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From:
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Date:
July 25, 2018

Arcadis Project No.:
B0064607.2018

Subject:
RACER Pontiac North Campus - 2018 Additional PCB Delineation
Summary

INTRODUCTION

Arcadis of Michigan, LLC (Arcadis) prepared this Polychlorinated Biphenyl (PCB) Delineation Summary report on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust for the Pontiac North Campus Site (the Site) located in Pontiac, Michigan (**Figure 1**). Additional PCB delineation activities were conducted on June 21-22, 2018 to further refine the conceptual site model (CSM) and areas subject to interim soil corrective measures being proposed for the Site.

The objective of June 2018 investigation activities was to collect additional soil samples for PCB analysis to address data gaps and more accurately delineate the vertical and horizontal extent of impacted soil areas containing >100 parts per million (ppm) PCBs within Area of Interest (AOI) W-1 (light non-aqueous phase liquid [LNAPL] Area No. 1/7) west of the existing United States Postal Service (USPS) distribution facility (**Figure 2**). Previous investigation activities were conducted in 2014 to 2015 and summarized in the *RACER Pontiac North Campus – 2014 – 2015 PCB Investigation Summary* (Arcadis 2015), conducted in October-November 2017 and summarized in the *RACER Pontiac North Campus – 2017 PCB Delineation Summary* (Arcadis 2018a), and also conducted on March 19-22, 2018 and summarized in *RACER Pontiac North Campus – 2018 PCB Delineation Summary* (Arcadis 2018b). Consistent with the description of field activities and soil sampling methodology described below and used in the most recent two investigations, this investigation was conducted in accordance with the recommendations made in the 2018 PCB Delineation Summary memo report as approved by the United States Environmental Protection Agency (USEPA) via a May 22, 2018 email correspondence.

FIELD ACTIVITIES

Field activities were completed on-Site from June 20 through 21, 2018. Prior to completing 6 soil borings, the boring locations were cleared by a private utility locator. Soil borings were advanced using a sonic drill rig. These activities were performed in accordance with objectives, sampling methodologies, and analytical procedures set forth in the Field Sampling Plan (FSP; Encore 2001a) and Quality Assurance Project Plan (QAPP; Encore 2001b).

SOIL SAMPLING

Soil borings were completed to delineate locations where analytical data have indicated PCB concentrations higher than 100 ppm in soil in borings completed in 2014, 2015, and 2017. While no such locations were identified in 13 samples collected in the March 2018 investigation, the desire to delineate the horizontal distance between clean borings to within approximately 30 feet resulted in five additional borings. The sixth location was selected based on the results field screening performed during field work. Soil samples were collected continuously with a sonic sampler to the water table, which ranged in depth from 15 to 22 feet below ground surface (bgs). Soil samples were field screened using Oil-In-Soil™ dye test kits for the presence of LNAPL biasing screening from depths with previously identified elevated photoionization detector (PID) readings, odors, or sheen/LNAPL observations. Approximately eight to ten soil samples were collected at each boring location (approximately one every 2 feet). All soil samples were submitted to Merit Laboratories in East Lansing, Michigan (Merit). Soil samples were transported under chain of custody to Merit for laboratory analysis of PCBs by United States Environmental Protection Agency (USEPA) Method 8082. One duplicate sample was collected for every 10 regular soil samples, and one matrix spike/matrix spike duplicate (MS/MSD) sample was collected for every 20 regular soil samples.

PCB DELINEATION RESULTS

Four areas within AOI W-1 (LNAPL Area No. 1/7) were targeted for PCB delineation: North Area 1, North Area 2, South Area 1, and South Area 2. Delineation sample locations from these four areas are shown on **Figure 2**. PCB concentration results for soil samples are shown in **Table 1**. Soil laboratory analytical reports are included in **Attachment 1**. Soil boring logs are attached in **Attachment 2**. Of note, in the June 2018 investigation analytical results, only one soil sample obtained at the SB-118 location from the 12- to 14-foot interval exceeded 100 ppm PCBs. This is also the location where field screening results led to the installation of the sixth soil boring location. PCB analytical results from other intervals at the SB-118 location and at the other five soil boring locations were all less than 100 ppm. Refined horizontal delineation boundaries, as well the refined estimated maximum extent of PCB impacts in soil greater than 100 ppm above the approximate groundwater elevation as of the October 2017 gauging event, are also depicted on the cross section transect map (**Figure 3**) and cross sections A-A' and B-B' (**Figures 4A** and **4B**, respectively).

North Area 1

Three soil borings (SB-117-18, SB-118-18, and SB-119-18) were completed in this area. SB-117-18 was completed between SB-38-14 and SB-59-14, and SB-118-18 was completed between SB-58-14 and SB-102-18. Based on the results of field screening with the Oil-In-Soil™ dye test kit, SB-119-18 was completed further northeast of SB-118-18 equidistant from SB-58-14 and SB-102-18. The PCB concentrations in soil samples collected from SB-117-18 ranged from non-detect (ND) to 75 ppm PCBs.

The highest concentration of 75 ppm PCBs in soil was detected in the 6- to 8-foot interval. The PCB concentrations in soil samples collected from SB-118-18 ranged from non-detect (ND) to 345 ppm PCBs. The highest concentration of 345 ppm PCBs in soil was detected in the 12- to 14-foot interval. The PCB concentrations in soil samples collected from SB-119-18 ranged from non-detect (ND) to 2 ppm PCBs. The highest concentration of 2 ppm PCBs in soil was detected in the 2- to 4-foot interval. Delineation is complete given that SB-119-18 was a step-out from SB-118-18, and within 30-feet of SB-58-14, SB-102-18 and SB-118-18. The extent of impacted soil greater than 100 ppm PCBs in North Area 1 is vertically delineated to approximately two-foot intervals down to the approximate groundwater elevation and horizontally delineated to an approximately 30-foot distance in all directions.

North Area 2

Two soil borings (SB-120-18 and SB-121-18) were completed in this area. SB-120-18 was completed between SB-89-17 and SB-46-14, and SB-121-18 was completed between SB-46-14 and SB-106-18. The PCB concentrations in soil samples collected from the two soil borings ranged from ND to 48 ppm PCBs. The highest concentration of 48 ppm PCBs in soil was detected in the 16- to 18-foot interval in SB-121-18. All soil samples collected in these borings had PCB detections less than 100 ppm. The extent of impacted soil greater than 100 ppm PCBs in North Area 2 is vertically delineated to approximately two-foot intervals down to the approximate groundwater elevation and horizontally delineated to an approximately 30-foot distance in all directions.

South Area 1 and South Area 2

One soil boring (SB-116-18) was completed between SB-43-14 (South Area 1) and SB-111-18 (South Area 2) at the intersection of the two areas. The PCB concentrations in the soil samples collected from the soil boring ranged from ND to 79 ppm PCBs. The highest concentration of 79 ppm PCBs in soil was detected in the 12- to 14-foot interval. The extent of impacted soil greater than 100 ppm PCBs in South Area 1 and South Area 2 is vertically delineated to approximately two-foot intervals down to the approximate groundwater elevation and horizontally delineated to an approximately 30-foot distance in all directions.

CONCLUSIONS

Based on the results presented in the previous sections, no additional delineation is recommended at this time. The extent of PCB-impacted soil being proposed for interim corrective measures at the Site has been defined vertically at two-foot intervals down to the the approximate groundwater elevation and horizontally to a distance of no greater than 30 feet. An Interim Measures / TSCA Risk-Based Soil Corrective Measures Work Plan is being prepared to address delineated impacts exceeding 100 ppm PCBs.

Enclosures:

Table

Table 1 Soil Analytical Results

Figures

Figure 1 Site Location

Figure 2 Site Layout

Figure 3 LNAPL Area No. 1/7 Cross Section Transect Map

arcadis.com

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Figure 4A Cross Section A-A'
Figure 4B Cross Section B-B'

Attachments

Attachment 1 Analytical Reports
Attachment 2 Soil Boring Logs

References:

Encore. 2001a. Field Sampling Plan, Pontiac North Campus. General Motors Corporation, Pontiac, Michigan. May 2001.

Encore. 2001b. RFI Work Plan, Pontiac North Campus. General Motors Corporation, Pontiac, Michigan. May 15, 2001.

Arcadis. 2015. RACER Pontiac North Campus - 2014-2015 PCB Investigation Summary. August 2015.

Arcadis. 2018a. RACER Pontiac North Campus - 2017 PCB Investigation Summary. February 27, 2018.

Arcadis. 2018b. RACER Pontiac North Campus - 2018 PCB Investigation Summary. May 8, 2018.

TABLES



Table 1
Soil Analytical Results (June 2018)
RACER - Pontiac North Campus
Pontiac, Michigan

