862	2005872	2084500	1903105	7
Aroclor-1260-1	(1)	3744928	4012577	4054662	4230276	4291300	4066749	5
Aroclor-1260-2	(2)	4779487	5110485	5166908	5440592	5743440	5248182	7
Aroclor-1260-3	(3)	5291665	5661792	5684600	5822972	6222960	5736798	6
Aroclor-1260-4	(4)	9837962	10486885	10465146	10639516	10562980	10398498	3
Aroclor-1260-5	(5)	7061733	7538955	7539540	7677296	7565200	7476545	3
Decachlorobiphenyl		80525530	85332320	87182580	90759880	95206800	87801422	6
Tetrachloro-m-xylene		67497090	71673227	70880980	71425560	66352000	69565771	4

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353Instrument ID: ECD\_P Date(s) Analyzed: 05/21/2015 05/21/2015GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	500	1	4.39	4.29	4.49	452166
		2	4.47	4.37	4.57	345974
		3	4.55	4.45	4.65	1065390
		4	0.00			0
		5	0.00			0
Aroclor-1232	500	1	4.55	4.45	4.65	829028
		2	5.07	4.97	5.17	401644
		3	5.41	5.31	5.51	527158
		4	5.51	5.41	5.61	410338
		5	5.95	5.85	6.05	427462
Aroclor-1242	500	1	4.87	4.77	4.97	791416
		2	5.07	4.97	5.17	770052
		3	5.41	5.31	5.51	977792
		4	6.21	6.11	6.31	883768
		5	6.24	6.14	6.34	946046
Aroclor-1248	500	1	5.33	5.23	5.43	862934
		2	5.35	5.25	5.45	1019010
		3	5.80	5.70	5.90	1351120
		4	6.21	6.11	6.31	1637260
		5	6.24	6.14	6.34	1603070
Aroclor-1254	500	1	6.18	6.08	6.28	1595510
		2	6.40	6.30	6.50	2472920
		3	6.76	6.66	6.86	2705040
		4	7.05	6.95	7.15	2095680
		5	7.46	7.36	7.56	2561520
Aroclor-1262	500	1	6.92	6.82	7.02	1899150
		2	7.18	7.08	7.28	2210480
		3	7.54	7.44	7.64	3226500
		4	7.76	7.66	7.86	2972420
		5	8.07	7.97	8.17	5828380
Aroclor-1268	500	1	8.36	8.26	8.46	5741780
		2	8.44	8.34	8.54	5918700
		3	8.65	8.55	8.75	4313600
		4	9.05	8.95	9.15	1786290
		5	9.43	9.33	9.53	12238100

## INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353Instrument ID: ECD\_P Date(s) Analyzed: 05/21/2015 05/21/2015GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	500	1	3.54	3.44	3.64	765296
		2	3.62	3.52	3.72	567904
		3	3.70	3.60	3.80	1816300
		4	0.00			0
		5	0.00			0
Aroclor-1232	500	1	3.70	3.60	3.80	1408580
		2	4.17	4.07	4.27	749638
		3	4.57	4.47	4.67	766912
		4	4.82	4.72	4.92	762098
		5	5.16	5.06	5.26	862512
Aroclor-1242	500	1	4.17	4.07	4.27	1434420
		2	4.39	4.29	4.49	2060420
		3	4.82	4.72	4.92	1634870
		4	5.16	5.06	5.26	2064460
		5	5.20	5.10	5.30	1698830
Aroclor-1248	500	1	4.39	4.29	4.49	1594170
		2	4.40	4.30	4.50	1649440
		3	4.62	4.52	4.72	2207520
		4	4.65	4.55	4.75	2297480
		5	5.16	5.06	5.26	4190740
Aroclor-1254	500	1	5.16	5.06	5.26	4523580
		2	5.31	5.21	5.41	3958480
		3	5.61	5.51	5.71	3210860
		4	5.70	5.60	5.80	6573300
		5	6.33	6.23	6.43	6110900
Aroclor-1262	500	1	6.01	5.91	6.11	5323160
		2	6.37	6.27	6.47	8170040
		3	6.62	6.52	6.72	7075640
		4	6.86	6.76	6.96	15571900
		5	7.20	7.10	7.30	11645300
Aroclor-1268	500	1	7.14	7.04	7.24	14874300
		2	7.20	7.10	7.30	15954300
		3	7.40	7.30	7.50	11775100
		4	7.69	7.59	7.79	4507900
		5	7.96	7.86	8.06	33255000

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353Continuing Calib Date: 05/26/2015 Initial Calibration Date(s): 05/21/2015 05/21/2015Continuing Calib Time: 16:13 Initial Calibration Time(s): 15:47 16:48GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	TO	DIFF RT
Aroclor-1016-1 (1)	5.06	5.07	4.97	5.17	0.01
Aroclor-1016-2 (2)	5.41	5.41	5.31	5.51	0.00
Aroclor-1016-3 (3)	5.51	5.51	5.41	5.61	0.00
Aroclor-1016-4 (4)	5.80	5.80	5.70	5.90	0.00
Aroclor-1016-5 (5)	5.94	5.94	5.84	6.04	0.00
Aroclor-1260-1 (1)	6.92	6.92	6.82	7.02	0.00
Aroclor-1260-2 (2)	7.46	7.46	7.36	7.56	0.00
Aroclor-1260-3 (3)	7.76	7.76	7.66	7.86	0.00
Aroclor-1260-4 (4)	8.07	8.07	7.97	8.17	0.01
Aroclor-1260-5 (5)	8.37	8.37	8.27	8.47	0.00
Tetrachloro-m-xylene	4.18	4.18	4.08	4.28	0.00
Decachlorobiphenyl	9.73	9.74	9.64	9.84	0.01

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353Continuing Calib Date: 05/26/2015 Initial Calibration Date(s): 05/21/2015 05/21/2015Continuing Calib Time: 16:13 Initial Calibration Time(s): 15:47 16:48GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	Avg RT	RT WINDOW FROM	TO	DIFF RT
Aroclor-1016-1 (1)	4.17	4.17	4.07	4.27	0.00
Aroclor-1016-2 (2)	4.57	4.57	4.47	4.67	0.00
Aroclor-1016-3 (3)	4.62	4.62	4.52	4.72	0.01
Aroclor-1016-4 (4)	4.65	4.65	4.55	4.75	0.00
Aroclor-1016-5 (5)	4.82	4.82	4.72	4.92	0.00
Aroclor-1260-1 (1)	5.83	5.83	5.73	5.93	0.00
Aroclor-1260-2 (2)	6.01	6.01	5.91	6.11	0.00
Aroclor-1260-3 (3)	6.33	6.33	6.23	6.43	0.00
Aroclor-1260-4 (4)	6.86	6.86	6.76	6.96	0.00
Aroclor-1260-5 (5)	7.20	7.20	7.10	7.30	0.00
Tetrachloro-m-xylene	3.33	3.33	3.23	3.43	0.00
Decachlorobiphenyl	8.18	8.18	8.08	8.28	0.00

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 05/21/2015 05/21/2015Client Sample No.: CCAL01 Date Analyzed: 05/26/2015Lab Sample No.: AR1660CCC500 Data File : PP009872.D Time Analyzed: 16:13

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	5.064	4.965	5.165	555.100	500.000	11.0
Aroclor-1016-2	5.413	5.313	5.513	559.590	500.000	11.9
Aroclor-1016-3	5.510	5.411	5.611	569.240	500.000	13.8
Aroclor-1016-4	5.802	5.703	5.903	577.070	500.000	15.4
Aroclor-1016-5	5.942	5.843	6.043	558.760	500.000	11.8
Aroclor-1260-1	6.920	6.822	7.022	504.690	500.000	0.9
Aroclor-1260-2	7.458	7.361	7.561	492.620	500.000	-1.5
Aroclor-1260-3	7.758	7.661	7.861	491.470	500.000	-1.7
Aroclor-1260-4	8.065	7.968	8.168	472.650	500.000	-5.5
Aroclor-1260-5	8.367	8.270	8.470	474.690	500.000	-5.1
Decachlorobiphenyl	9.732	9.636	9.836	46.300	50.000	-7.4
Tetrachloro-m-xylene	4.177	4.078	4.278	53.630	50.000	7.3

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 05/21/2015 05/21/2015Client Sample No.: CCAL01 Date Analyzed: 05/26/2015Lab Sample No.: AR1660CCC500 Data File : PP009872.D Time Analyzed: 16:13

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	4.170	4.069	4.269	562.680	500.000	12.5
Aroclor-1016-2	4.573	4.473	4.673	553.850	500.000	10.8
Aroclor-1016-3	4.615	4.515	4.715	555.490	500.000	11.1
Aroclor-1016-4	4.654	4.554	4.754	546.770	500.000	9.4
Aroclor-1016-5	4.821	4.721	4.921	557.580	500.000	11.5
Aroclor-1260-1	5.826	5.726	5.926	507.790	500.000	1.6
Aroclor-1260-2	6.010	5.910	6.110	490.930	500.000	-1.8
Aroclor-1260-3	6.330	6.231	6.431	478.700	500.000	-4.3
Aroclor-1260-4	6.860	6.760	6.960	466.350	500.000	-6.7
Aroclor-1260-5	7.200	7.101	7.301	456.230	500.000	-8.8
Decachlorobiphenyl	8.178	8.079	8.279	43.110	50.000	-13.8
Tetrachloro-m-xylene	3.329	3.228	3.428	55.700	50.000	11.4

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353Continuing Calib Date: 05/26/2015 Initial Calibration Date(s): 05/21/2015 05/21/2015Continuing Calib Time: 20:22 Initial Calibration Time(s): 15:47 16:48GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	TO	DIFF RT
Aroclor-1016-1 (1)	5.07	5.07	4.97	5.17	0.00
Aroclor-1016-2 (2)	5.41	5.41	5.31	5.51	0.00
Aroclor-1016-3 (3)	5.51	5.51	5.41	5.61	0.00
Aroclor-1016-4 (4)	5.80	5.80	5.70	5.90	0.00
Aroclor-1016-5 (5)	5.94	5.94	5.84	6.04	0.00
Aroclor-1260-1 (1)	6.92	6.92	6.82	7.02	0.00
Aroclor-1260-2 (2)	7.46	7.46	7.36	7.56	0.00
Aroclor-1260-3 (3)	7.76	7.76	7.66	7.86	0.00
Aroclor-1260-4 (4)	8.07	8.07	7.97	8.17	0.00
Aroclor-1260-5 (5)	8.37	8.37	8.27	8.47	0.00
Tetrachloro-m-xylene	4.18	4.18	4.08	4.28	0.00
Decachlorobiphenyl	9.73	9.74	9.64	9.84	0.01

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353Continuing Calib Date: 05/26/2015 Initial Calibration Date(s): 05/21/2015 05/21/2015Continuing Calib Time: 20:22 Initial Calibration Time(s): 15:47 16:48GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	TO	DIFF RT
Aroclor-1016-1 (1)	4.17	4.17	4.07	4.27	0.00
Aroclor-1016-2 (2)	4.57	4.57	4.47	4.67	0.00
Aroclor-1016-3 (3)	4.62	4.62	4.52	4.72	0.01
Aroclor-1016-4 (4)	4.66	4.65	4.55	4.75	-0.01
Aroclor-1016-5 (5)	4.82	4.82	4.72	4.92	0.00
Aroclor-1260-1 (1)	5.83	5.83	5.73	5.93	0.00
Aroclor-1260-2 (2)	6.01	6.01	5.91	6.11	0.00
Aroclor-1260-3 (3)	6.33	6.33	6.23	6.43	0.00
Aroclor-1260-4 (4)	6.86	6.86	6.76	6.96	0.00
Aroclor-1260-5 (5)	7.20	7.20	7.10	7.30	0.00
Tetrachloro-m-xylene	3.33	3.33	3.23	3.43	0.00
Decachlorobiphenyl	8.18	8.18	8.08	8.28	0.00

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 05/21/2015 05/21/2015Client Sample No.: CCAL02 Date Analyzed: 05/26/2015Lab Sample No.: AR1660CCC500 Data File : PP009887.D Time Analyzed: 20:22

