

Ms. Amanda Armbruster  
Saginaw Bay District Office  
Michigan Department of Environmental Quality  
401 Ketchum Street, Suite B  
Bay City, Michigan 48708

Arcadis of Michigan, LLC  
28550 Cabot Drive  
Suite 500  
Novi  
Michigan 48377  
Tel 248 994 2240  
Fax 248 994 2241  
[www.arcadis.com](http://www.arcadis.com)

Subject:  
Saginaw Malleable Industrial Land - Peninsula and Railyard Area Soil Cover  
Completion Summary

ENVIRONMENT

Dear Ms. Armbruster:

Date:  
December 10, 2018

Arcadis of Michigan, LLC (Arcadis) has prepared and is providing this Soil Cover Completion Summary behalf of RACER Trust summarizing the installation of vegetated soil covers at the RACER Trust, Saginaw Malleable Industrial Land (SMI) Railyard Area and Peninsula (**Figures 1 and 2**) in Saginaw, Michigan (Site). Based on comparison of all of the data to the Site-specific Recreational criteria developed and submitted to the Michigan Department of Environmental Quality (MDEQ) in the Recreational Use Risk Evaluation, Arcadis 2017, and the Site-specific Nonresidential cleanup criteria detailed in the Nonresidential Use Risk Evaluation, Arcadis, October 10, 2018, there were locations on the Site where surface soils exceeded Direct Contact Criteria (DCC).

Contact:  
Scott Clearwater

Phone:  
810 225 1921

Email:  
[scott.clearwater@arcadis.com](mailto:scott.clearwater@arcadis.com)

Our ref:  
B0064434.2018

After additional delineation at the Railyard Area was completed on May 23-24, 2018, Arcadis submitted a final Soil Cover Workplan July 6, 2018 (**Attachment 1**) providing details for the soil cover installation. The work plan was approved by MDEQ on August 6, 2018.

The following summary details the work completed at the Railyard Area and Peninsula to mitigate DCC impacts.

## Background

Soil samples were collected during various events in 2015, 2017, and 2018 from the Site to delineate surface soil (0-0.5 feet below ground surface [ft bgs]) lead impacts. The proposed soil cover areas were based on the analytical results compared to the Site-Specific Nonresidential DCC, as these criteria are less than the Site-Specific Recreational DCC.

Approximately 6,100 yards of stockpiled sand remained along the northern edge of the former buffer basin (berm area) on the SMI property. Soil sampling was conducted by GHD to verify the material would be a viable source of fill material for use at the Site. Results of the sampling were submitted to MDEQ in the Buffer Basin Berm Soil Sampling Results Memorandum dated January 29, 2018. MDEQ accepted the results via a February 5, 2018 email. Based on the characterization results, the stockpiled sand was deemed suitable for use as fill material.

Bids were submitted in accordance with RACER Trust (Racer) Invitation for Bids (IFB) by Job Site Services, Inc. (JSS), H&M Environmental Services, Inc. (H&M), Taplin Enterprises (Taplin), and K&D Industries, Inc. (K&D). As part of the bid review process the following factors were considered; safety record, previous experience and knowledge of work on Site, value of the costs presented, approach and schedule. Based on the review of the submitted bids JSS was selected to fulfill the requirements of the Lead Impacted Soil Removal and Soil Cover Installation.

During planning, JSS proposed obtaining the needed topsoil for the project from Dave Hausbeck Trucking (DHT) located at 2695 West Vassar Road in Reese, Michigan. Arcadis collected nine soil samples from the topsoil stockpile at DHT. Arcadis collected two grab soil samples from the topsoil stockpile at DHT on August 2, 2018. These were analyzed for total metals via United States Environmental Protection Agency (USEPA) Method 6010B, volatile organic compounds (VOCs) via USEPA Method 8260B, semi-volatile organic compounds (SVOCs) via USEPA method 8270C, and polychlorinated biphenyls (PCBs) via USEPA Method 8082A. Based on an e-mail request from MDEQ dated August 17, 2018, Arcadis collected seven additional samples for PNA analysis. The additional seven grab samples, collected on August 17, 2018, were submitted under chain-of-custody procedures to Merit Laboratories in Lansing, Michigan for analysis of PNAs via USEPA method 8270D. The top soil was approved for use as soil cover by MDEQ on August 22, 2018. Characterization of top soil was reported to the MDEQ in a submittal on August 23, 2018 (**Attachment 2**). A total of 450 cubic yards of top soil was used for this scope of work (SOW).

The soil stockpile located near the former buffer basin and the Peninsula Area are within the 100-year flood plain of the Saginaw River. Therefore, a Joint Permit Application (JPA) was submitted to MDEQ and the Army Corps of Engineers. The permit was issued on August 1, 2018 and is valid through August 1, 2023. A soil erosion and sediment control permit (SESC) was not required as part of this scope of work because the proposed work does not intend to disturb more than one acre of land and is greater than 500 feet from the Saginaw River. A floodplain permit to complete the proposed scope of work was submitted to the City of Saginaw on July 9, 2018. Verbal approval was granted by the City of Saginaw Engineering Department on August 10, 2018. The permits are included as **Attachment 3**.

Prior to any work being conducted, a survey was conducted by Spicer Group, Inc. (Spicer) to verify base elevations on August 2, 2018. Initial survey elevations are shown on **Figure 3** and **Figure 5**.

Subsequently, the cover installation work occurred from August 13, 2018 through September 6, 2018.

All construction work was sub-contracted by Arcadis to Job Site Services (JSS). All survey work was performed by Spicer Group. Oversight of the work was performed by Arcadis.

## DETAILS OF WORK COMPLETED

### Mobilization and Site Preparation/Well Abandonment

Before Site preparation, Health and Safety meetings were conducted by Arcadis everyday with JSS employees performing the work.

Based on the location of the proposed Peninsula soil cover areas, monitoring well MW01-118WT was abandoned by JSS prior to work on August 14, 2018. The well casing was removed, and the remaining void was backfilled with bentonite chips, and graded with soil for the top foot. The well abandonment log is provided as **Attachment 4**.

To gain access to the Peninsula for the heavy equipment and trucks, a section of the chain link fence surrounding the Peninsula closest to the access road was cut and moved. Due to excessive rainfall at the end of first week of work, the pathway leading to the excavation area at Peninsula needed heavy equipment weight dispersion mats to prevent excessive rutting or disturbance of the ground surface. Photos are included in **Attachment 5**.

Brush, small shrubs, and trees were removed from the Peninsula Area, as necessary. Arcadis observed 58 trees/shrubs in the work area, 10 of which were as large as approximately 10 to 12-inches at the base. For trees near the edges or that were isolated and can remain, surface soils were cleared by hand digging under the tree canopy. All trees up to near ground surface were cut and left west or south of the cover area for natural decay on-site. The roots in these areas were excavated and transported to Peoples Landfill located at 4143 East Rathbun Road, Birch Run, Michigan, a permitted non-hazardous landfill, for disposal along with the soil.

### Task 1 Peninsula Property

#### Excavation and Soil Cover Installation

Elevated lead concentrations in the soil at the Peninsula were identified for soil excavation and cover installation to maintain a neutral ground surface elevation. The area, as shown on **Figure 2**, is 11,755 square feet. Completion of the excavation work resulted in 534.28 tons of soil removal. Backfilling activities used 275 cubic yards (cy) of sand and 75 cy of topsoil. Work was performed as follows:

- Soils were removed from the Peninsula and transported to a Peoples Landfill for disposal. The manifests of the disposed soils are included as **Attachment 6**.
- The excavated areas were then surveyed to confirm that a minimum of six inches of soil was removed from the appropriate areas. It was determined that six inches were excavated.
- Upon completion of the soil removal, the geotextile (Material Type: Win Fab Style 3150 Orange) was placed at the bottom of the excavation as a demarcation layer.
- Then the excavation was backfilled with sand from the former buffer basin berm area stockpile and compacted using the treads of the heavy equipment on-Site.
- A survey was completed to verify a 4-inch sand lift was in place.

- The top two-inches of the excavated areas were backfilled with previously approved top-soil brought to the Peninsula to provide a base for vegetated growth.
- The topsoil was then covered with Michigan native grass seed (Barenbrug, 100lb per acre) and topped with hay/straw to prevent erosion and hold in moisture.
- A survey was conducted to determine the final elevations (**Figure 3**). On average, 6 inches were excavated, and 6 inches of cover were installed.
- The perimeter fence was repaired upon completion of the soil cover as shown in the photo log (**Attachment 5**).

## Task 2 Railyard Area

### Soil Cover Installation

Elevated lead concentrations in the soil at the Railyard Area were identified. The impacted soil was either covered with a 1-foot soil cover to provide a direct contact barrier for surface (0-1 ft. interval) soil or were below at least 1 foot of soil with no lead exceedances (**Figure 6**). The area requiring soil cover to be placed, as shown on **Figure 2**, is 22,551 square feet and required 899 cy of sand and 185 cy of topsoil for the cover. Work was performed as follows:

- The Railyard Area surficial lead exceedance area was levelled with sand from the former buffer basin berm area to create an even ground surface to place the geotextile fabric.
- A geotextile demarcation layer (Win Fab Style 3150 Orange) was placed to cover the surficial lead exceedance area.
- A 10-inch sand layer was placed on top of the geotextile and compacted using the treads of the heavy equipment on Site
- A survey was completed to verify the 10-inch sand elevation was in place.
- The top two-inches of the Railyard Area surficial lead exceedance area was covered with previously approved top-soil brought to the Railyard Area to provide a base for vegetated growth.
- The topsoil was then covered with Michigan native grass seed (Barenbrug, 100lb per acre) and topped with hay/straw to prevent erosion and hold in moisture.
- A survey was conducted to determine the final elevations (**Figure 4**) and verify that a 12-inch soil cover had been installed over the lead impacted areas and sloped to match the surrounding surface extending beyond the cover area at a 1:3 ratio.

### Additional Tasks

While onsite JSS completed additional maintenance tasks as listed below:

- General maintenance of the already in place soil cover on the former plant slab;
- Stockpile approximately 100 cy of topsoil for future maintenance needs;
- Backfill eroded areas near the stormwater pond; and
- Remove additional debris found south of the Peninsula Property.

Ms. Amanda Armbruster  
December 10, 2018

### Declaration of Restrictive Covenants

The soil covers installed and discussed in this report are meant to mitigate soil impacts above the DCC. Soil impacts have been covered or removed and surveyed to be included with the Declaration of Restrictive Covenants. Direct contact concerns have been mitigated as shown on **Figures 5 and 6**.

Please contact me at 810-225-1921 if you have any questions regarding the enclosed report or its attachments.

Sincerely,

Arcadis of Michigan, LLC



Scott Clearwater

Certified Project Manager

Enclosures:

### Figures

- 1 Site Location Map
- 2 Site Layout Map
- 3 Pre-cover and Post Cover Contours – Peninsula
- 4 Pre-cover and Post Cover Contours – Railyard
- 5 Peninsula Lead Analytical Summary
- 6 Railyard Lead Analytical Summary

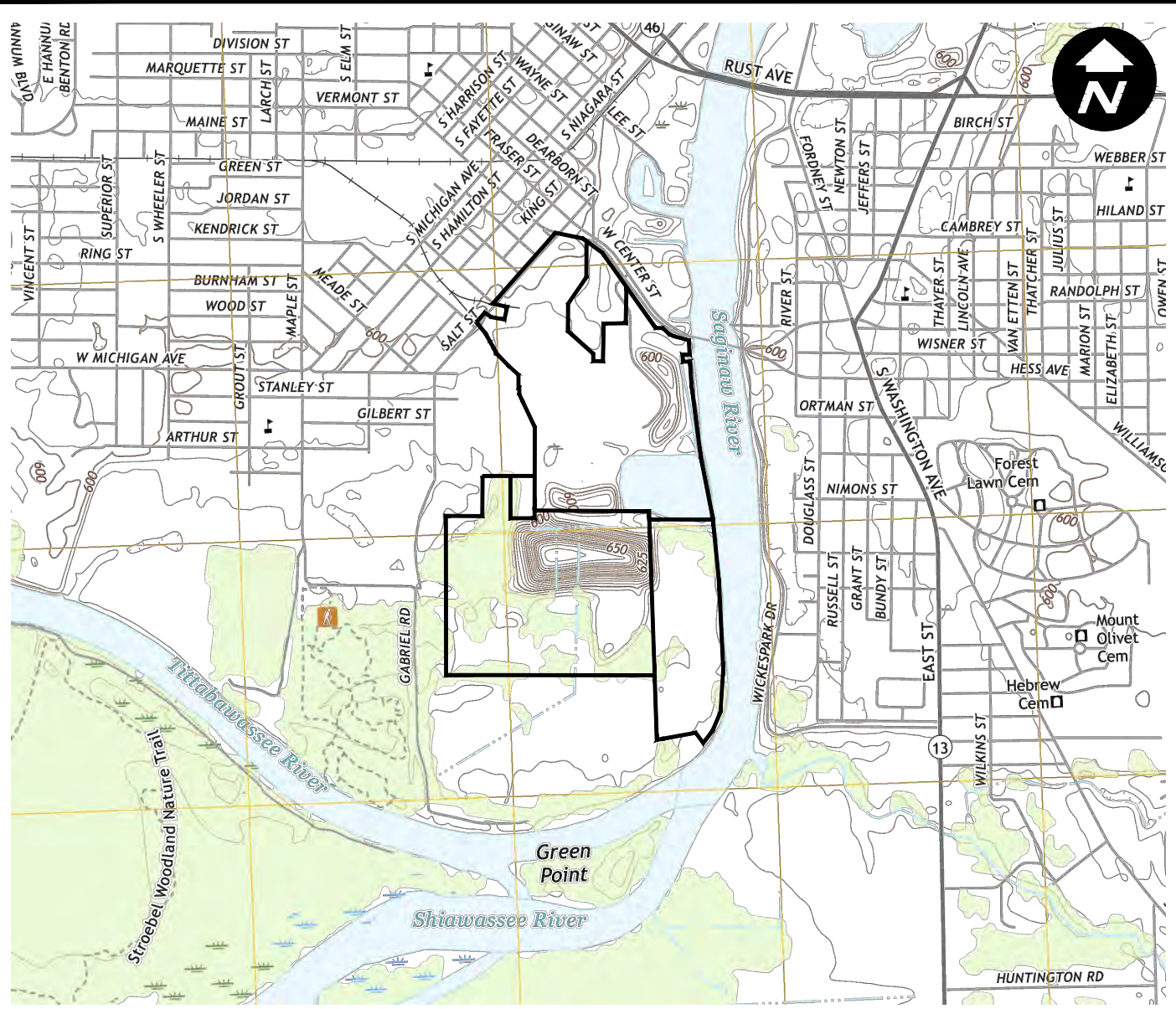
### Attachments

- 1 Work Plan Approval
- 2 Top Soil Use Approval
- 3 Permits Documentation: JPA and Floodplain
- 4 Well Abandonment Log
- 5 Photo Log of Work Performed
- 6 Waste Manifests of Excavated Soil from Peninsula

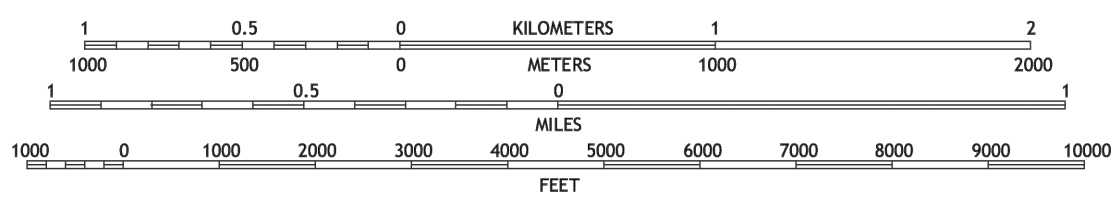
# FIGURES



CITY:NOVI DIV:GROUP:ENV DB: PIC: PM: TM: TR:  
 PROJECT NUMBER:  
 G:\PROJECTS\Project Stuff\OTHER OFFICE WORK\ENV WORK\KIKRISTEN PADRONRACER SAGINAW TOPO.dwg LAYOUT: 1 SAVED: 7/25/2017 10:54 AM PLOTSTYLETABLE: PLTCONT\_HALF.CTB PLOTTED: 7/25/2017 10:57 AM BY: DAVIS, GLENN II



SCALE 1:24 000



CONTOUR INTERVAL 5 FEET  
 NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011. A metadata file associated with this product is draft version 0.6.19








SAGINAW MALLEABLE INDUSTRIAL LAND, GREEN POINT LANDFILL, AND PENINSULA PROPERTY SAGINAW, MICHIGAN	
<b>SITE LOCATION MAP</b>	
	FIGURE <b>1</b>



CITY: Novi, DIV: ENV, DB: TRY, PIC: PM, TM: TR, PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl  
G:\COMMONRACER\Saginaw\64434 - SMI (10030) Main Location\GIS\IDocs\Workplan\FIG2 - Site Plan.mxd PLOTTED: 9/24/2018 3:14:42 PM BY: dolexa

**LEGEND**

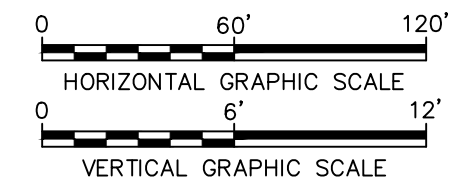
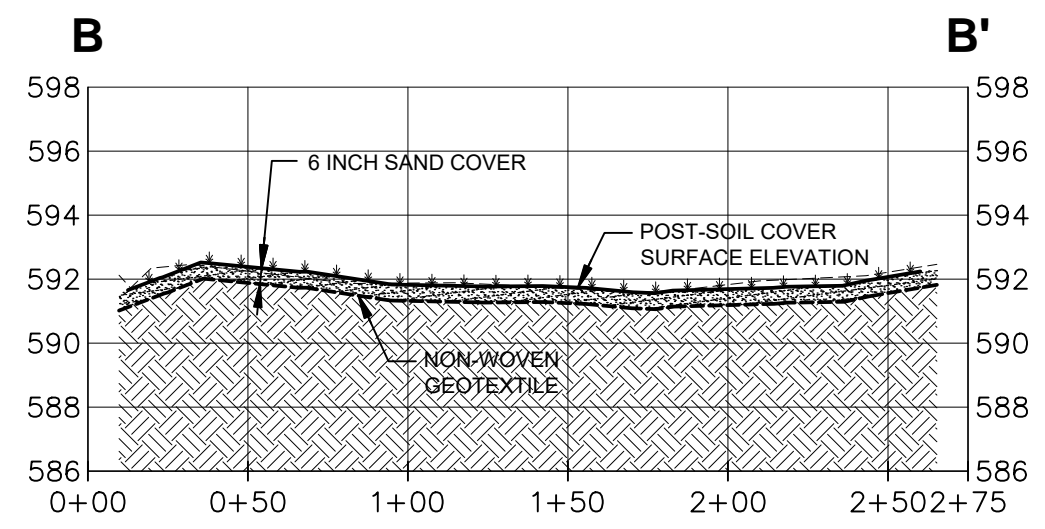
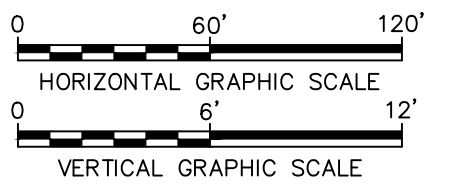
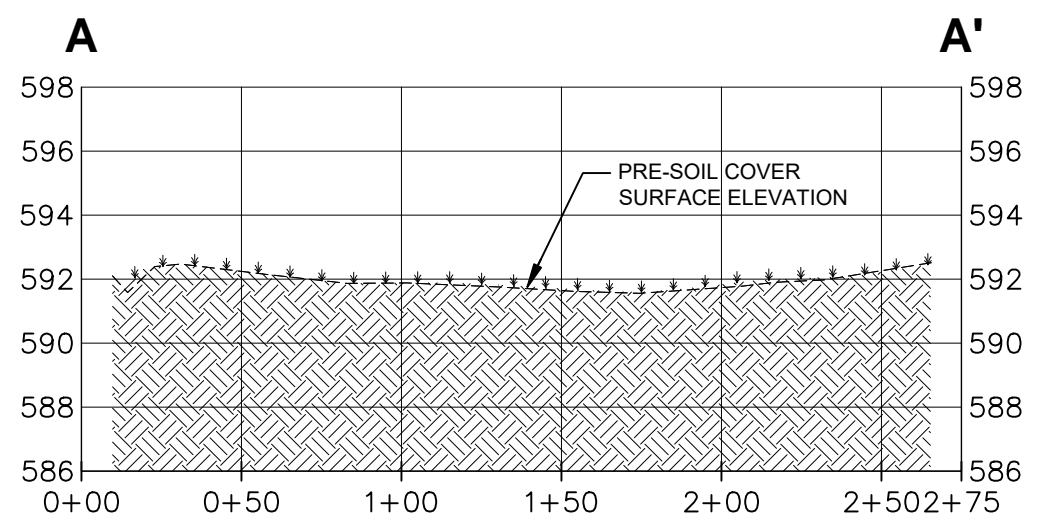
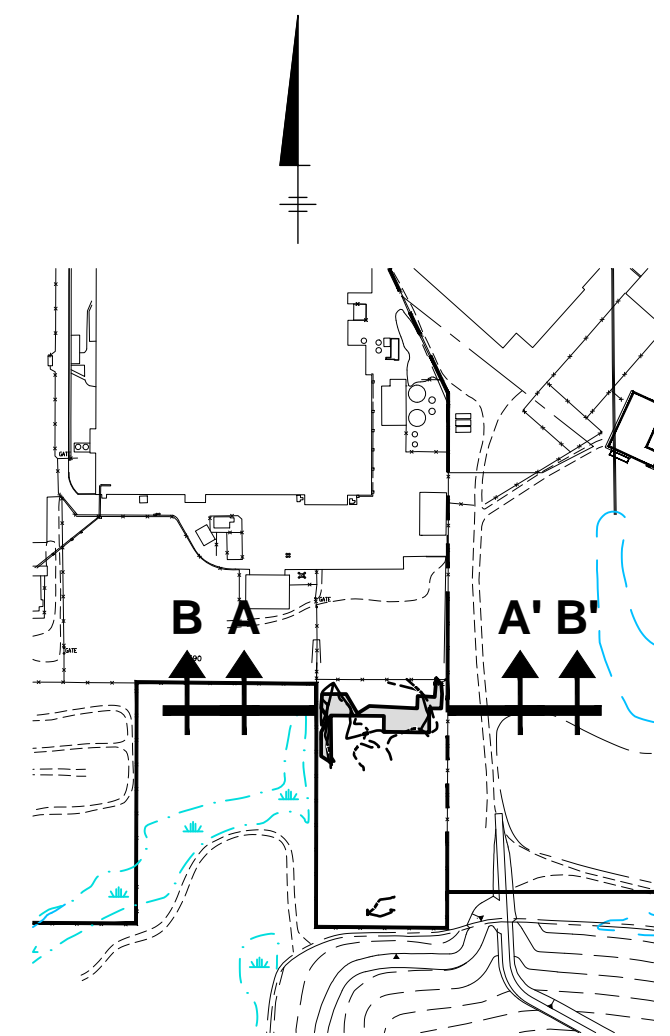
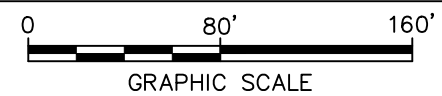
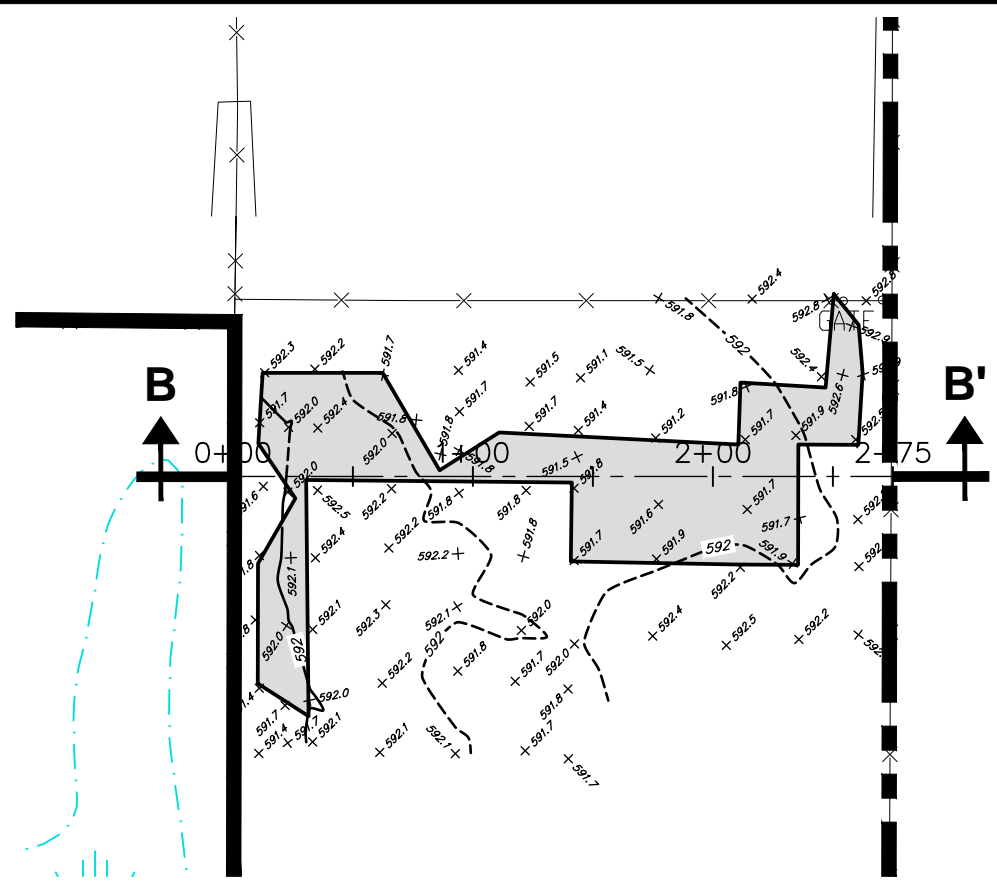
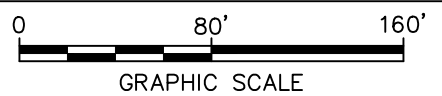
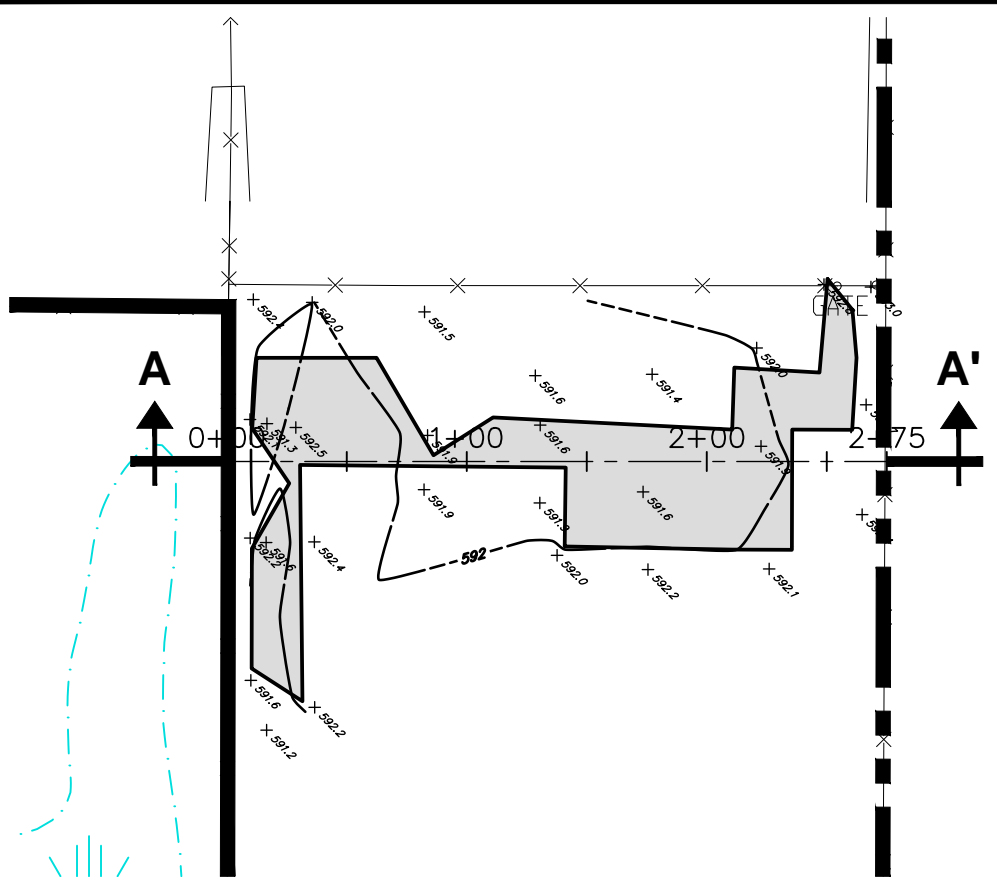
-  INSTALLED 2018 SOIL COVERS
-  BUFFER BASIN BERM AREA
-  SMI PROPERTY BOUNDARY
-  GPL PROPERTY BOUNDARY
-  PENINSULA PROPERTY BOUNDARY

SAGINAW MALLEABLE INDUSTRIAL LAND PROPERTY,  
GREENPOINT LANDFILL, AND PENINSULA PROPERTY  
SAGINAW, MICHIGAN

**SITE LAYOUT MAP**

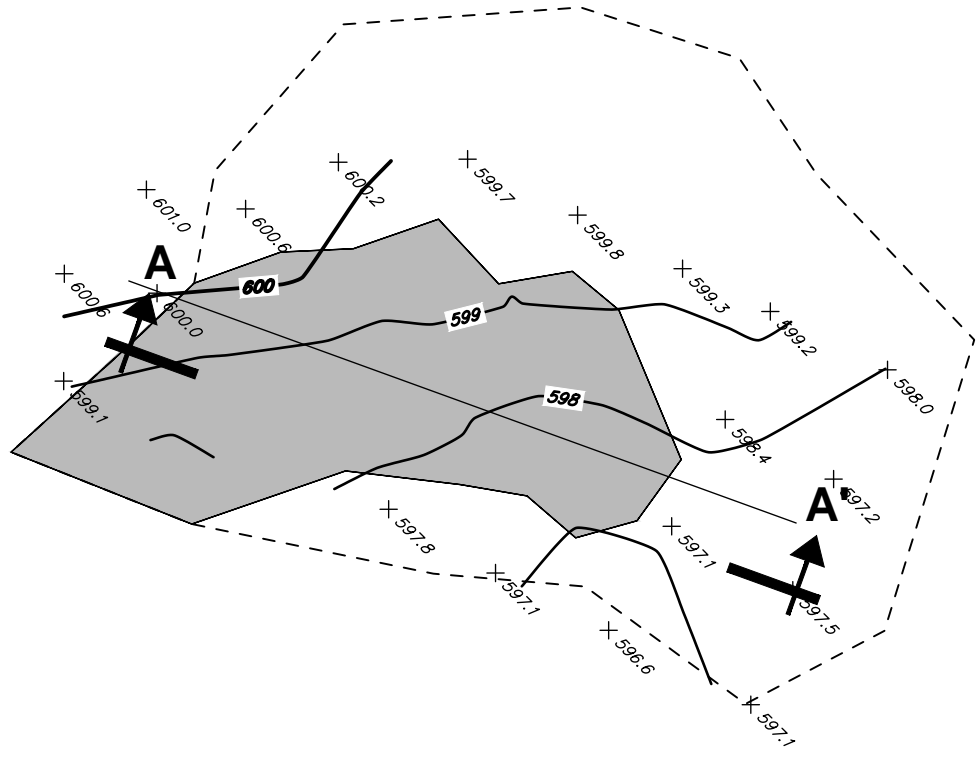


CITY:\Recd\DIV\GROUP\Recd\DR\Recd\LD\Opt\PIC\Opt\PM\Recd\TM\Opt\LYR\Opt\ON="OFF"REF=C:\Users\kavis\OneDrive - ARCADIS\BIM\360 Docs\RACER\TRUST\2018 SAGINAW MALLEABLE\20180604434\_2018\01-DWG\FIG 2 PENINSULA CROSS-SECTIONS.dwg LAYOUT: X\_SAVED: 10/25/2018 12:50 PM ACADVER: 21.05 (LMS TECH) PAGES: 10 PLOTSTYLETABLE: PLT\FULLCTB PLOTTED: 10/25/2018 12:51 PM BY: DAVIS, KATHI XREFS: IMAGES: PROJECTNAME: X-BASE1-X01

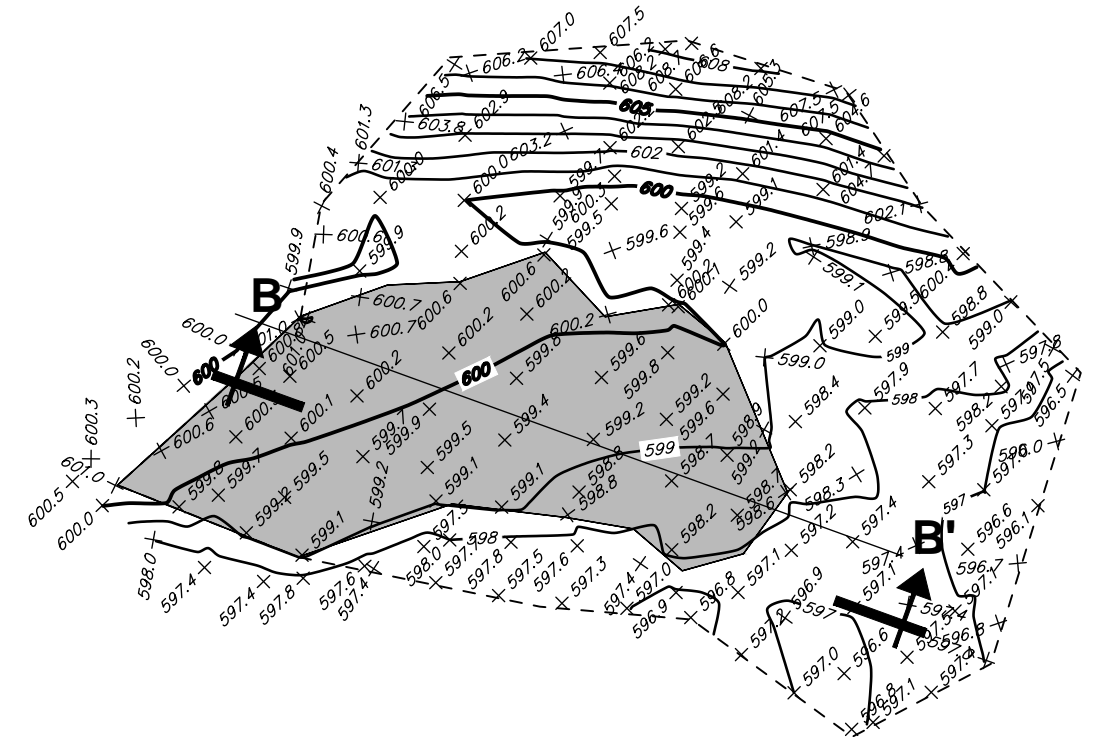
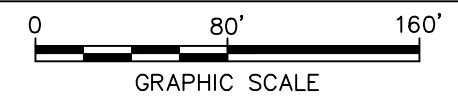


SAGINAW MALLEABLE INDUSTRIAL LAND PROPERTY,  
 GREENPOINT LANDFILL, AND PENINSULA PROPERTY  
 SAGINAW, MICHIGAN  
**PRE-COVER AND POST COVER  
 CONTOURS- PENINSULA**

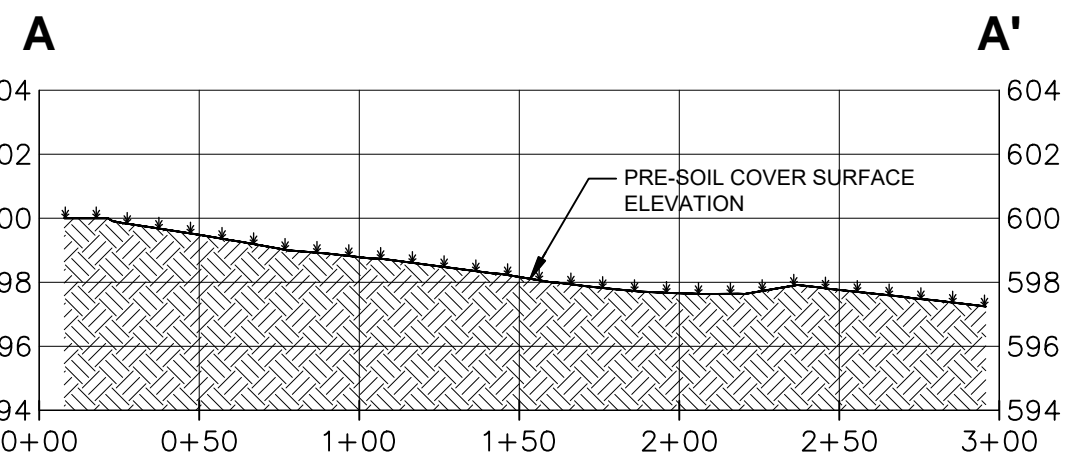
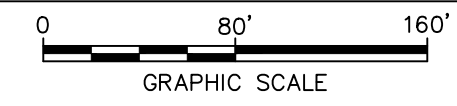
CITY:\Revd\DIV\GROUP\Revd\ DB\Revd\ LD\Opt\ PIC\Opt\ PM\Revd\ TM\Opt\ LVR\Opt\ONE\OFF=REF  
 C:\Users\stowell\OneDrive - ARCADIS\BIM 360 Docs\RACER TRUST\2018\Saginaw Malleable\2018\0804434\_201801-DWG\FIG 1 CROSS-SECTIONS.dwg LAYOUT: X SAVED: 10/12/2018 4:16 PM ACADVER: 21.05 (LMS TECH) PAGES: 10/12/2018 4:16 PM PLOTSTYLETABLE: PLTFULL.CTB  
 PLOTTED: 10/12/2018 4:16 PM BY: STOWELL, GARY  
 XREFS: IMAGES: PROJECTNAME:



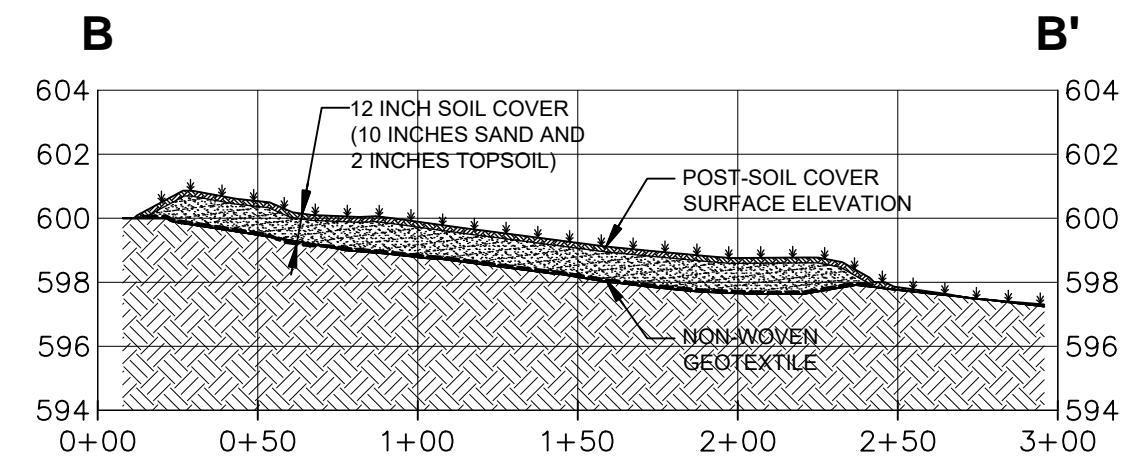
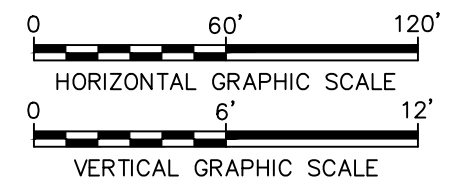
**PRE-SOIL COVER ELEVATIONS**



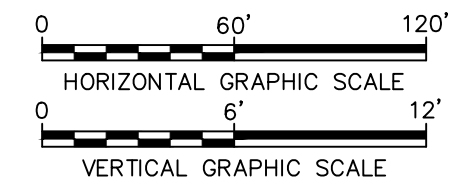
**POST-SOIL COVER ELEVATIONS**



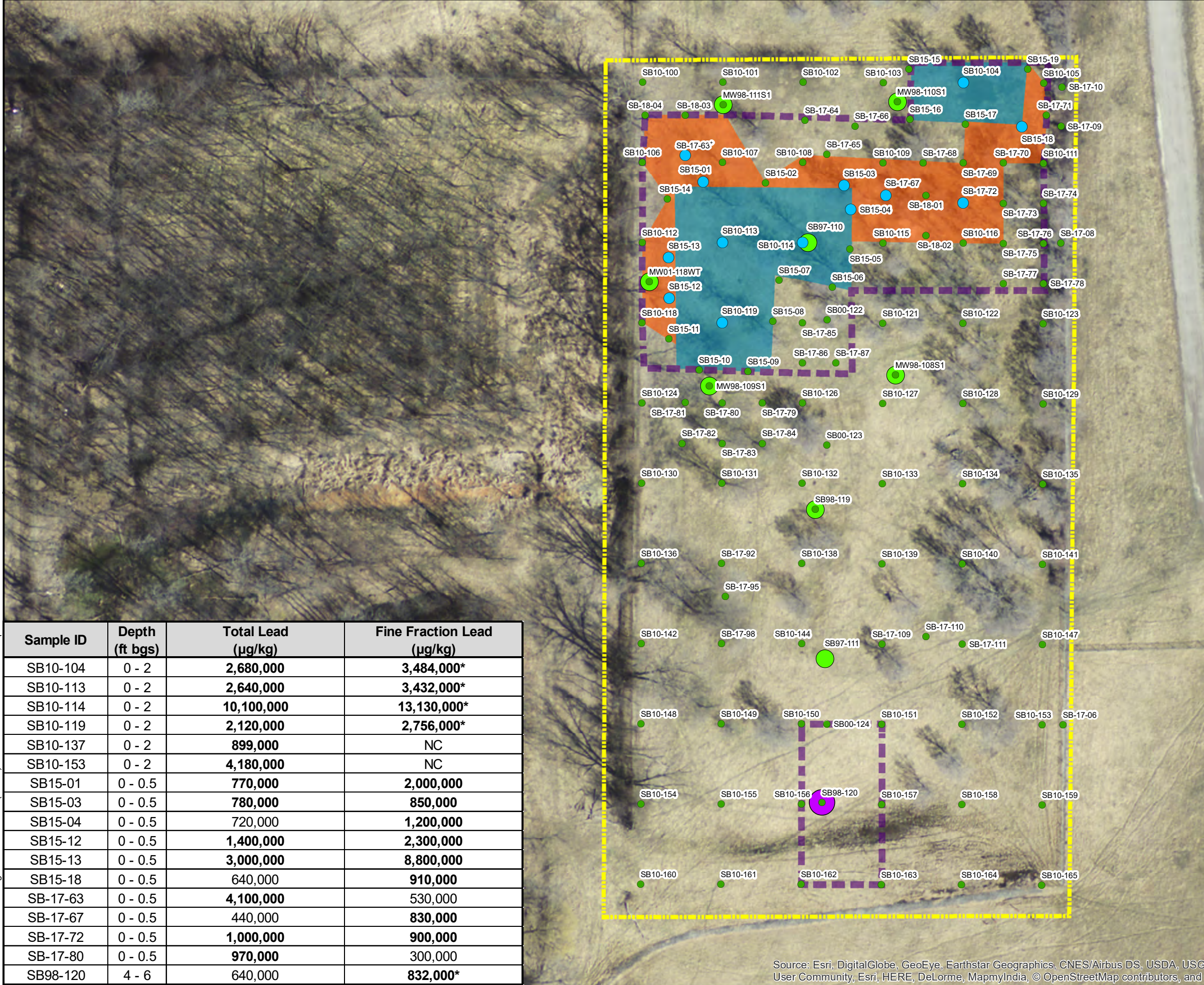
**PRE-SOIL COVER CROSS-SECTION**



**POST-SOIL COVER CROSS-SECTION**



SAGINAW MALLEABLE INDUSTRIAL LAND  
 PROPERTY, GREENPOINT LANDFILL, AND  
 PENINSULA PROPERTY SAGINAW, MICHIGAN  
**PRE-COVER AND POST COVER  
 CONTOURS - RAILYARD**



**LEGEND**

- LEAD ANALYTICAL DATA: 0 - 2 FT BGS**
- LEAD < 760,000 ug/kg
  - LEAD > 760,000 ug/kg
- LEAD ANALYTICAL DATA: > 2 FT BGS**
- LEAD < 760,000 ug/kg
  - LEAD > 760,000 ug/kg
- 2015 COMPLETED SOIL COVER AREA
  - 2018 COMPLETED SOIL COVER AREA
  - RESTRICTIVE COVENANT AREA
  - PENINSULA PROPERTY BOUNDARY

**NOTES:**

LABORATORY ANALYZED FINE FRACTION DATA ARE USED WHERE AVAILABLE.

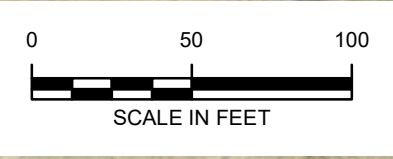
\* REPRESENTS ESTIMATED FINE FRACTION LEAD CONCENTRATION.

\* REPRESENTS LOCATIONS WHERE TOTAL LEAD DATA PRESENTED RATHER THAN FINE FRACTION LEAD.

NC REPRESENTS THAT LOCATION HAS BEEN RESAMPLED; FINE FRACTION LEAD CONCENTRATIONS HAVE NOT BEEN CALCULATED FOR HISTORIC SAMPLES.

ESTIMATED FINE FRACTION LEAD CONCENTRATIONS ARE BASED ON THE 95% UPPER CONFIDENCE LIMIT (UCL) FINE TO TOTAL RATIO OF 1.3.

SAMPLING INTERVALS REFER TO THE DEPTH BELOW GROUND SURFACE AT THE TIME OF SAMPLING.



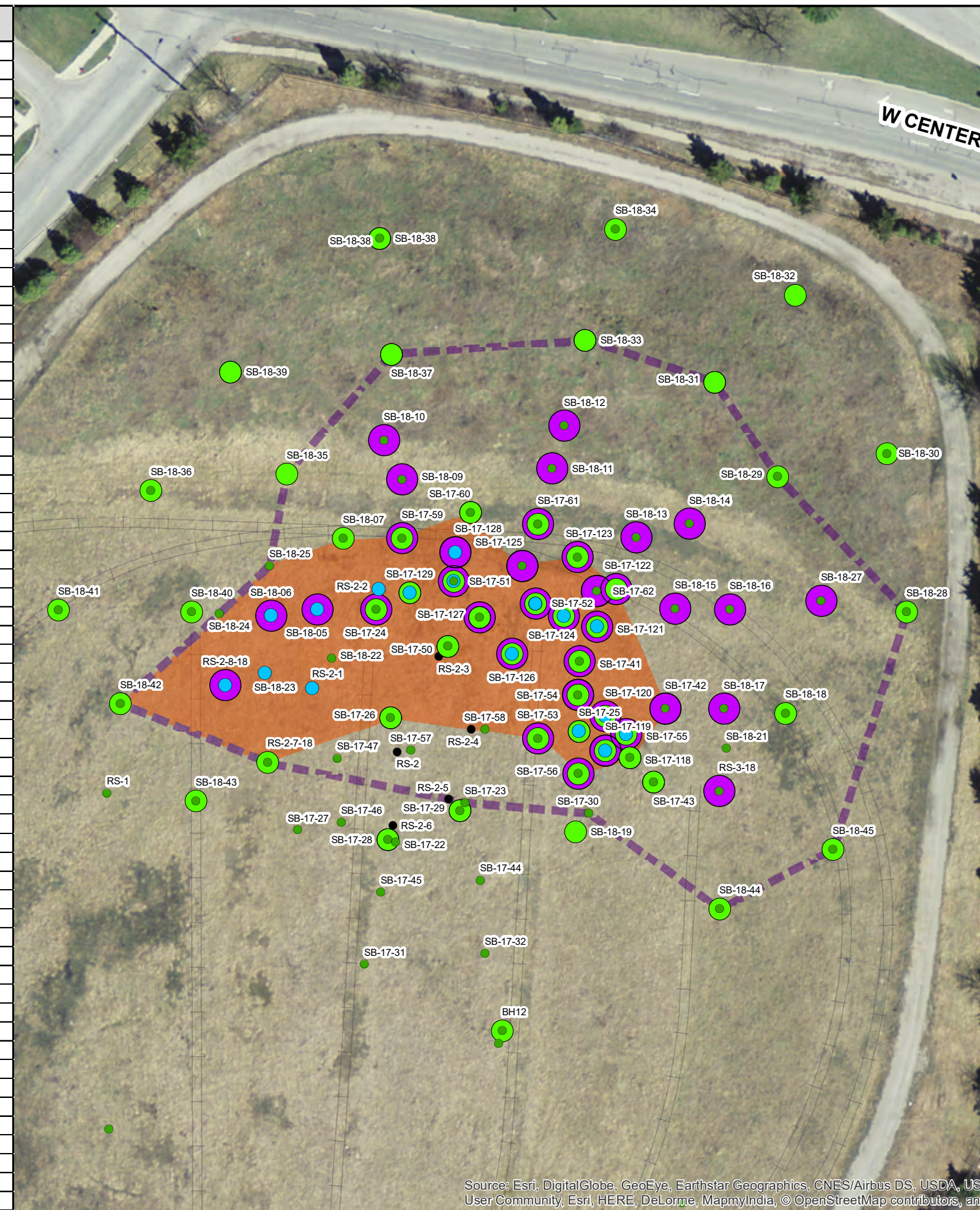
Sample ID	Depth (ft bgs)	Total Lead (µg/kg)	Fine Fraction Lead (µg/kg)
SB10-104	0 - 2	2,680,000	3,484,000*
SB10-113	0 - 2	2,640,000	3,432,000*
SB10-114	0 - 2	10,100,000	13,130,000*
SB10-119	0 - 2	2,120,000	2,756,000*
SB10-137	0 - 2	899,000	NC
SB10-153	0 - 2	4,180,000	NC
SB15-01	0 - 0.5	770,000	2,000,000
SB15-03	0 - 0.5	780,000	850,000
SB15-04	0 - 0.5	720,000	1,200,000
SB15-12	0 - 0.5	1,400,000	2,300,000
SB15-13	0 - 0.5	3,000,000	8,800,000
SB15-18	0 - 0.5	640,000	910,000
SB17-63	0 - 0.5	4,100,000	530,000
SB17-67	0 - 0.5	440,000	830,000
SB17-72	0 - 0.5	1,000,000	900,000
SB17-80	0 - 0.5	970,000	300,000
SB98-120	4 - 6	640,000	832,000*

RACER PENINSULA PROPERTY  
 SAGINAW, MICHIGAN

**PENINSULA LEAD ANALYTICAL SUMMARY**

CITY: Novi DIV: ENV DB: TRY PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl G:\COMMON\RACER\Saginaw\64434 - SMI (10030) Main Location\GIS\Docs\Workplan\FG8 - Railyard Cover.mxd PLOTTED: 9/27/2018 9:27:49 AM BY: dolax

Sample ID	Depth (ft bgs)	Total Lead (µg/kg)	Fine Fraction Lead (µg/kg)
RS-2-1	0 - 1	279,000	1,534,500*
RS-2-2	0 - 1	237,000	1,303,500*
RS-2-5	0 - 1	769,000	NC
RS-2-6	0 - 1	214,000 [1,370,000]	NC
RS2-8-18	0 - 0.5	2,440,000	3,050,000
RS2-8-18	2 - 3	41,500,000	1,800,000
RS3-18	2 - 3	1,940,000	2,840,000
SB-17-24	2 - 3	2,600,000	2,800,000
SB-17-25	0 - 0.5	1,500,000	2,200,000
SB-17-41	2 - 3	2,100,000	2,800,000
SB-17-42	2 - 3	170,000	1,200,000
SB-17-42	4 - 5	1,700,000	2,300,000
SB-17-51	1 - 2	2,500,000	1,300,000
SB-17-51	2 - 3	1,300,000	940,000
SB-17-51	4 - 5	1,600,000	510,000
SB-17-52	0 - 0.5	590,000	780,000
SB-17-52	1 - 2	860,000	1,500,000
SB-17-52	2 - 3	690,000	2,300,000
SB-17-53	2 - 3	2,800,000	2,900,000
SB-17-54	2 - 3	1,900,000	2,500,000
SB-17-54	4 - 5	150,000	825,000*
SB-17-55	0 - 0.5	980,000	1,700,000
SB-17-55	2 - 3	1,800,000	1,600,000
SB-17-56	2 - 3	2,800,000	950,000
SB-17-59	2 - 3	350,000	2,700,000
SB-17-61	2 - 3	430,000	3,600,000
SB-17-62	2 - 3	250,000	2,900,000
SB-17-62	4 - 5	1,100,000	2,600,000
SB-17-119	0 - 0.5	970,000	2,900,000
SB-17-119	2 - 3	20,000	2,300,000
SB-17-119	2 - 3	NA [c]	2,700,000
SB-17-120	0 - 0.5	460,000	2,000,000
SB-17-120	2 - 3	2,100,000	3,000,000
SB-17-121	0 - 0.5	470,000	1,000,000
SB-17-121	2 - 3	3,100,000	2,700,000
SB-17-122	2 - 3	57,000	1,700,000
SB-17-123	2 - 3	950,000	1,600,000
SB-17-124	0 - 0.5	360,000	1,500,000
SB-17-124	2 - 3	3,700,000	2,900,000
SB-17-125	0 - 0.5	1,700,000	670,000
SB-17-125	2 - 3	1,100,000	1,500,000
SB-17-125	4 - 5	690,000	1,300,000
SB-17-126	0 - 0.5	550,000	1,100,000
SB-17-126	2 - 3	1,000,000	1,300,000
SB-17-127	4 - 5	4,700	910,000
SB-17-128	0 - 0.5	570,000	1,700,000
SB-17-128	2 - 3	2,100,000	1,800,000
SB-17-128	4 - 5	500,000	950,000
SB-17-129	0 - 0.5	2,700,000	2,700,000
SB-18-05	0 - 0.5	2,080,000	2,240,000
SB-18-05	2 - 3	380,000	17,000,000
SB-18-06	0 - 0.5	3,490,000	3,280,000
SB-18-06	2 - 3	430,000	1,200,000
SB-18-09	2 - 3	410,000	910,000
SB-18-10	2 - 3	560,000	1,600,000
SB-18-11	2 - 3	270,000 [320,000]	1,350,000
SB-18-12	2 - 3	650,000	1,300,000
SB-18-13	2 - 3	2,600,000	1,500,000
SB-18-14	2 - 3	590,000	970,000
SB-18-15	2 - 3	640,000	1,300,000
SB-18-16	2 - 3	2,100,000	1,200,000
SB-18-17	2 - 3	1,100,000	1,300,000



### LEGEND

**LEAD ANALYTICAL DATA: 0 - 2 FT BGS**

- LEAD < 760,000 µg/kg
- LEAD > 760,000 µg/kg

**LEAD ANALYTICAL DATA: > 2 FT BGS**

- LEAD < 760,000 µg/kg
- LEAD > 760,000 µg/kg

- HISTORIC SAMPLE LOCATION WITH TOTAL LEAD WAS RE-SAMPLED TO INCLUDE FINE FRACTION ANALYSIS
- COMPLETED SOIL COVER AREA
- - - RESTRICTED COVENANT AREA

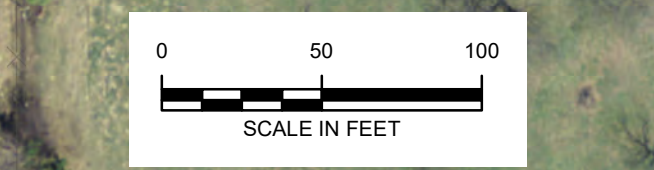
**NOTES:**

THE RECREATIONAL CRITERIA VALUE FOR LEAD IS 1,750,000 MICROGRAMS PER KILOGRAM (µg/kg).

LABORATORY ANALYZED FINE FRACTION DATA ARE USED WHERE AVAILABLE.

ESTIMATED FINE FRACTION LEAD CONCENTRATIONS ARE BASED ON THE 95% UPPER CONFIDENCE LIMIT (UCL) FINE TO TOTAL RATIO OF 5.5.

SAMPLING INTERVALS REFER TO THE DEPTH BELOW GROUND SURFACE AT THE TIME OF SAMPLING.



SAGINAW MALLEABLE INDUSTRIAL LAND  
SAGINAW, MICHIGAN

## RAILYARD LEAD ANALYTICAL SUMMARY

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and others.

# ATTACHMENTS



ATTACHMENT 1  
Work Plan Approval



## Clearwater, Scott

---

**From:** Armbruster, Amanda (DEQ) <ARMBRUSTERA@michigan.gov>  
**Sent:** Tuesday, August 7, 2018 3:46 PM  
**To:** Clearwater, Scott  
**Cc:** Dave Favero; Person, Ann (DEQ)  
**Subject:** RE: Saginaw Malleable Peninsula and Railyard - Soil Cover Work Plan Revised

Scott,

Per our telephone conversation yesterday, you may move forward with implementation of the soil cover work plan. We have one comment with regard to the proposed sampling of the topsoil cover material. The work plan indicates only one sample will be collected to evaluate 225 cubic yards of material. As discussed yesterday, if statistical analysis of the results is anticipated, a minimum of 9 samples should be collected. However, if sufficient historical information is available to show prior use of the topsoil source property included no hazardous substance use, fewer samples are acceptable (but one sample is too few).

Thank you,

Amanda Armbruster, Geologist  
Remediation and Redevelopment Division  
Saginaw Bay District Office  
989-894-6242

---

**From:** Clearwater, Scott <Scott.Clearwater@arcadis.com>  
**Sent:** Friday, July 06, 2018 1:42 PM  
**To:** Armbruster, Amanda (DEQ) <ARMBRUSTERA@michigan.gov>  
**Cc:** Dave Favero <dfavero@racertrust.org>  
**Subject:** Saginaw Malleable Peninsula and Railyard - Soil Cover Work Plan Revised

Amanda,

Per our conference call discussion on July 3<sup>rd</sup>, 2018 we are providing the attached revised work plan for soil cover activities. This combines the original June 8, 2018 draft work plan with the amendment that we discussed July 3<sup>rd</sup> to increase the area within the Railyard to be covered.

We are proceeding with contractor procurement, however, feel free to contact Dave or myself if you note any comments or questions that warrant edits and we can address any necessary changes to work plan scope through an addendum to our invitation to bid.

Thanks,  
Scott

**Scott Clearwater** | Certified Project Manager | [scott.clearwater@arcadis.com](mailto:scott.clearwater@arcadis.com)  
**Arcadis** | Arcadis of Michigan, LLC  
28550 Cabot Drive, Suite 500, Novi, MI | 48377 | USA  
T. +1 810 225 1921 | M. + 1 248 346 5970

Connect with us! [www.arcadis.com](http://www.arcadis.com) | [LinkedIn](#) | [Twitter](#) | [Facebook](#) | [Connect App](#)



Be green, leave it on the screen.

This email and any files transmitted with it are the property of Arcadis and its affiliates. All rights, including without limitation copyright, are reserved. This email contains information that may be confidential and may also be privileged. It is for the exclusive use of the intended recipient(s). If you are not an intended recipient, please note that any form of distribution, copying or use of this communication or the information in it is strictly prohibited and may be unlawful. If you have received this communication in error, please return it to the sender and then delete the email and destroy any copies of it. While reasonable precautions have been taken to ensure that no software or viruses are present in our emails, we cannot guarantee that this email or any attachment is virus free or has not been intercepted or changed. Any opinions or other information in this email that do not relate to the official business of Arcadis are neither given nor endorsed by it.

Ms. Amanda Armbruster  
Saginaw Bay District Office  
Michigan Department of Environmental Quality  
401 Ketchum Street, Suite B  
Bay City, Michigan 48708

Arcadis of Michigan, LLC  
28550 Cabot Drive  
Suite 500  
Novi  
Michigan 48377  
Tel 248 994 2240  
Fax 248 994 2241  
[www.arcadis.com](http://www.arcadis.com)

Subject:  
Saginaw Malleable Industrial Land - Peninsula and Railyard Area Soil Cover  
Work Plan - Revised

ENVIRONMENT

Dear Ms. Armbruster:

Date:  
July 6, 2018

Arcadis of Michigan, LLC (Arcadis) has prepared and is providing this revised work plan on behalf of RACER Trust to install vegetated soil covers at the RACER Trust, Saginaw Malleable Industrial Land (SMI) Railyard Area and Peninsula in Saginaw, Michigan (Site) following completion of recent delineation drilling. Based on comparison of all of the data to the Site-specific Recreational criteria developed and submitted to the Michigan Department of Environmental Quality (MDEQ) in the Recreational Use Risk Evaluation, Arcadis 2017, and the Site-specific Nonresidential cleanup criteria detailed in the Nonresidential Use Risk Evaluation, Arcadis, 2018, there are locations on the Site that have surface soils that exceed the Direct Contact Criteria (DCC).

Contact:  
Scott Clearwater

Phone:  
810 225 1921

Email:  
[scott.clearwater@arcadis.com](mailto:scott.clearwater@arcadis.com)

Our ref:  
B0064434.2018

Additional delineation drilling at the Railyard Area was completed on May 23-24, 2018 and was able to confirm delineation of the lead exceedances to define an extent where surface soils are above Site Specific nonresidential direct contact criteria (760 mg/kg). However, this delineation shows an extent of surface soil exceedances that is a slightly larger area than that known at the time of the Soil Cover Work Plan submitted June 8, 2018. Therefore, the proposed cover extent was increased in area, and the following revised Scope of Work (SOW) details the planned processes to install the vegetated soil covers as shown on **Figures 1 and 2**.

## Background

The Peninsula and Railyard Area had soil samples collected during various events in 2017 to delineate the surface soil (0-0.5 feet below ground surface [ft

bgs]) lead impacts. Analytical results from the surface sampling are summarized on **Figures 1 and 2**.

The proposed vegetated soil cover areas are based on the analytical results compared to the Site-Specific Nonresidential DCC, as shown on **Figures 1 and 2**, as the Site-Specific Nonresidential DCC is lower than the Site-Specific Recreational DCC.

Approximately 6,100 yards of virgin sand soils remain along the northern edge of the former buffer basin on the SMI property. Soil sampling was conducted by GHD at the area to verify the material would be a viable source of fill material for use at the Site. Results of the sampling were submitted to the MDEQ in the Buffer Basin Berm Soil Sampling Results Memorandum dated January 29, 2018 and MDEQ accepted those results via a February 5, 2018 email. Based on the characterization results, the stockpiled soils will be suitable for use as a base fill material and it is anticipated that approximately 600 yards of the stockpiled soils from the berm area are expected to be used as cover/backfill material for this scope of work.

## SCOPE OF WORK

The scope of work to be completed at the Peninsula includes excavation, transportation, and off-site disposal of impacted soils, installation of a demarcation layer (geotextile) as well as a soil cover, using soils from the former buffer basin berm along with topsoil from off-Site, and surface seeding and restoration.

### Task 1 Peninsula Property

#### Permitting

The location of the planned Peninsula soil cover area and the former buffer basin are within the 100-year flood plain of the Saginaw River, and accordingly a Joint Permit Application (JPA) has been drafted and submitted to MDEQ and the Army Corps of Engineers.

A soil erosion and sediment control permit (SESC) is not required as part of this scope of work in accordance with the MDEQ Soil Erosion and Construction Storm Water website ([https://www.michigan.gov/deq/0,4561,7-135-3311\\_4113---,00.html](https://www.michigan.gov/deq/0,4561,7-135-3311_4113---,00.html)) because the proposed work does not intend to disturb more than one acre of land and is a greater than 500 feet from the Saginaw River. However, a floodplain permit to complete the proposed scope of work will also be submitted to the City of Saginaw.

#### Mobilization and Site Preparation/Well Abandonment

Based on the location of the proposed Peninsula soil cover areas, hand digging will need to be completed around monitoring well MW01-118WT in order to allow for leaving the well in place for on-going monitoring based on request from Delphi. To gain access to the Peninsula for the heavy equipment and trucks, a section of the chain link fence surrounding the Peninsula closest to the access road will be cut and moved. Silt fence will be set up around the perimeter of the planned excavations to prevent soil runoff. If dust control is needed the work areas and access roads will be sprayed with water. If

necessary, heavy equipment weight dispersion mats will be placed to prevent excessive rutting or disturbance of the ground surface. Mud tracking and removal will be necessary along truck routes in and out of the work areas.

Brush and small shrubs will be removed from the cover area, as necessary. Additionally, it is anticipated that 5 to 7 small trees (less than 4 inches in diameter) will need to be removed in order to complete the work. For trees near the edges or that are isolated and can remain, hand digging will be used to clear the surface soils under the tree canopy as needed. Vegetation removed from the proposed work area will be transported to a permitted non-hazardous landfill for disposal based on root balls that may contain impacted soil.

### **Excavation and Soil Cover Installation**

Due to elevated lead concentrations in the soil at the Peninsula, three areas have been identified for soil excavation and cover installation. Based on the floodplain requirement to maintain a neutral elevation the removal of the top six inches of soil will occur prior to installing the soil cover. The three areas, as shown on **Figure 1**, are approximately 11,500 square feet of surface cover and will result in approximately 270 cubic yards of soil excavation and subsequent backfill. Soils will be removed from the Peninsula and transported to a permitted landfill for disposal. During excavation and soil cover installation the contractor will be required to perform air monitoring in the breathing zone as part of their health and safety requirements, including a four-gas meter and dust monitor. The excavation areas will be surveyed to confirm a minimum of six inches of soil have been removed from the appropriate areas.

Upon completion of the soil removal, the geotextile will be placed at the bottom of the excavation. Then the excavation will be backfilled with four inches of soil (approximately 200 cubic yards) from the former buffer basin berm area and compacted using the treads of the heavy equipment on-Site. The top two-inches of the excavated areas will be backfilled with top-soil brought to the Peninsula (approximately 75 cubic yards) to provide a base for vegetated growth as shown on **Figure 3**. Prior to the top-soil coming to the Peninsula, the subcontractor will provide proof the source material is from a clean borrow source, and free of contamination. Arcadis will collect one sample the proposed top soil and analyze it for volatile organic compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method 8260, semi-volatile organic compounds (SVOCs) via USEPA Method 8270, and metals via USEPA Method 6010/6020. The sample will be sent to Pace Laboratory in Grand Rapids, Michigan. The elevation of the backfill will be surveyed to confirm the cover thickness of six inches has been installed and to provide final elevations for inclusion in the Declaration of Restrictive Covenant (DRC) for the Site by an Arcadis provided licensed surveyor. The contractor will be responsible for maintaining an interval survey during excavation and backfill installation.

The topsoil will be covered with Michigan native grass seed (Barenbrug, 100lb per acre) and topped with hay to prevent erosion and hold in moisture and depending upon when the seeding occurs, 1 watering event may be performed.

## Site Restoration

The perimeter fence will be repaired upon completion of the soil cover. The silt fence will remain in place until vegetative growth is confirmed to be established and have adequate coverage (approximately 75% of the areas). If additional seeding or watering is required, it will be completed as part of routine Site OM&M activities.

## Task 2 Railyard Area

The scope of work to be completed at the Railyard Area includes installation of a demarcation layer and soil cover, using soils from the former buffer basin berm, topsoil from off-Site, and surface seeding and restoration.

## Permitting

At this time, it is expected that a SESC permit is not required as part of this scope of work because the proposed work does not intend to disturb more than one acre of land and is a greater than 500 feet from the Saginaw River.

A JPA is not required for the proposed work in the Railyard Area because the Railyard Area is outside of the regulated 100-year flood plain. However, the borrow area for the soil cover is the former buffer basin berm, which is within the 100-year flood plain of the Saginaw River. Therefore, the work is included in the pending JPA. Also, the borrow work will be included in the floodplain permit to be submitted to the City of Saginaw for the work in the Peninsula.

## Mobilization and Site Preparation

The Railyard Area is located in an open field; therefore, no access issues need to be addressed.; If necessary, heavy equipment weight dispersion mats will be placed to prevent excessive rutting or disturbance of the ground surface.

Brush and small shrubs will be removed from the cover area, as necessary. Vegetation removed from the proposed work area will be transported to a permitted non-hazardous landfill for disposal.

## Soil Cover Installation

Due to elevated lead concentrations in the soil at the Railyard Area, an area has been identified that requires a one-foot soil cover to provide a barrier to direct contact exposure. The area, as shown on **Figure 2**, is approximately 19,000 square feet, and will require approximately 700 cubic yards of cover. During soil cover installation the contractor will be required to perform air monitoring in the breathing zone as part of their health and safety requirements, including a four-gas meter and dust monitor.

The soil cover will consist of a demarcation layer (geotextile), ten inches of soil from the former buffer basin berm area (approximately 550 cubic yards) compacted using the treads of the heavy equipment on Site. The top two-inches of the soil cover area will be top-soil brought to the Railyard Area (approximately 150 cubic yards), to provide a base for vegetated growth, as shown on **Figure 4**. Prior to the top-soil

coming to the Railyard, the subcontractor will provide proof the source material is from a clean borrow source, and free of contamination. Arcadis will collect one sample of the proposed topsoil and analyze it for VOCs via USEPA Method 8260, SVOCs via USEPA Method 8270, and metals via USEPA Method 6010/6020. Samples will be sent to Pace Laboratory in Grand Rapids, Michigan. The elevation of the backfill will be surveyed to confirm the cover thickness of 12 inches has been installed and to provide final elevations for inclusion in the Declaration of Restrictive Covenant (DRC) for the Site by an Arcadis provided licensed surveyor. The contractor will be responsible for maintaining an interval survey during installation. The edges of the soil cover will be tapered with a 1:3 slope (or flatter) beyond the extent of the cover area, to maintain the full twelve-inch cover in the proposed area.

The topsoil will be covered with Michigan native grass seed (Barenbrug, 100lb per acre) and topped with hay to prevent erosion and hold in moisture and depending upon when the seeding occurs, 1 watering event may be performed.

### Site Restoration

The silt fence will remain in place until vegetative growth is confirmed to be established and have adequate coverage (approximately 75% of the areas). If additional seeding or watering is required, it will be completed as part of routine OM&M activities.

### Provision for Future Source of Soil Fill

It is possible that future maintenance of these or other covers at the Site will be necessary and require fill soil. To have soils available in the future to address any settling, erosion, or other maintenance issues, a second phase of construction was included in the JPA and is as follows. A review of the cover areas will be completed within 1 to 2 years. If any settling, erosion, or other maintenance issues are observed, soils will be excavated from the onsite berm to address the issues to match the surrounding elevations and maintain the cover thickness.

## SCHEDULE

The following is a proposed schedule to complete the cap activities:

Task	Date*
Revised Work Plan Submittal	July 2018
JPA and City of Saginaw Flood Plain Submittal	March-July 2018
Contractor Request for Proposals Issued	July 2018
Contractor Procurement	July 2018
JPA and Flood Plain Permit Approval	July 2018

Ms. Amanda Armbruster  
July 2018

Task	Date*
Cover Completion and Seeding	August/September 2018
Vegetation Growth Check	September/October 2018
Construction Completion Report	October/November 2018

\*Dates are subject to change

Please contact me at 810-225-1921 if you have any questions regarding the enclosed report or its attachments.