Location Code	Sample Code	Sample Date	Sample Depth (feet bgs)	Aroclor-1016 (PCB-1016) (µg/kg)	Aroclor-1221 (PCB-1221) (µg/kg)	Aroclor-1232 (PCB-1232) (µg/kg)	Aroclor-1242 (PCB-1242) (µg/kg)	Aroclor-1248 (PCB-1248) (µg/kg)	Aroclor-1254 (PCB-1254) (µg/kg)	Aroclor-1260 (PCB-1260) (µg/kg)	Total PCBs (µg/kg)
SB-115-18	SB-115-18_(0-2) (03-22-2018)	3/22/2018	0 - 2	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-115-18	SB-115-18_(2-4) (03-22-2018)	3/22/2018	2 - 4	< 330 U	< 330 U	< 330 U	< 330 U	1,100	< 330 U	< 330 U	1,100
SB-115-18	SB-115-18_(4-6) (03-22-2018)	3/22/2018	4 - 6	< 600 UY	< 600 UY	< 600 UY	< 600 UY	5,000 Y	< 600 UY	< 600 UY	5,000
SB-115-18	SB-115-18_(6-8) (03-22-2018)	3/22/2018	6 - 8	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-115-18	SB-115-18_(10-12) (03-22-2018)	3/22/2018	10 - 12	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-115-18	SB-115-18_(12-14) (03-22-2018)	3/22/2018	12 - 14	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-115-18	SB-115-18_(14-16) (03-22-2018)	3/22/2018	14 - 16	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-115-18	SB-115-18_(16-18) (03-22-2018)	3/22/2018	16 - 18	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-115-18	SB-115-18_(18-20) (03-22-2018)	3/22/2018	18 - 20	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]
SB-115-18	SB-115-18_(20-22) (03-22-2018)	3/22/2018	20 - 22	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-116-18	SB-116-18_(0-2) (06-21-2018)	6/21/2018	0 - 2	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-116-18	SB-116-18_(2-4) (06-21-2018)	6/21/2018	2 - 4	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-116-18	SB-116-18_(4-6) (06-21-2018)	6/21/2018	4 - 6	< 6,000 UY	< 6,000 UY	< 6,000 UY	< 6,000 UY	37,000 Y	< 6,000 UY	< 6,000 UY	37,000
SB-116-18	SB-116-18_(6-8) (06-21-2018)	6/21/2018	6 - 8	< 6,000 UY	< 6,000 UY	< 6,000 UY	< 6,000 UY	19,000 Y	< 6,000 UY	< 6,000 UY	19,000
SB-116-18	SB-116-18_(8-10) (06-21-2018)	6/21/2018	8 - 10	< 330 U	< 330 U	< 330 U	< 330 U	1,000	< 330 U	< 330 U	1,000
SB-116-18	SB-116-18_(10-12) (06-21-2018)	6/21/2018	10 - 12	< 2,000 UY	< 2,000 UY	< 2,000 UY	< 2,000 UY	7,000 Y	< 2,000 UY	< 2,000 UY	7,000
SB-116-18	SB-116-18_(12-14) (06-21-2018)	6/21/2018	12 - 14	< 13,000 UY	< 13,000 UY	< 13,000 UY	< 13,000 UY	< 13,000 UY	79,000 Y	< 13,000 UY	79,000
SB-116-18	SB-116-18_(14-15) (06-21-2018)	6/21/2018	14 - 15	< 7,000 UY	< 7,000 UY	< 7,000 UY	< 7,000 UY	34,000 Y	< 7,000 UY	< 7,000 UY	34,000
SB-117-18	SB-117-18_(0-2) (06-21-2018)	6/21/2018	0 - 2	< 330 U	< 330 U	< 330 U	< 330 U	400	< 330 U	< 330 U	400
SB-117-18	SB-117-18_(2-4) (06-21-2018)	6/21/2018	2 - 4	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-117-18	SB-117-18_(4-6) (06-21-2018)	6/21/2018	4 - 6	< 600 UY	< 600 UY	< 600 UY	3,300 Y	< 600 UY	< 600 UY	< 600 UY	3,300
SB-117-18	SB-117-18_(6-8) (06-21-2018)	6/21/2018	6 - 8	< 11,000 UY	< 11,000 UY	< 11,000 UY	75,000 Y	< 11,000 UY	< 11,000 UY	< 11,000 UY	75,000
SB-117-18	SB-117-18_(8-10) (06-21-2018)	6/21/2018	8 - 10	< 1,000 UY	< 1,000 UY	< 1,000 UY	7,000 Y	< 1,000 UY	< 1,000 UY	< 1,000 UY	7,000
SB-117-18	SB-117-18_(10-12) (06-21-2018)	6/21/2018	10 - 12	< 3,000 UY	< 3,000 UY	< 3,000 UY	21,000 Y	< 3,000 UY	< 3,000 UY	< 3,000 UY	21,000
SB-117-18	SB-117-18_(12-14) (06-21-2018)	6/21/2018	12 - 14	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-117-18	SB-117-18_(14-16) (06-21-2018)	6/21/2018	14 - 16	< 1,000 UY	< 1,000 UY	< 1,000 UY	6,000 Y	< 1,000 UY	< 1,000 UY	< 1,000 UY	6,000
SB-117-18	SB-117-18_(16-18) (06-21-2018)	6/21/2018	16 - 18	< 2,000 UY	< 2,000 UY	< 2,000 UY	12,000 Y	< 2,000 UY	< 2,000 UY	< 2,000 UY	12,000
SB-117-18	SB-117-18_(18-20) (06-21-2018)	6/21/2018	18 - 20	< 330 U	< 330 U	< 330 U	1,200	< 330 U	< 330 U	< 330 U	1,200
SB-118-18	SB-118-18_(0-2) (06-21-2018)	6/21/2018	0 - 2	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-118-18	SB-118-18_(2-4) (06-21-2018)	6/21/2018	2 - 4	< 16,000 UY	< 16,000 UY	< 16,000 UY	93,000 Y	< 16,000 UY	< 16,000 UY	< 16,000 UY	93,000
SB-118-18	SB-118-18_(4-6) (06-21-2018)	6/21/2018	4 - 6	< 2,000 UY	< 2,000 UY	< 2,000 UY	13,000 Y	< 2,000 UY	< 2,000 UY	< 2,000 UY	13,000
SB-118-18	SB-118-18_(8-10) (06-21-2018)	6/21/2018	8 - 10	< 2,000 UY	< 2,000 UY	< 2,000 UY	11,000 Y	< 2,000 UY	< 2,000 UY	< 2,000 UY	11,000
SB-118-18	SB-118-18_(12-14) (06-21-2018)	6/21/2018	12 - 14	< 61,000 UY	< 61,000 UY	< 61,000 UY	< 61,000 UY	345,000 Y	< 61,000 UY	< 61,000 UY	345,000
SB-118-18	SB-118-18_(16-18) (06-21-2018)	6/21/2018	16 - 18	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-118-18	SB-118-18_(18-20) (06-21-2018)	6/21/2018	18 - 20	< 3,000 UY	< 3,000 UY	< 3,000 UY	< 3,000 UY	11,000 Y	< 3,000 UY	< 3,000 UY	11,000
SB-118-18	SB-118-18_(20-22) (06-21-2018)	6/21/2018	20 - 22	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-119-18	SB-119-18_(0-2) (06-21-2018)	6/21/2018	0 - 2	< 330 U	< 330 U	< 330 U	< 330 U	1,300	< 330 U	< 330 U	1,300
SB-119-18	SB-119-18_(2-4) (06-21-2018)	6/21/2018	2 - 4	< 330 U	< 330 U	< 330 U	< 330 U	2,000	< 330 U	< 330 U	2,000
SB-119-18	SB-119-18_(4-6) (06-21-2018)	6/21/2018	4 - 6	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	500 [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	500 [< 330 U]
SB-119-18	SB-119-18_(6-8) (06-21-2018)	6/21/2018	6 - 8	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-119-18	SB-119-18_(8-10) (06-21-2018)	6/21/2018	8 - 10	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]
SB-119-18	SB-119-18_(10-12) (06-21-2018)	6/21/2018	10 - 12	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-119-18	SB-119-18_(12-14) (06-21-2018)	6/21/2018	12 - 14	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-119-18	SB-119-18_(14-15) (06-21-2018)	6/21/2018	14 - 15	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-120-18	SB-120-18_(0-2) (06-21-2018)	6/21/2018	0 - 2	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-120-18	SB-120-18_(2-4) (06-21-2018)	6/21/2018	2 - 4	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-120-18	SB-120-18_(4-6) (06-21-2018)	6/21/2018	4 - 6	< 330 U	< 330 U	< 330 U	900	< 330 U	< 330 U	< 330 U	900
SB-120-18	SB-120-18_(6-8) (06-21-2018)	6/21/2018	6 - 8	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-120-18	SB-120-18_(8-10) (06-21-2018)	6/21/2018	8 - 10	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	1,500 [330]	< 330 U [< 330 U]	1,500 [330]
SB-120-18	SB-120-18_(10-12) (06-21-2018)	6/21/2018	10 - 12	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-120-18	SB-120-18_(12-14) (06-21-2018)	6/21/2018	12 - 14	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-120-18	SB-120-18_(14-15) (06-21-2018)	6/21/2018	14 - 15	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-121-18	SB-121-18_(0-2) (06-21-2018)	6/22/2018	0 - 2	< 330 U	< 330 U	< 330 U	< 330 U	330	< 330 U	< 330 U	330
SB-121-18	SB-121-18_(2-4) (06-21-2018)	6/22/2018	2 - 4	< 330 U	< 330 U	< 330 U	< 330 U	200	< 330 U	< 330 U	200
SB-121-18	SB-121-18_(4-6) (06-21-2018)	6/22/2018	4 - 6	< 330 U	< 330 U	< 330 U	< 330 U	1,100	< 330 U	< 330 U	1,100
SB-121-18	SB-121-18_(6-8) (06-21-2018)	6/22/2018	6 - 8	< 600 UY	< 600 UY	< 600 UY	< 600 UY	3,500 Y	< 600 UY	< 600 UY	3,500
SB-121-18	SB-121-18_(8-10) (06-21-2018)	6/22/2018	8 - 10	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]	< 330 U [< 330 U]
SB-121-18	SB-121-18_(10-12) (06-21-2018)	6/22/2018	10 - 12	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	400	< 330 U	400
SB-121-18	SB-121-18_(12-14) (06-21-2018)	6/22/2018	12 - 14	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U	< 330 U
SB-121-18	SB-121-18_(14-16) (06-21-2018)	6/22/2018	14 - 16	< 330 U	< 330 U	< 330 U	600	< 330 U	< 330 U	< 330 U	600
SB-121-18	SB-121-18_(16-18) (06-21-2018)	6/22/2018	16 - 18	< 6,000 UY [< 6,000 UY]	< 6,000 UY [< 6,000 UY]	< 6,000 UY [< 6,000 UY]	< 6,000 UY [< 6,000 UY]	48,000 Y [55,000 Y]	< 6,000 UY [< 6,000 UY]	< 6,000 UY [< 6,000 UY]	48,000 [55,000]

Notes:

All results are listed in micrograms per kilogram (µg/kg).
Duplicate sample results are in brackets.
shade Result exceeds 100,000 µg/kg.

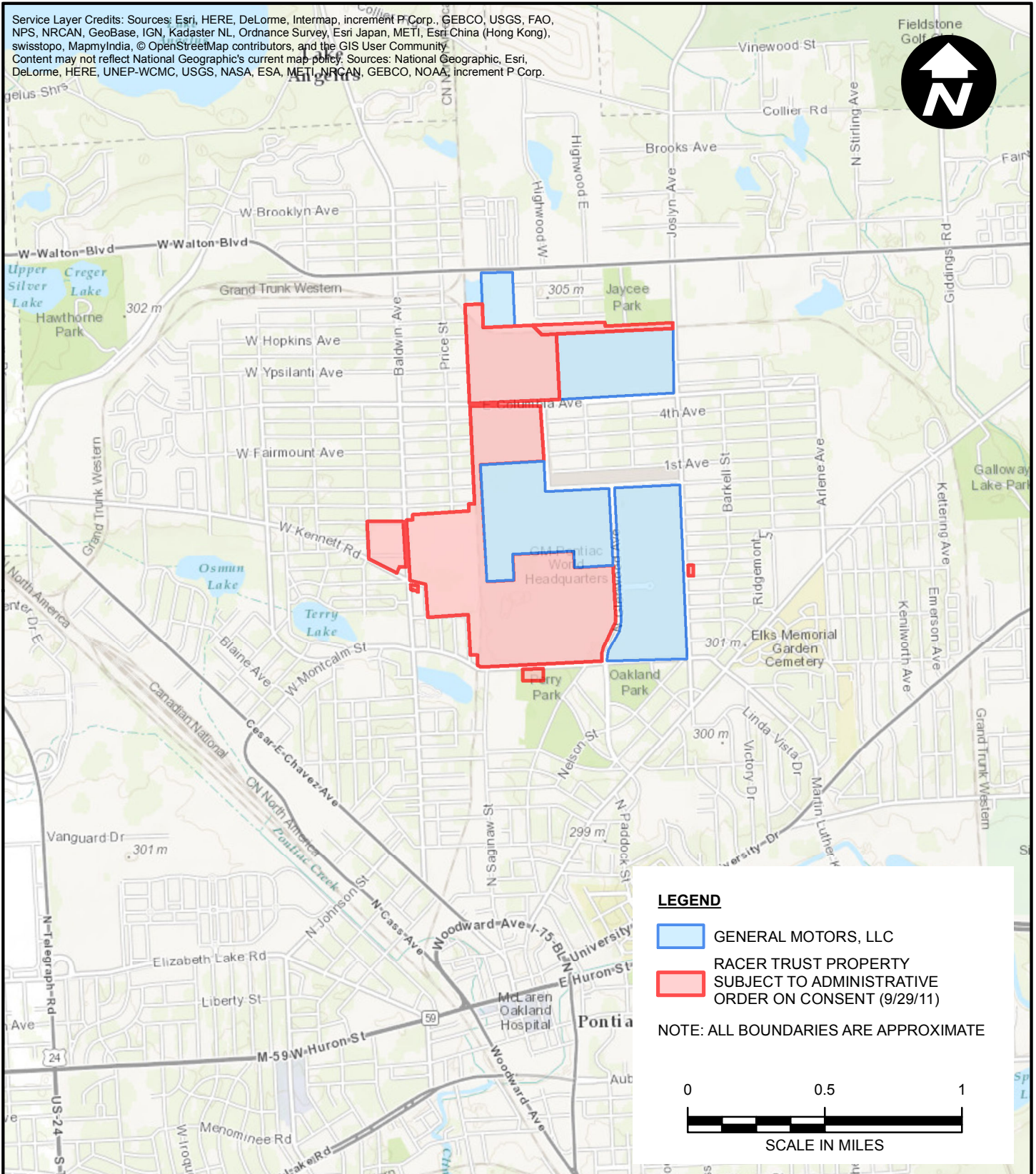
Abbreviations:

bgs Below ground surface
PCB Polychlorinated biphenyl
U Indicates the analyte was analyzed for but not detected
Y Elevated reporting limit due to high target concentration

FIGURES



Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
 Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.



LEGEND

- GENERAL MOTORS, LLC
- RACER TRUST PROPERTY
- SUBJECT TO ADMINISTRATIVE ORDER ON CONSENT (9/29/11)

NOTE: ALL BOUNDARIES ARE APPROXIMATE



PROJECT NUMBER: B0064411.0001.00145
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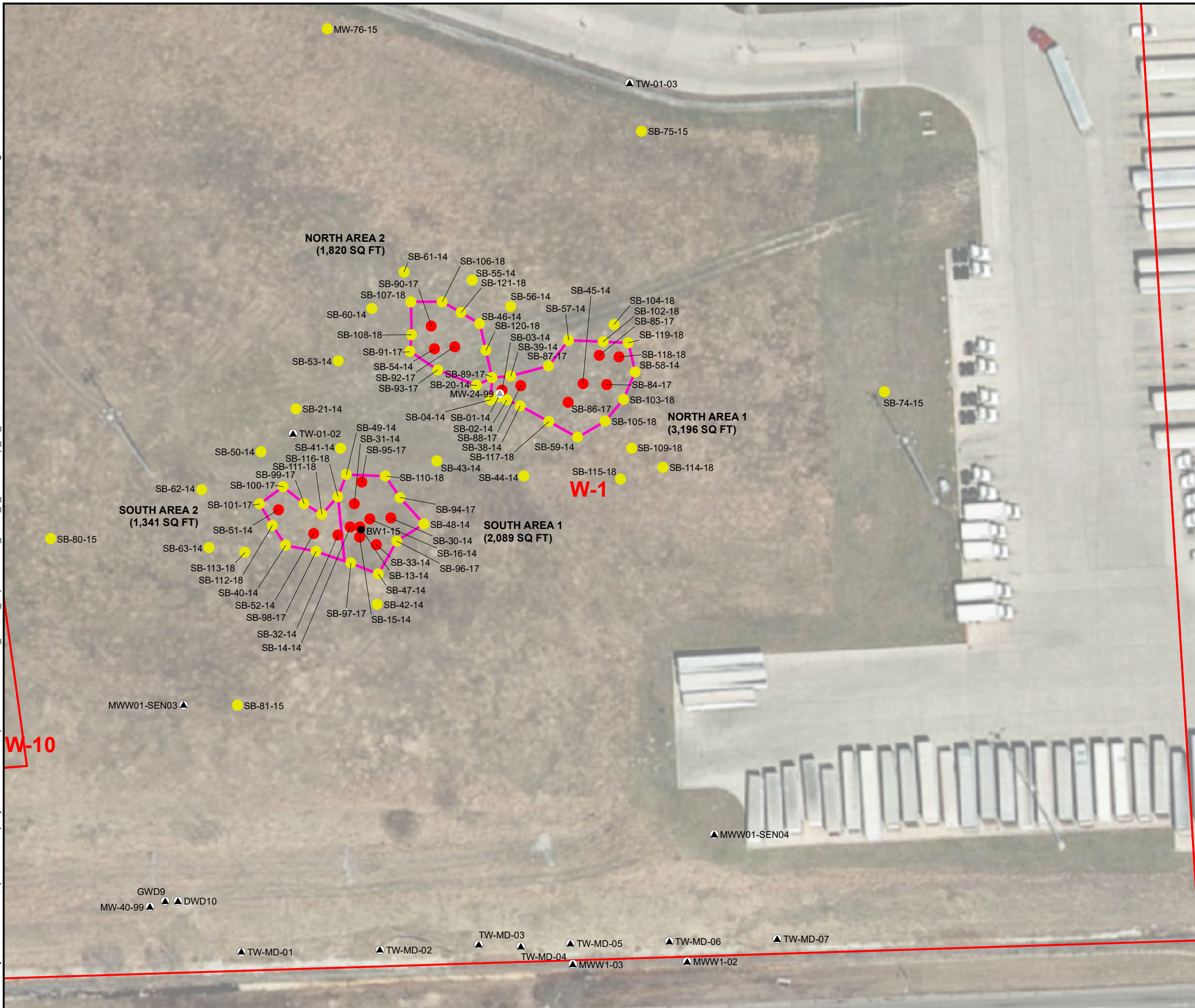