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	5.065	4.965	5.165	570.410	500.000	14.1
Aroclor-1016-2	5.414	5.313	5.513	565.070	500.000	13.0
Aroclor-1016-3	5.511	5.411	5.611	568.530	500.000	13.7
Aroclor-1016-4	5.803	5.703	5.903	599.490	500.000	19.9
Aroclor-1016-5	5.943	5.843	6.043	576.050	500.000	15.2
Aroclor-1260-1	6.921	6.822	7.022	523.990	500.000	4.8
Aroclor-1260-2	7.460	7.361	7.561	510.300	500.000	2.1
Aroclor-1260-3	7.758	7.661	7.861	511.980	500.000	2.4
Aroclor-1260-4	8.066	7.968	8.168	488.270	500.000	-2.3
Aroclor-1260-5	8.368	8.270	8.470	493.010	500.000	-1.4
Decachlorobiphenyl	9.733	9.636	9.836	48.380	50.000	-3.2
Tetrachloro-m-xylene	4.179	4.078	4.278	55.360	50.000	10.7

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 05/21/2015 05/21/2015Client Sample No.: CCAL02 Date Analyzed: 05/26/2015Lab Sample No.: AR1660CCC500 Data File : PP009887.D Time Analyzed: 20:22

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	4.171	4.069	4.269	583.550	500.000	16.7
Aroclor-1016-2	4.573	4.473	4.673	573.650	500.000	14.7
Aroclor-1016-3	4.615	4.515	4.715	577.390	500.000	15.5
Aroclor-1016-4	4.655	4.554	4.754	571.160	500.000	14.2
Aroclor-1016-5	4.821	4.721	4.921	565.440	500.000	13.1
Aroclor-1260-1	5.826	5.726	5.926	526.900	500.000	5.4
Aroclor-1260-2	6.010	5.910	6.110	506.750	500.000	1.4
Aroclor-1260-3	6.331	6.231	6.431	496.840	500.000	-0.6
Aroclor-1260-4	6.860	6.760	6.960	477.570	500.000	-4.5
Aroclor-1260-5	7.200	7.101	7.301	466.330	500.000	-6.7
Decachlorobiphenyl	8.178	8.079	8.279	45.780	50.000	-8.4
Tetrachloro-m-xylene	3.329	3.228	3.428	57.270	50.000	14.5

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353Continuing Calib Date: 05/27/2015 Initial Calibration Date(s): 05/21/2015 05/21/2015Continuing Calib Time: 10:44 Initial Calibration Time(s): 15:47 16:48GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	TO	DIFF RT
Aroclor-1016-1 (1)	5.06	5.07	4.97	5.17	0.01
Aroclor-1016-2 (2)	5.41	5.41	5.31	5.51	0.00
Aroclor-1016-3 (3)	5.51	5.51	5.41	5.61	0.00
Aroclor-1016-4 (4)	5.80	5.80	5.70	5.90	0.00
Aroclor-1016-5 (5)	5.94	5.94	5.84	6.04	0.00
Aroclor-1260-1 (1)	6.92	6.92	6.82	7.02	0.00
Aroclor-1260-2 (2)	7.46	7.46	7.36	7.56	0.00
Aroclor-1260-3 (3)	7.76	7.76	7.66	7.86	0.00
Aroclor-1260-4 (4)	8.07	8.07	7.97	8.17	0.01
Aroclor-1260-5 (5)	8.37	8.37	8.27	8.47	0.00
Tetrachloro-m-xylene	4.18	4.18	4.08	4.28	0.00
Decachlorobiphenyl	9.73	9.74	9.64	9.84	0.01

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353Continuing Calib Date: 05/27/2015 Initial Calibration Date(s): 05/21/2015 05/21/2015Continuing Calib Time: 10:44 Initial Calibration Time(s): 15:47 16:48GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	Avg RT	RT WINDOW FROM	TO	DIFF RT
Aroclor-1016-1 (1)	4.17	4.17	4.07	4.27	0.00
Aroclor-1016-2 (2)	4.57	4.57	4.47	4.67	0.00
Aroclor-1016-3 (3)	4.61	4.62	4.52	4.72	0.01
Aroclor-1016-4 (4)	4.65	4.65	4.55	4.75	0.00
Aroclor-1016-5 (5)	4.82	4.82	4.72	4.92	0.00
Aroclor-1260-1 (1)	5.83	5.83	5.73	5.93	0.01
Aroclor-1260-2 (2)	6.01	6.01	5.91	6.11	0.00
Aroclor-1260-3 (3)	6.33	6.33	6.23	6.43	0.00
Aroclor-1260-4 (4)	6.86	6.86	6.76	6.96	0.00
Aroclor-1260-5 (5)	7.20	7.20	7.10	7.30	0.00
Tetrachloro-m-xylene	3.33	3.33	3.23	3.43	0.00
Decachlorobiphenyl	8.18	8.18	8.08	8.28	0.00

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 05/21/2015 05/21/2015Client Sample No.: CCAL03 Date Analyzed: 05/27/2015Lab Sample No.: AR1660CCC500 Data File : PP009890.D Time Analyzed: 10:44

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	5.064	4.965	5.165	555.720	500.000	11.1
Aroclor-1016-2	5.412	5.313	5.513	546.370	500.000	9.3
Aroclor-1016-3	5.510	5.411	5.611	545.100	500.000	9.0
Aroclor-1016-4	5.802	5.703	5.903	585.630	500.000	17.1
Aroclor-1016-5	5.942	5.843	6.043	557.630	500.000	11.5
Aroclor-1260-1	6.920	6.822	7.022	506.260	500.000	1.3
Aroclor-1260-2	7.458	7.361	7.561	498.650	500.000	-0.3
Aroclor-1260-3	7.758	7.661	7.861	499.500	500.000	-0.1
Aroclor-1260-4	8.065	7.968	8.168	479.100	500.000	-4.2
Aroclor-1260-5	8.367	8.270	8.470	479.250	500.000	-4.2
Decachlorobiphenyl	9.732	9.636	9.836	47.360	50.000	-5.3
Tetrachloro-m-xylene	4.178	4.078	4.278	53.550	50.000	7.1

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 05/21/2015 05/21/2015Client Sample No.: CCAL03 Date Analyzed: 05/27/2015Lab Sample No.: AR1660CCC500 Data File : PP009890.D Time Analyzed: 10:44

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	4.170	4.069	4.269	573.640	500.000	14.7
Aroclor-1016-2	4.573	4.473	4.673	562.300	500.000	12.5
Aroclor-1016-3	4.614	4.515	4.715	569.380	500.000	13.9
Aroclor-1016-4	4.654	4.554	4.754	562.830	500.000	12.6
Aroclor-1016-5	4.820	4.721	4.921	537.440	500.000	7.5
Aroclor-1260-1	5.825	5.726	5.926	522.740	500.000	4.5
Aroclor-1260-2	6.010	5.910	6.110	504.740	500.000	0.9
Aroclor-1260-3	6.329	6.231	6.431	499.530	500.000	-0.1
Aroclor-1260-4	6.860	6.760	6.960	497.770	500.000	-0.4
Aroclor-1260-5	7.199	7.101	7.301	492.240	500.000	-1.6
Decachlorobiphenyl	8.176	8.079	8.279	46.340	50.000	-7.3
Tetrachloro-m-xylene	3.329	3.228	3.428	55.730	50.000	11.5

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353Continuing Calib Date: 05/27/2015 Initial Calibration Date(s): 05/21/2015 05/21/2015Continuing Calib Time: 14:25 Initial Calibration Time(s): 15:47 16:48GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	TO	DIFF RT
Aroclor-1016-1 (1)	5.06	5.07	4.97	5.17	0.01
Aroclor-1016-2 (2)	5.41	5.41	5.31	5.51	0.00
Aroclor-1016-3 (3)	5.51	5.51	5.41	5.61	0.00
Aroclor-1016-4 (4)	5.80	5.80	5.70	5.90	0.00
Aroclor-1016-5 (5)	5.94	5.94	5.84	6.04	0.00
Aroclor-1260-1 (1)	6.92	6.92	6.82	7.02	0.00
Aroclor-1260-2 (2)	7.46	7.46	7.36	7.56	0.00
Aroclor-1260-3 (3)	7.76	7.76	7.66	7.86	0.00
Aroclor-1260-4 (4)	8.06	8.07	7.97	8.17	0.01
Aroclor-1260-5 (5)	8.37	8.37	8.27	8.47	0.00
Tetrachloro-m-xylene	4.18	4.18	4.08	4.28	0.00
Decachlorobiphenyl	9.73	9.74	9.64	9.84	0.01

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353Continuing Calib Date: 05/27/2015 Initial Calibration Date(s): 05/21/2015 05/21/2015Continuing Calib Time: 14:25 Initial Calibration Time(s): 15:47 16:48GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	TO	DIFF RT
Aroclor-1016-1 (1)	4.17	4.17	4.07	4.27	0.00
Aroclor-1016-2 (2)	4.57	4.57	4.47	4.67	0.00
Aroclor-1016-3 (3)	4.61	4.62	4.52	4.72	0.01
Aroclor-1016-4 (4)	4.65	4.65	4.55	4.75	0.00
Aroclor-1016-5 (5)	4.82	4.82	4.72	4.92	0.00
Aroclor-1260-1 (1)	5.82	5.83	5.73	5.93	0.01
Aroclor-1260-2 (2)	6.01	6.01	5.91	6.11	0.00
Aroclor-1260-3 (3)	6.33	6.33	6.23	6.43	0.00
Aroclor-1260-4 (4)	6.86	6.86	6.76	6.96	0.00
Aroclor-1260-5 (5)	7.20	7.20	7.10	7.30	0.00
Tetrachloro-m-xylene	3.33	3.33	3.23	3.43	0.00
Decachlorobiphenyl	8.18	8.18	8.08	8.28	0.00

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 05/21/2015 05/21/2015Client Sample No.: CCAL04 Date Analyzed: 05/27/2015Lab Sample No.: AR1660CCC500 Data File : PP009900.D Time Analyzed: 14:25

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	5.064	4.965	5.165	562.560	500.000	12.5
Aroclor-1016-2	5.412	5.313	5.513	563.480	500.000	12.7
Aroclor-1016-3	5.509	5.411	5.611	563.350	500.000	12.7
Aroclor-1016-4	5.800	5.703	5.903	585.850	500.000	17.2
Aroclor-1016-5	5.941	5.843	6.043	556.430	500.000	11.3
Aroclor-1260-1	6.919	6.822	7.022	514.110	500.000	2.8
Aroclor-1260-2	7.457	7.361	7.561	514.650	500.000	2.9
Aroclor-1260-3	7.757	7.661	7.861	507.430	500.000	1.5
Aroclor-1260-4	8.064	7.968	8.168	498.680	500.000	-0.3
Aroclor-1260-5	8.366	8.270	8.470	498.980	500.000	-0.2
Decachlorobiphenyl	9.730	9.636	9.836	47.860	50.000	-4.3
Tetrachloro-m-xylene	4.177	4.078	4.278	55.630	50.000	11.3

**CALIBRATION VERIFICATION SUMMARY**Contract: DAYE02Lab Code: CHEM Case No.: G2353 SAS No.: G2353 SDG NO.: G2353GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 05/21/2015 05/21/2015Client Sample No.: CCAL04 Date Analyzed: 05/27/2015Lab Sample No.: AR1660CCC500 Data File : PP009900.D Time Analyzed: 14:25

COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	4.169	4.069	4.269	562.640	500.000	12.5
Aroclor-1016-2	4.572	4.473	4.673	561.660	500.000	12.3
Aroclor-1016-3	4.614	4.515	4.715	561.710	500.000	12.3
Aroclor-1016-4	4.653	4.554	4.754	556.830	500.000	11.4
Aroclor-1016-5	4.819	4.721	4.921	533.460	500.000	6.7
Aroclor-1260-1	5.824	5.726	5.926	526.230	500.000	5.2
Aroclor-1260-2	6.009	5.910	6.110	536.310	500.000	7.3
Aroclor-1260-3	6.329	6.231	6.431	505.830	500.000	1.2
Aroclor-1260-4	6.859	6.760	6.960	498.510	500.000	-0.3
Aroclor-1260-5	7.199	7.101	7.301	462.900	500.000	-7.4
Decachlorobiphenyl	8.176	8.079	8.279	44.470	50.000	-11.1
Tetrachloro-m-xylene	3.328	3.228	3.428	57.000	50.000	14.0

## Analytical Sequence

Client: Day Engineering, P.C.	SDG No.: G2353		
Project: MNR Harmon Yards Low-Flow Samples	Instrument ID: ECD_P		
GC Column: ZB-MR1	ID: 0.32 (mm)	Inst. Calib. Date(s): 05/21/2015	05/21/2015