Sincerely,

Arcadis of Michigan, LLC



Scott Clearwater

Certified Project Manager

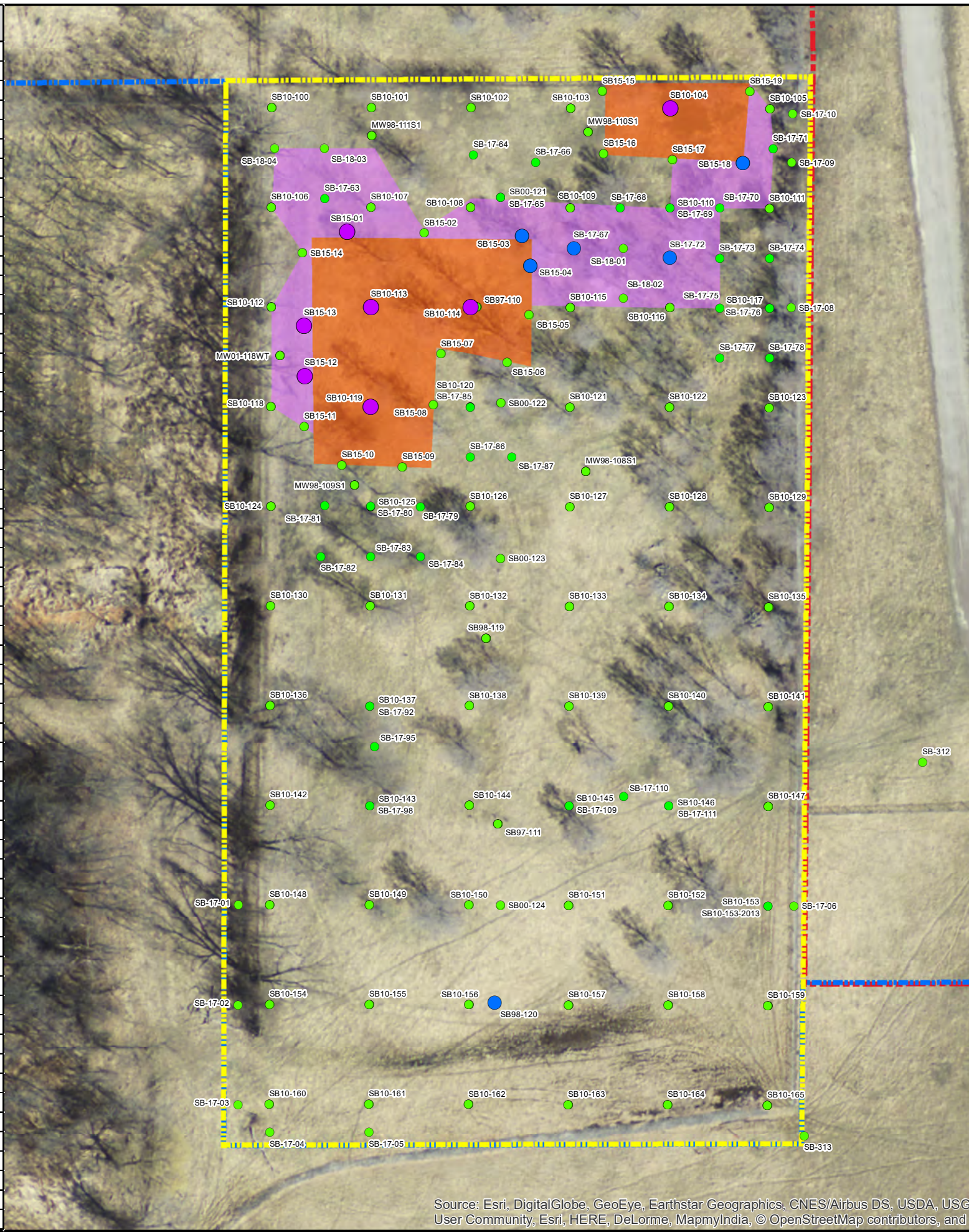
Enclosures:

**Figures**

- 1 Peninsula Fine Fraction Lead Surface Soil Sample Data Summary
- 2 Railyard Fine Fraction Lead Surface Soil Sample Data Summary
- 3 Proposed Cap Detail - Peninsula
- 4 Proposed Cap Detail – SMI Railyard

CITY: Novi DIV: ENV DB: TRY PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl G:\COMMON\RACER\Saginaw\64434 - SMI (10030) Main Location\GIS\Docs\Non-Res Summary Report\Peninsula Lead.mxd PLOTTED: 2/8/2018 4:06:35 PM BY: dolera

Sample ID	Depth (ft bgs)	Total Lead (µg/kg)	Fine Fraction Lead (µg/kg)
SB98-120	0.5 - 1	200,000	360,000*
SB00-121	0 - 0.5	731,000	NC
SB10-104	0 - 2	<b>2,680,000</b>	<b>4,824,000*</b>
SB10-110	0 - 2	595,000	NC
SB10-113	0 - 2	<b>2,640,000</b>	<b>4,752,000*</b>
SB10-114	0 - 2	<b>10,100,000</b>	<b>18,180,000*</b>
SB10-117	0 - 2	424,000	NC
SB10-119	0 - 2	<b>2,120,000</b>	<b>3,816,000*</b>
SB10-120	0 - 2	485,000	NC
SB10-125	0 - 2	715,000	NC
SB10-137	0 - 2	<b>899,000</b>	NC
SB10-143	0 - 2	470,000	NC
SB10-145	0 - 2	547,000	NC
SB10-146	0 - 2	567,000	NC
SB10-153	0 - 2	<b>4,180,000</b>	NC
SB10-153-2013	0 - 2	NA	64,200
SB15-01	0 - 0.5	<b>770,000</b>	<b>2,000,000</b>
SB15-03	0 - 0.5	<b>780,000</b>	<b>850,000</b>
SB15-04	0 - 0.5	720,000	<b>1,200,000</b>
SB15-18	0 - 0.5	640,000	<b>910,000</b>
SB15-12	0 - 0.5	<b>1,400,000</b>	<b>2,300,000</b>
SB15-13	0 - 0.5	<b>3,000,000</b>	<b>8,800,000</b>
SB17-06	0 - 0.5	14,000	19,000
SB17-08	0 - 0.5	35,000	41,000
SB17-09	0 - 0.5	56,000	62,000
SB17-10	0 - 0.5	21,000	21,000
SB17-63	0 - 0.5	<b>4,100,000</b>	610,000
SB17-64	0 - 0.5	25,000	35,000
SB17-65	0 - 0.5	260,000	300,000
SB17-66	0 - 0.5	56,000	84,000
SB17-67	0 - 0.5	440,000	<b>960,000</b>
SB17-68	0 - 0.5	160,000	200,000
SB17-69	0 - 0.5	290,000	340,000
SB17-70	0 - 0.5	150,000	190,000
SB17-71	0 - 0.5	290,000	540,000
SB17-72	0 - 0.5	<b>1,000,000</b>	<b>1,100,000</b>
SB17-73	0 - 0.5	200,000	290,000
SB17-74	0 - 0.5	230,000	260,000
SB17-75	0 - 0.5	280,000	470,000
SB17-76	0 - 0.5	86,000	190,000
SB17-77	0 - 0.5	490,000	490,000
SB17-78	0 - 0.5	220,000	260,000
SB17-79	0 - 0.5	300,000	430,000
SB17-80	0 - 0.5	<b>970,000</b>	370,000
SB17-81	0 - 0.5	87,000	210,000
SB17-82	0 - 0.5	82,000	160,000
SB17-83	0 - 0.5	65,000	85,000
SB17-84	0 - 0.5	140,000	210,000
SB17-85	0 - 0.5	540,000	340,000
SB17-86	0 - 0.5	110,000	130,000
SB17-87	0 - 0.5	180,000	250,000
SB17-92	0 - 0.5	25,000	25,000
SB17-95	0 - 0.5	73,000	52,000
SB17-98	0 - 0.5	30,000	35,000
SB17-109	0 - 0.5	46,000	65,000
SB17-110	0 - 0.5	170,000	350,000
SB17-111	0 - 0.5	120,000	120,000
SB18-01	1 - 0.5	420,000	340,000
SB18-02	2 - 0.5	370,000	450,000
SB18-03	3 - 0.5	54,000	94,000
SB18-04	0 - 0.5	25,000	36,000



### LEGEND

- FINE FRACTION LEAD < 760,000 ug/kg
- FINE FRACTION LEAD BETWEEN 760,000 AND 1,750,000 ug/kg
- FINE FRACTION LEAD > 1,750,000 ug/kg
- NO FINE FRACTION LEAD DATA AVAILABLE

- EXISTING SOIL COVER
- PROPOSED SOIL COVER
- PENINSULA PROPERTY BOUNDARY
- SMI PROPERTY BOUNDARY
- GPL PROPERTY BOUNDARY

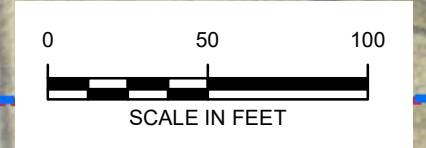
NOTES:

LABORATORY ANALYZED FINE FRACTION DATA ARE USED WHERE AVAILABLE.

\* REPRESENTS ESTIMATED FINE FRACTION LEAD CONCENTRATION.

NC REPRESENTS THAT LOCATION HAS BEEN RESAMPLED; FINE FRACTION LEAD CONCENTRATIONS HAVE NOT BEEN CALCULATED FOR HISTORIC SAMPLES.

ESTIMATED FINE FRACTION LEAD CONCENTRATIONS ARE BASED ON THE 95% UPPER CONFIDENCE LIMIT (UCL) FINE TO TOTAL RATIO OF 1.8.

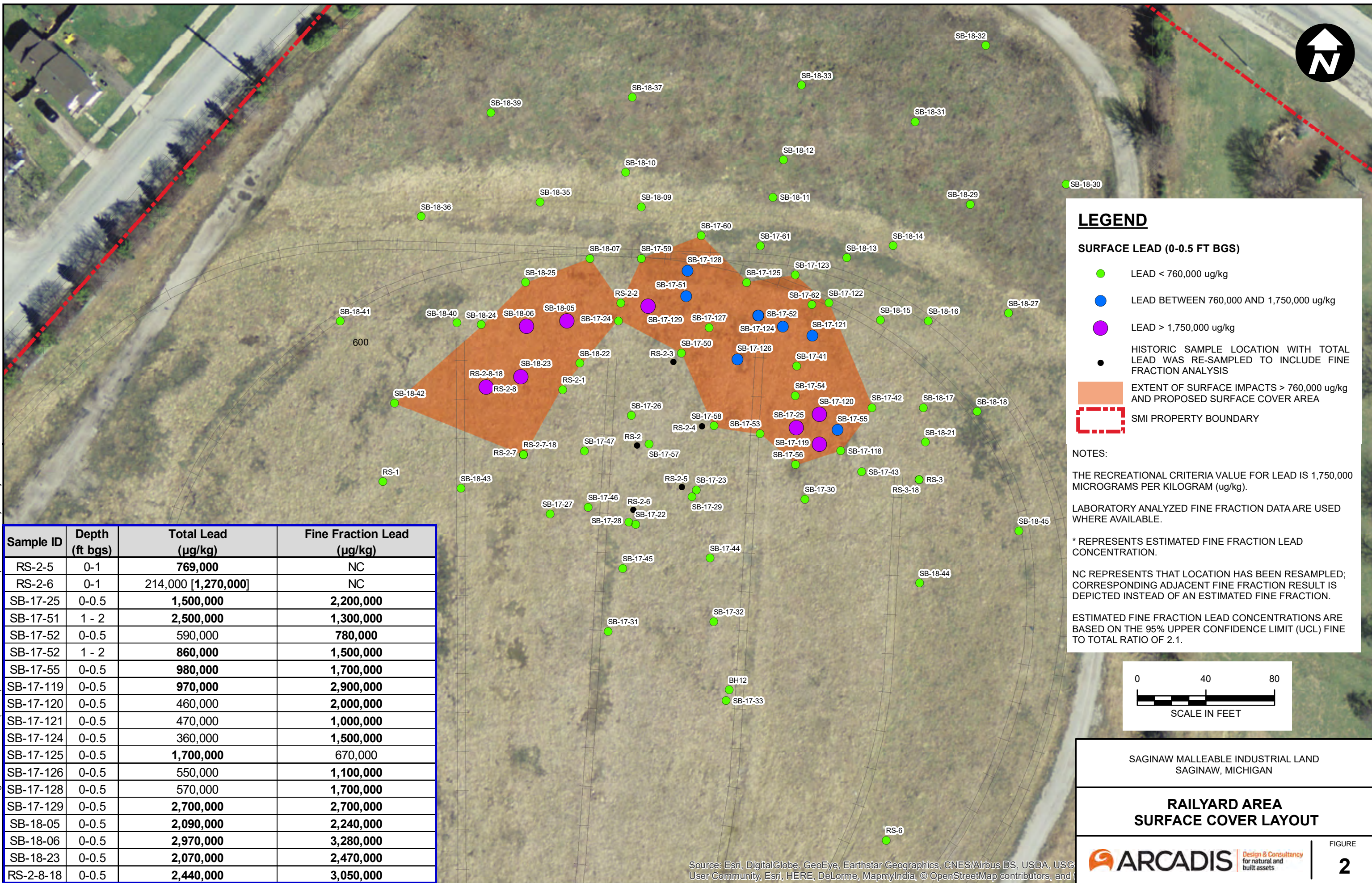


RACER PENINSULA PROPERTY  
SAGINAW, MICHIGAN

## PENINSULA FINE FRACTION LEAD SURFACE SOIL SAMPLE DATA SUMMARY

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, SMI, User Community, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and Swatch

CITY: Novi, DIV: ENV, DB: TRY, PIC: PM, TM: TR, PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl G:\COMMON\RACER\Saginaw\64434 - SMI (10030) Main Location\GIS\Docs\Workplan\FGz - Railyard Layout.mxd PLOTTED: 7/2/2018 5:34:29 PM BY: dolexa



**LEGEND**

**SURFACE LEAD (0-0.5 FT BGS)**

- LEAD < 760,000 ug/kg
- LEAD BETWEEN 760,000 AND 1,750,000 ug/kg
- LEAD > 1,750,000 ug/kg
- HISTORIC SAMPLE LOCATION WITH TOTAL LEAD WAS RE-SAMPLED TO INCLUDE FINE FRACTION ANALYSIS
- EXTENT OF SURFACE IMPACTS > 760,000 ug/kg AND PROPOSED SURFACE COVER AREA
- SMI PROPERTY BOUNDARY

**NOTES:**

THE RECREATIONAL CRITERIA VALUE FOR LEAD IS 1,750,000 MICROGRAMS PER KILOGRAM (ug/kg).

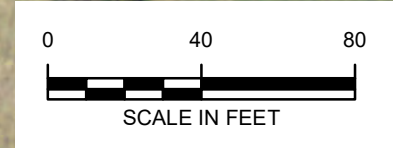
LABORATORY ANALYZED FINE FRACTION DATA ARE USED WHERE AVAILABLE.

\* REPRESENTS ESTIMATED FINE FRACTION LEAD CONCENTRATION.

NC REPRESENTS THAT LOCATION HAS BEEN RESAMPLED; CORRESPONDING ADJACENT FINE FRACTION RESULT IS DEPICTED INSTEAD OF AN ESTIMATED FINE FRACTION.

ESTIMATED FINE FRACTION LEAD CONCENTRATIONS ARE BASED ON THE 95% UPPER CONFIDENCE LIMIT (UCL) FINE TO TOTAL RATIO OF 2.1.

Sample ID	Depth (ft bgs)	Total Lead (ug/kg)	Fine Fraction Lead (ug/kg)
RS-2-5	0-1	769,000	NC
RS-2-6	0-1	214,000 [1,270,000]	NC
SB-17-25	0-0.5	1,500,000	2,200,000
SB-17-51	1 - 2	2,500,000	1,300,000
SB-17-52	0-0.5	590,000	780,000
SB-17-52	1 - 2	860,000	1,500,000
SB-17-55	0-0.5	980,000	1,700,000
SB-17-119	0-0.5	970,000	2,900,000
SB-17-120	0-0.5	460,000	2,000,000
SB-17-121	0-0.5	470,000	1,000,000
SB-17-124	0-0.5	360,000	1,500,000
SB-17-125	0-0.5	1,700,000	670,000
SB-17-126	0-0.5	550,000	1,100,000
SB-17-128	0-0.5	570,000	1,700,000
SB-17-129	0-0.5	2,700,000	2,700,000
SB-18-05	0-0.5	2,090,000	2,240,000
SB-18-06	0-0.5	2,970,000	3,280,000
SB-18-23	0-0.5	2,070,000	2,470,000
RS-2-8-18	0-0.5	2,440,000	3,050,000



SAGINAW MALLEABLE INDUSTRIAL LAND  
SAGINAW, MICHIGAN

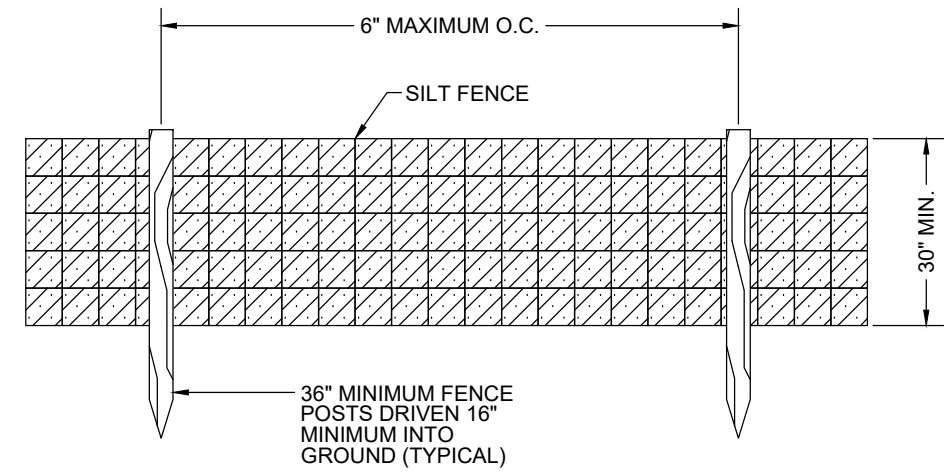
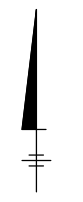
**RAILYARD AREA  
SURFACE COVER LAYOUT**

**ARCADIS** Design & Consultancy for natural and built assets

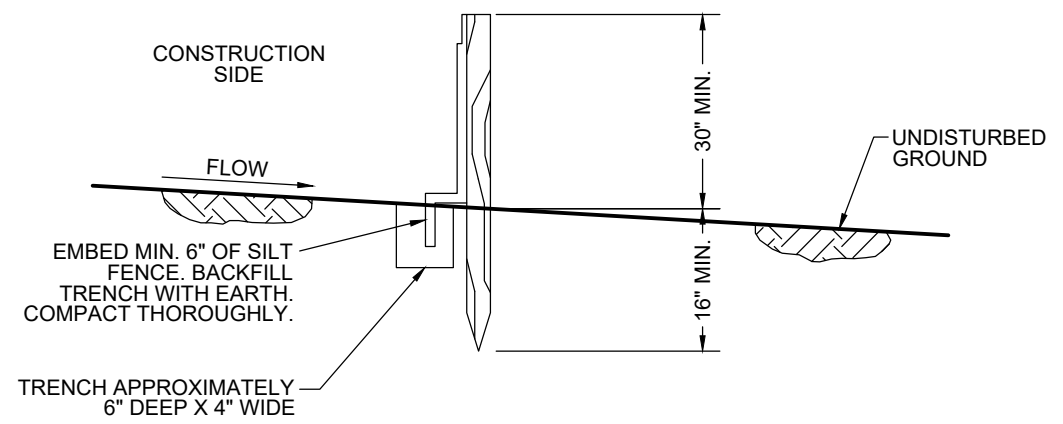
FIGURE **2**

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, SMI, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and Swatch

CITY: MANCHESTER DIV/GROUP: ENVCAD DB: B.SMALL PM: TM: PLOTSTYLETABLE: PLT\FULL.CTB PLOTTED: 2/15/2018 5:30 PM BY: SMALL, BRIAN  
 C:\Users\BSSmall\OneDrive - ARCADIS\BIM 360 Docs\Details\Cap and Silt Fence\2018\B0064434\201801-DWG\Details.dwg LAYOUT: 3 SAVED: 2/15/2018 4:44 PM ACADVER: 2018 (LMS TECH) PAGES: 3  
 LAYOUT: 3 SAVED: 2/15/2018 4:44 PM ACADVER: 2018 (LMS TECH) PAGES: 3



**FRONT VIEW**



**SIDE VIEW**

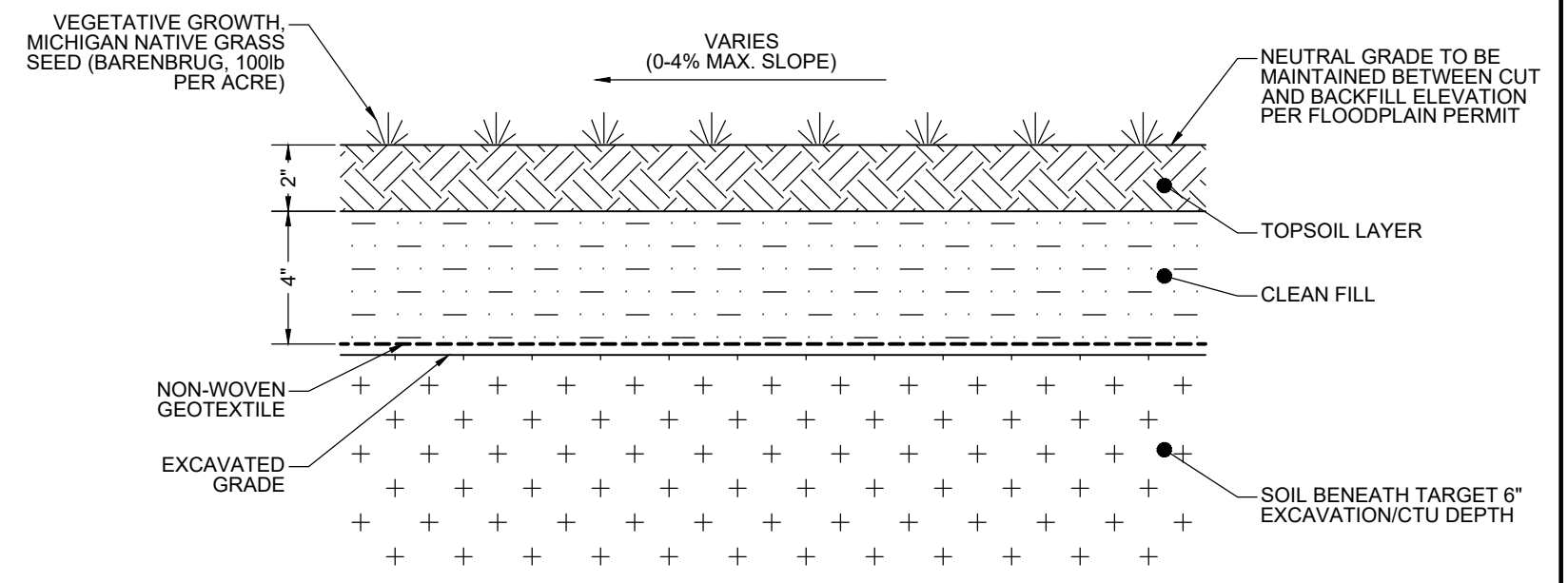
**TEMPORARY SILT FENCE DETAIL**  
 NOT TO SCALE

**NOTE:**

1. REMOVE SILT FENCE AFTER FINAL GRADING IS COMPLETED AND VEGETATION IS ESTABLISHED.

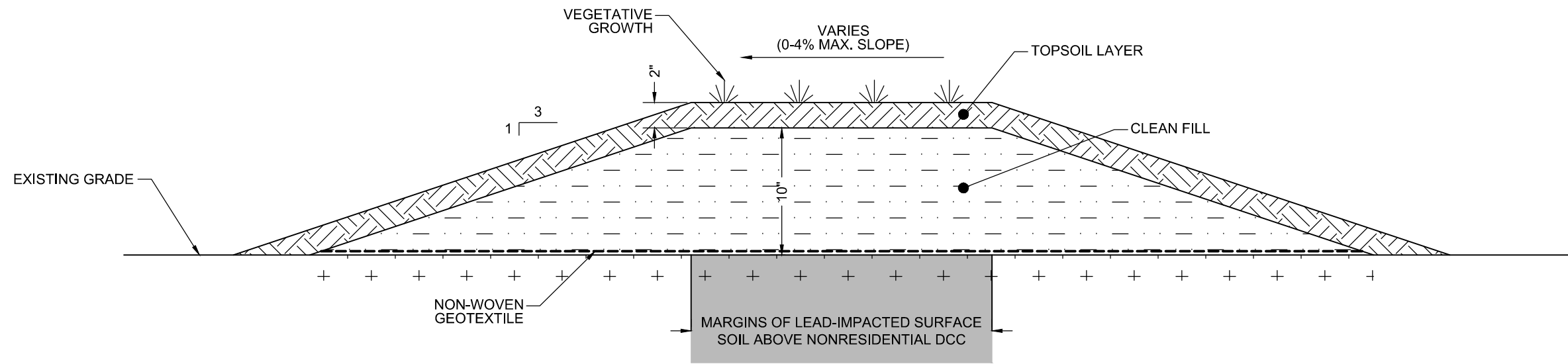
**MATERIALS:**

1. POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
2. SILT FENCE: AMOCO 2132 OR APPROVED EQUAL

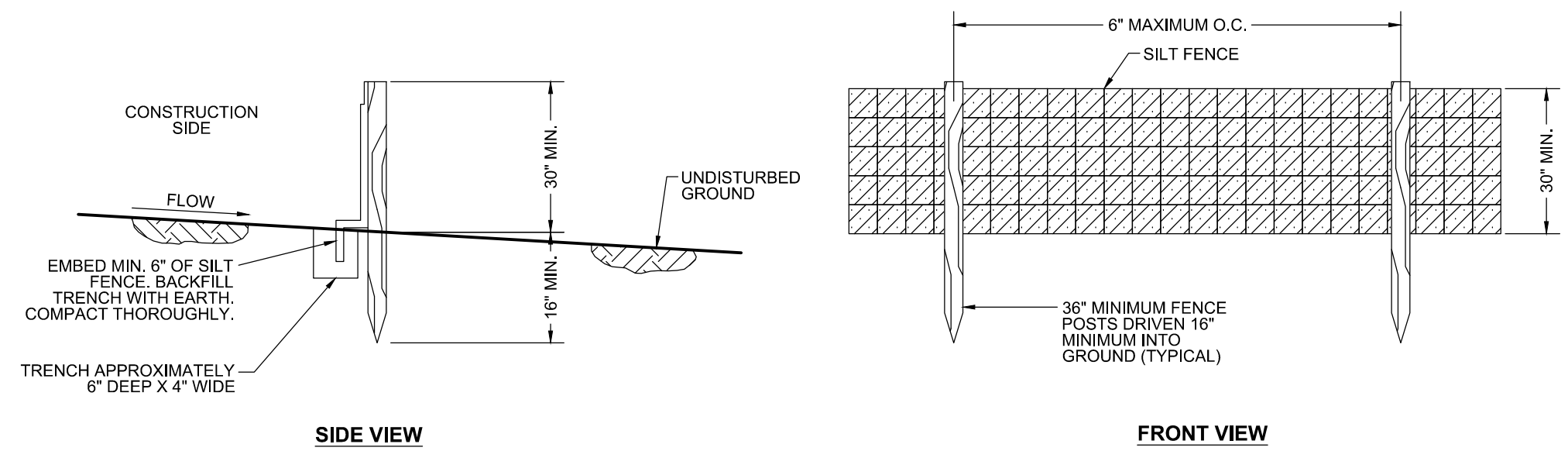


**TYPICAL COVER SECTION DETAIL**  
 NOT TO SCALE

SAGINAW MALLEABLE INDUSTRIAL LAND SAGINAW, MICHIGAN	
<b>PROPOSED SOIL COVER WORK PLAN DETAIL - PENINSULA</b>	
	FIGURE <b>3</b>



**TYPICAL COVER SECTION DETAIL**  
NOT TO SCALE



**TEMPORARY SILT FENCE DETAIL**  
NOT TO SCALE

- NOTE:**
1. REMOVE SILT FENCE AFTER FINAL GRADING IS COMPLETED AND VEGETATION IS ESTABLISHED.

- MATERIALS:**
1. POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
  2. SILT FENCE: AMOCO 2132 OR APPROVED EQUAL

SAGINAW MALLEABLE INDUSTRIAL LAND SAGINAW, MICHIGAN	
<b>PROPOSED SOIL COVER WORK PLAN DETAIL - RAILYARD AREA</b>	
	Design & Consultancy for natural and built assets
FIGURE <b>4</b>	

ATTACHMENT 2

Top Soil Use Approval



**From:** Armbruster, Amanda (DEQ)  
**To:** [Clearwater, Scott](#); [Dave Favero](#)  
**Cc:** [Person, Ann \(DEQ\)](#); [Smith, Jeanine](#)  
**Subject:** RE: RACER Peninsula and Railyard Topsoil Characterization Memo  
**Date:** Wednesday, August 22, 2018 9:25:03 AM  
**Attachments:** [image001.png](#)  
[image002.jpg](#)

---

Thank you for the sample results. Based on the additional data provided, we do not have any problems with using the topsoil as proposed.

Amanda Armbruster, Geologist  
Remediation and Redevelopment Division  
Saginaw Bay District Office  
989-894-6242

---

**From:** Clearwater, Scott <[Scott.Clearwater@arcadis.com](mailto:Scott.Clearwater@arcadis.com)>  
**Sent:** Tuesday, August 21, 2018 5:06 PM  
**To:** Armbruster, Amanda (DEQ) <[ARMBRUSTERA@michigan.gov](mailto:ARMBRUSTERA@michigan.gov)>; Dave Favero <[dfavero@racertrust.org](mailto:dfavero@racertrust.org)>  
**Cc:** Person, Ann (DEQ) <[PERSONA@michigan.gov](mailto:PERSONA@michigan.gov)>; Smith, Jeanine <[Jeanine.Smith@arcadis.com](mailto:Jeanine.Smith@arcadis.com)>  
**Subject:** RE: RACER Peninsula and Railyard Topsoil Characterization Memo

Amanda,  
Per our discussions we completed the additional sampling of the proposed topsoil source location. Seven additional samples were collected from their stockpile from the location they indicated would be sent for our use. Attached is the lab report for these 7 samples for the PNA analysis. Please let me know if you have any concerns or questions with these results and the use of this topsoil location.  
Thanks  
Scott

---

**From:** Armbruster, Amanda (DEQ) <[ARMBRUSTERA@michigan.gov](mailto:ARMBRUSTERA@michigan.gov)>  
**Sent:** Friday, August 17, 2018 12:04 PM  
**To:** Clearwater, Scott <[Scott.Clearwater@arcadis.com](mailto:Scott.Clearwater@arcadis.com)>; Dave Favero <[dfavero@racertrust.org](mailto:dfavero@racertrust.org)>  
**Cc:** Person, Ann (DEQ) <[PERSONA@michigan.gov](mailto:PERSONA@michigan.gov)>  
**Subject:** RE: RACER Peninsula and Railyard Topsoil Characterization Memo

Scott and Dave,  
I just read through the topsoil memo and discussed it with Ann. We are concerned there isn't clear historical use information for the source material. The memo indicates the soil being provided by the trucking company is "from previously undeveloped commercial and residential locations stripped for development". Topsoil from undeveloped properties typically wouldn't contain PNAs, but several PNAs were detected in both samples. Based on the soil being from numerous potential

source locations and because several PNAs were detected, more than 2 samples should be used to evaluate the topsoil. Now that we know the soil is coming from a stockpile at a trucking company, I referred to our Sampling Strategies and Statistics Training Material document for recommendations. When sampling soil piles, 8-10 samples are recommended for 101-500 cubic yards of soil. This soil is intended to be part of a clean soil cover, so we believe more evaluation is needed. Please let us know if you have questions or concerns.

Amanda Armbruster, Geologist  
Remediation and Redevelopment Division  
Saginaw Bay District Office  
989-894-6242

---

**From:** Clearwater, Scott <[Scott.Clearwater@arcadis.com](mailto:Scott.Clearwater@arcadis.com)>  
**Sent:** Wednesday, August 15, 2018 2:12 PM  
**To:** Armbruster, Amanda (DEQ) <[ARMBRUSTERA@michigan.gov](mailto:ARMBRUSTERA@michigan.gov)>  
**Cc:** Dave Favero <[dfavero@racertrust.org](mailto:dfavero@racertrust.org)>  
**Subject:** RACER Peninsula and Railyard Topsoil Characterization Memo

Amanda,  
Attached is a memo summarizing the results of characterization sampling completed on the topsoil material selected for use as cover at the RACER Peninsula and Railyard Areas. Please let Dave or I know if you have any comments or questions on the use of this material.  
Thanks,  
Scott

**Scott Clearwater** | Certified Project Manager | [scott.clearwater@arcadis.com](mailto:scott.clearwater@arcadis.com)  
**Arcadis** | Arcadis of Michigan, LLC  
28550 Cabot Drive, Suite 500, Novi, MI | 48377 | USA  
T. +1 810 225 1921 | M. + 1 248 346 5970

Connect with us! [www.arcadis.com](http://www.arcadis.com) | [LinkedIn](#) | [Twitter](#) | [Facebook](#) | [Connect App](#)



**Be green, leave it on the screen.**

This email and any files transmitted with it are the property of Arcadis and its affiliates. All rights, including without limitation copyright, are reserved. This email contains information that may be confidential and may also be privileged. It is for the exclusive use of the intended recipient(s). If you are not an intended recipient, please note that any form of distribution, copying or use of this communication or the information in it is strictly prohibited and may be unlawful. If you have received this communication in error, please return it to the sender and then delete the email and destroy any copies of it. While reasonable precautions have been taken to ensure that no software or viruses are present in our emails, we cannot guarantee that this email or any attachment is virus free or has not been intercepted or changed. Any opinions or other information in this email that do not relate to the official business of Arcadis are neither given nor endorsed by it.

This email and any files transmitted with it are the property of Arcadis and its affiliates. All rights, including without limitation copyright, are reserved. This email contains information that may be confidential and may also be privileged. It is for the exclusive use of the intended recipient(s). If you are not an intended recipient, please note that any form of distribution, copying or use of this communication or the information in it is strictly prohibited and may be unlawful. If you have received this communication in error, please return it to the sender and then delete the email and destroy any copies of it. While reasonable precautions have been taken to ensure that no software or viruses are present in our emails, we cannot guarantee that this email or any attachment is virus free or has not been intercepted or changed. Any opinions or other information in this email that do not relate to the official business of Arcadis are neither given nor endorsed by it.

Ms. Amanda Armbruster  
Saginaw Bay District Office  
Michigan Department of Environmental Quality  
401 Ketchum Street, Suite B  
Bay City, Michigan 48708

Arcadis of Michigan, LLC  
28550 Cabot Drive  
Suite 500  
Novi  
Michigan 48377  
Tel 248 994 2240  
Fax 248 994 2241  
[www.arcadis.com](http://www.arcadis.com)

Subject:  
Topsoil Source Material Sampling - Update  
RACER Saginaw Malleable Industrial Land and Peninsula Property, Saginaw,  
Michigan

ENVIRONMENT

Date:  
August 23, 2018

Dear Ms. Armbruster:

Contact:  
Scott Clearwater

This memo has been updated based on feedback provided by MDEQ via email on August 17, 2018 where a concern with PNA detections warranted a larger sample set of the proposed topsoil source.

Phone:  
810-225-1921

Arcadis of Michigan, LLC (Arcadis) has prepared this summary on behalf of RACER Trust (RACER). Job Site Services (JSS) has been selected as the contractor to complete soil cover activities and utilize a vendor to supply topsoil for the RACER Saginaw Soil Covers in the Railyard and Peninsula Areas. JSS has proposed obtaining the needed 325 cubic yards (cyds) of topsoil for the project from Dave Hausbeck Trucking (DHT) located at 2695 West Vassar Road in Reese, Michigan (**Figure 1 and 2**). Arcadis collected nine soil samples from the topsoil stockpile at DHT. Below is a summary of the soil sampling procedure and analytical data.

Email:  
[Scott.Clearwater@arcadis.com](mailto:Scott.Clearwater@arcadis.com)

Our ref:  
B0064434.2018

Arcadis collected two grab soil samples from the topsoil stockpile at DHT on August 2, 2018. Based on an e-mail request, dated August 17, 2018, from the Michigan Department of Environmental Quality (MDEQ) Arcadis was directed to collect additional samples. Upon MDEQ approval to collect seven more grab soil samples for PNA analysis, the samples were collected on August 17, 2018. The e-mail communications are provided at **Attachment 1**.

Soils were collected from the borrow source area, identified by DHT, as the location of the soil that is planned to be supplied to JSS as part of the soil cover work. DHT has confirmed the topsoil is a mix of soil from off-site sources and native soil. Off-site soils trucked to DHT consists of topsoil from previously undeveloped commercial and residential locations stripped for development. Sample locations are shown on **Figure 2**.

Ms. Amanda Armbruster  
August 23, 2018

The soil samples collected on August 2, 2018, were shipped under chain-of-custody procedures to Test America Laboratories, Inc. (TestAmerica) in North Canton, Ohio for analysis of total metals via United States Environmental Protection Agency (USEPA) Method 6010B, volatile organic compounds (VOCs) via USEPA Method 8260B, semi-volatile organic compounds (SVOCs) via USEPA method 8270C, and polychlorinated biphenyls (PCBs) via USEPA Method 8082A. Because the initial sampling results had detections of polynuclear hydrocarbons (PNAs), the MDEQ requested additional soil samples be collected and analyzed for PNAs. The additional seven grab samples, collected on August 17, 2018, were submitted under chain-of-custody procedures to Merit Laboratories in Lansing, Michigan for analysis of PNAs via USEPA method 8270D.

Arcadis compared the analytical results from the topsoil borrow source to the currently promulgated Statewide Default Background Levels for metals, and site-specific recreational and nonresidential criteria for detected metals, VOCs, and SVOCs. There were no detections of PNAs in the additional seven soil samples collected. From the initial two samples collected, the detected concentrations of metals were below the currently promulgated Statewide Default Background Levels. The concentrations of detected constituents were below the site-specific nonresidential Volatile Soil Inhalation Criteria for a 5-meter Source Thickness (adjusted for a 400-acre source area), Particulate Soil Inhalation Criteria (adjusted for a 400-acre source area), and Direct Contact Criteria, the site-specific recreational Direct Contact Criteria, Nonresidential Drinking Water Criteria, and Groundwater Surface Water Interface Criteria. PCBs were not detected in the soil samples. A summary of the analytical detections compared to the above criteria is provided in **Table 1**. All the laboratory results are provided in the attached reports in **Attachment 2**.

Based on the analytical results, the topsoil has been approved for use by the MDEQ to complete the soil covers, see **Attachment 1**. Please contact me at [scott.clearwater@arcadis.com](mailto:scott.clearwater@arcadis.com) or 810-225-1921 if you have any questions, or if you concur that it is acceptable to use the DHT topsoil.

Sincerely,

Arcadis of Michigan, LLC



Scott Clearwater  
Certified Project Manager

Enclosures:

**Tables**

- 1 Topsoil Borrow Source Sampling Detection Summary

Ms. Amanda Armbruster  
August 23, 2018

**Figures**

- 1 Site Location Map
- 2 Topsoil Sample Location Map

**Attachments**

- 1 MDEQ E-mail Communications
- 2 Laboratory Reports

# TABLE



**Table 1**  
**Topsoil Borrow Source Sampling Detection Summary**  
**RACER Saginaw**  
**Saginaw, Michigan**

Sample Location	Date Collected	Methyl acetate	Anthracene	Benzaldehyde	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(a) pyrene TEQ	Benzo(b) fluoranthene	Benzo(g,h,i) perylene
<i>Criteria</i>		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
<i>Statewide Default Background Levels</i>		NA	NA	NA	NA	NA	NA	NA	NA
<i>Site-Specific Nonresidential Volatile Soil Inhalation Criteria (5-meter Source Thickness) [a]</i>		NA	79,000,000	NA	460,000	NA	NA	NA	NA
<i>Site-Specific Nonresidential Particulate Soil Inhalation Criteria [a]</i>		NA	25,000,000,000	NA	17,000,000	33,000	NA	17,000,000	180,000,000
<i>Site-Specific Nonresidential Direct Contact Criteria</i>		NA	100,000,000	NA	(Q)	41,000	41,000	(Q)	2,100,000
<i>Site-Specific Recreational Direct Contact Criteria</i>		NA	NA	NA	(Q)	17,500	17,500	(Q)	NA
<i>Nonresidential Drinking Water Criteria</i>		NA	41,000	NA	NLL	NLL	NA	NLL	NLL
<i>Groundwater Surface Water Interface Criteria</i>		NA	ID	NA	NLL	NLL	NA	NLL	NLL
SS-1	08/02/18	2,100	6.1 J	43 J	41 J	48 J	77	73 J	37 J
SS-2	08/02/18	1,800	<330	<330	8.0 J	8.1 J	176	13 J	8.6 J

**Notes:**

Data are compared to site-specific non-residential and recreational criteria and the currently promulgated (2018) Statewide Default Background Levels, Nonresidential

**Bolded: Exceeds MDEQ Criteria**

[a] Values represent a 400-acre source area

(Q) = The soil direct contact criteria for the carcinogenic polycyclic aromatic hydrocarbons (cPAH) are developed using the oral cancer slope factor (SF<sub>o</sub>) for benzo(a)pyrene. The soil concentration of each cPAH detected at a facility shall be expressed as its equivalent concentration of benzo(a)pyrene by multiplying the soil concentration by its respective benzo(a)pyrene relative potency factor (RPF). All RPF-adjusted cPAH soil concentrations shall then be added together and the total RPF-adjusted cPAH soil concentration compared to the applicable soil direct contact criterion for benzo(a)pyrene. Non-detects results are shown as half the reporting limit.