RACER TRUST
 PONTIAC NORTH CAMPUS
 PONTIAC, MICHIGAN

SITE LOCATION

Design & Consultancy
 for natural and
 built assets

FIGURE
1



LEGEND

- SOIL BORING PCBS IN SOIL > 100PPM
- SOIL BORING PCBS IN SOIL < 100PPM
- ▲ EXISTING MONITORING WELL
- ▲ MONITORING WELL (ABANDONED)
- SOIL BORING
- PROPERTY BOUNDARY
- ESTIMATED MAXIMUM EXTENT OF PCB IMPACTS > 100PPM IN SOIL
- AREAS OF INTEREST

LNAPL - LIGHT NON-AQUEOUS PHASE LIQUID
 PCBS - POLYCHLORINATED BIPHENYLS
 ppm - PARTS PER MILLION

0 60 120

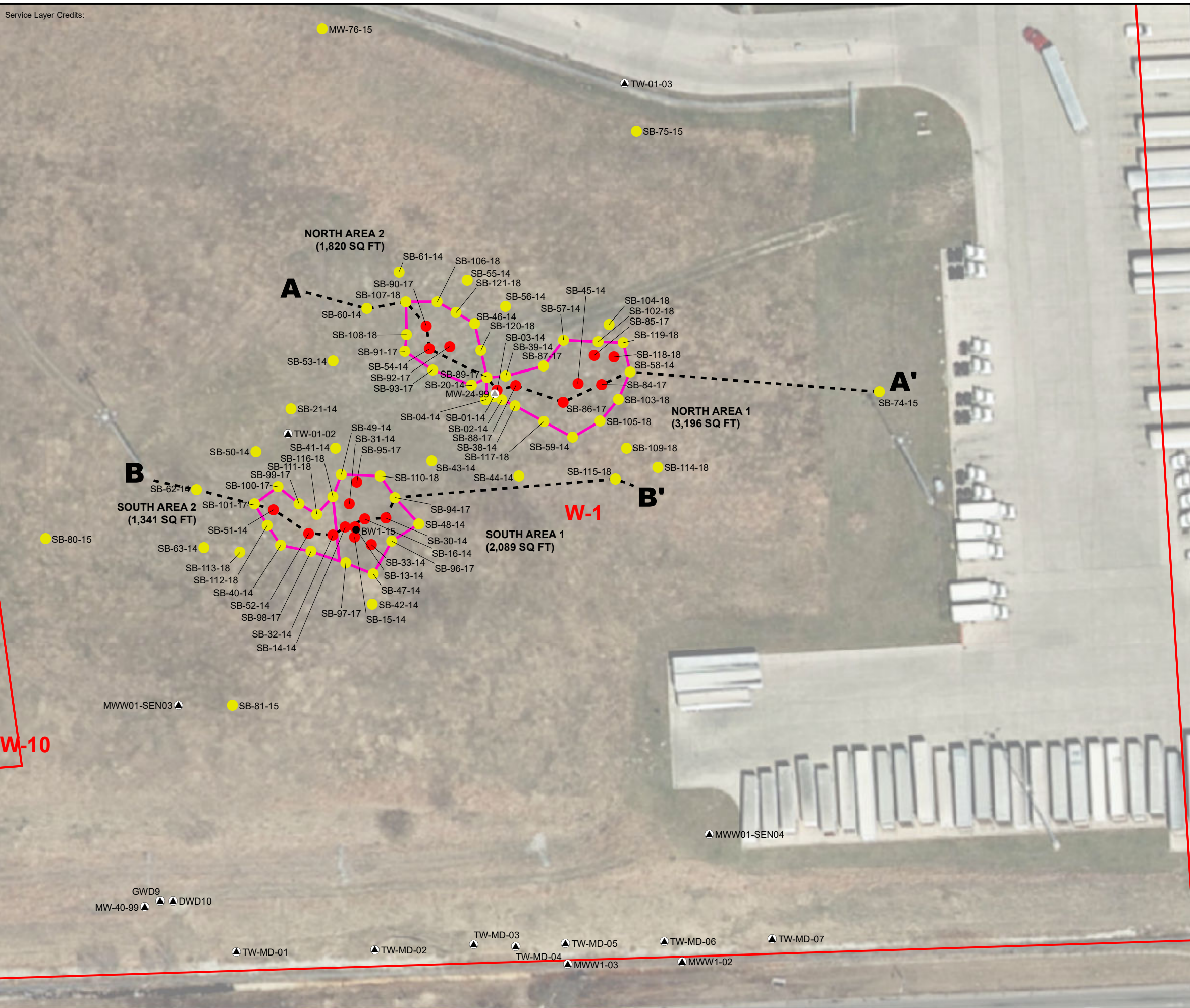
SCALE IN FEET

RACER TRUST
 PONTIAC NORTH CAMPUS
 PONTIAC, MICHIGAN

**LNAPL AREA No. 1/7
 CONCENTRATIONS IN SOIL**



CITY: Novi DIV: ENV DB: TRY PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
D:\GIS\Project Files\MotorsLiquidation\Company\Pontiac\North Campus\Documents\PCB_LNAPL_Report\LNAPL_Area1_7_SectionMap_v2\SectionMap_201807.mxd PLOTTED: 7/19/2018 2:47:26 PM BY: TYarbrough




LEGEND

- SOIL BORING PCBs IN SOIL >
 - SOIL BORING PCBs IN SOIL <
 - ▲ EXISTING MONITORING
 - ▲ MONITORING WELL
 - SOIL BORING
 - - - - - CROSS-SECTION
 - - - - - PROPERTY BOUNDARY
 - ESTIMATED MAXIMUM EXTENT OF PCB IMPACTS > 100PPM IN SOIL
 - AREAS OF INTEREST
- LNAPL - LIGHT NON-AQUEOUS PHASE LIQUID
PCBS - POLYCHLORINATED BIPHENYLS
ppm - PARTS PER MILLION



RACER TRUST
PONTIAC NORTH CAMPUS
PONTIAC, MICHIGAN

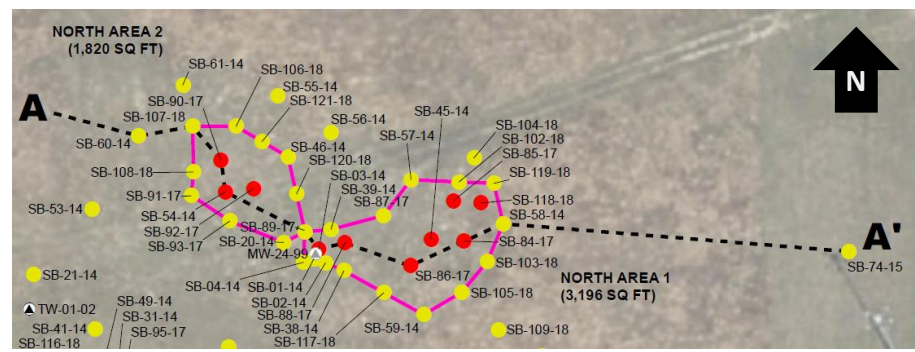
**LNAPL AREA No. 1/7
CROSS-SECTION TRANSECT MAP**



Design & Consultancy
for natural and
built assets

FIGURE

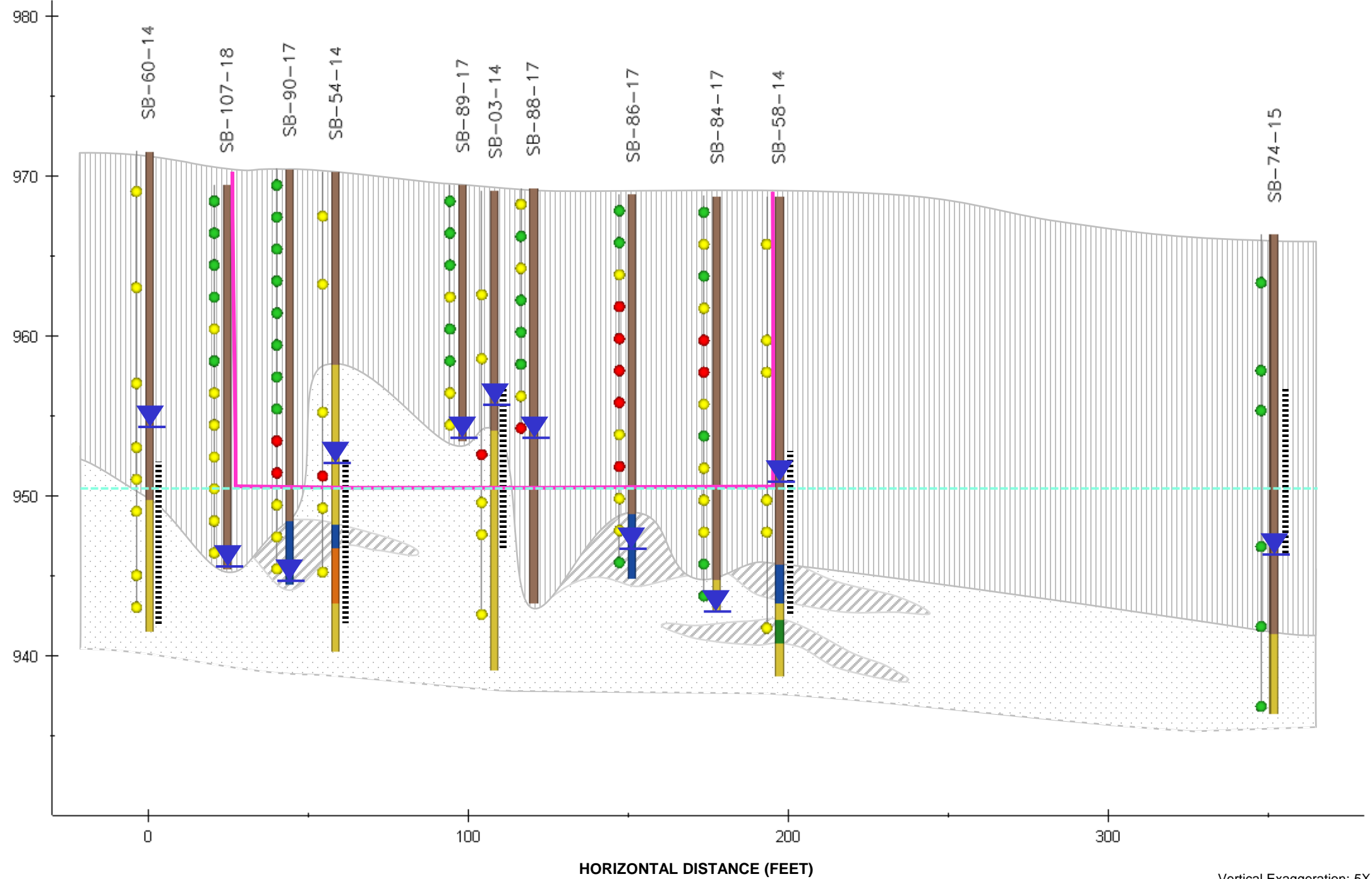
3



A WEST

A' EAST

ELEVATION (FEET ABOVE MEAN SEA LEVEL)



Vertical Exaggeration: 5X

Please refer to Figure 3 (cross section transect map) for detailed symbology descriptions of symbols present on the aerial map.