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCB RT #	TCX RT #
I.BLK	L.BLK	05/21/2015	15:31	PP009805.D	9.74	4.18
AR1660ICC1000	AR1660ICC1000	05/21/2015	15:47	PP009806.D	9.74	4.18
AR1660ICC750	AR1660ICC750	05/21/2015	16:02	PP009807.D	9.74	4.18
AR1660ICC500	AR1660ICC500	05/21/2015	16:18	PP009808.D	9.74	4.18
AR1660ICC250	AR1660ICC250	05/21/2015	16:33	PP009809.D	9.74	4.18
AR1660ICC50	AR1660ICC50	05/21/2015	16:48	PP009810.D	9.74	4.18
AR1221ICC500	AR1221ICC500	05/21/2015	17:04	PP009811.D	9.74	4.18
AR1232ICC500	AR1232ICC500	05/21/2015	17:19	PP009812.D	9.74	4.18
AR1242ICC500	AR1242ICC500	05/21/2015	17:34	PP009813.D	9.74	4.18
AR1248ICC500	AR1248ICC500	05/21/2015	17:50	PP009814.D	9.74	4.18
AR1254ICC500	AR1254ICC500	05/21/2015	18:05	PP009815.D	9.74	4.18
AR1262ICC500	AR1262ICC500	05/21/2015	18:20	PP009816.D	9.74	4.18
AR1268ICC500	AR1268ICC500	05/21/2015	18:35	PP009817.D	9.74	4.18
I.BLK	L.BLK	05/26/2015	15:58	PP009871.D	9.73	4.18
AR1660CCC500	AR1660CCC500	05/26/2015	16:13	PP009872.D	9.73	4.18
PB83570BL	PB83570BL	05/26/2015	16:32	PP009873.D	9.74	4.18
PB83570BS	PB83570BS	05/26/2015	16:47	PP009874.D	9.73	4.18
VE1-2	G2353-01	05/26/2015	17:03	PP009875.D	9.73	4.18
VE1-4	G2353-02	05/26/2015	17:18	PP009876.D	9.73	4.18
VE2-1	G2353-03	05/26/2015	17:33	PP009877.D	9.73	4.18
VE4-11	G2353-05	05/26/2015	18:04	PP009879.D	9.73	4.18
VE4-11MS	G2353-06MS	05/26/2015	18:19	PP009880.D	9.73	4.18
VE4-11MSD	G2353-07MSD	05/26/2015	18:35	PP009881.D	9.73	4.18
DAY-1	G2353-08	05/26/2015	18:50	PP009882.D	9.73	4.18
FIELDBLANK	G2353-09	05/26/2015	19:05	PP009883.D	9.73	4.18
I.BLK	L.BLK	05/26/2015	20:07	PP009886.D	9.73	4.18
AR1660CCC500	AR1660CCC500	05/26/2015	20:22	PP009887.D	9.73	4.18
I.BLK	L.BLK	05/27/2015	10:29	PP009889.D	9.73	4.18
AR1660CCC500	AR1660CCC500	05/27/2015	10:44	PP009890.D	9.73	4.18
VE3-1	G2353-04	05/27/2015	11:09	PP009891.D	9.74	4.19
I.BLK	L.BLK	05/27/2015	14:09	PP009899.D	9.73	4.18
AR1660CCC500	AR1660CCC500	05/27/2015	14:25	PP009900.D	9.73	4.18

## Analytical Sequence

Client: Day Engineering, P.C.	SDG No.: G2353
Project: MNR Harmon Yards Low-Flow Samples	Instrument ID: ECD_P
GC Column: ZB-MR2	ID: 0.32 (mm) Inst. Calib. Date(s): 05/21/2015 05/21/2015

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCB RT #	TCX RT #
I.BLK	L.BLK	05/21/2015	15:31	PP009805.D	9.74	4.18
AR1660ICC1000	AR1660ICC1000	05/21/2015	15:47	PP009806.D	9.74	4.18
AR1660ICC750	AR1660ICC750	05/21/2015	16:02	PP009807.D	9.74	4.18
AR1660ICC500	AR1660ICC500	05/21/2015	16:18	PP009808.D	9.74	4.18
AR1660ICC250	AR1660ICC250	05/21/2015	16:33	PP009809.D	9.74	4.18
AR1660ICC50	AR1660ICC50	05/21/2015	16:48	PP009810.D	9.74	4.18
AR1221ICC500	AR1221ICC500	05/21/2015	17:04	PP009811.D	9.74	4.18
AR1232ICC500	AR1232ICC500	05/21/2015	17:19	PP009812.D	9.74	4.18
AR1242ICC500	AR1242ICC500	05/21/2015	17:34	PP009813.D	9.74	4.18
AR1248ICC500	AR1248ICC500	05/21/2015	17:50	PP009814.D	9.74	4.18
AR1254ICC500	AR1254ICC500	05/21/2015	18:05	PP009815.D	9.74	4.18
AR1262ICC500	AR1262ICC500	05/21/2015	18:20	PP009816.D	9.74	4.18
AR1268ICC500	AR1268ICC500	05/21/2015	18:35	PP009817.D	9.74	4.18
I.BLK	L.BLK	05/26/2015	15:58	PP009871.D	9.73	4.18
AR1660CCC500	AR1660CCC500	05/26/2015	16:13	PP009872.D	9.73	4.18
PB83570BL	PB83570BL	05/26/2015	16:32	PP009873.D	9.74	4.18
PB83570BS	PB83570BS	05/26/2015	16:47	PP009874.D	9.73	4.18
VE1-2	G2353-01	05/26/2015	17:03	PP009875.D	9.73	4.18
VE1-4	G2353-02	05/26/2015	17:18	PP009876.D	9.73	4.18
VE2-1	G2353-03	05/26/2015	17:33	PP009877.D	9.73	4.18
VE4-11	G2353-05	05/26/2015	18:04	PP009879.D	9.73	4.18
VE4-11MS	G2353-06MS	05/26/2015	18:19	PP009880.D	9.73	4.18
VE4-11MSD	G2353-07MSD	05/26/2015	18:35	PP009881.D	9.73	4.18
DAY-1	G2353-08	05/26/2015	18:50	PP009882.D	9.73	4.18
FIELDBLANK	G2353-09	05/26/2015	19:05	PP009883.D	9.73	4.18
I.BLK	L.BLK	05/26/2015	20:07	PP009886.D	9.73	4.18
AR1660CCC500	AR1660CCC500	05/26/2015	20:22	PP009887.D	9.73	4.18
I.BLK	L.BLK	05/27/2015	10:29	PP009889.D	9.73	4.18
AR1660CCC500	AR1660CCC500	05/27/2015	10:44	PP009890.D	9.73	4.18
VE3-1	G2353-04	05/27/2015	11:09	PP009891.D	9.74	4.19
I.BLK	L.BLK	05/27/2015	14:09	PP009899.D	9.73	4.18
AR1660CCC500	AR1660CCC500	05/27/2015	14:25	PP009900.D	9.73	4.18

# QC SAMPLE

# DATA

**Report of Analysis**A  
B  
C  
D  
E  
F  
G

Client:	Day Engineering, P.C.	Date Collected:	
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	
Client Sample ID:	PB83570BL	SDG No.:	G2353
Lab Sample ID:	PB83570BL	Matrix:	Water
Analytical Method:	SW8082A	% Moisture:	100
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:		uL	
Extraction Type:			Injection Volume :
GPC Factor :	1.0	PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009873.D	1	05/26/15 08:38	05/26/15 16:32	PB83570

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.5	U	0.096	0.1	0.5	ug/L
11104-28-2	Aroclor-1221	0.5	U	0.1	0.1	0.5	ug/L
11141-16-5	Aroclor-1232	0.5	U	0.1	0.1	0.5	ug/L
53469-21-9	Aroclor-1242	0.5	U	0.089	0.1	0.5	ug/L
12672-29-6	Aroclor-1248	0.5	U	0.1	0.1	0.5	ug/L
11097-69-1	Aroclor-1254	0.5	U	0.044	0.1	0.5	ug/L
37324-23-5	Aroclor-1262	0.5	U	0.081	0.1	0.5	ug/L
11100-14-4	Aroclor-1268	0.5	U	0.081	0.1	0.5	ug/L
11096-82-5	Aroclor-1260	0.5	U	0.081	0.1	0.5	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	18.3		35 - 137		92%	SPK: 20
2051-24-3	Decachlorobiphenyl	18		40 - 135		90%	SPK: 20

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates &gt;25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

## Report of Analysis

Client: Day Engineering, P.C. Date Collected: 05/21/15  
 Project: MNR Harmon Yards Low-Flow Samples Date Received: 05/21/15  
 Client Sample ID: PIBLK-PP009805.D SDG No.: G2353  
 Lab Sample ID: I.BLK-PP009805.D Matrix: Water  
 Analytical Method: SW8082A % Moisture: 100 Decanted:  
 Sample Wt/Vol: 1000 Units: mL Final Vol: 10000 uL  
 Soil Aliquot Vol: uL Test: PCB Group1  
 Extraction Type: Injection Volume :  
 GPC Factor : 1.0 PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009805.D	1		05/21/15	pp052115

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.5	U	0.096	0.1	0.5	ug/L
11104-28-2	Aroclor-1221	0.5	U	0.1	0.1	0.5	ug/L
11141-16-5	Aroclor-1232	0.5	U	0.1	0.1	0.5	ug/L
53469-21-9	Aroclor-1242	0.5	U	0.089	0.1	0.5	ug/L
12672-29-6	Aroclor-1248	0.5	U	0.1	0.1	0.5	ug/L
11097-69-1	Aroclor-1254	0.5	U	0.044	0.1	0.5	ug/L
37324-23-5	Aroclor-1262	0.5	U	0.081	0.1	0.5	ug/L
11100-14-4	Aroclor-1268	0.5	U	0.081	0.1	0.5	ug/L
11096-82-5	Aroclor-1260	0.5	U	0.081	0.1	0.5	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	21.8		35 - 137		109%	SPK: 20
2051-24-3	Decachlorobiphenyl	22.8		40 - 135		114%	SPK: 20

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates &gt;25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

G2353

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

## Report of Analysis

Client: Day Engineering, P.C. Date Collected: 05/26/15  
 Project: MNR Harmon Yards Low-Flow Samples Date Received: 05/26/15  
 Client Sample ID: PIBLK-PP009871.D SDG No.: G2353  
 Lab Sample ID: I.BLK-PP009871.D Matrix: Water  
 Analytical Method: SW8082A % Moisture: 100 Decanted:  
 Sample Wt/Vol: 1000 Units: mL Final Vol: 10000 uL  
 Soil Aliquot Vol: uL Test: PCB Group1  
 Extraction Type: Injection Volume :  
 GPC Factor : 1.0 PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009871.D	1		05/26/15	pp052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.5	U	0.096	0.1	0.5	ug/L
11104-28-2	Aroclor-1221	0.5	U	0.1	0.1	0.5	ug/L
11141-16-5	Aroclor-1232	0.5	U	0.1	0.1	0.5	ug/L
53469-21-9	Aroclor-1242	0.5	U	0.089	0.1	0.5	ug/L
12672-29-6	Aroclor-1248	0.5	U	0.1	0.1	0.5	ug/L
11097-69-1	Aroclor-1254	0.5	U	0.044	0.1	0.5	ug/L
37324-23-5	Aroclor-1262	0.5	U	0.081	0.1	0.5	ug/L
11100-14-4	Aroclor-1268	0.5	U	0.081	0.1	0.5	ug/L
11096-82-5	Aroclor-1260	0.5	U	0.081	0.1	0.5	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	23.8		35 - 137		119%	SPK: 20
2051-24-3	Decachlorobiphenyl	21.6		40 - 135		108%	SPK: 20

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates &gt;25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

G2353

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

## Report of Analysis

Client: Day Engineering, P.C. Date Collected: 05/26/15  
 Project: MNR Harmon Yards Low-Flow Samples Date Received: 05/26/15  
 Client Sample ID: PIBLK-PP009886.D SDG No.: G2353  
 Lab Sample ID: I.BLK-PP009886.D Matrix: Water  
 Analytical Method: SW8082A % Moisture: 100 Decanted:  
 Sample Wt/Vol: 1000 Units: mL Final Vol: 10000 uL  
 Soil Aliquot Vol: uL Test: PCB Group1  
 Extraction Type: Injection Volume :  
 GPC Factor : 1.0 PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009886.D	1		05/26/15	pp052615