ID = insufficient data to develop criterion

(G) = GSI criterion depends on the pH or water hardness, or both, of the receiving surface water.

(X) = GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

NLL = hazardous substance not likely to leach under most soil conditions

**Abbreviations:**

<: Not Detected

B: Compound found in the blank and sample

J: Result is less than reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value

NA: No Criteria

mg/kg: milligram per kilogram

ug/kg: microgram per kilogram

**Table 1**  
**Topsoil Borrow Source Sampling Detection Summary**  
**RACER Saginaw**  
**Saginaw, Michigan**

Sample Location	Date Collected	Benzo(k) fluoranthene	Bis(2- ethylhexyl) phthalate	Chrysene	Dibenzo(a,h) anthracene	Fluoroanthene	Indeno(1,2,3 -cd)pyrene	3&4 Methylphenol
		<i>Criteria</i>						
		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
		NA	NA	NA	NA	NA	NA	NA
		NA	NA	NA	NA	NA	NA	NA
		170,000,000	630,000,000	1,700,000,000	1,700,000	3,600,000,000	17,000,000	2,500,000,000
		(Q)	3,400,000	(Q)	(Q)	49,000,000	(Q)	4,300,000
		(Q)	NA	(Q)	(Q)	NA	(Q)	NA
		NLL	NLL	NLL	NLL	730,000	NLL	20,000
		NLL	NLL	NLL	NLL	5,500	NLL	1,000
SS-1	08/02/18	33 J	82 J	55 J	14 J	99 J	34 J	72 J
SS-2	08/02/18	5.4 J	210 J	8.2 J	<330	15 J	11 J	<330

**Notes:**

Data are compared to site-specific non-residential and recreational criteria and the currently promulgated (2018) Statewide Default Background Levels, Nonresidential

**Bolded: Exceeds MDEQ Criteria**

[a] Values represent a 400-acre source area

(Q) = The soil direct contact criteria for the carcinogenic polycyclic aromatic hydrocarbons (cPAH) are developed using the oral cancer slope factor (SF<sub>o</sub>) for benzo(a)pyrene. The soil concentration of each cPAH detected at a facility shall be expressed as its equivalent concentration of benzo(a)pyrene by multiplying the soil concentration by its respective benzo(a)pyrene relative potency factor (RPF). All RPF-adjusted cPAH soil concentrations shall then be added together and the total RPF-adjusted cPAH soil concentration compared to the applicable soil direct contact criterion for benzo(a)pyrene. Non-detects results are shown as half the reporting limit.

ID = insufficient data to develop criterion

(G) = GSI criterion depends on the pH or water hardness, or both, of the receiving surface water.

(X) = GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

NLL = hazardous substance not likely to leach under most soil conditions

**Abbreviations:**

<: Not Detected

B: Compound found in the blank and sample

J: Result is less than reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value

NA: No Criteria

mg/kg: milligram per kilogram

ug/kg: microgram per kilogram

**Table 1**  
**Topsoil Borrow Source Sampling Detection Summary**  
**RACER Saginaw**  
**Saginaw, Michigan**

Sample Location	Date Collected	Phenanthrene	Pyrene	Barium	Cadmium	Chromium	Arsenic	Lead	Mercury	
		<i>Criteria</i>	<i>ug/kg</i>	<i>ug/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	<i>mg/kg</i>	
		<i>Statewide Default Background Levels</i>	NA	NA	75	1.2	18	5.8	21	0.13
		<i>Site-Specific Nonresidential Volatile Soil Inhalation Criteria (5-meter Source Thickness) [a]</i>	9,600	40,000,000	NA	NA	NA	NA	NA	1.6
		<i>Site-Specific Nonresidential Particulate Soil Inhalation Criteria [a]</i>	2,500,000	2,500,000,000	130,000	560	2,500	230	4,000	7,600
		<i>Site-Specific Nonresidential Direct Contact Criteria</i>	26,000,000	37,000,000	100,000	220	100,000	52	760	150
		<i>Site-Specific Recreational Direct Contact Criteria</i>	NA	NA	NA	NA	100,000	174	1,750	NA
		<i>Nonresidential Drinking Water Criteria</i>	160,000	480,000	1,300	6	100,000	4.6	700	1.7
		<i>Groundwater Surface Water Interface Criteria</i>	2,100	ID	(G)	(G, X)	(G, X)	4.6	(G, X)	0.05
SS-1	08/02/18	47 J	88 J	44	0.29	16	4.1	15	<0.15	
SS-2	08/02/18	6.8 J	13 J	45	0.30	18	3.8	9.6	0.035 J B	

**Notes:**

Data are compared to site-specific non-residential and recreational criteria and the currently promulgated (2018) Statewide Default Background Levels, Nonresidential

**Bolded: Exceeds MDEQ Criteria**

[a] Values represent a 400-acre source area

(Q) = The soil direct contact criteria for the carcinogenic polycyclic aromatic hydrocarbons (cPAH) are developed using the oral cancer slope factor (SFo) for benzo(a)pyrene. The soil concentration of each cPAH detected at a facility shall be expressed as its equivalent concentration of benzo(a)pyrene by multiplying the soil concentration by its respective benzo(a)pyrene relative potency factor (RPF). All RPF-adjusted cPAH soil concentrations shall then be added together and the total RPF-adjusted cPAH soil concentration compared to the applicable soil direct contact criterion for benzo(a)pyrene. Non-detects results are shown as half the reporting limit.

ID = insufficient data to develop criterion

(G) = GSI criterion depends on the pH or water hardness, or both, of the receiving surface water.

(X) = GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.

NLL = hazardous substance not likely to leach under most soil conditions

**Abbreviations:**

<: Not Detected

B: Compound found in the blank and sample

J: Result is less than reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value

NA: No Criteria

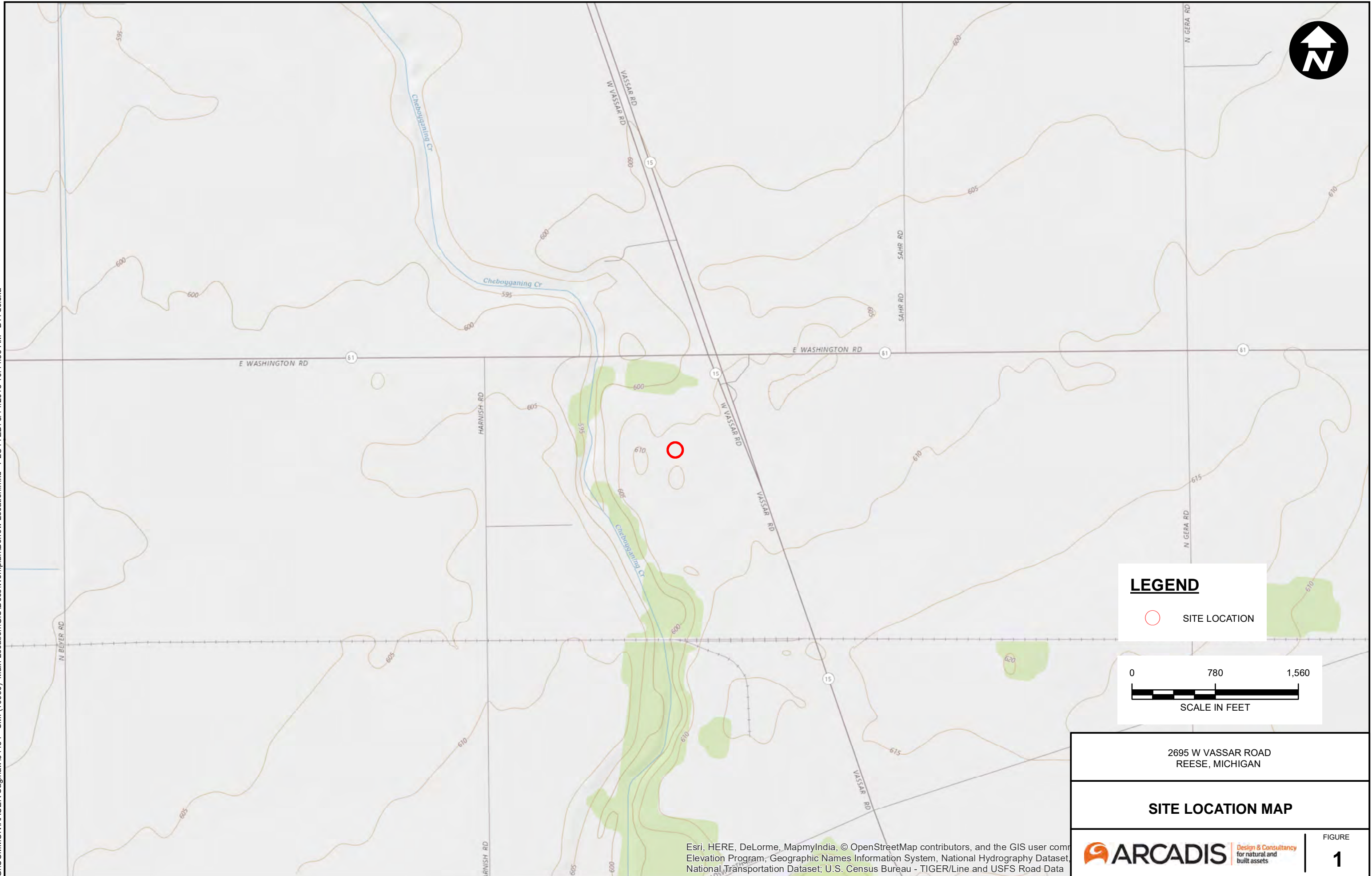
mg/kg: milligram per kilogram

ug/kg: microgram per kilogram

# FIGURES



CITY: Novi DIV: ENV DB: TRY PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl  
G:\COMMON\RACER\Saginaw\64434 - SMI (10030) Main Location\GIS\Docs\Workplan\Borrow Location.mxd PLOTTED: 8/14/2018 10:14:53 AM BY: dolexa



Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community  
Elevation Program, Geographic Names Information System, National Hydrography Dataset,  
National Transportation Dataset, U.S. Census Bureau - TIGER/Line and USFS Road Data



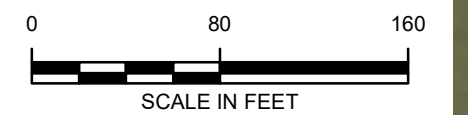
CITY: Novi DIV: ENV DB: TRY PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl  
G:\COMMON\RACER\Saginaw\64434 - SMI (10030) Main Location\GIS\Docs\Workplan\Topsol Borrow.mxd PLOTTED: 8/22/2018 4:38:26 PM BY: dolaxa



TS-3  
TS-2  
TS-1  
TS-5  
TS-6  
TS-7  
SS-2  
SS-1

**LEGEND**

● SOIL SAMPLE LOCATION



2695 W VASSAR ROAD  
REESE, MICHIGAN

**TOPSOIL SAMPLE LOCATION MAP**

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USG  
User Community, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and



FIGURE

**2**

**ATTACHMENT 2**  
**Laboratory Reports**



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-99401-1

Client Project/Site: Racer Saginaw

For:

ARCADIS U.S., Inc.

28550 Cabot Drive

Suite 500

Novi, Michigan 48377

Attn: Scott Clearwater



Authorized for release by:

8/10/2018 10:40:02 AM

Michael DelMonico, Project Manager I

(330)497-9396

[michael.delmonico@testamericainc.com](mailto:michael.delmonico@testamericainc.com)

### LINKS

Review your project  
results through

Total Access

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

1

2

3

4

5

6

7

8

9

10

11

12

13

14



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Method Summary . . . . .	6
Sample Summary . . . . .	7
Detection Summary . . . . .	8
Client Sample Results . . . . .	9
Surrogate Summary . . . . .	17
QC Sample Results . . . . .	18
QC Association Summary . . . . .	26
Lab Chronicle . . . . .	28
Certification Summary . . . . .	29
Chain of Custody . . . . .	30

# Definitions/Glossary

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

## Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

**Job ID: 240-99401-1**

**Laboratory: TestAmerica Canton**

**Narrative**

## CASE NARRATIVE

**Client: ARCADIS U.S., Inc.**

**Project: Racer Saginaw**

**Report Number: 240-99401-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

### **RECEIPT**

The samples were received on 8/3/2018 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6° C.

### **VOLATILE ORGANIC COMPOUNDS (GCMS)**

Samples SS-1\_080218 (240-99401-1) and SS-2\_080218 (240-99401-2) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 08/07/2018 and analyzed on 08/08/2018.

1,2-Dichloroethane-d4 (Surr) and Toluene-d8 (Surr) failed the surrogate recovery criteria high for SS-1\_080218 (240-99401-1).

Toluene-d8 (Surr) failed the surrogate recovery criteria high for SS-2\_080218 (240-99401-2). Refer to the QC report for details.

Several analytes failed the recovery criteria high for LCS 240-339726/2-A. Refer to the QC report for details.

The laboratory control sample (LCS) for preparation batch 240-339726 and analytical batch 240-339819 recovered outside control limits for methyl acetate. This analyte has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. The results have been reported and qualified.

The laboratory control sample (LCS) for preparation batch 240-339726 and analytical batch 240-339819 recovered outside control limits for multiple analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data

# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## Job ID: 240-99401-1 (Continued)

### Laboratory: TestAmerica Canton (Continued)

have been reported.

Surrogate recovery for the following samples were outside of acceptance limits: SS-1\_080218 (240-99401-1) and SS-2\_080218 (240-99401-2). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples SS-1\_080218 (240-99401-1) and SS-2\_080218 (240-99401-2) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 08/06/2018 and analyzed on 08/08/2018.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### POLYCHLORINATED BIPHENYLS (PCBS)

Samples SS-1\_080218 (240-99401-1) and SS-2\_080218 (240-99401-2) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/03/2018 and analyzed on 08/08/2018.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required. All of the samples in this data set analyzed for PCBs were subjected to the sulfuric acid cleanup procedure before instrumental analysis, per EPA Method 3665A.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### TOTAL METALS (ICP)

Samples SS-1\_080218 (240-99401-1) and SS-2\_080218 (240-99401-2) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 08/06/2018 and analyzed on 08/07/2018.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### TOTAL MERCURY

Samples SS-1\_080218 (240-99401-1) and SS-2\_080218 (240-99401-2) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 08/06/2018 and analyzed on 08/07/2018.

Mercury was detected in method blank MB 240-339590/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### PERCENT SOLIDS

Samples SS-1\_080218 (240-99401-1) and SS-2\_080218 (240-99401-2) were analyzed for percent solids in accordance with ASTM Method D2216-80. The samples were analyzed on 08/03/2018.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Method Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
3050B	Preparation, Metals	SW846	TAL CAN
3540C	Soxhlet Extraction	SW846	TAL CAN
5035	Closed System Purge and Trap	SW846	TAL CAN
7471A	Preparation, Mercury	SW846	TAL CAN

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396



# Sample Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-99401-1	SS-1_080218	Solid	08/02/18 14:45	08/03/18 09:00
240-99401-2	SS-2_080218	Solid	08/02/18 14:40	08/03/18 09:00

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# Detection Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

**Client Sample ID: SS-1\_080218**

**Lab Sample ID: 240-99401-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	2100	*	1700	140	ug/Kg	1	☼	8260B	Total/NA
Anthracene	6.1	J	370	1.1	ug/Kg	1	☼	8270C	Total/NA
Benzaldehyde	43	J	370	32	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	41	J	370	0.88	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	48	J	370	0.89	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	73	J	370	0.82	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	37	J	370	0.49	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	33	J	370	0.95	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	82	J	370	71	ug/Kg	1	☼	8270C	Total/NA
Chrysene	55	J	370	1.5	ug/Kg	1	☼	8270C	Total/NA
Dibenz(a,h)anthracene	14	J	370	0.92	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	99	J	370	0.77	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	34	J	370	0.49	ug/Kg	1	☼	8270C	Total/NA
3 & 4 Methylphenol	72	J	370	40	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	47	J	370	1.0	ug/Kg	1	☼	8270C	Total/NA
Pyrene	88	J	370	0.61	ug/Kg	1	☼	8270C	Total/NA
Barium	44		21	0.38	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.29		0.21	0.050	mg/Kg	1	☼	6010B	Total/NA
Chromium	16		0.52	0.16	mg/Kg	1	☼	6010B	Total/NA
Arsenic	4.1		1.0	0.33	mg/Kg	1	☼	6010B	Total/NA
Lead	15		1.0	0.30	mg/Kg	1	☼	6010B	Total/NA

**Client Sample ID: SS-2\_080218**

**Lab Sample ID: 240-99401-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	1800	*	1600	120	ug/Kg	1	☼	8260B	Total/NA
Benzo[a]anthracene	8.0	J	330	0.79	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	8.1	J	330	0.81	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	13	J	330	0.74	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	8.6	J	330	0.44	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	5.4	J	330	0.86	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	210	J	330	64	ug/Kg	1	☼	8270C	Total/NA
Chrysene	8.2	J	330	1.4	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	15	J	330	0.69	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	11	J	330	0.44	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	6.8	J	330	0.92	ug/Kg	1	☼	8270C	Total/NA
Pyrene	13	J	330	0.55	ug/Kg	1	☼	8270C	Total/NA
Barium	45		25	0.46	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.30		0.25	0.061	mg/Kg	1	☼	6010B	Total/NA
Chromium	18		0.63	0.19	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.8		1.3	0.40	mg/Kg	1	☼	6010B	Total/NA
Lead	9.6		1.3	0.36	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.035	J B	0.12	0.022	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

**Client Sample ID: SS-1\_080218**

**Lab Sample ID: 240-99401-1**

**Date Collected: 08/02/18 14:45**

**Matrix: Solid**

**Date Received: 08/03/18 09:00**

**Percent Solids: 71.2**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1100	U *	1100	180	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Benzene	72	U	72	43	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Bromodichloromethane	140	U	140	33	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Bromoform	140	U	140	42	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Bromomethane	360	U *	360	51	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
2-Butanone (MEK)	1100	U	1100	91	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Carbon disulfide	360	U	360	33	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Carbon tetrachloride	72	U	72	49	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Chlorobenzene	72	U	72	54	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Chloroethane	360	U *	360	51	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Chloroform	72	U	72	43	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Chloromethane	360	U	360	33	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
cis-1,2-Dichloroethene	72	U	72	63	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
cis-1,3-Dichloropropene	72	U	72	42	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Cyclohexane	1700	U	1700	54	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Dibromochloromethane	72	U	72	62	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,2-Dibromo-3-Chloropropane	360	U	360	87	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,2-Dibromoethane	360	U	360	42	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,2-Dichlorobenzene	140	U	140	33	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,3-Dichlorobenzene	140	U	140	69	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,4-Dichlorobenzene	140	U	140	49	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Dichlorodifluoromethane	140	U	140	40	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,1-Dichloroethane	72	U	72	56	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,2-Dichloroethane	72	U	72	54	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,1-Dichloroethene	72	U *	72	65	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,2-Dichloropropane	72	U	72	54	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Ethylbenzene	72	U	72	63	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
2-Hexanone	3600	U	3600	160	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Isopropylbenzene	360	U	360	62	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
<b>Methyl acetate</b>	<b>2100</b>	<b>*</b>	1700	140	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Methylcyclohexane	1700	U	1700	67	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Methylene Chloride	360	U *	360	120	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
4-Methyl-2-pentanone (MIBK)	3600	U	3600	72	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Methyl tert-butyl ether	360	U	360	47	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Styrene	72	U	72	18	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,1,2,2-Tetrachloroethane	72	U	72	43	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Tetrachloroethene	72	U	72	38	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Toluene	140	U	140	43	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
trans-1,2-Dichloroethene	72	U	72	63	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
trans-1,3-Dichloropropene	72	U	72	27	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,2,4-Trichlorobenzene	360	U	360	47	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,1,1-Trichloroethane	72	U	72	51	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,1,2-Trichloroethane	72	U	72	42	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Trichloroethene	72	U	72	67	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Trichlorofluoromethane	140	U *	140	62	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	360	U *	360	42	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Vinyl chloride	58	U	58	31	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1
Xylenes, Total	220	U	220	51	ug/Kg	☼	08/07/18 11:05	08/08/18 02:09	1

TestAmerica Canton

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

**Client Sample ID: SS-1\_080218**

**Lab Sample ID: 240-99401-1**

**Date Collected: 08/02/18 14:45**

**Matrix: Solid**

**Date Received: 08/03/18 09:00**

**Percent Solids: 71.2**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	137		58 - 142	08/07/18 11:05	08/08/18 02:09	1
Dibromofluoromethane (Surr)	143		31 - 155	08/07/18 11:05	08/08/18 02:09	1
1,2-Dichloroethane-d4 (Surr)	163	X	64 - 144	08/07/18 11:05	08/08/18 02:09	1
Toluene-d8 (Surr)	163	X	61 - 137	08/07/18 11:05	08/08/18 02:09	1

**Method: 8270C - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	370	U	370	1.1	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Acenaphthylene	370	U	370	0.49	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Acetophenone	370	U	370	15	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Anthracene</b>	<b>6.1</b>	<b>J</b>	370	1.1	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Atrazine	56	U	56	50	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Benzaldehyde</b>	<b>43</b>	<b>J</b>	370	32	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Benzo[a]anthracene</b>	<b>41</b>	<b>J</b>	370	0.88	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Benzo[a]pyrene</b>	<b>48</b>	<b>J</b>	370	0.89	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Benzo[b]fluoranthene</b>	<b>73</b>	<b>J</b>	370	0.82	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Benzo[g,h,i]perylene</b>	<b>37</b>	<b>J</b>	370	0.49	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Benzo[k]fluoranthene</b>	<b>33</b>	<b>J</b>	370	0.95	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
1,1'-Biphenyl	370	U	370	24	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Bis(2-chloroethoxy)methane	370	U	370	17	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Bis(2-chloroethyl)ether	110	U	110	17	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>82</b>	<b>J</b>	370	71	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
4-Bromophenyl phenyl ether	370	U	370	19	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Butyl benzyl phthalate	370	U	370	31	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Caprolactam	370	U	370	100	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Carbazole	370	U	370	26	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
4-Chloroaniline	280	U	280	42	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
4-Chloro-3-methylphenol	370	U	370	63	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2-Chloronaphthalene	370	U	370	19	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2-Chlorophenol	370	U	370	14	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
4-Chlorophenyl phenyl ether	370	U	370	19	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Chrysene</b>	<b>55</b>	<b>J</b>	370	1.5	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Dibenz(a,h)anthracene</b>	<b>14</b>	<b>J</b>	370	0.92	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Dibenzofuran	370	U	370	18	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
3,3'-Dichlorobenzidine	2200	U	2200	60	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2,4-Dichlorophenol	370	U	370	61	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Diethyl phthalate	370	U	370	43	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2,4-Dimethylphenol	370	U	370	56	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Dimethyl phthalate	370	U	370	19	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Di-n-butyl phthalate	370	U	370	31	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
4,6-Dinitro-2-methylphenol	210	U	210	110	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2,4-Dinitrophenol	210	U	210	200	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2,4-Dinitrotoluene	370	U	370	86	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2,6-Dinitrotoluene	370	U	370	78	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Di-n-octyl phthalate	370	U	370	39	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Fluoranthene</b>	<b>99</b>	<b>J</b>	370	0.77	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Fluorene	370	U	370	0.74	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Hexachlorobenzene	370	U	370	2.9	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Hexachlorobutadiene	56	U	56	17	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Hexachlorocyclopentadiene	370	U	370	86	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1

TestAmerica Canton

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

**Client Sample ID: SS-1\_080218**

**Lab Sample ID: 240-99401-1**

**Date Collected: 08/02/18 14:45**

**Matrix: Solid**

**Date Received: 08/03/18 09:00**

**Percent Solids: 71.2**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	370	U	370	13	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>34</b>	<b>J</b>	370	0.49	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Isophorone	370	U	370	17	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2-Methylnaphthalene	370	U	370	0.70	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2-Methylphenol	370	U	370	43	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>3 &amp; 4 Methylphenol</b>	<b>72</b>	<b>J</b>	370	40	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Naphthalene	370	U	370	1.1	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2-Nitroaniline	280	U	280	56	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
3-Nitroaniline	280	U	280	68	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
4-Nitroaniline	280	U	280	83	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Nitrobenzene	370	U	370	18	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2-Nitrophenol	370	U	370	18	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
4-Nitrophenol	460	U	460	130	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
N-Nitrosodi-n-propylamine	370	U	370	15	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
N-Nitrosodiphenylamine	370	U	370	17	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2,2'-oxybis[1-chloropropane]	370	U	370	14	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Pentachlorophenol	210	U	210	81	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Phenanthrene</b>	<b>47</b>	<b>J</b>	370	1.0	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
Phenol	370	U	370	11	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
<b>Pyrene</b>	<b>88</b>	<b>J</b>	370	0.61	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2,4,5-Trichlorophenol	370	U	370	96	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1
2,4,6-Trichlorophenol	370	U	370	89	ug/Kg	☼	08/06/18 09:08	08/08/18 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	82		32 - 120	08/06/18 09:08	08/08/18 17:32	1
2-Fluorophenol (Surr)	76		29 - 120	08/06/18 09:08	08/08/18 17:32	1
Nitrobenzene-d5 (Surr)	65		30 - 120	08/06/18 09:08	08/08/18 17:32	1
Phenol-d5 (Surr)	80		29 - 120	08/06/18 09:08	08/08/18 17:32	1
Terphenyl-d14 (Surr)	91		41 - 120	08/06/18 09:08	08/08/18 17:32	1
2,4,6-Tribromophenol (Surr)	60		10 - 120	08/06/18 09:08	08/08/18 17:32	1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	67	U	67	30	ug/Kg	☼	08/03/18 15:57	08/08/18 08:11	1
Aroclor-1221	67	U	67	32	ug/Kg	☼	08/03/18 15:57	08/08/18 08:11	1
Aroclor-1232	67	U	67	31	ug/Kg	☼	08/03/18 15:57	08/08/18 08:11	1
Aroclor-1242	67	U	67	26	ug/Kg	☼	08/03/18 15:57	08/08/18 08:11	1
Aroclor-1248	67	U	67	32	ug/Kg	☼	08/03/18 15:57	08/08/18 08:11	1
Aroclor-1254	67	U	67	31	ug/Kg	☼	08/03/18 15:57	08/08/18 08:11	1
Aroclor-1260	67	U	67	30	ug/Kg	☼	08/03/18 15:57	08/08/18 08:11	1
Aroclor-1262	67	U	67	42	ug/Kg	☼	08/03/18 15:57	08/08/18 08:11	1
Aroclor-1268	67	U	67	31	ug/Kg	☼	08/03/18 15:57	08/08/18 08:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	62		14 - 128	08/03/18 15:57	08/08/18 08:11	1
DCB Decachlorobiphenyl	65	p	10 - 132	08/03/18 15:57	08/08/18 08:11	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>44</b>		21	0.38	mg/Kg	☼	08/06/18 14:00	08/07/18 20:03	1

TestAmerica Canton

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

**Client Sample ID: SS-1\_080218**

**Lab Sample ID: 240-99401-1**

**Date Collected: 08/02/18 14:45**

**Matrix: Solid**

**Date Received: 08/03/18 09:00**

**Percent Solids: 71.2**

**Method: 6010B - Metals (ICP) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.29		0.21	0.050	mg/Kg	☼	08/06/18 14:00	08/07/18 20:03	1
Chromium	16		0.52	0.16	mg/Kg	☼	08/06/18 14:00	08/07/18 20:03	1
Silver	0.52	U	0.52	0.085	mg/Kg	☼	08/06/18 14:00	08/07/18 20:03	1
Arsenic	4.1		1.0	0.33	mg/Kg	☼	08/06/18 14:00	08/07/18 20:03	1
Lead	15		1.0	0.30	mg/Kg	☼	08/06/18 14:00	08/07/18 20:03	1
Selenium	1.6	U	1.6	0.49	mg/Kg	☼	08/06/18 14:00	08/07/18 20:03	1

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15	U	0.15	0.027	mg/Kg	☼	08/06/18 16:00	08/07/18 14:45	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	71.2		0.1	0.1	%			08/03/18 09:22	1
Percent Moisture	28.8		0.1	0.1	%			08/03/18 09:22	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

**Client Sample ID: SS-2\_080218**

**Lab Sample ID: 240-99401-2**

**Date Collected: 08/02/18 14:40**

**Matrix: Solid**

**Date Received: 08/03/18 09:00**

**Percent Solids: 78.3**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	980	U *	980	160	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Benzene	66	U	66	39	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Bromodichloromethane	130	U	130	30	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Bromoform	130	U	130	38	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Bromomethane	330	U *	330	46	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
2-Butanone (MEK)	980	U	980	82	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Carbon disulfide	330	U	330	30	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Carbon tetrachloride	66	U	66	44	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Chlorobenzene	66	U	66	49	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Chloroethane	330	U *	330	46	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Chloroform	66	U	66	39	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Chloromethane	330	U	330	30	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
cis-1,2-Dichloroethene	66	U	66	57	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
cis-1,3-Dichloropropene	66	U	66	38	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Cyclohexane	1600	U	1600	49	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Dibromochloromethane	66	U	66	56	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,2-Dibromo-3-Chloropropane	330	U	330	79	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,2-Dibromoethane	330	U	330	38	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,2-Dichlorobenzene	130	U	130	30	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,3-Dichlorobenzene	130	U	130	62	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,4-Dichlorobenzene	130	U	130	44	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Dichlorodifluoromethane	130	U	130	36	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,1-Dichloroethane	66	U	66	51	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,2-Dichloroethane	66	U	66	49	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,1-Dichloroethene	66	U *	66	59	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,2-Dichloropropane	66	U	66	49	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Ethylbenzene	66	U	66	57	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
2-Hexanone	3300	U	3300	140	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Isopropylbenzene	330	U	330	56	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
<b>Methyl acetate</b>	<b>1800</b>	<b>*</b>	1600	120	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Methylcyclohexane	1600	U	1600	61	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Methylene Chloride	330	U *	330	110	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
4-Methyl-2-pentanone (MIBK)	3300	U	3300	66	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Methyl tert-butyl ether	330	U	330	43	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Styrene	66	U	66	16	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,1,2,2-Tetrachloroethane	66	U	66	39	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Tetrachloroethene	66	U	66	34	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Toluene	130	U	130	39	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
trans-1,2-Dichloroethene	66	U	66	57	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
trans-1,3-Dichloropropene	66	U	66	25	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,2,4-Trichlorobenzene	330	U	330	43	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,1,1-Trichloroethane	66	U	66	46	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,1,2-Trichloroethane	66	U	66	38	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Trichloroethene	66	U	66	61	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Trichlorofluoromethane	130	U *	130	56	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	330	U *	330	38	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Vinyl chloride	52	U	52	28	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1
Xylenes, Total	200	U	200	46	ug/Kg	☼	08/07/18 11:05	08/08/18 02:32	1

TestAmerica Canton

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

**Client Sample ID: SS-2\_080218**

**Lab Sample ID: 240-99401-2**

**Date Collected: 08/02/18 14:40**

**Matrix: Solid**

**Date Received: 08/03/18 09:00**

**Percent Solids: 78.3**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		58 - 142	08/07/18 11:05	08/08/18 02:32	1
Dibromofluoromethane (Surr)	125		31 - 155	08/07/18 11:05	08/08/18 02:32	1
1,2-Dichloroethane-d4 (Surr)	138		64 - 144	08/07/18 11:05	08/08/18 02:32	1
Toluene-d8 (Surr)	142	X	61 - 137	08/07/18 11:05	08/08/18 02:32	1

**Method: 8270C - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	330	U	330	0.96	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Acenaphthylene	330	U	330	0.44	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Acetophenone	330	U	330	14	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Anthracene	330	U	330	0.98	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Atrazine	50	U	50	45	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Benzaldehyde	330	U	330	29	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
<b>Benzo[a]anthracene</b>	<b>8.0</b>	<b>J</b>	330	0.79	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
<b>Benzo[a]pyrene</b>	<b>8.1</b>	<b>J</b>	330	0.81	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
<b>Benzo[b]fluoranthene</b>	<b>13</b>	<b>J</b>	330	0.74	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
<b>Benzo[g,h,i]perylene</b>	<b>8.6</b>	<b>J</b>	330	0.44	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
<b>Benzo[k]fluoranthene</b>	<b>5.4</b>	<b>J</b>	330	0.86	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
1,1'-Biphenyl	330	U	330	21	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Bis(2-chloroethoxy)methane	330	U	330	15	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Bis(2-chloroethyl)ether	100	U	100	15	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>210</b>	<b>J</b>	330	64	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
4-Bromophenyl phenyl ether	330	U	330	18	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Butyl benzyl phthalate	330	U	330	28	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Caprolactam	330	U	330	94	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Carbazole	330	U	330	24	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
4-Chloroaniline	250	U	250	38	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
4-Chloro-3-methylphenol	330	U	330	57	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2-Chloronaphthalene	330	U	330	18	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2-Chlorophenol	330	U	330	13	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
4-Chlorophenyl phenyl ether	330	U	330	18	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
<b>Chrysene</b>	<b>8.2</b>	<b>J</b>	330	1.4	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Dibenz(a,h)anthracene	330	U	330	0.83	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Dibenzofuran	330	U	330	16	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
3,3'-Dichlorobenzidine	2000	U	2000	54	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2,4-Dichlorophenol	330	U	330	55	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Diethyl phthalate	330	U	330	39	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2,4-Dimethylphenol	330	U	330	50	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Dimethyl phthalate	330	U	330	18	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Di-n-butyl phthalate	330	U	330	28	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
4,6-Dinitro-2-methylphenol	190	U	190	100	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2,4-Dinitrophenol	190	U	190	180	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2,4-Dinitrotoluene	330	U	330	78	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2,6-Dinitrotoluene	330	U	330	71	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Di-n-octyl phthalate	330	U	330	35	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
<b>Fluoranthene</b>	<b>15</b>	<b>J</b>	330	0.69	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Fluorene	330	U	330	0.67	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Hexachlorobenzene	330	U	330	2.6	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Hexachlorobutadiene	50	U	50	15	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Hexachlorocyclopentadiene	330	U	330	78	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1

TestAmerica Canton

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

**Client Sample ID: SS-2\_080218**

**Lab Sample ID: 240-99401-2**

**Date Collected: 08/02/18 14:40**

**Matrix: Solid**

**Date Received: 08/03/18 09:00**

**Percent Solids: 78.3**

**Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	330	U	330	11	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>11</b>	<b>J</b>	330	0.44	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Isophorone	330	U	330	15	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2-Methylnaphthalene	330	U	330	0.63	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2-Methylphenol	330	U	330	39	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
3 & 4 Methylphenol	330	U	330	37	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Naphthalene	330	U	330	1.0	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2-Nitroaniline	250	U	250	50	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
3-Nitroaniline	250	U	250	62	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
4-Nitroaniline	250	U	250	76	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Nitrobenzene	330	U	330	16	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2-Nitrophenol	330	U	330	16	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
4-Nitrophenol	420	U	420	120	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
N-Nitrosodi-n-propylamine	330	U	330	14	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
N-Nitrosodiphenylamine	330	U	330	15	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2,2'-oxybis[1-chloropropane]	330	U	330	13	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Pentachlorophenol	190	U	190	73	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
<b>Phenanthrene</b>	<b>6.8</b>	<b>J</b>	330	0.92	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
Phenol	330	U	330	10	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
<b>Pyrene</b>	<b>13</b>	<b>J</b>	330	0.55	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2,4,5-Trichlorophenol	330	U	330	87	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1
2,4,6-Trichlorophenol	330	U	330	81	ug/Kg	☼	08/06/18 09:08	08/08/18 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	72		32 - 120	08/06/18 09:08	08/08/18 18:00	1
2-Fluorophenol (Surr)	69		29 - 120	08/06/18 09:08	08/08/18 18:00	1
Nitrobenzene-d5 (Surr)	60		30 - 120	08/06/18 09:08	08/08/18 18:00	1
Phenol-d5 (Surr)	71		29 - 120	08/06/18 09:08	08/08/18 18:00	1
Terphenyl-d14 (Surr)	90		41 - 120	08/06/18 09:08	08/08/18 18:00	1
2,4,6-Tribromophenol (Surr)	52		10 - 120	08/06/18 09:08	08/08/18 18:00	1

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	66	U	66	29	ug/Kg	☼	08/03/18 15:57	08/08/18 08:25	1
Aroclor-1221	66	U	66	32	ug/Kg	☼	08/03/18 15:57	08/08/18 08:25	1
Aroclor-1232	66	U	66	30	ug/Kg	☼	08/03/18 15:57	08/08/18 08:25	1
Aroclor-1242	66	U	66	25	ug/Kg	☼	08/03/18 15:57	08/08/18 08:25	1
Aroclor-1248	66	U	66	32	ug/Kg	☼	08/03/18 15:57	08/08/18 08:25	1
Aroclor-1254	66	U	66	30	ug/Kg	☼	08/03/18 15:57	08/08/18 08:25	1
Aroclor-1260	66	U	66	29	ug/Kg	☼	08/03/18 15:57	08/08/18 08:25	1
Aroclor-1262	66	U	66	41	ug/Kg	☼	08/03/18 15:57	08/08/18 08:25	1
Aroclor-1268	66	U	66	30	ug/Kg	☼	08/03/18 15:57	08/08/18 08:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		14 - 128	08/03/18 15:57	08/08/18 08:25	1
DCB Decachlorobiphenyl	79		10 - 132	08/03/18 15:57	08/08/18 08:25	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Barium</b>	<b>45</b>		25	0.46	mg/Kg	☼	08/06/18 14:00	08/07/18 20:08	1