PCB – Polychlorinated biphenyls
PPM – Parts per million

Generalized Stratigraphy

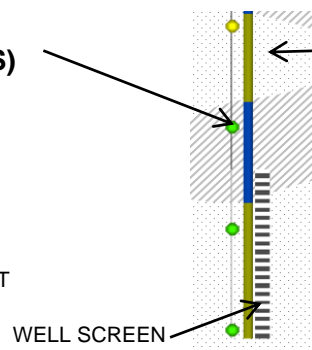
- CONCRETE
- FILL MATERIAL
- GLACIAL OUTWASH DEPOSITS COMPRISED PRIMARILY OF SANDS AND GRAVELS
- GLACIOLACUSTRINE DEPOSITS COMPRISED PRIMARILY OF SILTS AND CLAYS WITH THIN LENSES OF SANDS AND GRAVELS

Borehole Stratigraphy

- FILL
- GRAVEL
- SAND
- SILT
- CLAY
- NO RECOVERY

PCBs IN SOIL (SPHERES)

- ≥100 PPM
- <100 PPM
- NON-DETECT (Soil Only)



BOREHOLE STRATIGRAPHY

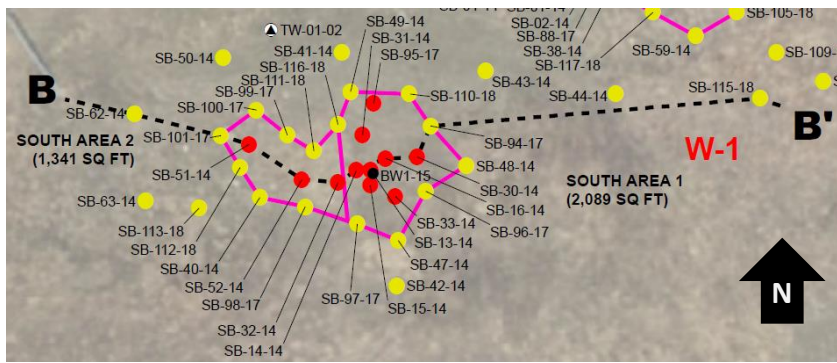
- SOIL SAMPLE LOCATION SPHERES ARE DEPICTED AT VERTICAL MIDPOINT OF EACH 2-FOOT SAMPLING INTERVAL, AND THEREFORE REPRESENTS PCB CONCENTRATIONS 1 FOOT ABOVE AND BELOW THE LOCATION
- ESTIMATED MAXIMUM EXTENT OF PCB IMPACTS ≥ 100 PPM IN SOIL ABOVE APPROXIMATE GROUNDWATER ELEVATION BASED ON OCTOBER 2017 GAUGING EVENT
- APPROXIMATE GROUNDWATER ELEVATION BASED ON OCTOBER 2017 GAUGING EVENT
- DEPTH TO WATER IN SOIL BORING DURING INSTALLATION

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PONTIAC NORTH CAMPUS

PCB EXCAVATION EXTENT LNAPL AREA NOS. 1/7
OVERVIEW CROSS SECTION A-A'



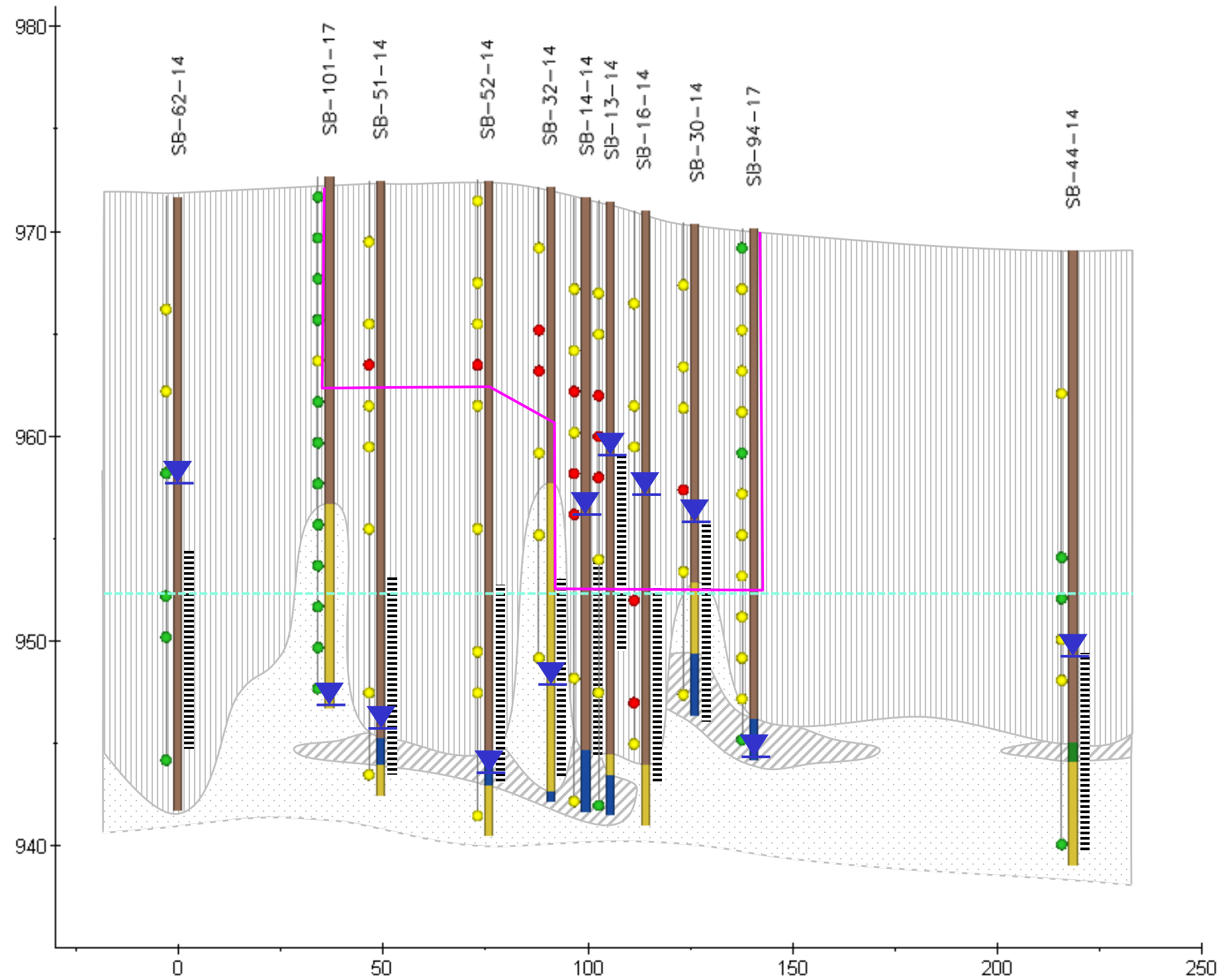
FIGURE
4A



B
WEST

B'
EAST

ELEVATION (FEET ABOVE MEAN SEA LEVEL)



HORIZONTAL DISTANCE (FEET)

Vertical Exaggeration: 5X

Please refer to Figure 3 (cross section transect map) for detailed symbology descriptions of symbols present on the aerial map.

PCB – Polychlorinated biphenyls
PPM – Parts per million

Generalized Stratigraphy

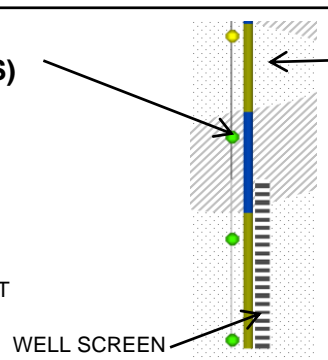
- CONCRETE
- FILL MATERIAL
- GLACIAL OUTWASH DEPOSITS COMPRISED PRIMARILY OF SANDS AND GRAVELS
- GLACIOLACUSTRINE DEPOSITS COMPRISED PRIMARILY OF SILTS AND CLAYS WITH THIN LENSES OF SANDS AND GRAVELS

Borehole Stratigraphy

- FILL
- GRAVEL
- SAND
- SILT
- CLAY
- NO RECOVERY

PCBs IN SOIL (SPHERES)

- ≥100 PPM
- <100 PPM
- NON-DETECT (Soil Only)



BOREHOLE STRATIGRAPHY

- SOIL SAMPLE LOCATION SPHERES ARE DEPICTED AT VERTICAL MIDPOINT OF EACH 2-FOOT SAMPLING INTERVAL, AND THEREFORE REPRESENTS PCB CONCENTRATIONS 1 FOOT ABOVE AND BELOW THE LOCATION
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RACER TRUST
PONTIAC, MICHIGAN
PONTIAC NORTH CAMPUS

**PCB EXCAVATION EXTENT LNAPL AREA NOS. 1/7
OVERVIEW CROSS SECTION B-B'**

ARCADIS

FIGURE
4B

ATTACHMENT 1

Analytical Reports





Analytical Laboratory Report

Report ID: S91030.01(01)
Generated on 06/28/2018

Report to

Attention: Theresa Olechiw
Arcadis
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: NA FAX: 248-994-2241
Email: theresa.olechiw@arcadis-us.com

Additional Contacts: Colleen Barton, Brad Saunders

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
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Contacts for report questions:
John Lavery (johnlavery@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S91030.01-S91030.60
Project: PNC Racer
Collected Date: 06/21/2018 - 06/22/2018
Submitted Date/Time: 06/22/2018 13:50
Sampled by: Kaitlyn Voet
P.O. #: B0064607.2018

Table of Contents

- Cover Page (Page 1)
- General Report Notes (Page 2)
- Report Narrative (Page 2)
- Laboratory Certifications (Page 3)
- Qualifier Descriptions (Page 3)
- Glossary of Abbreviations (Page 3)
- Method Summary (Page 4)
- Sample Summary (Page 5)

Maya Murshak
Technical Director



Analytical Laboratory Report

General Report Notes

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Full accreditation certificates are available upon request. Starred (*) analytes are not NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

Report Narrative

There is no additional narrative for this analytical report



Analytical Laboratory Report

Laboratory Certifications

Authority	Certification ID
Michigan DEQ	#9956
DOD ELAP/ISO 17025	#69699
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Alaska CSLAP	#17-001

Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
x	Preserved from bulk sample

Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



Analytical Laboratory Report

Method Summary

Method	Version
SM2540B	Standard Method 2540 B 2011
SW3546	SW 846 Method 3546 Revision 0 February 2007
SW8082A	SW 846 Method 8082A Revision 1 February 2007



Analytical Laboratory Report

Sample Summary (60 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S91030.01	SB-116-18_(0-2)	Soil	06/21/18 09:30
S91030.02	SB-116-18_(2-4)	Soil	06/21/18 09:35
S91030.03	SB-116-18_(4-6)	Soil	06/21/18 09:40
S91030.04	SB-116-18_(6-8)	Soil	06/21/18 09:45
S91030.05	SB-116-18_(8-10)	Soil	06/21/18 09:50
S91030.06	SB-116-18_(10-12)	Soil	06/21/18 09:55
S91030.07	SB-116-18_(12-14)	Soil	06/21/18 10:00
S91030.08	SB-116-18_(14-15)	Soil	06/21/18 10:05
S91030.09	SB-117-18_(0-2)	Soil	06/21/18 10:55
S91030.10	SB-117-18_(2-4)	Soil	06/21/18 11:00
S91030.11	SB-117-18_(4-6)	Soil	06/21/18 11:05
S91030.12	SB-117-18_(6-8)	Soil	06/21/18 11:10
S91030.13	SB-117-18_(8-10)	Soil	06/21/18 11:15
S91030.14	SB-117-18_(10-12)	Soil	06/21/18 11:20
S91030.15	SB-117-18_(12-14)	Soil	06/21/18 11:25
S91030.16	SB-117-18_(14-16)	Soil	06/21/18 11:30
S91030.17	SB-117-18_(16-18)	Soil	06/21/18 11:35
S91030.18	SB-117-18_(18-20)	Soil	06/21/18 11:40
S91030.19	SB-118-18_(0-2)	Soil	06/21/18 13:20
S91030.20	SB-118-18_(2-4)	Soil	06/21/18 13:25
S91030.21	SB-118-18_(4-6)	Soil	06/21/18 13:30
S91030.22	SB-118-18_(12-14)	Soil	06/21/18 14:20
S91030.23	SB-118-18_(8-10)	Soil	06/21/18 13:40
S91030.24	SB-118-18_(16-18)	Soil	06/21/18 14:25
S91030.25	SB-118-18_(18-20)	Soil	06/21/18 14:30
S91030.26	SB-118-18_(20-22)	Soil	06/21/18 14:35
S91030.27	SB-119-18_(0-2)	Soil	06/21/18 14:45
S91030.28	SB-119-18_(2-4)	Soil	06/21/18 14:50
S91030.29	SB-119-18_(2-4) MS	Soil	06/21/18 14:50
S91030.30	SB-119-18_(2-4) MSD	Soil	06/21/18 14:50
S91030.31	SB-119-18_(4-6)	Soil	06/21/18 14:55
S91030.32	SB-119-18_(6-8)	Soil	06/21/18 15:00
S91030.33	SB-119-18_(8-10)	Soil	06/21/18 15:05
S91030.34	SB-119-18_(10-12)	Soil	06/21/18 15:20
S91030.35	SB-119-18_(12-14)	Soil	06/21/18 15:25
S91030.36	SB-119-18_(14-15)	Soil	06/21/18 15:50
S91030.37	SB-121-18_(0-2)	Soil	06/22/18 07:30
S91030.38	SB-121-18_(2-4)	Soil	06/22/18 07:35
S91030.39	SB-121-18_(2-4) MS	Soil	06/22/18 07:35
S91030.40	SB-121-18_(2-4) MSD	Soil	06/22/18 07:35
S91030.41	SB-120-18_(0-2)	Soil	06/21/18 16:05
S91030.42	SB-120-18_(2-4)	Soil	06/21/18 16:10
S91030.43	SB-120-18_(4-6)	Soil	06/21/18 16:15
S91030.44	SB-120-18_(6-8)	Soil	06/21/18 16:20
S91030.45	SB-120-18_(8-10)	Soil	06/21/18 16:25
S91030.46	SB-120-18_(10-12)	Soil	06/21/18 16:30
S91030.47	SB-120-18_(12-14)	Soil	06/21/18 16:35
S91030.48	SB-120-18_(14-15)	Soil	06/21/18 16:40
S91030.49	DUP-01	Soil	06/21/18 00:01
S91030.50	DUP-02	Soil	06/21/18 00:01
S91030.51	DUP-03	Soil	06/21/18 00:01
S91030.52	SB-121-18_(4-6)	Soil	06/22/18 07:40
S91030.53	SB-121-18_(6-8)	Soil	06/22/18 07:45



Analytical Laboratory Report

Sample Summary (continued)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S91030.54	SB-121-18_(8-10)	Soil	06/22/18 07:50
S91030.55	SB-121-18_(10-12)	Soil	06/22/18 07:55
S91030.56	SB-121-18_(12-14)	Soil	06/22/18 08:00
S91030.57	SB-121-18_(14-16)	Soil	06/22/18 08:05
S91030.58	SB-121-18_(16-18)	Soil	06/22/18 08:10
S91030.59	DUP-4	Soil	06/22/18 00:01
S91030.60	DUP-5	Soil	06/22/18 00:01