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.5	U	0.096	0.1	0.5	ug/L
11104-28-2	Aroclor-1221	0.5	U	0.1	0.1	0.5	ug/L
11141-16-5	Aroclor-1232	0.5	U	0.1	0.1	0.5	ug/L
53469-21-9	Aroclor-1242	0.5	U	0.089	0.1	0.5	ug/L
12672-29-6	Aroclor-1248	0.5	U	0.1	0.1	0.5	ug/L
11097-69-1	Aroclor-1254	0.5	U	0.044	0.1	0.5	ug/L
37324-23-5	Aroclor-1262	0.5	U	0.081	0.1	0.5	ug/L
11100-14-4	Aroclor-1268	0.5	U	0.081	0.1	0.5	ug/L
11096-82-5	Aroclor-1260	0.5	U	0.081	0.1	0.5	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	24.7		35 - 137		124%	SPK: 20
2051-24-3	Decachlorobiphenyl	22.8		40 - 135		114%	SPK: 20

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates &gt;25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

**Report of Analysis**

Client: Day Engineering, P.C. Date Collected: 05/27/15  
 Project: MNR Harmon Yards Low-Flow Samples Date Received: 05/27/15  
 Client Sample ID: PIBLK-PP009889.D SDG No.: G2353  
 Lab Sample ID: I.BLK-PP009889.D Matrix: Water  
 Analytical Method: SW8082A % Moisture: 100 Decanted:  
 Sample Wt/Vol: 1000 Units: mL Final Vol: 10000 uL  
 Soil Aliquot Vol: uL Test: PCB Group1  
 Extraction Type: Injection Volume :  
 GPC Factor : 1.0 PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009889.D	1		05/27/15	PP052715

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.5	U	0.096	0.1	0.5	ug/L
11104-28-2	Aroclor-1221	0.5	U	0.1	0.1	0.5	ug/L
11141-16-5	Aroclor-1232	0.5	U	0.1	0.1	0.5	ug/L
53469-21-9	Aroclor-1242	0.5	U	0.089	0.1	0.5	ug/L
12672-29-6	Aroclor-1248	0.5	U	0.1	0.1	0.5	ug/L
11097-69-1	Aroclor-1254	0.5	U	0.044	0.1	0.5	ug/L
37324-23-5	Aroclor-1262	0.5	U	0.081	0.1	0.5	ug/L
11100-14-4	Aroclor-1268	0.5	U	0.081	0.1	0.5	ug/L
11096-82-5	Aroclor-1260	0.5	U	0.081	0.1	0.5	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	24.3		35 - 137		122%	SPK: 20
2051-24-3	Decachlorobiphenyl	22.8		40 - 135		114%	SPK: 20

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates &gt;25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

**Report of Analysis**

Client: Day Engineering, P.C. Date Collected: 05/27/15  
 Project: MNR Harmon Yards Low-Flow Samples Date Received: 05/27/15  
 Client Sample ID: PIBLK-PP009899.D SDG No.: G2353  
 Lab Sample ID: I.BLK-PP009899.D Matrix: Water  
 Analytical Method: SW8082A % Moisture: 100 Decanted:  
 Sample Wt/Vol: 1000 Units: mL Final Vol: 10000 uL  
 Soil Aliquot Vol: uL Test: PCB Group1  
 Extraction Type: Injection Volume :  
 GPC Factor : 1.0 PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009899.D	1		05/27/15	PP052715

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	0.5	U	0.096	0.1	0.5	ug/L
11104-28-2	Aroclor-1221	0.5	U	0.1	0.1	0.5	ug/L
11141-16-5	Aroclor-1232	0.5	U	0.1	0.1	0.5	ug/L
53469-21-9	Aroclor-1242	0.5	U	0.089	0.1	0.5	ug/L
12672-29-6	Aroclor-1248	0.5	U	0.1	0.1	0.5	ug/L
11097-69-1	Aroclor-1254	0.5	U	0.044	0.1	0.5	ug/L
37324-23-5	Aroclor-1262	0.5	U	0.081	0.1	0.5	ug/L
11100-14-4	Aroclor-1268	0.5	U	0.081	0.1	0.5	ug/L
11096-82-5	Aroclor-1260	0.5	U	0.081	0.1	0.5	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	25.4		35 - 137		127%	SPK: 20
2051-24-3	Decachlorobiphenyl	23.4		40 - 135		117%	SPK: 20

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates &gt;25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

G2353

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

## Report of Analysis

Client: Day Engineering, P.C. Date Collected:  
 Project: MNR Harmon Yards Low-Flow Samples Date Received:  
 Client Sample ID: PB83570BS SDG No.: G2353  
 Lab Sample ID: PB83570BS Matrix: Water  
 Analytical Method: SW8082A % Moisture: 100 Decanted:  
 Sample Wt/Vol: 1000 Units: mL Final Vol: 10000 uL  
 Soil Aliquot Vol: uL Test: PCB Group1  
 Extraction Type: Injection Volume :  
 GPC Factor : 1.0 PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009874.D	1	05/26/15 08:38	05/26/15 16:47	PB83570

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	2.1		0.096	0.1	0.5	ug/L
11104-28-2	Aroclor-1221	0.5	U	0.1	0.1	0.5	ug/L
11141-16-5	Aroclor-1232	0.5	U	0.1	0.1	0.5	ug/L
53469-21-9	Aroclor-1242	0.5	U	0.089	0.1	0.5	ug/L
12672-29-6	Aroclor-1248	0.5	U	0.1	0.1	0.5	ug/L
11097-69-1	Aroclor-1254	0.5	U	0.044	0.1	0.5	ug/L
37324-23-5	Aroclor-1262	0.5	U	0.081	0.1	0.5	ug/L
11100-14-4	Aroclor-1268	0.5	U	0.081	0.1	0.5	ug/L
11096-82-5	Aroclor-1260	1.8		0.081	0.1	0.5	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	17.8		35 - 137		89%	SPK: 20
2051-24-3	Decachlorobiphenyl	17.3		40 - 135		87%	SPK: 20

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates &gt;25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

## Report of Analysis

Client: Day Engineering, P.C. Date Collected: 05/19/15  
 Project: MNR Harmon Yards Low-Flow Samples Date Received: 05/21/15  
 Client Sample ID: VE4-11MS SDG No.: G2353  
 Lab Sample ID: G2353-06MS Matrix: Water  
 Analytical Method: SW8082A % Moisture: 100 Decanted:  
 Sample Wt/Vol: 980 Units: mL Final Vol: 10000 uL  
 Soil Aliquot Vol: uL Test: PCB Group1  
 Extraction Type: Injection Volume :  
 GPC Factor : 1.0 PH :

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009880.D	1	05/26/15 08:38	05/26/15 18:19	PB83570

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	2.2		0.098	0.102	0.51	ug/L
11104-28-2	Aroclor-1221	0.51	U	0.102	0.102	0.51	ug/L
11141-16-5	Aroclor-1232	0.51	U	0.102	0.102	0.51	ug/L
53469-21-9	Aroclor-1242	0.51	U	0.091	0.102	0.51	ug/L
12672-29-6	Aroclor-1248	0.51	U	0.102	0.102	0.51	ug/L
11097-69-1	Aroclor-1254	0.51	U	0.045	0.102	0.51	ug/L
37324-23-5	Aroclor-1262	0.51	U	0.083	0.102	0.51	ug/L
11100-14-4	Aroclor-1268	0.51	U	0.083	0.102	0.51	ug/L
11096-82-5	Aroclor-1260	1.8		0.083	0.102	0.51	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	18.7		35 - 137		93%	SPK: 20
2051-24-3	Decachlorobiphenyl	15.3		40 - 135		77%	SPK: 20

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates &gt;25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

G2353

**Report of Analysis**A  
B  
C  
D  
E  
F  
G

Client:	Day Engineering, P.C.	Date Collected:	05/19/15	
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15	
Client Sample ID:	VE4-11MSD	SDG No.:	G2353	
Lab Sample ID:	G2353-07MSD	Matrix:	Water	
Analytical Method:	SW8082A	% Moisture:	100	Decanted:
Sample Wt/Vol:	990	Units:	mL	Final Vol: 10000 uL
Soil Aliquot Vol:			uL	Test: PCB Group1
Extraction Type:				Injection Volume :
GPC Factor :	1.0	PH :		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PP009881.D	1	05/26/15 08:38	05/26/15 18:35	PB83570

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
12674-11-2	Aroclor-1016	2		0.097	0.101	0.505	ug/L
11104-28-2	Aroclor-1221	0.505	U	0.101	0.101	0.505	ug/L
11141-16-5	Aroclor-1232	0.505	U	0.101	0.101	0.505	ug/L
53469-21-9	Aroclor-1242	0.505	U	0.09	0.101	0.505	ug/L
12672-29-6	Aroclor-1248	0.505	U	0.101	0.101	0.505	ug/L
11097-69-1	Aroclor-1254	0.505	U	0.044	0.101	0.505	ug/L
37324-23-5	Aroclor-1262	0.505	U	0.082	0.101	0.505	ug/L
11100-14-4	Aroclor-1268	0.505	U	0.082	0.101	0.505	ug/L
11096-82-5	Aroclor-1260	1.7		0.082	0.101	0.505	ug/L
<b>SURROGATES</b>							
877-09-8	Tetrachloro-m-xylene	18.3		35 - 137		92%	SPK: 20
2051-24-3	Decachlorobiphenyl	15.5		40 - 135		78%	SPK: 20

U = Not Detected

LOQ = Limit of Quantitation

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LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates &gt;25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

**LAB CHRONICLE**

<b>OrderID:</b>	G2353	<b>OrderDate:</b>	5/21/2015 3:04:05 PM
<b>Client:</b>	Day Engineering, P.C.	<b>Project:</b>	MNR Harmon Yards Low-Flow Samples
<b>Contact:</b>	Raymond Kampff	<b>Location:</b>	F52

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
G2353-01	VE1-2	WATER			05/20/15			05/21/15
			Metals Group3	6020		05/27/15	05/28/15	
G2353-02	VE1-4	WATER			05/20/15			05/21/15
			Metals Group3	6020		05/27/15	05/28/15	
G2353-03	VE2-1	WATER			05/20/15			05/21/15
			Metals Group3	6020		05/27/15	05/28/15	
G2353-04	VE3-1	WATER			05/19/15			05/21/15
			Metals Group3	6020		05/27/15	05/28/15	
G2353-05	VE4-11	WATER			05/19/15			05/21/15
			Metals Group3	6020		05/27/15	05/28/15	
G2353-08	DAY-1	WATER			05/19/15			05/21/15
			Metals Group3	6020		05/27/15	05/28/15	
G2353-09	FIELDBLANK	WATER			05/20/15			05/21/15
			Metals Group3	6020		05/27/15	05/28/15	