TestAmerica Canton

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

**Client Sample ID: SS-2\_080218**

**Lab Sample ID: 240-99401-2**

**Date Collected: 08/02/18 14:40**

**Matrix: Solid**

**Date Received: 08/03/18 09:00**

**Percent Solids: 78.3**

**Method: 6010B - Metals (ICP) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.30		0.25	0.061	mg/Kg	☼	08/06/18 14:00	08/07/18 20:08	1
Chromium	18		0.63	0.19	mg/Kg	☼	08/06/18 14:00	08/07/18 20:08	1
Silver	0.63	U	0.63	0.10	mg/Kg	☼	08/06/18 14:00	08/07/18 20:08	1
Arsenic	3.8		1.3	0.40	mg/Kg	☼	08/06/18 14:00	08/07/18 20:08	1
Lead	9.6		1.3	0.36	mg/Kg	☼	08/06/18 14:00	08/07/18 20:08	1
Selenium	1.9	U	1.9	0.59	mg/Kg	☼	08/06/18 14:00	08/07/18 20:08	1

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035	J B	0.12	0.022	mg/Kg	☼	08/06/18 16:00	08/07/18 14:48	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	78.3		0.1	0.1	%			08/03/18 09:22	1
Percent Moisture	21.7		0.1	0.1	%			08/03/18 09:22	1

# Surrogate Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (58-142)	DBFM (31-155)	DCA (64-144)	TOL (61-137)
240-99401-1	SS-1_080218	137	143	163 X	163 X
240-99401-2	SS-2_080218	125	125	138	142 X
LCS 240-339726/2-A	Lab Control Sample	88	92	98	91
MB 240-339726/1-A	Method Blank	84	91	93	94

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)  
DBFM = Dibromofluoromethane (Surr)  
DCA = 1,2-Dichloroethane-d4 (Surr)  
TOL = Toluene-d8 (Surr)

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	FBP (32-120)	2FP (29-120)	NBZ (30-120)	PHL (29-120)	TPHL (41-120)	TBP (10-120)
240-99401-1	SS-1_080218	82	76	65	80	91	60
240-99401-2	SS-2_080218	72	69	60	71	90	52
LCS 240-339507/19-A	Lab Control Sample	82	77	75	81	97	59
MB 240-339507/18-A	Method Blank	83	79	70	84	102	55

#### Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)  
2FP = 2-Fluorophenol (Surr)  
NBZ = Nitrobenzene-d5 (Surr)  
PHL = Phenol-d5 (Surr)  
TPHL = Terphenyl-d14 (Surr)  
TBP = 2,4,6-Tribromophenol (Surr)

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (14-128)	DCBP1 (10-132)
240-99401-1	SS-1_080218	62	65 p
240-99401-2	SS-2_080218	68	79
LCS 240-339398/23-A	Lab Control Sample	68	69
MB 240-339398/22-A	Method Blank	68	75

#### Surrogate Legend

TCX = Tetrachloro-m-xylene  
DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 240-339726/1-A**

**Matrix: Solid**

**Analysis Batch: 339819**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 339726**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	97	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Benzene	40	U	40	24	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Bromodichloromethane	80	U	80	18	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Bromoform	80	U	80	23	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Bromomethane	200	U	200	28	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
2-Butanone (MEK)	600	U	600	50	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Carbon disulfide	200	U	200	18	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Carbon tetrachloride	40	U	40	27	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Chlorobenzene	40	U	40	30	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Chloroethane	200	U	200	28	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Chloroform	40	U	40	24	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Chloromethane	200	U	200	18	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
cis-1,2-Dichloroethene	40	U	40	35	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
cis-1,3-Dichloropropene	40	U	40	23	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Cyclohexane	960	U	960	30	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Dibromochloromethane	40	U	40	34	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,2-Dibromo-3-Chloropropane	200	U	200	48	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,2-Dibromoethane	200	U	200	23	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,2-Dichlorobenzene	80	U	80	18	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,3-Dichlorobenzene	80	U	80	38	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,4-Dichlorobenzene	80	U	80	27	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Dichlorodifluoromethane	80	U	80	22	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,1-Dichloroethane	40	U	40	31	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,2-Dichloroethane	40	U	40	30	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,1-Dichloroethene	40	U	40	36	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,2-Dichloropropane	40	U	40	30	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Ethylbenzene	40	U	40	35	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
2-Hexanone	2000	U	2000	86	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Isopropylbenzene	200	U	200	34	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Methyl acetate	960	U	960	75	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Methylcyclohexane	960	U	960	37	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Methylene Chloride	200	U	200	65	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	40	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Methyl tert-butyl ether	200	U	200	26	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Styrene	40	U	40	10	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,1,2,2-Tetrachloroethane	40	U	40	24	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Tetrachloroethene	40	U	40	21	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Toluene	80	U	80	24	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
trans-1,2-Dichloroethene	40	U	40	35	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
trans-1,3-Dichloropropene	40	U	40	15	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,2,4-Trichlorobenzene	200	U	200	26	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,1,1-Trichloroethane	40	U	40	28	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,1,2-Trichloroethane	40	U	40	23	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Trichloroethene	40	U	40	37	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Trichlorofluoromethane	80	U	80	34	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	23	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Vinyl chloride	32	U	32	17	ug/Kg		08/07/18 11:05	08/08/18 00:59	1
Xylenes, Total	120	U	120	28	ug/Kg		08/07/18 11:05	08/08/18 00:59	1

TestAmerica Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	84		58 - 142	08/07/18 11:05	08/08/18 00:59	1
Dibromofluoromethane (Surr)	91		31 - 155	08/07/18 11:05	08/08/18 00:59	1
1,2-Dichloroethane-d4 (Surr)	93		64 - 144	08/07/18 11:05	08/08/18 00:59	1
Toluene-d8 (Surr)	94		61 - 137	08/07/18 11:05	08/08/18 00:59	1

**Lab Sample ID: LCS 240-339726/2-A**  
**Matrix: Solid**  
**Analysis Batch: 339819**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 339726**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acetone	2000	3390	*	ug/Kg		170	24 - 125
Benzene	1000	1040		ug/Kg		104	77 - 120
Bromodichloromethane	1000	878		ug/Kg		88	61 - 132
Bromoform	1000	503		ug/Kg		50	40 - 140
Bromomethane	1000	2640	*	ug/Kg		264	10 - 153
2-Butanone (MEK)	2000	1970		ug/Kg		99	51 - 120
Carbon disulfide	1000	1420		ug/Kg		142	17 - 163
Carbon tetrachloride	1000	801		ug/Kg		80	43 - 144
Chlorobenzene	1000	951		ug/Kg		95	76 - 120
Chloroethane	1000	1990	*	ug/Kg		199	10 - 166
Chloroform	1000	1030		ug/Kg		103	74 - 120
Chloromethane	1000	831		ug/Kg		83	41 - 124
cis-1,2-Dichloroethene	1000	1040		ug/Kg		104	78 - 120
cis-1,3-Dichloropropene	1000	903		ug/Kg		90	66 - 126
Cyclohexane	1000	1160		ug/Kg		116	66 - 129
Dibromochloromethane	1000	644		ug/Kg		64	46 - 125
1,2-Dibromo-3-Chloropropane	1000	659		ug/Kg		66	40 - 133
1,2-Dibromoethane	1000	880		ug/Kg		88	80 - 120
1,2-Dichlorobenzene	1000	975		ug/Kg		97	75 - 120
1,3-Dichlorobenzene	1000	937		ug/Kg		94	72 - 120
1,4-Dichlorobenzene	1000	925		ug/Kg		92	71 - 120
Dichlorodifluoromethane	1000	757		ug/Kg		76	15 - 127
1,1-Dichloroethane	1000	1130		ug/Kg		113	72 - 120
1,2-Dichloroethane	1000	1030		ug/Kg		103	71 - 120
1,1-Dichloroethene	1000	1770	*	ug/Kg		177	58 - 130
1,2-Dichloropropane	1000	1000		ug/Kg		100	78 - 122
Ethylbenzene	1000	974		ug/Kg		97	76 - 120
2-Hexanone	2000	1700	J	ug/Kg		85	52 - 129
Isopropylbenzene	1000	1010		ug/Kg		101	76 - 124
Methyl acetate	2000	3610	*	ug/Kg		180	63 - 126
Methylcyclohexane	1000	1060		ug/Kg		106	71 - 126
Methylene Chloride	1000	1470	*	ug/Kg		147	64 - 126
4-Methyl-2-pentanone (MIBK)	2000	1800	J	ug/Kg		90	65 - 131
Methyl tert-butyl ether	1000	1240		ug/Kg		124	68 - 129
Styrene	1000	952		ug/Kg		95	80 - 120
1,1,1,2-Tetrachloroethane	1000	909		ug/Kg		91	78 - 120
Tetrachloroethene	1000	1000		ug/Kg		100	68 - 122
Toluene	1000	1010		ug/Kg		101	74 - 120
trans-1,2-Dichloroethene	1000	1220		ug/Kg		122	74 - 124
trans-1,3-Dichloropropene	1000	812		ug/Kg		81	55 - 121
1,2,4-Trichlorobenzene	1000	1000		ug/Kg		100	60 - 124
1,1,1-Trichloroethane	1000	1030		ug/Kg		103	60 - 136
1,1,2-Trichloroethane	1000	1000		ug/Kg		100	80 - 120
Trichloroethene	1000	983		ug/Kg		98	73 - 123

TestAmerica Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-339726/2-A**  
**Matrix: Solid**  
**Analysis Batch: 339819**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 339726**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	1000	1970	*	ug/Kg		197	28 - 152
1,1,2-Trichloro-1,2,2-trifluoroethane	1000	1840	*	ug/Kg		184	64 - 125
Vinyl chloride	1000	871		ug/Kg		87	49 - 131
Xylenes, Total	2000	1940		ug/Kg		97	78 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		58 - 142
Dibromofluoromethane (Surr)	92		31 - 155
1,2-Dichloroethane-d4 (Surr)	98		64 - 144
Toluene-d8 (Surr)	91		61 - 137

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 240-339507/18-A**  
**Matrix: Solid**  
**Analysis Batch: 339857**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 339507**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	260	U	260	0.76	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Acenaphthylene	260	U	260	0.35	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Acetophenone	260	U	260	11	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Anthracene	260	U	260	0.78	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Atrazine	40	U	40	36	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Benzaldehyde	260	U	260	23	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Benzo[a]anthracene	260	U	260	0.63	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Benzo[a]pyrene	260	U	260	0.64	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Benzo[b]fluoranthene	260	U	260	0.59	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Benzo[g,h,i]perylene	260	U	260	0.35	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Benzo[k]fluoranthene	260	U	260	0.68	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
1,1'-Biphenyl	260	U	260	17	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Bis(2-chloroethoxy)methane	260	U	260	12	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Bis(2-chloroethyl)ether	80	U	80	12	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Bis(2-ethylhexyl) phthalate	260	U	260	51	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
4-Bromophenyl phenyl ether	260	U	260	14	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Butyl benzyl phthalate	260	U	260	22	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Caprolactam	260	U	260	75	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Carbazole	260	U	260	19	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
4-Chloroaniline	200	U	200	30	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
4-Chloro-3-methylphenol	260	U	260	45	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2-Chloronaphthalene	260	U	260	14	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2-Chlorophenol	260	U	260	10	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
4-Chlorophenyl phenyl ether	260	U	260	14	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Chrysene	260	U	260	1.1	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Dibenz(a,h)anthracene	260	U	260	0.66	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Dibenzofuran	260	U	260	13	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
3,3'-Dichlorobenzidine	1600	U	1600	43	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2,4-Dichlorophenol	260	U	260	44	ug/Kg		08/06/18 09:08	08/08/18 08:30	1

TestAmerica Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-339507/18-A**  
**Matrix: Solid**  
**Analysis Batch: 339857**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 339507**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diethyl phthalate	260	U	260	31	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2,4-Dimethylphenol	260	U	260	40	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Dimethyl phthalate	260	U	260	14	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Di-n-butyl phthalate	260	U	260	22	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
4,6-Dinitro-2-methylphenol	150	U	150	80	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2,4-Dinitrophenol	150	U	150	140	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2,4-Dinitrotoluene	260	U	260	62	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2,6-Dinitrotoluene	260	U	260	56	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Di-n-octyl phthalate	260	U	260	28	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Fluoranthene	260	U	260	0.55	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Fluorene	260	U	260	0.53	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Hexachlorobenzene	260	U	260	2.1	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Hexachlorobutadiene	40	U	40	12	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Hexachlorocyclopentadiene	260	U	260	62	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Hexachloroethane	260	U	260	9.0	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Indeno[1,2,3-cd]pyrene	260	U	260	0.35	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Isophorone	260	U	260	12	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2-Methylnaphthalene	260	U	260	0.50	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2-Methylphenol	260	U	260	31	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
3 & 4 Methylphenol	260	U	260	29	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Naphthalene	260	U	260	0.82	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2-Nitroaniline	200	U	200	40	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
3-Nitroaniline	200	U	200	49	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
4-Nitroaniline	200	U	200	60	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Nitrobenzene	260	U	260	13	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2-Nitrophenol	260	U	260	13	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
4-Nitrophenol	330	U	330	94	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
N-Nitrosodi-n-propylamine	260	U	260	11	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
N-Nitrosodiphenylamine	260	U	260	12	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2,2'-oxybis[1-chloropropane]	260	U	260	10	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Pentachlorophenol	150	U	150	58	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Phenanthrene	260	U	260	0.73	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Phenol	260	U	260	8.0	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
Pyrene	260	U	260	0.44	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2,4,5-Trichlorophenol	260	U	260	69	ug/Kg		08/06/18 09:08	08/08/18 08:30	1
2,4,6-Trichlorophenol	260	U	260	64	ug/Kg		08/06/18 09:08	08/08/18 08:30	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorobiphenyl (Surr)	83		32 - 120	08/06/18 09:08	08/08/18 08:30	1
2-Fluorophenol (Surr)	79		29 - 120	08/06/18 09:08	08/08/18 08:30	1
Nitrobenzene-d5 (Surr)	70		30 - 120	08/06/18 09:08	08/08/18 08:30	1
Phenol-d5 (Surr)	84		29 - 120	08/06/18 09:08	08/08/18 08:30	1
Terphenyl-d14 (Surr)	102		41 - 120	08/06/18 09:08	08/08/18 08:30	1
2,4,6-Tribromophenol (Surr)	55		10 - 120	08/06/18 09:08	08/08/18 08:30	1

TestAmerica Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-339507/19-A**

**Matrix: Solid**

**Analysis Batch: 339857**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 339507**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	667	547		ug/Kg		82	48 - 120
Acenaphthylene	667	590		ug/Kg		88	46 - 120
Acetophenone	667	488		ug/Kg		73	46 - 120
Anthracene	667	572		ug/Kg		86	51 - 120
Atrazine	1330	1190		ug/Kg		89	57 - 120
Benzaldehyde	1330	993		ug/Kg		74	48 - 120
Benzo[a]anthracene	667	590		ug/Kg		89	53 - 120
Benzo[a]pyrene	667	653		ug/Kg		98	50 - 120
Benzo[b]fluoranthene	667	642		ug/Kg		96	48 - 120
Benzo[g,h,i]perylene	667	664		ug/Kg		100	50 - 120
Benzo[k]fluoranthene	667	678		ug/Kg		102	51 - 120
1,1'-Biphenyl	667	550		ug/Kg		83	48 - 120
Bis(2-chloroethoxy)methane	667	518		ug/Kg		78	50 - 120
Bis(2-chloroethyl)ether	667	506		ug/Kg		76	48 - 120
Bis(2-ethylhexyl) phthalate	667	653		ug/Kg		98	52 - 120
4-Bromophenyl phenyl ether	667	517		ug/Kg		78	51 - 120
Butyl benzyl phthalate	667	636		ug/Kg		95	53 - 120
Caprolactam	1330	1150		ug/Kg		86	59 - 120
Carbazole	667	606		ug/Kg		91	56 - 120
4-Chloroaniline	667	319		ug/Kg		48	37 - 120
4-Chloro-3-methylphenol	667	525		ug/Kg		79	47 - 120
2-Chloronaphthalene	667	554		ug/Kg		83	49 - 120
2-Chlorophenol	667	524		ug/Kg		79	50 - 120
4-Chlorophenyl phenyl ether	667	517		ug/Kg		77	49 - 120
Chrysene	667	609		ug/Kg		91	54 - 120
Dibenz(a,h)anthracene	667	610		ug/Kg		92	48 - 120
Dibenzofuran	667	542		ug/Kg		81	49 - 120
3,3'-Dichlorobenzidine	1330	887	J	ug/Kg		66	40 - 120
2,4-Dichlorophenol	667	524		ug/Kg		79	48 - 120
Diethyl phthalate	667	519		ug/Kg		78	52 - 120
2,4-Dimethylphenol	667	448		ug/Kg		67	37 - 120
Dimethyl phthalate	667	542		ug/Kg		81	53 - 120
Di-n-butyl phthalate	667	587		ug/Kg		88	56 - 120
4,6-Dinitro-2-methylphenol	1330	895		ug/Kg		67	18 - 120
2,4-Dinitrophenol	1330	441		ug/Kg		33	10 - 120
2,4-Dinitrotoluene	667	584		ug/Kg		88	53 - 120
2,6-Dinitrotoluene	667	581		ug/Kg		87	54 - 120
Di-n-octyl phthalate	667	649		ug/Kg		97	42 - 120
Fluoranthene	667	566		ug/Kg		85	53 - 120
Fluorene	667	538		ug/Kg		81	50 - 120
Hexachlorobenzene	667	504		ug/Kg		76	46 - 120
Hexachlorobutadiene	667	467		ug/Kg		70	44 - 120
Hexachlorocyclopentadiene	667	374		ug/Kg		56	14 - 120
Hexachloroethane	667	460		ug/Kg		69	45 - 120
Indeno[1,2,3-cd]pyrene	667	615		ug/Kg		92	49 - 120
Isophorone	667	522		ug/Kg		78	47 - 120
2-Methylnaphthalene	667	516		ug/Kg		77	49 - 120
2-Methylphenol	667	540		ug/Kg		81	49 - 120

TestAmerica Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-339507/19-A**  
**Matrix: Solid**  
**Analysis Batch: 339857**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 339507**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3 & 4 Methylphenol	667	516		ug/Kg		77	50 - 120
Naphthalene	667	507		ug/Kg		76	48 - 120
2-Nitroaniline	667	560		ug/Kg		84	46 - 120
3-Nitroaniline	667	494		ug/Kg		74	48 - 120
4-Nitroaniline	667	546		ug/Kg		82	49 - 120
Nitrobenzene	667	501		ug/Kg		75	48 - 120
2-Nitrophenol	667	553		ug/Kg		83	46 - 120
4-Nitrophenol	1330	733		ug/Kg		55	42 - 120
N-Nitrosodi-n-propylamine	667	493		ug/Kg		74	49 - 120
N-Nitrosodiphenylamine	667	585		ug/Kg		88	53 - 120
2,2'-oxybis[1-chloropropane]	667	536		ug/Kg		80	37 - 120
Pentachlorophenol	1330	623		ug/Kg		47	14 - 120
Phenanthrene	667	566		ug/Kg		85	52 - 120
Phenol	667	530		ug/Kg		79	49 - 120
Pyrene	667	635		ug/Kg		95	55 - 120
2,4,5-Trichlorophenol	667	501		ug/Kg		75	34 - 120
2,4,6-Trichlorophenol	667	490		ug/Kg		73	19 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	82		32 - 120
2-Fluorophenol (Surr)	77		29 - 120
Nitrobenzene-d5 (Surr)	75		30 - 120
Phenol-d5 (Surr)	81		29 - 120
Terphenyl-d14 (Surr)	97		41 - 120
2,4,6-Tribromophenol (Surr)	59		10 - 120

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 240-339398/22-A**  
**Matrix: Solid**  
**Analysis Batch: 339843**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 339398**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	50	U	50	22	ug/Kg		08/03/18 15:57	08/08/18 07:27	1
Aroclor-1221	50	U	50	24	ug/Kg		08/03/18 15:57	08/08/18 07:27	1
Aroclor-1232	50	U	50	23	ug/Kg		08/03/18 15:57	08/08/18 07:27	1
Aroclor-1242	50	U	50	19	ug/Kg		08/03/18 15:57	08/08/18 07:27	1
Aroclor-1248	50	U	50	24	ug/Kg		08/03/18 15:57	08/08/18 07:27	1
Aroclor-1254	50	U	50	23	ug/Kg		08/03/18 15:57	08/08/18 07:27	1
Aroclor-1260	50	U	50	22	ug/Kg		08/03/18 15:57	08/08/18 07:27	1
Aroclor-1262	50	U	50	31	ug/Kg		08/03/18 15:57	08/08/18 07:27	1
Aroclor-1268	50	U	50	23	ug/Kg		08/03/18 15:57	08/08/18 07:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		14 - 128	08/03/18 15:57	08/08/18 07:27	1
DCB Decachlorobiphenyl	75		10 - 132	08/03/18 15:57	08/08/18 07:27	1

TestAmerica Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID:** LCS 240-339398/23-A  
**Matrix:** Solid  
**Analysis Batch:** 339843

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 339398

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aroclor-1016	1000	652		ug/Kg		65	47 - 120
Aroclor-1260	1000	753		ug/Kg		75	46 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	68		14 - 128
DCB Decachlorobiphenyl	69		10 - 132

## Method: 6010B - Metals (ICP)

**Lab Sample ID:** MB 240-339562/1-A  
**Matrix:** Solid  
**Analysis Batch:** 339883

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 339562

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	20	U	20	0.36	mg/Kg		08/06/18 14:00	08/07/18 19:16	1
Cadmium	0.20	U	0.20	0.048	mg/Kg		08/06/18 14:00	08/07/18 19:16	1
Chromium	0.50	U	0.50	0.15	mg/Kg		08/06/18 14:00	08/07/18 19:16	1
Silver	0.50	U	0.50	0.081	mg/Kg		08/06/18 14:00	08/07/18 19:16	1
Arsenic	1.0	U	1.0	0.32	mg/Kg		08/06/18 14:00	08/07/18 19:16	1
Lead	1.0	U	1.0	0.28	mg/Kg		08/06/18 14:00	08/07/18 19:16	1
Selenium	1.5	U	1.5	0.47	mg/Kg		08/06/18 14:00	08/07/18 19:16	1

**Lab Sample ID:** LCS 240-339562/2-A  
**Matrix:** Solid  
**Analysis Batch:** 339883

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 339562

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	200	188		mg/Kg		94	80 - 120
Cadmium	5.00	5.00		mg/Kg		100	80 - 120
Chromium	20.0	19.0		mg/Kg		95	80 - 120
Silver	5.00	4.83		mg/Kg		97	80 - 120
Arsenic	200	196		mg/Kg		98	80 - 120
Lead	50.0	46.7		mg/Kg		93	80 - 120
Selenium	200	196		mg/Kg		98	80 - 120

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID:** MB 240-339590/1-A  
**Matrix:** Solid  
**Analysis Batch:** 339900

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 339590

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0185	J	0.10	0.018	mg/Kg		08/06/18 16:00	08/07/18 14:31	1

TestAmerica Canton

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-339590/2-A  
Matrix: Solid  
Analysis Batch: 339900

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 339590

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.833	0.852		mg/Kg		102	80 - 120

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## GC/MS VOA

### Prep Batch: 339726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-99401-1	SS-1_080218	Total/NA	Solid	5035	
240-99401-2	SS-2_080218	Total/NA	Solid	5035	
MB 240-339726/1-A	Method Blank	Total/NA	Solid	5035	
LCS 240-339726/2-A	Lab Control Sample	Total/NA	Solid	5035	

### Analysis Batch: 339819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-99401-1	SS-1_080218	Total/NA	Solid	8260B	339726
240-99401-2	SS-2_080218	Total/NA	Solid	8260B	339726
MB 240-339726/1-A	Method Blank	Total/NA	Solid	8260B	339726
LCS 240-339726/2-A	Lab Control Sample	Total/NA	Solid	8260B	339726

## GC/MS Semi VOA

### Prep Batch: 339507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-99401-1	SS-1_080218	Total/NA	Solid	3540C	
240-99401-2	SS-2_080218	Total/NA	Solid	3540C	
MB 240-339507/18-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-339507/19-A	Lab Control Sample	Total/NA	Solid	3540C	

### Analysis Batch: 339857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-99401-1	SS-1_080218	Total/NA	Solid	8270C	339507
240-99401-2	SS-2_080218	Total/NA	Solid	8270C	339507
MB 240-339507/18-A	Method Blank	Total/NA	Solid	8270C	339507
LCS 240-339507/19-A	Lab Control Sample	Total/NA	Solid	8270C	339507

## GC Semi VOA

### Prep Batch: 339398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-99401-1	SS-1_080218	Total/NA	Solid	3540C	
240-99401-2	SS-2_080218	Total/NA	Solid	3540C	
MB 240-339398/22-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-339398/23-A	Lab Control Sample	Total/NA	Solid	3540C	

### Analysis Batch: 339843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-99401-1	SS-1_080218	Total/NA	Solid	8082A	339398
240-99401-2	SS-2_080218	Total/NA	Solid	8082A	339398
MB 240-339398/22-A	Method Blank	Total/NA	Solid	8082A	339398
LCS 240-339398/23-A	Lab Control Sample	Total/NA	Solid	8082A	339398

## Metals

### Prep Batch: 339562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-99401-1	SS-1_080218	Total/NA	Solid	3050B	
240-99401-2	SS-2_080218	Total/NA	Solid	3050B	

TestAmerica Canton

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## Metals (Continued)

### Prep Batch: 339562 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-339562/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 240-339562/2-A	Lab Control Sample	Total/NA	Solid	3050B	

### Prep Batch: 339590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-99401-1	SS-1_080218	Total/NA	Solid	7471A	
240-99401-2	SS-2_080218	Total/NA	Solid	7471A	
MB 240-339590/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 240-339590/2-A	Lab Control Sample	Total/NA	Solid	7471A	

### Analysis Batch: 339883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-99401-1	SS-1_080218	Total/NA	Solid	6010B	339562
240-99401-2	SS-2_080218	Total/NA	Solid	6010B	339562
MB 240-339562/1-A	Method Blank	Total/NA	Solid	6010B	339562
LCS 240-339562/2-A	Lab Control Sample	Total/NA	Solid	6010B	339562

### Analysis Batch: 339900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-99401-1	SS-1_080218	Total/NA	Solid	7471A	339590
240-99401-2	SS-2_080218	Total/NA	Solid	7471A	339590
MB 240-339590/1-A	Method Blank	Total/NA	Solid	7471A	339590
LCS 240-339590/2-A	Lab Control Sample	Total/NA	Solid	7471A	339590

## General Chemistry

### Analysis Batch: 339305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-99401-1	SS-1_080218	Total/NA	Solid	Moisture	
240-99401-2	SS-2_080218	Total/NA	Solid	Moisture	

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

**Client Sample ID: SS-1\_080218**

**Date Collected: 08/02/18 14:45**

**Date Received: 08/03/18 09:00**

**Lab Sample ID: 240-99401-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	339305	08/03/18 09:22	BWL	TAL CAN

**Client Sample ID: SS-1\_080218**

**Date Collected: 08/02/18 14:45**

**Date Received: 08/03/18 09:00**

**Lab Sample ID: 240-99401-1**

**Matrix: Solid**

**Percent Solids: 71.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			339726	08/07/18 11:05	LAM	TAL CAN
Total/NA	Analysis	8260B		1	339819	08/08/18 02:09	TJL1	TAL CAN
Total/NA	Prep	3540C			339507	08/06/18 09:08	AMT	TAL CAN
Total/NA	Analysis	8270C		1	339857	08/08/18 17:32	MRU	TAL CAN
Total/NA	Prep	3540C			339398	08/03/18 15:57	AMT	TAL CAN
Total/NA	Analysis	8082A		1	339843	08/08/18 08:11	CSC	TAL CAN
Total/NA	Prep	3050B			339562	08/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	339883	08/07/18 20:03	WKD	TAL CAN
Total/NA	Prep	7471A			339590	08/06/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	339900	08/07/18 14:45	AJC	TAL CAN

**Client Sample ID: SS-2\_080218**

**Date Collected: 08/02/18 14:40**

**Date Received: 08/03/18 09:00**

**Lab Sample ID: 240-99401-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	339305	08/03/18 09:22	BWL	TAL CAN

**Client Sample ID: SS-2\_080218**

**Date Collected: 08/02/18 14:40**

**Date Received: 08/03/18 09:00**

**Lab Sample ID: 240-99401-2**

**Matrix: Solid**

**Percent Solids: 78.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			339726	08/07/18 11:05	LAM	TAL CAN
Total/NA	Analysis	8260B		1	339819	08/08/18 02:32	TJL1	TAL CAN
Total/NA	Prep	3540C			339507	08/06/18 09:08	AMT	TAL CAN
Total/NA	Analysis	8270C		1	339857	08/08/18 18:00	MRU	TAL CAN
Total/NA	Prep	3540C			339398	08/03/18 15:57	AMT	TAL CAN
Total/NA	Analysis	8082A		1	339843	08/08/18 08:25	CSC	TAL CAN
Total/NA	Prep	3050B			339562	08/06/18 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	339883	08/07/18 20:08	WKD	TAL CAN
Total/NA	Prep	7471A			339590	08/06/18 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	339900	08/07/18 14:48	AJC	TAL CAN

**Laboratory References:**

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TestAmerica Canton

# Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.  
Project/Site: Racer Saginaw

TestAmerica Job ID: 240-99401-1

## Laboratory: TestAmerica Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-18 *
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18
Minnesota	NELAP	5	039-999-348	12-31-18
Minnesota (Petrofund)	State Program	1	3506	07-31-18 *
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-17-9	08-31-18 *
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-18 *
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Canton

**TestAmerica Canton**  
4101 Shuffel Street, N. W.

North Canton, OH 44720  
Phone: 330.497.9396 Fax: 330.497.0772


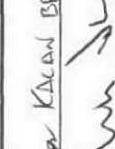
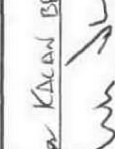
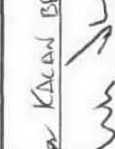
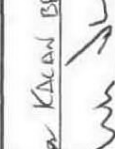
**MICHIGAN**  
190

**Chain of Custody Record**  
2.6/12.6

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING  
TestAmerica Laboratories, Inc.  
TAL-8210 (0713)

155766

Regulatory Program:  DW  NPDES  RCRA  Other:

Client Contact Company Name: ARCADIS Address: 28550 CABOT DR City/State/Zip: NOLVI, MI 48377 Phone: 313 971 6728 Project Name: RACER SAGINAW Site: PO#		Project Manager: SCOTT CLEARWATER Tel/Fax: 248 346 5476 Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <input type="checkbox"/> 2 weeks <input checked="" type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Site Contact: KRISTEN PABLO Lab Contact: Carrier:  COC No: 1 of 1 COCs Sampler: KALAN BELIGGS For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:	
Sample Identification		Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	TOTAL RECD METALS	Sample Specific Notes:
SS-1-080218	Sample Date: 8-2-18	Sample Time: 1445	Sample Type (C=Comp, G=Grab): G	Matrix: S	# of Cont.: 3
SS-2-080218	Sample Date: 8-2-18	Sample Time: 1440	Sample Type (C=Comp, G=Grab): G	Matrix: S	# of Cont.: 3
<p>Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other <u>None</u></p> <p>Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.</p> <p><input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> 5kin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown</p> <p>Special Instructions/QC Requirements &amp; Comments: E-MAIL RESULTS TO KRISTEN.PABLO@ARCADIS.COM</p>					
Custody Seal No.: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temp. (°C): Obs'd: _____		Therm ID No.: _____	
Relinquished by: 		Received by: 		Company: ARCADIS	
Date/Time: 8-2-18 14:13		Date/Time: 8-2-18 14:13		Company: TESTAMERICA	
Relinquished by: 		Received by: 		Company: TESTAMERICA	
Date/Time: 8/2/18 9:00		Date/Time: 8/2/18 9:00		Company: TAE	



TestAmerica Canton Sample Receipt Form/Narrative

Login #: 99401

Canton Facility

Client Arcadis Site Name Cooler unpacked by: Bill Brown
Cooler Received on 8/3/18 Opened on 8/3/18
FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Canton Foam Box Client Cooler Box Other
Packing material used: Bubble Wrap Foam Plastic Bag None Other
COOLANT: Wet Ice Blue Ice Dry Ice Water None

- 1. Cooler temperature upon receipt IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp. 26 °C Corrected Cooler Temp. 2.6 °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC849161
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? Yes No NA Larger than this.
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Yes No
16. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving: VOAs Oil and Grease TOC

Contacted PM Date by via Verbal Voice Mail Other
Concerning

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: CB

Blank lines for Chain of Custody and Sample Discrepancies.

18. SAMPLE CONDITION
Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION
Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):



# Analytical Laboratory Report

Report ID: S93241.01(01)  
Generated on 08/21/2018

## Report to

---

Attention: Scott Clearwater

Arcadis  
28550 Cabot Drive  
Suite 500  
Novi, MI 48377

Phone: 810-225-1921 FAX: 248-994-2241  
Email: [scott.clearwater@arcadis.com](mailto:scott.clearwater@arcadis.com)

## Report produced by

---

Merit Laboratories, Inc.  
2680 East Lansing Drive  
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

## Contacts for report questions:

John Lavery ([johnlavery@meritlabs.com](mailto:johnlavery@meritlabs.com))  
Barbara Ball ([bball@meritlabs.com](mailto:bball@meritlabs.com))

## Report Summary

---

Lab Sample ID(s): S93241.01-S93241.07  
Project: B0064434.2018.00002  
Collected Date: 08/17/2018  
Submitted Date/Time: 08/20/2018 08:00  
Sampled by: Liam Peterson  
P.O. #: B0064434.2018.00002

## 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
SW8270D	SW 846 Method 8270D Revision 4 February 2007



# Analytical Laboratory Report

## Sample Summary (7 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S93241.01	TS-1	Soil	08/17/18 16:06
S93241.02	TS-2	Soil	08/17/18 16:08
S93241.03	TS-3	Soil	08/17/18 16:10
S93241.04	TS-4	Soil	08/17/18 16:12
S93241.05	TS-5	Soil	08/17/18 16:14
S93241.06	TS-6	Soil	08/17/18 16:16
S93241.07	TS-7	Soil	08/17/18 16:18



# Analytical Laboratory Report

Lab Sample ID: S93241.01

Sample Tag: TS-1

Collected Date/Time: 08/17/2018 16:06

Matrix: Soil

COC Reference: 106818

### Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.1	IR

### Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	08/20/18 16:20	ANW	

### Inorganics

Method: SM2540B, Run Date: 08/20/18 09:20, Analyst: JBL

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

### Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 08/21/18 01:30, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	



# Analytical Laboratory Report

Lab Sample ID: S93241.02

Sample Tag: TS-2

Collected Date/Time: 08/17/2018 16:08

Matrix: Soil

COC Reference: 106818

### Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.1	IR

### Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	08/20/18 16:20	ANW	

### Inorganics

Method: SM2540B, Run Date: 08/20/18 09:20, Analyst: JBL

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

### Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 08/21/18 01:50, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	



# Analytical Laboratory Report

Lab Sample ID: S93241.03

Sample Tag: TS-3

Collected Date/Time: 08/17/2018 16:10

Matrix: Soil

COC Reference: 106818

### Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.1	IR

### Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	08/20/18 16:20	ANW	

### Inorganics

Method: SM2540B, Run Date: 08/20/18 09:20, Analyst: JBL

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

### Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 08/21/18 02:09, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	



# Analytical Laboratory Report

Lab Sample ID: S93241.04

Sample Tag: TS-4

Collected Date/Time: 08/17/2018 16:12

Matrix: Soil

COC Reference: 106818

### Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.1	IR

### Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	08/20/18 16:20	ANW	

### Inorganics

Method: SM2540B, Run Date: 08/20/18 09:20, Analyst: JBL

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

### Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 08/21/18 02:29, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	



# Analytical Laboratory Report

Lab Sample ID: S93241.05

Sample Tag: TS-5

Collected Date/Time: 08/17/2018 16:14

Matrix: Soil

COC Reference: 106818

### Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.1	IR

### Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	08/20/18 16:20	ANW	

### Inorganics

Method: SM2540B, Run Date: 08/20/18 09:20, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	80	1	1	%	1		

### Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 08/21/18 02:49, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	



# Analytical Laboratory Report

Lab Sample ID: S93241.06

Sample Tag: TS-6

Collected Date/Time: 08/17/2018 16:16

Matrix: Soil

COC Reference: 106818

### Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.1	IR

### Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	08/20/18 16:20	ANW	

### Inorganics

Method: SM2540B, Run Date: 08/20/18 09:20, Analyst: JBL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Total Solids*	76	1	1	%	1		

### Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 08/21/18 03:09, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	



# Analytical Laboratory Report

Lab Sample ID: S93241.07

Sample Tag: TS-7

Collected Date/Time: 08/17/2018 16:18

Matrix: Soil

COC Reference: 106818

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.1	IR

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
PNA Extraction*	Completed	SW3546	08/20/18 16:20	ANW	

Inorganics

Method: SM2540B, Run Date: 08/20/18 09:20, Analyst: JBL

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

Organics - Semi-Volatiles

Polynuclear Aromatics, Method: SW8270D, Run Date: 08/21/18 03:29, Analyst: PL

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Acenaphthene	Not detected	300		ug/kg	10	83-32-9	
Acenaphthylene	Not detected	300		ug/kg	10	208-96-8	
Anthracene	Not detected	300		ug/kg	10	120-12-7	
Benzo(a)anthracene	Not detected	300		ug/kg	10	56-55-3	
Benzo(a)pyrene	Not detected	300		ug/kg	10	50-32-8	
Benzo(b)fluoranthene	Not detected	300		ug/kg	10	205-99-2	
Benzo(k)fluoranthene	Not detected	300		ug/kg	10	207-08-9	
Benzo(ghi)perylene	Not detected	300		ug/kg	10	191-24-2	
Chrysene	Not detected	300		ug/kg	10	218-01-9	
Dibenzo(ah)anthracene	Not detected	300		ug/kg	10	53-70-3	
Fluoranthene	Not detected	300		ug/kg	10	206-44-0	
Fluorene	Not detected	300		ug/kg	10	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	300		ug/kg	10	193-39-5	
Naphthalene	Not detected	300		ug/kg	10	91-20-3	
Phenanthrene	Not detected	300		ug/kg	10	85-01-8	
Pyrene	Not detected	300		ug/kg	10	129-00-0	
2-Methylnaphthalene	Not detected	300		ug/kg	10	91-57-6	
1-Methylnaphthalene	Not detected	300		ug/kg	10	90-12-0	

# Merit Laboratories Login Checklist

Lab Set ID:S93241

Client:ARCADIS\_NOVI (ARCADIS U.S., Inc.)