Analytical Laboratory Report

Lab Sample ID: S91030.01

Sample Tag: SB-116-18_(0-2)

Collected Date/Time: 06/21/2018 09:30

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	93	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 18:08, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	5	12674-11-2	
PCB-1242	Not detected	330		ug/kg	5	53469-21-9	
PCB-1221	Not detected	330		ug/kg	5	11104-28-2	
PCB-1232	Not detected	330		ug/kg	5	11141-16-5	
PCB-1248	Not detected	330		ug/kg	5	12672-29-6	
PCB-1254	Not detected	330		ug/kg	5	11097-69-1	
PCB-1260	Not detected	330		ug/kg	5	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.02

Sample Tag: SB-116-18_(2-4)

Collected Date/Time: 06/21/2018 09:35

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 18:19, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	5	12674-11-2	
PCB-1242	Not detected	330		ug/kg	5	53469-21-9	
PCB-1221	Not detected	330		ug/kg	5	11104-28-2	
PCB-1232	Not detected	330		ug/kg	5	11141-16-5	
PCB-1248	Not detected	330		ug/kg	5	12672-29-6	
PCB-1254	Not detected	330		ug/kg	5	11097-69-1	
PCB-1260	Not detected	330		ug/kg	5	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.03

Sample Tag: SB-116-18_(4-6)

Collected Date/Time: 06/21/2018 09:40

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	82	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 16:56, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	6,000		ug/kg	1000	12674-11-2	Y
PCB-1242	Not detected	6,000		ug/kg	1000	53469-21-9	Y
PCB-1221	Not detected	6,000		ug/kg	1000	11104-28-2	Y
PCB-1232	Not detected	6,000		ug/kg	1000	11141-16-5	Y
PCB-1248	37,000	6,000		ug/kg	1000	12672-29-6	Y
PCB-1254	Not detected	6,000		ug/kg	1000	11097-69-1	Y
PCB-1260	Not detected	6,000		ug/kg	1000	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.04

Sample Tag: SB-116-18_(6-8)

Collected Date/Time: 06/21/2018 09:45

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	82	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 17:07, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	6,000		ug/kg	1000	12674-11-2	Y
PCB-1242	Not detected	6,000		ug/kg	1000	53469-21-9	Y
PCB-1221	Not detected	6,000		ug/kg	1000	11104-28-2	Y
PCB-1232	Not detected	6,000		ug/kg	1000	11141-16-5	Y
PCB-1248	19,000	6,000		ug/kg	1000	12672-29-6	Y
PCB-1254	Not detected	6,000		ug/kg	1000	11097-69-1	Y
PCB-1260	Not detected	6,000		ug/kg	1000	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.05

Sample Tag: SB-116-18_(8-10)

Collected Date/Time: 06/21/2018 09:50

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	92	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 14:07, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	30	12674-11-2	
PCB-1242	Not detected	330		ug/kg	30	53469-21-9	
PCB-1221	Not detected	330		ug/kg	30	11104-28-2	
PCB-1232	Not detected	330		ug/kg	30	11141-16-5	
PCB-1248	Not detected	330		ug/kg	30	12672-29-6	
PCB-1254	1,000	330		ug/kg	30	11097-69-1	
PCB-1260	Not detected	330		ug/kg	30	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.06

Sample Tag: SB-116-18_(10-12)

Collected Date/Time: 06/21/2018 09:55

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	91	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 14:18, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	2,000		ug/kg	300	12674-11-2	Y
PCB-1242	Not detected	2,000		ug/kg	300	53469-21-9	Y
PCB-1221	Not detected	2,000		ug/kg	300	11104-28-2	Y
PCB-1232	Not detected	2,000		ug/kg	300	11141-16-5	Y
PCB-1248	Not detected	2,000		ug/kg	300	12672-29-6	Y
PCB-1254	7,000	2,000		ug/kg	300	11097-69-1	Y
PCB-1260	Not detected	2,000		ug/kg	300	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.07

Sample Tag: SB-116-18_(12-14)

Collected Date/Time: 06/21/2018 10:00

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	75	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 14:28, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	13,000		ug/kg	2000	12674-11-2	Y
PCB-1242	Not detected	13,000		ug/kg	2000	53469-21-9	Y
PCB-1221	Not detected	13,000		ug/kg	2000	11104-28-2	Y
PCB-1232	Not detected	13,000		ug/kg	2000	11141-16-5	Y
PCB-1248	Not detected	13,000		ug/kg	2000	12672-29-6	Y
PCB-1254	79,000	13,000		ug/kg	2000	11097-69-1	Y
PCB-1260	Not detected	13,000		ug/kg	2000	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.08

Sample Tag: SB-116-18_(14-15)

Collected Date/Time: 06/21/2018 10:05

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	74	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 19:02, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	7,000		ug/kg	1000	12674-11-2	Y
PCB-1242	Not detected	7,000		ug/kg	1000	53469-21-9	Y
PCB-1221	Not detected	7,000		ug/kg	1000	11104-28-2	Y
PCB-1232	Not detected	7,000		ug/kg	1000	11141-16-5	Y
PCB-1248	34,000	7,000		ug/kg	1000	12672-29-6	Y
PCB-1254	Not detected	7,000		ug/kg	1000	11097-69-1	Y
PCB-1260	Not detected	7,000		ug/kg	1000	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.09

Sample Tag: SB-117-18_(0-2)

Collected Date/Time: 06/21/2018 10:55

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	89	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 19:13, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	400	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.10

Sample Tag: SB-117-18_(2-4)

Collected Date/Time: 06/21/2018 11:00

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	89	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 19:23, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.11

Sample Tag: SB-117-18_(4-6)

Collected Date/Time: 06/21/2018 11:05

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	90	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 19:45, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	600		ug/kg	100	12674-11-2	Y
PCB-1242	3,300	600		ug/kg	100	53469-21-9	Y
PCB-1221	Not detected	600		ug/kg	100	11104-28-2	Y
PCB-1232	Not detected	600		ug/kg	100	11141-16-5	Y
PCB-1248	Not detected	600		ug/kg	100	12672-29-6	Y
PCB-1254	Not detected	600		ug/kg	100	11097-69-1	Y
PCB-1260	Not detected	600		ug/kg	100	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.12

Sample Tag: SB-117-18_(6-8)

Collected Date/Time: 06/21/2018 11:10

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	89	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 17:45, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	11,000		ug/kg	2000	12674-11-2	Y
PCB-1242	75,000	11,000		ug/kg	2000	53469-21-9	Y
PCB-1221	Not detected	11,000		ug/kg	2000	11104-28-2	Y
PCB-1232	Not detected	11,000		ug/kg	2000	11141-16-5	Y
PCB-1248	Not detected	11,000		ug/kg	2000	12672-29-6	Y
PCB-1254	Not detected	11,000		ug/kg	2000	11097-69-1	Y
PCB-1260	Not detected	11,000		ug/kg	2000	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.13

Sample Tag: SB-117-18_(8-10)

Collected Date/Time: 06/21/2018 11:15

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	94	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/27/18 13:13, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	1,000		ug/kg	200	12674-11-2	Y
PCB-1242	7,000	1,000		ug/kg	200	53469-21-9	Y
PCB-1221	Not detected	1,000		ug/kg	200	11104-28-2	Y
PCB-1232	Not detected	1,000		ug/kg	200	11141-16-5	Y
PCB-1248	Not detected	1,000		ug/kg	200	12672-29-6	Y
PCB-1254	Not detected	1,000		ug/kg	200	11097-69-1	Y
PCB-1260	Not detected	1,000		ug/kg	200	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.14

Sample Tag: SB-117-18_(10-12)

Collected Date/Time: 06/21/2018 11:20

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	92	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/27/18 13:34, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	3,000		ug/kg	500	12674-11-2	Y
PCB-1242	21,000	3,000		ug/kg	500	53469-21-9	Y
PCB-1221	Not detected	3,000		ug/kg	500	11104-28-2	Y
PCB-1232	Not detected	3,000		ug/kg	500	11141-16-5	Y
PCB-1248	Not detected	3,000		ug/kg	500	12672-29-6	Y
PCB-1254	Not detected	3,000		ug/kg	500	11097-69-1	Y
PCB-1260	Not detected	3,000		ug/kg	500	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.15

Sample Tag: SB-117-18_(12-14)

Collected Date/Time: 06/21/2018 11:25

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	93	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 21:07, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.16

Sample Tag: SB-117-18_(14-16)

Collected Date/Time: 06/21/2018 11:30

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	95	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/27/18 13:23, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	1,000		ug/kg	200	12674-11-2	Y
PCB-1242	6,000	1,000		ug/kg	200	53469-21-9	Y
PCB-1221	Not detected	1,000		ug/kg	200	11104-28-2	Y
PCB-1232	Not detected	1,000		ug/kg	200	11141-16-5	Y
PCB-1248	Not detected	1,000		ug/kg	200	12672-29-6	Y
PCB-1254	Not detected	1,000		ug/kg	200	11097-69-1	Y
PCB-1260	Not detected	1,000		ug/kg	200	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.17

Sample Tag: SB-117-18_(16-18)

Collected Date/Time: 06/21/2018 11:35

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	95	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/27/18 13:44, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	2,000		ug/kg	300	12674-11-2	Y
PCB-1242	12,000	2,000		ug/kg	300	53469-21-9	Y
PCB-1221	Not detected	2,000		ug/kg	300	11104-28-2	Y
PCB-1232	Not detected	2,000		ug/kg	300	11141-16-5	Y
PCB-1248	Not detected	2,000		ug/kg	300	12672-29-6	Y
PCB-1254	Not detected	2,000		ug/kg	300	11097-69-1	Y
PCB-1260	Not detected	2,000		ug/kg	300	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.18

Sample Tag: SB-117-18_(18-20)

Collected Date/Time: 06/21/2018 11:40

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	91	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 20:03, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	30	12674-11-2	
PCB-1242	1,200	330		ug/kg	30	53469-21-9	
PCB-1221	Not detected	330		ug/kg	30	11104-28-2	
PCB-1232	Not detected	330		ug/kg	30	11141-16-5	
PCB-1248	Not detected	330		ug/kg	30	12672-29-6	
PCB-1254	Not detected	330		ug/kg	30	11097-69-1	
PCB-1260	Not detected	330		ug/kg	30	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.19

Sample Tag: SB-118-18_(0-2)

Collected Date/Time: 06/21/2018 13:20

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	94	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 20:45, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.20

Sample Tag: SB-118-18_(2-4)

Collected Date/Time: 06/21/2018 13:25

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	92	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/27/18 14:12, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	16,000		ug/kg	3000	12674-11-2	Y
PCB-1242	93,000	16,000		ug/kg	3000	53469-21-9	Y
PCB-1221	Not detected	16,000		ug/kg	3000	11104-28-2	Y
PCB-1232	Not detected	16,000		ug/kg	3000	11141-16-5	Y
PCB-1248	Not detected	16,000		ug/kg	3000	12672-29-6	Y
PCB-1254	Not detected	16,000		ug/kg	3000	11097-69-1	Y
PCB-1260	Not detected	16,000		ug/kg	3000	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.21

Sample Tag: SB-118-18_(4-6)

Collected Date/Time: 06/21/2018 13:30

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	83	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/27/18 14:36, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	2,000		ug/kg	300	12674-11-2	Y
PCB-1242	13,000	2,000		ug/kg	300	53469-21-9	Y
PCB-1221	Not detected	2,000		ug/kg	300	11104-28-2	Y
PCB-1232	Not detected	2,000		ug/kg	300	11141-16-5	Y
PCB-1248	Not detected	2,000		ug/kg	300	12672-29-6	Y
PCB-1254	Not detected	2,000		ug/kg	300	11097-69-1	Y
PCB-1260	Not detected	2,000		ug/kg	300	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.22

Sample Tag: SB-118-18_(12-14)

Collected Date/Time: 06/21/2018 14:20

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	81	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 16:28, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	61,000		ug/kg	10000	12674-11-2	Y
PCB-1242	Not detected	61,000		ug/kg	10000	53469-21-9	Y
PCB-1221	Not detected	61,000		ug/kg	10000	11104-28-2	Y
PCB-1232	Not detected	61,000		ug/kg	10000	11141-16-5	Y
PCB-1248	345,000	61,000		ug/kg	10000	12672-29-6	Y
PCB-1254	Not detected	61,000		ug/kg	10000	11097-69-1	Y
PCB-1260	Not detected	61,000		ug/kg	10000	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.23

Sample Tag: SB-118-18_(8-10)

Collected Date/Time: 06/21/2018 13:40

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	95	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/27/18 14:46, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	2,000		ug/kg	300	12674-11-2	Y
PCB-1242	11,000	2,000		ug/kg	300	53469-21-9	Y
PCB-1221	Not detected	2,000		ug/kg	300	11104-28-2	Y
PCB-1232	Not detected	2,000		ug/kg	300	11141-16-5	Y
PCB-1248	Not detected	2,000		ug/kg	300	12672-29-6	Y
PCB-1254	Not detected	2,000		ug/kg	300	11097-69-1	Y
PCB-1260	Not detected	2,000		ug/kg	300	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.24

Sample Tag: SB-118-18_(16-18)

Collected Date/Time: 06/21/2018 14:25

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	86	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 20:24, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.25

Sample Tag: SB-118-18_(18-20)