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

### Hit Summary Sheet SW-846

<b>SDG No.:</b>	G2353		<b>Order ID:</b>	G2353					
<b>Client:</b>	Day Engineering, P.C.		<b>Project ID:</b>	MNR Harmon Yards Low-Flow Samples					
Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
<b>Client ID :</b>	<b>VE1-2</b>								
G2353-01	VE1-2	WATER	Arsenic	2.820		0.18	0.5	1	ug/L
G2353-01	VE1-2	WATER	Chromium	0.969	J	0.04	1.0	2	ug/L
G2353-01	VE1-2	WATER	Copper	3.210		0.04	1.0	2	ug/L
G2353-01	VE1-2	WATER	Lead	4.340		0.04	0.5	1	ug/L
<b>Client ID :</b>	<b>VE1-4</b>								
G2353-02	VE1-4	WATER	Arsenic	3.500		0.18	0.5	1	ug/L
G2353-02	VE1-4	WATER	Chromium	0.796	J	0.04	1.0	2	ug/L
G2353-02	VE1-4	WATER	Copper	10.800		0.04	1.0	2	ug/L
G2353-02	VE1-4	WATER	Lead	3.890		0.04	0.5	1	ug/L
<b>Client ID :</b>	<b>VE2-1</b>								
G2353-03	VE2-1	WATER	Arsenic	0.507	J	0.18	0.5	1	ug/L
G2353-03	VE2-1	WATER	Chromium	0.137	J	0.04	1.0	2	ug/L
G2353-03	VE2-1	WATER	Copper	4.550		0.04	1.0	2	ug/L
G2353-03	VE2-1	WATER	Lead	1.380		0.04	0.5	1	ug/L
<b>Client ID :</b>	<b>VE3-1</b>								
G2353-04	VE3-1	WATER	Arsenic	9.160		0.18	0.5	1	ug/L
G2353-04	VE3-1	WATER	Chromium	3.070		0.04	1.0	2	ug/L
G2353-04	VE3-1	WATER	Copper	5.240		0.04	1.0	2	ug/L
G2353-04	VE3-1	WATER	Lead	3.770		0.04	0.5	1	ug/L
<b>Client ID :</b>	<b>VE4-11</b>								
G2353-05	VE4-11	WATER	Arsenic	2.300		0.18	0.5	1	ug/L
G2353-05	VE4-11	WATER	Chromium	1.370	J	0.04	1.0	2	ug/L
G2353-05	VE4-11	WATER	Copper	9.240		0.04	1.0	2	ug/L
G2353-05	VE4-11	WATER	Lead	1.550		0.04	0.5	1	ug/L
<b>Client ID :</b>	<b>DAY-1</b>								
G2353-08	DAY-1	WATER	Arsenic	10.700		0.18	0.5	1	ug/L
G2353-08	DAY-1	WATER	Chromium	1.310	J	0.04	1.0	2	ug/L
G2353-08	DAY-1	WATER	Copper	1.340	J	0.04	1.0	2	ug/L
G2353-08	DAY-1	WATER	Lead	1.750		0.04	0.5	1	ug/L
<b>Client ID :</b>	<b>FIELDBLANK</b>								
G2353-09	FIELDBLANK	WATER	Chromium	0.431	J	0.04	1.0	2	ug/L
G2353-09	FIELDBLANK	WATER	Copper	80.000		0.04	1.0	2	ug/L
G2353-09	FIELDBLANK	WATER	Lead	1.600		0.04	0.5	1	ug/L

**Hit Summary Sheet  
SW-846****SDG No.:** G2353**Order ID:** G2353**Client:** Day Engineering, P.C.**Project ID:** MNR Harmon Yards Low-Flow Samples

---

**Sample ID**    **Client ID**    **Matrix**    **Parameter**    **Concentration**    **C**    **MDL**    **LOD**    **RDL**    **Units**

A

B

C

D

E

F

G

H

# SAMPLE DATA

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE1-2	SDG No.:	G2353
Lab Sample ID:	G2353-01	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7440-38-2	Arsenic	2.82		1	0.18	0.5	1	ug/L	05/27/15 11:00	05/28/15 01:08	SW6020
7440-47-3	Chromium	0.969	J	1	0.04	1.0	2	ug/L	05/27/15 11:00	05/28/15 01:08	SW6020
7440-50-8	Copper	3.21		1	0.04	1.0	2	ug/L	05/27/15 11:00	05/28/15 01:08	SW6020
7439-92-1	Lead	4.34		1	0.04	0.5	1	ug/L	05/27/15 11:00	05/28/15 01:08	SW6020

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group3			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

\* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE1-4	SDG No.:	G2353
Lab Sample ID:	G2353-02	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7440-38-2	Arsenic	3.5		1	0.18	0.5	1	ug/L	05/27/15 11:00	05/28/15 01:24	SW6020
7440-47-3	Chromium	0.796	J	1	0.04	1.0	2	ug/L	05/27/15 11:00	05/28/15 01:24	SW6020
7440-50-8	Copper	10.8		1	0.04	1.0	2	ug/L	05/27/15 11:00	05/28/15 01:24	SW6020
7439-92-1	Lead	3.89		1	0.04	0.5	1	ug/L	05/27/15 11:00	05/28/15 01:24	SW6020

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group3			

U = Not Detected

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MDL = Method Detection Limit

LOD = Limit of Detection

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N = Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE2-1	SDG No.:	G2353
Lab Sample ID:	G2353-03	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7440-38-2	Arsenic	0.507	J	1	0.18	0.5	1	ug/L	05/27/15 11:00	05/28/15 01:40	SW6020
7440-47-3	Chromium	0.137	J	1	0.04	1.0	2	ug/L	05/27/15 11:00	05/28/15 01:40	SW6020
7440-50-8	Copper	4.55		1	0.04	1.0	2	ug/L	05/27/15 11:00	05/28/15 01:40	SW6020
7439-92-1	Lead	1.38		1	0.04	0.5	1	ug/L	05/27/15 11:00	05/28/15 01:40	SW6020

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group3			

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MDL = Method Detection Limit

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N =Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE3-1	SDG No.:	G2353
Lab Sample ID:	G2353-04	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7440-38-2	Arsenic	9.16	1	0.18	0.5	1		ug/L	05/27/15 11:00	05/28/15 01:55	SW6020
7440-47-3	Chromium	3.07	1	0.04	1.0	2		ug/L	05/27/15 11:00	05/28/15 01:55	SW6020
7440-50-8	Copper	5.24	1	0.04	1.0	2		ug/L	05/27/15 11:00	05/28/15 01:55	SW6020
7439-92-1	Lead	3.77	1	0.04	0.5	1		ug/L	05/27/15 11:00	05/28/15 01:55	SW6020

Color Before:	Brown	Clarity Before:	Cloudy	Texture:
Color After:	Yellow	Clarity After:	Clear	Artifacts:
Comments:	Metals Group3			

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**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	VE4-11	SDG No.:	G2353
Lab Sample ID:	G2353-05	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7440-38-2	Arsenic	2.3		1	0.18	0.5	1	ug/L	05/27/15 11:00	05/28/15 02:35	SW6020
7440-47-3	Chromium	1.37	J	1	0.04	1.0	2	ug/L	05/27/15 11:00	05/28/15 02:35	SW6020
7440-50-8	Copper	9.24		1	0.04	1.0	2	ug/L	05/27/15 11:00	05/28/15 02:35	SW6020
7439-92-1	Lead	1.55		1	0.04	0.5	1	ug/L	05/27/15 11:00	05/28/15 02:35	SW6020

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group3			

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MDL = Method Detection Limit

LOD = Limit of Detection

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J = Estimated Value

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N =Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/19/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	DAY-1	SDG No.:	G2353
Lab Sample ID:	G2353-08	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7440-38-2	Arsenic	10.7		1	0.18	0.5	1	ug/L	05/27/15 11:00	05/28/15 04:17	SW6020
7440-47-3	Chromium	1.31	J	1	0.04	1.0	2	ug/L	05/27/15 11:00	05/28/15 04:17	SW6020
7440-50-8	Copper	1.34	J	1	0.04	1.0	2	ug/L	05/27/15 11:00	05/28/15 04:17	SW6020
7439-92-1	Lead	1.75		1	0.04	0.5	1	ug/L	05/27/15 11:00	05/28/15 04:17	SW6020

Color Before:	Brown	Clarity Before:	Cloudy	Texture:
Color After:	Yellow	Clarity After:	Clear	Artifacts:
Comments:	Metals Group3			

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LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

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J = Estimated Value

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OR = Over Range

N =Spiked sample recovery not within control limits

**Report of Analysis**

Client:	Day Engineering, P.C.	Date Collected:	05/20/15
Project:	MNR Harmon Yards Low-Flow Samples	Date Received:	05/21/15
Client Sample ID:	FIELDBLANK	SDG No.:	G2353
Lab Sample ID:	G2353-09	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
7440-38-2	Arsenic	1	U	1	0.18	0.5	1	ug/L	05/27/15 11:00	05/28/15 04:32	SW6020
7440-47-3	Chromium	0.431	J	1	0.04	1.0	2	ug/L	05/27/15 11:00	05/28/15 04:32	SW6020
7440-50-8	Copper	80		1	0.04	1.0	2	ug/L	05/27/15 11:00	05/28/15 04:32	SW6020
7439-92-1	Lead	1.6		1	0.04	0.5	1	ug/L	05/27/15 11:00	05/28/15 04:32	SW6020

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group3			

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LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

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N =Spiked sample recovery not within control limits

**METAL**  
**CALIBRATION**  
**DATA**

**Metals****- 2a -****INITIAL AND CONTINUING CALIBRATION VERIFICATION**Client: Day Engineering, P.C.SDG No.: G2353Contract: DAYE02Lab Code: CHEMCase No.: G2353SAS No.: G2353Initial Calibration Source: EPAContinuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
		ug/L							
ICV09	Arsenic	194.7	200	97.4	90 - 110	P	05/27/2015	14:26	LB76244
	Chromium	96.92	98.0	98.9	90 - 110	P	05/27/2015	14:26	LB76244
	Copper	104.1	98.0	106.2	90 - 110	P	05/27/2015	14:26	LB76244
	Lead	197.1	200	98.6	90 - 110	P	05/27/2015	14:26	LB76244

**Metals****- 2a -****INITIAL AND CONTINUING CALIBRATION VERIFICATION**

**Client:** Day Engineering, P.C.      **SDG No.:** G2353  
**Contract:** DAYE02      **Lab Code:** CHEM      **Case No.:** G2353      **SAS No.:** G2353  
**Initial Calibration Source:** EPA  
**Continuing Calibration Source:** Inorganic Ventures

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<b>Sample ID</b>	<b>Analyte</b>	<b>Result</b>	<b>True Value</b>	<b>% Recovery</b>	<b>Acceptance Window (%R)</b>	<b>M</b>	<b>Analysis Date</b>	<b>Analysis Time</b>	<b>Run Number</b>
		<b>ug/L</b>							
CCV94	Arsenic	487.9	500	97.6	90 - 110	P	05/27/2015	15:21	LB76244
	Chromium	479.2	500	95.8	90 - 110	P	05/27/2015	15:21	LB76244
	Copper	980	1000	98	90 - 110	P	05/27/2015	15:21	LB76244
	Lead	492.2	500	98.4	90 - 110	P	05/27/2015	15:21	LB76244
CCV95	Arsenic	479.4	500	95.9	90 - 110	P	05/27/2015	17:10	LB76244
	Chromium	476.5	500	95.3	90 - 110	P	05/27/2015	17:10	LB76244
	Copper	961.3	1000	96.1	90 - 110	P	05/27/2015	17:10	LB76244
	Lead	487.1	500	97.4	90 - 110	P	05/27/2015	17:10	LB76244
CCV96	Arsenic	483	500	96.6	90 - 110	P	05/27/2015	18:51	LB76244
	Chromium	484.5	500	96.9	90 - 110	P	05/27/2015	18:51	LB76244
	Copper	970.2	1000	97	90 - 110	P	05/27/2015	18:51	LB76244
	Lead	490.6	500	98.1	90 - 110	P	05/27/2015	18:51	LB76244
CCV97	Arsenic	478.4	500	95.7	90 - 110	P	05/27/2015	19:31	LB76244
	Chromium	476.5	500	95.3	90 - 110	P	05/27/2015	19:31	LB76244
	Copper	959.2	1000	95.9	90 - 110	P	05/27/2015	19:31	LB76244
	Lead	485.6	500	97.1	90 - 110	P	05/27/2015	19:31	LB76244
CCV98	Arsenic	464.9	500	93	90 - 110	P	05/27/2015	21:05	LB76244
	Chromium	468	500	93.6	90 - 110	P	05/27/2015	21:05	LB76244
	Copper	930.9	1000	93.1	90 - 110	P	05/27/2015	21:05	LB76244
	Lead	476.9	500	95.4	90 - 110	P	05/27/2015	21:05	LB76244
CCV99	Arsenic	482.8	500	96.6	90 - 110	P	05/27/2015	22:54	LB76244
	Chromium	496.2	500	99.2	90 - 110	P	05/27/2015	22:54	LB76244
	Copper	982.9	1000	98.3	90 - 110	P	05/27/2015	22:54	LB76244
	Lead	493.1	500	98.6	90 - 110	P	05/27/2015	22:54	LB76244
CCV01	Arsenic	469.6	500	93.9	90 - 110	P	05/28/2015	00:37	LB76244
	Chromium	483.7	500	96.7	90 - 110	P	05/28/2015	00:37	LB76244
	Copper	958.1	1000	95.8	90 - 110	P	05/28/2015	00:37	LB76244
	Lead	479.1	500	95.8	90 - 110	P	05/28/2015	00:37	LB76244
CCV02	Arsenic	464.1	500	92.8	90 - 110	P	05/28/2015	02:19	LB76244
	Chromium	487.4	500	97.5	90 - 110	P	05/28/2015	02:19	LB76244
	Copper	950.4	1000	95	90 - 110	P	05/28/2015	02:19	LB76244
	Lead	476.2	500	95.2	90 - 110	P	05/28/2015	02:19	LB76244
CCV03	Arsenic	471.5	500	94.3	90 - 110	P	05/28/2015	04:01	LB76244
	Chromium	496.1	500	99.2	90 - 110	P	05/28/2015	04:01	LB76244