Project: B0064434.2018.00002

Submitted:08/20/2018 08:00 Login User: SRS

Attention: Scott Clearwater

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

Phone: 810-225-1921 FAX:248-994-2241

Email: scott.clearwater@arcadis.com

Selection	Description	Note
-----------	-------------	------

## Sample Receiving

- |     |                                                                                                  |                                                        |
|-----|--------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 01. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Samples are received at 4C +/- 2C Thermometer # IR 4.1 |
| 02. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Received on ice/ cooling process begun                 |
| 03. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples shipped                                        |
| 04. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Samples left in 24 hr. drop box                        |
| 05. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Are there custody seals/tape or is the drop box locked |

## Chain of Custody

- |     |                                                                                                  |                                          |
|-----|--------------------------------------------------------------------------------------------------|------------------------------------------|
| 06. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | COC adequately filled out                |
| 07. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | COC signed and relinquished to the lab   |
| 08. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Sample tag on bottles match COC          |
| 09. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Subcontracting needed? Subcontracted to: |

## Preservation

- |     |                                                                                                  |                                                     |
|-----|--------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 10. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Do sample have correct chemical preservation        |
| 11. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Completed pH checks on preserved samples? (no VOAs) |
| 12. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Did any samples need to be preserved in the lab?    |

## Bottle Conditions

- |     |                                                                                                  |                                               |
|-----|--------------------------------------------------------------------------------------------------|-----------------------------------------------|
| 13. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | All bottles intact                            |
| 14. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Appropriate analytical bottles are used       |
| 15. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Merit bottles used                            |
| 16. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Sufficient sample volume received             |
| 17. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples require laboratory filtration         |
| 18. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Samples submitted within holding time         |
| 19. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Do water VOC or TOX bottles contain headspace |

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

Client Review By: \_\_\_\_\_ Date: \_\_\_\_\_



ATTACHMENT 3

Permits Documentation: JPA and Floodplain





MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION
MINOR PROJECT PERMIT

Issued To:

Dave Favero
RACER Properties LLC
500 Woodward Avenue, Suite 2650
Detroit, MI 48226

Permit No: WRP012752
Submission No.: HNC-9N1F-639CH
Site Name: 73-77 West Center Street-Saginaw
Issued: August 1, 2018
Revised:
Expires: August 1, 2023

This permit is being issued by the Michigan Department of Environmental Quality (MDEQ), Water Resources Division, under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); specifically:

- Part 301, Inland Lakes and Streams
Part 303, Wetlands Protection
Part 315, Dam Safety
Part 31, Water Resources Protection (Floodplain Regulatory Authority)
Part 323, Shorelands Protection and Management
Part 325, Great Lakes Submerged Lands
Part 353, Sand Dunes Protection and Management

Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:

Authorized Activity:

Place up to 279 cubic yards of clean fill and excavate 891 cubic yards within the 100-year floodplain of the Saginaw River.
All work must be completed in accordance with the attached plans.

Authorized Under Minor Permit Category: R323.1312(c)
Water Course Affected: Saginaw River
Property Location: Saginaw County, City of Saginaw
Town 12N, Range 04E, Sections 34 and 35
Property Tax No. 19-2231-00100 , 19-2231-00000

Authority granted by this permit is subject to the following limitations:

- A. Initiation of any work on the permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit.
B. The permittee, in exercising the authority granted by this permit, shall not cause unlawful pollution as defined by Part 31 of the NREPA.


- C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
- D. All work shall be completed in accordance with the approved plans and specifications submitted with the application and/or plans and specifications attached to this permit.
- E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved.
- F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with 2013 PA 174 (Act 174) and comply with each of the requirements of Act 174.
- G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other state statutes.
- H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.
- I. Permittee shall notify the MDEQ within one week after the completion of the activity authorized by this permit by completing and forwarding the attached preaddressed postcard to the office addressed thereon.
- J. This permit shall not be assigned or transferred without the written approval of the MDEQ.
- K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific state act, federal act, and/or rule under which this permit is granted.
- L. All dredged or excavated materials shall be disposed of in an upland site (outside of floodplains, unless exempt under Part 31 of the NREPA, and wetlands).
- M. In issuing this permit, the MDEQ has relied on the information and data that the permittee has provided in connection with the submitted application for permit. If, subsequent to the issuance of a permit, such information and data prove to be false, incomplete, or inaccurate, the MDEQ may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.
- N. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents, and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representative of the permittee, undertaken in connection with this permit. The permittee's obligation to indemnify the State of Michigan applies only if the state: (1) provides the permittee or its designated representative written notice of the claim or cause of action within 30 days after it is received by the state, and (2) consents to the permittee's participation in the proceeding on the claim or cause of action. It does not apply to contested case proceedings under the Administrative Procedures Act, 1969 PA 306, as amended, challenging the permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.
- O. Noncompliance with these terms and conditions and/or the initiation of other regulated activities not specifically authorized shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, the MDEQ may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
- P. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity from the MDEQ. Such revision request shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by the MDEQ prior to being implemented.
- Q. This permit may be transferred to another person upon written approval of the MDEQ. The permittee must submit a written request to the MDEQ to transfer the permit to the new owner. The new owner must also submit a written request to the MDEQ to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties that includes all of the above information may be provided to the MDEQ. The MDEQ will review the request and, if approved, will provide written notification to the new owner.
- R. Prior to initiating permitted construction, the permittee is required to provide a copy of the permit to the contractor(s) for review. The property owner, contractor(s), and any agent involved in exercising the permit

are held responsible to ensure that the project is constructed in accordance with all drawings and specifications. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by the permit.

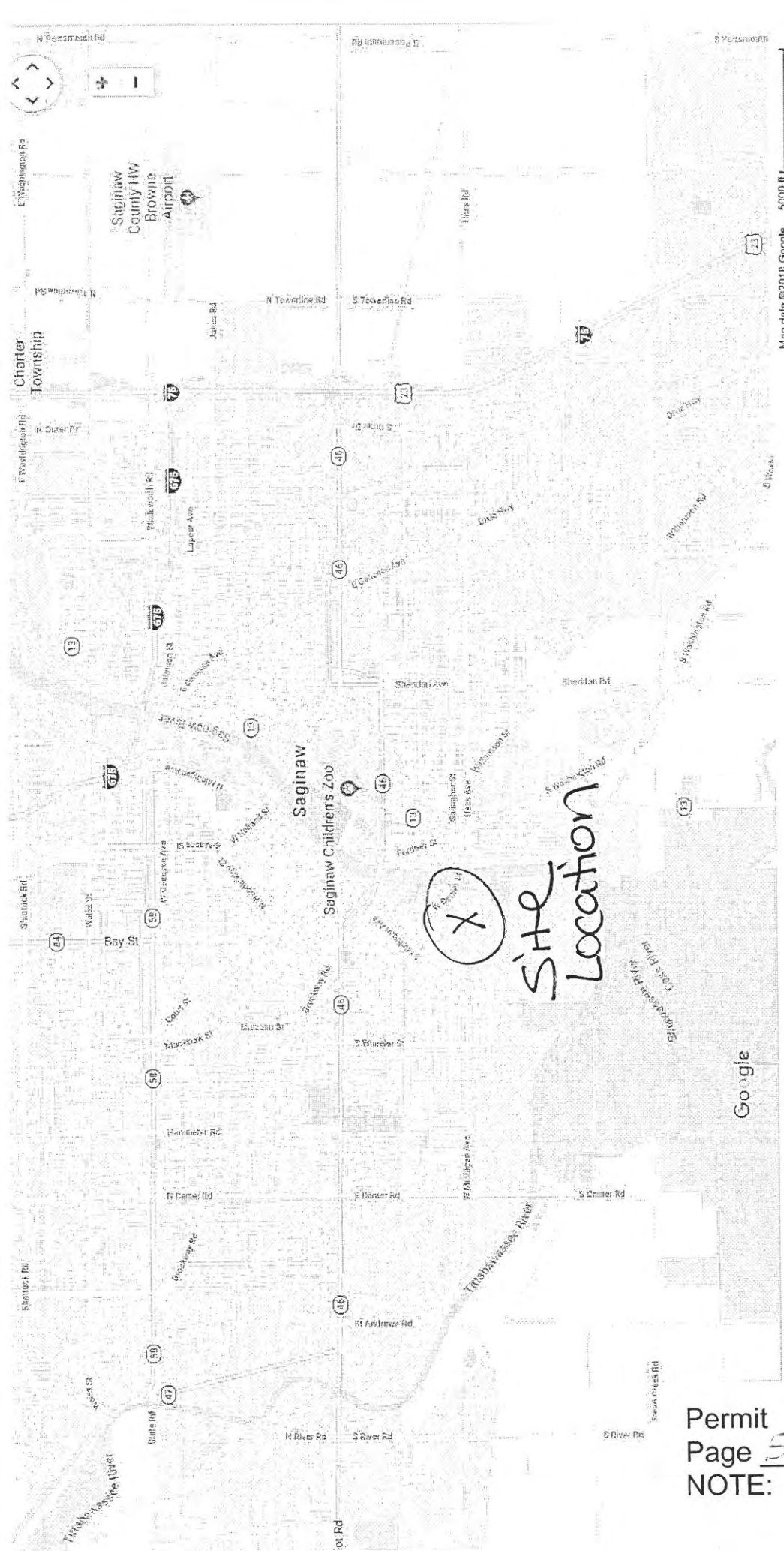
- S. Construction must be undertaken and completed during the dry period of the wetland. If the area does not dry out, construction shall be done on equipment mats to prevent compaction of the soil.
- T. Authority granted by this permit does not waive permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent (CEA).
- U. Authority granted by this permit does not waive permit requirements under the authority of Part 305, Natural Rivers, of the NREPA. A Natural Rivers Zoning Permit may be required for construction, land alteration, streambank stabilization, or vegetation removal along or near a natural river.
- V. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.
- W. Unless specifically stated in this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the water body are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.
- X. For projects with potential impacts to fish spawning or migration, no work shall occur within fish spawning or migration timelines (i.e., windows) unless otherwise approved in writing by the Michigan Department of Natural Resources, Fisheries Division.
- Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:
  - 1. Authority granted by this permit does not waive permit or program requirements under Part 91 of the NREPA or the need to acquire applicable permits from the CEA. To locate the Soil Erosion Program Administrator for your county, visit [www.mi.gov/degstormwater](http://www.mi.gov/degstormwater) and select "Soil Erosion and Sedimentation Control Program" under "Related Links."
  - 2. The authority to conduct the activity as authorized by this permit is granted solely under the provisions of the governing act as identified above. This permit does not convey, provide, or otherwise imply approval of any other governing act, ordinance, or regulation, nor does it waive the permittee's obligation to acquire any local, county, state, or federal approval or authorization necessary to conduct the activity.
  - 3. No fill, excess soil, or other material shall be placed in any wetland, floodplain, or surface water area not specifically authorized by this permit, its plans, and specifications.
  - 4. This permit does not authorize or sanction work that has been completed in violation of applicable federal, state, or local statutes.
  - 5. The permit placard shall be kept posted at the work site, in a prominent location at all times for the duration of the project, or until permit expiration.
  - 6. This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by the MDEQ, will be for a five-year period beginning on the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.
  - 7. The design flood or 1% annual chance (100-year) floodplain elevation at this location on the Saginaw River is 593.5 feet NGVD29 (593.0 feet NAVD88).
  - 8. No fill, excess soil, or other material shall be placed in the 100-year floodplain, any wetland or surface water area not specifically authorized by this permit, its plans, and specifications.
  - 9. Unless specifically stated under the "Permitted Activity" of this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a floodplain, wetland or on

bottomland of the waterbody are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.

10. Fill within the 100-year floodplain is limited to 279 cubic yards.
11. The compensating cut (excavations) for floodplain fill, as authorized by this permit, shall be completed prior to, or concurrently with, the placement of the fill. The compensating cut and fill areas shall be properly stabilized to prevent soil erosion and off site sedimentation in conformance with Part 91, Soil Erosion and Sedimentation Control, of the NREPA.
12. Fill shall not be placed to prevent surface water drainage across the site. Site runoff shall be directed to public or natural drainage ways and not unnaturally discharged onto adjacent properties.
13. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.
14. All fill/backfill shall consist of clean inert material that will not cause siltation nor contain soluble chemicals, organic matter, pollutants, or contaminants. All fill shall be contained in such a manner so as not to erode into any surface water, floodplain, or wetland. All raw areas associated with the permitted activity shall be stabilized with sod and/or seed and mulch, riprap, or other technically effective methods as necessary to prevent erosion.
15. Under Appendix G of the Michigan Building Code 2009, a local building permit is required for development located in flood hazard areas.
16. The project is located within a community that participates in the National Flood Insurance Program (NFIP). As a participant in the NFIP, the community must comply with the Michigan Building Code (including Appendix G and listed supporting materials); the Michigan Residential Code; and Title 44 of the Code of Federal Regulations, Part 60, Criteria for Land Management and Use. The community is also responsible to ensure that its floodplain maps and studies are maintained to show changes to flood elevations and flood delineations as described in 44 CFR, Part 65, Identification and Mapping of Special Hazard Areas.
17. The permittee is responsible for acquiring all necessary easements or rights-of-way before commencing any work authorized by this permit. All construction operations relating to or part of this project shall be confined to the existing right-of-way limits or other acquired easements.
18. The authority to conduct the activity as authorized by this permit is granted solely under the provisions of the governing act as identified above. This permit does not convey, provide, or otherwise imply approval of any other governing act, ordinance, or regulation, nor does it waive the permittee's obligation to acquire any local, county, state or federal approval or authorization, necessary to conduct the activity.
19. This permit is limited to authorizing the construction as specified above and carries with it no assurances or implications that associated lake, stream, wetland or floodplain areas can be developed and serviced by the structures authorized by this permit.

Issued By:   
Joy C. Brooks, P.E.  
Saginaw Bay District Office  
Water Resources Division  
989-820-1632

cc: Saginaw CEA  
City of Saginaw  
City of Saginaw Township Building Official/Floodplain Administrator  
Mr. Scott Clearwater, ARCADIS of MI LLC



Permit WRP012752

Page 5 of 12

NOTE: Plans may not be to scale

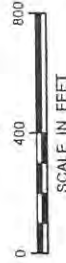
**LEGEND:**

- Peninsula Property
- - - Property Boundary
- x-x-x Fence
- Site Features
- Cross-Section
- Excavation and Soil Cover Area
- Borrow Source
- ▨ Railroad Soil Cover Area
- ▨ Wetlands as Identified on NWI and MIRIS
- Saginaw River

RECEIVED

MAR 14 2018

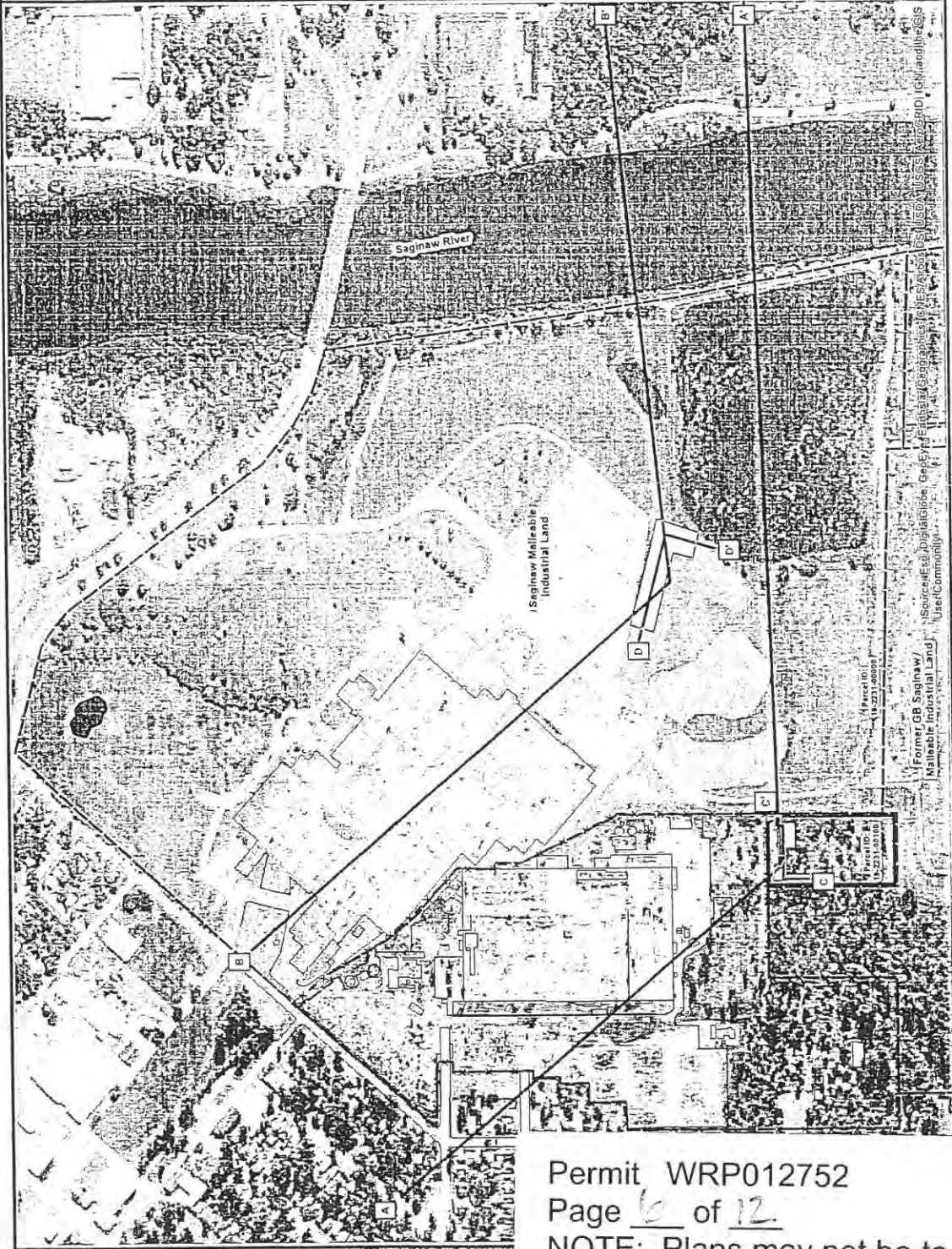
Water Resources Division



RACER TRUST SAGINAW PENINSULA PROPERTY  
77 WEST CENTER STREET, SAGINAW, MI

**SOIL COVER SITE PLAN**

**ARCADIS** FIGURE 2



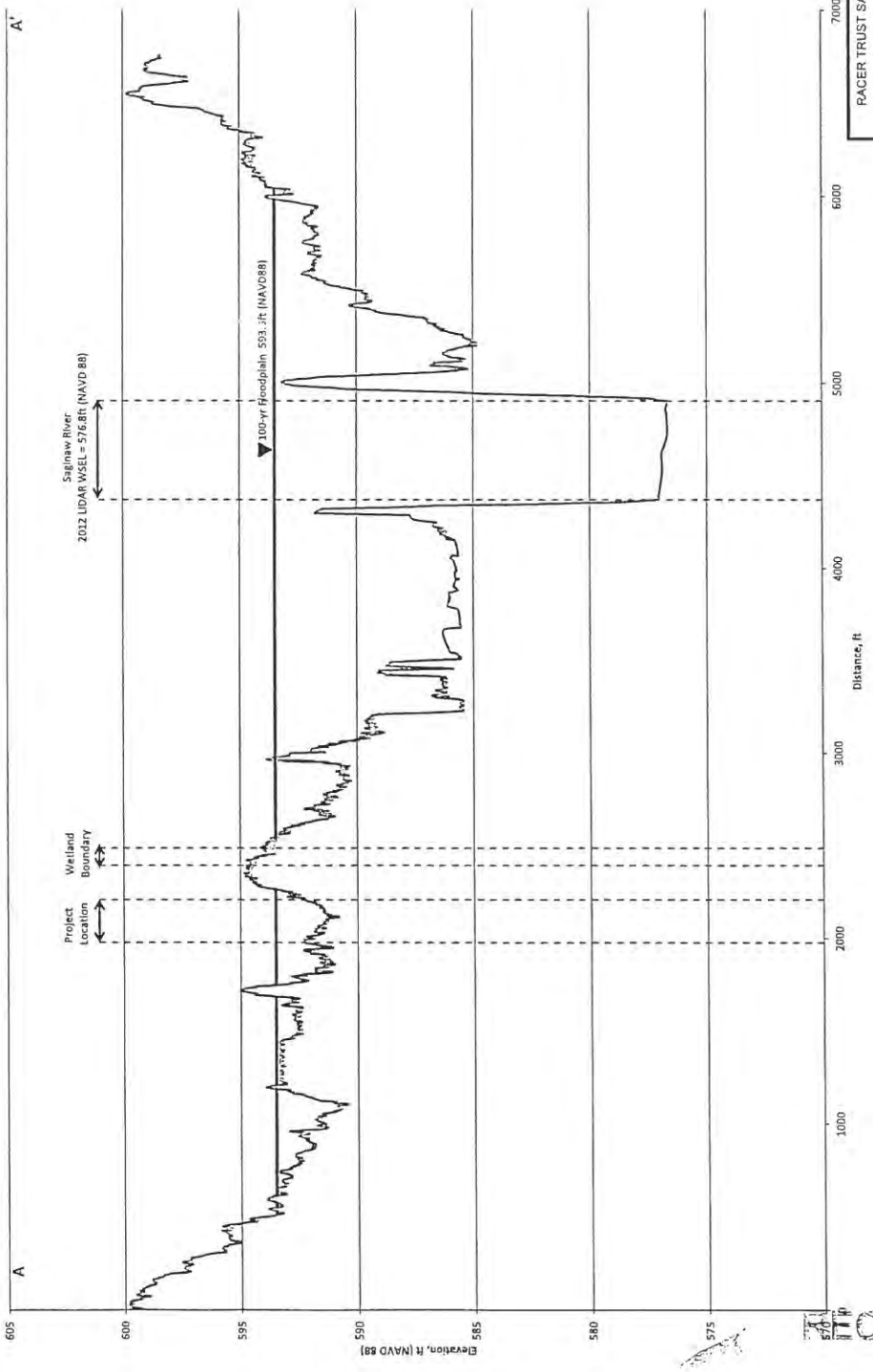
Permit WRP012752

Page 6 of 12

NOTE: Plans may not be to scale

WEST

EAST



PACER TRUST SAGINAW PENINSULA PROPERTY  
 77 WEST CENTER STREET, SAGINAW, MI

EXISTING CROSS-SECTION  
 A-A' LOCATION MAP



FIGURE  
**3A**

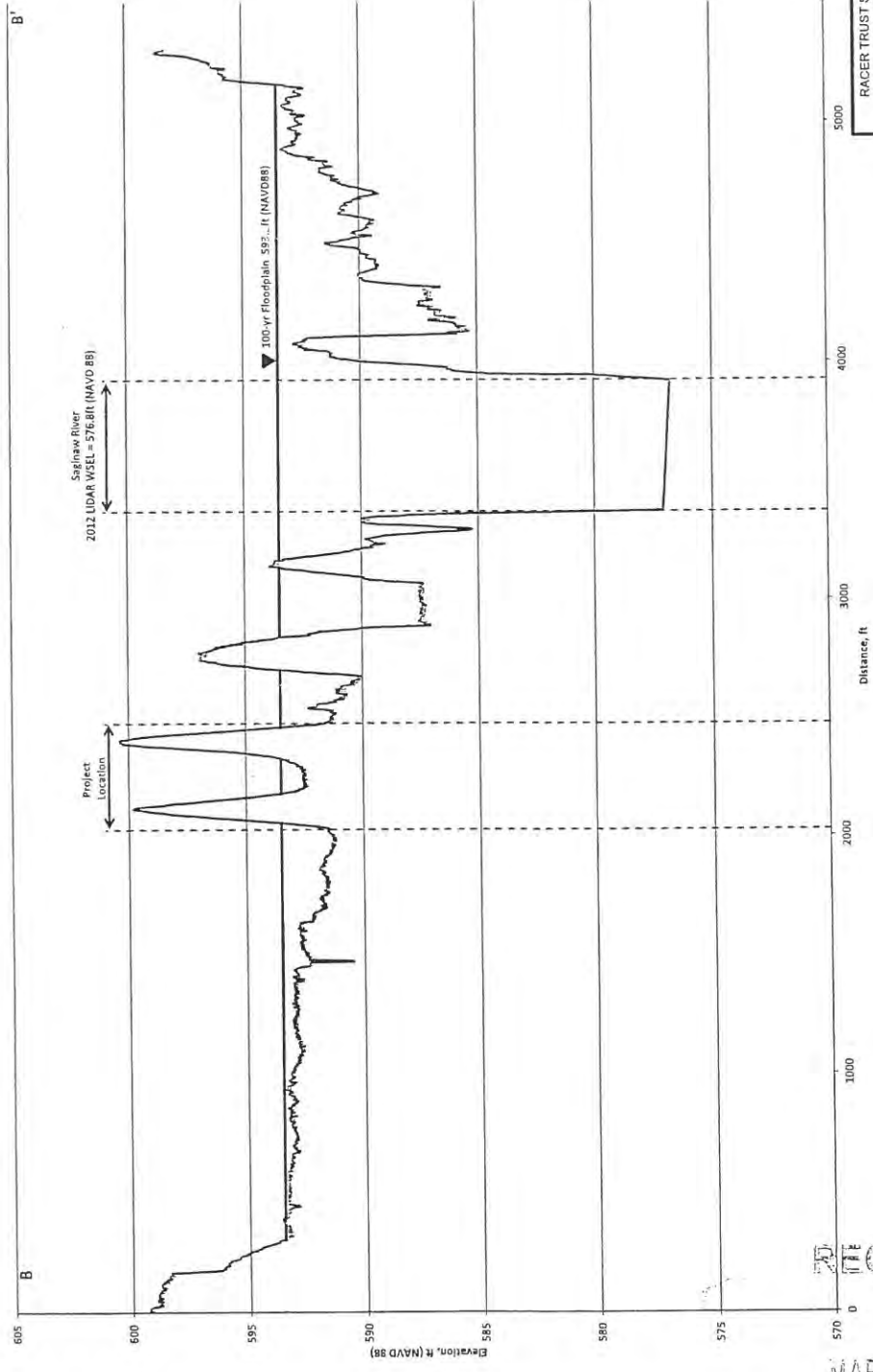
Permit WRP012752

Page 7 of 12

NOTE: Plans may not be to scale

EAST

WEST



RECEIVED

MAR 14 2016

RACER TRUST SAGINAW PENINSULA PROPERTY  
77 WEST CENTER STREET, SAGINAW, MI

EXISTING CROSS-SECTION  
B-B' LOCATION MAP

ARCADIS  
FIGURE 3B

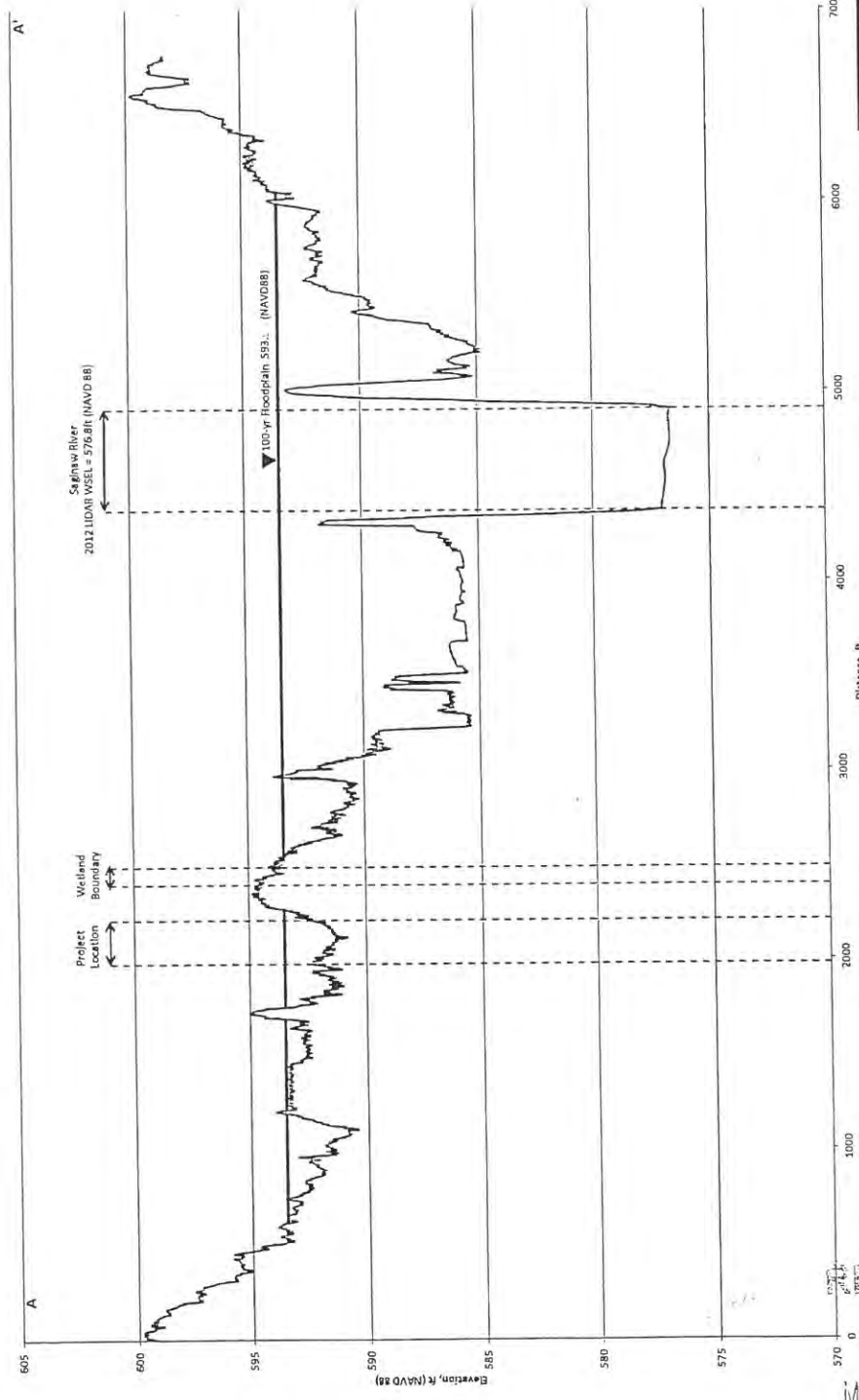
Permit WRP012752  
Page 8 of 12

NOTE: Plans may not be to scale

Figure 3B, Existing Section.mxd DATE: 2/27/16 2:09:39 PM

EAST

WEST



Distance, ft

Elevation, ft (NAVD 88)

MAR 14 2018  
11:05 AM  
C:\GIS\DATA\PROJECTS\2018\20180314\180314\_01.dwg

RACER TRUST SAGINAW PENINSULA PROPERTY  
77 WEST CENTER STREET, SAGINAW, MI

PROPOSED CROSS-SECTION  
A-A' LOCATION MAP



FIGURE  
3C

used cross-section matches the existing cross-section.

Permit WRP012752

Page 9 of 12

NOTE: Plans may not be to scale

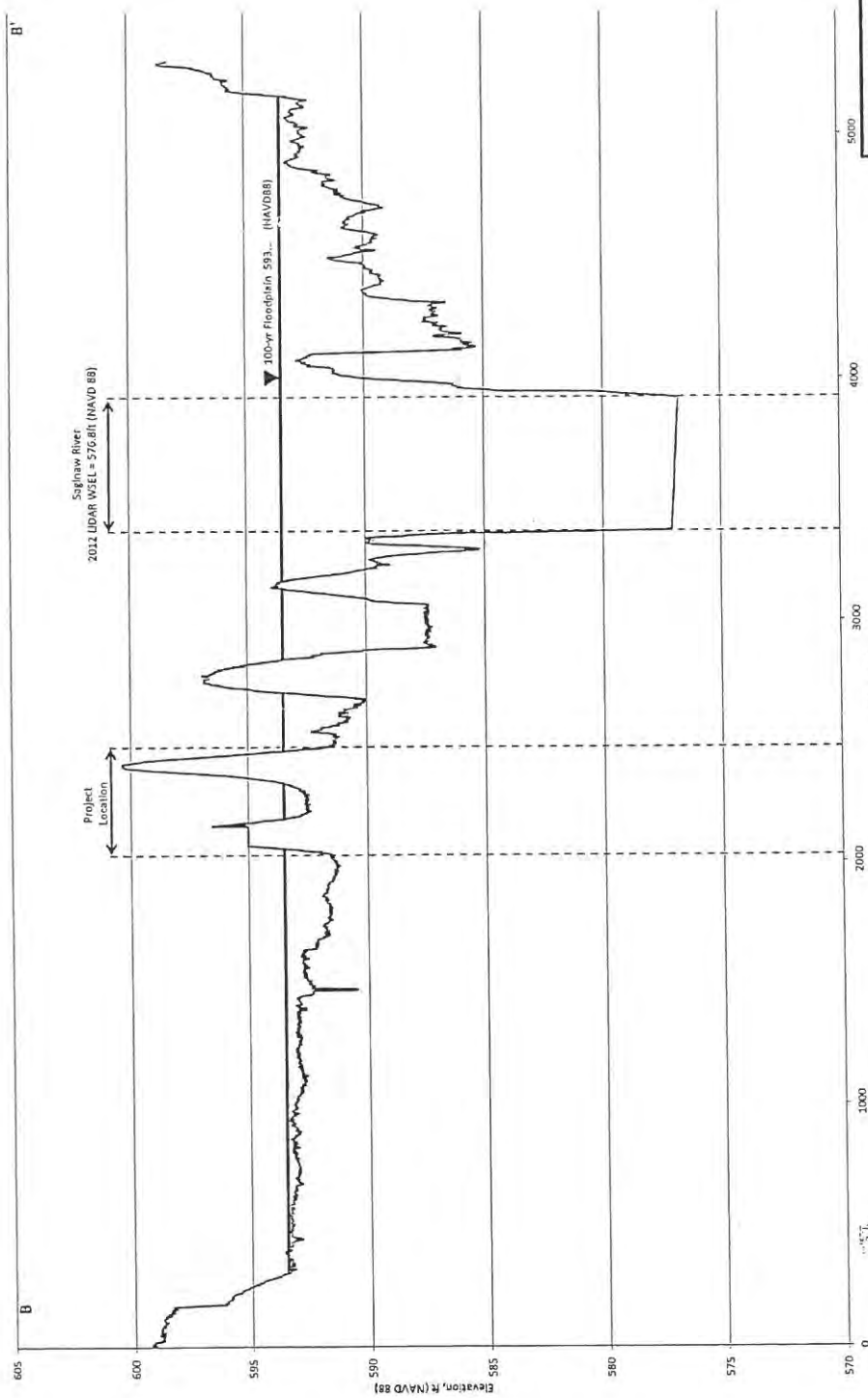
PROJECT: Saginaw.mxd DATE: 2/20/18 1:01:51 PM

EAST

B'