Collected Date/Time: 06/21/2018 14:30

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 17:17, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	3,000		ug/kg	500	12674-11-2	Y
PCB-1242	Not detected	3,000		ug/kg	500	53469-21-9	Y
PCB-1221	Not detected	3,000		ug/kg	500	11104-28-2	Y
PCB-1232	Not detected	3,000		ug/kg	500	11141-16-5	Y
PCB-1248	11,000	3,000		ug/kg	500	12672-29-6	Y
PCB-1254	Not detected	3,000		ug/kg	500	11097-69-1	Y
PCB-1260	Not detected	3,000		ug/kg	500	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.26

Sample Tag: SB-118-18_(20-22)

Collected Date/Time: 06/21/2018 14:35

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	42	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 20:56, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.27

Sample Tag: SB-119-18_(0-2)

Collected Date/Time: 06/21/2018 14:45

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	94	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/27/18 14:57, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	40	12674-11-2	
PCB-1242	Not detected	330		ug/kg	40	53469-21-9	
PCB-1221	Not detected	330		ug/kg	40	11104-28-2	
PCB-1232	Not detected	330		ug/kg	40	11141-16-5	
PCB-1248	1,300	330		ug/kg	40	12672-29-6	
PCB-1254	Not detected	330		ug/kg	40	11097-69-1	
PCB-1260	Not detected	330		ug/kg	40	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.28

Sample Tag: SB-119-18_(2-4)

Collected Date/Time: 06/21/2018 14:50

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	92	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 16:56, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	50	12674-11-2	
PCB-1242	Not detected	330		ug/kg	50	53469-21-9	
PCB-1221	Not detected	330		ug/kg	50	11104-28-2	
PCB-1232	Not detected	330		ug/kg	50	11141-16-5	
PCB-1248	2,000	330		ug/kg	50	12672-29-6	
PCB-1254	Not detected	330		ug/kg	50	11097-69-1	
PCB-1260	Not detected	330		ug/kg	50	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.29

Sample Tag: SB-119-18_(2-4) MS

Collected Date/Time: 06/21/2018 14:50

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	92	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 17:26, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	50	12674-11-2	
PCB-1242	Not detected	330		ug/kg	50	53469-21-9	
PCB-1221	Not detected	330		ug/kg	50	11104-28-2	
PCB-1232	Not detected	330		ug/kg	50	11141-16-5	
PCB-1248	1,800	330		ug/kg	50	12672-29-6	
PCB-1254	Not detected	330		ug/kg	50	11097-69-1	
PCB-1260	Not detected	330		ug/kg	50	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.30

Sample Tag: SB-119-18_(2-4) MSD

Collected Date/Time: 06/21/2018 14:50

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	92	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 17:37, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	50	12674-11-2	
PCB-1242	Not detected	330		ug/kg	50	53469-21-9	
PCB-1221	Not detected	330		ug/kg	50	11104-28-2	
PCB-1232	Not detected	330		ug/kg	50	11141-16-5	
PCB-1248	2,000	330		ug/kg	50	12672-29-6	
PCB-1254	Not detected	330		ug/kg	50	11097-69-1	
PCB-1260	Not detected	330		ug/kg	50	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.31

Sample Tag: SB-119-18_(4-6)

Collected Date/Time: 06/21/2018 14:55

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 20:35, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	500	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.32

Sample Tag: SB-119-18_(6-8)

Collected Date/Time: 06/21/2018 15:00

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	84	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 19:55, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.33

Sample Tag: SB-119-18_(8-10)

Collected Date/Time: 06/21/2018 15:05

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	92	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 20:06, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.34

Sample Tag: SB-119-18_(10-12)

Collected Date/Time: 06/21/2018 15:20

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	93	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 20:16, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.35

Sample Tag: SB-119-18_(12-14)

Collected Date/Time: 06/21/2018 15:25

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	93	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 20:27, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.36

Sample Tag: SB-119-18_(14-15)

Collected Date/Time: 06/21/2018 15:50

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	92	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 20:38, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.37

Sample Tag: SB-121-18_(0-2)

Collected Date/Time: 06/22/2018 07:30

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/25/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	93	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/25/18 20:48, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	330	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.38

Sample Tag: SB-121-18_(2-4)

Collected Date/Time: 06/22/2018 07:35

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:05, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	89	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 15:33, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	200	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.39

Sample Tag: SB-121-18_(2-4) MS

Collected Date/Time: 06/22/2018 07:35

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	89	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 15:49, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	340	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.40

Sample Tag: SB-121-18_(2-4) MSD

Collected Date/Time: 06/22/2018 07:35

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	86	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 16:01, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	320	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.41

Sample Tag: SB-120-18_(0-2)

Collected Date/Time: 06/21/2018 16:05

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	91	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 19:20, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.42

Sample Tag: SB-120-18_(2-4)

Collected Date/Time: 06/21/2018 16:10

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	91	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 21:28, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.43

Sample Tag: SB-120-18_(4-6)

Collected Date/Time: 06/21/2018 16:15

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	84	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/27/18 15:08, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	20	12674-11-2	
PCB-1242	900	330		ug/kg	20	53469-21-9	
PCB-1221	Not detected	330		ug/kg	20	11104-28-2	
PCB-1232	Not detected	330		ug/kg	20	11141-16-5	
PCB-1248	Not detected	330		ug/kg	20	12672-29-6	
PCB-1254	Not detected	330		ug/kg	20	11097-69-1	
PCB-1260	Not detected	330		ug/kg	20	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.44

Sample Tag: SB-120-18_(6-8)

Collected Date/Time: 06/21/2018 16:20

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	85	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 19:31, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.45

Sample Tag: SB-120-18_(8-10)

Collected Date/Time: 06/21/2018 16:25

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	85	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 19:10, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	50	12674-11-2	
PCB-1242	Not detected	330		ug/kg	50	53469-21-9	
PCB-1221	Not detected	330		ug/kg	50	11104-28-2	
PCB-1232	Not detected	330		ug/kg	50	11141-16-5	
PCB-1248	Not detected	330		ug/kg	50	12672-29-6	
PCB-1254	1,500	330		ug/kg	50	11097-69-1	
PCB-1260	Not detected	330		ug/kg	50	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.46

Sample Tag: SB-120-18_(10-12)

Collected Date/Time: 06/21/2018 16:30

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 22:10, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.47

Sample Tag: SB-120-18_(12-14)

Collected Date/Time: 06/21/2018 16:35

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 22:21, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	330	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.48

Sample Tag: SB-120-18_(14-15)

Collected Date/Time: 06/21/2018 16:40

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 22:32, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.49

Sample Tag: DUP-01

Collected Date/Time: 06/21/2018 00:01

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	81	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 22:42, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.50

Sample Tag: DUP-02

Collected Date/Time: 06/21/2018 00:01

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	92	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 22:53, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.51

Sample Tag: DUP-03

Collected Date/Time: 06/21/2018 00:01

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	83	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 23:03, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	330	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.52

Sample Tag: SB-121-18_(4-6)

Collected Date/Time: 06/22/2018 07:40

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	86	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/27/18 15:18, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	30	12674-11-2	
PCB-1242	Not detected	330		ug/kg	30	53469-21-9	
PCB-1221	Not detected	330		ug/kg	30	11104-28-2	
PCB-1232	Not detected	330		ug/kg	30	11141-16-5	
PCB-1248	1,100	330		ug/kg	30	12672-29-6	
PCB-1254	Not detected	330		ug/kg	30	11097-69-1	
PCB-1260	Not detected	330		ug/kg	30	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.53

Sample Tag: SB-121-18_(6-8)

Collected Date/Time: 06/22/2018 07:45

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/27/18 15:29, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	600		ug/kg	100	12674-11-2	Y
PCB-1242	Not detected	600		ug/kg	100	53469-21-9	Y
PCB-1221	Not detected	600		ug/kg	100	11104-28-2	Y
PCB-1232	Not detected	600		ug/kg	100	11141-16-5	Y
PCB-1248	3,500	600		ug/kg	100	12672-29-6	Y
PCB-1254	Not detected	600		ug/kg	100	11097-69-1	Y
PCB-1260	Not detected	600		ug/kg	100	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.54

Sample Tag: SB-121-18_(8-10)

Collected Date/Time: 06/22/2018 07:50

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	89	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 23:14, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.55

Sample Tag: SB-121-18_(10-12)

Collected Date/Time: 06/22/2018 07:55

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	84	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 23:25, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	400	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.56

Sample Tag: SB-121-18_(12-14)

Collected Date/Time: 06/22/2018 08:00

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/26/18 11:00	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	91	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/26/18 22:00, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	Not detected	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.57

Sample Tag: SB-121-18_(14-16)

Collected Date/Time: 06/22/2018 08:05

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/27/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	87	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/28/18 12:47, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	10	12674-11-2	
PCB-1242	600	330		ug/kg	10	53469-21-9	
PCB-1221	Not detected	330		ug/kg	10	11104-28-2	
PCB-1232	Not detected	330		ug/kg	10	11141-16-5	
PCB-1248	Not detected	330		ug/kg	10	12672-29-6	
PCB-1254	Not detected	330		ug/kg	10	11097-69-1	
PCB-1260	Not detected	330		ug/kg	10	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.58

Sample Tag: SB-121-18_(16-18)

Collected Date/Time: 06/22/2018 08:10

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/27/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	86	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/28/18 13:40, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	6,000		ug/kg	1000	12674-11-2	Y
PCB-1242	Not detected	6,000		ug/kg	1000	53469-21-9	Y
PCB-1221	Not detected	6,000		ug/kg	1000	11104-28-2	Y
PCB-1232	Not detected	6,000		ug/kg	1000	11141-16-5	Y
PCB-1248	48,000	6,000		ug/kg	1000	12672-29-6	Y
PCB-1254	Not detected	6,000		ug/kg	1000	11097-69-1	Y
PCB-1260	Not detected	6,000		ug/kg	1000	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration



Analytical Laboratory Report

Lab Sample ID: S91030.59

Sample Tag: DUP-4

Collected Date/Time: 06/22/2018 00:01

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/27/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/28/18 13:08, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	330		ug/kg	20	12674-11-2	
PCB-1242	Not detected	330		ug/kg	20	53469-21-9	
PCB-1221	Not detected	330		ug/kg	20	11104-28-2	
PCB-1232	Not detected	330		ug/kg	20	11141-16-5	
PCB-1248	Not detected	330		ug/kg	20	12672-29-6	
PCB-1254	Not detected	330		ug/kg	20	11097-69-1	
PCB-1260	Not detected	330		ug/kg	20	11096-82-5	



Analytical Laboratory Report

Lab Sample ID: S91030.60

Sample Tag: DUP-5

Collected Date/Time: 06/22/2018 00:01

Matrix: Soil

COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	5.6	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst
Extraction, PCB*	Completed	SW3546	06/27/18 12:30	PLB

Inorganics

Method: SM2540B, Run Date: 06/24/18 17:30, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	88	1	1	%	1		

Organics - PCBs/Pesticides

PCB List, Method: SW8082A, Run Date: 06/28/18 13:23, Analyst: JANB

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
PCB-1016	Not detected	6,000		ug/kg	1000	12674-11-2	Y
PCB-1242	Not detected	6,000		ug/kg	1000	53469-21-9	Y
PCB-1221	Not detected	6,000		ug/kg	1000	11104-28-2	Y
PCB-1232	Not detected	6,000		ug/kg	1000	11141-16-5	Y
PCB-1248	55,000	6,000		ug/kg	1000	12672-29-6	Y
PCB-1254	Not detected	6,000		ug/kg	1000	11097-69-1	Y
PCB-1260	Not detected	6,000		ug/kg	1000	11096-82-5	Y

Y-Elevated reporting limit due to high target concentration

Merit Laboratories Login Checklist

Lab Set ID:S91030

Client:ARCADIS_NOVI (ARCADIS U.S., Inc.)

Project: PNC Racer

Submitted:06/22/2018 13:50 Login User: MMC

Attention: Theresa Olechiv

Address: Arcadis
28550 Cabot Drive
Suite 500
Novi, MI 48377

Phone: NA

FAX:248-994-2241

Email:theresa.olechiv@arcadis-us.com

Selection	Description	Note
01. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Samples shipped	
02. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Samples left in 24 hr. drop box	
03. <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Are there custody seals/tape or is the drop box locked	
04. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Samples are received at 4C +/- 2C Thermometer #	IR 5.6
05. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Received on ice/ cooling process begun	
06. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	All bottles intact	
07. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Appropriate analytical bottles are used	
08. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Do sample have correct chemical preservation	
09. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Merit bottles used	
10. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Sufficient sample volume received	
11. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Samples require laboratory filtration	
12. <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Completed pH checks on preserved samples? (no VOAs)	
13. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Did any samples need to be preserved in the lab?	
14. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Samples submitted within holding time	
15. <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Do water VOC or TOX bottles contain headspace	
16. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	COC adequately filled out	
17. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	COC signed and relinquished to the lab	
18. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Sample tag on bottles match COC	
19. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Subcontracting needed? Subcontacted to:	

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: _____ Date: _____



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C.O.C. PAGE # 1 OF 5

REPORT TO **CHAIN OF CUSTODY RECORD** **INVOICE TO**

CONTACT NAME Theresa Olechiw
 COMPANY Arcadis
 ADDRESS 28550 Cabot Drive #500
 CITY Novi STATE MI ZIP CODE 48377
 PHONE NO. 810.225.1909 FAX NO. _____ P.O. NO. B0064607.2018
 E-MAIL ADDRESS Theresa.Olechiw@arcadis.com; Brad.Saunders@ar QUOTE NO. _____

CONTACT NAME Accounts Payable SAME
 COMPANY Arcadis
 ADDRESS 630 Plaza Drive Suite 600
 CITY Highlands Ranch STATE CO ZIP CODE 80129
 PHONE NO. _____ E-MAIL ADDRESS accountspayable.administration@arcadis-us.com

PROJECT NO./NAME PNC RACER SAMPLER(S) PLEASE PRINT/SIGN NAME Kaitlyn Voet
 TURNAROUND TIME REQUIRED 1 DAY 2 DAYS 3 DAYS STANDARD OTHER _____
 DELIVERABLES REQUIRED STD LEVEL II LEVEL III LEVEL IV EDD OTHER _____

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
 SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	PCBs (8082)
	DATE	TIME											
91030.01	6-21-18	930	SB-116-18-(0-2)	S	1	X							X
.02		935	SB-116-18-(2-4)	S	1	X							X
.03		940	SB-116-18-(4-6)	S	1	X							X
.04		945	SB-116-18-(6-8)	S	1	X							X
.05		950	SB-116-18-(8-10)	S	1	X							X
.06		955	SB-116-18-(10-12)	S	1	X							X
.07		1000	SB-116-18-(12-14)	S	1	X							X
.08		1005	SB-116-18-(14-15)	S	1	X							X
.09		1055	SB-117-18-(0-2)	S	1	X							X
.10		1100	SB-117-18-(2-4)	S	1	X							X
.11		1105	SB-117-18-(4-6)	S	1	X							X
.12		1110	SB-117-18-(6-8)	S	1	X							X

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
 OHIO VAP Drinking Water
 DoD NPDES

Project Locations
 Detroit New York
 Other Pontiac, MI

Special Instructions

RELINQUISHED BY: Kaitlyn Voet Arcadis 6/22/18 3:50
 RECEIVED BY: [Signature] 6/22/18 3:50
 RELINQUISHED BY: _____ DATE _____ TIME _____
 RECEIVED BY: _____ DATE _____ TIME _____

RELINQUISHED BY: _____ DATE _____ TIME _____
 RECEIVED BY: _____ DATE _____ TIME _____
 SEAL NO. SEAL INTACT YES NO INITIALS _____
 SEAL NO. SEAL INTACT YES NO INITIALS _____
 NOTES: 5.6 TEMP. ON ARRIVAL _____

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



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C.O.C. PAGE # 2 OF 5

REPORT TO **CHAIN OF CUSTODY RECORD** **INVOICE TO**

CONTACT NAME **Theresa Olechiw**
 COMPANY **Arcadis**
 ADDRESS **28550 Cabot Drive #500**
 CITY **Novi** STATE **MI** ZIP CODE **48377**
 PHONE NO. **810.225.1909** FAX NO. P.O. NO. **B0064607.2018**
 E-MAIL ADDRESS **Theresa.Olechiw@arcadis.com; Brad.Saunders@ar** QUOTE NO.

CONTACT NAME **Accounts Payable** SAME
 COMPANY **Arcadis**
 ADDRESS **630 Plaza Drive Suite 600**
 CITY **Highlands Ranch** STATE **CO** ZIP CODE **80129**
 PHONE NO. E-MAIL ADDRESS **accountspayable.administration@arcadis-us.com**

PROJECT NO./NAME **PNC RACER** SAMPLER(S) - PLEASE PRINT/SIGN NAME *Kaitlyn Voet* **Kaitlyn Voet**
 TURNAROUND TIME REQUIRED 1 DAY 2 DAYS 3 DAYS STANDARD OTHER
 DELIVERABLES REQUIRED STD LEVEL II LEVEL III LEVEL IV EDD OTHER
 MATRIX GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
 CODE: SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE # Containers & Preservatives

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications	
<input type="checkbox"/> OHIO VAP	<input type="checkbox"/> Drinking Water
<input type="checkbox"/> DoD	<input type="checkbox"/> NPDES
Project Locations	
<input type="checkbox"/> Detroit	<input type="checkbox"/> New York
<input checked="" type="checkbox"/> Other <u>Pontiac, MI</u>	
Special Instructions	

MERIT LAB NO. <small>FOR LAB USE ONLY</small>	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	HNOH	MeOH	OTHER	PCBs (8082)
	DATE	TIME											
91080.13	6-21-18	1115	SB-117-18-(8-10)	S	1	X							X
.14		1120	SB-117-18-(10-12)	S	1	X							X
.15		1125	SB-117-18-(12-14)	S	1	X							X
.16		1130	SB-117-18-(14-16)	S	1	X							X
.17		1135	SB-117-18-(16-18)	S	1	X							X
.18		1140	SB-117-18-(18-20)	S	1	X							X
.19		1320	SB-118-18-(0-2)	S	1	X							X
.20		1325	SB-118-18-(2-4)	S	1	X							X
.21		1330	SB-118-18-(4-6)	S	1	X							X
.22		1420	SB-118-18-(12-14)	S	1	X							X
.23		1340	SB-118-18-(8-10)	S	1	X							X
.24		1425	SB-118-18-(16-18)	S	1	X							X

RELINQUISHED BY: *Kaitlyn Voet* Arcadis Sampler DATE 6/22/18 TIME 1350
 RECEIVED BY: *[Signature]* DATE 6/22/18 TIME 1358
 RELINQUISHED BY: _____ DATE _____ TIME _____
 RECEIVED BY: _____ DATE _____ TIME _____

RELINQUISHED BY: _____ DATE _____ TIME _____
 RECEIVED BY: _____ DATE _____ TIME _____
 SEAL NO. SEAL INTACT YES NO INITIALS _____ NOTES: TEMP. ON ARRIVAL 5.6
 SEAL NO. SEAL INTACT YES NO INITIALS _____

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



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REPORT TO **CHAIN OF CUSTODY RECORD** **INVOICE TO**

CONTACT NAME **Theresa Olechwi**
 COMPANY **Arcadis**
 ADDRESS **28550 Cabot Drive #500**
 CITY **Novi** STATE **MI** ZIP CODE **48377**
 PHONE NO. **810.225.1909** FAX NO. P.O. NO. **B0064607.2018**
 E-MAIL ADDRESS **Theresa.Olechwi@arcadis.com; Brad.Saunders@ar** QUOTE NO.

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 ADDRESS **630 Plaza Drive Suite 600**
 CITY **Highlands Ranch** STATE **CO** ZIP CODE **80129**
 PHONE NO. E-MAIL ADDRESS **accountspayable.administration@arcadis-us.com**

PROJECT NO./NAME **PNC RACER** SAMPLER(S) - PLEASE PRINT SIGN NAME *Kaitlyn Voet* **Kaitlyn Voet**

TURNAROUND TIME REQUIRED 1 DAY 2 DAYS 3 DAYS STANDARD OTHER
 DELIVERABLES REQUIRED STD LEVEL II LEVEL III LEVEL IV EDD OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
 SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

MERIT LAB NO. <small>FOR LAB USE ONLY</small>	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	PCBs (8082)	MS/MSD
	DATE	TIME												

91080.25	6/21/18	1430	SB-118-18-(18-20)	S	1		X						X	
.26	6/21/18	1435	SB-118-18-(20-22)	S	1		X						X	
.27	6/21/18	1445	SB-119-18-(0-2)	S	1		X						X	
28/29/30		1450	SB-119-18-(2-4)	S	3		X						X	X
.31		1455	SB-119-18-(4-6)	S	1		X						X	
.32		1500	SB-119-18-(6-8)	S	1		X						X	
.33		1505	SB-119-18-(8-10)	S	1		X						X	
.34		1520	SB-119-18-(10-12)	S	1		X						X	
.35		1525	SB-119-18-(12-14)	S	1		X						X	
.36		1550	SB-119-18-(14-15)	S	1		X						X	
.37	6/22/18	0730	SB-121-18-(0-2)	S	1		X						X	
.38/39/40	6/22/18	0735	SB-121-18-(2-4)	S	3		X						X	X

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

Certifications
 OHIO VAP Drinking Water
 DoD NPDES

Project Locations
 Detroit New York
 Other Pontiac, MI

Special Instructions

RELINQUISHED BY: SIGNATURE/ORGANIZATION *Kaitlyn Voet* Arcadis DATE **6/21/18** TIME **1350**
 RECEIVED BY: SIGNATURE/ORGANIZATION *[Signature]* DATE **6/22/18** TIME **1350**
 RELINQUISHED BY: SIGNATURE/ORGANIZATION DATE TIME
 RECEIVED BY: SIGNATURE/ORGANIZATION DATE TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION DATE TIME
 RECEIVED BY: SIGNATURE/ORGANIZATION DATE TIME
 SEAL NO. SEAL INTACT YES NO INITIALS
 SEAL NO. SEAL INTACT YES NO INITIALS
 NOTES: TEMP. ON ARRIVAL **5.6**

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



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PROJECT NO./NAME **PNC RACER** SAMPLER(S) - PLEASE PRINT SIGN NAME **Kaitlyn Voet**
 TURNAROUND TIME REQUIRED 1 DAY 2 DAYS 3 DAYS STANDARD OTHER
 DELIVERABLES REQUIRED STD LEVEL II LEVEL III LEVEL IV EDD OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
 SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIPE A=AIR W=WASTE

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

MERIT LAB NO. <small>FOR LAB USE ONLY</small>	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	PCBs (8082)	Certifications		Project Locations		Special Instructions
	DATE	TIME												<input type="checkbox"/> OHIO VAP	<input type="checkbox"/> Drinking Water	<input type="checkbox"/> DoD	<input type="checkbox"/> NPDES	
91030.41	6-21-18	1605	SB-120-18-(0-2)	S	1	X							X					
.42		1610	SB-120-18-(2-4)	S	1	X							X					
.43		1615	SB-120-18-(4-6)	S	1	X							X					
.44		1620	SB-120-18-(6-8)	S	1	X							X					
.45		1625	SB-120-18-(8-10)	S	1	X							X					
.46		1630	SB-120-18-(10-12)	S	1	X							X					
.47		1635	SB-120-18-(12-14)	S	1	X							X					
.48		1640	SB-120-18-(14-15)	S	1	X							X					
.49	6-21-18	-	DUP-01	S	1	X							X					
.50	6-21-18	-	DUP-02	S	1	X							X					
.51	6-21-18	-	DUP-03	S	1	X							X					
.52	6/22/18	0740	SB-121-18-(4-6)	S	1	X							X					

RELINQUISHED BY: *Kaitlyn Voet* Arcadis Sampler DATE 6/22/18 TIME 1:35
 RECEIVED BY: *Brad Saunders* Arcadis DATE 6/22/18 TIME 1:50
 RELINQUISHED BY: _____ DATE _____ TIME _____
 RECEIVED BY: _____ DATE _____ TIME _____

RELINQUISHED BY: _____ DATE _____ TIME _____
 RECEIVED BY: _____ DATE _____ TIME _____
 SEAL NO. SEAL INTACT YES NO INITIALS _____
 SEAL NO. SEAL INTACT YES NO INITIALS _____
 NOTES: TEMP. ON ARRIVAL 5.6

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

ATTACHMENT 2

Soil Boring Logs

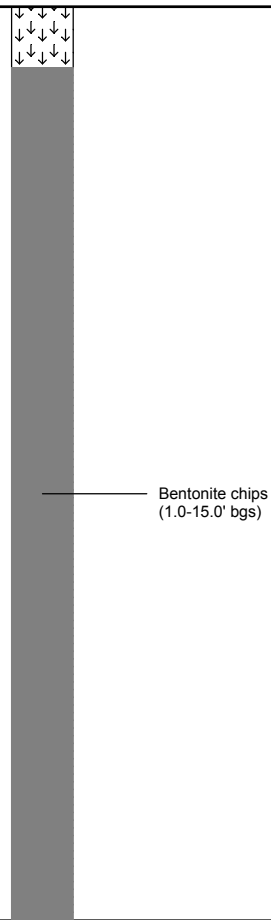


Date Start: 6/21/2018
Date Finish: 6/21/2018
Drilling Company: Cascade
Driller's Name: J. Mathew
Drilling Method: Sonic
Sampling Method: 5.0'/10.0' Core barrel, Continuous
Rig Type: Sonic
Water Level Start (ft. bgs.): 15.0
Water Level Finish (ft. btoc.): NA

Northing: NA
Easting: NA
Casing Elevation: NA
Borehole Depth (ft. bgs.): 15.0
Surface Elevation: NA
Descriptions By: Kaitlyn Voet

Well/Boring ID: SB-116-18
Client: RACER
Location: RACER PNC
Weather Conditions: Sunny, 70 F


DEPTH (feet bgs.)	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0	0									
4.9						X	X	(0.0 - 7.5') FILL, SAND, very fine to fine, subrounded; trace medium sand, subangular; trace silt; poorly sorted; moist; black (10YR 2/1).		
0.6						X	X			
0.8		1	0.0-5.0'	5.0		X	X	Note: Metal and blue rubber-like pieces from 3.0-7.5' bgs.		
1.1						X	X			
2.0						X	X			
10.0	-5					X	X			
41.9						X	X			
26.7		2	5.0-10.0'	5.0		X	X	Note: Large wood pieces at 7.5' bgs.		
4.8						X	X	(7.5 - 8.5') FILL, CLAY, medium plasticity, slow dilatancy; some very fine sand; moist; very dark gray (10YR 3/1).		
4.1						X	X	(8.5 - 15.0') FILL, SAND, fine, subrounded; some small to medium pebbles, subrounded; trace silt; moist; black (10YR 2/1). Note: Fill material, glass, metal, cloth material.		
8.3	-10					X	X			
199.4						X	X			
94.4		3	10.0-15.0'			X	X			
111.4						X	X			
69.0	-15					X	X	Note: Wet at 15.0' bgs.		
								End of boring at 15.0' bgs.		