**Metals****- 2a -****INITIAL AND CONTINUING CALIBRATION VERIFICATION**

**Client:** Day Engineering, P.C.      **SDG No.:** G2353  
**Contract:** DAYE02      **Lab Code:** CHEM      **Case No.:** G2353      **SAS No.:** G2353  
**Initial Calibration Source:** EPA  
**Continuing Calibration Source:** Inorganic Ventures

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Sample ID	Analyte	Result		% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
		ug/L	True Value						
CCV03	Copper	962.8	1000	96.3	90 - 110	P	05/28/2015	04:01	LB76244
	Lead	485.2	500	97	90 - 110	P	05/28/2015	04:01	LB76244
CCV04	Arsenic	471.6	500	94.3	90 - 110	P	05/28/2015	04:56	LB76244
	Chromium	490.5	500	98.1	90 - 110	P	05/28/2015	04:56	LB76244
CCV05	Copper	960.3	1000	96	90 - 110	P	05/28/2015	04:56	LB76244
	Lead	478.6	500	95.7	90 - 110	P	05/28/2015	04:56	LB76244
CCV06	Arsenic	465.1	500	93	90 - 110	P	05/28/2015	06:38	LB76244
	Chromium	479.6	500	95.9	90 - 110	P	05/28/2015	06:38	LB76244
CCV07	Copper	946.6	1000	94.7	90 - 110	P	05/28/2015	06:38	LB76244
	Lead	474.2	500	94.8	90 - 110	P	05/28/2015	06:38	LB76244
CCV08	Arsenic	458.2	500	91.6	90 - 110	P	05/28/2015	08:21	LB76244
	Chromium	472.4	500	94.5	90 - 110	P	05/28/2015	08:21	LB76244
CCV09	Copper	932.6	1000	93.3	90 - 110	P	05/28/2015	08:21	LB76244
	Lead	471.5	500	94.3	90 - 110	P	05/28/2015	08:21	LB76244
CCV08	Arsenic	459.7	500	91.9	90 - 110	P	05/28/2015	10:03	LB76244
	Chromium	474.4	500	94.9	90 - 110	P	05/28/2015	10:03	LB76244
CCV09	Copper	935.6	1000	93.6	90 - 110	P	05/28/2015	10:03	LB76244
	Lead	469.7	500	93.9	90 - 110	P	05/28/2015	10:03	LB76244
CCV08	Arsenic	485.9	500	97.2	90 - 110	P	05/28/2015	11:39	LB76244
	Chromium	496.8	500	99.4	90 - 110	P	05/28/2015	11:39	LB76244
CCV09	Copper	987.7	1000	98.8	90 - 110	P	05/28/2015	11:39	LB76244
	Lead	498	500	99.6	90 - 110	P	05/28/2015	11:39	LB76244
CCV09	Arsenic	494.9	500	99	90 - 110	P	05/28/2015	12:42	LB76244
	Chromium	501.5	500	100.3	90 - 110	P	05/28/2015	12:42	LB76244
CCV09	Copper	998.5	1000	99.9	90 - 110	P	05/28/2015	12:42	LB76244
	Lead	504.9	500	101	90 - 110	P	05/28/2015	12:42	LB76244



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### Metals

- 2b -

#### CRDL STANDARD FOR AA & ICP

**Client:** Day Engineering, P.C.

**SDG No.:** G2353

**Contract:** DAYE02

**Lab Code:** CHEM

**Case No.:** G2353

**SAS No.:** G2353

**Initial Calibration Source:**  

**Continuing Calibration Source:**  

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI	Arsenic	0.867	1.0	86.7	70 - 130	P	05/27/2015	19:46	LB76244
	Chromium	1.804	2.0	90.2	70 - 130	P	05/27/2015	19:46	LB76244
	Copper	1.79	2.0	89.5	70 - 130	P	05/27/2015	19:46	LB76244
	Lead	0.9	1.0	90	50 - 150	P	05/27/2015	19:46	LB76244



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### Metals

- 3a -

#### INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

<b>Client:</b>	<u>Day Engineering, P.C.</u>				<b>SDG No.:</b>	<u>G2353</u>					
<b>Contract:</b>	<u>DAYE02</u>		<b>Lab Code:</b>	<u>CHEM</u>		<b>Case No.:</b>	<u>G2353</u>		<b>SAS No.:</b>	<u>G2353</u>	
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number	
<b>ICB09</b>	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	14:41	LB76244
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/27/2015	14:41	LB76244
	Copper	2.0	+/-2.0	U	1.0		2.0	P	05/27/2015	14:41	LB76244
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	14:41	LB76244

**Metals****- 3a -****INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY****Client:** Day Engineering, P.C.**SDG No.:** G2353**Contract:** DAYE02**Lab Code:** CHEM**Case No.:** G2353**SAS No.:** G2353

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number	
CCB94	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	15:28	LB76244
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/27/2015	15:28	LB76244
	Copper	2.0	+/-2.0	U	1.0		2.0	P	05/27/2015	15:28	LB76244
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	15:28	LB76244
CCB95	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	17:17	LB76244
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/27/2015	17:17	LB76244
	Copper	0.052	+/-2.0	J	1.0		2.0	P	05/27/2015	17:17	LB76244
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	17:17	LB76244
CCB96	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	18:59	LB76244
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/27/2015	18:59	LB76244
	Copper	2.0	+/-2.0	U	1.0		2.0	P	05/27/2015	18:59	LB76244
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	18:59	LB76244
CCB97	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	19:38	LB76244
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/27/2015	19:38	LB76244
	Copper	2.0	+/-2.0	U	1.0		2.0	P	05/27/2015	19:38	LB76244
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	19:38	LB76244
CCB98	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	21:20	LB76244
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/27/2015	21:20	LB76244
	Copper	2.0	+/-2.0	U	1.0		2.0	P	05/27/2015	21:20	LB76244
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	21:20	LB76244
CCB99	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	23:02	LB76244
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/27/2015	23:02	LB76244
	Copper	0.65	+/-2.0	J	1.0		2.0	P	05/27/2015	23:02	LB76244
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/27/2015	23:02	LB76244
CCB01	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	00:45	LB76244
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/28/2015	00:45	LB76244
	Copper	2.0	+/-2.0	U	1.0		2.0	P	05/28/2015	00:45	LB76244
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	00:45	LB76244
CCB02	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	02:27	LB76244
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/28/2015	02:27	LB76244
	Copper	2.0	+/-2.0	U	1.0		2.0	P	05/28/2015	02:27	LB76244
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	02:27	LB76244
CCB03	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	04:09	LB76244
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/28/2015	04:09	LB76244
	Copper	2.0	+/-2.0	U	1.0		2.0	P	05/28/2015	04:09	LB76244
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	04:09	LB76244
CCB04	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	05:04	LB76244
	Chromium	0.086	+/-2.0	J	1.0		2.0	P	05/28/2015	05:04	LB76244
	Copper	0.182	+/-2.0	J	1.0		2.0	P	05/28/2015	05:04	LB76244
	Lead	0.085	+/-1.0	J	0.5		1.0	P	05/28/2015	05:04	LB76244

**Metals****- 3a -****INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY****Client:** Day Engineering, P.C.**SDG No.:** G2353**Contract:** DAYE02**Lab Code:** CHEM**Case No.:** G2353**SAS No.:** G2353

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB05	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	06:46
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/28/2015	06:46
	Copper	2.0	+/-2.0	U	1.0		2.0	P	05/28/2015	06:46
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	06:46
CCB06	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	08:29
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/28/2015	08:29
	Copper	2.0	+/-2.0	U	1.0		2.0	P	05/28/2015	08:29
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	08:29
CCB07	Arsenic	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	10:11
	Chromium	2.0	+/-2.0	U	1.0		2.0	P	05/28/2015	10:11
	Copper	0.161	+/-2.0	J	1.0		2.0	P	05/28/2015	10:11
	Lead	1.0	+/-1.0	U	0.5		1.0	P	05/28/2015	10:11
CCB08	Arsenic	0.27	+/-1.0	J	0.5		1.0	P	05/28/2015	11:46
	Chromium	0.189	+/-2.0	J	1.0		2.0	P	05/28/2015	11:46
	Copper	0.549	+/-2.0	J	1.0		2.0	P	05/28/2015	11:46
	Lead	0.256	+/-1.0	J	0.5		1.0	P	05/28/2015	11:46
CCB09	Arsenic	0.228	+/-1.0	J	0.5		1.0	P	05/28/2015	12:50
	Chromium	0.163	+/-2.0	J	1.0		2.0	P	05/28/2015	12:50
	Copper	0.308	+/-2.0	J	1.0		2.0	P	05/28/2015	12:50
	Lead	0.166	+/-1.0	J	0.5		1.0	P	05/28/2015	12:50

**Metals****- 3a -****INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY**

<b>Client:</b>	Day Engineering, P.C.		<b>SDG No.:</b>	G2353						
<b>Contract:</b>	DAYE02	<b>Lab Code:</b>	CHEM	<b>Case No.:</b>	G2353					
<b>Sample ID</b>	<b>Analyte</b>	<b>Result</b> ug/L	<b>Acceptance</b> Limit	<b>Conc</b> Qual	<b>LOD</b>	<b>CRQL</b>	<b>M</b>	<b>Analysis</b> Date	<b>Analysis</b> Time	<b>Run</b> Number

**Metals****- 3b -****PREPARATION BLANK SUMMARY****Client:** Day Engineering, P.C.**SDG No.:** G2353**Instrument:** P6

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	LOD ug/L	CRQL ug/L	M	Analysis Date	Analysis Time	Run
<b>PB83617BL</b>	<b>WATER</b>			<b>Batch Number:</b>	<b>PB83617</b>			<b>Prep Date:</b>	<b>05/27/2015</b>	
	Arsenic	1.0	<1.0	U	0.5	1.0	P	05/27/2015	20:02	LB76244
	Chromium	2.0	<2.0	U	1.0	2.0	P	05/27/2015	20:02	LB76244
	Copper	2.0	<2.0	U	1.0	2.0	P	05/27/2015	20:02	LB76244
	Lead	1.0	<1.0	U	0.5	1.0	P	05/27/2015	20:02	LB76244

**Metals**

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**INTERFERENCE CHECK SAMPLE**

**Client:** Day Engineering, P.C. **SDG No.:** G2353  
**Contract:** DAYE02 **Lab Code:** CHEM **Case No.:** G2353 **SAS No.:** G2353  
**ICS Source:** EPA **Instrument ID:** P6

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA09	Arsenic	1.17	0.1	1170	-1.9	2.1	05/27/2015	14:49	LB76244
	Chromium	19.7	21.0	93.8	16.8	25.2	05/27/2015	14:49	LB76244
	Copper	8.62	8.0	107.8	4	12	05/27/2015	14:49	LB76244
	Lead	4.6	4.0	115	2	6	05/27/2015	14:49	LB76244
ICSAB09	Arsenic	21	19.0	110.5	15.2	22.8	05/27/2015	14:57	LB76244
	Chromium	39.2	40.0	98	32	48	05/27/2015	14:57	LB76244
	Copper	29	25.0	116	20	30	05/27/2015	14:57	LB76244
	Lead	24.1	25.0	96.4	20	30	05/27/2015	14:57	LB76244

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**metals****- 5a -****MATRIX SPIKE SUMMARY**client: Day Engineering, P.C.level: lowsdg no.: G2353contract: DAYE02lab code: CHEMcase no.: G2353sas no.: G2353matrix: WATERsample id: G2351-06client id: MW-29SMSPercent Solids for Sample: NASpiked ID: G2351-07Percent Solids for Spike Sample: NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	778	1.31			800	97	P	
Chromium	ug/L	75 - 125	389	0.747	J		400	97	P	
Copper	ug/L	75 - 125	292	3.07			300	96	P	
Lead	ug/L	75 - 125	958	0.104	J		1000	96	P	