B

WEST



RACER TRUST SAGINAW PENINSULA PROPERTY  
 77 WEST CENTER STREET, SAGINAW, MI

PROPOSED CROSS-SECTION  
 B-B' LOCATION MAP

ARCADIS  
 FIGURE 3D

RECEIVED

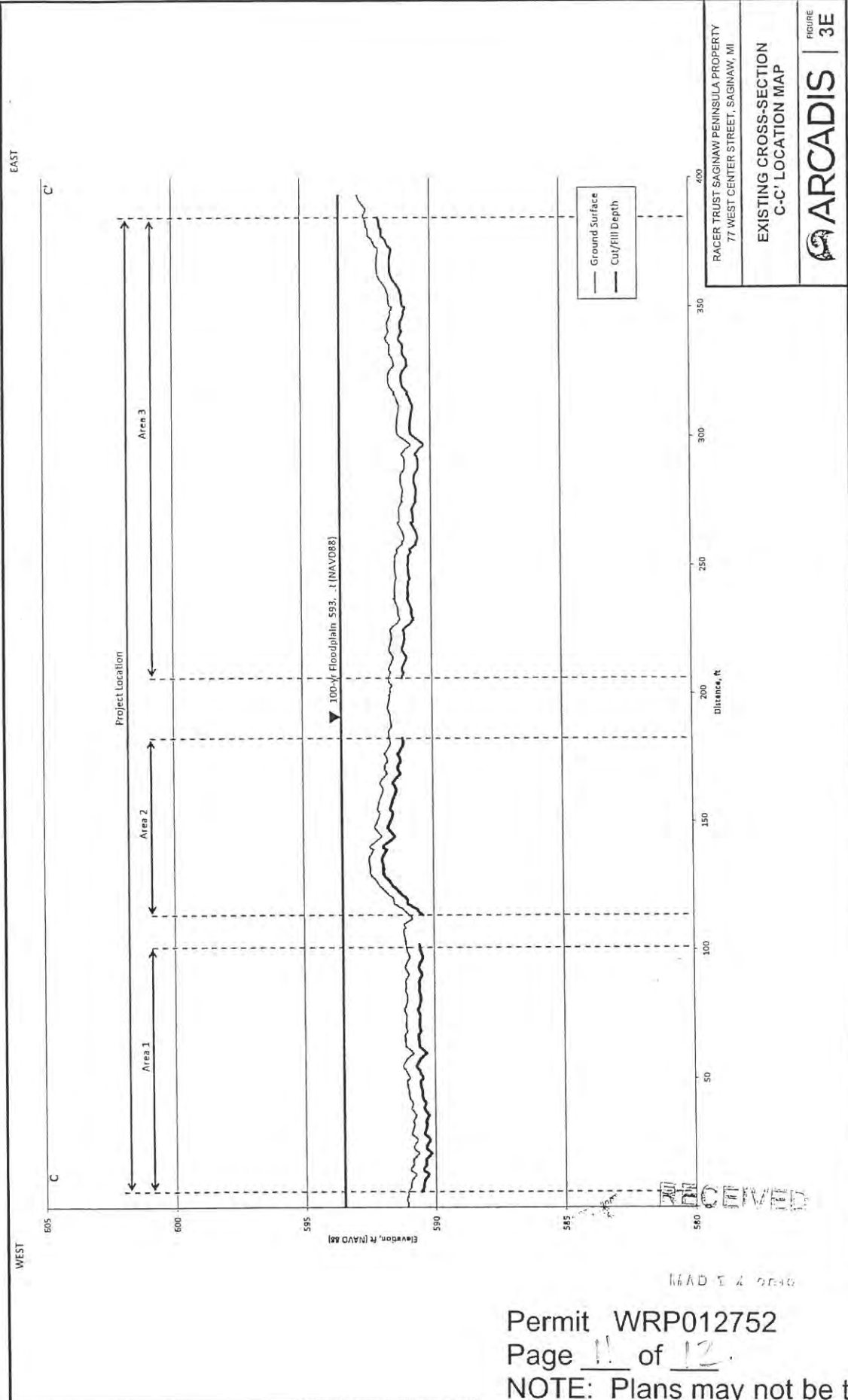
MAR 14 2018

Permit WRP012752

Page 10 of 12

NOTE: Plans may not be to scale

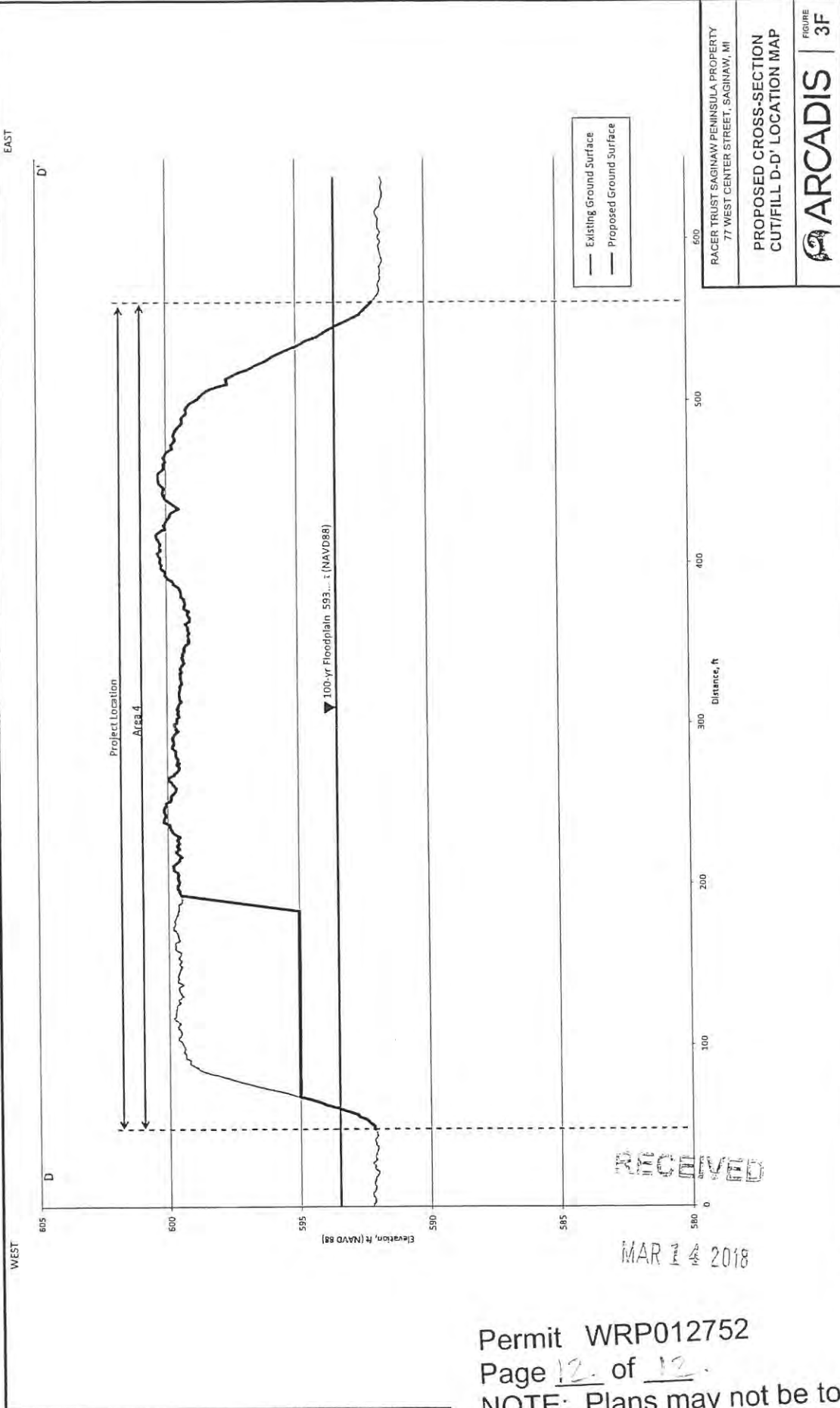
Proposed Section B-B'. DATE: 2/15/2018 1:02:53 PM



Permit WRP012752  
Page 11 of 12

NOTE: Plans may not be to scale

Plotting: 2/2/2018 3:07:15 PM



Permit WRP012752  
 Page 12 of 12

NOTE: Plans may not be to scale

1: 20180309 09:55:44 PM DATE: 2027018 9:55:44 PM

## Application for Permit to Develop in a Floodplain Area



The undersigned hereby makes application for a permit to develop in a designated floodplain area. The work to be performed is described below and in attachments hereto. The undersigned agrees that all such work shall be done in accordance with the requirements of the City of Saginaw Floodplain Ordinance and with all other applicable local, State and Federal regulations. This application does not create liability on the part of the City of Saginaw or any officer or employees thereof for any flood damage that results from the reliance on this application or any administrative decision made lawfully thereunder.

Owner: RACER Trust Builder: ARCADIS of MI, LLC  
Address: 500 Woodward, Suite 2650, Detroit, MI 48226 Address: 28550 Cabot Drive, Suite 500, Novi, MI 48377  
Telephone: 734-879-9525 Telephone: 810-225-1921  
Email: Scott.Clearwater@arcadis-us.com  
Location: 77 & 79 West Center Street, Saginaw, MI

### A. Description of Work (Complete for All Work): 6-inch excavation and backfill

1. Proposed Development Description:

New Building  Improvement to Existing Building   
Manufactured Home  Filling   
Other

2. Size and location of proposed development (attach site plan):

Excavate top 6-inches of an area approximately 11,000 square feet and restore area to pre-excavation elevation.  
See attached site map. Borrow source soils will be taken from an area with an elevation outside of the flood plain.

3. Is the proposed development in a Special Flood Hazard Area (Zones A, AE, A1-A3, AH or AO)?

Yes  No

4. Per the floodplain map, what is the zone and panel number of the area of the proposed development?

Zone AE Panel Number 135 of 360 (map 26145C0135 D)

5. Are other Federal, State or local permits obtained?

Yes  Type: MDEQ General Joint Permit for work in a floodplain

No  Reason: MDEQ requirement for work in a 100-year floodplain

6. Is the proposed development in an identified floodway?

Yes  No

7. If yes to #6, is a "No Rise Certification" with supporting data attached?

Yes  No

**B. Complete for New Structures and Building Sites: No structures being built.**

1. Base Flood Elevation at the site: \_\_\_\_\_ feet NGVD
2. Required lowest floor elevation(including basement): \_\_\_\_\_ feet NGVD
3. Elevation to which all attendant utilities, including all heating and electrical equipment will be protected from flood damage: \_\_\_\_\_ feet NGVD

**C. Complete for Alterations, Additions, or Improvements to Existing Structures:**

1. What is the estimate market value of the existing structure? \$ \_\_\_\_\_
2. What is the cost of the proposed construction? \$ \_\_\_\_\_
3. If the cost of the proposed construction equals or exceeds 50 percent of the market value of the structure, then the substantial improvement provisions shall apply.

**D. Complete for Non-residential Flood proofed Construction: NA**

1. Type of flood proofing method: \_\_\_\_\_
2. The required flood proofing elevation is: \_\_\_\_\_ feet NGDV
3. Flood proofing certification by a registered engineer is attached: Yes  No

**E. Complete for Subdivisions and Planned Unit Developments: NA**

1. Will the subdivision or other development contain 50 lots or 5 acres? Yes  No
2. If yes, does the plat or proposal clearly identify base flood elevations? Yes  No
3. Are the 100 Year Floodplain and Floodway delineated on the site plan? Yes  No

**ADMINISTRATIVE**

1. Permit approved \_\_\_\_\_ Permit denied \_\_\_\_\_
2. Elevation Certification attached: Yes  No
3. As-Built lowest floor elevation \_\_\_\_\_ feet NGVD

Applicant's Signature: David Favre Date July 9, 2018








Approved City Engineer: \_\_\_\_\_ Date: \_\_\_\_\_

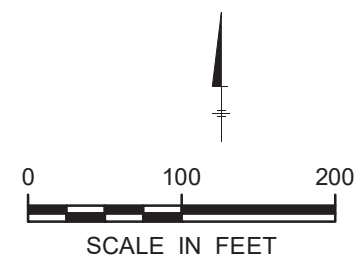
Approved Chief Inspector: \_\_\_\_\_ Date: \_\_\_\_\_

CITY: SAN FRANCISCO DIV/GROUP: ENV/IM DB: shell LD: PIC: PM: TM:  
PROJECT\_PATH: \\ourstorapl\Data\ArcSisData\GIS\Projects\ ENVRACER\_Saginaw\MXD\JPA 2018\Fig4\_ ExistingSiteConditions.mxd DATE: 3/5/2018 11:40:23 AM



**LEGEND:**

-  Peninsula Property
-  Property Boundary
-  Fence
-  Site Features
-  Excavation and Soil Cover Area
-  Borrow Source
-  Wetlands as Identified on NWI and MIRIS



RACER TRUST SAGINAW PENINSULA PROPERTY  
77 WEST CENTER STREET, SAGINAW, MI

**PROPOSED SCOPE OF WORK**

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

ATTACHMENT 4  
Well Abandonment Log



**MONITOR WELL ABANDONMENT RECORD**

Site Name: Racer Saginaw – Peninsula Property County: Saginaw

Section: 35 Town: 12N Range: 4E Well ID#: MW01-118WT

Date Installed: 11/5/01 Date Abandoned: 8/14/18 Drilling Firm: Job Site Services

Well Depth: 15.30 ft Screen Depth from TOC: 2.95-12.70 ft Water Table Depth from TOC: 5.90 ft

Casing Type: Galvanized  PVC  Stainless Steel  ID: 2"  4"

Screen Type: PVC  Stainless Steel  Length: 10 ft

2" Annulus Grouted: Yes  No  from 0 ft to 2 ft Grout Type Concrete (0-1') Bentonite Chips (1'-2')

4" Annulus Grouted: Yes  No  from       ft to       ft Grout Type:

Casing: Pulled  Cut  Depth BGS:                    Well Grouted? Yes  No

Grout Type: Bentonite  Cement  Grouting Method: Through Casing  Tremie  Other   
(explain)

Well casing was pulled and the void was backfilled with bentonite chips, and graded with topsoil

Crew:

Location Sketch:

Comments:



\_\_\_\_\_  
Signature of Consultant/Engineer                      10/30/18  
Date

ATTACHMENT 5  
Photo Log of Work Performed



## PHOTOGRAPH LOG

Racer Trust  
Racer Saginaw Peninsula and Railyard Soil Cover  
Saginaw Michigan



**Photograph: 1**

**Description:**  
Clearing the planned  
cap area for Peninsula  
Property.

**Date:** 8/13/2018



**Photograph: 2**

**Description:**  
Clearing the planned  
cap area for Peninsula  
Property.

**Date:** 8/13/2018

## PHOTOGRAPH LOG

Racer Trust  
Racer Saginaw Peninsula and Railyard Soil Cover  
Saginaw Michigan



**Photograph: 3**

**Description:**  
Clearing the planned  
cap area for Peninsula  
Property.

**Date:** 8/13/2018



**Photograph: 4**

**Description:**  
Clearing the planned  
cap area for the  
Railyard Area.

**Date:** 8/13/2018

## PHOTOGRAPH LOG

Racer Trust  
Racer Saginaw Peninsula and Railyard Soil Cover  
Saginaw Michigan



**Photograph: 5**

**Description:**  
Clearing the planned  
cap area for the  
Railyard Area.

**Date:** 8/13/2018



**Photograph: 6**

**Description:**  
Abandoning monitoring  
well MW-118WT.  
Removal of well casing.

**Location:**  
Peninsula Property

**Date:** 8/14/2018

## PHOTOGRAPH LOG

Racer Trust  
Racer Saginaw Peninsula and Railyard Soil Cover  
Saginaw Michigan



**Photograph: 7**

**Description:**  
Begin excavation in the Peninsula Property, west edge.

**Date:** 8/14/2018



**Photograph: 8**

**Description:**  
Excavation in the Peninsula Property, west edge.

**Location:**  
Peninsula Property

**Date:** 8/15/2018

## PHOTOGRAPH LOG

Racer Trust  
Racer Saginaw Peninsula and Railyard Soil Cover  
Saginaw Michigan



**Photograph: 9**

**Description:**  
Leveling the Railyard  
Area.

**Date:** 8/15/2018



**Photograph: 10**

**Description:**  
View of sand borrow  
source onsite.

**Date:** 8/16/2018

## PHOTOGRAPH LOG

Racer Trust  
Racer Saginaw Peninsula and Railyard Soil Cover  
Saginaw Michigan



**Photograph: 11**

**Description:**  
Demarcation layer and start of the sand cover in the Railyard Area.

**Date:** 8/17/2018



**Photograph: 12**

**Description:**  
Continue spreading the 10-inch sand layer in the Railyard Area.

**Date:** 8/20/2018

## PHOTOGRAPH LOG

Racer Trust  
Racer Saginaw Peninsula and Railyard Soil Cover  
Saginaw Michigan



**Photograph: 13**

**Description:**  
10-inch sand layer in  
Railyard Area.

**Date:** 8/21/2018



**Photograph: 14**

**Description:**  
Adding topsoil layer to  
the 10-inch sand lift in  
the Railyard Area.

**Date:** 8/23/2018

## PHOTOGRAPH LOG

Racer Trust  
Racer Saginaw Peninsula and Railyard Soil Cover  
Saginaw Michigan



**Photograph: 15**

**Description:**  
Spreading 2-inches of topsoil in the Railyard Area.

**Date:** 8/23/2018



**Photograph: 16**

**Description:**  
Final soil cover in the Railyard Area, seeded and covered with straw.

**Date:** 8/24/2018

## PHOTOGRAPH LOG

Racer Trust  
Racer Saginaw Peninsula and Railyard Soil Cover  
Saginaw Michigan



**Photograph: 17**

**Description:**

Final soil cover in the Railyard Area, seeded and covered with straw.

**Date:** 8/24/2018



**Photograph: 18**

**Description:**

Excavated soils from the Peninsula Property being hauled offsite.

**Location:**

Peninsula Property

**Date:** 8/28/2018

## PHOTOGRAPH LOG

Racer Trust  
Racer Saginaw Peninsula and Railyard Soil Cover  
Saginaw Michigan



**Photograph: 19**

**Description:**  
Excavating soils in the  
Peninsula Area.

**Date:** 8/29/2018



**Photograph: 20**

**Description:**  
Peninsula Area  
excavation, northeast  
corner.

**Location:**  
Peninsula Property

**Date:** 8/29/2018

## PHOTOGRAPH LOG

Racer Trust  
Racer Saginaw Peninsula and Railyard Soil Cover  
Saginaw Michigan



**Photograph: 21**

**Description:**  
Peninsula Property backfilled to match surrounding grade and maintain neutral floodplain capacity.

**Date:** 9/4/2018



**Photograph: 22**

**Description:**  
Peninsula Property seeded and covered with straw.

**Date:** 9/4/2018

## PHOTOGRAPH LOG

Racer Trust  
Racer Saginaw Peninsula and Railyard Soil Cover  
Saginaw Michigan



**Photograph: 23**

**Description:**  
Sand berm borrow  
source area smoothed  
out, seeded and  
covered with straw.

**Date:** 9/5/2018



**Photograph: 24**

**Description:**  
Peninsula Property  
fence repaired hole cut  
for access.

**Date:** 9/5/2018

ATTACHMENT 6

Waste Manifests of Excavated Soil from Peninsula





Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492847  
 Ticket# 339262

Customer Name JOBSITESERV115329MI JOB SITE Carrier DHT VOORHEIS HAUSBECK EXCAVATING  
 Ticket Date 08/28/2018 Vehicle# 311 Volume 40.0  
 Payment Type Credit Account Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check#  
 Route Billing # 0001582  
 State Waste Code Gen EPA ID  
 Manifest 201610 Grid  
 Destination  
 PO  
 Profile 115329MI (LEAD IMPACTED SOIL (WM012A))  
 Generator 129-RACERTRUST79 RACER TRUST

Time	Scale	Operator	Inbound	Gross	
In 08/28/2018 12:51:42	SCALE1	aolive2		95120	lb
Out 08/28/2018 12:51:42		aolive2		40280	lb
				54840	lb
				27.42	Tons

Comments RACER TRUST  
 79 W. CENTER ST



Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T	100	27.42	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Doc No.		2. Page 1 of				
3. Generator's Mailing Address: Job Site Services 4395 WILBER RD BAY CITY, MI 48706			Generator's Site Address (if different than mailing): RACER TRUST 79 WEST CENTER STREET SACINAW, MI 48602			A. Manifest Number <b>WMNA</b> <b>T201610</b>				
4. Generator's Phone 810-225-1921						B. State Generator's ID				
5. Transporter 1 Company Name			6. US EPA ID Number			C. State Transporter's ID				
7. Transporter 2 Company Name			8. US EPA ID Number			D. Transporter's Phone				
9. Designated Facility Name and Site Address PEOPLES LANDFILL 4143 EAST RATHBUN RD BIRCH RUN, MI 48411			10. US EPA ID Number			E. State Transporter's ID				
						F. Transporter's Phone				
						G. State Facility ID				
						H. State Facility Phone				
GENERATOR	11. Description of Waste Materials				12. Containers		13. Total Quantity	14. Unit Wt./Vol.	15. Misc. Comments	
					No.	Type				
	a.				8262	STEEL LEAD	25yd	27.42		
	WM Profile # 118319 MI									
	b.									
	WM Profile #									
c.										
WM Profile #										
d.										
WM Profile #										
J. Additional Descriptions for Materials Listed Above Color - BROWN/GRNY PHYSICAL STATE - Solid CODE - NO BILL TO: JOB SITE SERVICES					K. Disposal Location					
					Cell		Level			
					Grid					
15. Special Handling Instructions and Additional Information										
Purchase Order #					EMERGENCY CONTACT / PHONE NO.:					
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.										
Printed Name Kriston Podron				Signature "On behalf of" as agent for Racer Trust and Racer Properties				Month 8	Day 28	Year 18
17. Transporter 1 Acknowledgement of Receipt of Materials										
Printed Name Matthew Elston				Signature				Month 8	Day 28	Year 18
18. Transporter 2 Acknowledgement of Receipt of Materials										
Printed Name				Signature				Month	Day	Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.										
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.										
Printed Name Andres olive				Signature				Month 8	Day 28	Year 18

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492841  
 Ticket# 339256

Customer Name JOBSITESERV115329MI JOB SITE Carrier DHT VOORHEIS HAUSBECK EXCAVATING  
 Ticket Date 08/28/2018 Vehicle# 332 Volume 40.0  
 Payment Type Credit Account Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check#  
 Route Billing # 0001582  
 State Waste Code Gen EPA ID  
 Manifest 201604 Grid  
 Destination  
 PO  
 Profile 115329MI (LEAD IMPACTED SOIL (WM012A))  
 Generator 129-RACERTRUST79 RACER TRUST

Time	Scale	Operator	Inbound	Gross	
In 08/28/2018 12:24:16	SCALE1	aolive2		100280	lb
Out 08/28/2018 12:24:16		aolive2		40600	lb
				Net	59680 lb
				Tons	29.84

Comments RACER TRUST  
79 W. CENTER ST



Product	LD%	Qty	UDM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T	100	29.84	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of		
3. Generator's Mailing Address: JOB SITE SERVICES 4395 WILDER ROAD BAY CITY, MI 48706	Generator's Site Address (if different than mailing): RACER TRUST 79 WEST CENTER STREET SAGINAW, MI 48602		A. Manifest Number <b>WMNA T201604</b>		
4. Generator's Phone 810-225-1921			B. State Generator's ID		
5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID			
		D. Transporter's Phone			
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID			
		F. Transporter's Phone			
9. Designated Facility Name and Site Address PEOPLES LANDFILL - 4143 EAST EATHBUN RD. BIRCH RUN, MI 48415	10. US EPA ID Number	G. State Facility ID			
		H. State Facility Phone			
G E N E R A T O R	11. Description of Waste Materials	12. Containers	13. Total Quantity	14. Unit Wt./Vol.	15. Misc. Comments
	a.	No. Type			
	WM Profile # 115329 MI	125 STEEL LEAD	25yd	29.04	
	b.				
	WM Profile #				
c.					
WM Profile #					
d.					
WM Profile #					
J. Additional Descriptions for Materials Listed Above COLOR - BRWN/GRAY PHYSICAL STATE - SOLID ODOR - NO BILL TO: JOB SITE SERVICES	K. Disposal Location				
	Cell		Level		
	Grid				
15. Special Handling Instructions and Additional Information					
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:			
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.					
Printed Name Kristen Padron	Signature "On behalf of" <i>Kristen Padron</i>	as agent for Racer Trust and Racer Properties	Month 8	Day 28	Year 18
17. Transporter 1 Acknowledgement of Receipt of Materials	Printed Name John Engelhardt	Signature <i>John Engelhardt</i>	Month 8	Day 28	Year 18
18. Transporter 2 Acknowledgement of Receipt of Materials	Printed Name	Signature	Month	Day	Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.					
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.					
Printed Name Andrea Olive	Signature <i>Andrea Olive</i>	Month 8	Day 28	Year 18	

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492837  
 Ticket# 339252

Customer Name	JOBSITESERV115329MI JOB SITE	Carrier	DHT VOORHEIS HAUSBECK EXCAVATING
Ticket Date	08/28/2018	Vehicle#	199 Volume 40.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001582
State Waste Code		Gen EPA ID	
Manifest	201605	Grid	
Destination			
PQ			
Profile	115329MI (LEAD IMPACTED SOIL (WM012A))		
Generator	129-RACERTRUST79 RACER TRUST		

	Time	Scale	Operator	Inbound	Gross	96800 lb
In	08/28/2018 12:07:27	SCALE1	aolive2		Tare	40640 lb
Out	08/28/2018 12:07:27		aolive2		Net	56160 lb
					Tons	28.08

Comments RACER TRUST  
79 W. CENTER



Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T	100	28.08	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of
3. Generator's Mailing Address: Job Site Services 4395 Wilder Rd Way City, MI 49706		Generator's Site Address (if different than mailing): Racer Trust 79 West Center St. Jagunaw, MI 48602	
4. Generator's Phone 815-225-1921		A. Manifest Number <b>WMNA T201605</b>	
5. Transporter 1 Company Name		B. State Generator's ID	
6. US EPA ID Number		C. State Transporter's ID	
7. Transporter 2 Company Name		D. Transporter's Phone	
8. US EPA ID Number		E. State Transporter's ID	
9. Designated Facility Name and Site Address Peoples Landfill 4143 East Rathbun Rd Birch Run, MI 48415		F. Transporter's Phone	
10. US EPA ID Number		G. State Facility ID	
		H. State Facility Phone	
GENERATOR	11. Description of Waste Materials		12. Containers
			No. Type
	a. WM Profile # 115329MI		2058 Steel Drum
	b. WM Profile #		2808 30 gal
	c. WM Profile #		
	d. WM Profile #		
J. Additional Descriptions for Materials Listed Above Color - Brown/Gray Physical State: Solid Dour: No BXL 70: Job Site Services		K. Disposal Location	
15. Special Handling Instructions and Additional Information		Cell	Level
Purchase Order #		Grid	
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Printed Name Kristen Padron		Signature "On behalf of" as agent for Racer Trust and Racer Properties	Month Day Year 8 28 18
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature	Month Day Year
Printed Name Greg Whitney			8 08 18
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature	Month Day Year
Printed Name			
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.			
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.			
Printed Name Andrea Olive		Signature A J OM	Month Day Year 8 28 18

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492831  
 Ticket# 339247

Customer Name JOBSITESERV115329MI JOB SITE Carrier DHT VOORHEIS HAUSBECK EXCAVATING  
 Ticket Date 08/28/2018 Vehicle# 311 Volume 40.0  
 Payment Type Credit Account Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check#  
 Route Billing # 0001582  
 State Waste Code Gen EPA ID  
 Manifest 201608 Grid  
 Destination  
 PD  
 Profile 115329MI (LEAD IMPACTED SOIL (WM012A))  
 Generator 129-RACERTRUST79 RACER TRUST

Time	Scale	Operator	Inbound	Gross	
In 08/28/2018 11:37:11	SCALE1	aolive2		Tare	94540 lb
Out 08/28/2018 11:37:11		aolive2		Net	40280 lb
				Tons	54260 lb
					27.13

Comments RACER TRUST  
 79 W. CENTER ST



Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T	100	27.13	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of				
3. Generator's Mailing Address: <i>Job Site Services 4395 WILBER RD DAY CITY, MI 48706</i>	Generator's Site Address (if different than mailing): <i>RACER TRUST 79 WEST CENTER STREET SAGINAW, MI 48602</i>		A. Manifest Number <b>WMNA</b> <span style="float:right; font-size: 1.2em;">T201608</span>				
			B. State Generator's ID				
4. Generator's Phone <i>810-225-1921</i>	5. Transporter 1 Company Name		6. US EPA ID Number				
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID			
9. Designated Facility Name and Site Address <i>PEOPLE LANDFILL 4147 EAST RATHBUN RD BIRCH RUN, MI 48415</i>		10. US EPA ID Number		D. Transporter's Phone			
11. Description of Waste Materials		12. Containers		13. Total Quantity	14. Unit Wt./Vol.	1. Misc. Comments	
				No.	Type		
a.		8262 <i>steel lead</i>		30 yd.	27.13		
WM Profile # <i>115729ME</i>							
b.							
WM Profile #							
c.							
WM Profile #							
d.							
WM Profile #							
J. Additional Descriptions for Materials Listed Above <i>COLOR-BROWN/GRY PHYSICAL STATE: SOLID ODOR: NU BILL TO: JOB SITE SERVICES</i>		K. Disposal Location					
		Cell		Level			
		Grid					
15. Special Handling Instructions and Additional Information							
Purchase Order #			EMERGENCY CONTACT / PHONE NO.:				
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.							
Printed Name <i>Kristen Podron</i>		Signature "On behalf of" <i>Mark Van Trust and Racer Properties</i>			Month <i>8</i>	Day <i>28</i>	Year <i>18</i>
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed Name <i>Matthew Elston</i>		Signature <i>[Signature]</i>			Month <i>8</i>	Day <i>28</i>	Year <i>18</i>
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed Name		Signature			Month	Day	Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.							
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.							
Printed Name <i>Andres Olive</i>		Signature <i>[Signature]</i>			Month <i>8</i>	Day <i>28</i>	Year <i>18</i>

GENERATOR

TRANSPORTER

FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492836  
 Ticket# 339246

Customer Name JOBSITESERV115329MI JOB SITE Carrier DHT VOORHEIS HAUSBECK EXCAVATING  
 Ticket Date 08/28/2018 Vehicle# 310B Volume 25.0  
 Payment Type Credit Account Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check#  
 Route Billing # 0001582  
 State Waste Code Gen EPA ID  
 Manifest 201607 Grid  
 Destination  
 PO  
 Profile 115329MI (LEAD IMPACTED SOIL (WM012A))  
 Generator 129-RACERTRUST79 RACER TRUST

Time	Scale	Operator	Inbound	Gross	
In 08/28/2018 11:24:52	SCALE1	aolive2		86900 lb	
Out 08/28/2018 12:04:36	SCALE1	aolive2		37720 lb	
				Net	49180 lb
				Tons	24.59

Comments RACER TRUST  
 79 W. CENTER ST



Product	LDX	Qty	UDM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T 100		24.59	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of																												
3. Generator's Mailing Address: <i>JOB SITE SERVICES</i> <i>4395 WILDER RD</i> <i>BAY CITY, MI 48706</i> 4. Generator's Phone <i>810-225-1921</i>	Generator's Site Address (if different than mailing): <i>RACER TRUST</i> <i>79 WEST CENTER STREET</i> <i>SAGINAW, MI 48602</i>		A. Manifest Number																												
			WMNA <span style="float:right; font-size: 1.5em;">T201607</span>																												
5. Transporter 1 Company Name			6. US EPA ID Number																												
7. Transporter 2 Company Name			8. US EPA ID Number																												
9. Designated Facility Name and Site Address			10. US EPA ID Number																												
<i>PEOPLES LANDFILL</i> <i>4143 EAST KATHRYN RD</i> <i>BIRCH RUN, MI 48415</i>			C. State Transporter's ID																												
			D. Transporter's Phone																												
11. Description of Waste Materials a.			12. Containers																												
			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Type</th> <th>13. Total Quantity</th> <th>14. Unit Wt./Vol.</th> <th>1. Misc. Comments</th> </tr> </thead> <tbody> <tr> <td><i>8012</i></td> <td><i>5700L LEAD</i></td> <td><i>25</i></td> <td><i>24.59</i></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		No.	Type	13. Total Quantity	14. Unit Wt./Vol.	1. Misc. Comments	<i>8012</i>	<i>5700L LEAD</i>	<i>25</i>	<i>24.59</i>																		
No.	Type	13. Total Quantity	14. Unit Wt./Vol.	1. Misc. Comments																											
<i>8012</i>	<i>5700L LEAD</i>	<i>25</i>	<i>24.59</i>																												
WM Profile # <i>115329 MI</i>																															
b.																															
WM Profile #																															
c.																															
WM Profile #																															
d.																															
WM Profile #																															
J. Additional Descriptions for Materials Listed Above <i>COLOR - BROWN/GRAY PHYSICAL STATE: SOLID</i> <i>ODOR: NONE</i> <i>UNITS: JOB SITE SERVICES</i>			K. Disposal Location  <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Cell</td> <td></td> <td>Level</td> <td></td> </tr> <tr> <td>Grid</td> <td></td> <td></td> <td></td> </tr> </table>		Cell		Level		Grid																						
Cell		Level																													
Grid																															
15. Special Handling Instructions and Additional Information																															
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:																													
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.																															
Printed Name <i>Kristen Padron</i>		Signature "On behalf of" <i>as agent for Racer Trust and Racer Properties</i>		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Month</td> <td>Day</td> <td>Year</td> </tr> <tr> <td><i>8</i></td> <td><i>28</i></td> <td><i>18</i></td> </tr> </table>	Month	Day	Year	<i>8</i>	<i>28</i>	<i>18</i>																					
Month	Day	Year																													
<i>8</i>	<i>28</i>	<i>18</i>																													
17. Transporter 1 Acknowledgement of Receipt of Materials																															
Printed Name <i>Jeff Phillips</i>		Signature <i>[Signature]</i>		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Month</td> <td>Day</td> <td>Year</td> </tr> <tr> <td><i>8</i></td> <td><i>28</i></td> <td><i>18</i></td> </tr> </table>	Month	Day	Year	<i>8</i>	<i>28</i>	<i>18</i>																					
Month	Day	Year																													
<i>8</i>	<i>28</i>	<i>18</i>																													
18. Transporter 2 Acknowledgement of Receipt of Materials																															
Printed Name		Signature		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Month</td> <td>Day</td> <td>Year</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Month	Day	Year																								
Month	Day	Year																													
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.																															
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.																															
Printed Name <i>Andrew Olive</i>		Signature <i>[Signature]</i>		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Month</td> <td>Day</td> <td>Year</td> </tr> <tr> <td><i>8</i></td> <td><i>28</i></td> <td><i>18</i></td> </tr> </table>	Month	Day	Year	<i>8</i>	<i>28</i>	<i>18</i>																					
Month	Day	Year																													
<i>8</i>	<i>28</i>	<i>18</i>																													

GENERATOR INFORMATION



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492835  
 Ticket# 339251

Customer Name JOBSITESERV115329MI JOB SITE Carrier DHT VOORHEIS HAUSBECK EXCAVATING  
 Ticket Date 08/28/2018 Vehicle# 180 Volume 45.0  
 Payment Type Credit Account Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check#  
 Route Billing # 0001582  
 State Waste Code Gen EPA ID  
 Manifest 201606 Grid  
 Destination  
 PO  
 Profile 115329MI (LEAD IMPACTED SOIL (WM012A))  
 Generator 129-RACERTRUST79 RACER TRUST

Time	Scale	Operator	Inbound	Gross	
In 08/28/2018 11:57:50	SCALE1	aolive2		103860 lb	
Out 08/28/2018 11:57:50		aolive2		Tare 42440 lb	
				Net 61420 lb	
				Tons 30.71	

Comments RACER TRUST  
 79 W. CENTER ST



Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T	100	30.71	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Doc No.		2. Page 1 of			
3. Generator's Mailing Address: Job Site SERVICES 4395 WILDER RD BAY CITY, MI 48706				Generator's Site Address (if different than mailing): RACER TRUST 79 WEST CENTER STREET SAGINAW, MI 48602		A. Manifest Number <b>WMNA T201606</b>			
4. Generator's Phone 810-225-1921				B. State Generator's ID					
5. Transporter 1 Company Name				6. US EPA ID Number		C. State Transporter's ID			
7. Transporter 2 Company Name				8. US EPA ID Number		D. Transporter's Phone			
9. Designated Facility Name and Site Address PEOPLES LANDFILL 4143 EAST RATHBUN RD BIRCH RUN, MI 48415				10. US EPA ID Number		E. State Transporter's ID			
						F. Transporter's Phone			
						G. State Facility ID			
						H. State Facility Phone			
GENERATOR	11. Description of Waste Materials			12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments	
	a.			No.	Type				
	WM Profile # 115729 MI			8262	Steel Lead	25 yd	300.71		
	b.								
	WM Profile #								
	c.								
WM Profile #									
d.									
WM Profile #									
J. Additional Descriptions for Materials Listed Above COLOR - BROWN / GRAY    PHYSICAL STATE: SOLID ODOR: NV  BILL TO: Job Site SERVICES				K. Disposal Location					
				Cell		Level			
				Grid					
15. Special Handling Instructions and Additional Information									
Purchase Order #				EMERGENCY CONTACT / PHONE NO.:					
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.									
Printed Name Kristen Padron				Signature "On behalf of" as agent for Racer Trust and Racer Property		Month	Day	Year	
						8	28	18	
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials				Signature		Month	Day	Year
	Printed Name Dorovan Pashby						08	28	18
	18. Transporter 2 Acknowledgement of Receipt of Materials				Signature		Month	Day	Year
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.								
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.				Signature		Month	Day	Year
	Printed Name Andres Olive						8	29	18

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492819  
 Ticket# 339230

Customer Name	JOBSITESERV115329MI JOB SITE	Carrier	DHT VOORHEIS HAUSBECK EXCAVATING
Ticket Date	08/28/2018	Vehicle#	199
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001582
State Waste Code		Gen EPA ID	
Manifest	201597	Grid	
Destination			
PO			
Profile	115329MI (LEAD IMPACTED SOIL (WM012A))		
Generator	129-RACERTRUST79 RACER TRUST		

	Time	Scale	Operator	Inbound	Gross	89320 lb
In	08/28/2018 10:12:17	SCALE1	aolive2		Tare	40640 lb
Out	08/28/2018 10:31:12	SCALE1	aolive2		Net	48680 lb
					Tons	24.34

Comments RACER TRUST  
 79 WEST CENTER ST



Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T 100		24.34	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature





# NON-HAZARDOUS MANIFEST

199

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of	
3. Generator's Mailing Address: JOB SITE SERVICES 4395 WILDER ROAD BAY CITY, MI 48706	Generator's Site Address (if different than mailing): RACER TRUST 79 WEST CENTER STREET SAGINAW, MI 48602		A. Manifest Number <b>WMNA T201597</b>	
			B. State Generator's ID	
4. Generator's Phone	6. US EPA ID Number		C. State Transporter's ID	
5. Transporter 1 Company Name	8. US EPA ID Number		D. Transporter's Phone	
7. Transporter 2 Company Name	10. US EPA ID Number		E. State Transporter's ID	
9. Designated Facility Name and Site Address PEOPLE'S LANDFILL 4143 EAST RATHBUN RD. BIRCH RUN, MI 48415			F. Transporter's Phone	
			G. State Facility ID	
				H. State Facility Phone
11. Description of Waste Materials	12. Containers		13. Total Quantity	14. Unit Wt./Vol.
	a.	No. Type		
WM Profile # 115329MI	10	See Lat	29.34	30
b.				
WM Profile #				
c.				
WM Profile #				
d.				
WM Profile #				
J. Additional Descriptions for Materials Listed Above COLOR - BRWN/GRAY PHYSICAL STATE - SOLID ODOR - NO BILL TO: JOB SITE SERVICES	K. Disposal Location			
	Cell		Level	
	Grid			
15. Special Handling Instructions and Additional Information				
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:		
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.				
Printed Name Kristen Padron	Signature "On behalf of" as agent of Racer Trust and Racer Properties		Month 8	Day 28
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed Name Greg Whitley	Signature		Month 8	Day 28
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed Name	Signature		Month	Day
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.				
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.				
Printed Name Andrea Olive	Signature		Month 8	Day 28