Remarks: bgs = below ground surface
 NA = not applicable
 NM = not measured
 Negative shake tests from 12.0-14.0' bgs.

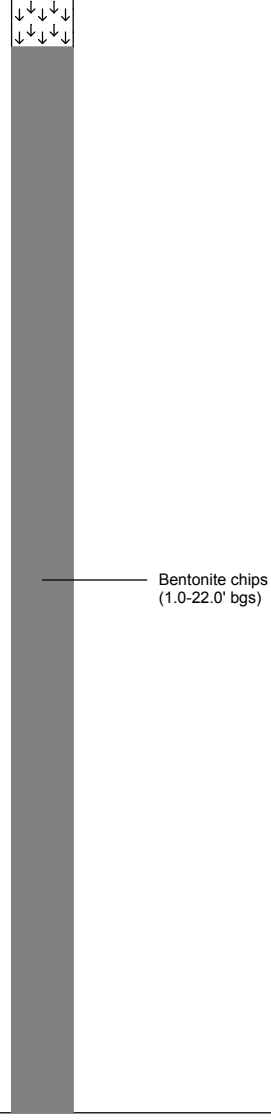
Date Start: 6/21/2018 Date Finish: 6/21/2018 Drilling Company: Cascade Driller's Name: J. Mathew Drilling Method: Sonic Sampling Method: 5.0'/10.0' Core barrel, Continuous Rig Type: Sonic Water Level Start (ft. bgs.): 20.0 Water Level Finish (ft. btoc.): NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth (ft. bgs.): 20.0 Surface Elevation: NA Descriptions By: Kaitlyn Voet	Well/Boring ID: SB-117-18 Client: RACER Location: RACER PNC Weather Conditions: Sunny, 70 F
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DEPTH (feet bgs.)	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0	0									
		1	0.0-5.0'	3.3	2.5 0.0 2.7 2.7 3.1	X X X X X	X X X X X	(0.0 - 8.5') FILL, SAND, very fine to fine; and SILT; some small to medium pebbles, subangular to subrounded; poorly sorted; moist to dry; dark brown (10YR 3/3). Note: Fill material; metal, wood, and cloth and slight odors from 2.0-8.5' bgs.		
		2	5.0-10.0'	3.3	3.1 10.0 35.0	X X X	X X X			
					12.3	X	X	(8.5 - 9.0') CONCRETE.		
					11.5	X	X	(9.0 - 20.0') FILL, SAND, very fine to fine, subrounded; well sorted; moist; dark yellowish brown (10YR 3/4).		
		3	10.0-15.0'	3.3	0.2 16.6 4.0	X X X	X X X	Note: Color transition to black (10YR 2/1) from 12.0-15.0' bgs.		
					2.9 4.0	X X	X X	Note: Concrete pieces at 15.0' bgs. Note: Color transition to dark yellowish brown (10YR 3/4) from 15.0-18.0' bgs.		
		4	15.0-20.0'	5.0	15.3 14.8 15.0	X X X	X X X	Note: Color transition to black (10YR 2/1) from 18.0-20.0' bgs.		
					15.0	X	X	Note: Metal pieces from 19.0-20.0' bgs.		
					3.9	X	X	Note: Wet at 20.0' bgs.		
20	20							End of boring at 20.0' bgs.		

	Remarks: bgs = below ground surface NA = not applicable NM = not measured
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Date Start: 6/21/2018 Date Finish: 6/21/2018 Drilling Company: Cascade Driller's Name: J. Mathew Drilling Method: Sonic Sampling Method: 5.0'/10.0' Core barrel, Continuous Rig Type: Sonic Water Level Start (ft. bgs.): 22.0 Water Level Finish (ft. btoc.): NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth (ft. bgs.): 22.0 Surface Elevation: NA Descriptions By: Kaitlyn Voet	Well/Boring ID: SB-118-18 Client: RACER Location: RACER PNC Weather Conditions: Sunny, 75 F
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DEPTH (feet bgs.)	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0	0									
		1	0.0-5.0'	5.0		0.1 0.2 0.8 2.2 1.9	X X X X X	(0.0 - 2.5') FILL, SAND, very fine to fine, subrounded; little granules, subangular; poorly sorted; dry; dark yellowish brown (10YR 4/6). (2.5 - 6.0') FILL, SAND, very fine to fine, subrounded; some silt; trace small pebbles, subrounded; poorly sorted; moist to dry; black (10YR 2/1).		
5	-5	2	5.0-10.0'	5.0		2.3 1.8 7.8 4.7 40.7	X X X X X	(6.0 - 7.0') FILL, SAND, very fine to fine; and SILT; moist; dark brown (10YR 3/3). Note: Wood pieces. (7.0 - 8.0') CONCRETE. (8.0 - 10.0') FILL, SAND, very fine to fine, subrounded; well sorted; moist; black (10YR 2/1) to dark yellowish brown (10YR 4/6).		
10	-10	3	10.0-15.0'	5.0		NM 7.5 2.1 2.0	X X X X	(10.0 - 12.0') Fill material, wood. (12.0 - 15.0') FILL, SAND, very fine to fine, subrounded; some silt; poorly sorted; moist to wet; black (10YR 2/1). Note: Wet from 14.0-15.0' bgs.		
15	-15	4	15.0-20.0'	5.0		1.4 1.9 2.3 10.0 32.6	X X X X	(15.0 - 20.0') SAND, very fine to fine, subrounded; well sorted; moist; black (10YR 2/1).		
20	-20	5	20.0-22.0'	2.0		7.0 16.4	X X	(20.0 - 22.0') CLAY, low plasticity, slow dilatancy, and SILT; moist; very soft; light greenish gray (GLEY 8/1). Note: Wet at 22.0' bgs. End of boring at 22.0' bgs.		



Remarks: bgs = below ground surface
 NA = not applicable
 NM = not measured
 Positive shake tests from 19.0-20.0' bgs.




Date Start: 6/21/2018 Date Finish: 6/21/2018 Drilling Company: Cascade Driller's Name: J. Mathew Drilling Method: Sonic Sampling Method: 5.0'/10.0' Core barrel, Continuous Rig Type: Sonic Water Level Start (ft. bgs.): 15.0 Water Level Finish (ft. btoc.): NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth (ft. bgs.): 25.0 Surface Elevation: NA Descriptions By: Kaitlyn Voet	Well/Boring ID: SB-119-18 Client: RACER Location: RACER PNC Weather Conditions: Sunny, 75 F
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DEPTH (feet bgs.)	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0	0									
		1	0.0-5.0'	5.0	0.2	X	X	(0.0 - 2.5') FILL, SAND, very fine to fine, subrounded; little granules to small pebbles, subangular to subrounded; poorly sorted; dry; dark brown (10YR 3/3).		<p>Bentonite chips (1.0-25.0' bgs)</p>
					0.3	X	X			
					1.1	X	X	(2.5 - 6.0') FILL, SAND, fine to medium, subrounded to subangular; some small to medium pebbles, subangular; dry to moist; black (10YR 2/1). Note: Brick and metal pieces from 2.5-4.0' bgs.		
					0.9	X	X			
					0.9	X	X			
5	-5				2.4	X	X			
		2	5.0-10.0'	5.0	3.6	X	X	(6.0 - 10.0') FILL, SAND, fine to medium, subrounded; well sorted; moist; black (10YR 2/1).		
					79.4	X	X			
					43.9	X	X			
					47.7	X	X			
10	-10				29.9	X	X	(10.0 - 15.0') FILL, SAND, very fine to fine, subrounded; some silt; trace small to medium pebbles, subrounded to subangular; poorly sorted; moist; black (10YR 2/1).		
		3	10.0-15.0'	5.0	6.7	X	X			
					5.9	X	X			
					2.2	X	X			
					7.3	X	X	Note: Wet at 15.0' bgs.		
15	-15				NM	X	X	(15.0 - 20.0') FILL, SAND, very fine to fine, subrounded; and SILT; trace small pebbles, subrounded; poorly sorted; wet; black (10YR 2/1).		
		4	15.0-20.0'	3.0	NM	X	X			
					NM	X	X			
					NM	X	X			

	Remarks: bgs = below ground surface NA = not applicable NM = not measured Negative shake test from 6.0-8.0' bgs.
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Date Start: 6/21/2018 Date Finish: 6/21/2018 Drilling Company: Cascade Driller's Name: J. Mathew Drilling Method: Sonic Sampling Method: 5.0'/10.0' Core barrel, Continuous Rig Type: Sonic Water Level Start (ft. bgs.): 15.0 Water Level Finish (ft. btoc.): NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth (ft. bgs.): 25.0 Surface Elevation: NA Descriptions By: Kaitlyn Voet	Well/Boring ID: SB-120-18 Client: RACER Location: RACER PNC Weather Conditions: Sunny, 75 F
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DEPTH (feet bgs.)	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
20	-20	4	20.0-25.0'	5.0	NM		[Dotted pattern]	Note: Color change to yellowish brown (10YR 5/4).		[Grey bar]
					NM					
					NM					
					NM					
					NM					
					NM					
25	-25							End of boring at 25.0' bgs.		
30	-30									
35	-35									

	Remarks: bgs = below ground surface NA = not applicable NM = not measured Negative shake test from 8.0-10.0' bgs.
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Date Start: 6/22/2018 Date Finish: 6/22/2018 Drilling Company: Cascade Driller's Name: J. Mathew Drilling Method: Sonic Sampling Method: 5.0'/10.0' Core barrel, Continuous Rig Type: Sonic Water Level Start (ft. bgs.): 18.0 Water Level Finish (ft. btoc.): NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth (ft. bgs.): 25.0 Surface Elevation: NA Descriptions By: Kaitlyn Voet	Well/Boring ID: SB-121-18 Client: RACER Location: RACER PNC Weather Conditions: Overcast, 60 F
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DEPTH (feet bgs.)	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
0	0									
		1	0.0-5.0'	5.0		10.5 1.6 0.5 0.5 0.2	X X X X X	(0.0 - 2.5') FILL, SAND, very fine to fine, subrounded; some silt; trace granules to small pebbles, subangular to subrounded; poorly sorted; dry; dark yellowish brown (10YR 4/4). (2.5 - 9.0') FILL, SAND, very fine to fine, subrounded; and SILT; little small to medium pebbles, subrounded to subangular; poorly sorted; moist; black (10YR 2/1). Note: Metal pieces.		
5	-5	2	5.0-10.0'	5.0		3.3 1.3 1.7 5.6 46.6 33.6 7.0	X X X X X X X	(9.0 - 12.0') FILL, SILT; some very fine to fine sand; trace granules to small pebbles, subrounded to subangular; poorly sorted; moist; black (10YR 2/1). (12.0 - 13.0') FILL, SAND, very fine to fine, subrounded to subangular; trace granules, subangular; poorly sorted; black (10YR 2/1). (13.0 - 13.5') FILL, SAND, medium to coarse, subangular; trace granules, subangular; poorly sorted; very dark gray (10YR 3/1). (13.5 - 14.0') FILL, SAND, very fine to fine; well sorted; moist; black (10YR 2/1). (14.0 - 16.0') FILL, SAND, very fine to fine; some silt; trace granule, subangular; poorly sorted; black (10YR 2/1).		
10	-10	3	10.0-15.0'	5.0		20.0 5.5 20.5	X X X	(16.0 - 18.0') FILL, SAND, very fine to fine; trace silt; well sorted; moist; black (10YR 2/1). Note: Wet at 18.0' bgs.		
15	-15	4	15.0-20.0'	5.0		2.4 51.5 133.0 48.2	X X X X	(18.0 - 20.0') FILL, SAND, very fine to fine, subrounded; some granules to small pebbles, subangular to subrounded; trace large pebbles, subangular; trace silt; wet; very dark gray (10YR 3/1).		Bentonite chips (1.0-25.0' bgs)

	Remarks: bgs = below ground surface NA = not applicable NM = not measured Negative shake test from 8.0-10.0' and 16.0-18.0' bgs.
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Date Start: 6/22/2018 Date Finish: 6/22/2018 Drilling Company: Cascade Driller's Name: J. Mathew Drilling Method: Sonic Sampling Method: 5.0'/10.0' Core barrel, Continuous Rig Type: Sonic Water Level Start (ft. bgs.): 18.0 Water Level Finish (ft. btoc.): NA	Northing: NA Easting: NA Casing Elevation: NA Borehole Depth (ft. bgs.): 25.0 Surface Elevation: NA Descriptions By: Kaitlyn Voet	Well/Boring ID: SB-121-18 Client: RACER Location: RACER PNC Weather Conditions: Overcast, 60 F
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DEPTH (feet bgs.)	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Analytical Sample	Geologic Column	Stratigraphic Description	Water Level (ft. bgs.)	Well/Boring Construction
20	-20				23.2		X			
		5	20.0-25.0'	5.0	16.9		X	(20.0 - 22.5') SAND, very fine to fine, subrounded; well sorted; wet; black (10YR 2/1).		
					30.8					
					19.6		X	(22.5 - 25.0') SAND, very fine to fine, subrounded; and SILT; low plasticity to nonplastic; soft; poorly sorted; moist; very dark brown (10YR 2/2).		
					11.2					
					13.3					
25	-25							End of boring at 25.0' bgs.		
30	-30									
35	-35									

	Remarks: bgs = below ground surface NA = not applicable NM = not measured Negative shake test from 8.0-10.0' and 16.0-18.0' bgs.
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