**metals****- 5a -****MATRIX SPIKE DUPLICATE SUMMARY**

client:	Day Engineering, P.C.	level:	low	sdg no.:	G2353			
contract:	DAYE02	lab code:	CHEM	case no.:	G2353	sas no.:		
matrix:	WATER	sample id:	G2351-06	client id:	MW-29SMSD			
Percent Solids for Sample:	NA	Spiked ID:	G2351-08	Percent Solids for Spike Sample:	NA			
Analyte	Units	Acceptance Limit %R	MSD Result	Sample C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	781	1.31	800	97	P	
Chromium	ug/L	75 - 125	389	0.747	J	400	97	P
Copper	ug/L	75 - 125	293	3.07		300	97	P
Lead	ug/L	75 - 125	966	0.104	J	1000	97	P

**metals****- 5a -****MATRIX SPIKE SUMMARY**client: Day Engineering, P.C.level: lowsdg no.: G2353contract: DAYE02lab code: CHEMcase no.: G2353 sas no.: G2353matrix: WATERsample id: G2353-05 client id: VE4-11MSPercent Solids for Sample: NASpiked ID: G2353-06Percent Solids for Spike Sample: NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	778	2.3			800	97	P	
Chromium	ug/L	75 - 125	390	1.37	J		400	97	P	
Copper	ug/L	75 - 125	298	9.24			300	96	P	
Lead	ug/L	75 - 125	993	1.55			1000	99	P	

**metals****- 5a -****MATRIX SPIKE DUPLICATE SUMMARY**

client:	Day Engineering, P.C.	level:	low	sdg no.:	G2353			
contract:	DAYE02	lab code:	CHEM	case no.:	G2353	sas no.:		
matrix:	WATER	sample id:	G2353-05	client id:	VE4-11MSD			
Percent Solids for Sample:	NA	Spiked ID:	G2353-07	Percent Solids for Spike Sample:	NA			
Analyte	Units	Acceptance Limit %R	MSD Result	Sample C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	766	2.3	800	95	P	
Chromium	ug/L	75 - 125	383	1.37	J	400	95	P
Copper	ug/L	75 - 125	290	9.24	300	94	P	
Lead	ug/L	75 - 125	981	1.55	1000	98	P	

**Metals**

- 5b -

Client: Day Engineering, P.C.

SDG No.: G2353

Contract: DAYE02

Lab Code: CHEM

Case No.: G2353 SAS No.: G2353

Matrix:

Level: LOW

Client ID:

Sample ID:

Spiked ID:

Analyte	Units	Acceptance Limit %R	C	Sample Result	C	Spike Added	% Recovery	Qual	M
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**Metals****- 6 -****DUPLICATE SAMPLE SUMMARY**

<b>Client:</b>	<u>Day Engineering, P.C.</u>	<b>Level:</b>	<u>LOW</u>	<b>SDG No.:</b>	<u>G2353</u>
<b>Contract:</b>	<u>DAYE02</u>	<b>Lab Code:</b>	<u>CHEM</u>	<b>Case No.:</b>	<u>G2353</u>
<b>Matrix:</b>	<u>WATER</u>	<b>Sample ID:</b>	<u>G2351-06</u>	<b>Client ID:</b>	<u>MW-29SDUP</u>
<b>Percent Solids for Sample:</b>	<u>NA</u>	<b>Duplicate ID</b>	<u>G2351-06DUP</u>	<b>Percent Solids for Spike Sample:</b>	<u>NA</u>

<b>Analyte</b>	<b>Units</b>	<b>Acceptance Limit</b>	<b>Sample Result</b>	<b>C</b>	<b>Duplicate Result</b>	<b>C</b>	<b>RPD</b>	<b>Qual</b>	<b>M</b>
Arsenic	ug/L	20	1.31		1.24		5	P	
Chromium	ug/L	20	0.747	J	0.708	J	5	P	
Copper	ug/L	20	3.07		3.19		4	P	
Lead	ug/L	20	0.104	J	1.0	U	200.0	P	

<sup>a</sup>A control limit of  $\pm 20\%$  RPD for each matrix applies for sample values greater than 10 times Detection Limit<sup>b</sup>

**Metals****- 6 -****DUPLICATE SAMPLE SUMMARY**

<b>Client:</b>	Day Engineering, P.C.	<b>Level:</b>	LOW	<b>SDG No.:</b>	G2353				
<b>Contract:</b>	DAYE02	<b>Lab Code:</b>	CHEM	<b>Case No.:</b>	G2353	<b>SAS No.:</b>	G2353		
<b>Matrix:</b>	WATER	<b>Sample ID:</b>	G2351-07	<b>Client ID:</b>	MW-29SMSD				
<b>Percent Solids for Sample:</b>	NA	<b>Duplicate ID</b>	G2351-08	<b>Percent Solids for Spike Sample:</b>		NA			
<b>Analyte</b>	<b>Units</b>	<b>Acceptance Limit</b>	<b>Sample Result</b>	<b>Sample C</b>	<b>Duplicate Result</b>	<b>Duplicate C</b>	<b>RPD</b>	<b>Qual</b>	<b>M</b>
Arsenic	ug/L	20	778		781		0	P	
Chromium	ug/L	20	389		389		0	P	
Copper	ug/L	20	292		293		0	P	
Lead	ug/L	20	958		966		1	P	

<sup>a</sup>A control limit of  $\pm 20\%$  RPD for each matrix applies for sample values greater than 10 times Detection Limit<sup>b</sup>

**Metals****- 6 -****DUPLICATE SAMPLE SUMMARY**

<b>Client:</b>	<u>Day Engineering, P.C.</u>	<b>Level:</b>	<u>LOW</u>	<b>SDG No.:</b>	<u>G2353</u>
<b>Contract:</b>	<u>DAYE02</u>	<b>Lab Code:</b>	<u>CHEM</u>	<b>Case No.:</b>	<u>G2353</u>
<b>Matrix:</b>	<u>WATER</u>	<b>Sample ID:</b>	<u>G2353-06</u>	<b>Client ID:</b>	<u>VE4-11MSD</u>
<b>Percent Solids for Sample:</b>	NA	<b>Duplicate ID</b>	G2353-07	<b>Percent Solids for Spike Sample:</b>	NA
<b>Analyte</b>	<b>Units</b>	<b>Acceptance Limit</b>	<b>Sample Result</b>	<b>Duplicate Result</b>	
			C	C	RPD
Arsenic	ug/L	20	778	766	2
Chromium	ug/L	20	390	383	2
Copper	ug/L	20	298	290	3
Lead	ug/L	20	993	981	1

<sup>a</sup>A control limit of  $\pm 20\%$  RPD for each matrix applies for sample values greater than 10 times Detection Limit<sup>b</sup>

**Metals****- 7 -****LABORATORY CONTROL SAMPLE SUMMARY****Client:** Day Engineering, P.C.**SDG No.:** G2353**Contract:** DAYE02**Lab Code:** CHEM**Case No.:** G2353      **SAS No.:** G2353

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
<b>PB83617BS</b>							
Arsenic	ug/L	500	472		94.4	80 - 120	P
Chromium	ug/L	500	476		95.2	80 - 120	P
Copper	ug/L	1000	950		95	80 - 120	P
Lead	ug/L	500	481		96.2	80 - 120	P

**Metals****-9 -****ICP SERIAL DILUTIONS****SAMPLE NO.**

MW-29SL

**Lab Name:** Chemtech Consulting Group**Contract:** DAYE02**Lab Code:** CHEM      **Lb No.:** lb76244**Lab Sample ID :** G2351-06L      **SDG No.:** G2353**Matrix (soil/water):** WATER**Level (low/med):** LOW**Concentration Units:** ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ- ence	Q	M
Arsenic	1.31		0.92	J	30		P
Chromium	0.747	J	10.0	U	100.0		P
Copper	3.07		1.93	J	37		P
Lead	0.104	J	5.0	U	100.0		P

**Metals****-9 -****ICP SERIAL DILUTIONS****SAMPLE NO.**

VE4-11L

**Lab Name:** Chemtech Consulting Group**Contract:** DAYE02**Lab Code:** CHEM      **Lb No.:** lb76244**Lab Sample ID :** G2353-05L      **SDG No.:** G2353**Matrix (soil/water):** WATER**Level (low/med):** LOW**Concentration Units:**

ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ- ence	Q	M
Arsenic	2.3		1.67	J	27		P
Chromium	1.37	J	1.13	J	18		P
Copper	9.24		8.19	J	11		P
Lead	1.55		1.33	J	14		P

METAL  
PREPARATION &  
INSTRUMENT  
DATA

**Metals**

- 10 -

Client: Day Engineering, P.C.

SDG No.: G2353

Contract: DAYE02

Lab Code: CHEM

Case No.: G2353

SAS No.: G2353

Instrument ID: P6

Preparation Method:

Analyte	Wave-length (nm)	MDL	LOD	PQL	Date:
<b>LIQUID</b>					
Method:	<b>6020</b>				
Arsenic	75	0.18	0.5	1	
Chromium	52	0.04	1.0	2	
Copper	63	0.04	1.0	2	
Lead	208	0.04	0.5	1	

**Metals****- 11 -****ICP INTERELEMENT CORRECTION FACTORS**Client: Day Engineering, P.C.SDG No.: G2353Contract: DAYE02Lab Code: CHEMCase No.: G2353 SAS No.: G2353

Instrument ID: \_\_\_\_\_

Date: \_\_\_\_\_

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For:				
		Al	Ca	Fe	Mg	Ag
Arsenic	193.759	0.0000000	0.0000000	-0.0001030	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0001620	0.0000000	0.0000000
Lead	220.353	-0.0001070	0.0000000	0.0000280	0.0000000	0.0000000

**Metals****- 11 -****ICP INTERELEMENT CORRECTION FACTORS**Client: Day Engineering, P.C.SDG No.: G2353Contract: DAYE02Lab Code: CHEMCase No.: G2353 SAS No.: G2353

Instrument ID: \_\_\_\_\_

Date: \_\_\_\_\_

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For:				
		As	Ba	Be	Cd	Co
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0001570
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

**Metals****- 11 -****ICP INTERELEMENT CORRECTION FACTORS**Client: Day Engineering, P.C.SDG No.: G2353Contract: DAYE02Lab Code: CHEMCase No.: G2353 SAS No.: G2353

Instrument ID: \_\_\_\_\_

Date: \_\_\_\_\_

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For:				
		Cr	Cu	K	Mn	Mo
Arsenic	193.759	-0.0011220	0.0000000	0.0000000	0.0000000	0.0015300
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0002280	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0014660
Lead	220.353	-0.0003060	0.0000000	0.0000000	0.0001250	-0.0013650

**Metals****- 11 -****ICP INTERELEMENT CORRECTION FACTORS**Client: Day Engineering, P.C.SDG No.: G2353Contract: DAYE02Lab Code: CHEMCase No.: G2353 SAS No.: G2353

Instrument ID: \_\_\_\_\_

Date: \_\_\_\_\_

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For:				
		Na	Ni	Pb	Sb	Se
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	-0.0049290	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0002444	0.0000000	0.0000000	0.0000000

**Metals****- 11 -****ICP INTERELEMENT CORRECTION FACTORS**Client: Day Engineering, P.C.SDG No.: G2353Contract: DAYE02Lab Code: CHEMCase No.: G2353 SAS No.: G2353

Instrument ID: \_\_\_\_\_

Date: \_\_\_\_\_

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave-Length (nm)	ICP Interelement Correction Factors For:					
		Sn	Ti	Tl	V	Zn	
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	

**Metals****- 12 -****LINEAR RANGES**Client: Day Engineering, P.C.SDG No.: G2353Contract: DAYE02Lab Code: CHEMCase No.: G2353 SAS No.: G2353Instrument ID: P6Date: 02/17/2015

<b>Analyte</b>	<b>Integration</b>	
	<b>Time (sec)</b>	<b>LDR ug/L</b>
Arsenic	0.001	5000
Chromium	0.1	5000
Copper	0.1	10000
Lead	0.1	10000

METAL  
PREPARATION &  
ANALYTICAL  
SUMMARY

**Metals****- 13 -****SAMPLE PREPARATION SUMMARY**

<b>Client:</b>	<u>Day Engineering, P.C.</u>	<b>SDG No.:</b>	<u>G2353</u>
<b>Contract:</b>	<u>DAYE02</u>	<b>Lab Code:</b>	<u>CHEM</u>
		<b>Method:</b>	
		<b>Case No.:</b>	<u>G2353</u>
			<b>SAS No.:</b> <u>G2353</u>

<b>Sample ID</b>	<b>Client ID</b>	<b>Sample</b>	<b>Matrix</b>	<b>Prep Date</b>	<b>Initial Sample Size(mL)</b>	<b>Final Sample Volume (mL)</b>	<b>Percent Solids</b>
		<b>Type</b>					
<b>Batch Number:</b>	<b>PB83617</b>						
G2351-06DUP	MW-29SDUP	DUP	WATER	05/27/2015	50.0	50.0	50.0
G2351-07	MW-29SMS	MS	WATER	05/27/2015	50.0	50.0	50.0
G2351-08	MW-29SMSD	MSD	WATER	05/27/2015	50.0	50.0	50.0
G2353-01	VE1-2	SAM	WATER	05/27/2015	50.0	50.0	50.0
G2353-02	VE1-4	SAM	WATER	05/27/2015	50.0	50.0	50.0
G2353-03	VE2-1	SAM	WATER	05/27/2015	50.0	50.0	50.0
G2353-04	VE3-1	SAM	WATER	05/27/2015	50.0	50.0	50.0
G2353-05	VE4-11	SAM	WATER	05/27/2015	50.0	50.0	50.0
G2353-06	VE4-11MS	MS	WATER	05/27/2015	50.0	50.0	50.0
G2353-07	VE4-11MSD	MSD	WATER	05/27/2015	50.0	50.0	50.0
G2353-08	DAY-1	SAM	WATER	05/27/2015	50.0	50.0	50.0
G2353-09	FIELDBLANK	SAM	WATER	05/27/2015	50.0	50.0	50.0
PB83617BL	PB83617BL	MB	WATER	05/27/2015	50.0	50.0	50.0
PB83617BS	PB83617BS	LCS	WATER	05/27/2015	50.0	50.0	50.0

**metals****- 14 -****ANALYSIS RUN LOG**

Client: Day Engineering, P.C.

Contract: DAYE02

Lab code: CHEM Case no.: G2353

Sas no.: G2353

Sdg no.: G2353

Instrument id number: Method:

Run number: LB76244

Start date: 05/27/2015

End date: 05/27/2015

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1331	As,Cr,Cu,Pb
S1	S1	1	1339	As,Cr,Cu,Pb
S2	S2	1	1355	As,Cr,Cu,Pb
S3	S3	1	1403	As,Cr,Cu,Pb
S4	S4	1	1410	As,Cr,Cu,Pb
S5	S5	1	1418	As,Cr,Cu,Pb
ICV09	ICV09	1	1426	As,Cr,Cu,Pb
ICB09	ICB09	1	1441	As,Cr,Cu,Pb
ICSA09	ICSA09	1	1449	As,Cr,Cu,Pb
ICSAB09	ICSAB09	1	1457	As,Cr,Cu,Pb
ICSA09	ICSA09	10	1505	As,Cr,Cu,Pb
ICSAB09	ICSAB09	10	1513	As,Cr,Cu,Pb
CCV94	CCV94	1	1521	As,Cr,Cu,Pb
CCB94	CCB94	1	1528	As,Cr,Cu,Pb
CCV95	CCV95	1	1710	As,Cr,Cu,Pb
CCB95	CCB95	1	1717	As,Cr,Cu,Pb
CCV96	CCV96	1	1851	As,Cr,Cu,Pb
CCB96	CCB96	1	1859	As,Cr,Cu,Pb
CCV97	CCV97	1	1931	As,Cr,Cu,Pb
CCB97	CCB97	1	1938	As,Cr,Cu,Pb
CRI	CRI	1	1946	As,Cr,Cu,Pb
PB83617BL	PB83617BL	1	2002	As,Cr,Cu,Pb
PB83617BS	PB83617BS	1	2010	As,Cr,Cu,Pb
CCV98	CCV98	1	2105	As,Cr,Cu,Pb
CCB98	CCB98	1	2120	As,Cr,Cu,Pb
G2351-06DUP	MW-29SDUP	1	2215	As,Cr,Cu,Pb
G2351-06L	MW-29SL	5	2231	As,Cr,Cu,Pb
CCV99	CCV99	1	2254	As,Cr,Cu,Pb
CCB99	CCB99	1	2302	As,Cr,Cu,Pb
G2351-07	MW-29SMS	1	2310	As,Cr,Cu,Pb
G2351-08	MW-29SMSD	1	2326	As,Cr,Cu,Pb
CCV01	CCV01	1	0037	As,Cr,Cu,Pb
CCB01	CCB01	1	0045	As,Cr,Cu,Pb
G2353-01	VE1-2	1	0108	As,Cr,Cu,Pb
G2353-02	VE1-4	1	0124	As,Cr,Cu,Pb
G2353-03	VE2-1	1	0140	As,Cr,Cu,Pb
G2353-04	VE3-1	1	0155	As,Cr,Cu,Pb
CCV02	CCV02	1	0219	As,Cr,Cu,Pb
CCB02	CCB02	1	0227	As,Cr,Cu,Pb
G2353-05	VE4-11	1	0235	As,Cr,Cu,Pb
G2353-05L	VE4-11L	5	0250	As,Cr,Cu,Pb
G2353-06	VE4-11MS	1	0306	As,Cr,Cu,Pb
G2353-07	VE4-11MSD	1	0322	As,Cr,Cu,Pb

**metals****- 14 -****ANALYSIS RUN LOG**Client: Day Engineering, P.C.Contract: DAYE02Lab code: CHEM Case no.: G2353Sas no.: G2353Sdg no.: G2353

Instrument id number: \_\_\_\_\_ Method: \_\_\_\_\_

Run number: LB76244Start date: 05/27/2015End date: 05/27/2015

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
CCV03	CCV03	1	0401	As,Cr,Cu,Pb
CCB03	CCB03	1	0409	As,Cr,Cu,Pb
G2353-08	DAY-1	1	0417	As,Cr,Cu,Pb
G2353-09	FIELDBLANK	1	0432	As,Cr,Cu,Pb
CCV04	CCV04	1	0456	As,Cr,Cu,Pb
CCB04	CCB04	1	0504	As,Cr,Cu,Pb
CCV05	CCV05	1	0638	As,Cr,Cu,Pb
CCB05	CCB05	1	0646	As,Cr,Cu,Pb
CCV06	CCV06	1	0821	As,Cr,Cu,Pb
CCB06	CCB06	1	0829	As,Cr,Cu,Pb
CCV07	CCV07	1	1003	As,Cr,Cu,Pb
CCB07	CCB07	1	1011	As,Cr,Cu,Pb
CCV08	CCV08	1	1139	As,Cr,Cu,Pb
CCB08	CCB08	1	1146	As,Cr,Cu,Pb
CCV09	CCV09	1	1242	As,Cr,Cu,Pb
CCB09	CCB09	1	1250	As,Cr,Cu,Pb

# SHIPPING DOCUMENTS

# CHEMTECH

284 Sheffield Street, Mountainside, NJ 07092  
 (908) 789-8900 Fax (908) 789-8922  
[www.chemtech.net](http://www.chemtech.net)

## CHAIN OF CUSTODY RECORD

CHEMTECH PROJECT NO. G72353  
 QUOTE NO.

COC Number 034869

CLIENT INFORMATION		CLIENT PROJECT INFORMATION		CLIENT BILLING INFORMATION							
COMPANY: Day Engineering		PROJECT NAME: MNR Hammond DRZ		BILL TO: Same							
ADDRESS: 1563 Lyell Ave		PROJECT NO.: Location: Harmony Yacht		PO#:							
CITY: Rochester		STATE: NY ZIP: 14606		CITY: 6100 STATE: ZIP:							
ATTENTION: Ray Kampf		PROJECT MANAGER: Ray Kampf		ATTENTION: / PHONE:							
PHONE: 585 454 0210		FAX: 585 454 0210		FAX: 585 454 0210							
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		ANALYSIS							
FAX: _____ DAYS: _____		□ LEVEL 1: Results only □ LEVEL 2: Results + QC		Benzene, chlorobenzene, 2-methylphenol, 8000							
HARD COPY: _____ DAYS: _____		□ LEVEL 3: Results (plus results raw data) + QC		CP51 VOL <sup>3</sup> , -							
EDD: _____ 10 DAYS.		□ LEVEL 4: Results + QC (all raw data)		PCBs, Arsenic, Chromium, DPPG, Lead							
PREAPPROVED TAT: <input type="checkbox"/> YES <input type="checkbox"/> NO		□ EDD Format: NYDEC Equis									
* STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS											
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE	SAMPLE COLLECTION	DATE	TIME	# OF BOTTLES	PRESERVATIVES		COMMENTS	
								A	E		E
1. VE 1-2			X	5/20/15		5	X	X	X	X	
2. VE 1-4			X	5/20/15		5	X	X	X	X	
3. VE 2-1			X	5/20/15		5	X	X	X	X	
4. VE 3-1			X	5/19/15		5	X	X	X	X	
5. VE 4-11			X	5/19/15		5	X	X	X	X	
6. VE 4-11 MS			X	5/19/15		5	X	X	X	X	
7. VE 4-11 MSD			X	5/19/15		5	X	X	X	X	
8. DAY-1			X	5/19/15		5	X	X	X	X	
9. FIELD BLANK			X	5/20/15		5	X	X	X	X	
10.											
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY											
RELINQUISHED BY SAMPLER:		DATETIME: 5/21/15 0700		RECEIVED BY: 1350		Conditions of bottles or coolers at receipt: MeOH extraction requires an additional 4 oz jar for percent solid.		Specify Preservative: A-HCl B-HNO <sub>3</sub> C-H <sub>2</sub> SO <sub>4</sub> D-NaOH E-ICE F-Other			Comments: Ice in Cooler?: <input checked="" type="checkbox"/>
1. Trosick		DATETIME:		RECEIVED BY:				206			
2. RELINQUISHED BY:		DATETIME:		RECEIVED FOR LAB BY:				206			
3. 		DATETIME: 5/21/15 0700		RECEIVED FOR LAB BY: P.S.		SHIPPED VIA: CLIENT: <input type="checkbox"/> HAND DELIVERED <input type="checkbox"/> OVERNIGHT <input checked="" type="checkbox"/> PICKED UP <input type="checkbox"/> OVERNIGHT		Shipment Complete: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
Page ____ of ____											

**From:** Ray Kampff <RKampff@daymail.net>  
**Sent:** Friday, May 22, 2015 12:08 PM  
**To:** Snehal Mehta  
**Subject:** RE: MNR Samples picked up on 5/21

Yes OK to adjust pH

---

**From:** Snehal Mehta [mailto:Snehal@chemtech.net]  
**Sent:** Friday, May 22, 2015 11:59 AM  
**To:** Ray Kampff  
**Subject:** MNR Samples picked up on 5/21

Ray,

Just left you a voice mail about samples picked up on 5/21. We have created 3-separate work orders as attached COCs indicates three different site/locations. Four samples listed below will need you permission to adjust the pH to proceed with Metals analysis as it's received with Ph > 2.

- VE2-1
- VE3-1
- DAY-1
- VE4-11

Regards,

Snehal Mehta

Tel. 908 728 3149  
Fax: 908-789-8514



The advertisement for ChemTech Environmental Laboratory features a white header with the company name "CHEMTECH" in large blue letters, followed by "Working in Partnership for a Better Environment". Below this, there are two photographs: one showing laboratory glassware and another showing laboratory equipment. The right side of the ad is blue with white text: "A full-service Environmental Laboratory" and "Since 1987". At the bottom, addresses and contact information are provided for two locations: New Jersey (284 Sheffield Street, Mountainside, NJ 07092, Phone: (908) 789-8900, Fax: (908) 789-8922) and Maryland (7210 Corporate Court, Frederick, MD 21704, Phone: (240) 215-3990, Fax: (908) 789-8922). Logos for NELAC and other accreditation bodies are also present.



284 Sheffield Street Mountainside NJ 07092 Tel. 908-7898900

## Laboratory Certification

<b>State</b>	<b>License No.</b>
New Jersey	20012
New York	11376
Connecticut	PH-0649
Florida	E87935
Louisiana	5035
Maryland	296
Massachusetts	M-NJ503
Pennsylvania	68-548
Rhode Island	LAO00259
Virginia	460220
Texas	T10470448-10-1

Other :

DOD ELAP Certified (L-A-B Accredited), ISO/IEC 17025	L2219
Soil Permit	P330-11-00012
CLP Inorganic Contract	EPW09038
CLP Organic Contract	EPW11030

QA Control Code: A2070148