GENERATOR

TRANSPORTER

FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492820  
 Ticket# 339236

Customer Name	JOBSITESERV115329MI JOB SITE	Carrier	DHT VOORHEIS HAUSBECK EXCAVATING
Ticket Date	08/28/2018	Vehicle#	332
Payment Type	Credit Account	Volume	40.0
Manual Ticket#		Container	
Hauling Ticket#		Driver	
Route		Check#	
State Waste Code		Billing #	0001582
Manifest	201594	Gen EPA ID	
Destination		Grid	
PO			
Profile	115329MI (LEAD IMPACTED SOIL (WM012A))		
Generator	129-RACERTRUST79 RACER TRUST		

	Time	Scale	Operator	Inbound	Gross	98920 lb
In	08/28/2018 10:34:05	SCALE1	aolive2		Tare	40600 lb
Out	08/28/2018 10:34:05		aolive2		Net	58320 lb
					Tons	29.16

Comments RACER TRUST  
 79 W. CENTER ST



Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T	100	29.16	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No.		Manifest Doc No.		2. Page 1 of		
3. Generator's Mailing Address: JOB SITE SERVICES 4395 WILDER ROAD BAY CITY, MI 48706			Generator's Site Address (if different than mailing): RACER TRUST 79 W. CENTER STREET SAGINAW, MI 48602			A. Manifest Number <b>WMNA</b>		
4. Generator's Phone						B. State Generator's ID <b>T201594</b>		
5. Transporter 1 Company Name			6. US EPA ID Number			C. State Transporter's ID		
						D. Transporter's Phone		
7. Transporter 2 Company Name			8. US EPA ID Number			E. State Transporter's ID		
						F. Transporter's Phone		
9. Designated Facility Name and Site Address PEOPLES LANDFILL 4143 EAST RATHBUN RD. BIRCH RUN, MI 48415			10. US EPA ID Number			G. State Facility ID		
						H. State Facility Phone		
GENERATOR	11. Description of Waste Materials			12. Containers		13. Total Quantity	14. Unit Wt./Vol.	
	a.			No.	Type			
	WM Profile # 115329MI				Steel lead	25 YARDS	29.16	
	b.							
	WM Profile #							
c.								
WM Profile #								
d.								
WM Profile #								
J. Additional Descriptions for Materials Listed Above COLOR-BRWN/GRAY PHYSICAL STATE-SOLID ODOR-NO BILL TO: JOB SITE SERVICES			K. Disposal Location					
			Cell		Level			
			Grid					
15. Special Handling Instructions and Additional Information								
Purchase Order #				EMERGENCY CONTACT / PHONE NO.:				
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.								
Printed Name Kristen Padron			Signature "On behalf of" <i>Kristen Padron</i> as agent for Racer Trust and Racer properties			Month 8	Day 28	
Year 18								
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials							
	Printed Name John Engelhardt			Signature <i>John Engelhardt</i>			Month 8	Day 28
	Year 18							
18. Transporter 2 Acknowledgement of Receipt of Materials								
Printed Name			Signature			Month	Day	
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.							
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.							
Printed Name Andres Olve			Signature <i>Andres Olve</i>			Month 8	Day 28	
Year 18								

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492806  
 Ticket# 339218

Customer Name JOBSITESERV115329MI JOB SITE Carrier DHT VOORHEIS HAUSBECK EXCAVATING  
 Ticket Date 08/28/2018 Vehicle# 180 Volume 45.0  
 Payment Type Credit Account Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check#  
 Route Billing # 0001582  
 State Waste Code Gen EPA ID  
 Manifest 201598 Grid  
 Destination  
 PO  
 Profile 115329MI (LEAD IMPACTED SOIL (WM012A))  
 Generator 129-RACERTRUST79 RACER TRUST

Time	Scale	Operator	Inbound	Gross	
In 08/28/2018 08:41:55	SCALE1	aolive2		102560 lb	
Out 08/28/2018 09:12:18	SCALE1	aolive2		42440 lb	
				Net	60120 lb
				Tons	30.06

Comments RACER TRUST  
 79 WEST CENTER ST

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T 100		30.06	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

180

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No.		Manifest Doc No.		2. Page 1 of			
3. Generator's Mailing Address: JOB SITE SERVICES 4395 WILDER ROAD BAY CITY, MI 48706			Generator's Site Address (if different than mailing): RACER TRUST 79 W. CENTER STREET SAGINAW, MI 48602			A. Manifest Number WMNA T201598			
4. Generator's Phone						B. State Generator's ID			
5. Transporter 1 Company Name			6. US EPA ID Number			C. State Transporter's ID			
						D. Transporter's Phone			
7. Transporter 2 Company Name			8. US EPA ID Number			E. State Transporter's ID			
						F. Transporter's Phone			
9. Designated Facility Name and Site Address PEOPLES LANDFILL 4143 EAST RATHBUN RD. BIRCH RUN, MI 48415			10. US EPA ID Number			G. State Facility ID			
						H. State Facility Phone			
GENERATOR	11. Description of Waste Materials				12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments
	a.						25yd	30.00	
	WM Profile # 115329MI								
	b.								
	WM Profile #								
	c.								
WM Profile #									
d.									
WM Profile #									
J. Additional Descriptions for Materials Listed Above COLOR - BRWN/GRAY PHYSICAL STATE - SOLID ODDR-NO BILL TO: JOB SITE SERVICES				K. Disposal Location					
				Cell		Level			
				Grid					
15. Special Handling Instructions and Additional Information									
Purchase Order #				EMERGENCY CONTACT / PHONE NO.:					
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.									
Printed Name Kriston Padron			Signature "On behalf of" as agent for Racer Trust and Racer Properties			Month 08	Day 28	Year 18	
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials				Signature		Month 08	Day 28	Year 18
	Printed Name Danavan Pasky								
	18. Transporter 2 Acknowledgement of Receipt of Materials				Signature		Month	Day	Year
Printed Name									
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.								
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.								
	Printed Name Andres Soliver			Signature			Month 8	Day 28	Year 18

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492815  
 Ticket# 339232

Customer Name	JOBSITESERV115329MI JOB SITE	Carrier	DHT VOORHEIS HAUSBECK EXCAVATING
Ticket Date	08/28/2018	Vehicle#	180
Payment Type	Credit Account	Volume	45.0
Manual Ticket#		Container	
Hauling Ticket#		Driver	
Route		Check#	
State Waste Code		Billing #	0001582
Manifest	201596	Gen EPA ID	
Destination		Grid	
PO			
Profile	115329MI (LEAD IMPACTED SOIL (WM012A))		
Generator	129-RACERTRUST79 RACER TRUST		

	Time	Scale	Operator	Inbound	Gross	101560 lb
In	08/28/2018 10:18:43	SCALE1	aolive2		Tare	42440 lb
Out	08/28/2018 10:18:43		aolive2		Net	59120 lb
					Tons	29.56

Comments RACER TRUST  
 79 WEST CENTER ST



Product	LDX	Qty	UOM	Rate	Fee	Amount	Origin
1	Cont Soil Sp. W.-T 100	29.56	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of
3. Generator's Mailing Address: JOB SITE SERVICES 4395 WILDER ROAD BAY CITY, MI 48706	Generator's Site Address (if different than mailing): RACER TRUST 79 W. CENTER STREET SAGINAW, MI 48602		A. Manifest Number <b>WMNA</b> T201596
4. Generator's Phone			B. State Generator's ID
5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID	
		D. Transporter's Phone	
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID	
		F. Transporter's Phone	
9. Designated Facility Name and Site Address PEOPLES LANDFILL 4143 EAST RATHBUN RD. BIRCH RUN, MI 48415	10. US EPA ID Number	G. State Facility ID	
		H. State Facility Phone	
11. Description of Waste Materials	12. Containers		13. Total Quantity
	No.	Type	14. Unit Wt./Vol.
a.		steel lead	29.56
WM Profile # 115329 MI			
b.			
WM Profile #			
c.			
WM Profile #			
d.			
WM Profile #			
J. Additional Descriptions for Materials Listed Above COLOR-BROWN/GRAY PHYSICAL STATE-SOLID OBOR-ND BILL TO: JOB SITE SERVICES	K. Disposal Location		
	Cell		Level
	Grid		
15. Special Handling Instructions and Additional Information			
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:	
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Printed Name Kristen Padron	Signature "On behalf of" as agent of Racer Trust and Racer Properties	Month 8	Day 28
		Year 18	
17. Transporter 1 Acknowledgement of Receipt of Materials	Printed Name Dorcas Pashky	Signature [Signature]	Month 08
			Day 28
			Year 18
18. Transporter 2 Acknowledgement of Receipt of Materials	Printed Name	Signature	Month
			Day
			Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.			
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.			
Printed Name Andrea Olive	Signature [Signature]	Month 8	Day 28
		Year 18	

GENERATOR

TRANSPORTER

FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492821  
 Ticket# 339231

Customer Name	JOBSITESERV115329MI JOB SITE	Carrier	DHT VOORHEIS HAUSBECK EXCAVATING
Ticket Date	08/28/2018	Vehicle#	311 Volume 40.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001582
State Waste Code		Gen EPA ID	
Manifest	201595	Grid	
Destination			
PO			
Profile	115329MI (LEAD IMPACTED SOIL (WM012A))		
Generator	129-RACERTRUST79 RACER TRUST		

	Time	Scale	Operator	Inbound	Gross	88800 lb
In	08/28/2018 10:14:06	SCALE1	aolive2		Tare	40280 lb
Out	08/28/2018 10:36:15	SCALE1	aolive2		Net	48520 lb
					Tons	24.26

Comments RACER TRUST  
 79 WEST CENTER ST



Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T	100	24.26	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

31

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of
3. Generator's Mailing Address: JOB SITE SERVICES 4395 WILDER ROAD BAY CITY, MI 48706 4. Generator's Phone 810-225-1921	Generator's Site Address (if different than mailing): RACER TRUST 79 W. CENTER STREET SAGINAW, MI 48602		A. Manifest Number <b>WMNA</b>
			B. State Generator's ID <b>T201595</b>
5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID	
		D. Transporter's Phone	
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID	
		F. Transporter's Phone	
9. Designated Facility Name and Site Address PEOPLES LANDFILL 4143 EAST RATHBUN RD. BIRCH RUN, MI 48415	10. US EPA ID Number	G. State Facility ID	
		H. State Facility Phone	
11. Description of Waste Materials	12. Containers		13. Total Quantity
	No.	Type	
a. WM Profile # 115329MI	8262	Steel Lead	30yd 24.26
b. WM Profile #			
c. WM Profile #			
d. WM Profile #			
J. Additional Descriptions for Materials Listed Above COLOR-BRWN/GRAY PHYSICAL STATE-SOLID ODOR-NO. BILL TO: JOB SITE SERVICES	K. Disposal Location		
	Cell		Level
15. Special Handling Instructions and Additional Information			
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:	
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Printed Name Kristen Padron	Signature "On behalf of" as agent for Racer Trust Mont. Lee and Racer Properties	Month 8	Day 28
		Year 17	
17. Transporter 1 Acknowledgement of Receipt of Materials			
Printed Name Matthew Elston	Signature	Month 8	Day 28
		Year 18	
18. Transporter 2 Acknowledgement of Receipt of Materials			
Printed Name	Signature	Month	Day
		Year	
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.			
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.			
Printed Name Andrea Olive	Signature	Month 8	Day 28
		Year 18	

GENERATOR TRANSPORTER FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492807  
 Ticket# 339217

Customer Name	JOBSITESERV115329MI JOB SITE	Carrier	DHT VOORHEIS HAUSBECK EXCAVATING
Ticket Date	08/28/2018	Vehicle#	332
Payment Type	Credit Account	Volume	40.0
Manual Ticket#		Container	
Hauling Ticket#		Driver	
Route		Check#	
State Waste Code		Billing #	0001582
Manifest	201593	Gen EPA ID	
Destination		Grid	
PG			
Profile	115329MI (LEAD IMPACTED SOIL (WM012A))		
Generator	129-RACERTRUST79 RACER TRUST		

	Time	Scale	Operator	Inbound	Gross	96920 lb
In	08/28/2018 08:39:59	SCALE1	aolive2		Tare	40600 lb
Out	08/28/2018 09:15:18	SCALE1	aolive2		Net	56320 lb
					Tons	28.16

Comments RACER TRUST  
 79 WEST CENTER ST



Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T	100	28.16	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

332

NON-HAZARDOUS MANIFEST		1. Generator's US EPA ID No.		Manifest Doc No.		2. Page 1 of				
3. Generator's Mailing Address: JOB SITE SERVICES 4395 WILDER ROAD BAY CITY, MI 48706			Generator's Site Address (if different than mailing): RACER TRUST 79 WEST CENTER STREET SAGINAW, MI 48602			A. Manifest Number WMNA T201593				
4. Generator's Phone						B. State Generator's ID				
5. Transporter 1 Company Name			6. US EPA ID Number			C. State Transporter's ID				
						D. Transporter's Phone				
7. Transporter 2 Company Name			8. US EPA ID Number			E. State Transporter's ID				
						F. Transporter's Phone				
9. Designated Facility Name and Site Address PEOPLES LANDFILL 4143 EAST RATHBUN RD. BIRCH RUN, MI 48415			10. US EPA ID Number			G. State Facility ID				
						H. State Facility Phone				
GENERATOR	11. Description of Waste Materials				12. Containers		13. Total Quantity	14. Unit Wt./Vol.	1. Misc. Comments	
	a.				No.		Type			
	WM Profile # 115329MI						25 var	28.16		
	b.									
	WM Profile #									
c.										
WM Profile #										
d.										
WM Profile #										
J. Additional Descriptions for Materials Listed Above COLOR-BRWN/GRAY PHYSICAL STATE-SOLID ODOR-NO BILL TO: JOB SITE SERVICES					K. Disposal Location					
					Cell		Level			
					Grid					
15. Special Handling Instructions and Additional Information										
Purchase Order #					EMERGENCY CONTACT / PHONE NO.:					
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.										
Printed Name Kristen Padron				Signature "On behalf of" <i>Kristen Padron as agent of Racer Trust and Racer Properties</i>				Month 8	Day 28	Year 18
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials									
	Printed Name John Engelhardt			Signature <i>John Engelhardt</i>			Month 8	Day 28	Year 18	
	18. Transporter 2 Acknowledgement of Receipt of Materials									
Printed Name			Signature			Month	Day	Year		
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.									
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.									
Printed Name Andrea Olive				Signature <i>Andrea Olive</i>				Month 8	Day 28	Year 18

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492909  
 Ticket# 339322

Customer Name	JOBSITESERV115329MI JOB SITE	Carrier	DHT VOORHEIS HAUSBECK EXCAVATING
Ticket Date	08/29/2018	Vehicle#	360
Payment Type	Credit Account	Container #	
Manual Ticket#		Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001582
State Waste Code		Gen EPA ID	
Manifest	201601	Grid	
Destination			
PQ			
Profile	115329MI (LEAD IMPACTED SOIL (WM012A))		
Generator	129-RACERTRUST79 RACER TRUST		

	Time	Scale	Operator	Inbound	Gross	98640 lb
In	08/29/2018 08:50:57	SCALE1	aolive2		Tare	41460 lb
Out	08/29/2018 09:03:13	SCALE1	aolive2		Net	57180 lb
					Tons	28.59

Comments RACER TRUST  
 79 W. CENTER ST

WASTE MANAGEMENT

Product	LDX	Qty	UDM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T 100		28.59	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature





# NON-HAZARDOUS MANIFEST

566

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of																																																			
<b>3. Generator's Mailing Address:</b> Job Site Services 4395 WILDER RD Bay City, Michigan 48706 <b>4. Generator's Phone</b> 810-223-1921	<b>Generator's Site Address (if different than mailing):</b> RACER TRUST 79 WEST CENTER STREET SAGINAW, MI 48602		<b>A. Manifest Number</b> WMNA T201601																																																			
			<b>B. State Generator's ID</b>																																																			
<b>5. Transporter 1 Company Name</b>	<b>6. US EPA ID Number</b>		<b>C. State Transporter's ID</b> <b>D. Transporter's Phone</b>																																																			
<b>7. Transporter 2 Company Name</b>	<b>8. US EPA ID Number</b>		<b>E. State Transporter's ID</b> <b>F. Transporter's Phone</b>																																																			
<b>9. Designated Facility Name and Site Address</b> PEOPLES LANDFILL 4143 EAST RATHBUN RD BIRCH RUN, MI 48415	<b>10. US EPA ID Number</b>		<b>G. State Facility ID</b> <b>H. State Facility Phone</b>																																																			
GENERATOR	<b>11. Description of Waste Materials</b>		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">12. Containers</th> <th rowspan="2">13. Total Quantity</th> <th rowspan="2">14. Unit Wt./Vol.</th> <th rowspan="2">1. Misc. Comments</th> </tr> <tr> <th>No.</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td>123</td> <td>Steel Lead</td> <td>25yd</td> <td>28.59</td> <td></td> </tr> <tr> <td>WM Profile #</td> <td colspan="4">115329 MI</td> </tr> <tr> <td>b.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>WM Profile #</td> <td colspan="4"></td> </tr> <tr> <td>c.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>WM Profile #</td> <td colspan="4"></td> </tr> <tr> <td>d.</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>WM Profile #</td> <td colspan="4"></td> </tr> </tbody> </table>	12. Containers		13. Total Quantity	14. Unit Wt./Vol.	1. Misc. Comments	No.	Type	a.	123	Steel Lead	25yd	28.59		WM Profile #	115329 MI				b.						WM Profile #					c.						WM Profile #					d.						WM Profile #				
	12. Containers		13. Total Quantity	14. Unit Wt./Vol.	1. Misc. Comments																																																	
	No.	Type																																																				
	a.	123	Steel Lead	25yd	28.59																																																	
	WM Profile #	115329 MI																																																				
	b.																																																					
WM Profile #																																																						
c.																																																						
WM Profile #																																																						
d.																																																						
WM Profile #																																																						
<b>J. Additional Descriptions for Materials Listed Above</b>		<b>K. Disposal Location</b>																																																				
Color - BROWN/GRAY PHYSICAL STATE - SOLID CODE - M BKE TO: Job Site Services		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Cell</td> <td></td> <td>Level</td> <td></td> </tr> <tr> <td>Grid</td> <td></td> <td></td> <td></td> </tr> </table>		Cell		Level		Grid																																														
Cell		Level																																																				
Grid																																																						
<b>15. Special Handling Instructions and Additional Information</b>																																																						
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:																																																				
<b>16. GENERATOR'S CERTIFICATE:</b>																																																						
I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.																																																						
Printed Name Kristen Padron		Signature "On behalf of" as agent for Racer Trust and Racer Properties																																																				
		Month	Day Year																																																			
		8	29 18																																																			
TRANSPORTER	<b>17. Transporter 1 Acknowledgement of Receipt of Materials</b>																																																					
	Printed Name Martin Turner	Signature Martin Turner																																																				
		Month	Day Year																																																			
		8	29 18																																																			
<b>18. Transporter 2 Acknowledgement of Receipt of Materials</b>																																																						
Printed Name		Signature																																																				
		Month	Day Year																																																			
FACILITY	<b>19. Certificate of Final Treatment/Disposal</b>																																																					
	I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.																																																					
	<b>20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.</b>																																																					
Printed Name Andrea Olive		Signature Andrea Olive																																																				
		Month	Day Year																																																			
		8	29 18																																																			

L21117

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492929  
 Ticket# 339341

Customer Name	JOBSITESERV115329MI JOB SITE	Carrier	DHT VOORHEIS HAUSBECK EXCAVATING
Ticket Date	08/29/2018	Vehicle#	393 Volume 40.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001582
State Waste Code		Gen EPA ID	
Manifest	7167131	Grid	
Destination			
PO			
Profile	115329MI (LEAD IMPACTED SOIL (WM012A))		
Generator	129-RACERTRUST79 RACER TRUST		

	Time	Scale	Operator	Inbound	Gross	100960 lb
In	08/29/2018 11:43:09	SCALE1	aolive2		Tare	41700 lb
Out	08/29/2018 11:59:10	SCALE1	aolive2		Net	59260 lb
					Tons	29.63

Comments RACER TRUST  
 79 W. CENTER ST



Product	LDX	Qty	UDM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T 100		29.63	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of					
3. Generator's Mailing Address: Job Site Services 4395 Wilder Road Bay City, Michigan 48706	Generator's Site Address (if different than mailing): Racer Trust 79 West Center Street Saginaw, Michigan 48602		A. Manifest Number <b>WMNA</b>	<b>7167131</b>				
			B. State Generator's ID					
4. Phone - 810-225-1921	5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID	D. Transporter's Phone				
	7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID	F. Transporter's Phone				
9. Designated Facility Name and Site Address Peoples Landfill 4143 East Rathbun Rd. Birch Run, MI 48415	10. US EPA ID Number		G. State Facility ID	H. State Facility Phone				
GENERATOR	11. Description of Waste Materials		12. Containers	13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments		
	a. Lead Impacted Soil		No.	Type				
	WM Profile # <b>115329MI</b>		125	Steel lined	25 yd		29.65	
	b.							
	WM Profile #							
	c.							
WM Profile #								
d.								
WM Profile #								
J. Additional Descriptions for Materials Listed Above Color - Brwn/Gray Physical State - Solid Odor - No		K. Disposal Location						
BILL TO: Job Site Services		Cell	Level					
		Grid						
15. Special Handling Instructions and Additional Information								
Purchase Order # _____ EMERGENCY CONTACT / PHONE NO.: Scott Clearwater 810-225-1921								
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.								
Printed Name <i>Kristen Padron</i>		Signature "On behalf of" <i>as agent for Racer Trust</i> <i>Kristen Padron</i> <i>and Racer Properties</i>			Month	Day	Year	
					9	29	18	
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials							
	Printed Name <i>Chris Larson</i>		Signature <i>Chris Larson</i>			Month	Day	Year
						8	29	18
PORTER	18. Transporter 2 Acknowledgement of Receipt of Materials							
	Printed Name		Signature			Month	Day	Year
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.							
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.							
	Printed Name <i>Andres Olive</i>		Signature <i>Andres Olive</i>			Month	Day	Year
					8	29	18	

#180457  
LSA08/18

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492871  
 Ticket# 339287

Customer Name JOBSITESERV115329MI JOB SITE Carrier DHT VOORHEIS HAUSBECK EXCAVATING  
 Ticket Date 08/28/2018 Vehicle# 3108 Volume 25.0  
 Payment Type Credit Account Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check#  
 Route Billing # 0001582  
 State Waste Code Gen EPA ID  
 Manifest 201609 Grid  
 Destination  
 PQ  
 Profile 115329MI (LEAD IMPACTED SOIL (WM012A))  
 Generator 129-RACERTRUST79 RACER TRUST

Time	Scale	Operator	Inbound	Gross	
In 08/28/2018 14:50:59	SCALE1	aolive2		88900 lb	
Out 08/28/2018 14:50:59		aolive2		37720 lb	
				Net	51180 lb
				Tons	25.59

Comments RACER TRUST  
 79 W. CENTER ST



Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T 100		25.59	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of
3. Generator's Mailing Address: JOB SITE SERVICES 4395 WILBER RD DAY CITY, MI 48706	Generator's Site Address (if different than mailing): RACER TRUST 79 WEST CENTER STREET SAGINAW, MI 48602		A. Manifest Number <b>WMNA T201609</b>
4. Generator's Phone 810-225-1921	B. State Generator's ID		
5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID	
		D. Transporter's Phone	
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID	
		F. Transporter's Phone	
9. Designated Facility Name and Site Address PEOPLES LANDFILL 4143 EAST RATHBUN RD BIRCH RUN, MI 48415	10. US EPA ID Number	G. State Facility ID	
		H. State Facility Phone	
G E N E R A T O R	11. Description of Waste Materials		I. Misc. Comments
	a.	12. Containers No. Type	13. Total Quantity
	WM Profile # 115329 MI	8012 STEEL LEAD	25.70 25.59
	b.		
	WM Profile #		
c.			
WM Profile #			
d.			
WM Profile #			
J. Additional Descriptions for Materials Listed Above Color - BROWN/GRAY PHYSICAL STATE - SOLID ODOR - NO BILL TO: Job SITE SERVICES	K. Disposal Location		
	Cell	Level	
	Grid		
15. Special Handling Instructions and Additional Information			
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:	
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Printed Name Kristen Padron	Signature "On behalf of" as agent for Racer Trust and Racer Properties	Month 7	Day 28
		Year 18	
17. Transporter 1 Acknowledgement of Receipt of Materials			
Printed Name JEFF PHIPPS	Signature	Month 8	Day 28
		Year 18	
18. Transporter 2 Acknowledgement of Receipt of Materials			
Printed Name	Signature	Month	Day
		Year	
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.			
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.			
Printed Name Andrea Olive	Signature	Month 8	Day 28
		Year 18	

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492863  
 Ticket# 339279

Customer Name	JOBSITESERV115329MI JOB SITE	Carrier	DHT VOORHEIS HAUSBECK EXCAVATING
Ticket Date	08/28/2018	Vehicle#	311 Volume 40.0
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001582
State Waste Code		Gen EPA ID	
Manifest	201599	Grid	
Destination			
PO			
Profile	115329MI (LEAD IMPACTED SOIL (WM012A))		
Generator	129-RACERTRUST79 RACER TRUST		

	Time	Scale	Operator	Inbound	Gross	94960 lb
In	08/28/2018 14:03:19	SCALE1	aolive2		Tare	40280 lb
Out	08/28/2018 14:03:19		aolive2		Net	54680 lb
					Tons	27.34

Comments RACER TRUST  
 79 W. CENTER ST



Product	LDX	Qty	UOM	Rate	Fee	Amount	Origin
1	Cont Soil Sp. W.-T 100	27.34	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of				
3. Generator's Mailing Address: JOB SITE SERVICES 4395 WILDER ROAD BAY CITY, MI 48706	Generator's Site Address (If different than mailing): RAICER TRUST 79 W. CENTER STREET SAGINAW, MI 48602		A. Manifest Number <b>WMNA T201599</b>				
4. Generator's Phone 810-225-1921			B. State Generator's ID				
5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID					
		D. Transporter's Phone					
7. Transporter 2 Company Name	8. US EPA ID Number	E. State Transporter's ID					
		F. Transporter's Phone					
9. Designated Facility Name and Site Address PEOPLES LANDFILL 4143 EAST RATHBUN RD. BIRCH RUN, MI 48415	10. US EPA ID Number	G. State Facility ID					
		H. State Facility Phone					
11. Description of Waste Materials	12. Containers		13. Total Quantity	14. Unit Wt./Vol.	I. Misc. Comments		
	a.	No.	Type				
	WM Profile #	8261	STEEL DRUM	25yd		27.34	
	b.						
	WM Profile #						
	c.						
d.							
WM Profile #							
J. Additional Descriptions for Materials Listed Above COLOR-BRWN/GRAY PHYSICAL STATE - SOLID ODOR-NO  BILL TO: JOB SITE SERVICES	K. Disposal Location						
	Cell		Level				
	Grid						
15. Special Handling Instructions and Additional Information							
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:					
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.							
Printed Name Kristen Padron	Signature "On behalf of" as agent for Raicer Trust and Raicer Properties			Month 7	Day 27	Year 18	
17. Transporter 1 Acknowledgement of Receipt of Materials	Printed Name Matthew Elston	Signature			Month 8	Day 28	Year 18
18. Transporter 2 Acknowledgement of Receipt of Materials	Printed Name	Signature			Month	Day	Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.							
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.							
Printed Name Andrea Olive	Signature			Month 8	Day 28	Year 18	

GENERATOR

TRANSPORTER

FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



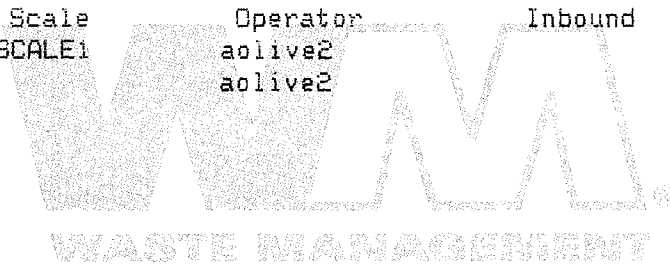
Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492859  
 Ticket# 339275

Customer Name JOBSITESERV115329MI JOB SITE Carrier DHT VOORHEIS HAUSBECK EXCAVATING  
 Ticket Date 08/28/2018 Vehicle# 332 Volume 40.0  
 Payment Type Credit Account Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check#  
 Route Billing # 0001502  
 State Waste Code Gen EPA ID  
 Manifest 201602 Grid  
 Destination  
 PD  
 Profile 115329MI (LEAD IMPACTED SOIL (WM012A))  
 Generator 129-RACERTRUST79 RACER TRUST

Time	Scale	Operator	Inbound	Gross	99860 lb
In 08/28/2018 13:47:45	SCALE1	aolive2		Tare	40600 lb
Out 08/28/2018 13:47:45		aolive2		Net	59260 lb
				Tons	29.63

Comments RACER TRUST  
 79 W. CENTER ST



Product	LD%	Qty	UDM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T	100	29.63	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of
3. Generator's Mailing Address: <i>Job SITE SERVICES 4375 WILDER RD DAY CITY, MI 48706</i>	Generator's Site Address (if different than mailing): <i>RACER TRUST 79 WEST CENTER STREET SAGINAW, MI 48602</i>		A. Manifest Number <b>WMNA</b> <span style="float:right; font-size: 1.5em;">T201602</span>
4. Generator's Phone <i>810-225-1921</i>	B. State Generator's ID		
5. Transporter 1 Company Name	6. US EPA ID Number	C. State Transporter's ID	
7. Transporter 2 Company Name	8. US EPA ID Number	D. Transporter's Phone	
9. Designated Facility Name and Site Address <i>PEOPLES LANDFILL 4143 EAST RATHBUN RD BIRCH RUN, MI 48415</i>	10. US EPA ID Number	E. State Transporter's ID	
		F. Transporter's Phone	
		G. State Facility ID	
		H. State Facility Phone	
11. Description of Waste Materials	12. Containers		13. Total Quantity
	No.	Type	14. Unit Wt./Vol.
a.	125	STEEL DRUM	257d
WM Profile # <i>115329 MI</i>			<i>29.63</i>
b.			
WM Profile #			
c.			
WM Profile #			
d.			
WM Profile #			
J. Additional Descriptions for Materials Listed Above <i>Color - BROWN/ GRAY PHYSICAL STATE - SOLID ODOR - NO BILL TO: Job SITE SERVICES</i>	K. Disposal Location		
	Cell	Level	
	Grid		
15. Special Handling Instructions and Additional Information			
Purchase Order #	EMERGENCY CONTACT / PHONE NO.:		
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Printed Name <i>Kristen Padron</i>	Signature "On behalf of" <i>Kristen Padron</i>	Month <i>8</i>	Day <i>28</i>
		Year <i>18</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials	Printed Name <i>John Engelhardt</i>	Signature <i>John Engelhardt</i>	Month <i>8</i>
			Day <i>28</i>
			Year <i>18</i>
18. Transporter 2 Acknowledgement of Receipt of Materials	Printed Name	Signature	Month
			Day
			Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.			
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.			
Printed Name <i>Andrea Olive</i>	Signature <i>Andrea Olive</i>	Month <i>8</i>	Day <i>28</i>
		Year <i>18</i>	

GENERATOR

TRANSPORTER

FACILITY

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original **16492852**  
 Ticket# 339267

Customer Name JOBSITESERV115329MI JOB SITE Carrier DHT VOORHEIS HAUSBECK EXCAVATING  
 Ticket Date 08/28/2018 Vehicle# 180 Volume 45.0  
 Payment Type Credit Account Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check#  
 Route Billing # 0001582  
 State Waste Code Gen EPA ID  
 Manifest 201600 Grid  
 Destination  
 PD  
 Profile 115329MI (LEAD IMPACTED SOIL (WM012A))  
 Generator 129-RACERTRUST79 RACER TRUST

	Time	Scale	Operator	Inbound	Gross	105240 lb
In	08/28/2018 13:17:57	SCALE1	aolive2		Tare	42440 lb
Out	08/28/2018 13:17:57		aolive2		Net	62800 lb
					Tons	31.40

Comments RACER TRUST  
 79 W. CENTER ST



Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T	100	31.40	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of
3. Generator's Mailing Address: JOB SITE SERVICES 4295 WILDER RD. BAY CITY, MI 48706		Generator's Site Address (if different than mailing): RACER TRUST 79 W. CENTER STREET SAGINAW, MI 48602	
4. Generator's Phone 810-225-1921		A. Manifest Number WMNA T201600	
5. Transporter 1 Company Name		B. State Generator's ID	
6. US EPA ID Number		C. State Transporter's ID	
7. Transporter 2 Company Name		D. Transporter's Phone	
8. US EPA ID Number		E. State Transporter's ID	
9. Designated Facility Name and Site Address PEOPLES LANDFILL 4143 EAST RATHBUN RD. BIRCH RUN, MI 48415		F. Transporter's Phone	
10. US EPA ID Number		G. State Facility ID	
		H. State Facility Phone	
GENERATOR	11. Description of Waste Materials		12. Containers
	a.		No. Type
	WM Profile # 115329MI		127 STEEL LEAK
	b.		13. Total Quantity
	WM Profile #		2540
	c.		14. Unit Wt./Vol.
WM Profile #		31.40	I. Misc. Comments
d.			
WM Profile #			
J. Additional Descriptions for Materials Listed Above COLOR- BRWN/GRAY ; PHYSICAL STATE-SOLID ODOR-NO BILL TO: JOB SITE SERVICES		K. Disposal Location	
15. Special Handling Instructions and Additional Information		Cell	Level
Purchase Order #		Grid	
EMERGENCY CONTACT / PHONE NO.:			
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.			
Printed Name Kriston Padron		Signature "On behalf of" <i>as agent to Racer Trust and Racer Properties</i>	
		Month	Day Year
		8	25 18
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials		
	Printed Name Donovan Pashby		Signature Donovan Pashby
			Month Day Year
		08	28 18
18. Transporter 2 Acknowledgement of Receipt of Materials			
Printed Name		Signature	
		Month Day Year	
FACILITY	19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.		
	20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.		
	Printed Name Andrea Olive		Signature A Olive
		Month	Day Year
		8	28 18

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Blue- GENERATOR #2 COPY

Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY

Gold- TRANSPORTER #1 COPY



Peoples L/F  
 4143 E. Rathbun Rd  
 Birch Run, MI, 48415  
 Ph: 989 777 1145

Original 16492853  
 Ticket# 339268

Customer Name JOBSITESERV115329MI JOB SITE Carrier DHT VOORHEIS HAUSBECK EXCAVATING  
 Ticket Date 08/28/2018 Vehicle# 199 Volume 40.0  
 Payment Type Credit Account Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check#  
 Route Billing # 0001582  
 State Waste Code Gen EPA ID  
 Manifest 201603 Grid  
 Destination  
 PD  
 Profile 115329MI (LEAD IMPACTED SOIL (WM012A))  
 Generator 129-RACERTRUST79 RACER TRUST

Time	Scale	Operator	Inbound	Gross	
In 08/28/2018 13:26:12	SCALE1	aolive2		98220 lb	
Out 08/28/2018 13:26:12		aolive2		40640 lb	
				Net	57580 lb
				Tons	28.79

Comments RACER TRUST  
 79 W. CENTER ST



Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil Sp. W.-T 100		28.79	Tons				MI-SAGINAW

Total Fees  
 Total Ticket

Driver's Signature

403WM-N





# NON-HAZARDOUS MANIFEST

<b>NON-HAZARDOUS MANIFEST</b>	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of				
3. Generator's Mailing Address: JOB SITE SERVICES 4395 WILCOX RD BAY CITY, MI 48706	Generator's Site Address (if different than mailing): RACER TRUST 79 WEST CENTER ROAD STREET SAGINAW, MI 48602		A. Manifest Number <b>WMNA</b>	T201603			
4. Generator's Phone 910-223-1921			B. State Generator's ID				
5. Transporter 1 Company Name	6. US EPA ID Number		C. State Transporter's ID				
			D. Transporter's Phone				
7. Transporter 2 Company Name	8. US EPA ID Number		E. State Transporter's ID				
			F. Transporter's Phone				
9. Designated Facility Name and Site Address PEOPLES LANDFILL 4143 EAST RATHOUN RD BIRCH RUN, MI 48415	10. US EPA ID Number		G. State Facility ID				
			H. State Facility Phone				
G E N E R A T O R	11. Description of Waste Materials		12. Containers		13. Total Quantity	14. Unit Wt./Vol.	15. Misc. Comments
			No.	Type			
	a.		8058	Steel Lead	28.79	30 yd	
	WM Profile # 115729 MI						
	b.						
	WM Profile #						
c.							
WM Profile #							
d.							
WM Profile #							
J. Additional Descriptions for Materials Listed Above COLOR - DRUM/GRAY      PHYSICAL STATE - SOLID NO ODOR  BILL TO: JOB SITE SERVICES			K. Disposal Location				
			Cell		Level		
			Grid				
15. Special Handling Instructions and Additional Information							
Purchase Order #			EMERGENCY CONTACT / PHONE NO.:				
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.							
Printed Name Kristen Pedron		Signature "On behalf of" as agent for Racer Trust and Racer Properties			Month 7	Day 24	Year 11
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed Name Greg Whitney		Signature			Month 8	Day 25	Year 18
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed Name		Signature			Month	Day	Year
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.							
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.							
Printed Name Annes olive		Signature			Month 9	Day 28	Year 18

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  
Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY  
Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY