WESTERN NEW YORK OFFICE



July 7, 2015

Mr. Timothy E. Dieffenbach NYSDEC Region 9 270 Michigan Avenue Buffalo, New York 14203

# Re: Remedial Investigation Summary Report Tract I & II Highland Avenue Sites 3001 Highland Avenue Niagara Falls, New York NYSDEC Site Numbers C932157 & 932136

Dear Mr. Dieffenbach:

On behalf of Honeywell International, Inc. (Honeywell), Groundwater & Environmental Services, Inc. (GES) has prepared the enclosed *Remedial Investigation Summary Report* (RISR) for the Tract I & II Highland Avenue Sites, located in Niagara Falls, New York.

The work was completed in general accordance with the NYSDEC-approved *NAPL Investigation Workplan* prepared by GES and submitted on April 22, 2015.

Based on the site conditions and efforts summarized in the attached report, GES, on behalf of Honeywell, is requesting that NYSDEC provide a letter that states that no further action is required at this time to address the petroleum NAPL that has been characterized in this report.

If you have any questions or comments, please do not hesitate to contact GES at your convenience.

Sincerely, GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

Entop

Eric D. Popken Project Manager

Enclosure



# **REMEDIAL INVESTIGATION SUMMARY REPORT**

Tract I & II Highland Avenue Sites 3001 Highland Avenue Niagara Falls, New York NYSDEC Site Numbers C932157 & 932136

Prepared for



Brightfields Corporation 333 Ganson Street Buffalo, New York 14203

Report Date

July 7, 2015

Prepared By:

En

Eric D. Popken Project Manager

Reviewed By: Gerald H. Cresap, Ir., P.E. Regional Engineering Manager

GROUNDWATER & ENVIRONMENTAL SERVICES, INC. 495 Aero Drive, Suite 3 Cheektowaga, New York 14225 1-800-287-7857



# **REMEDIAL INVESTIGATION SUMMARY REPORT**

Tract I & II Highland Avenue Sites 3001 Highland Avenue Niagara Falls, New York NYSDEC Site Numbers C932157 & 932136

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I certify that I am currently a New York State registered professional engineer and that this *Remedial Investigation Summary Report* was prepared in accordance with all applicable statues and regulations and in substantial conformance with Division of Remediation *Technical Guidance for Site Investigation and* 





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# 1.0 INTRODUCTION

Groundwater & Environmental Services, Inc. (GES) has prepared this *Remedial Investigation Summary Report* (RISR) for the Tract I & II Highland Avenue Sites, located in Niagara Falls, New York. The purpose of this investigation is to further delineate and characterize the light non-aqueous phase liquid (NAPL) that was observed in test pits conducted by Ontario Specialty Contracting (OSC) under the oversight and direction of Amec Foster Wheeler (Amec) during a previous site investigation in February 2015. The work was completed in general accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved *NAPL Investigation Workplan* prepared by GES and submitted on April 22, 2015. A site location map is provided in **Figure 1** and a site map is provided in **Figure 2**.

# 2.0 INVESTIGATION BACKGROUND, CLEANUP STANDARDS, AND APPROACH

In February 2015, NAPL was observed entering into two test pits (test pits LNAPL-1 & 2) located within the northeast corner of the Tract II (NYSDEC Site #932136) restricted residential future use boundary, in the vicinity of two former underground storage tanks (USTs) removed in 2013 on the adjacent Tract I site (NYSDEC Site #C932157). NYSDEC was notified of the observed NAPL and seven additional test pits (LNALPL-3 through LNAPL-9) were then excavated to the top of bedrock to gather information on the extent of impact. NAPL was observed within three of the nine completed test pits (LNAPL-1, LNAPL-2, and LNAPL-9 as shown in **Figure 3**. Winter weather conditions at the site prevented continuous monitoring of the test pits. A sample of the NAPL and a composite soil sample were collected and analyzed to help identify the type of contaminant present. It should be noted that the composite sample was taken from a stockpile of excavated soils which had been segregated due to petroleum nuisance characteristics (e.g. petroleum odors, staining) and was biased toward the most impacted soil. Analysis of the NAPL sample indicated weathered #6 oil and gasoline as the main constituents; no polychlorinated biphenyls (PCBs) as aroclors were detected. Petroleum identification results are included in **Table 1**. The laboratory analytical report is included in **Appendix A**. Relevant photographs collected by field personnel during the initial investigation are provided in **Appendix B**.

In March 2015, during excavation and relocation of metals-contaminated soil on the Tract II site as part of the primary remedial scope of work on-site, 1,216 tons of soil containing nuisance characteristics of petroleum contamination were segregated, stockpiled on-site, and later shipped off-site for disposal. These soils were excavated from within the area of the Tract II test pits (LNAPL-1 and LNAPL-2) advanced in February 2015. A depression within the northeastern corner of the Tract II restricted residential future use boundary was produced as a result of these excavation activities and can be seen within the appended photo documentation.

Based on existing data provided by Brightfields as part of a Request for Proposal (RFP) sent to GES in March 2015 as well as the site visit performed by GES on March 20, 2015, it was understood that remedial activities are currently being conducted for the Tract II site under a NYSDEC-approved *Tract II Remedial Design Work Plan* (RDWP). In addition GES is aware that the Tract I site has received a Certificate of Completion (COC) from the NYSDEC and is currently managed through an Environmental Easement and Site Management Plan. This investigation work is considered to be part of a corrective action measure for the Tract I site and a discrete component of the overall Tract II site remedial effort. To the extent there was work performed on the Tract I site, it was in conformance with the respective Site Management Plan.



On April 22, 2015, GES submitted the NYSDEC-approved *NAPL Investigation Work Plan* for the site, which included an outline for plans to further characterize and delineate the NAPL impacts previously discovered on-site. The scope of work included the advancement of additional test pits, and collection of soil and groundwater samples.

As noted in the RDWP, the proposed future use of the area where NAPL has been initially detected on the Tract II site would include a future City-owned park. The technical guidance for site investigation and remediation (NYSDEC DER-10) designates a park as a "restricted residential" use, therefore the RDWP establishes that the soil cleanup objectives (SCOs) would fall under "restricted residential" soil SCOs. These SCOs are outlined in Part 6 of New York State Codes, Rules, and Regulations, Part 375 (6 NYCRR Part 375) and were used as the basis for the remedial investigation, but were confined to a petroleum based delineation.

Proposed future use of the Tract I site would include commercial buildings. The Site Management Plan for the Tract I site establishes that the SCOs for the Tract I site would fall under "commercial" soil SCOs as outlined in 6 NYCRR Part 375.

As noted above, nine test pits (LNAPL-1 through LNAPL-9, as shown in **Figure 3**) were excavated during the initial investigation in February 2015, and NAPL was observed at three locations – LNAPL-1, LNAPL-2, and LNAPL-9. It is understood that NAPL was not observed in the remaining test pits; therefore, it was estimated that the NAPL footprint was initially laterally delineated to the location of the remaining test pits:

- to the east of test pit LNAPL-1 and LNAPL-9 by test pits LNAPL-5 and LNAPL-4, respectively;
- to the south of test pits LNAPL-1 and LNAPL-2 by test pits LNAPL-3 and LNAPL-8, respectively; and,
- to the west of test pit LNAPL-2 by test pit LNAPL 6 and LNAPL-7.

No test pits were advanced north of LNAPL-9 during the February 2015 investigation; therefore, test pits were proposed on the Tract I property for northern delineation. In addition, the distance between LNAPL-3 and LNAPL-8 and test pits LNAPL-1 and LNAPL-2 was far relative to the other delineating test pits. These areas were considered to be data gaps from the initial investigation; therefore, additional test pits were proposed and conducted in these areas.

# 3.0 **REMEDIAL INVESTIGATION METHODOLOGY**

# 3.1 Test Pits

On March 20, 2015, GES visited the site to review the locations of the test pits that were previously conducted. It was observed that the impacted area could be easily accessed by construction equipment, and there were no structures, active overhead or underground utilities, or any other physical restrictions. In addition, there were no finished surfaces that would need to be disturbed when investigating the site. Therefore, in order to further delineate the NAPL and soil impacts in a cost-effective and efficient manner, a subsurface investigation was conducted, consisting of the completion of a series of test pits at the locations shown on **Figure 3**. The test pits were conducted by Ontario Specialty Contracting (OSC) under oversight and direction of GES. From April 23 through May 19, 2015, 21 test pits (LNAPL-10



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through LNAPL-27, and a re-advancement of LNAPL-1, 2, and 9) were advanced using a track-mounted excavator. Test pits were advanced to depths ranging from 4 to 22 feet below grade (ftbg).

The test pits were advanced in approximately two-foot intervals. Soil samples were logged by GES personnel for color, moisture content, grain size, and visual evidence of hydrocarbon impact. The samples were placed in plastic bags and screened for organic vapors using a photo-ionization detector (PID) equipped with a 10.6 electron-Volt (eV) lamp and calibrated to 100 parts per million by volume (ppmv) using an isobutylene standard. From select samples, the soil sample from each test pit exhibiting the highest PID measurement was selected for laboratory analysis. If no elevated PID readings were observed, but visual or olfactory signs of petroleum contamination were observed, a sample was selected for laboratory analysis. If no elevated PID readings or visual/olfactory signs of petroleum contamination were observed, then no sample was selected for laboratory analysis. Samples were placed in laboratorysupplied glassware, stored on ice, and shipped under chain of custody to Paradigm Environmental Services, Inc. in Rochester, New York for analysis of the list of volatile organic compounds (VOCS) provided in NYSDEC Commissioner Policy (CP)-51, via United States Environmental Protection Agency (USEPA) Method 8260, and the list of semi-volatile organic compounds (SVOCs) provided in NYSDEC CP-51 via USEPA Method 8270. In addition, a groundwater sample was collected from LNAPL-19 and submitted for laboratory analysis of petroleum related VOCs and SVOCs. Relevant photographs collected by field personnel are provided in Appendix B. Test pit logs containing soil lithology, field screening readings and general observations are included in Appendix C. Coordinates and surface elevations for all test pits are provided in Table 2 for future reference.

# 4.0 REMEDIAL INVESTIGATION RESULTS

# 4.1 Lithology and Field Observations

The test pit locations, with respect to the site layout are illustrated on **Figure 3**. Coordinates for all test pit locations were collected by OSC personnel using a Topcon RTK-GPS system and are provided in **Table 2** for future reference. Test pit logs containing soil lithology, field screening readings and general observations are included in **Appendix C**.

In general, four distinct lithological layers were encountered during the subsurface investigation: fill material, a clay and silt layer, a discontinuous organic layer, and a discontinuous basal sand and gravel layer that often extended to the termination depth of the investigation, which in most cases was bedrock. A summary of the observed site lithology and field observations are described below.

- FILL
  - On the Tract I site, the fill material primarily consisted of clean cover material that was applied as part of the overall scope of work for the site. The cover material consisted of a clay/silt mixture. The clean fill material on the Tract I site was generally observed from the surface to up to four ftbg.
  - On the Tract II site, the fill material primarily consists of silt with gravel and debris. The debris primarily consisted of a mixture of bricks, concrete, and wood. Fill material was generally observed from the surface to depths ranging from one to two ftbg.
- CLAY Brown or grey, clay and silt were typically encountered below the fill interval. The clay material was often moist, though not wet or saturated, and occasionally contained organics. The clay layer was generally observed from the surface to depths up to 20 ftbg.



- ORGANIC LAYER A discontinuous organic layer was encountered in test pits labeled LNAPL-11, 12, 19, 20, 23, 24, and 25. Organic layer was dark brown to black in color and consisted of silt with a high degree of organics. The organic layer was observed at depths ranging from four to six ftbg and was no thicker than one foot. It is thought that this layer may represent the original surface of the site before anthropogenic development of the site.
- SAND AND GRAVEL A basal sand and gravel layer was often observed below the clay & silt layer and was often the terminal layer before encountering bedrock. The sand and gravel occasionally contained cobbles and weathered bedrock which was difficult for the excavator to advance through. The sand and gravel was observed from depths ranging from 4 to 20 ftbg. The sand and gravel layer ranged in thickness from less than one foot to seven feet. Elevated PID readings were most often observed in this interval. Maximum PID readings in this interval ranged from 26.4 ppmv to 66.6 ppmv. Groundwater was often observed entering the test pits in this interval, carrying the NAPL at the locations shown on Figure 3. At test pits LNAPL-21 and LNAPL-23, the sand and gravel layer undermined the above soil intervals causing instability and caving of the above intervals. Due to the caving, these test pits were terminated prior to reaching the top of bedrock. Further details are provided in the test pit logs.
- BEDROCK Dark gray, dolostone bedrock was encountered at the termination of the test pits. This is consistent with prior investigation activities on-site. According to the RDWP, the dolostone is a member of the Silurian-aged Lockport Group. Bedrock was observed to be between 4 and 22 ftbg. It should be noted that surface elevation varies greatly across the NAPL investigation area, primarily due to the depression in Tract II created during the March 2015 soil removal activities. Most test pits advanced at the Tract II site were in the depression and therefore were at lower surface elevation relative to the surface elevations at the Tract I test pits. Surface and bedrock elevations are provided on **Table 2**. To illustrate the true surface and bedrock elevation across the NAPL investigation area, a cross-section figure was generated from the approximate location of LNAPL-18 north to LNAPL-25, a distance of approximately 275 feet, as shown in the Cross-Section Location Map in **Figure 4** and the Cross-Section Map in **Figure 5**. Bedrock elevation. The basal sand and gravel layer was observed to generally follow the bedrock elevation.
- At test pit LNAPL-20, a black, metallic pipe with an approximate outer diameter of 10" (initially estimated to be 12" during the test pit activities) was encountered at a depth of approximately 10 ftbg. A review of the historical Sanborn map for the site (as included as **Figure 6**) was performed and it was determined that the pipe was an inactive relic for the former Tract I structure based on the location of an 8" (presumably inner diameter) water line that ran through this area of the site and specifically at the location of LNAPL-20. Additionally, the pipe material, finish, and size were consistent with other sections previously encountered by site personnel, both upstream and downstream of the LNAPL-20 location. The pipe had been capped at the upstream and downstream locations. On May 19, 2015 a section of the pipe was removed for inspection. A photograph of the pipe is included in **Appendix A**. The inner contents consisted primarily of surrounding soil that had filled in during removal. After inspection, OSC sealed the exposed ends with clean clay material that was used to backfill the test pit.

# 4.2 NAPL Observations

NAPL in the form of a discontinuous, brown petroleum product was observed in the following test pits: LNAPL-1, 2, 9, 12, 13, 19, 20, 22, and 24. The approximate lateral extent of the observed NAPL is shown on **Figure 3**. NAPL was observed entering the test pits when groundwater was encountered at the



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basal sand and gravel layer that is located immediately above bedrock and is likely the primary route of transport across the sites from the location of the underground storage tanks removed from Tract I as shown on **Figure 3**.

During the initial NAPL investigation in February 2015, a sample of the NAPL was collected and submitted for laboratory analysis of petroleum product identification via New York State Department of Health (NYSDOH) Method 310.13. As shown in **Table 1**, laboratory results indicated that the NAPL consisted of a mixture of #6 oil and gasoline.

# 4.3 Soil Sample Analytical Results

Test pit analytical data are tabulated in **Table 3** (VOCs) and **Table 4** (SVOCs), and illustrated in **Figure** 7. The laboratory analytical reports are included in **Appendix A**. All subsurface soil analytical results were compared to guidelines provided in 6 NYCRR Part 375, Commercial Use SCOs for samples collected from Tract I, and Restricted Residential Use SCOs for samples collected from Tract II. The laboratory analytical results for the composite soil sample (E4-TD-1) collected on February 10, 2015 is also included.

A summary of the analyzed compounds is provided below:

- VOCs Concentrations of VOCs were not detected above Restricted Residential or Commercial SCOs in any of the soil samples collected from the test pits.
- SVOCs
  - Concentrations of SVOCs were detected below Commercial SCOs for all soil samples collected from test pits advanced on Tract I.
  - Concentrations of SVOCs were detected above Restricted Residential SCOs only from the composite sample collected from a stockpile of excavated soils which had been segregated due to petroleum nuisance characteristics.
  - Concentrations of SVOCs were detected below Restricted Residential SCOs for all other soil samples collected from test pits advanced on Tract II.

## 4.4 Groundwater Analytical Results

On April 27, 2015 a groundwater sample was collected from LNAPL-19 for laboratory analysis of petroleum related VOCs and SVOCs. Analytical data are tabulated in **Table 5** (VOCs) and **Table 6** (SVOCs). The laboratory analytical report is included in **Appendix A**. Groundwater analytical results were compared to NYSDEC TOGS 1.1.1 standards (or guidance values where no standard exists) Class GA, type H (WS) for protection of drinking water. A summary of the analyzed compounds is provided below:

- VOCs Concentrations of VOCs were not detected above laboratory limits or TOGS 1.1.1 standards.
- SVOCs Concentrations of SVOCs were not detected above laboratory limits or TOGS 1.1.1 standards.



# 5.0 RESTORATION EFFORTS AND WASTE DISPOSAL

Soil excavated during the investigation activities was temporarily stockpiled on-site. Upon completion of the test pits, and with NYSDEC approval, the excavated soil was backfilled into the test pits from which it originated.

Prior to backfilling the test pits, and with NYSDEC authorization, NAPL was removed from any standing water inside the test pits using buoyant hydrophobic adsorbent pads, and pumping out any collected water inside the test pits. The water was managed by OSC and discharged to the sanitary sewer manhole that is located on-site.

Excavated soil was backfilled into the test pits in the reverse order from which it was removed. As per NYSDEC direction, any soil exhibiting nuisance characteristics (e.g. petroleum staining, odors, NAPL, or elevated PID readings) was segregated for landfill disposal. It should be noted that on May 19, 2015, additional soil was excavated at the locations of test pits LNAPL-1 and LNAPL-2 to remove soils exhibiting petroleum nuisance characteristics. Additional soil grab samples were collected from test pits LNAPL-1, 2, and 9 and submitted for laboratory analysis of petroleum VOCs and SVOCs, as described in Section 3.1, to confirm that the remaining soils on the Tract II site meet applicable SCOs. In addition to collecting laboratory analysis to establish a landfill disposal profile. Any void space remaining in the test pits due to disposal of soil meeting the above characteristics was backfilled with clean soil provided by OSC in accordance with on-site requirements for both the Tract I and II sites.

From June 9 to June 10, 2015, 188 tons of soil was transported to the Modern Landfill, Inc. landfill in Model City, New York for disposal as non-hazardous, petroleum contaminated soil. Soil disposal manifests, including those from the March 2015 soil disposal are included in **Appendix D**.

As a prudent measure and with NYSDEC authorization, a moderate portion of Oxygen Release Compound Advanced<sup>®</sup> (ORC-A) was placed within the first backfill lift of each of the three Tract II test pits where NAPL had been previously observed (LNAPL-1, 2, and 9). ORC-A is a compound manufactured by Regenesis, Inc. of San Clemente, California that is utilized to accelerate the rate of naturally occurring aerobic contaminant biodegradation in groundwater and saturated soils. Approximately 225 pounds of ORC-A was distributed equally between the three test pits in an effort to causes a positive influence towards natural attenuation of any remaining petroleum contaminants. After application of the ORC-A, the test pits were backfilled to grade.

# 6.0 SUMMARY

As described in Section 4.3 and 4.4, elevated concentrations of petroleum VOCs and SVOCs in soil samples were not detected in the test pit samples collected from the Tract I and Tract II sites above applicable SCOs with the exception of the composite sample collected in February 2015, from a stockpile of excavated soils which had been segregated due to petroleum nuisance characteristics. In accordance with guidance from NYSDEC, additional grab-style soil samples were collected from test pits LNAPL-1, 2, and 9 and submitted for laboratory analysis of VOCs and SVOCs as described in Section 3.1 to confirm that the remaining soils on the Tract II site meet applicable SCOs. As discussed in Section 4.3 and shown on **Table 3** and **Table 4**, concentrations of VOCs and SVOCs were below applicable SCOs.



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As discussed in Section 4.4 and shown on **Table 5** and **Table 6**, concentrations of petroleum VOCs and SVOCs from the groundwater sample collected from test pit LNAPL-19 (where NAPL was observed) were not detected above laboratory limits or TOGS 1.1.1 standards.

NAPL has been delineated both laterally and vertically by the series of test pits that were advanced on the two sites. In addition, the laboratory analytical results for the soil and groundwater samples collected indicates that the limited presence of petroleum-based NAPL is heavily weathered due to the lack of detected VOCs and SVOCs, and has not impacted the Tract I or Tract II site soils to the extent which exceeds applicable SCOs.

As discussed in Section 5.0, 255 pounds of ORC-A was distributed equally between the three Tract II test pits where NAPL had been previously observed in an effort to assist in the further natural biodegradation of the residual NAPL in the subsurface.

During the remedial investigation activities and the excavation and relocation of metals-contaminated soil, a total of 1,404 tons of petroleum-impacted soil were transported for landfill disposal.



FIGURES



M:/Graphics/0900-Buffalo/Misc/Brightfields/Brightfields Tract I/Brightfields Tract I & II SLM.dwg, Layout1, 6/10/2015 1:18:19 PM, WShea





- PROPERTY BOUNDARY

fted by: I.G.S. N.J.)	SITE	МАР	
CKED BY: EWED BY:	BRIGHTFIELDS TRACT I & T 3001 HIGHL NIAGARA FALI	CORPORATION RACT II SITES AND AVENUE LS, NEW YORK	
ORTH	Groundwater & Envire 495 AERO DRIVE, SUITE 3, CH	onmental Servi HEEKTOWAGA, NEW Y	i <b>ces, Inc.</b> ORK 14225
$\left  \right\rangle$	SCALE IN FEET	DATE	FIGURE
<u>4</u>	0 APPROXIMATE 60	6-10-15	2







PROPERTY BOUNDARY TEST PITS

fted by: /.G.S. N.J.)	LNAPL TEST PIT	'S LOCATION MA	AP
CKED BY: EWED BY:	BRIGHTFIELDS TRACT I & T 3001 HIGHL NIAGARA FAL	CORPORATION RACT II SITES AND AVENUE LS, NEW YORK	
	Groundwater & Envire 495 AERO DRIVE, SUITE 3, CH	onmental Servi HEEKTOWAGA, NEW Y	ces, Inc. ORK 14225
$ \rangle$	SCALE IN FEET	DATE	FIGURE
4	0 APPROXIMATE 60	6-10-15	3







PROPERTY BOUNDARY TEST PITS

fted by: I.G.S. N.J.)	CROSS-SECTION	I LOCATION MA	Р
CKED BY: EWED BY:	BRIGHTFIELDS TRACT I & T 3001 HIGHL NIAGARA FAL	CORPORATION RACT II SITES AND AVENUE LS, NEW YORK	
ORTH	Groundwater & Envire 495 AERO DRIVE, SUITE 3, CH	onmental Servi HEEKTOWAGA, NEW Y	i <b>ces, Inc.</b> ORK 14225
$ \rangle$	SCALE IN FEET	DATE	FIGURE
4	0 APPROXIMATE 60	6-10-15	4





TRAVSPORTER

Brightfields Corporation Tract I and Tract II Sites 3001 Highland Avenue Niagara Falls, New York

Figure 6 Sample of Sanborn Map Showing Water Pipe





LNAPL-12
4-23-15
10'
3.8
ND
ND

ppmv

ug/kg

VOC

SVOC

ND

 PROPERTY BOUNDARY TEST PITS
 SAMPLE IDENTIFICATION
 SAMPLE DATE SAMPLE DEPTH (feet)
 PID READING (ppmv)
 TOTAL VOC CONCENTRATION (ug/kg)
 PARTS PER MILLION BY VOLUME
 MICROGRAMS PER KILOGRAM
 VOLATILE ORGANIC COMPOUNDS
 SEMI-VOLATILE ORGANIC COMPOUNDS
 NOT DETECTED

fted by: /.G.S. N.J.)	SOIL ANALYTI	CAL DATA MAP	
CKED BY: EWED BY:	BRIGHTFIELDS TRACT I & T 3001 HIGHL NIAGARA FALI	CORPORATION RACT II SITES AND AVENUE LS, NEW YORK	
ORTH	Groundwater & Envire 495 AERO DRIVE, SUITE 3, CH	onmental Servi HEEKTOWAGA, NEW Y	i <b>ces, Inc.</b> ORK 14225
$ \rangle$	SCALE IN FEET	DATE	FIGURE
4	0 APPROXIMATE 60	6-10-15	7



TABLES



## Table 1 Petroleum Identification Analysis February 2015

Sample Point	E4-TD-2	T2-WC PIPE
Location	TRACT II	TRACT II
Sample Type	SOIL	SLUDGE
Sample Date	2/10/2015	2/11/2015
Identification of Routine Petroleum Products via Me	ethod 310.13 (mg/kg)	
Gasoline	750,000	ND<480
Kerosene	ND<19,000	ND<1,200
Motor Oil	17,000	17,000
Fuel Oil #2	ND<19,000	ND<1,200
Fuel Oil #4	ND<19,000	ND<1,200
Fuel Oil #6	3,800,000	ND<1,200
Unknown Hydrocarbons	ND<7,700	ND<1,200

Notes:

ND = below laboratory detection limits NA = Not Analyzed

NC = Not Collected ftbg = feet below grade

 $\mu g/kg = micrograms per kilogram$ 



# Table 2Test Pit Location and Elevation Data

<b>TP</b> #	Northing	Easting	<b>Ground Surface Elevation</b>	Bedrock Depth (ftbg)	<b>Bedrock Elevation</b>	Depth to Gravel (ftbg)	<b>Gravel Elevation</b>
1	1135656.57	1025240.83	Not Recorded	5.0	NA	3.0	NA
2	1135661.27	1025204.89	Not Recorded	5.0	NA	3.0	NA
3	1135612.79	1025246.85	Not Recorded	Not Recorded NA Not Recorded		NA	
4	1135690.97	1025256.63	Not Recorded	Not Recorded	NA	Not Recorded	NA
5	1135661.50	1025280.96	Not Recorded	Not Recorded	NA	Not Recorded	NA
6	1135661.17	1025166.23	Not Recorded	Not Recorded	NA	Not Recorded	NA
7	1135654.54	1025130.47	Not Recorded	Not Recorded	NA	Not Recorded	NA
8	1135609.92	1025209.33	Not Recorded	Not Recorded	NA	Not Recorded	NA
9	1135691.83	1025191.00	Not Recorded	8.0	NA	6.0	NA
10	1135679.64	1025167.86	578.6	6.7	571.9	Not Observed	NA
11	1135730.26	1025177.42	582.5	10	572.5	NA	NA
12	1135735.55	1025206.87	581.0	10.5	10.5 570.5 9.		571.5
13	1135708.25	1025226.03	578.3	8.5	569.8	8.0	570.3
14	1135681.54	1025273.79	579.1	6.5	572.6	6.0	573.1
15	1135640.95	1025261.78	575.4	5	570.4	Not Observed	NA
16	1135638.99	1025221.60	575.5	4 571.5 Not Observed		NA	
17	1135631.24	1025191.14	576.3	4.5	4.5 571.8 4.0		572.3
18	1135609.19	1025162.83	580.6	9.5	571.1	8.0	572.6
19	1135758.86	1025232.11	581.5	10.5	571.0	Not Observed	NA
20	1135775.12	1025188.15	583.4	15	568.4	14.0	569.4
21	1135825.83	1025181.70	583.4	Not Reached	Not Reached	Not Observed	NA
22	1135797.67	1025223.29	583.4	19	564.4	12.0	571.4
23	1135778.28	1025147.66	583.7	Not Reached	Not Reached	18.0	565.7
24	1135798.63	1025266.44	581.7	14.5	567.2	12.0	569.7
25	1135844.64	1025257.99	582.6	22	560.6	20.0	562.6
26	1135780.18	1025299.26	580.6	15	565.6	12.0	568.6
27	1135736.98	1025277.49	580.2	10	570.2	9.5	570.7

#### Notes:

ftbg = feet below grade NA = not applicable NAD83 Datum used for Northing and Easting Elevations are above mean sea level



## Table 3 Soil Analytical Data Volatile Organic Compounds Test Pit Samples

	Sample Point			E4-TD-1	LNAPL-12	LNAPL-13	LNAPL-17	LNAPL-19*	LNAPL-20*	LNAPL-21*	LNAPL-22*	LNAPL-24
	Location			TRACT II	TRACT I	TRACT I	TRACT II	TRACT I				
		1		Restricted			Restricted					
	SCO Comparison Type	**6 NYCRR Part		Residential	Commercial	Commercial	Residential	Commercial	Commercial	Commercial	Commercial	Commercial
	Sample Type	375-6.8(b)	**6 NYCRR Part	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Depth (ftbg)	Restricted Use	375-6.8(b)	Composite	10'	8.5'	4.5'	10-10.5'	14-15'	8-10'	14-15'	14-14.5'
	Sample Date	SCOs, Restricted	Restricted Use	2/10/2015	4/23/2015	4/23/2015	4/23/2015	4/24/2015*	4/24/2015*	4/24/2015*	4/24/2015*	4/27/2015
Ph	otoionization Detector (ppmV)	Residential	SCOs, Commercial	NC	3.8	26.4	48.6	52.1	28.6	24.6	11.6	40.1
CAS #	Volatile Organic Compounds via 82600	С (µg/kg)										
95-63-6	1,2,4 TRIMETHYLBENZENE	52,000	190,000	560	ND<9.87	ND<6.94	14.2	ND<8.16	ND<9.64	ND<8.18	ND<10.9	8.87
108-67-8	1,3,5 TRIMETHYLBENZENE	52,000	190,000	140	ND<9.87	ND<6.94	ND<8.79	ND<8.16	ND<9.64	ND<8.18	ND<10.9	ND<8.55
71-43-2	BENZENE	4,800	44,000	82	ND<9.87	ND<6.94	ND<8.79	ND<8.16	ND<9.64	ND<8.18	ND<10.9	ND<8.55
100-41-4	ETHYLBENZENE	41,000	390,000	140	ND<9.87	ND<6.94	ND<8.79	ND<8.16	ND<9.64	ND<8.18	ND<10.9	ND<8.55
98-82-8	ISOPROPYLBENZENE	NS	NS	62	ND<9.87	ND<6.94	36	ND<8.16	ND<9.64	ND<8.18	ND<10.9	ND<8.55
1330-20-7	XYLENES, TOTAL	100,000	500,000	610	ND<9.87	ND<6.94	ND<8.79	ND<8.16	ND<9.64	ND<8.18	ND<10.9	ND<8.55
1634-04-4	METHYL TERT-BUTYL ETHER	100,000	500,000	ND<81	ND<9.87	ND<6.94	ND<8.79	ND<8.16	ND<9.64	ND<8.18	ND<10.9	ND<8.55
91-20-3	NAPHTHALENE	100,000	500,000	3800	ND<24.7	ND<17.4	ND<22.0	ND<20.4	ND<24.1	ND<20.5	ND<27.3	ND<21.4
104-51-8	n-BUTYLBENZENE	100,000	500,000	210	ND<9.87	14.3	81.5	10.5	ND<9.64	ND<8.18	ND<10.9	10.6
103-65-1	n-PROPYLBENZENE	100,000	500,000	160	ND<9.87	ND<6.94	36.9	ND<8.16	ND<9.64	ND<8.18	ND<10.9	ND<8.55
99-87-6	p-ISOPROPYLTOLUENE	NS	NS	62	ND<9.87	ND<6.94	ND<8.79	ND<8.16	ND<9.64	ND<8.18	ND<10.9	ND<8.55
135-98-8	sec-BUTYLBENZENE	100,000	500,000	120	ND<9.87	7.78	50.7	10.2	9.85	ND<8.18	ND<10.9	ND<8.55
98-06-6	tert-BUTYLBENZENE	100,000	500,000	ND<81	ND<9.87	ND<6.94	ND<8.79	ND<8.16	ND<9.64	ND<8.18	ND<10.9	ND<8.55
108-88-3	TOLUENE	100,000	500,000	83	ND<9.87	ND<6.94	ND<8.79	ND<8.16	ND<9.64	ND<8.18	ND<10.9	ND<8.55
	Total VOCs (ug/kg)			6,029	ND	22.1	219	20.7	9.9	ND	ND	19.5

Notes:

ND = below laboratory detection limits

NA = Not Analyzed

NC = Not Collected

ftbg = feet below grade

ppmV = parts-per-million by volume

µg/kg = micrograms per kilogram

CAS = Chemical Abstracts Services

SCO = Soil Cleanup Objective

\*Samples LNAPL-19, LNAPL-20, LNAPL-21 and LNAPL-22 were logged on the lab chain of custody as being collected in 4/23/15; however they were collected on 4/24/15

\*\*Title 6 of the Official Compilation of New York Codes, Rules and Regulations Part 375, Restricted Use Soil Cleanup Objectives for Residential Use. (micrograms per killiogram by volume) NS=Not Specified by 6 NYCRR Part 375



## Table 3 Soil Analytical Data Volatile Organic Compounds Test Pit Samples

	Sample Point			LNAPL-26	LNAPL-1	LNAPL-2	LNAPL-9
	Location			TRACT I	TRACT II	TRACT II	TRACT II
					Restricted	Restricted	Restricted
	SCO Comparison Type	**6 NYCRR Part		Commercial	Residential	Residential	Residential
	Sample Type	375-6.8(b)	**6 NYCRR Part	SOIL	SOIL	SOIL	SOIL
	Depth (ftbg)	Restricted Use	375-6.8(b)	14-15'	4-5'	3-5'	6-8'
	Sample Date	SCOs, Restricted	Restricted Use	4/27/2014	5/19/2015	5/19/2015	5/19/2015
Ph	otoionization Detector (ppmV)	Residential	SCOs, Commercial	31.8	22.3	1.6	0.9
CAS #	Volatile Organic Compounds via 8260	С (µg/kg)					
95-63-6	1,2,4 TRIMETHYLBENZENE	52,000	190,000	24.4	ND<65.0	ND<9.44	ND<7.48
108-67-8	1,3,5 TRIMETHYLBENZENE	52,000	190,000	ND<7.55	ND<65.0	ND<9.44	ND<7.48
71-43-2	BENZENE	4,800	44,000	ND<7.55	ND<65.0	ND<9.44	ND<7.48
100-41-4	ETHYLBENZENE	41,000	390,000	ND<7.55	ND<65.0	ND<9.44	ND<7.48
98-82-8	ISOPROPYLBENZENE	NS	NS	ND<7.55	ND<65.0	ND<9.44	ND<7.48
1330-20-7	XYLENES, TOTAL	100,000	500,000	8.63	68.8	ND<9.44	ND<7.48
1634-04-4	METHYL TERT-BUTYL ETHER	100,000	500,000	ND<7.55	ND<65.0	ND<9.44	ND<7.48
91-20-3	NAPHTHALENE	100,000	500,000	ND<18.9	1,430	ND<23.6	ND<18.7
104-51-8	n-BUTYLBENZENE	100,000	500,000	8.79	122	ND<9.44	ND<7.48
103-65-1	n-PROPYLBENZENE	100,000	500,000	ND<7.55	ND<65.0	ND<9.44	ND<7.48
99-87-6	p-ISOPROPYLTOLUENE	NS	NS	ND<7.55	ND<65.0	ND<9.44	ND<7.48
135-98-8	sec-BUTYLBENZENE	100,000	500,000	ND<7.55	ND<65.0	ND<9.44	ND<7.48
98-06-6	tert-BUTYLBENZENE	100,000	500,000	ND<7.55	ND<65.0	ND<9.44	ND<7.48
108-88-3	TOLUENE	100,000	500,000	ND<7.55	ND<65.0	ND<9.44	ND<7.48
	Total VOCs (ug/kg)			41.8	1,621	ND	ND

Notes:

ND = below laboratory detection limits

- NA = Not Analyzed
- NC = Not Collected

ftbg = feet below grade

ppmV = parts-per-million by volume

µg/kg = micrograms per kilogram

CAS = Chemical Abstracts Services

SCO = Soil Cleanup Objective

\*Samples LNAPL-19, LNAPL-20, LNAPL-21 and LNAPL-22 were logged on the lab chain of custod

\*\*Title 6 of the Official Compilation of New York Codes, Rules and Regulations Part 375, Restricted

NS=Not Specified by 6 NYCRR Part 375



#### Table 4 Soil Analytical Data Semi-Volatile Organic Compounds Test Pit Samples

	Sample Point			E4-TD1	LNAPL-12	LNAPL-13	LNAPL-17	LNAPL-19*	LNAPL-20*	LNAPL-21*	LNAPL-22*	LNAPL-24	LNAPL-26	LNAPL-1	LNAPL-2	LNAPL-9
	Location			TRACT II	TRACT I	TRACT I	TRACT II	TRACT I	TRACT II	TRACT II	TRACT II					
				Restricted			Restricted							Restricted	Restricted	Restricted
5	SCO Comparison Type	**6 NYCRR	**6 NYCRR	Residential	Commercial	Commercial	Residential	Commercial	Commercial	Commercial	Commercial	Commercial	Commercial	Residential	Residential	Residential
	Sample Type	Part 375-6.8(b)	Part 375-6.8(b)	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Depth (ftbg)	Restricted Use	Restricted Use	Composite	10'	8.5'	4.5'	10-10.5'	14-15'	8-10'	14-15'	14-14.5'	14-15'	4-5'	3-5'	6-8'
	Sample Date	SCOs, Restricted	SCOs,	2/10/2015	4/23/2015	4/23/2015	4/23/2015	4/24/2015*	4/24/2015*	4/24/2015*	4/24/2015*	4/27/2015	4/27/2014	5/19/2015	5/19/2015	5/19/2015
Photo	ionization Detector (ppmV)	Residential	Commercial	NC	3.8	26.4	48.6	52.1	28.6	24.6	11.6	40.1	31.8	22.3	1.6	0.9
CAS #	Semi-Volatile Organic Compour	nds via 8270D (µg/	kg)													
83-32-9	ACENAPHTHENE	100,000	500,000	7,700	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	351	ND<324	ND<323	427	646	479
208-96-8	ACENAPHTHYLENE	100,000	500,000	4,100	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	ND<304	ND<334	ND<311
120-12-7	ANTHRACENE	100,000	500,000	6,700	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	316	335	ND<311
56-55-3	BENZO(A)ANTHRACENE	1,000	5,600	ND<12,000	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	ND<304	431	ND<311
50-32-8	BENZO(A)PYRENE	1,000	1,000	2,300	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	ND<304	ND<334	ND<311
205-99-2	BENZO(B)FLUORANTHENE	1,000	5,600	2,500	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	ND<304	ND<334	ND<311
191-24-2	BENZO(G,H,I)PERYLENE	100,000	500,000	1,400	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	ND<304	ND<334	ND<311
207-08-9	BENZO(K)FLUORANTHENE	3,900	5,600	2,500	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	ND<304	ND<334	ND<311
218-01-9	CHRYSENE	3,900	5,600	4,800	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	ND<304	446	ND<311
53-70-3	DIBENZ(A,H)ANTHRACENE	330	560	ND<12,000	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	ND<304	ND<334	ND<311
206-44-0	FLUORANTHENE	100,000	500,000	6,200	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	ND<304	1,040	ND<311
86-73-7	FLUORENE	100,000	500,000	7,900	ND<291	ND<308	416	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	407	843	ND<311
193-39-5	INDENO(1,2,3-C,D)PYRENE	500	5,600	ND<12,000	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	ND<304	ND<334	ND<311
91-20-3	NAPHTHALENE	100,000	500,000	2,400	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	ND<304	ND<334	ND<311
85-01-8	PHENANTHRENE	100,000	500,000	21,000	ND<291	ND<308	943	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	1,100	544	ND<311
129-00-0	PYRENE	100,000	500,000	8,600	ND<291	ND<308	ND<305	ND<357	ND<317	ND<345	ND<314	ND<324	ND<323	ND<304	1,240	ND<311
	Total SVOCs (µg/kg)			78,100	ND	ND	1,359	ND	ND	ND	351	ND	ND	2,250	5,525	479

Notes: ND = below laboratory detection limits

NA = Not Analyzed

NC = Not Collected

ftbg = feet below grade

ppmV = parts-per-million by volume

µg/kg = micrograms per kilogram

CAS = Chemical Abstracts Services

SCO = Soil Cleanup Objective

\*Samples LNAPL-19, LNAPL-20, LNAPL-21 and LNAPL-22 were logged on the lab chain of custody as being collected in 4/23/15; however they were collected on 4/24/15

\*\*Title 6 of the Official Compilation of New York Codes, Rules and Regulations Part 375, Restricted Use Soil Cleanup Objectives for Residential Use. (micrograms per killiogram by volume) NS=Not Specified by 6 NYCRR Part 375



#### Table 5 Groundwater Analytical Data Volatile Organic Compounds Groundwater Samples

Monitoring Well	Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	Isopropylbenzene	n-propylbenzene	p-isopropyltoluene	1,2,4- trimethylbenzene	1,3,5- trimethylbenzene	n-butylbenzene	sec-buty lbenzene	naphthalene	Methyl-tert-butyl- ether (MTBE)	tert-butylbenzene	Total VOCs (μg/L)
NYSDEC TOGS 1.1.1 Groundwater Standards (ug/L)		1	5	5	5	5	5	5	5	5	5	5	10	10	5	NA
LNAPL-19	4/27/2015	ND<0.700	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<2.00	ND<5.00	ND<2.00	ND<2.00	ND<5.00

Notes:

All data presented in micrograms per Liter (ug/L). ND = None detected above laboratory limit indicated. **Bold** values indicate exceedence of Guidance Values. NA = Not Applicable TOGS 1.1.1 = Technical & Operational Guidance Series VOC= Volatile Organic Compound



#### Table 6 Groundwater Analytical Data Semi-Volatile Organic Compounds Groundwater Samples

Monitoring Well	Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzon(a)pyrene	Benzo(b)flouranthene	Benzo(g,h,i)perylene	Benzo(k)flouranthene	Chrysene	dibenzo(a,h)anthracen e	Flouranthene	Flourene	Indeno(1,2,3- cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total SVOCs (µg/L)
NYSDEC TOGS 1.1.1 Groundwater Standards (ug/L)		20	NA	50	0.002	0.002	0.002	NA	0.002	0.002	NA	50	50	0.002	10	50	50	NA
LNAPL-19	4/27/2015	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0

Notes:

All data presented in micrograms per Liter (ug/L).

ND = None detected above laboratory limit indicated.

Bold values indicate exceedence of Guidance Values.

NA = Not Applicable

TOGS 1.1.1= Technical & Operational Guidance Series SVOC= Semi-Volatile Organic Compound



# APPENDIX A

Laboratory Analytical Reports



THE LEADER IN ENVIRONMENTAL TESTING

# **ANALYTICAL REPORT**

# TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

# TestAmerica Job ID: 480-75576-1

Client Project/Site: Niagara Falls site - Tract II

# For:

AMEC Foster Wheeler E & I, Inc 800 North Bell Avenue, Suite 200 Pittsburgh, Pennsylvania 15106

Attn: Rob Crowley

Joeph V. Gisconsyn

Authorized for release by: 2/27/2015 9:40:35 AM Joe Giacomazza, Project Management Assistant II joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Manager of Project Management (716)504-9835 brian.fischer@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.



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# Qualifiers

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GC/MS VOA		Λ
Qualifier	Qualifier Description	
*	LCS or LCSD exceeds the control limits	5
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	5
Metals		
Qualifier	Qualifier Description	
В	Compound was found in the blank and sample.	
۸	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.	
General Che	mistry	8
Qualifier	Qualifier Description	
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.	9
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	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	
DFR	Duplicate error ratio (normalized absolute difference)	

DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

## Job ID: 480-75576-1

## Laboratory: TestAmerica Buffalo

#### Narrative

Job Narrative 480-75576-1

#### Receipt

The samples were received on 2/18/201550 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was  $5.5^{\circ}$  C.

#### Except:

Method(s) 1311: The following sample was collected in an improper container: PM-DISP2 (480-75576-2). The client was contacted regarding this issue, and the laboratory was instructed to proceed with analysis.

#### GC/MS VOA

Method(s) 8260C: The following sample(s) was diluted due to the nature of the TCLP matrix: (480-75576-1 MS), (480-75576-1 MSD), (LB 480-227522/1-A), PM-DISP1 (480-75576-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) for batch 228007 recovered outside control limits for the following analytes: 1,1 Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 228007 recovered above the upper control limit for 1,1 Dichloroethene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCVIS 480-228007/2).

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

#### GC/MS Semi VOA

Method(s) 8270D: The following sample was diluted due to the nature of the sample matrix: PM-DISP2 (480-75576-2). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 227638 recovered above the upper control limit for 2,4-Dinotrotoluenre. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: (CCVIS 480-227638/3).

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

#### GC Semi VOA

Method(s) 8082A: The following samples required dilution due to the matrix effects and are reported as elevated non-detections for all target analytes (Aroclors); PM-DISP1 (480-75576-1). The reported values represent the lowest limit that can be ascertained given the sample composition.

Method(s) 8082A: The following sample required a dilution due to the matrix effects and is reported as elevated non-detections for all target analytes (Aroclors); PM-DISP2 (480-75576-2). The reported values represent the lowest limit that can be ascertained given the sample composition.

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

#### Metals

Method(s) 6010C: The low level continuing calibration verification (CCVL 480-227836-30) recovered above the upper control limit for total lead. The sample(s) (480-75576-1 MS), (480-75576-1 MSD), (480-75576-1 PDS), (LCS 480-227662/3-A), (MB 480-227662/2-A), PM-DISP1 (480-75576-1) associated with this CCVL were either ND <or>
 less than the reporting limit (RL) for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

Method(s) 6010C: The TCLP Leachate Blank for preparation batch 227662 contained total barium above the reporting limit (RL). The associated sample(s) PM-DISP1 (480-75576-1) contained detects for this analyte at concentrations greater than 10X the value found in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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

## Job ID: 480-75576-1 (Continued)

### Laboratory: TestAmerica Buffalo (Continued)

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

#### **General Chemistry**

Method(s) 9040C, SM 4500 H+ B: The following sample(s) was received outside of holding time: PM-DISP2 (480-75576-2).

Method(s) 9040C: This sample was a mixed matrix sample that consisted of a layer of oil upon a layer of water. The water layer was decanted and tested for pH. The oil layer was not analyzed as it would have damaged the instrument. PM-DISP2 (480-75576-2)

Method(s) 9045C, 9045D: The following sample(s) was received outside of holding time: PM-DISP1 (480-75576-1).

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

#### **Organic Prep**

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 227438.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 227666.

Method(s) 3510C: Elevated reporting limits are provided for the following sample due to insufficient sample provided for preparation: PM-DISP2 (480-75576-2).

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 228002.

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

# **Detection Summary**

## TestAmerica Job ID: 480-75576-1

# Client Sample ID: PM-DISP1

# Lab Sample ID: 480-75576-1

Lab Sample ID: 480-75576-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type	
Barium	1.2	В	0.0020		mg/L	1	6010C	TCLP	
Cadmium	0.0092		0.0020		mg/L	1	6010C	TCLP	5
Lead	0.26	^	0.010		mg/L	1	6010C	TCLP	5
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D Method	Prep Type	
Flashpoint	>176.0		50.0		Degrees F	1	1010A	Total/NA	
рН	8.10	HF	0.100		SU	1	9045D	Total/NA	

## Client Sample ID: PM-DISP2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0038	J	0.0050	0.0013	mg/L	1	_	8260C	TCLP
Barium	0.078		0.0020		mg/L	1		6010C	TCLP
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Flashpoint	>176.0		50.0		Degrees F	1	_	1010A	Total/NA

TestAmerica Buffalo

# Client Sample ID: PM-DISP1

Date Collected: 02/18/15 12:00 Date Received: 02/18/15 17:00

Method: 8260C - TCLP Volatile	es - TCLP								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.010	0.0041	mg/L			02/21/15 06:07	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			02/21/15 06:07	10
Chlorobenzene	ND		0.010	0.0075	mg/L			02/21/15 06:07	10
Chloroform	ND		0.010	0.0034	mg/L			02/21/15 06:07	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			02/21/15 06:07	10
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			02/21/15 06:07	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			02/21/15 06:07	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			02/21/15 06:07	10
Trichloroethene	ND		0.010	0.0046	mg/L			02/21/15 06:07	10
Vinyl chloride	ND		0.010	0.0090	mg/L			02/21/15 06:07	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		66 - 137			-		02/21/15 06:07	10
Toluene-d8 (Surr)	98		71 - 126					02/21/15 06:07	10
4-Bromofluorobenzene (Surr)	96		73 - 120					02/21/15 06:07	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.010	0.00046	mg/L		02/20/15 09:49	02/23/15 16:24	1
2,4-Dinitrotoluene	ND		0.0050	0.00045	mg/L		02/20/15 09:49	02/23/15 16:24	1
Hexachlorobenzene	ND		0.0050	0.00051	mg/L		02/20/15 09:49	02/23/15 16:24	1
Hexachlorobutadiene	ND		0.0050	0.00068	mg/L		02/20/15 09:49	02/23/15 16:24	1
Hexachloroethane	ND		0.0050	0.00059	mg/L		02/20/15 09:49	02/23/15 16:24	1
3-Methylphenol	ND		0.010	0.00040	mg/L		02/20/15 09:49	02/23/15 16:24	1
2-Methylphenol	ND		0.0050	0.00040	mg/L		02/20/15 09:49	02/23/15 16:24	1
4-Methylphenol	ND		0.010	0.00036	mg/L		02/20/15 09:49	02/23/15 16:24	1
Nitrobenzene	ND		0.0050	0.00029	mg/L		02/20/15 09:49	02/23/15 16:24	1
Pentachlorophenol	ND		0.010	0.0022	mg/L		02/20/15 09:49	02/23/15 16:24	1
Pyridine	ND		0.025	0.00041	mg/L		02/20/15 09:49	02/23/15 16:24	1
2,4,5-Trichlorophenol	ND		0.0050	0.00048	mg/L		02/20/15 09:49	02/23/15 16:24	1
2,4,6-Trichlorophenol	ND		0.0050	0.00061	mg/L		02/20/15 09:49	02/23/15 16:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	97		52 - 132	02/20/15 09:49	02/23/15 16:24	1
2-Fluorobiphenyl	88		48 - 120	02/20/15 09:49	02/23/15 16:24	1
2-Fluorophenol	52		20 - 120	02/20/15 09:49	02/23/15 16:24	1
Nitrobenzene-d5	84		46 - 120	02/20/15 09:49	02/23/15 16:24	1
p-Terphenyl-d14	107		67 - 150	02/20/15 09:49	02/23/15 16:24	1
Phenol-d5	35		16 - 120	02/20/15 09:49	02/23/15 16:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		520	100	ug/Kg	₩ <del> </del> <del> </del>	02/19/15 12:13	02/20/15 14:58	2
PCB-1221	ND		520	100	ug/Kg	¢	02/19/15 12:13	02/20/15 14:58	2
PCB-1232	ND		520	100	ug/Kg	¢	02/19/15 12:13	02/20/15 14:58	2
PCB-1242	ND		520	100	ug/Kg	¢	02/19/15 12:13	02/20/15 14:58	2
PCB-1248	ND		520	100	ug/Kg	¢	02/19/15 12:13	02/20/15 14:58	2
PCB-1254	ND		520	240	ug/Kg	¢	02/19/15 12:13	02/20/15 14:58	2
PCB-1260	ND		520	240	ug/Kg	¢	02/19/15 12:13	02/20/15 14:58	2

TestAmerica Buffalo

# Lab Sample ID: 480-75576-1 Matrix: Solid

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#### Lab Sample ID: 480-75576-1 Matrix: Solid

Date Collected: 02/18/15 12:00 Date Received: 02/18/15 17:00

**Client Sample ID: PM-DISP1** 

		wat	rix:	201	IC
Pe	rcen	t So	lids	: 88	.4

5

6

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl			47 _ 176				02/19/15 12:13	02/20/15 14:58	2
Tetrachloro-m-xylene	86		46 - 175				02/19/15 12:13	02/20/15 14:58	2
	TCLP								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		02/20/15 10:05	02/21/15 11:00	1
Barium	1.2	В	0.0020		mg/L		02/20/15 10:05	02/21/15 11:00	1
Cadmium	0.0092		0.0020		mg/L		02/20/15 10:05	02/21/15 11:00	1
Chromium	ND		0.0040		mg/L		02/20/15 10:05	02/21/15 11:00	1
Lead	0.26	^	0.010		mg/L		02/20/15 10:05	02/21/15 11:00	1
Selenium	ND		0.025		mg/L		02/20/15 10:05	02/21/15 11:00	1
Silver	ND		0.0060		mg/L		02/20/15 10:05	02/21/15 11:00	1
 Method: 7470A - TCLP Mercur	v - TCLP								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		02/20/15 09:55	02/20/15 13:12	1
 General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10		mg/Kg		02/24/15 03:15	02/24/15 12:01	1
Sulfide, Reactive	ND		10		mg/Kg		02/24/15 03:15	02/24/15 10:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176.0		50.0		Degrees F			02/20/15 17:05	1
рН	8.10	HF	0.100		SU			02/23/15 12:55	1

#### Client Sample ID: PM-DISP2

Date Collected: 02/18/15 12:10 Date Received: 02/18/15 17:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0010	0.00041	mg/L			02/24/15 12:55	1
Carbon tetrachloride	ND		0.0010	0.00027	mg/L			02/24/15 12:55	1
Chlorobenzene	ND		0.0010	0.00075	mg/L			02/24/15 12:55	1
Chloroform	ND		0.0010	0.00034	mg/L			02/24/15 12:55	1
1,2-Dichloroethane	ND		0.0010	0.00021	mg/L			02/24/15 12:55	1
1,1-Dichloroethene	ND	*	0.0010	0.00029	mg/L			02/24/15 12:55	1
2-Butanone (MEK)	0.0038	J	0.0050	0.0013	mg/L			02/24/15 12:55	1
Tetrachloroethene	ND		0.0010	0.00036	mg/L			02/24/15 12:55	1
Trichloroethene	ND		0.0010	0.00046	mg/L			02/24/15 12:55	1
Vinyl chloride	ND		0.0010	0.00090	mg/L			02/24/15 12:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		66 - 137			-		02/24/15 12:55	1
Toluene-d8 (Surr)	94		71 - 126					02/24/15 12:55	1
4-Bromofluorobenzene (Surr)	97		73 - 120					02/24/15 12:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.10	0.0046	mg/L		02/19/15 09:46	02/20/15 12:11	10
2,4-Dinitrotoluene	ND		0.050	0.0045	mg/L		02/19/15 09:46	02/20/15 12:11	10
Hexachlorobenzene	ND		0.050	0.0051	mg/L		02/19/15 09:46	02/20/15 12:11	10
Hexachlorobutadiene	ND		0.050	0.0068	mg/L		02/19/15 09:46	02/20/15 12:11	10
Hexachloroethane	ND		0.050	0.0059	mg/L		02/19/15 09:46	02/20/15 12:11	10
3-Methylphenol	ND		0.10	0.0040	mg/L		02/19/15 09:46	02/20/15 12:11	10
2-Methylphenol	ND		0.050	0.0040	mg/L		02/19/15 09:46	02/20/15 12:11	10
4-Methylphenol	ND		0.10	0.0036	mg/L		02/19/15 09:46	02/20/15 12:11	10
Nitrobenzene	ND		0.050	0.0029	mg/L		02/19/15 09:46	02/20/15 12:11	10
Pentachlorophenol	ND		0.10	0.022	mg/L		02/19/15 09:46	02/20/15 12:11	10
Pyridine	ND		0.25	0.0041	mg/L		02/19/15 09:46	02/20/15 12:11	10
2,4,5-Trichlorophenol	ND		0.050	0.0048	mg/L		02/19/15 09:46	02/20/15 12:11	10
2,4,6-Trichlorophenol	ND		0.050	0.0061	mg/L		02/19/15 09:46	02/20/15 12:11	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	91		52 - 132	02/19/15 09:46	02/20/15 12:11	10
2-Fluorobiphenyl	106		48 - 120	02/19/15 09:46	02/20/15 12:11	10
2-Fluorophenol	50		20 - 120	02/19/15 09:46	02/20/15 12:11	10
Nitrobenzene-d5	93		46 - 120	02/19/15 09:46	02/20/15 12:11	10
p-Terphenyl-d14	101		67 - 150	02/19/15 09:46	02/20/15 12:11	10
Phenol-d5	32		16 - 120	02/19/15 09:46	02/20/15 12:11	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.5	0.88	ug/L		02/24/15 09:24	02/24/15 16:30	2
PCB-1221	ND		2.5	0.88	ug/L		02/24/15 09:24	02/24/15 16:30	2
PCB-1232	ND		2.5	0.88	ug/L		02/24/15 09:24	02/24/15 16:30	2
PCB-1242	ND		2.5	0.88	ug/L		02/24/15 09:24	02/24/15 16:30	2
PCB-1248	ND		2.5	0.88	ug/L		02/24/15 09:24	02/24/15 16:30	2
PCB-1254	ND		2.5	1.3	ug/L		02/24/15 09:24	02/24/15 16:30	2
PCB-1260	ND		2.5	1.3	ug/L		02/24/15 09:24	02/24/15 16:30	2

TestAmerica Buffalo

Lab Sample ID: 480-75576-2

Matrix: Water

#### Lab Sample ID: 480-75576-2 Matrix: Water

5 6 7

Date Collected: 02/18/15 12:10 Date Received: 02/18/15 17:00

**Client Sample ID: PM-DISP2** 

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	81		19 - 126				02/24/15 09:24	02/24/15 16:30	2
Tetrachloro-m-xylene	41		23 - 127				02/24/15 09:24	02/24/15 16:30	2
Method: 6010C - Metals (ICP)	- TCLP								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		02/19/15 11:45	02/20/15 10:26	1
Barium	0.078		0.0020		mg/L		02/19/15 11:45	02/20/15 10:26	1
Cadmium	ND		0.0020		mg/L		02/19/15 11:45	02/20/15 10:26	1
Chromium	ND		0.0040		mg/L		02/19/15 11:45	02/20/15 10:26	1
Lead	ND		0.010		mg/L		02/19/15 11:45	02/20/15 10:26	1
Selenium	ND		0.025		mg/L		02/19/15 11:45	02/20/15 10:26	1
Silver	ND		0.0060		mg/L		02/19/15 11:45	02/20/15 10:26	1
Method: 7470A - Mercury (C)	(AA) - TCLP								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		02/19/15 12:25	02/19/15 14:59	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		10.0		mg/L		02/24/15 03:15	02/24/15 11:58	1
Sulfide, Reactive	ND		10.0		mg/L		02/24/15 03:15	02/24/15 10:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176.0		50.0		Degrees F			02/20/15 17:05	1
рН	7.58	HF	0.100		SU			02/20/15 12:40	1

#### TestAmerica Job ID: 480-75576-1

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

#### Method: 8260C - TCLP Volatiles

Matrix: Solid					Prep Type: Total/NA
				Percent Surrog	ate Recovery (Acceptance Limits)
		12DCE	TOL	BFB	
Lab Sample ID	Client Sample ID	(66-137)	(71-126)	(73-120)	
LCS 480-227775/4	Lab Control Sample	102	98	98	
MB 480-227775/6	Method Blank	102	96	95	
Surrogate Legend					
12DCE = 1,2-Dichloroe	ethane-d4 (Surr)				
IOL = Ioluene-d8 (Su	irr)				
BFB = 4-Bromofluorob	penzene (Surr)				
Method: 8260C - T	CLP Volatiles				
Matrix: Solid					Prep Type: TCLP

				Percent Surro	gate Recovery (Acceptance Limits)
		12DCE	TOL	BFB	
Lab Sample ID	Client Sample ID	(66-137)	(71-126)	(73-120)	
480-75576-1	PM-DISP1	107	98	96	
480-75576-1 MS	PM-DISP1	107	97	97	
480-75576-1 MSD	PM-DISP1	104	96	96	
LB 480-227522/1-A	Method Blank	108	101	96	
Surrogate Legend					
12DCE = 1,2-Dichloroeth	hane-d4 (Surr)				
TOL = Toluene-d8 (Surr	)				
BFB = 4-Bromofluorober	nzene (Surr)				

### Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

		Percent Surrogate Recovery (Acceptance Limits)							
		12DCE	TOL	BFB					
Lab Sample ID	Client Sample ID	(66-137)	(71-126)	(73-120)					
LCS 480-228007/4	Lab Control Sample	86	93	94					
MB 480-228007/6	Method Blank	86	96	92					
Surrogate Legend									

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

#### Method: 8260C - Volatile Organic Compounds by GC/MS

#### Matrix: Water

				Percent Surrog	ate Recovery (Acceptance Limits
		12DCE	TOL	BFB	
Lab Sample ID	Client Sample ID	(66-137)	(71-126)	(73-120)	
480-75576-2	PM-DISP2	89	94	97	
Surrogate Legend	ethane-d4 (Surr)				
TOI = Toluene-d8 (Si					
	() ()				

Prep Type: TCLP

Prep Type: Total/NA

# Prep Type: Total/NA

Prep Type: TCLP

Prep Type: Total/NA

Matrix: Solid								Prep Type: Tot
				Percent Su	rrogate Reco	very (Accept	ance Limits	)
		ТВР	FBP	2FP	NBZ	TPH	PHL	
Lab Sample ID	Client Sample ID	(52-132)	(48-120)	(20-120)	(46-120)	(67-150)	(16-120)	
LCS 480-227666/2-A	Lab Control Sample	103	92	54	88	103	40	
LCSD 480-227666/3-A	Lab Control Sample Dup	101	93	58	90	106	41	
MB 480-227666/1-A	Method Blank	70	71	45	67	95	32	
Surrogate Legend								
TBP = 2,4,6-Tribromophe	enol							
FBP = 2-Fluorobiphenyl								
2FP = 2-Fluorophenol								
NBZ = Nitrobenzene-d5								
TPH = p-Terphenyl-d14								
PHL = Phenol-d5								

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

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

Matrix:	Solid	

		Percent Surrogate Recovery (Acceptance Limits)							
		ТВР	FBP	2FP	NBZ	TPH	PHL		
Lab Sample ID	Client Sample ID	(52-132)	(48-120)	(20-120)	(46-120)	(67-150)	(16-120)		
480-75576-1	PM-DISP1	97	88	52	84	107	35		
LB 480-227516/1-D	Method Blank	90	87	54	85	105	37		
Surrogate Legend									
TBP = 2,4,6-Tribromop	henol								
EPD = 2 Eluorohinhon	d								

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol NBZ = Nitrobenzene-d5

TPH = p-Terphenyl-d14 PHL = Phenol-d5

#### Method: 8270D - Semivolatile Organic Compounds (GC/MS) Matrix: Water

		Percent Surrogate Recovery (Acceptance Limits)						
		TBP	FBP	2FP	NBZ	TPH	PHL	
Lab Sample ID	Client Sample ID	(52-132)	(48-120)	(20-120)	(46-120)	(67-150)	(16-120)	
LCS 480-227438/2-A	Lab Control Sample	101	92	57	87	101	41	
LCSD 480-227438/3-A	Lab Control Sample Dup	104	96	57	94	106	42	
MB 480-227438/1-A	Method Blank	98	91	55	91	110	39	

#### Surrogate Legend

TBP = 2,4,6-Tribromophenol

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol

NBZ = Nitrobenzene-d5

TPH = p-Terphenyl-d14

PHL = Phenol-d5

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

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

Matrix: Water								Prep Type: TCLP
				Percent Su	rrogate Reco	very (Accept	ance Limits)	
		ТВР	FBP	2FP	NBZ	TPH	PHL	
Lab Sample ID	Client Sample ID	(52-132)	(48-120)	(20-120)	(46-120)	(67-150)	(16-120)	
480-75576-2	PM-DISP2	91	106	50	93	101	32	
Surrogate Legend								
TBP = 2,4,6-Tribron	nophenol							
FBP = 2-Fluorobiph	enyl							
2FP = 2-Fluoropher	nol							
NBZ = Nitrobenzene	e-d5							
TPH = p-Terphenyl-	d14							
PHL = Phenol-d5								

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

Matrix: Solid				Prep Type: Total/NA
_				Percent Surrogate Recovery (Acceptance Limits)
		DCB2	TCX2	
Lab Sample ID	Client Sample ID	(47-176)	(46-175)	
480-75576-1	PM-DISP1	112	86	
LCS 480-227507/2-A	Lab Control Sample	133	119	
MB 480-227507/1-A	Method Blank	120	106	
Surrogate Legend				
DCB = DCB Decachlor	obiphenyl			
TCX = Tetrachloro-m-xy	ylene			

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

#### Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		DCB2	TCX2	
Lab Sample ID	Client Sample ID	(19-126)	(23-127)	
480-75576-2	PM-DISP2	81	41	
LCS 480-228002/2-A	Lab Control Sample	53	58	
LCSD 480-228002/3-A	Lab Control Sample Dup	67	75	
MB 480-228002/1-A	Method Blank	84	73	

#### Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

#### Method: 8260C - TCLP Volatiles

#### Lab Sample ID: MB 480-227775/6 Matrix: Solid

Analysis Batch: 227775

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0010	0.00041	mg/L			02/20/15 22:12	1
Carbon tetrachloride	ND		0.0010	0.00027	mg/L			02/20/15 22:12	1
Chlorobenzene	ND		0.0010	0.00075	mg/L			02/20/15 22:12	1
Chloroform	ND		0.0010	0.00034	mg/L			02/20/15 22:12	1
1,2-Dichloroethane	ND		0.0010	0.00021	mg/L			02/20/15 22:12	1
1,1-Dichloroethene	ND		0.0010	0.00029	mg/L			02/20/15 22:12	1
2-Butanone (MEK)	ND		0.0050	0.0013	mg/L			02/20/15 22:12	1
Tetrachloroethene	ND		0.0010	0.00036	mg/L			02/20/15 22:12	1
Trichloroethene	ND		0.0010	0.00046	mg/L			02/20/15 22:12	1
Vinyl chloride	ND		0.0010	0.00090	mg/L			02/20/15 22:12	1
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137			-		02/20/15 22:12	1

1,2-Dichloroethane-d4 (Surr)	102	66 - 137	02/20/15 22:12
Toluene-d8 (Surr)	96	71 - 126	02/20/15 22:12
4-Bromofluorobenzene (Surr)	95	73 - 120	02/20/15 22:12

#### Lab Sample ID: LCS 480-227775/4

#### Matrix: Solid Analysis Batch: 227775

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0250	0.0242		mg/L		97	71 _ 124	
Chlorobenzene	0.0250	0.0245		mg/L		98	72 <sub>-</sub> 120	
1,2-Dichloroethane	0.0250	0.0247		mg/L		99	75 - 127	
1,1-Dichloroethene	0.0250	0.0224		mg/L		90	58 <sub>-</sub> 121	
Tetrachloroethene	0.0250	0.0255		mg/L		102	74 <sub>-</sub> 122	
Trichloroethene	0.0250	0.0246		mg/L		98	74 - 123	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		66 - 137
Toluene-d8 (Surr)	98		71 - 126
4-Bromofluorobenzene (Surr)	98		73 - 120

#### Lab Sample ID: LB 480-227522/1-A Matrix: Solid

#### Analysis Batch: 227775

	LB	LB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.010	0.0041	mg/L			02/21/15 05:44	10
Carbon tetrachloride	ND		0.010	0.0027	mg/L			02/21/15 05:44	10
Chlorobenzene	ND		0.010	0.0075	mg/L			02/21/15 05:44	10
Chloroform	ND		0.010	0.0034	mg/L			02/21/15 05:44	10
1,2-Dichloroethane	ND		0.010	0.0021	mg/L			02/21/15 05:44	10
1,1-Dichloroethene	ND		0.010	0.0029	mg/L			02/21/15 05:44	10
2-Butanone (MEK)	ND		0.050	0.013	mg/L			02/21/15 05:44	10
Tetrachloroethene	ND		0.010	0.0036	mg/L			02/21/15 05:44	10
Trichloroethene	ND		0.010	0.0046	mg/L			02/21/15 05:44	10

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2/27/2015

Client Sample ID: Method Blank

Prep Type: Total/NA

### Client Sample ID: Lab Control Sample

**Client Sample ID: Method Blank** 

Prep Type: TCLP

Prep Type: Total/NA

4

1

1

Lab Sample ID: LB 480-227522/1-A

Matrix: Solid

Analyte

Vinyl chloride

Surrogate

Toluene-d8 (Surr)

Analysis Batch: 227775

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

Method: 8260C - TCLP Volatiles (Continued)

**Client Sample ID: Method Blank** 

Analyzed

02/21/15 05:44

Analyzed

02/21/15 05:44

02/21/15 05:44

02/21/15 05:44

Prep Type: TCLP

Dil Fac

10

# 2 3 4 5 6

# Dil Fac 7 10 8 10 9 DISP1 10 TCLP 10

Client Sample ID: PM-DISP1 Prep Type: TCLP

Lab Sample ID: 480-75576-1 MS Matrix: Solid Analysis Batch: 227775

	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	ND		0.250	0.259		mg/L		104	71 - 124
Chlorobenzene	ND		0.250	0.248		mg/L		99	72 <sub>-</sub> 120
1,2-Dichloroethane	ND		0.250	0.265		mg/L		106	75 <sub>-</sub> 127
1,1-Dichloroethene	ND		0.250	0.262		mg/L		105	58 <sub>-</sub> 121
Tetrachloroethene	ND		0.250	0.265		mg/L		106	74 <sub>-</sub> 122
Trichloroethene	ND		0.250	0.255		mg/L		102	74 - 123
	MS	MS							

**QC Sample Results** 

RL

0.010

Limits

66 - 137

71 - 126

73 - 120

MDL Unit

0.0090 mg/L

D

Prepared

Prepared

LB LB

LB LB

%Recovery Qualifier

108

101

96

ND

**Result Qualifier** 

		1110	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		66 - 137
Toluene-d8 (Surr)	97		71 - 126
4-Bromofluorobenzene (Surr)	97		73 - 120

#### Lab Sample ID: 480-75576-1 MSD Matrix: Solid Analysis Batch: 227775

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	ND		0.250	0.245		mg/L		98	71 - 124	5	13
Chlorobenzene	ND		0.250	0.239		mg/L		96	72 _ 120	4	25
1,2-Dichloroethane	ND		0.250	0.252		mg/L		101	75 _ 127	5	20
1,1-Dichloroethene	ND		0.250	0.239		mg/L		96	58 <sub>-</sub> 121	9	16
Tetrachloroethene	ND		0.250	0.253		mg/L		101	74 <sub>-</sub> 122	5	20
Trichloroethene	ND		0.250	0.250		mg/L		100	74 - 123	2	16
	MSD	MSD									

14/30	WISD	
%Recovery	Qualifier	Limits
104		66 - 137
96		71 - 126
96		73 - 120
	**************************************	%Recovery     Qualifier       104     96       96

#### Client Sample ID: PM-DISP1 Prep Type: TCLP

RL

0.0010

0.0010

0.0010

0.0010

0.0010

0.0010

0.0050

0.0010

0.0010

0.0010

Limits

66 - 137

71 - 126

73 - 120

Lab Sample ID: MB 480-228007/6

Matrix: Water

Carbon tetrachloride

1,2-Dichloroethane

1,1-Dichloroethene

2-Butanone (MEK)

Tetrachloroethene

Toluene-d8 (Surr)

Trichloroethene

Vinyl chloride

Surrogate

Chlorobenzene

Chloroform

Analyte

Benzene

Analysis Batch: 228007

Method: 8260C - Volatile Organic Compounds by GC/MS

MB MB Result Qualifier

ND

86

96

92

%Recovery

MB MB /ery Qualifier **Client Sample ID: Method Blank** 

Analyzed

02/24/15 12:00

02/24/15 12:00

02/24/15 12:00

02/24/15 12:00

02/24/15 12:00

02/24/15 12:00

02/24/15 12:00

02/24/15 12:00

02/24/15 12:00

02/24/15 12:00

Analyzed

02/24/15 12:00

02/24/15 12:00

02/24/15 12:00

Prep Type: Total/NA

Prep Type: Total/NA

Dil Fac

1

1

1

1

1

1

1

1

1

1

1

Dil Fac

## 2 3 4 5

# 6 7 8 9 10

11 12 13

Client Sample ID: Lab	Control Sample

MDL Unit

0.00041 mg/L

0.00027 mg/L

0.00075 mg/L

0.00034 mg/L

0.00021 mg/L

0.00029 mg/L

0.0013 mg/L

0.00036 mg/L

0.00046 mg/L

0.00090 mg/L

D

Prepared

Prepared

#### Matrix: Water Analysis Batch: 228007

4-Bromofluorobenzene (Surr)

Lab Sample ID: LCS 480-228007/4

1,2-Dichloroethane-d4 (Surr)

4-Bromofluorobenzene (Surr)

			Spike	LCS	LCS				%Rec.	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene			0.0250	0.0261		mg/L		104	71 - 124	_
Chlorobenzene			0.0250	0.0245		mg/L		98	72 <sub>-</sub> 120	
1,2-Dichloroethane			0.0250	0.0226		mg/L		90	75 - 127	
1,1-Dichloroethene			0.0250	0.0382	*	mg/L		153	58 <sub>-</sub> 121	
Tetrachloroethene			0.0250	0.0240		mg/L		96	74 <sub>-</sub> 122	
Trichloroethene			0.0250	0.0271		mg/L		108	74 - 123	
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
1,2-Dichloroethane-d4 (Surr)	86		66 - 137							
Toluene-d8 (Surr)	93		71 - 126							

73 - 120

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

94

#### Lab Sample ID: MB 480-227438/1-A **Client Sample ID: Method Blank** Prep Type: Total/NA Matrix: Water Analysis Batch: 227638 Prep Batch: 227438 MB MB MDL Unit Result Qualifier Analyzed Dil Fac Analyte RL D Prepared 1,4-Dichlorobenzene ND 0.0025 0.00012 mg/L 02/19/15 08:30 02/20/15 09:50 1 2,4-Dinitrotoluene ND 0.0013 0.00011 mg/L 02/19/15 08:30 02/20/15 09:50 1 Hexachlorobenzene ND 0.0013 0.00013 mg/L 02/19/15 08:30 02/20/15 09:50 Hexachlorobutadiene ND 0.0013 0.00017 mg/L 02/19/15 08:30 02/20/15 09:50 ND Hexachloroethane 0.0013 0.00015 mg/L 02/19/15 08:30 02/20/15 09:50 1 3-Methylphenol ND 0.0025 0.00010 mg/L 02/19/15 08:30 02/20/15 09:50 1 ND 0.0013 0.00010 mg/L 02/19/15 08:30 02/20/15 09:50 2-Methylphenol 1

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 227438

Prep Type: Total/NA

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

Lab Sample ID: MB 480-227438/1-A							Client Sa	mple ID: Metho	d Blank
Matrix: Water								Prep Type: T	otal/NA
Analysis Batch: 227638								Prep Batch:	227438
-	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methylphenol	ND		0.0025	0.000090	mg/L		02/19/15 08:30	02/20/15 09:50	1
Nitrobenzene	ND		0.0013	0.000073	mg/L		02/19/15 08:30	02/20/15 09:50	1
Pentachlorophenol	ND		0.0025	0.00055	mg/L		02/19/15 08:30	02/20/15 09:50	1
Pyridine	ND		0.0063	0.00010	mg/L		02/19/15 08:30	02/20/15 09:50	1
2,4,5-Trichlorophenol	ND		0.0013	0.00012	mg/L		02/19/15 08:30	02/20/15 09:50	1
2,4,6-Trichlorophenol	ND		0.0013	0.00015	mg/L		02/19/15 08:30	02/20/15 09:50	1
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	98		52 - 132				02/19/15 08:30	02/20/15 09:50	1
2 Eluarabinhanyl	01		10 100				02/10/15 00.20	02/20/15 00.50	1

91	40 - 120	02/19/15 08:30 02/20/15 09:50	1
55	20 - 120	02/19/15 08:30 02/20/15 09:50	1
91	46 - 120	02/19/15 08:30 02/20/15 09:50	1
110	67 - 150	02/19/15 08:30 02/20/15 09:50	1
39	16 - 120	02/19/15 08:30 02/20/15 09:50	1
	55 91 110 39	57     46 - 120       55     20 - 120       91     46 - 120       110     67 - 150       39     16 - 120	51       46 - 120       02/19/15 08:30       02/20/15 09:50         55       20 - 120       02/19/15 08:30       02/20/15 09:50         91       46 - 120       02/19/15 08:30       02/20/15 09:50         110       67 - 150       02/19/15 08:30       02/20/15 09:50         39       16 - 120       02/19/15 08:30       02/20/15 09:50

Lab Sample ID: LCS 480-227438/2-A
Matrix: Water
Analysis Batch: 227638

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,4-Dichlorobenzene	0.0500	0.0333		mg/L		67	32 - 120	
2,4-Dinitrotoluene	0.0500	0.0502		mg/L		100	65 _ 154	
Hexachloroethane	0.0500	0.0332		mg/L		66	14 - 101	
Pentachlorophenol	0.100	0.0908		mg/L		91	39 - 136	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2,4,6-Tribromophenol	101		52 - 132
2-Fluorobiphenyl	92		48 - 120
2-Fluorophenol	57		20 - 120
Nitrobenzene-d5	87		46 - 120
p-Terphenyl-d14	101		67 - 150
Phenol-d5	41		16 - 120

#### Lab Sample ID: LCSD 480-227438/3-A Matrix: Water

Analysis Batch: 227638							Prep	Batch: 2	27438
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,4-Dichlorobenzene	0.0500	0.0317		mg/L		63	32 - 120	5	36
2,4-Dinitrotoluene	0.0500	0.0545		mg/L		109	65 - 154	8	20
Hexachloroethane	0.0500	0.0316		mg/L		63	14 _ 101	5	46
Pentachlorophenol	0.100	0.0948		mg/L		95	39 - 136	4	37

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
2,4,6-Tribromophenol	104		52 - 132
2-Fluorobiphenyl	96		48 - 120
2-Fluorophenol	57		20 - 120

#### TestAmerica Buffalo

3 4 5

Pentachlorophenol

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

# 2 3 4 5 6 7 8 9 10

Lab Sample ID: LCSD 480-227438/3-A							Client Sample ID: Lab Control Sample Dup						
Matrix: Water									Prep Type: 1	Total/NA			
Analysis Batch: 227638									Prep Batch:	227438			
	LCSD L	CSD											
Surrogate %	Recovery Q	ualifier	Limits										
Nitrobenzene-d5	94		46 - 120										
p-Terphenyl-d14	106		67 - 150										
Phenol-d5	42		16 - 120										
Lab Sample ID: MB 480-227666/1-A								Client Sa	mple ID: Metho	d Blank			
Matrix: Solid									Prep Type: 1	Total/NA			
Analysis Batch: 227861									Prep Batch:	227666			
	M	B MB											
Analyte	Resu	It Qualifier	RL	MDL	Unit	0	) Р	Prepared	Analyzed	Dil Fac			
1,4-Dichlorobenzene	N	D	0.0025	0.00012	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
2,4-Dinitrotoluene	N	D	0.0013	0.00011	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
Hexachlorobenzene	N	D	0.0013	0.00013	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
Hexachlorobutadiene	N	D	0.0013	0.00017	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
Hexachloroethane	N	D	0.0013	0.00015	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
3-Methylphenol	N	D	0.0025	0.00010	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
2-Methylphenol	N	D	0.0013	0.00010	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
4-Methylphenol	N	D	0.0025	0.000090	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
Nitrobenzene	N	D	0.0013	0.000073	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
Pentachlorophenol	N	D	0.0025	0.00055	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
Pyridine	N	D	0.0063	0.00010	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
2,4,5-Trichlorophenol	N	D	0.0013	0.00012	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
2,4,6-Trichlorophenol	N	D	0.0013	0.00015	mg/L		02/2	20/15 09:49	02/23/15 14:48	1			
	N	B MB											
Surrogate	%Recove	ry Qualifier	Limits				P	Prepared	Analyzed	Dil Fac			
2,4,6-Tribromophenol	1	70	52 - 132				02/2	20/15 09:49	02/23/15 14:48	1			
2-Fluorobiphenyl	1	71	48 - 120				02/2	20/15 09:49	02/23/15 14:48	1			
2-Fluorophenol	4	15	20 - 120				02/2	20/15 09:49	02/23/15 14:48	1			
Nitrobenzene-d5	6	67	46 - 120				02/2	20/15 09:49	02/23/15 14:48	1			
p-Terphenyl-d14	9	95	67 - 150				02/2	20/15 09:49	02/23/15 14:48	1			
Phenol-d5		32	16 - 120				02/2	20/15 09:49	02/23/15 14:48	1			
Lab Sample ID: LCS 480-227666/2-	Α						Client	t Sample	D: Lab Control	Sample			
Matrix: Solid									Prep Type: 1	Total/NA			
Analysis Batch: 227861									Prep Batch:	227666			
			Spike	LCS LCS	3				%Rec.				
Analyte			Added	Result Qua	alifier	Unit	D	%Rec	Limits				
1,4-Dichlorobenzene			0.0500	0.0322		mg/L		64	32 - 120				
2,4-Dinitrotoluene			0.0500	0.0503		mg/L		101	65 - 154				
Hexachloroethane			0.0500	0.0310		mg/L		62	14 - 101				

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2,4,6-Tribromophenol	103		52 - 132
2-Fluorobiphenyl	92		48 - 120
2-Fluorophenol	54		20 - 120
Nitrobenzene-d5	88		46 - 120
p-Terphenyl-d14	103		67 _ 150

0.0900

mg/L

0.100

TestAmerica Buffalo

90

39 - 136

Lab Sample ID: LCS 480-227666/2-A

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

**Client Sample ID: Lab Control Sample** 

# 1 2 3 4 5 6 7 8 9 10

11 12 13

15

Matrix: Solid												Prep 1	Type: To	otal/NA
Analysis Batch: 227861												Prep	Batch: 2	227666
-	1.05	100												
Surrogato	% Pocovory	LUS	lifior	Limite										
Bhonol d5		Qua		16 120										
-	40			10 - 120										
Lab Sample ID: LCSD 480-2	27666/3-A							Cli	ent	Sam	ple ID: L	ab Contro	ol Samp	le Dup
Matrix: Solid											•	Prep 1	Tvpe: To	otal/NA
Analysis Batch: 227861												Prep	Batch:	227666
				Spike	LCSD	LCS	D					%Rec.		RPD
Analyte				Added	Result	Qual	lifier	Unit		D	%Rec	Limits	RPD	Limit
1,4-Dichlorobenzene				0.0500	0.0307			mg/L			61	32 - 120	5	36
2,4-Dinitrotoluene				0.0500	0.0523			mg/L			105	65 - 154	4	20
Hexachloroethane				0.0500	0.0286			mg/L			57	14 - 101	8	46
Pentachlorophenol				0.100	0.0934			mg/L			93	39 - 136	4	37
	LCSD	105	n											
Surrogate	%Recovery	Qua	Lifier	Limits										
2.4.6-Tribromophenol				52 - 132										
2-Fluorobiphenyl	93			48 - 120										
2-Fluorophenol	58			20 - 120										
Nitrobenzene-d5	90			46 - 120										
p-Terphenyl-d14	106			67 - 150										
Phenol-d5	41			16 - 120										
- Lab Sample ID: LB 480-2275	516/1-D										Client Sa	mple ID:	Method	Blank
Matrix: Solid												Pre	ep Type	: TCLP
Analysis Batch: 227861												Prep	Batch:	227666
,		LB	LB											
Analyte	R	esult	Qualifier	RL	N	NDL	Unit		D	Р	repared	Analy	zed	Dil Fac
1,4-Dichlorobenzene		ND		0.010	0.00	046	mg/L		_	02/2	0/15 09:49	02/23/15	16:00	1
2,4-Dinitrotoluene		ND		0.0050	0.00	045	mg/L			02/2	0/15 09:49	02/23/15	16:00	1
Hexachlorobenzene		ND		0.0050	0.00	051	mg/L			02/2	0/15 09:49	02/23/15	16:00	1
Hexachlorobutadiene		ND		0.0050	0.00	068	mg/L			02/2	0/15 09:49	02/23/15	16:00	1
Hexachloroethane		ND		0.0050	0.00	059	mg/L			02/2	0/15 09:49	02/23/15	16:00	1
3-Methylphenol		ND		0.010	0.00	040	mg/L			02/2	0/15 09:49	02/23/15	16:00	1
2-Methylphenol		ND		0.0050	0.00	040	mg/L			02/2	0/15 09:49	02/23/15	16:00	1
4-Methylphenol		ND		0.010	0.00	036	mg/L			02/2	0/15 09:49	02/23/15	16:00	1
Nitrobenzene		ND		0.0050	0.00	029	mg/L			02/2	0/15 09:49	02/23/15	16:00	1
Pentachlorophenol		ND		0.010	0.0	022	mg/L			02/2	0/15 09:49	02/23/15	16:00	1
Pyridine		ND		0.025	0.00	041	mg/L			02/2	0/15 09:49	02/23/15	16:00	1
2,4,5-Trichlorophenol		ND		0.0050	0.00	048	mg/L			02/2	0/15 09:49	02/23/15	16:00	1
2,4,6-Trichlorophenol		ND		0.0050	0.00	061	mg/L			02/2	0/15 09:49	02/23/15	16:00	1
		LB	LB											

	Analyzed	Dil Fac
Surrogate %Recovery Qualifier Limits Prepared		Dirruc
2,4,6-Tribromophenol         90         52 - 132         02/20/15 09.	:49 02/23/15 16:00	1
2-Fluorobiphenyl 87 48 - 120 02/20/15 09	:49 02/23/15 16:00	1
2-Fluorophenol 54 20 - 120 02/20/15 09	:49 02/23/15 16:00	1
Nitrobenzene-d5 85 46 - 120 02/20/15 09.	:49 02/23/15 16:00	1
p-Terphenyl-d14 105 67 - 150 02/20/15 09.	:49 02/23/15 16:00	1
Phenol-d5 37 16 - 120 02/20/15 09	:49 02/23/15 16:00	1

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

Lab Sample ID: MB 480-227507/1-A Matrix: Solid Analysis Batch: 227665							Client Sa	mple ID: Metho Prep Type: T Prep Batch:	d Blank otal/NA 227507
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		240	47	ug/Kg		02/19/15 12:08	02/20/15 11:31	1
PCB-1221	ND		240	47	ug/Kg		02/19/15 12:08	02/20/15 11:31	1
PCB-1232	ND		240	47	ug/Kg		02/19/15 12:08	02/20/15 11:31	1
PCB-1242	ND		240	47	ug/Kg		02/19/15 12:08	02/20/15 11:31	1
PCB-1248	ND		240	47	ug/Kg		02/19/15 12:08	02/20/15 11:31	1
PCB-1254	ND		240	110	ug/Kg		02/19/15 12:08	02/20/15 11:31	1
PCB-1260	ND		240	110	ug/Kg		02/19/15 12:08	02/20/15 11:31	1
	МВ	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	120		47 _ 176				02/19/15 12:08	02/20/15 11:31	1
Tetrachloro-m-xylene	106		46 - 175				02/19/15 12:08	02/20/15 11:31	1

#### Lab Sample ID: LCS 480-227507/2-A Matrix: Solid Analysis Batch: 227665

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
PCB-1016	2130	2750		ug/Kg		129	51 _ 185	 
PCB-1260	2130	3030		ug/Kg		142	61 - 184	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	133		47 - 176
Tetrachloro-m-xylene	119		46 - 175

#### Lab Sample ID: MB 480-228002/1-A Matrix: Water

#### Analysis Batch: 228070

	MB	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.18	ug/L		02/24/15 09:24	02/24/15 15:46	1
PCB-1221	ND		0.50	0.18	ug/L		02/24/15 09:24	02/24/15 15:46	1
PCB-1232	ND		0.50	0.18	ug/L		02/24/15 09:24	02/24/15 15:46	1
PCB-1242	ND		0.50	0.18	ug/L		02/24/15 09:24	02/24/15 15:46	1
PCB-1248	ND		0.50	0.18	ug/L		02/24/15 09:24	02/24/15 15:46	1
PCB-1254	ND		0.50	0.25	ug/L		02/24/15 09:24	02/24/15 15:46	1
PCB-1260	ND		0.50	0.25	ug/L		02/24/15 09:24	02/24/15 15:46	1
	МВ	МВ							

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	84		19 - 126	02/24/15 09:	24 02/24/15 15:46	1
Tetrachloro-m-xylene	73		23 - 127	02/24/15 09:	24 02/24/15 15:46	1

Lab Sample ID: LCS 480-228002/2-A Matrix: Water							ID: Lab C	ontrol Sample
Matrix: Water							Prep 1	Total/NA
Analysis Batch: 228070							Prep	Batch: 228002
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
PCB-1016	4.00	2.76		ug/L		69	51 - 137	

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8

**Client Sample ID: Lab Control Sample** 

**Client Sample ID: Method Blank** 

Prep Type: Total/NA Prep Batch: 228002

Prep Type: Total/NA Prep Batch: 227507

**8** 9

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

Lab Sample ID: LCS 480-228 Matrix: Water Analysis Batch: 228070	8002/2-A						Client	: Sample	ID: Lab Co Prep Ty Prep B	ntrol Sample pe: Total/NA atch: 228002
-			Spike	LCS	LCS				%Rec.	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
PCB-1260			4.00	2.70		ug/L		68	45 _ 139	
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
DCB Decachlorobiphenyl	53		19 - 126							
Tetrachloro-m-xylene	58		23 - 127							

Lab Sample ID: LCSD 480-22	Sample ID: LCSD 480-228002/3-A						ent Sam	ple ID:	Lab Contro	I Sampl	e Dup
Matrix: Water									Prep T	ype: To	tal/NA
Analysis Batch: 228070									Batch: 228002		
			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016			4.00	3.41		ug/L		85	51 - 137	21	50
PCB-1260			4.00	3.49		ug/L		87	45 - 139	26	50
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
DCB Decachlorobiphenyl	67		19 _ 126								
Tetrachloro-m-xylene	75		23 - 127								

#### Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-227481/1 Matrix: Water	b Sample ID: MB 480-227481/1-A atrix: Water						Client Sa	mple ID: Metho Prep Type: T	d Blank otal/NA
Analysis Batch: 227683								Prep Batch:	227481
	МВ	МВ							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015		mg/L		02/19/15 11:45	02/20/15 10:21	1
Barium	ND		0.0020		mg/L		02/19/15 11:45	02/20/15 10:21	1
Cadmium	ND		0.0020		mg/L		02/19/15 11:45	02/20/15 10:21	1
Chromium	ND		0.0040		mg/L		02/19/15 11:45	02/20/15 10:21	1
Lead	ND		0.010		mg/L		02/19/15 11:45	02/20/15 10:21	1
Selenium	ND		0.025		mg/L		02/19/15 11:45	02/20/15 10:21	1
Silver	ND		0.0060		mg/L		02/19/15 11:45	02/20/15 10:21	1

#### Lab Sample ID: LCS 480-227481/2-A Matrix: Water

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

#### Prep Batch: 227481

Analysis Batch: 227683							Prep Ba	atch: 227481
-	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	1.00	1.02		mg/L		102	80 - 120	
Barium	1.00	0.986		mg/L		99	80 - 120	
Cadmium	1.00	0.965		mg/L		97	80 - 120	
Chromium	1.00	1.05		mg/L		105	80 - 120	
Lead	1.00	0.959		mg/L		96	80 - 120	
Selenium	1.00	0.991		mg/L		99	80 - 120	
Silver	1.00	1.04		mg/L		104	80 - 120	

RL

0.015

0.0020

0.0020

0.0040

0.010

0.025

0.0060

Spike

Added

1.00

1.00

MDL Unit

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

Unit

mg/L

mg/L

D

Prepared

02/20/15 10:05

02/20/15 10:05

02/20/15 10:05

02/20/15 10:05

02/20/15 10:05

02/20/15 10:05

02/20/15 10:05

D

Lab Sample ID: MB 480-227662/2-A

Lab Sample ID: LCS 480-227662/3-A

Matrix: Solid

Analyte Arsenic

Barium

Lead

Silver

Analyte

Arsenic

Barium

Cadmium Chromium Lead Selenium Silver

Cadmium

Chromium

Selenium

Matrix: Solid

Analysis Batch: 227836

Analysis Batch: 227836

Method: 6010C - Metals (ICP) (Continued)

**Client Sample ID: Method Blank** 

Analyzed

02/21/15 10:54

02/21/15 10:54

02/21/15 10:54

02/21/15 10:54

02/21/15 10:54

02/21/15 10:54

02/21/15 10:54

Prep Type: Total/NA

Prep Batch: 227662

# 8

**Client Sample ID: Lab Control S** Prep Type: **Prep Batch** 

Sample	
Total/NA	
: 227662	

Dil Fac

1

1

1

1

1

### %Rec.

%Rec	Limits	
112	80 - 120	
102	80 - 120	
106	80 - 120	
100	80 - 120	
104	80 - 120	
118	80 - 120	
117	80 - 120	

#### **Client Sample ID: PM-DISP2** Prep Type: TCLP

Client Sample ID: PM-DISP2

Prep Type: TCLP

Prep Batch: 227481

Prep Batch: 227481

Lab Sample ID: 480-75576-2 MS Matrix: Water	D		
Silver	ND	1.00	1
Selenium	ND	1.00	1
Lead	ND	1.00	0.9
Chiomun	ND	1.00	1

MB MB Result Qualifier

ND

ND

ND

ND

ND ۸

ND

ND

#### Analysis Batch: 227683

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Arsenic	ND		1.00	1.08		mg/L		108	75 - 125	1	20	
Barium	0.078		1.00	1.06		mg/L		99	75 - 125	0	20	
Cadmium	ND		1.00	0.995		mg/L		100	75 - 125	0	20	
Chromium	ND		1.00	1.05		mg/L		105	75 - 125	1	20	
Lead	ND		1.00	0.979		mg/L		98	75 - 125	1	20	
Selenium	ND		1.00	1.04		mg/L		104	75 - 125	1	20	
Silver	ND		1.00	1.06		mg/L		106	75 - 125	1	20	

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1.00	1.06	mg/L
1.00	1.00	mg/L
1.00	1.04 ^	mg/L
1.00	1.18	mg/L
1.00	1.17	mg/L

1.12

1.02

LCS LCS

**Result Qualifier** 

#### Lab Sample ID: 480-75576-2 MS Matrix: Water Analysis Batch: 227683

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	ND		1.00	1.09		mg/L		109	75 - 125	
Barium	0.078		1.00	1.07		mg/L		99	75 - 125	
Cadmium	ND		1.00	0.999		mg/L		100	75 _ 125	
Chromium	ND		1.00	1.05		mg/L		105	75 - 125	
Lead	ND		1.00	0.985		mg/L		98	75 - 125	
Selenium	ND		1.00	1.04		mg/L		104	75 - 125	
Silver	ND		1.00	1.07		mg/L		107	75 - 125	

Lab Sample ID: LB 480-227516/1-C

Matrix: Solid

Method: 6010C - Metals (ICP) (Continued)

**Client Sample ID: Method Blank** 

Analyzed

D

Prepared

Prep Type: TCLP Prep Batch: 227662

# 8 Client Sample ID: PM-DISP1

Dil Fac

Prep Type: TCLP Prep Batch: 227662 12 13

#### Client Sample ID: PM-DISP1 Prep Type: TCLP

Prep Batch: 227662

Analysis Batch: 227836					
	LB	LB			
Analyte	Result	Qualifier	RL	MDL	Unit
Arsenic	ND		0.015		mg/L
Barium	0.0656		0.0020		mg/L

Arsenic	ND	0.015	mg/L	02/20/15 10:05	02/21/15 10:43	1
Barium	0.0656	0.0020	mg/L	02/20/15 10:05	02/21/15 10:43	1
Cadmium	ND	0.0020	mg/L	02/20/15 10:05	02/21/15 10:43	1
Chromium	ND	0.0040	mg/L	02/20/15 10:05	02/21/15 10:43	1
Lead	ND	0.010	mg/L	02/20/15 10:05	02/21/15 10:43	1
Selenium	ND	0.025	mg/L	02/20/15 10:05	02/21/15 10:43	1
Silver	ND	0.0060	mg/L	02/20/15 10:05	02/21/15 10:43	1

#### Lab Sample ID: 480-75576-1 MS Matrix: Solid

Analysis Batch: 227836

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	ND		1.00	1.12		mg/L		111	75 - 125	
Barium	1.2	В	1.00	2.04		mg/L		86	75 - 125	
Cadmium	0.0092		1.00	1.08		mg/L		107	75 - 125	
Chromium	ND		1.00	0.938		mg/L		93	75 - 125	
Lead	0.26	٨	1.00	1.30	٨	mg/L		103	75 - 125	
Selenium	ND		1.00	1.15		mg/L		115	75 - 125	
Silver	ND		1.00	1.15		mg/L		115	75 - 125	

#### Lab Sample ID: 480-75576-1 MSD Matrix: Solid

Analysis Batch: 227836 Sample Sample

-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	ND		1.00	1.14		mg/L		113	75 _ 125	2	20
Barium	1.2	В	1.00	2.12		mg/L		94	75 - 125	4	20
Cadmium	0.0092		1.00	1.10		mg/L		109	75 _ 125	2	20
Chromium	ND		1.00	0.949		mg/L		95	75 _ 125	1	20
Lead	0.26	^	1.00	1.31	۸	mg/L		104	75 - 125	1	20
Selenium	ND		1.00	1.18		mg/L		118	75 <sub>-</sub> 125	2	20
Silver	ND		1.00	1.17		mg/L		117	75 - 125	1	20

#### Method: 7470A - TCLP Mercury

Lab Sample ID: MB 480-227661/2-A Matrix: Solid Analysis Batch: 227833	МВ	МВ							Client Sa	mple ID: Metho Prep Type: <sup>-</sup> Prep Batch	od Blank Fotal/NA : 227661
Analyte	Result	Qualifier	F	RL	MDL	Unit		D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000	20		mg/L		02	/20/15 09:55	02/20/15 13:08	1
Lab Sample ID: LCS 480-227661/3-A Matrix: Solid Analysis Batch: 227833			Sniko	1.05				Clier	nt Sample	ID: Lab Control Prep Type: <sup>-</sup> Prep Batch	Sample Fotal/NA : 227661
Analyte			Added	Result	Qual	ifier	Unit	D	%Rec	Limits	
Mercury			0.00668	0.00657			mg/L		98	80 - 120	

Analyte

Mercury

#### Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: LB 480-227516/1-E	3								<b>Client Sa</b>	ample ID: Meth	od Blank
Matrix: Solid										Prep Typ	be: TCLP
Analysis Batch: 227833										Prep Batch	: <b>227661</b>
Analysis							_			A	D!!
	R			<b>KL</b>				02/2	vrepared	Analyzed	
		ND	0.000	)20	mg/∟			02/2	0/15 09.55	02/20/15 15:07	I
Lab Sample ID: 480-75576-1 MS									Clier	nt Sample ID: P	M-DISP1
Matrix: Solid										Prep Typ	be: TCLP
Analysis Batch: 227833										Prep Batch	: <b>227661</b>
	Sample	Sample	Spike	MS	MS					%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		_ <u>D</u>	%Rec	Limits	
Mercury	ND		0.00668	0.00608		mg/L			91	80 - 120	
									Clier	nt Sample ID: P	M-DISP1
Matrix: Solid										Prep Typ	e: TCLP
Analysis Batch: 227833										Prep Batch	: 227661
	Sample	Sample	Spike	MSD	MSD					%Rec.	RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		D	%Rec	Limits RP	D Limit
Mercury	ND		0.00668	0.00600		mg/L			90	80 - 120	1 20
Lab Sample ID: MB 480-227508/1-/ Matrix: Water Analysis Batch: 227564	4	MB MB							Client Sa	ample ID: Metho Prep Type: Prep Batch	od Blank Total/NA 1: 227508
Analyte	R	esult Qualifier		RL	MDL Unit		D	Р	repared	Analyzed	Dil Fac
Mercury		ND	0.000	)20	mg/L			02/1	9/15 12:25	02/19/15 14:56	1
Lab Sample ID: LCS 480-227508/2 Matrix: Water Analysis Batch: 227564	-A						C	Client	t Sample	ID: Lab Contro Prep Type: Prep Batch	I Sample Total/NA 1: 227508
			Spike	LCS	LCS			_		%Rec.	
Analyte			Added	Result	Qualifier	Unit		_ D		Limits	
Mercury			0.00667	0.00663		mg/L			99	80 - 120	
Lab Sample ID: 480-75576-2 MS Matrix: Water									Clier	nt Sample ID: P Prep Typ Prop Batch	M-DISP2 be: TCLP
Analysis Batch. 227564	Sample	Sample	Spike	MS	MS					Упер Батси %Rec.	1. 22/ 500
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		D	%Rec	Limits	
Mercury	ND		0.00667	0.00645		mg/L			97	80 - 120	
										_	
Lab Sample ID: 480-75576-2 MSD									Clier	nt Sample ID: P	M-DISP2
Matrix: Water										Prep Typ	De: TCLP
Analysis Batch: 227564	0	Comula	• "							Prep Batch	: 227508
			C D U D D		MCIN						

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RPD

0

Limit

20

Result Qualifier

0.00647

Unit

mg/L

D

%Rec

97

Limits

80 - 120

Added

0.00667

Result Qualifier

ND

#### Method: 1010A - Ignitability, Pensky-Martens Closed Cup Method

Lab Sample ID: LCS 480-227766/1 Matrix: Solid					Client	Sampl	e ID: Lab C Prep T	ontrol Sample ype: Total/NA
Analysis Batch: 227766								
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Flashpoint	81.0	79.00		Degrees F		98	97.5 - 102.	
							5	

#### Method: 9012 - Cyanide, Reactive

 I ab Sample ID: MB 480-228004/1-	Δ											Client Sa	ample ID: N	lethod	Blank
Matrix: Solid													Prep Tv	pe: To	tal/NA
Analysis Batch: 228055		МВ	мв										Prep B	atch: 2	228004
Analyte	R	esult	Qualifier		RL		MDL	Unit		D	Р	repared	Analyze	d	Dil Fac
Cyanide, Reactive		ND			10.0			mg/L			02/2	4/15 03:15	02/24/15 1	1:56	1
	- <b>A</b>									С	lient	Sample	ID: Lab Co	ntrol S	ample
Matrix: Solid													Prep Tv	pe: To	tal/NA
Analysis Batch: 228055													Prep B	atch: 2	228004
				Spike		LCS	LCS						%Rec.		
Analyte				Added		Result	Qual	ifier	Unit		D	%Rec	Limits		
Cyanide, Reactive				1000		433.8			mg/L		_	43	10 - 100		
Lab Sample ID: 480-75576-2 DU												Clier	nt Sample I	D: PM-	DISP2
Matrix: Water													Prep Ty	pe: To	tal/NA
Analysis Batch: 228055													Prep B	atch: 2	28004
-	Sample	Samp	le			DU	DU								RPD
Analyte	Result	Qualit	fier			Result	Qual	ifier	Unit		D			RPD	Limit
Cyanide, Reactive	ND					ND			mg/L		_			NC	20

#### Method: 9034 - Sulfide, Reactive

– Lab Sample ID: MB 480-228003/1-A Matrix: Solid	<b>X</b>											Client Sa	ample ID: Prep T	Method vpe: To	Blank tal/NA
Analysis Batch: 228045		МВ	мв										Prep I	Batch: 2	228003
Analyte	Re	esult (	Qualifier		RL		MDL	Unit		D	Р	repared	Analyz	ed	Dil Fac
Sulfide, Reactive		ND			10.0			mg/L			02/2	4/15 03:15	02/24/15	10:50	1
 Lab Sample ID: LCS 480-228003/2-	A									С	lient	Sample	ID: Lab Co	ontrol S	ample
Matrix: Solid													Prep T	ype: To	tal/NA
Analysis Batch: 228045													Prep I	Batch: 2	28003
				Spike		LCS	LCS						%Rec.		
Analyte				Added		Result	Qua	lifier	Unit		D	%Rec	Limits		
Sulfide, Reactive				1000		821.5			mg/L			82	10 - 100		
Lab Sample ID: 480-75576-2 DU												Clier	nt Sample	ID: PM-	DISP2
Matrix: Water													Prep T	ype: To	tal/NA
Analysis Batch: 228045													Prep I	Batch: 2	28003
	Sample	Samp	le			DU	DU								RPD
Analyte	Result	Qualif	ier			Result	Qua	lifier	Unit		D			RPD	Limit
Sulfide, Reactive	ND					ND			mg/L					NC	20

#### Method: 9040C - pH

Lab Sample ID: LCS 480-227702/1 Matrix: Water					Client Sample ID: Lab Control Samp Prep Type: Total/N				
Analysis Batch: 22//02	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
pH	7.00	7.010		SU		100	99 - 101		
Method: 9045D - pH									
Lab Sample ID: LCS 480-227916/1					Client	t Sample	D' Lah Co	ntrol Sample	

Lab Sample ID. LCS 460-227916/1					Chem	Jampie		ontrol Sample
Matrix: Solid							Prep <sup>-</sup>	Type: Total/NA
Analysis Batch: 227916								
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
рН	7.00	7.010		SU		100	99 _ 101	

**Client Sample ID** 

PM-DISP1

PM-DISP1

PM-DISP1

PM-DISP1

PM-DISP1

PM-DISP1

Method Blank

Method Blank

Method Blank

Lab Control Sample

Method Blank

**Client Sample ID** 

Method

1311

1311

1311

1311

Method

8260C

8260C

8260C

8260C

8260C

8260C

8260C

Prep Batch

Prep Batch

227522

227522

227522

227522

# 6 7 8 9 10

Leach Batch: 227979

**GC/MS VOA** 

Lab Sample ID

480-75576-1 MS

480-75576-1 MSD

LB 480-227522/1-A

Lab Sample ID

480-75576-1 MS

480-75576-1 MSD

LB 480-227522/1-A

LCS 480-227775/4

MB 480-227775/6

480-75576-1

Analysis Batch: 227775

480-75576-1

Leach Batch: 227522

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
480-75576-2	PM-DISP2	TCLP	Water	1311	
Analysis Batch: 2280	07				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-2	PM-DISP2	TCLP	Water	8260C	227979
LCS 480-228007/4	Lab Control Sample	Total/NA	Water	8260C	

Prep Type

TCLP

TCLP

TCLP

TCLP

Prep Type

TCLP

TCLP

TCLP

TCLP

Total/NA

Total/NA

Total/NA

Matrix

Solid

Solid

Solid

Solid

Matrix

Solid

Solid

Solid

Solid

Solid

Solid

Water

#### GC/MS Semi VOA

#### Prep Batch: 227438

MB 480-228007/6

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
480-75576-2	PM-DISP2	TCLP	Water	3510C	227451
LCS 480-227438/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-227438/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-227438/1-A	Method Blank	Total/NA	Water	3510C	

#### Leach Batch: 227451

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
480-75576-2	PM-DISP2	TCLP	Water	1311	

#### Leach Batch: 227516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	TCLP	Solid	1311	
LB 480-227516/1-D	Method Blank	TCLP	Solid	1311	

#### Analysis Batch: 227638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-2	PM-DISP2	TCLP	Water	8270D	227438
LCS 480-227438/2-A	Lab Control Sample	Total/NA	Water	8270D	227438
LCSD 480-227438/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	227438
MB 480-227438/1-A	Method Blank	Total/NA	Water	8270D	227438

GC/MS Semi VOA (Continued)

Prep Batch: 227666

#### **QC Association Summary**

# 5 9 3 10 3 11 12 4 2

12 13 14

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	TCLP	Solid	3510C	227516
LB 480-227516/1-D	Method Blank	TCLP	Solid	3510C	227516
LCS 480-227666/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 480-227666/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	
MB 480-227666/1-A	Method Blank	Total/NA	Solid	3510C	
Analysis Batch: 22786	1				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	TCLP	Solid	8270D	227666
LB 480-227516/1-D	Method Blank	TCLP	Solid	8270D	227666
LCS 480-227666/2-A	Lab Control Sample	Total/NA	Solid	8270D	227666
LCSD 480-227666/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	227666
MB 480-227666/1-A	Method Blank	Total/NA	Solid	8270D	227666
GC Semi VOA					
Prep Batch: 227507					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	Total/NA	Solid	3550C	
LCS 480-227507/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-227507/1-A	Method Blank	Total/NA	Solid	3550C	
Analysis Batch: 22766	5				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	Total/NA	Solid	8082A	227507
LCS 480-227507/2-A	Lab Control Sample	Total/NA	Solid	8082A	227507
MB 480-227507/1-A	Method Blank	Total/NA	Solid	8082A	227507
Prep Batch: 228002					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-2	PM-DISP2	Total/NA	Water	3510C	
LCS 480-228002/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-228002/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-228002/1-A	Method Blank	Total/NA	Water	3510C	
Analysis Batch: 228070	)				
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
480-75576-2	PM-DISP2	Total/NA	Water	8082A	228002
LCS 480-228002/2-A	Lab Control Sample	Total/NA	Water	8082A	228002
LCSD 480-228002/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	228002
MB 480-228002/1-A	Method Blank	Total/NA	Water	8082A	228002

#### **Metals**

#### Leach Batch: 227451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-2	PM-DISP2	TCLP	Water	1311	
480-75576-2 MS	PM-DISP2	TCLP	Water	1311	
480-75576-2 MSD	PM-DISP2	TCLP	Water	1311	

**Client Sample ID** 

Lab Control Sample

PM-DISP2

PM-DISP2

PM-DISP2

Method Blank

**Client Sample ID** 

PM-DISP2

PM-DISP2

**Metals (Continued)** 

Prep Batch: 227481 Lab Sample ID

480-75576-2

480-75576-2

480-75576-2 MS

480-75576-2 MS

480-75576-2 MSD

LCS 480-227481/2-A

MB 480-227481/1-A

Prep Batch: 227508 Lab Sample ID

Method

3010A

3010A

3010A

3010A

3010A

Method

7470A

7470A

Prep Batch

227451

227451

227451

Prep Batch

227451

227451

# 9

480-75576-2 MSD	PM-DISP2	TCLP	Water	7470A	227451
LCS 480-227508/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 480-227508/1-A	Method Blank	Total/NA	Water	7470A	
Leach Batch: 227516					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	TCLP	Solid	1311	
480-75576-1 MS	PM-DISP1	TCLP	Solid	1311	
480-75576-1 MSD	PM-DISP1	TCLP	Solid	1311	
LB 480-227516/1-B	Method Blank	TCLP	Solid	1311	
LB 480-227516/1-C	Method Blank	TCLP	Solid	1311	
_ Analysis Batch: 22756	4				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-2	PM-DISP2	TCLP	Water	7470A	227508
480-75576-2 MS	PM-DISP2	TCLP	Water	7470A	227508
480-75576-2 MSD	PM-DISP2	TCLP	Water	7470A	227508
LCS 480-227508/2-A	Lab Control Sample	Total/NA	Water	7470A	227508
MB 480-227508/1-A	Method Blank	Total/NA	Water	7470A	227508
Prep Batch: 227661					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	TCLP	Solid	7470A	227516
480-75576-1 MS	PM-DISP1	TCLP	Solid	7470A	227516
480-75576-1 MSD	PM-DISP1	TCLP	Solid	7470A	227516
LB 480-227516/1-B	Method Blank	TCLP	Solid	7470A	227516
LCS 480-227661/3-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 480-227661/2-A	Method Blank	Total/NA	Solid	7470A	
Prep Batch: 227662					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	TCLP	Solid	3010A	227516
480-75576-1 MS	PM-DISP1	TCLP	Solid	3010A	227516
480-75576-1 MSD	PM-DISP1	TCLP	Solid	3010A	227516
LB 480-227516/1-C	Method Blank	TCLP	Solid	3010A	227516
LCS 480-227662/3-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 480-227662/2-A	Method Blank	Total/NA	Solid	3010A	

#### Analysis Batch: 227683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-2	PM-DISP2	TCLP	Water	6010C	227481

TestAmerica Buffalo

Prep Type

TCLP

TCLP

TCLP

Total/NA

Total/NA

Prep Type

TCLP

TCLP

Matrix

Water

Water

Water

Water

Water

Matrix

Water

Water

Prep Type

TCLP

TCLP

Total/NA

Total/NA

Prep Type

TCLP

TCLP

TCLP

TCLP

Total/NA

Total/NA

Prep Type

TCLP

TCLP

TCLP

TCLP

Total/NA

Total/NA

Matrix

Water

Water

Water

Water

Matrix

Solid

Solid

Solid

Solid

Solid

Solid

Matrix

Solid

Solid

Solid

Solid

Solid

Solid

Analysis Batch: 227683 (Continued)

**Client Sample ID** 

Lab Control Sample

PM-DISP2

PM-DISP2

Method Blank

**Client Sample ID** 

PM-DISP1

PM-DISP1

PM-DISP1

Method Blank

Method Blank

**Client Sample ID** 

PM-DISP1

PM-DISP1

PM-DISP1

Method Blank

Method Blank

Lab Control Sample

Lab Control Sample

**Metals (Continued)** 

Lab Sample ID

480-75576-2 MS

480-75576-2 MSD

LCS 480-227481/2-A

MB 480-227481/1-A

Lab Sample ID

480-75576-1 MS

480-75576-1 MSD

LB 480-227516/1-B

LCS 480-227661/3-A

MB 480-227661/2-A

Lab Sample ID

480-75576-1 MS

480-75576-1 MSD

LB 480-227516/1-C

LCS 480-227662/3-A

MB 480-227662/2-A

480-75576-1

Analysis Batch: 227836

480-75576-1

Analysis Batch: 227833

Method

6010C

6010C

6010C

6010C

Method

7470A

7470A

7470A

7470A

7470A

7470A

Method

6010C

6010C

6010C

6010C

6010C

6010C

Prep Batch

227481

227481

227481

227481

Prep Batch

227661

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Prep Batch

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#### **General Chemistry**

#### Analysis Batch: 227393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	Total/NA	Solid	Moisture	
Analysis Batch: 2277	02				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-2	PM-DISP2	Total/NA	Water	9040C	
LCS 480-227702/1	Lab Control Sample	Total/NA	Water	9040C	
Analysis Batch: 2277	66				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	Total/NA	Solid	1010A	
480-75576-2	PM-DISP2	Total/NA	Water	1010A	
LCS 480-227766/1	Lab Control Sample	Total/NA	Solid	1010A	
Analysis Batch: 2279	16				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	Total/NA	Solid	9045D	
LCS 480-227916/1	Lab Control Sample	Total/NA	Solid	9045D	
Prep Batch: 228003					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	Total/NA	Solid	7.3.4	
480-75576-2	PM-DISP2	Total/NA	Water	7.3.4	
480-75576-2 DU PM-DISP2		Total/NA	Water	7.3.4	

#### TestAmerica Buffalo

2/27/2015

#### TestAmerica Job ID: 480-75576-1

#### General Chemistry (Continued)

#### Prep Batch: 228003 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-228003/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
MB 480-228003/1-A	Method Blank	Total/NA	Solid	7.3.4	

#### Prep Batch: 228004

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	Total/NA	Solid	7.3.3	
480-75576-2	PM-DISP2	Total/NA	Water	7.3.3	
480-75576-2 DU	PM-DISP2	Total/NA	Water	7.3.3	
LCS 480-228004/2-A	Lab Control Sample	Total/NA	Solid	7.3.3	
MB 480-228004/1-A	Method Blank	Total/NA	Solid	7.3.3	

#### Analysis Batch: 228045

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	Total/NA	Solid	9034	228003
480-75576-2	PM-DISP2	Total/NA	Water	9034	228003
480-75576-2 DU	PM-DISP2	Total/NA	Water	9034	228003
LCS 480-228003/2-A	Lab Control Sample	Total/NA	Solid	9034	228003
MB 480-228003/1-A	Method Blank	Total/NA	Solid	9034	228003

#### Analysis Batch: 228055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75576-1	PM-DISP1	Total/NA	Solid	9012	228004
480-75576-2	PM-DISP2	Total/NA	Water	9012	228004
480-75576-2 DU	PM-DISP2	Total/NA	Water	9012	228004
LCS 480-228004/2-A	Lab Control Sample	Total/NA	Solid	9012	228004
MB 480-228004/1-A	Method Blank	Total/NA	Solid	9012	228004

#### **Client Sample ID: PM-DISP1**

Date Collected: 02/18/15 12:00 Date Received: 02/18/15 17:00

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
TCLP	Leach	1311			227522	02/19/15 13:04	JLS	TAL BUF
TCLP	Analysis	8260C		10	227775	02/21/15 06:07	LJF	TAL BUF
TCLP	Leach	1311			227516	02/19/15 12:49	JLS	TAL BUF
TCLP	Prep	3510C			227666	02/20/15 09:49	JLS	TAL BUF
TCLP	Analysis	8270D		1	227861	02/23/15 16:24	LMW	TAL BUF
Total/NA	Prep	3550C			227507	02/19/15 12:13	CAM	TAL BUF
Total/NA	Analysis	8082A		2	227665	02/20/15 14:58	KS	TAL BUF
TCLP	Leach	1311			227516	02/19/15 12:49	JLS	TAL BUF
TCLP	Prep	3010A			227662	02/20/15 10:05	TAS	TAL BUF
TCLP	Analysis	6010C		1	227836	02/21/15 11:00	SLB	TAL BUF
TCLP	Leach	1311			227516	02/19/15 12:49	JLS	TAL BUF
TCLP	Prep	7470A			227661	02/20/15 09:55	LRK	TAL BUF
TCLP	Analysis	7470A		1	227833	02/20/15 13:12	LRK	TAL BUF
Total/NA	Analysis	1010A		1	227766	02/20/15 17:05	RP	TAL BUF
Total/NA	Prep	7.3.3			228004	02/24/15 03:15	LAW	TAL BUF
Total/NA	Analysis	9012		1	228055	02/24/15 12:01	NCH	TAL BUF
Total/NA	Prep	7.3.4			228003	02/24/15 03:15	LAW	TAL BUF
Total/NA	Analysis	9034		1	228045	02/24/15 10:50	LAW	TAL BUF
Total/NA	Analysis	9045D		1	227916	02/23/15 12:55	MDL	TAL BUF
Total/NA	Analysis	Moisture		1	227393	02/18/15 21:06	СМК	TAL BUF

#### Client Sample ID: PM-DISP2

#### Date Collected: 02/18/15 12:10 Date Received: 02/18/15 17:00

Lab Sample ID: 480-75576-2

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
TCLP	Leach	1311			227979	02/24/15 07:55	JLS	TAL BUF
TCLP	Analysis	8260C		1	228007	02/24/15 12:55	EDB	TAL BUF
TCLP	Leach	1311			227451	02/19/15 08:58	JLS	TAL BUF
TCLP	Prep	3510C			227438	02/19/15 09:46	TRG	TAL BUF
TCLP	Analysis	8270D		10	227638	02/20/15 12:11	LMW	TAL BUF
Total/NA	Prep	3510C			228002	02/24/15 09:24	JLS	TAL BUF
Total/NA	Analysis	8082A		2	228070	02/24/15 16:30	KS	TAL BUF
TCLP	Leach	1311			227451	02/19/15 08:58	JLS	TAL BUF
TCLP	Prep	3010A			227481	02/19/15 11:45	TAS	TAL BUF
TCLP	Analysis	6010C		1	227683	02/20/15 10:26	SLB	TAL BUF
TCLP	Leach	1311			227451	02/19/15 08:58	JLS	TAL BUF
TCLP	Prep	7470A			227508	02/19/15 12:25	LRK	TAL BUF
TCLP	Analysis	7470A		1	227564	02/19/15 14:59	LRK	TAL BUF
Total/NA	Analysis	1010A		1	227766	02/20/15 17:05	RP	TAL BUF
Total/NA	Prep	7.3.3			228004	02/24/15 03:15	LAW	TAL BUF
Total/NA	Analysis	9012		1	228055	02/24/15 11:58	NCH	TAL BUF
Total/NA	Prep	7.3.4			228003	02/24/15 03:15	LAW	TAL BUF
Total/NA	Analysis	9034		1	228045	02/24/15 10:50	LAW	TAL BUF

Lab Sample ID: 480-75576-2

Matrix: Water

### Client Sample ID: PM-DISP2

Date	Collected:	02/18/15 12:10
Date	<b>Received:</b>	02/18/15 17:00

		Batch	Batch		Dilution	Batch	Prepared		
Pr	ер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
To	tal/NA	Analysis	9040C		1	227702	02/20/15 12:40	MDL	TAL BUF

#### Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

#### **Certification Summary**

#### Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

uthority	Program		EPA Region	Certification ID	Expiration Date	
ew York	NELAP	NELAP		10026	03-31-15 *	
The following analytes	are included in this report, b	ut certification is not off	ered by the governing	authority:		
Analysis Method	Prep Method	Matrix	Analy	te		
1010A		Water	Flash	point		
7470A	7470A	Solid	Mercu	iry		
9012	7.3.3	Solid	Cyani	de, Reactive		
9012	7.3.3	Water	Cyani	de, Reactive		
9034	7.3.4	Solid	Sulfid	e, Reactive		
9034	7.3.4	Water	Sulfid	e, Reactive		
9040C		Water	pH			
Moisture		Solid	Perce	nt Moisture		
Moisture		Solid	Perce	nt Solids		

\* Certification renewal pending - certification considered valid.

#### **Method Summary**

#### Client: AMEC Foster Wheeler E & I, Inc Project/Site: Niagara Falls site - Tract II

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1	2

Method	Method Description	Protocol	Laboratory
8260C	TCLP Volatiles	SW846	TAL BUF
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
7470A	TCLP Mercury	SW846	TAL BUF
1010A	Ignitability, Pensky-Martens Closed Cup Method	SW846	TAL BUF
9012	Cyanide, Reactive	SW846	TAL BUF
9034	Sulfide, Reactive	SW846	TAL BUF
9040C	pH	SW846	TAL BUF
9045D	pH	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

#### 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 BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

#### Sample Summary

Matrix

Solid

Water

Client: AMEC Foster Wheeler E & I, Inc Project/Site: Niagara Falls site - Tract II

Client Sample ID

PM-DISP1

PM-DISP2

Lab Sample ID

480-75576-1

480-75576-2

TestAmerica Job ID: 480-75576-1

02/18/15 12:00 02/18/15 17:00

Received

02/18/15 17:00

Collected

02/18/15 12:10

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sei Lea DC! 3 d1 1004 Brite		Chain	of Custody Record	052120	TestAmerica
WY 14228 16.691.2600 Fax: 7	Regulatory Program:		CRA Other:		THE LEADER IN ENVIRONMENTAL TESTING TestAmerica Laboratories, Inc. TAL-8210 (0713)
Client Contact	Project Manager: Rob Cr	مالله	Site Contact: by i I from D	ate: <i>2/13/15</i>	COC No:
le: Amec	Tel/Fax:		Lab Contact: だかっ デューレ C	arrier:	ofCOCs
200 North Bell Are		KING DAYS			Sampler: For I ah Iteo Only:
412 279 6661	TAT if different from Below				Walk-in Client:
	2 weeks		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		Lab Sampling:
Tract L Tract 2	Tweek		الالالال بر الالال بر الالال بر الالالال		Job/SDG No.: 75576
194120005h of 112nd	I I day				
Sample Identification	Sample         Sample         Type           Date         Time         G=Grab)	# of Matrix Cont.			Sample Specific Notes:
PM-DISPI	2/18/15 12ª C	Seil 3	X X X X X X		
PM-DISPO	2/2/5 12.10 C	ML 2	XXXXXXX		
				480-75576 Chain of Custo	dy
					1810 - 1810 -
used: 1=.ice, ∠=mut; 3=.mz>u4; 4=muu3, ard Identification:	o=NaCIH, b= CIBer		Sample Disposal ( A fee may be a	ssessed if samples are retaine	ed longer than 1 month)
es from a listed EPA Hazardous Waste? Pleas ction if the lab is to dispose of the sample.	se List any EPA Waste Codes for t	the sample in the			
I Elammable Skin Irritant	Poison B	umo	Return to Client	sal by Lab	Months
ictions/QC Requirements & Comments: $N_{0}$ $C$ $L$ $R$					
als Intact: . Tres No	Custody Seal No.:		Cooler Temp. ("C): Obs'c	:Corr'd:	Therm ID No.:
W. Jaka	Company:	Date/Time:	Acceived by:	Company:	Date/Time:
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2/27/2015

Client: AMEC Foster Wheeler E & I, Inc

#### Login Number: 75576 List Number: 1

Creator: Kinecki, Kenneth P

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	Very limited aqueous volume
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AMEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

List Source: TestAmerica Buffalo



THE LEADER IN ENVIRONMENTAL TESTING

# **ANALYTICAL REPORT**

#### TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

#### TestAmerica Job ID: 480-75353-1

Client Project/Site: Niagara Falls site - Tract II Revision: 1

#### For:

AMEC Foster Wheeler E & I, Inc 800 North Bell Avenue, Suite 200 Pittsburgh, Pennsylvania 15106

#### Attn: Rob Crowley

Authorized for release by: 2/24/2015 9:26:54 AM

Brian Fischer, Manager of Project Management (716)504-9835 brian.fischer@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.



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# 2 3 4 5 6 7 8 9 10 11 12 13

#### Qualifiers

GC/MS VOA	A	
Qualifier	Qualifier Description	
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	
*	LCS or LCSD exceeds the control limits	
GC/MS Sem	ni VOA	
Qualifier	Qualifier Description	
х	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.	
Metals		8
Qualifier	Qualifier Description	
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.	6
Glossary		1
Abbreviation	These commonly used abbreviations may or may not be present in this report.	1
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	

%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

#### Job ID: 480-75353-1

#### Laboratory: TestAmerica Buffalo

#### Narrative

Job Narrative 480-75353-1

#### Comments

This report has been revised to include a clarifying job narrative comment regarding method 310.13 results for sample E4-TD-2 (480-75353-2)

#### Receipt

The samples were received on 2/12/2015 7:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

Except:

The following sample was activated for 8082 PCB analysis by the client on 2/13/15: E4-TD2 (480-75353-2). This analysis was not originally requested on the chain-of-custody (COC). Only the oil layer should be analyzed.

#### GC/MS VOA

Method(s) 8260C: The following samples were diluted in the medium level analysis to bring the concentration of target analytes within the calibration range: E4-TD1 (480-75353-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) for batch 226979 recovered outside control limits for the following analytes: Sec-Butylbenzene, and Tert-Butylbenzene. These were not requested spike compounds; therefore, the data have been qualified and reported.

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

#### GC/MS Semi VOA

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 226770 recovered above the upper control limit for Benzo(k)fluoranthene. The sample associated with this CCV was non-detect for the affected analyte; therefore, the data have been reported. The following sample was impacted: (CCVIS 480-226770/3).

Method(s) 8270D: The following sample was diluted due to the nature of the sample matrix : E4-TD1 (480-75353-1). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

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

#### GC Semi VOA

Method(s) 8082A: The following sample required a dilution due to the matrix effects and is reported as elevated non-detections for all target analytes (Aroclors) ; E4-TD2 (480-75353-2). The reported values represent the lowest limit that can be ascertained given the sample composition.

Method(s) 8082A: All primary data is reported from the ZB-35 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

Method(s) 310.13: The following sample was diluted to bring the concentration of target analytes within the calibration range: T2-WC PIPE (480-75353-3). Elevated reporting limits (RLs) are provided.

Method(s) 310.13: The following sample contained a petroleum product which most closely resembles Motor Oil: T2-WC PIPE (480-75353-3).

Method(s) 310.13: The following sample was diluted to bring the concentration of target analytes within the calibration range: E4-TD2 (480-75353-2). Elevated reporting limits (RLs) are provided.

#### Job ID: 480-75353-1 (Continued)

#### Laboratory: TestAmerica Buffalo (Continued)

Method(s) 310.13: The following sample contained a petroleum product which most closely resembles a combination of Gasoline and Fuel Oil#6: E4-TD2 (480-75353-2). The mixture of these and other petroleum products is definitive in the identification process, though quantification can be elevated due to overlapping pattern areas. Given the high dilution of 50x, the sample matrix of a waste/oil, and the above mentioned overlap, the quantitaive results for these components is to be considered bias high and estimated in nature.

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

#### Metals

Method(s) 6010C: The low level continuing calibration verification (CCVL 480-226939/25) for analytical batch 480-226939 contained total aluminum, calcium, and iron above the upper quality control limits. All reported samples associated with this CCVL were either ND for these analytes or contained these analytes at concentrations greater than 10X the values found in the CCVL; therefore, re-analysis of samples (LCSSRM 480-226693/2-), (MB 480-226693/1-A) was not performed.

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

#### **Organic Prep**

Method(s) 3550B, 3550C: The following samples:T2-WC PIPE (480-75353-3) were decanted prior to preparation .

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.
#### Client Sample ID: E4-TD1

Lab Sample ID: 480-75353-1
----------------------------

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	82		81	15	ug/Kg	1	₽	8260C	Total/NA
Ethylbenzene	140		81	23	ug/Kg	1	₽	8260C	Total/NA
Toluene	83		81	22	ug/Kg	1	₽	8260C	Total/NA
m-Xylene & p-Xylene	390		160	45	ug/Kg	1	₽	8260C	Total/NA
o-Xylene	220		81	10	ug/Kg	1	₽	8260C	Total/NA
Xylenes, Total	610		160	45	ug/Kg	1	₽	8260C	Total/NA
Isopropylbenzene	170		81	12	ug/Kg	1	₽	8260C	Total/NA
N-Propylbenzene	160		81	21	ug/Kg	1	₽	8260C	Total/NA
4-Isopropyltoluene	62	J	81	27	ug/Kg	1	₽	8260C	Total/NA
1,2,4-Trimethylbenzene	560		81	22	ug/Kg	1	₽	8260C	Total/NA
1,3,5-Trimethylbenzene	140		81	24	ug/Kg	1	₽	8260C	Total/NA
n-Butylbenzene	210		81	24	ug/Kg	1	₽	8260C	Total/NA
sec-Butylbenzene	120	*	81	30	ug/Kg	1	¢	8260C	Total/NA
Naphthalene	3800		81	27	ug/Kg	1	₽	8260C	Total/NA
Acenaphthene	7700	J	12000	1700	ug/Kg	50	₽	8270D	Total/NA
Acenaphthylene	4100	J	12000	1500	ug/Kg	50	₽	8270D	Total/NA
Anthracene	6700	J	12000	2900	ug/Kg	50	₽	8270D	Total/NA
Benzo(a)pyrene	2300	J	12000	1700	ug/Kg	50	₽	8270D	Total/NA
Benzo(b)fluoranthene	2500	J	12000	1800	ug/Kg	50	₽	8270D	Total/NA
Benzo(g,h,i)perylene	1400	J	12000	1200	ug/Kg	50	₽	8270D	Total/NA
Chrysene	4800	J	12000	2600	ug/Kg	50	₽	8270D	Total/NA
Fluoranthene	6200	J	12000	1200	ug/Kg	50	₽	8270D	Total/NA
Fluorene	7900	J	12000	1400	ug/Kg	50	₽	8270D	Total/NA
Naphthalene	2400	J	12000	1500	ug/Kg	50	₽	8270D	Total/NA
Phenanthrene	21000		12000	1700	ug/Kg	50	₽	8270D	Total/NA
Pyrene	8600	J	12000	1400	ug/Kg	50	₽	8270D	Total/NA
Aluminum	13900		13.0		mg/Kg	1	₽	6010C	Total/NA
Arsenic	10.7		2.6		mg/Kg	1	₽	6010C	Total/NA
Barium	119		0.65		mg/Kg	1	₽	6010C	Total/NA
Beryllium	0.87		0.26		mg/Kg	1	₽	6010C	Total/NA
Cadmium	12.2		0.26		mg/Kg	1	₽	6010C	Total/NA
Calcium	14300		65.1		mg/Kg	1	₽	6010C	Total/NA
Chromium	17.9		0.65		mg/Kg	1	₩.	6010C	Total/NA
Cobalt	9.2		0.65		mg/Kg	1	₽	6010C	Total/NA
Copper	143		1.3		mg/Kg	1	₽	6010C	Total/NA
Iron	18800		13.0		mg/Kg	1	₽	6010C	Total/NA
Lead	305		1.3		mg/Kg	1	₽	6010C	Total/NA
Magnesium	4530		26.1		mg/Kg	1	₽	6010C	Total/NA
Manganese	238		0.26		mg/Kg	1		6010C	Total/NA
Nickel	20.4		6.5		mg/Kg	1	₽	6010C	Total/NA
Potassium	1610		39.1		mg/Kg	1	₽	6010C	Total/NA
Vanadium	24.1		0.65		mg/Kg	1		6010C	Total/NA
Zinc	924		2.6		mg/Kg	1	¢	6010C	Total/NA
Mercury	0.084		0.026		mg/Kg	1	₽	7471B	Total/NA

#### **Client Sample ID: E4-TD2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline	750000		7700	7700	mg/Kg	50	_	310.13	Total/NA
Fuel Oil #6	3800000		19000	19000	mg/Kg	50		310.13	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Lab Sample ID: 480-75353-2

#### **Detection Summary**

Client: AMEC Foster Wheeler E & I, Inc Project/Site: Niagara Falls site - Tract II

Client Sample ID: T2-WC PIPE Lab Sample ID: 480-753									D: 480-75353-3
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Motor Oil	17000		2400	2400	mg/Kg	50	<del>\</del>	310.13	Total/NA

**Client Sample ID: E4-TD1** 

Date Collected: 02/10/15 12:00 Date Received: 02/12/15 07:45

4-Bromofluorobenzene (Surr)

#### TestAmerica Job ID: 480-75353-1

# 1 2 3 4 5 6 7 8 9 10 11

Lab Sample ID: 480-75353-1
Matrix: Solid
Percent Solids: 72.8

02/13/15 00:11 02/14/15 16:33

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	82		81	15	ug/Kg	<u></u>	02/13/15 00:11	02/14/15 16:33	1
Ethylbenzene	140		81	23	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
Toluene	83		81	22	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
m-Xylene & p-Xylene	390		160	45	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
o-Xylene	220		81	10	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
Xylenes, Total	610		160	45	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
Isopropylbenzene	170		81	12	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
N-Propylbenzene	160		81	21	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
4-Isopropyltoluene	62	J	81	27	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
1,2,4-Trimethylbenzene	560		81	22	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
1,3,5-Trimethylbenzene	140		81	24	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
n-Butylbenzene	210		81	24	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
sec-Butylbenzene	120	*	81	30	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
Naphthalene	3800		81	27	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
Methyl tert-butyl ether	ND		81	30	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
tert-Butylbenzene	ND	*	81	22	ug/Kg	¢	02/13/15 00:11	02/14/15 16:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		53 - 146				02/13/15 00:11	02/14/15 16:33	1
Toluene-d8 (Surr)	104		50 _ 149				02/13/15 00:11	02/14/15 16:33	1

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

112

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	7700	J	12000	1700	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Acenaphthylene	4100	J	12000	1500	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Anthracene	6700	J	12000	2900	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Benzo(a)anthracene	ND		12000	1200	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Benzo(a)pyrene	2300	J	12000	1700	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Benzo(b)fluoranthene	2500	J	12000	1800	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Benzo(g,h,i)perylene	1400	J	12000	1200	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Benzo(k)fluoranthene	ND		12000	1500	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Chrysene	4800	J	12000	2600	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Dibenz(a,h)anthracene	ND		12000	2000	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Fluoranthene	6200	J	12000	1200	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Fluorene	7900	J	12000	1400	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Indeno(1,2,3-cd)pyrene	ND		12000	1400	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Naphthalene	2400	J	12000	1500	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Phenanthrene	21000		12000	1700	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50
Pyrene	8600	J	12000	1400	ug/Kg	¢	02/12/15 09:45	02/13/15 02:32	50

49 - 148

Surrogate	%Recovery	Qualifier	Limits	F	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	0	X	39 - 146	02/	12/15 09:45	02/13/15 02:32	50
2-Fluorophenol	0	x	18 - 120	02/*	12/15 09:45	02/13/15 02:32	50
2-Fluorobiphenyl	0	X	37 - 120	02/	12/15 09:45	02/13/15 02:32	50
Phenol-d5	0	X	11 - 120	02/*	12/15 09:45	02/13/15 02:32	50
p-Terphenyl-d14	0	X	65 - 153	02/*	12/15 09:45	02/13/15 02:32	50
Nitrobenzene-d5	0	X	34 - 132	02/	12/15 09:45	02/13/15 02:32	50

#### Client Sample ID: E4-TD1 Date Collected: 02/10/15 12:00 Date Received: 02/12/15 07:45

#### Lab Sample ID: 480-75353-1 Matrix: Solid

Percent Solids: 72.8

5

6

Method: 6010C - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13900		13.0		mg/Kg	₩ ₩	02/12/15 11:12	02/13/15 12:36	1
Antimony	ND		19.5		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Arsenic	10.7		2.6		mg/Kg	¢	02/12/15 11:12	02/17/15 13:41	1
Barium	119		0.65		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Beryllium	0.87		0.26		mg/Kg	₽	02/12/15 11:12	02/13/15 12:36	1
Cadmium	12.2		0.26		mg/Kg	₽	02/12/15 11:12	02/13/15 12:36	1
Calcium	14300		65.1		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Chromium	17.9		0.65		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Cobalt	9.2		0.65		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Copper	143		1.3		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Iron	18800		13.0		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Lead	305		1.3		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Magnesium	4530		26.1		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Manganese	238		0.26		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Nickel	20.4		6.5		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Potassium	1610		39.1		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Selenium	ND		5.2		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Silver	ND		0.78		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Sodium	ND		182		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Thallium	ND		7.8		mg/Kg	₽	02/12/15 11:12	02/13/15 12:36	1
Vanadium	24.1		0.65		mg/Kg	¢	02/12/15 11:12	02/13/15 12:36	1
Zinc	924		2.6		mg/Kg	¢	02/12/15 11:12	02/17/15 13:41	1
Method: 7471B - Mercury in Solid	or Semisolid V	Naste (Manı	al Cold Vapor	Technic	que)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.084		0.026		mg/Kg	<u>\$</u>	02/17/15 11:30	02/17/15 13:14	1

RL

7700

19000

38000

19000

19000

19000

7700

RL

3.3

3.3

3.3

3.3

3.3

3.3

3.3

Limits

46 - 175

46 - 175

47 - 176

47 - 176

MDL Unit

7700 mg/Kg

19000 mg/Kg

38000 mg/Kg

19000 mg/Kg

19000 mg/Kg

19000 mg/Kg

MDL Unit

3.3 mg/Kg

mg/Kg

7700

D

D

Prepared

02/12/15 14:32

02/12/15 14:32

02/12/15 14:32

02/12/15 14:32

02/12/15 14:32

02/12/15 14:32

02/12/15 14:32

Prepared

02/13/15 10:29

02/13/15 10:29

02/13/15 10:29

02/13/15 10:29

02/13/15 10:29

02/13/15 10:29

02/13/15 10:29

Prepared

02/13/15 10:29

02/13/15 10:29

02/13/15 10:29

02/13/15 10:29

Method: 310.13 - Identification of Routine Petroleum Products

**Result Qualifier** 

750000

ND

94

58

109

99

Qualifier

%Recovery

Result Qualifier

3800000

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

#### Client Sample ID: E4-TD2 Date Collected: 02/10/15 12:10

Date Received: 02/12/15 07:45

Analyte

Gasoline

Kerosene

Motor Oil

Fuel Oil #2

Fuel Oil #4

Fuel Oil #6

Analyte

PCB-1016

PCB-1221

PCB-1232

PCB-1242

PCB-1248

PCB-1254

PCB-1260

Surrogate

Tetrachloro-m-xylene

Tetrachloro-m-xylene

DCB Decachlorobiphenyl

DCB Decachlorobiphenyl

Unknown Hydrocarbons

Lab Sample	ID: 480-75353-2
	Matrix: Waste

Analyzed

02/13/15 13:28

02/13/15 13:28

02/13/15 13:28

02/13/15 13:28

02/13/15 13:28

02/13/15 13:28

02/13/15 13:28

Analyzed

02/17/15 15:29

02/17/15 15:29

02/17/15 15:29

02/17/15 15:29

02/17/15 15:29

02/17/15 15:29

02/17/15 15:29

Analyzed

02/17/15 15:29

02/17/15 15:29

02/17/15 15:29

02/17/15 15:29

Dil Fac

50

50

50

50

50

50

50

2

2

2

2 2

2

2

2

2

2

2

Dil Fac

Dil Fac

# **Client Sample ID: T2-WC PIPE**

Date Collected: 02/11/15 15:00 Date Received: 02/12/15 07:45

#### Lab Sample ID: 480-75353-3 Matrix: Solid

Percent Solids: 68.6

#### Method: 310.13 - Identification of Routine Petroleum Products Analyte Result Qualifier

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		480	480	mg/Kg	<u> </u>	02/13/15 10:32	02/17/15 13:06	50
Kerosene	ND		1200	1200	mg/Kg	₽	02/13/15 10:32	02/17/15 13:06	50
Motor Oil	17000		2400	2400	mg/Kg	₽	02/13/15 10:32	02/17/15 13:06	50
Fuel Oil #2	ND		1200	1200	mg/Kg	¢	02/13/15 10:32	02/17/15 13:06	50
Fuel Oil #4	ND		1200	1200	mg/Kg	₽	02/13/15 10:32	02/17/15 13:06	50
Fuel Oil #6	ND		1200	1200	mg/Kg	₽	02/13/15 10:32	02/17/15 13:06	50
Unknown Hydrocarbons	ND		1200	1200	mg/Kg	¢	02/13/15 10:32	02/17/15 13:06	50

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

TPH

(65-153)

0 X

104

107

NBZ

(34-132)

0 X

85

82

PHL

(11-120)

0 X

84

82

#### Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid					Prep Type: Total/NA
				Percent Surr	ogate Recovery (Acceptance Limits)
		12DCE	TOL	BFB	
Lab Sample ID	Client Sample ID	(53-146)	(50-149)	(49-148)	
480-75353-1	E4-TD1	112	104	112	
LCS 480-226818/1-A	Lab Control Sample	117	108	118	
MB 480-226818/2-A	Method Blank	128	118	126	
<b>.</b>					

2FP

(18-120)

0 X

78

83

FBP

(37-120)

0 X

91

87

TBP

(39-146)

0 X

96

91

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Matrix: Solid

MB 480-226655/1-A

BFB = 4-Bromofluorobenzene (Surr)

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

Lab Sample ID **Client Sample ID** 480-75353-1 E4-TD1 LCS 480-226655/2-A Lab Control Sample

Method Blank

Surrogate Legend TBP = 2,4,6-Tribromophenol 2FP = 2-Fluorophenol FBP = 2-Fluorobiphenyl PHL = Phenol-d5 TPH = p-Terphenyl-d14 NBZ = Nitrobenzene-d5

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

Matrix: Waste						Prep Type: Total/NA
_				Percent Su	rrogate Recov	ery (Acceptance Limits)
		TCX1	TCX2	DCB1	DCB2	
Lab Sample ID	Client Sample ID	(46-175)	(46-175)	(47-176)	(47-176)	
480-75353-2	E4-TD2	94	58	109	99	
LCS 480-226888/2-A	Lab Control Sample	127	118	141	127	
LCSD 480-226888/3-A	Lab Control Sample Dup	132	118	144	129	
MB 480-226888/1-A	Method Blank	102	101	128	116	

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

RL

99

99

99

200

99

200

99

99

99

99

99

99

99

99

99

MDL Unit

ug/Kg

19 ug/Kg

29

27 ug/Kg

55 ug/Kg

13 ug/Kg

15 ug/Kg

26 ug/Kg

30 ug/Kg

29 ug/Kg

36

33 ug/Kg

55 ug/Kg

33 ug/Kg

28 ug/Kg

ug/Kg

37 ug/Kg

D

Prepared

02/13/15 00:01

02/13/15 00:01

02/13/15 00:01

02/13/15 00:01

02/13/15 00:01

02/13/15 00:01

02/13/15 00:01

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02/13/15 00:01

02/13/15 00:01

02/13/15 00:01

02/13/15 00:01

02/13/15 00:01

02/13/15 00:01

Lab Sample ID: MB 480-226818/2-A

Matrix: Solid

Analyte

Benzene

Toluene

o-Xylene

Xylenes, Total

Isopropylbenzene

N-Propylbenzene

4-Isopropyltoluene

n-Butylbenzene

Naphthalene

sec-Butylbenzene

Methyl tert-butyl ether

1,2,4-Trimethylbenzene

1,3,5-Trimethylbenzene

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 226979

Method: 8260C - Volatile Organic Compounds by GC/MS

MB MB Result Qualifier

ND

**Client Sample ID: Method Blank** 

Analyzed

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

02/14/15 13:47

Prep Type: Total/NA

Prep Batch: 226818

Dil Fac

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

# 2 3 4 5

tert-Butylbenzene	ND		99	28 ug/Kg	02/13/15 00:01	02/14/15 13:47	1
	МВ	МВ					
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	128		53 - 146		02/13/15 00:01	02/14/15 13:47	1
Toluene-d8 (Surr)	118		50 - 149		02/13/15 00:01	02/14/15 13:47	1
4-Bromofluorobenzene (Surr)	126		49 - 148		02/13/15 00:01	02/14/15 13:47	1

#### Lab Sample ID: LCS 480-226818/1-A Matrix: Solid

#### Analysis Batch: 226979

#### Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 226818

-	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	2500	2740		ug/Kg		110	77 _ 125	
Ethylbenzene	2500	2810		ug/Kg		113	78 - 124	
Toluene	2500	2730		ug/Kg		109	75 _ 124	
m-Xylene & p-Xylene	2500	2890		ug/Kg		116	77 _ 125	
o-Xylene	2500	2840		ug/Kg		114	80 - 124	
1,2,4-Trimethylbenzene	2500	2930		ug/Kg		118	77 _ 127	
Methyl tert-butyl ether	2500	2710		ug/Kg		109	67 - 137	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	117		53 - 146
Toluene-d8 (Surr)	108		50 - 149
4-Bromofluorobenzene (Surr)	118		49 - 148

Lab Sample ID: MB 480-226655/1-A

Matrix: Solid

Acenaphthene

Anthracene

Chrysene

Fluorene

Pyrene

Fluoranthene

Naphthalene

Phenanthrene

Acenaphthylene

Benzo(a)pyrene

Benzo(a)anthracene

Benzo(b)fluoranthene

Benzo(g,h,i)perylene

Benzo(k)fluoranthene

Dibenz(a,h)anthracene

Indeno(1,2,3-cd)pyrene

Analyte

Analysis Batch: 226770

**Client Sample ID: Method Blank** 

Analyzed

02/12/15 17:28

02/12/15 17:28

02/12/15 17:28

02/12/15 17:28

02/12/15 17:28

02/12/15 17:28

02/12/15 17:28

02/12/15 17:28

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02/12/15 17:28

02/12/15 17:28

02/12/15 17:28

02/12/15 17:28

02/12/15 17:28

02/12/15 17:28

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 226655

Dil Fac

1

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	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	91		39 - 146	02/12/15 08:28	02/12/15 17:28	1
2-Fluorophenol	83		18 - 120	02/12/15 08:28	02/12/15 17:28	1
2-Fluorobiphenyl	87		37 - 120	02/12/15 08:28	02/12/15 17:28	1
Phenol-d5	82		11 _ 120	02/12/15 08:28	02/12/15 17:28	1
p-Terphenyl-d14	107		65 - 153	02/12/15 08:28	02/12/15 17:28	1
Nitrobenzene-d5	82		34 - 132	02/12/15 08:28	02/12/15 17:28	1

#### Lab Sample ID: LCS 480-226655/2-A Matrix: Solid Analysis Batch: 226770

Analysis Batch: 226770							Prep Batch: 226655
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthene	1640	1520		ug/Kg		93	53 - 120
Acenaphthylene	1640	1600		ug/Kg		98	58 - 121
Anthracene	1640	1620		ug/Kg		99	62 - 129
Benzo(a)anthracene	1640	1660		ug/Kg		101	65 - 133
Benzo(a)pyrene	1640	1590		ug/Kg		97	64 - 127
Benzo(b)fluoranthene	1640	1560		ug/Kg		95	64 - 135
Benzo(g,h,i)perylene	1640	1520		ug/Kg		93	50 - 152
Benzo(k)fluoranthene	1640	1740		ug/Kg		106	58 - 138
Chrysene	1640	1610		ug/Kg		99	64 - 131
Dibenz(a,h)anthracene	1640	1530		ug/Kg		94	54 - 148
Fluoranthene	1640	1670		ug/Kg		102	62 - 131
Fluorene	1640	1610		ug/Kg		98	63 - 126
Indeno(1,2,3-cd)pyrene	1640	1510		ug/Kg		92	56 - 149
Naphthalene	1640	1430		ug/Kg		87	46 - 120
Phenanthrene	1640	1630		ug/Kg		99	60 - 130
Pyrene	1640	1700		ug/Kg		104	51 <sub>-</sub> 133

TestAmerica Buffalo

RL

170

170

170

170

170

170

170

170

170

170

170

170

170

170

170

170

MDL Unit

41 ug/Kg

17 ug/Kg

18 ug/Kg

22 ug/Kg

38 ug/Kg

30 ug/Kg

18 ug/Kg

20 ug/Kg

21 ug/Kg

22 ug/Kg

20 ug/Kg

25 ug/Kg

25 ug/Kg

22 ug/Kg

25 ug/Kg

27 ug/Kg

D

Prepared

02/12/15 08:28

02/12/15 08:28

02/12/15 08:28

02/12/15 08:28

02/12/15 08:28

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02/12/15 08:28

02/12/15 08:28

02/12/15 08:28

02/12/15 08:28

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

MB MB Result Qualifier

ND

Limits

39 - 146

18 - 120

Lab Sample ID: LCS 480-226655/2-A

Matrix: Solid

2,4,6-Tribromophenol

Surrogate

2-Fluorophenol

Analysis Batch: 226770

Prep Type: Total/NA Prep Batch: 226655

**Client Sample ID: Lab Control Sample** 

# **8** 9

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1	

LCS LCS

%Recovery Qualifier

96

78

2-Fluorobiphenyl	91		37 _ 120											
Phenol-d5	84		11 _ 120											
p-Terphenyl-d14	104		65 - 153											
Nitrobenzene-d5	85		34 - 132											
Method: 310.13 - Identification of	Routin	e Petrol	eum Pro	duc	ts									
Lab Sample ID: MB 480-226762/1-A											Client Sa	ample ID:	Metho	d Blank
Matrix: Waste												Prep T	ype: T	otal/NA
Analysis Batch: 226897												Prep	Batch:	226762
	MB	MB												
Analyte	Result	Qualifier		RL		MDL	Unit		D	P	repared	Analyz	zed	Dil Fac
Gasoline	ND			200		200	mg/Kg			02/1	2/15 14:32	02/13/15	10:57	1
Kerosene	ND			500		500	mg/Kg			02/1	2/15 14:32	02/13/15	10:57	1
Motor Oil	ND		1	000		1000	mg/Kg			02/1	2/15 14:32	02/13/15	10:57	1
Fuel Oil #2	ND			500		500	mg/Kg			02/1	2/15 14:32	02/13/15	10:57	1
Fuel Oil #4	ND			500		500	mg/Kg			02/1	2/15 14:32	02/13/15	10:57	1
Fuel Oil #6	ND			500		500	mg/Kg			02/1	2/15 14:32	02/13/15	10:57	1
Unknown Hydrocarbons	ND			200		200	mg/Kg			02/1	2/15 14:32	02/13/15	10:57	1
Lab Sample ID: LCS 480-226762/2-A									С	lient	t Sample	ID: Lab C	ontrol	Sample
Matrix: Waste											- C.	Prep T	vpe: T	otal/NA
Analysis Batch: 226897												Prep	Batch:	226762
			Spike		LCS	LCS						%Rec.		
Analyte			Added		Result	Qua	lifier	Unit		D	%Rec	Limits		
Fuel Oil #2			15000		13800			mg/Kg			92	50 - 150		
- Lab Sample ID: LCSD 480-226762/3-A								Cli	ient	Sam	nple ID: L	ab Contro	ol Samı	ole Dup
Matrix: Waste											· · · ·	Prep T	ype: T	otal/NA
Analysis Batch: 226897												Prep	Batch:	226762
•			Spike		LCSD	LCS	D					%Rec.		RPD
Analyte			Added		Result	Qua	lifier	Unit		D	%Rec	Limits	RPD	Limit
Fuel Oil #2			15000		13500			mg/Kg			90	50 - 150	2	50
- Lab Sample ID: MB 480-226891/1-A											Client Sa	ample ID:	Metho	d Blank
Matrix: Solid												Prep T	vpe: T	otal/NA
Analysis Batch: 226935												Prep	Batch:	226891
	MB	MB												
Analyte	Result	Qualifier		RL		MDL	Unit		D	P	repared	Analyz	zed	Dil Fac
Gasoline	ND			6.5		6.5	mg/Kg			02/1	3/15 10:32	02/14/15	04:59	1
Kerosene	ND			16		16	mg/Kg			02/1	3/15 10:32	02/14/15	04:59	1
Motor Oil	ND			32		32	mg/Kg			02/1	3/15 10:32	02/14/15	04:59	1
Fuel Oil #2	ND			16		16	mg/Kg			02/1	3/15 10:32	02/14/15	04:59	1
Fuel Oil #4	ND			16		16	mg/Kg			02/1	3/15 10:32	02/14/15	04:59	1
Fuel Oil #6	ND			16		16	mg/Kg			02/1	3/15 10:32	02/14/15	04:59	1
Unknown Hydrocarbons	ND			16		16	mg/Kg			02/1	3/15 10:32	02/14/15	04:59	1

#### Method: 310.13 - Identification of Routine Petroleum Products (Continued)

Lab Sample ID: LCS 480-226891/2-A Matrix: Solid Analysis Batch: 226935	Spike	LCS	LCS		Client	Sample	ID: Lab C Prep T Prep %Rec.	ontrol S Type: To Batch: 2	ample tal/NA 26891
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Fuel Oil #2	49.1	45.7		mg/Kg		93	50 - 150		
Lab Sample ID: LCSD 480-226891/3-A				Clie	ent Sam	ple ID:	Lab Contro	ol Sampl	e Dup
Matrix: Solid							Prep 1	Type: To	tal/NA
Analysis Batch: 226935							Prep	Batch: 2	26891
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Fuel Oil #2	49.1	44.7		mg/Kg		91	50 - 150	2	50

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

Lab Sample ID: MB 480-226888/1-A Matrix: Waste Analysis Batch: 227098							Client Sa	mple ID: Metho Prep Type: T Prep Batch:	d Blank otal/NA 226888
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.5	2.5	mg/Kg		02/13/15 10:29	02/17/15 14:45	1
PCB-1221	ND		2.5	2.5	mg/Kg		02/13/15 10:29	02/17/15 14:45	1
PCB-1232	ND		2.5	2.5	mg/Kg		02/13/15 10:29	02/17/15 14:45	1
PCB-1242	ND		2.5	2.5	mg/Kg		02/13/15 10:29	02/17/15 14:45	1
PCB-1248	ND		2.5	2.5	mg/Kg		02/13/15 10:29	02/17/15 14:45	1
PCB-1254	ND		2.5	2.5	mg/Kg		02/13/15 10:29	02/17/15 14:45	1
PCB-1260	ND		2.5	2.5	mg/Kg		02/13/15 10:29	02/17/15 14:45	1
	MB	MP							

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		46 - 175	02/13/15 10:29	02/17/15 14:45	1
Tetrachloro-m-xylene	101		46 - 175	02/13/15 10:29	02/17/15 14:45	1
DCB Decachlorobiphenyl	128		47 - 176	02/13/15 10:29	02/17/15 14:45	1
DCB Decachlorobiphenyl	116		47 _ 176	02/13/15 10:29	02/17/15 14:45	1

Lab Sample ID: LCS 480-226 Matrix: Waste	6888/2-A						Client	Sample	e ID: Lab Co Prep T	ontrol Sample ype: Total/NA
Analysis Batch: 227098									Prep I	Batch: 226888
			Spike	LCS	LCS				%Rec.	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
PCB-1016			50.0	63.4		mg/Kg		127	51 _ 185	
PCB-1260			50.0	69.1		mg/Kg		138	61 _ 184	
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
Tetrachloro-m-xylene	127		46 - 175							
Tetrachloro-m-xylene	118		46 _ 175							
DCB Decachlorobiphenyl	141		47 _ 176							
DCB Decachlorobiphenyl	127		47 _ 176							

8

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

Lab Sample ID: LCSD 480-22 Matrix: Waste Analysis Batch: 227098	26888/3-A					Clie	nt Sam	iple ID:	Lab Contro Prep T Prep B	I Sample ype: Tof Batch: 2	e Dup tal/NA 26888
			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016			50.0	64.3		mg/Kg		129	51 _ 185	1	50
PCB-1260			50.0	70.3		mg/Kg		141	61 _ 184	2	50
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
Tetrachloro-m-xylene	132		46 - 175								
Tetrachloro-m-xylene	118		46 - 175								
DCB Decachlorobiphenyl	144		47 _ 176								
DCB Decachlorobiphenyl	129		47 - 176								

#### Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-226693/1-A Matrix: Solid Analysis Batch: 226939								Cli	ient Sa	ample ID: Me Prep Typ Prep Ba	ethod Blank e: Total/NA tch: 226693
	МВ	МВ									
Analyte	Result	Qualifier	RL	MDL	Unit		DI	Prepa	ared	Analyzed	Dil Fac
Aluminum	ND	Λ	10.2		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Antimony	ND		15.4		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Arsenic	ND		2.0		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Barium	ND		0.51		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Beryllium	ND		0.20		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Cadmium	ND		0.20		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Calcium	ND	٨	51.2		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Chromium	ND		0.51		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Cobalt	ND		0.51		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Copper	ND		1.0		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Iron	ND	٨	10.2		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Lead	ND		1.0		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Magnesium	ND		20.5		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Manganese	ND		0.20		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Nickel	ND		5.1		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Potassium	ND		30.7		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Selenium	ND		4.1		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Silver	ND		0.61		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Sodium	ND		143		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Thallium	ND		6.1		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Vanadium	ND		0.51		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Zinc	ND		2.0		mg/Kg		02/	12/15	5 11:12	02/13/15 11:	25 1
Lab Sample ID: LCSSRM 480-226693/2-A							Clien	t Sa	ample	ID: Lab Con	trol Sample
Matrix: Solid										Prep Typ	e: Total/NA
Analysis Batch: 226939		Spike	LCSSRM	LCS	SRM					Prep Ba %Rec.	tch: 226693
Analyte		Added	Result	Qual	ifier	Unit	D	%	Rec	Limits	
Aluminum		8630	7159	٨		mg/Kg		-	82.9	41.6 - 157.	

Antimony

TestAmerica Buffalo

9 70.0 23.0 - 254.

6

74.66

mg/Kg

107

8
9
3

Method: 60	)10C - I	Metals (	(ICP) (	Continued)
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Lab Sample ID: LCSSRM 480-226693/2-A					Client	Sampl	e ID: Lab Contro	I Sample
Matrix: Solid							Prep Type:	Total/NA
Analysis Batch: 226939							Prep Batcl	n: <b>226693</b>
	Spike	LCSSRM	LCSSRM				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	149	119.8		mg/Kg		80.4	70.9 - 129.	
Desitive	050	000 5				00.0	8	
Banum	259	222.5		mg/Kg		86.0	/3./ - 126.	
Beryllium	147	109 5		ma/Ka		74 4	3 67 0 - 111	
2013							4	
Cadmium	150	123.9		mg/Kg		82.5	73.0 - 126.	
							3	
Calcium	6320	5392	۸	mg/Kg		85.3	73.9 - 125.	
	440						9	
Chromium	116	97.39		mg/Kg		84.3	69.7 - 129.	
Cobalt	67.8	62 34		ma/Ka		Q1 Q	9 74.4 125	
Cobult	01.0	02.01		inging		01.0	8	
Copper	67.7	55.06		mg/Kg		81.3	73.2 - 129.	
							2	
Iron	12100	9344	^	mg/Kg		76.9	30.5 - 169.	
							9	
Lead	251	223.3		mg/Kg		89.0	75.6 - 124.	
Magnesium	3560	2803		ma/Ka		81 /	8 68 3 4 2 4	
Magnesium	5500	2030		iiig/itg		01.4	7	
Manganese	556	447.8		mg/Kg		80.5	77.4 - 122.	
							6	
Nickel	311	274.6		mg/Kg		88.3	74.3 - 126.	
							7	
Potassium	3000	2515		mg/Kg		83.8	62.5 - 137.	
Selenium	160	137 4		ma/Ka		85.9	2	
	100	107.4		mg/rtg		00.0	1	
Silver	43.7	36.26		mg/Kg		82.9	66.4 - 133.	
							9	
Sodium	737	595.9		mg/Kg		80.9	56.8 - 143.	
							4	
Ihallium	256	232.5		mg/Kg		90.9	69.5 - 130. -	
Vanadium	115	94 69		ma/Ka		82.7	5 67 5 121	
vanadian	110	37.05		mg/itg		02.1	9	
Zinc	302	256.4		mg/Kg		84.8	71.9 - 128.	
							4	

#### Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 480-227109/1-A Matrix: Solid							Client Sa	mple ID: Metho Prep Type: T	d Blank Total/NA
Analysis Batch: 227157	мв	МВ						Prep Batch:	227109
Analyte	Result	Qualifier	<b>RL</b>	MDL	Unit ma/Ka	D	Prepared	Analyzed	Dil Fac

**8** 9

## Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: LCSSRM 480-227109/2-A					Client	Sample	e ID: Lab C	ontrol Sample
Matrix: Solid							Prep 1	Type: Total/NA
Analysis Batch: 227157							Prep	Batch: 227109
	Spike	LCSSRM	LCSSRM				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Mercury	5.76	4.16		mg/Kg		72.1	51.0 - 148.	
							8	

**Client Sample ID** 

EA TOA

**GC/MS VOA** 

Lab Sample ID

400 75252 4

Prep Batch: 226818

Prep Type

Total/NIA

Matrix

Calid

Method

E025

Prep Batch

1

LCS 480-226818/1-A	Lab Control Sample	Total/NA	Solid	5035	
MB 480-226818/2-A	Method Blank	Total/NA	Solid	5035	
analysis Batch: 22697	9				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75353-1	E4-TD1	Total/NA	Solid	8260C	226818
LCS 480-226818/1-A	Lab Control Sample	Total/NA	Solid	8260C	226818
MB 480-226818/2-A	Method Blank	Total/NA	Solid	8260C	226818
C/MS Semi VOA Prep Batch: 226655 Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
C/MS Semi VOA Prep Batch: 226655 Lab Sample ID 480-75353-1	Client Sample ID E4-TD1	Prep Type Total/NA	Matrix Solid	Method 3550C	Prep Batch
C/MS Semi VOA Prep Batch: 226655 Lab Sample ID 480-75353-1 LCS 480-226655/2-A	Client Sample ID E4-TD1 Lab Control Sample	Prep Type Total/NA Total/NA	Matrix Solid Solid	Method 3550C 3550C	Prep Batch

#### Analysis Batch: 226770

Lab Sample ID 480-75353-1	Client Sample ID E4-TD1	Prep Type Total/NA	Matrix Solid	Method 8270D	Prep Batch 226655
LCS 480-226655/2-A	Lab Control Sample	Total/NA	Solid	8270D	226655
MB 480-226655/1-A	Method Blank	Total/NA	Solid	8270D	226655

#### GC Semi VOA

#### Prep Batch: 226762

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
480-75353-2	E4-TD2	Total/NA	Waste	3580A	
LCS 480-226762/2-A	Lab Control Sample	Total/NA	Waste	3580A	
LCSD 480-226762/3-A	Lab Control Sample Dup	Total/NA	Waste	3580A	
MB 480-226762/1-A	Method Blank	Total/NA	Waste	3580A	

Prep Batch: 226888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep B	Batch
480-75353-2	E4-TD2	Total/NA	Waste	3580A	
LCS 480-226888/2-A	Lab Control Sample	Total/NA	Waste	3580A	
LCSD 480-226888/3-A	Lab Control Sample Dup	Total/NA	Waste	3580A	
MB 480-226888/1-A	Method Blank	Total/NA	Waste	3580A	

#### Prep Batch: 226891

				Method	гер Бассп
480-75353-3 T2-WC F	PIPE	Total/NA	Solid	3550B	
LCS 480-226891/2-A Lab Con	trol Sample	Total/NA	Solid	3550C	
LCSD 480-226891/3-A Lab Con	trol Sample Dup	Total/NA	Solid	3550C	
MB 480-226891/1-A Method I	Blank	Total/NA	Solid	3550C	

#### Analysis Batch: 226897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75353-2	E4-TD2	Total/NA	Waste	310.13	226762

### GC Semi VOA (Continued)

#### Analysis Batch: 226897 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-226762/2-A	Lab Control Sample	Total/NA	Waste	310.13	226762
LCSD 480-226762/3-A	Lab Control Sample Dup	Total/NA	Waste	310.13	226762
MB 480-226762/1-A	Method Blank	Total/NA	Waste	310.13	226762
Analysis Batch: 226935					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-226891/2-A	Lab Control Sample	Total/NA	Solid	310.13	226891
LCSD 480-226891/3-A	Lab Control Sample Dup	Total/NA	Solid	310.13	226891
MB 480-226891/1-A	Method Blank	Total/NA	Solid	310.13	226891
Analysis Batch: 227098					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75353-2	E4-TD2	Total/NA	Waste	8082A	226888
LCS 480-226888/2-A	Lab Control Sample	Total/NA	Waste	8082A	226888
LCSD 480-226888/3-A	Lab Control Sample Dup	Total/NA	Waste	8082A	226888
MB 480-226888/1-A	Method Blank	Total/NA	Waste	8082A	226888
Analysis Batch: 227160					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75353-3	T2-WC PIPE	Total/NA	Solid	310.13	226891
Metals					
Prep Batch: 226693					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75353-1	E4-TD1	Total/NA	Solid	3050B	
LCSSRM 480-226693/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-226693/1-A	Method Blank	Total/NA	Solid	3050B	
Analysis Batch: 226939					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75353-1	E4-TD1	Total/NA	Solid	6010C	226693
LCSSRM 480-226693/2-A	Lab Control Sample	Total/NA	Solid	6010C	226693
MB 480-226693/1-A	Method Blank	Total/NA	Solid	6010C	226693
Prep Batch: 227109					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
480-75353-1	E4-TD1	Total/NA	Solid	7471B	
LCSSRM 480-227109/2-A	Lab Control Sample	Total/NA	Solid	7471B	
MB 480-227109/1-A	Method Blank	Total/NA	Solid	7471B	
Analysis Batch: 227157					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
480-75353-1	E4-TD1	Total/NA	Solid	7471B	227109
LCSSRM 480-227109/2-A	Lab Control Sample	Total/NA	Solid	7471B	227109
MB 480-227109/1-A	Method Blank	Total/NA	Solid	7471B	227109
Analysis Batch: 227158					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch

9

#### **General Chemistry**

#### Analysis Batch: 226790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-75353-1	E4-TD1	Total/NA	Solid	Moisture	
480-75353-3	T2-WC PIPE	Total/NA	Solid	Moisture	

#### Client Sample ID: E4-TD1 Date Collected: 02/10/15 12:00 Date Received: 02/12/15 07:45

Lab Sample ID: 480-75353-1 Matrix: Solid Percent Solids: 72.8

Lab Sample ID: 480-75353-3

Matrix: Solid

Percent Solids: 68.6

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			226818	02/13/15 00:11	GTG	TAL BUF
Total/NA	Analysis	8260C		1	226979	02/14/15 16:33	GTG	TAL BUF
Total/NA	Prep	3550C			226655	02/12/15 09:45	MRB	TAL BUF
Total/NA	Analysis	8270D		50	226770	02/13/15 02:32	LMW	TAL BUF
Total/NA	Prep	3050B			226693	02/12/15 11:12	TAS	TAL BUF
Total/NA	Analysis	6010C		1	226939	02/13/15 12:36	AMH	TAL BUF
Total/NA	Prep	3050B			226693	02/12/15 11:12	TAS	TAL BUF
Total/NA	Analysis	6010C		1	227158	02/17/15 13:41	LMH	TAL BUF
Total/NA	Prep	7471B			227109	02/17/15 11:30	LRK	TAL BUF
Total/NA	Analysis	7471B		1	227157	02/17/15 13:14	LRK	TAL BUF
Total/NA	Analysis	Moisture		1	226790	02/12/15 17:05	СМК	TAL BUF

#### Client Sample ID: E4-TD2 Date Collected: 02/10/15 12:10 Date Received: 02/12/15 07:45

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3580A			226762	02/12/15 14:32	CPH	TAL BUF
Total/NA	Analysis	310.13		50	226897	02/13/15 13:28	JRL	TAL BUF
Total/NA	Prep	3580A			226888	02/13/15 10:29	JLS	TAL BUF
Total/NA	Analysis	8082A		2	227098	02/17/15 15:29	KS	TAL BUF

#### Client Sample ID: T2-WC PIPE Date Collected: 02/11/15 15:00 Date Received: 02/12/15 07:45

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			226891	02/13/15 10:32	JLS	TAL BUF
Total/NA	Analysis	310.13		50	227160	02/17/15 13:06	JRL	TAL BUF
Total/NA	Analysis	Moisture		1	226790	02/12/15 17:05	СМК	TAL BUF

#### Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

#### **Certification Summary**

Client: AMEC Foster Wheeler E & I, Inc Project/Site: Niagara Falls site - Tract II TestAmerica Job ID: 480-75353-1

#### Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

uthority	Program		EPA Region	Certification ID	Expiration Date
lew York	NELAP		2	10026	03-31-15 *
The following analytes	are included in this report, bu	ut certification is not off	fered by the governing a	authority:	
Analysis Method	Prep Method	Matrix	Analyt	e	
310.13	3550B	Solid	Fuel C	)il #2	
310.13	3550B	Solid	Fuel C	Dil #4	
310.13	3550B	Solid	Fuel C	Dil #6	
310.13	3550B	Solid	Gasol	ine	
310.13	3550B	Solid	Keros	ene	
310.13	3550B	Solid	Motor	Oil	
310.13	3550B	Solid	Unkno	own Hydrocarbons	
310.13	3580A	Waste	Fuel C	Dil #2	
310.13	3580A	Waste	Fuel C	Dil #4	
310.13	3580A	Waste	Fuel C	Dil #6	
310.13	3580A	Waste	Gasol	ine	
310.13	3580A	Waste	Keros	ene	
310.13	3580A	Waste	Motor	Oil	
310.13	3580A	Waste	Unkno	own Hydrocarbons	
Moisture		Solid	Perce	nt Moisture	
Moisture		Solid	Perce	nt Solids	

#### **Method Summary**

#### Client: AMEC Foster Wheeler E & I, Inc Project/Site: Niagara Falls site - Tract II

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
310.13	Identification of Routine Petroleum Products	NYASP	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

#### Protocol References:

EPA = US Environmental Protection Agency

NYASP = New York Analytical Services Protocol

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

#### Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

#### Sample Summary

Matrix

Solid

Waste

Solid

Client: AMEC Foster Wheeler E & I, Inc Project/Site: Niagara Falls site - Tract II

Client Sample ID

E4-TD1

E4-TD2

T2-WC PIPE

Lab Sample ID

480-75353-1

480-75353-2

480-75353-3

TestAmerica Job ID: 480-75353-1

02/10/15 12:00 02/12/15 07:45

Received

02/12/15 07:45

02/12/15 07:45

Collected

02/10/15 12:10

02/11/15 15:00

5
8
9
13
14

#### Detection Limit Exceptions Summary

Client: AMEC Foster Wheeler E & I, Inc Project/Site: Niagara Falls site - Tract II

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
310.13	Solid	Motor Oil	mg/Kg	33	33.33

THE LEADER IN ENVIRONMENTAL TESTING THE LEADER IN ENVIRONMENTAL TESTING TESTAMERICA LABORATORIES, INC. TAL-5210 (0713)	COC No: of COCs	Sampler.	For Lab Use Only: Walk-in Client:	Lab Sampling:	Job / SDG No.:	Sample Specific Notes:				Pless analyze	product layer	-				od Ioncor than 4 month)		Months		Therm ID No.:	2/12/1- 0746	Date/Time#	Date/Time:	] 7
0521 <b>18</b>	te: 2 ( ) 15		· · · · · · · · · · · · · · · · · · ·															al by Lab		Corr'd:	Company:	Company:	Company:	7 6'2
Custody Record	Contact: bl. L. Huy Da	contact: との、しょうという して	5 571+ 571-	124 745 745	W C E	747 7728 7928	X ××			×		×					illiple uisposal ( A ice illay be as	C Return to Client		Cooler Temp. (°C): Obs'd:	sceived of:	aceived by:	eceived in Laboratory by:	
Chain of (	b Crewly Site (	rnaround Time	m Below	veeks (Y/ N)	) əjdu	Sample         Sample           Type         88           Comp.         # of           C=Comp.         # of           G=Grab.         Matrix           Cont.         Image: Cont.	S Sal 6	-	-	A level		A Sw I					Codes for the sample in the	Unknown			Date/Time: 75 Re	Dáte/Time: Re	Date/Time: Re	
Regulatory Proc	Project Manager: R	Tel/Fax: Analysis Tu	CALENDAR DAYS TAT if different fro			Sample Sample Date Time	2/10/15 1200			2/10/1/2		2/11/58/500				NO3; 5=NaOH; 6= Other	Please List any EPA Waste (	int Doison B	2	Custody Seal No.:	Company:	Company:	Company:	
[estûmerir=/Ruffal tai tai	480-75353 Chain of Custody	Company Name: Ame. Address: Sec. 1. H. Bril Am.	City/State/ZIP: Compile PA 15106	Fax: Project Name: Trac + 2	Site:	Sample Identification	E4-701	<i>av</i>	La alt	1 E4-TD2	yee 2	0 12-WCRPC	f 29			Preservation Used: 1= Ice, 2= HCI: 3= H2SO4, 4=H	Possible Hazard identrication: Are any samples from a listed EPA Hazardous Waste? Commants Saction if the lab is to disnose of the sample		Special Instructions/QC Requirements & Comments: Cର f	Custowy Seals Intact:	Religious by L Z/ref	ZReihquished by:	ORelinquished by:	

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**15** 16 Client: AMEC Foster Wheeler E & I, Inc

#### Login Number: 75353 List Number: 1

Creator: Janish, Carl M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	amec
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

List Source: TestAmerica Buffalo



# Analytical Report For

# **Groundwater & Environmental Services**

For Lab Project ID

# 151491

Referencing

Brightfields Tract II *Prepared* Tuesday, April 28, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt. Page 1 of 12





WWW.PARADIGMENV.COM

179 Lake Avenue, Rochester, NY 14608

PHONE: 585-647-2530

TOLL FREE: 800-724-1997 FAX: 585-647-3311

LAB PROJECT NARRATIVE

CLIENT: Groundwater & Environmental Services PROJECT NAME: Brightfields Tract II LAB PROJECT NUMBER: 151491

Three soil samples were collected on 4/23/2015 and submitted to Paradigm for VOC 8260 STARS and SVOC 8270 STARS analysis. The samples were received at the Paradigm laboratory on 4/24/2015 with NELAC compliance issues as noted on the Chain of Custody Supplement Sample Condition Report.

For VOCs, all analytical quality control measures, including blanks, surrogates, calibrations and Laboratory Control Spikes, were compliant with method specifications.

For SVOCs, the samples "LNAPL-13 (8.5')" and "LNAPL-17 (4.5')" had surrogate outliers as indicated on the sample reports. These outliers indicate probable matrix effects. Both samples had significant concentrations of non-target petroleum hydrocarbons. All other method QC measures, including blanks, calibrations and Laboratory Control Spikes, were compliant with method specifications.



Client:	Groundwater & Environmental Services		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-12 (10')		
Lab Sample ID:	151491-01	Date Sampled:	4/23/2015
Matrix:	Soil	Date Received:	4/24/2015

#### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	Resu	lt <u>Units</u>		<b>Qualifier</b>	Date Anal	<u>yzed</u>
Acenaphthene	< 291	ug/Kg			4/27/2015	16:17
Acenaphthylene	< 291	ug/Kg			4/27/2015	16:17
Anthracene	< 291	ug/Kg			4/27/2015	16:17
Benzo (a) anthracene	< 291	ug/Kg			4/27/2015	16:17
Benzo (a) pyrene	< 291	ug/Kg			4/27/2015	16:17
Benzo (b) fluoranthene	< 291	ug/Kg			4/27/2015	16:17
Benzo (g,h,i) perylene	< 291	ug/Kg			4/27/2015	16:17
Benzo (k) fluoranthene	< 291	ug/Kg			4/27/2015	16:17
Chrysene	< 291	ug/Kg			4/27/2015	16:17
Dibenz (a,h) anthracene	< 291	ug/Kg			4/27/2015	16:17
Fluoranthene	< 291	ug/Kg			4/27/2015	16:17
Fluorene	< 291	ug/Kg			4/27/2015	16:17
Indeno (1,2,3-cd) pyrene	< 291	ug/Kg			4/27/2015	16:17
Naphthalene	< 291	ug/Kg			4/27/2015	16:17
Phenanthrene	< 291	ug/Kg			4/27/2015	16:17
Pyrene	< 291	ug/Kg			4/27/2015	16:17
Surrogate	Pe	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2-Fluorobiphenyl		53.5	46.3 - 96.9		4/27/2015	16:17
Nitrobenzene-d5		50.6	39.7 - 90.9		4/27/2015	16:17
Terphenyl-d14		68.5	56.8 - 119		4/27/2015	16:17
Method Reference(s):	EPA 8270D					
December Data	EPA 3550C					
Data File:	4/2//2015 B04797.D					

#### Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	<b>Qualifier</b>	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	< 9.87	ug/Kg		4/24/2015 14:47
1,3,5-Trimethylbenzene	< 9.87	ug/Kg		4/24/2015 14:47
Benzene	< 9.87	ug/Kg		4/24/2015 14:47

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt. Page 3 of 12



Client:	<b>Groundwater</b>	• & Env	vironmental Serv	<u>vices</u>			
Project Reference:	Brightfields Ti	act II					
Sample Identifier:	LNAPL-12 (1	0')					
Lab Sample ID:	151491-01			Dat	e Sampled:	4/23/2015	
Matrix:	Soil			Dat	e Received:	4/24/2015	
Ethylbenzene		< 9.87	ug/Kg			4/24/2015	14:47
Isopropylbenzene		< 9.87	ug/Kg			4/24/2015	14:47
m,p-Xylene		< 9.87	ug/Kg			4/24/2015	14:47
Methyl tert-butyl Ether		< 9.87	ug/Kg			4/24/2015	14:47
Naphthalene		< 24.7	ug/Kg			4/24/2015	14:47
n-Butylbenzene		< 9.87	ug/Kg			4/24/2015	14:47
n-Propylbenzene		< 9.87	ug/Kg			4/24/2015	14:47
o-Xylene		< 9.87	ug/Kg			4/24/2015	14:47
p-Isopropyltoluene		< 9.87	ug/Kg			4/24/2015	14:47
sec-Butylbenzene		< 9.87	ug/Kg			4/24/2015	14:47
tert-Butylbenzene		< 9.87	ug/Kg			4/24/2015	14:47
Toluene		< 9.87	ug/Kg			4/24/2015	14:47
<u>Surrogate</u>		I	Percent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	<u>zed</u>
1,2-Dichloroethane-d4			103	80.6 - 125		4/24/2015	14:47
4-Bromofluorobenzene			105	86.6 - 111		4/24/2015	14:47
Pentafluorobenzene			101	90.9 - 107		4/24/2015	14:47
Toluene-D8			98.4	90.8 - 109		4/24/2015	14:47
Method Referenc	<b>e(s):</b> EPA 826	0C					
Data File:	EPA 503: x22163.I	5A )					

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

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Client:	<u>Groundwater &amp; Environmental Services</u>		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-13 (8.5')		
Lab Sample ID:	151491-02	Date Sampled:	4/23/2015
Matrix:	Soil	Date Received:	4/24/2015

#### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	Result	<u>Units</u>		<b>Qualifier</b>	Date Analy	<u>yzed</u>
Acenaphthene	< 308	ug/Kg			4/27/2015	16:45
Acenaphthylene	< 308	ug/Kg			4/27/2015	16:45
Anthracene	< 308	ug/Kg			4/27/2015	16:45
Benzo (a) anthracene	< 308	ug/Kg			4/27/2015	16:45
Benzo (a) pyrene	< 308	ug/Kg			4/27/2015	16:45
Benzo (b) fluoranthene	< 308	ug/Kg			4/27/2015	16:45
Benzo (g,h,i) perylene	< 308	ug/Kg			4/27/2015	16:45
Benzo (k) fluoranthene	< 308	ug/Kg			4/27/2015	16:45
Chrysene	< 308	ug/Kg			4/27/2015	16:45
Dibenz (a,h) anthracene	< 308	ug/Kg			4/27/2015	16:45
Fluoranthene	< 308	ug/Kg			4/27/2015	16:45
Fluorene	< 308	ug/Kg			4/27/2015	16:45
Indeno (1,2,3-cd) pyrene	< 308	ug/Kg			4/27/2015	16:45
Naphthalene	< 308	ug/Kg			4/27/2015	16:45
Phenanthrene	< 308	ug/Kg			4/27/2015	16:45
Pyrene	< 308	ug/Kg			4/27/2015	16:45
<u>Surrogate</u>	Per	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	zed
2-Fluorobiphenyl		41.8	46.3 - 96.9	*	4/27/2015	16:45
Nitrobenzene-d5		31.6	39.7 - 90.9	*	4/27/2015	16:45
Terphenyl-d14		56.8	56.8 - 119		4/27/2015	16:45
Method Reference(s):	EPA 8270D					
	EPA 3550C					
Preparation Date: Data File:	4/2//2015 B04798.D					

#### Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	< 6.94	ug/Kg		4/24/2015 15:11
1,3,5-Trimethylbenzene	< 6.94	ug/Kg		4/24/2015 15:11
Benzene	< 6.94	ug/Kg		4/24/2015 15:11

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Client:	<u>Groundwat</u>	er & Envi	<u>ronmental Ser</u>	<u>vices</u>			
Project Reference:	Brightfields	Tract II					
Sample Identifier:	LNAPL-13	(8.5')					
Lab Sample ID:	151491-02			Dat	te Sampled:	4/23/2015	
Matrix:	Soil			Dat	te Received:	4/24/2015	
Ethylbenzene		< 6.94	ug/Kg			4/24/2015	15:11
Isopropylbenzene		< 6.94	ug/Kg			4/24/2015	15:11
m,p-Xylene		< 6.94	ug/Kg			4/24/2015	15:11
Methyl tert-butyl Ethe	r	< 6.94	ug/Kg			4/24/2015	15:11
Naphthalene		< 17.4	ug/Kg			4/24/2015	15:11
n-Butylbenzene		14.3	ug/Kg			4/24/2015	15:11
n-Propylbenzene		< 6.94	ug/Kg			4/24/2015	15:11
o-Xylene		< 6.94	ug/Kg			4/24/2015	15:11
p-Isopropyltoluene		< 6.94	ug/Kg			4/24/2015	15:11
sec-Butylbenzene		7.78	ug/Kg			4/24/2015	15:11
tert-Butylbenzene		< 6.94	ug/Kg			4/24/2015	15:11
Toluene		< 6.94	ug/Kg			4/24/2015	15:11
<u>Surrogate</u>		<u>Pe</u>	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	<u>zed</u>
1,2-Dichloroethane-d4			102	80.6 - 125		4/24/2015	15:11
4-Bromofluorobenzen	e		91.5	86.6 - 111		4/24/2015	15:11
Pentafluorobenzene			102	90.9 - 107		4/24/2015	15:11
Toluene-D8			101	90.8 <b>-</b> 109		4/24/2015	15:11
Method Referen	ce(s): EPA 8	260C					
Data File:	z2216	54.D					
· · · · ·							

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt. Page 6 of 12



Client:	Groundwater & Environmental Services		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-17 (4.5')		
Lab Sample ID:	151491-03	Date Sampled:	4/23/2015
Matrix:	Soil	Date Received:	4/24/2015

#### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>		<u>Qualifier</u>	<b>Date Anal</b>	<u>yzed</u>
Acenaphthene	< 305	ug/Kg			4/27/2015	17:14
Acenaphthylene	< 305	ug/Kg			4/27/2015	17:14
Anthracene	< 305	ug/Kg			4/27/2015	17:14
Benzo (a) anthracene	< 305	ug/Kg			4/27/2015	17:14
Benzo (a) pyrene	< 305	ug/Kg			4/27/2015	17:14
Benzo (b) fluoranthene	< 305	ug/Kg			4/27/2015	17:14
Benzo (g,h,i) perylene	< 305	ug/Kg			4/27/2015	17:14
Benzo (k) fluoranthene	< 305	ug/Kg			4/27/2015	17:14
Chrysene	< 305	ug/Kg			4/27/2015	17:14
Dibenz (a,h) anthracene	< 305	ug/Kg			4/27/2015	17:14
Fluoranthene	< 305	ug/Kg			4/27/2015	17:14
Fluorene	416	ug/Kg			4/27/2015	17:14
Indeno (1,2,3-cd) pyrene	< 305	ug/Kg			4/27/2015	17:14
Naphthalene	< 305	ug/Kg			4/27/2015	17:14
Phenanthrene	943	ug/Kg			4/27/2015	17:14
Pyrene	< 305	ug/Kg			4/27/2015	17:14
Surrogate	Per	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	zed
2-Fluorobiphenyl		67.5	46.3 - 96.9		4/27/2015	17:14
Nitrobenzene-d5		50.4	39.7 - 90.9		4/27/2015	17:14
Terphenyl-d14		64.4	56.8 - 119		4/27/2015	17:14
Method Reference(s):	EPA 8270D					
Preparation Date: Data File:	EPA 3550C 4/27/2015 B04799.D					

#### Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	<b>Qualifier</b>	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	14.2	ug/Kg		4/24/2015 15:36
1,3,5-Trimethylbenzene	< 8.79	ug/Kg		4/24/2015 15:36
Benzene	< 8.79	ug/Kg		4/24/2015 15:36

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Client:	<u>Groundwate</u>	<u>r &amp; Env</u>	ironmental Ser	<u>vices</u>			
Project Reference:	Brightfields T	ract II					
Sample Identifier:	LNAPL-17 (4	ł.5')					
Lab Sample ID:	151491-03			Dat	te Sampled:	4/23/2015	
Matrix:	Soil			Dat	te Received:	4/24/2015	
Ethylbenzene		< 8.79	ug/Kg			4/24/2015	15:36
Isopropylbenzene		36.0	ug/Kg			4/24/2015	15:36
m,p-Xylene		< 8.79	ug/Kg			4/24/2015	15:36
Methyl tert-butyl Ether		< 8.79	ug/Kg			4/24/2015	15:36
Naphthalene		< 22.0	ug/Kg			4/24/2015	15:36
n-Butylbenzene		81.5	ug/Kg			4/24/2015	15:36
n-Propylbenzene		36.9	ug/Kg			4/24/2015	15:36
o-Xylene		< 8.79	ug/Kg			4/24/2015	15:36
p-Isopropyltoluene		< 8.79	ug/Kg			4/24/2015	15:36
sec-Butylbenzene		50.7	ug/Kg			4/24/2015	15:36
tert-Butylbenzene		< 8.79	ug/Kg			4/24/2015	15:36
Toluene		< 8.79	ug/Kg			4/24/2015	15:36
<u>Surrogate</u>		<u>P</u>	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	zed
1,2-Dichloroethane-d4			101	80.6 - 125		4/24/2015	15:36
4-Bromofluorobenzene	2		89.9	86.6 - 111		4/24/2015	15:36
Pentafluorobenzene			102	90.9 - 107		4/24/2015	15:36
Toluene-D8			107	90.8 - 109		4/24/2015	15:36
Method Reference	ce(s): EPA 826	50C					
Data File:	EPA 503 x22165.	D					

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

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# **Analytical Report Appendix**

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard. sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

*"J"* = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"\*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

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# **GENERAL TERMS AND CONDITIONS** LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the
Compensation.	parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
	percent $(1-1/2\%)$ per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.
Limitations of Liability.	In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re- perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
	LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance (c) the wightion of the Client of any analicable law (d) non-compliance by the Client with any
	environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
	Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
	LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
Force Majeure.	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

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Received By:	<b>Relinquished By:</b>	Sampled By:		SAMPLE CONDITION:	**LAB USE ONL	10	9	8	7	o	රා 	4	3 1/ /3	2 / / / / / / / / / / / / / / / / / / /	1 4/23/15 1	DATE		Brightfields Tract	PROJECT NAME/SITE NAME:	(716) 647-2530 * (800)	Rochester, NY 14608	179 Lake Avenue	SERVICES, I	ENVIRONME	PARADI
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PARADIGM		<u>Chain of C</u>	<u>ustody Supp</u>	<u>lement</u>	
Client:		Stoundwater + Env. Services	Completed by:	Glenn Pezzulo	
Lab Project ID:	-	151491	Date:	4/24/15	
		Sample Condition Req Per NELAC/ELAP 210/241/2	<b>uirements</b> 42/243/244		
Condition	NE.	LAC compliance with the sample condition Yes	on requirements up No	on receipt N/A	
Container Type			5035		
Con	nments _		(*		
Transferred to method- compliant container					
Headspace (<1 mL)					
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Preservation	nments				
Chlorine Absent (<0.10 ppm per test s Con	strip) nments				
Holding Time	nments				
Temperature		8°C ired		· · · · · · · · · · · · · · · · · · ·	

Sufficient Sample Quantity

1 -35-326

Comments


### Analytical Report For

## **Groundwater & Environmental Services**

For Lab Project ID

## 151513

Referencing

Brightfields Tract II *Prepared* Thursday, April 30, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below:

Reduced sample size used for TCLP (1311) extraction due to limited sample volume.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

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WWW.PARADIGMENV.COM

179 Lake Avenue, Rochester, NY 14608

PHONE: 585-647-2530

TOLL FREE: 800-724-1997 FAX: 585-647-3311

LAB PROJECT NARRATIVE

CLIENT: Groundwater & Environmental Services PROJECT NAME: Brightfields Tract II LAB PROJECT NUMBER: 151513

Two soil samples were collected on 4/23/2015 and submitted to Paradigm for TCLP Lead, TCLP Benzene, Flashpoint, pH, Paint Filter and PHC analysis. The samples were received at the Paradigm laboratory on 4/24/2015 with NELAC compliance issues as noted on the Chain of Custody Supplement Sample Condition Report.

For TCLP Benzene, all analytical quality control measures, including blanks, surrogates, calibrations and Laboratory Control Spikes, were compliant with method specifications.

For TCLP Lead and PHCs, all analytical quality control measures, including blanks, calibrations and Laboratory Control Spikes, were compliant with method specifications.

For pH, Paint Filter test and Flashpoint, all calibrations, reference values or other method QC requirements were met.



Client:	<u>Groundw</u>	ater & Environm	<u>ental Services</u>		
Project Reference:	Brightfield	ls Tract II			
Sample Identifier:	Disposal	1			
Lab Sample ID:	151513-0	01		Date Sampled:	4/23/2015
Matrix:	Soil			Date Received:	4/24/2015
<u>Flash Point</u>					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
Flash Point, Celsius		>70.0	С		4/27/2015
Method Referen	nce(s): EP.	A 1010A			
<u>Paint Filter Test</u>					
Analyte		Result	<u>Units</u>	Qualifier	Date Analyzed
Paint Filter Test		Pass	N/A		4/27/2015
Method Referen	nce(s): EP.	A 9095B			
рH					
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed
рН		8.89 @ 17.4 C	S.U.		4/27/2015 14:40
Method Referen	nce(s): EP.	A 9045D			
<u>Petroleum Hydro</u>	carbons by	<u>GC</u>			
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
Heavy weight PHC as	Lube Oil	158	mg/Kg		4/28/2015
Sample chromate Method Referen Preparation Da ELAP does no	ogram not an exact nce(s): NY te: 4/2 t offer this test	t match to reference chromo SDOH 310.13 Modified 27/2015 for approval as part o	atogram. Closest match n f their laboratory ce	nade. rtification program	

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Client:	Groundwater & Environmental Services		
Project Reference:	Brightfields Tract II		
Sample Identifier:	Disposal 1		
Lab Sample ID:	151513-01A	Date Sampled:	4/23/2015
Matrix:	TCLP Extract	Date Received:	4/24/2015

#### **TCLP Volatile Organics**

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<b>Regulatory Limit</b>	<b>Qualifier</b>	Date Analy	<u>vzed</u>
Benzene	< 20.0	ug/L	500		4/28/2015	15:09
<u>Surrogate</u>	Perce	nt Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	zed
1,2-Dichloroethane-d4		96.9	82.3 - 115		4/28/2015	15:09
4-Bromofluorobenzene		87.0	85.5 - 111		4/28/2015	15:09
Pentafluorobenzene		96.4	91.2 - 107		4/28/2015	15:09
Toluene-D8		96.1	90.9 - 108		4/28/2015	15:09
Method Reference(s):	EPA 8260C					
	EPA 1311 / 5030					
Data File:	x22252.D					
<u>TCLP Metals (ICP)</u>						
Analyta	Decult	Unito	De sul et e sur L'sur it	Qualifian	Data Anal	d

Analyte		<u>Result</u>	<u>Units</u>	Regulatory Limit Qualifier	<u>Date Analyzeu</u>
Lead		< 0.100	mg/L	5	4/28/2015 16:59
	Method Reference(s):	EPA 6010C EPA 1311 / 3005			
	Preparation Date: Data File:	4/27/2015 042815b			

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Client:	<u>Groun</u>	Groundwater & Environmental Services								
Project Reference:	Brightf	ields Tract II								
Sample Identifier:	Dispo	sal 2								
Lab Sample ID:	15151	13-02		Date Sampled:	4/23/2015					
Matrix:	Soil			Date Received:	4/24/2015					
<u>Flash Point</u>										
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	<b>Date Analyzed</b>					
Flash Point, Celsius		>70.0	С		4/27/2015					
Method Referen	nce(s):	EPA 1010A								
<u>Paint Filter Test</u>										
<u>Analyte</u>		Result	Units	Qualifier	<b>Date Analyzed</b>					
Paint Filter Test		Pass	N/A		4/27/2015					
Method Referen	ice(s):	EPA 9095B								
рН										
<u>Analyte</u>		Result	<u>Units</u>	Qualifier	Date Analyzed					
рН		8.70 @ 19.3 C	S.U.		4/27/2015 14:40					
Method Referen	ice(s):	EPA 9045D								
<u>Petroleum Hydro</u>	<u>carbons</u>	<u>by GC</u>								
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	<b>Date Analyzed</b>					
Heavy weight PHC as	Lube Oil	375	mg/Kg		4/28/2015					
Sample chromate Method Referen Preparation Da ELAP does no	ogram not an nce(s): te: t offer this	exact match to reference chromo NYSDOH 310.13 Modified 4/27/2015 test for approval as part o	atogram. Closest ma f their laborator	itch made. v certification proaram.						

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Client:	Groundwater & Environmental Services		
Project Reference:	Brightfields Tract II		
Sample Identifier:	Disposal 2		
Lab Sample ID:	151513-02A	Date Sampled:	4/23/2015
Matrix:	TCLP Extract	Date Received:	4/24/2015

#### **TCLP Volatile Organics**

Analyte	<u>Result</u>	<u>Units</u>	<b>Regulatory Limit</b>	<b>Qualifier</b>	Date Anal	<u>yzed</u>
Benzene	< 20.0	ug/L	500		4/28/2015	15:32
<u>Surrogate</u>	Perce	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	<u>zed</u>
1,2-Dichloroethane-d4		99.7	82.3 - 115		4/28/2015	15:32
4-Bromofluorobenzene		87.9	85.5 - 111		4/28/2015	15:32
Pentafluorobenzene		96.8	91.2 - 107		4/28/2015	15:32
Toluene-D8		97.2	90.9 - 108		4/28/2015	15:32
Method Reference(s):	EPA 8260C					
	EPA 1311 / 5030					
Data File:	x22253.D					
<u>TCLP Metals (ICP)</u>						

<u>Analyte</u>		Result	<u>Units</u>	Regulatory Limit Qualifier	<u>Date Analyzed</u>
Lead		< 0.100	mg/L	5	4/28/2015 17:03
	Method Reference(s):	EPA 6010C			
		EPA 1311 / 3005			
	Preparation Date:	4/27/2015			
	Data File:	042815b			

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# **Analytical Report Appendix**

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard. sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

*"J"* = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"\*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

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### **GENERAL TERMS AND CONDITIONS** LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the
Compensation.	parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
	percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.
Limitations of Liability.	In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re- perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
	LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance (c) the wightion of the Client of any annicable law (d) non-compliance by the Client with any
	environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
	Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
	LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
Force Majeure.	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

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Received By:	Relinquished By:	Jom Hallmort 6	Sampled By:	SAMPLE CONDITION: Check acceptable or note deviation:	**LAB USE ONLY**	6	ŷ	<u>(</u> 20	· ·	\$	CJ	\$	ω	0 2 J 1530	1 4/23/16 1515	DATE		Brightfields Tract II	PROJECT NAME/SITE NAME:	(716) 647-2530 * (800) 724-198	Dorheeter NY 14508	470 I aka Avamia	SERVICES NC.	ENVRONMENTA	PARADIGN
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Client:	Groendwater Env. Serv.	Completed by:	Nolpail
ab Project ID:	151513	Date:	4/24/15
	Sample Condition R Per NELAC/ELAP 210/24	<b>equirements</b> 1/242/243/244	
Condition	NELAC compliance with the sample cond Yes	ition requirements up No	oon receipt N/A
Container Type			
Comment	S		
Transferred to method- compliant container			
H <b>eadspace</b> (<1 mL) Comment			
Preservation Comment	ts		¥
Chlorine Absent (<0.10 ppm per test strip) Comment	ts		
Holding Time Comment	ts		
Temperature Commen	ts 8°C iculy	X 24/15 085	2 Metals
Sufficient Sample Quantity Commen	ts		
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2012



### Analytical Report For

## **Groundwater & Environmental Services**

For Lab Project ID

## 151532

Referencing

Brightfields Tract II Prepared Wednesday, April 29, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

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WWW.PARADIGMENV.COM

179 Lake Avenue, Rochester, NY 14608

PHONE: 585-647-2530 TO

TOLL FREE: 800-724-1997 FAX: 585-647-3311

LAB PROJECT NARRATIVE

CLIENT: Groundwater & Environmental Services PROJECT NAME: Brightfields Tract II LAB PROJECT NUMBER: 151532

Four soil samples were collected on 4/23/2015 and submitted to Paradigm for VOC 8260 STARS and SVOC 8270 STARS analysis. The samples were received at the Paradigm laboratory on 4/27/2015 with NELAC compliance issues as noted on the Chain of Custody Supplement Sample Condition Report.

For VOCs, all analytical quality control measures, including blanks, surrogates, calibrations and Laboratory Control Spikes, were compliant with method specifications.

For SVOCs, all four samples had one or more surrogate outliers as indicated on the sample reports. These outliers indicate probable matrix effects. All samples had significant concentrations of non-target petroleum hydrocarbons. All other method QC measures, including blanks, calibrations and Laboratory Control Spikes, were compliant with method specifications.



Client:	<u>Groundwater &amp; Environmental Services</u>		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-19 (10-10.5')		
Lab Sample ID:	151532-01	Date Sampled:	4/23/2015
Matrix:	Soil	Date Received:	4/27/2015

### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	Result	t <u>Units</u>		<b>Qualifier</b>	<b>Date Anal</b>	<u>yzed</u>
Acenaphthene	< 357	ug/Kg			4/28/2015	13:07
Acenaphthylene	< 357	ug/Kg			4/28/2015	13:07
Anthracene	< 357	ug/Kg			4/28/2015	13:07
Benzo (a) anthracene	< 357	ug/Kg			4/28/2015	13:07
Benzo (a) pyrene	< 357	ug/Kg			4/28/2015	13:07
Benzo (b) fluoranthene	< 357	ug/Kg			4/28/2015	13:07
Benzo (g,h,i) perylene	< 357	ug/Kg			4/28/2015	13:07
Benzo (k) fluoranthene	< 357	ug/Kg			4/28/2015	13:07
Chrysene	< 357	ug/Kg			4/28/2015	13:07
Dibenz (a,h) anthracene	< 357	ug/Kg			4/28/2015	13:07
Fluoranthene	< 357	ug/Kg			4/28/2015	13:07
Fluorene	< 357	ug/Kg			4/28/2015	13:07
Indeno (1,2,3-cd) pyrene	< 357	ug/Kg			4/28/2015	13:07
Naphthalene	< 357	ug/Kg			4/28/2015	13:07
Phenanthrene	< 357	ug/Kg			4/28/2015	13:07
Pyrene	< 357	ug/Kg			4/28/2015	13:07
<u>Surrogate</u>	Pe	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2-Fluorobiphenyl		35.9	46.3 - 96.9	*	4/28/2015	13:07
Nitrobenzene-d5		33.8	39.7 - 90.9	*	4/28/2015	13:07
Terphenyl-d14		55.5	56.8 - 119	*	4/28/2015	13:07
Method Reference(s):	EPA 8270D					
Preparation Date: Data File:	EPA 3550C 4/28/2015 B04811.D					

### Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	< 8.16	ug/Kg		4/27/2015 15:02
1,3,5-Trimethylbenzene	< 8.16	ug/Kg		4/27/2015 15:02
Benzene	< 8.16	ug/Kg		4/27/2015 15:02

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Client:	<u>Groundwat</u>	er & Envi	ronmental Ser	<u>vices</u>			
Project Reference:	Brightfields	Tract II					
Sample Identifier:	LNAPL-19 (	(10-10.5')					
Lab Sample ID:	151532-01			Dat	te Sampled:	4/23/2015	
Matrix:	Soil			Dat	te Received:	4/27/2015	
Ethylbenzene		< 8.16	ug/Kg			4/27/2015	15:02
Isopropylbenzene		< 8.16	ug/Kg			4/27/2015	15:02
m,p-Xylene		< 8.16	ug/Kg			4/27/2015	15:02
Methyl tert-butyl Ether	r	< 8.16	ug/Kg			4/27/2015	15:02
Naphthalene		< 20.4	ug/Kg			4/27/2015	15:02
n-Butylbenzene		10.5	ug/Kg			4/27/2015	15:02
n-Propylbenzene		< 8.16	ug/Kg			4/27/2015	15:02
o-Xylene		< 8.16	ug/Kg			4/27/2015	15:02
p-Isopropyltoluene		< 8.16	ug/Kg			4/27/2015	15:02
sec-Butylbenzene		10.2	ug/Kg			4/27/2015	15:02
tert-Butylbenzene		< 8.16	ug/Kg			4/27/2015	15:02
Toluene		< 8.16	ug/Kg			4/27/2015	15:02
<u>Surrogate</u>		<u>Pe</u>	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	<u>zed</u>
1,2-Dichloroethane-d4			97.9	80.6 - 125		4/27/2015	15:02
4-Bromofluorobenzene	e		103	86.6 - 111		4/27/2015	15:02
Pentafluorobenzene			101	90.9 - 107		4/27/2015	15:02
Toluene-D8			101	90.8 - 109		4/27/2015	15:02
Method Reference	ce(s): EPA 83	260C					
Data File:	EPA 5 x2219	035A 5.D					

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt. Page 4 of 14



Client:	<u>Groundwater &amp; Environmental Services</u>		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-20 (14-15')		
Lab Sample ID:	151532-02	Date Sampled:	4/23/2015
Matrix:	Soil	Date Received:	4/27/2015

#### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	Resul	t <u>Units</u>		<b>Qualifier</b>	<b>Date Anal</b>	<u>yzed</u>
Acenaphthene	< 317	ug/Kg			4/28/2015	13:35
Acenaphthylene	< 317	ug/Kg			4/28/2015	13:35
Anthracene	< 317	ug/Kg			4/28/2015	13:35
Benzo (a) anthracene	< 317	ug/Kg			4/28/2015	13:35
Benzo (a) pyrene	< 317	ug/Kg			4/28/2015	13:35
Benzo (b) fluoranthene	< 317	ug/Kg			4/28/2015	13:35
Benzo (g,h,i) perylene	< 317	ug/Kg			4/28/2015	13:35
Benzo (k) fluoranthene	< 317	ug/Kg			4/28/2015	13:35
Chrysene	< 317	ug/Kg			4/28/2015	13:35
Dibenz (a,h) anthracene	< 317	ug/Kg			4/28/2015	13:35
Fluoranthene	< 317	ug/Kg			4/28/2015	13:35
Fluorene	< 317	ug/Kg			4/28/2015	13:35
Indeno (1,2,3-cd) pyrene	< 317	ug/Kg			4/28/2015	13:35
Naphthalene	< 317	ug/Kg			4/28/2015	13:35
Phenanthrene	< 317	ug/Kg			4/28/2015	13:35
Pyrene	< 317	ug/Kg			4/28/2015	13:35
<u>Surrogate</u>	Pe	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2-Fluorobiphenyl		55.8	46.3 - 96.9		4/28/2015	13:35
Nitrobenzene-d5		44.8	39.7 - 90.9		4/28/2015	13:35
Terphenyl-d14		59.8	56.8 - 119		4/28/2015	13:35
Method Reference(s):	EPA 8270D					
Preparation Date: Data File:	EPA 3550C 4/28/2015 B04812.D					

### Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	<b>Qualifier</b>	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	< 9.64	ug/Kg		4/27/2015 14:38
1,3,5-Trimethylbenzene	< 9.64	ug/Kg		4/27/2015 14:38
Benzene	< 9.64	ug/Kg		4/27/2015 14:38

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Client:	Groundwater &	<u>e Env</u>	vironmental Serv	vices			
Project Reference:	Brightfields Trac	ct II					
Sample Identifier:	LNAPL-20 (14-	15')					
Lab Sample ID:	151532-02			Dat	e Sampled:	4/23/2015	
Matrix:	Soil			Dat	e Received:	4/27/2015	
Ethylbenzene	<	9.64	ug/Kg			4/27/2015	14:38
Isopropylbenzene	<	9.64	ug/Kg			4/27/2015	14:38
m,p-Xylene	<	9.64	ug/Kg			4/27/2015	14:38
Methyl tert-butyl Ether	<	9.64	ug/Kg			4/27/2015	14:38
Naphthalene	<	24.1	ug/Kg			4/27/2015	14:38
n-Butylbenzene	<	9.64	ug/Kg			4/27/2015	14:38
n-Propylbenzene	<	9.64	ug/Kg			4/27/2015	14:38
o-Xylene	<	9.64	ug/Kg			4/27/2015	14:38
p-Isopropyltoluene	<	9.64	ug/Kg			4/27/2015	14:38
sec-Butylbenzene	9	.85	ug/Kg			4/27/2015	14:38
tert-Butylbenzene	<	9.64	ug/Kg			4/27/2015	14:38
Toluene	<	9.64	ug/Kg			4/27/2015	14:38
<u>Surrogate</u>		P	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	<u>zed</u>
1,2-Dichloroethane-d4			102	80.6 - 125		4/27/2015	14:38
4-Bromofluorobenzene	2		89.7	86.6 - 111		4/27/2015	14:38
Pentafluorobenzene			101	90.9 - 107		4/27/2015	14:38
Toluene-D8			101	90.8 - 109		4/27/2015	14:38
Method Reference	<b>e(s):</b> EPA 8260C						
Data File:	EPA 5035A x22194.D						

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

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Client:	<u>Groundwater &amp; Environmental Services</u>		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-21 (8-10')		
Lab Sample ID:	151532-03	Date Sampled:	4/23/2015
Matrix:	Soil	Date Received:	4/27/2015

#### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	Resu	lt <u>Units</u>		<b>Qualifier</b>	Date Anal	<u>yzed</u>
Acenaphthene	< 345	ug/Kg			4/28/2015	14:04
Acenaphthylene	< 345	ug/Kg			4/28/2015	14:04
Anthracene	< 345	ug/Kg			4/28/2015	14:04
Benzo (a) anthracene	< 345	ug/Kg			4/28/2015	14:04
Benzo (a) pyrene	< 345	ug/Kg			4/28/2015	14:04
Benzo (b) fluoranthene	< 345	ug/Kg			4/28/2015	14:04
Benzo (g,h,i) perylene	< 345	ug/Kg			4/28/2015	14:04
Benzo (k) fluoranthene	< 345	ug/Kg			4/28/2015	14:04
Chrysene	< 345	ug/Kg			4/28/2015	14:04
Dibenz (a,h) anthracene	< 345	ug/Kg			4/28/2015	14:04
Fluoranthene	< 345	ug/Kg			4/28/2015	14:04
Fluorene	< 345	ug/Kg			4/28/2015	14:04
Indeno (1,2,3-cd) pyrene	< 345	ug/Kg			4/28/2015	14:04
Naphthalene	< 345	ug/Kg			4/28/2015	14:04
Phenanthrene	< 345	ug/Kg			4/28/2015	14:04
Pyrene	< 345	ug/Kg			4/28/2015	14:04
<u>Surrogate</u>	Pe	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2-Fluorobiphenyl		34.3	46.3 - 96.9	*	4/28/2015	14:04
Nitrobenzene-d5		32.3	39.7 - 90.9	*	4/28/2015	14:04
Terphenyl-d14		54.8	56.8 - 119	*	4/28/2015	14:04
Method Reference(s):	EPA 8270D					
Preparation Date: Data File:	EPA 3550C 4/28/2015 B04813.D					

### Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	<b>Qualifier</b>	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	< 8.18	ug/Kg		4/27/2015 15:27
1,3,5-Trimethylbenzene	< 8.18	ug/Kg		4/27/2015 15:27
Benzene	< 8.18	ug/Kg		4/27/2015 15:27

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Client:	<u>Groundwate</u>	r & Envi	ronmental Ser	<u>vices</u>			
Project Reference:	Brightfields T	ract II					
Sample Identifier:	LNAPL-21 (8	3-10')					
Lab Sample ID:	151532-03			Dat	e Sampled:	4/23/2015	
Matrix:	Soil			Dat	e Received:	4/27/2015	
Ethylbenzene		< 8.18	ug/Kg			4/27/2015	15:27
Isopropylbenzene		< 8.18	ug/Kg			4/27/2015	15:27
m,p-Xylene		< 8.18	ug/Kg			4/27/2015	15:27
Methyl tert-butyl Ether		< 8.18	ug/Kg			4/27/2015	15:27
Naphthalene		< 20.5	ug/Kg			4/27/2015	15:27
n-Butylbenzene		< 8.18	ug/Kg			4/27/2015	15:27
n-Propylbenzene		< 8.18	ug/Kg			4/27/2015	15:27
o-Xylene		< 8.18	ug/Kg			4/27/2015	15:27
p-Isopropyltoluene		< 8.18	ug/Kg			4/27/2015	15:27
sec-Butylbenzene		< 8.18	ug/Kg			4/27/2015	15:27
tert-Butylbenzene		< 8.18	ug/Kg			4/27/2015	15:27
Toluene		< 8.18	ug/Kg			4/27/2015	15:27
<u>Surrogate</u>		<u>Pe</u>	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	<u>zed</u>
1,2-Dichloroethane-d4			97.8	80.6 - 125		4/27/2015	15:27
4-Bromofluorobenzene	!		99.5	86.6 - 111		4/27/2015	15:27
Pentafluorobenzene			99.5	90.9 - 107		4/27/2015	15:27
Toluene-D8			99.0	90.8 - 109		4/27/2015	15:27
Method Reference	<b>e(s):</b> EPA 826	50C					
Data File:	EPA 503 x22196.	35A D					

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

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Client:	<b>Groundwater &amp; Environmental Services</b>		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-22 (14-15')		
Lab Sample ID:	151532-04	Date Sampled:	4/23/2015
Matrix:	Soil	Date Received:	4/27/2015

#### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>		<b>Qualifier</b>	Date Anal	<u>yzed</u>
Acenaphthene	351	ug/Kg			4/28/2015	14:32
Acenaphthylene	< 314	ug/Kg			4/28/2015	14:32
Anthracene	< 314	ug/Kg			4/28/2015	14:32
Benzo (a) anthracene	< 314	ug/Kg			4/28/2015	14:32
Benzo (a) pyrene	< 314	ug/Kg			4/28/2015	14:32
Benzo (b) fluoranthene	< 314	ug/Kg			4/28/2015	14:32
Benzo (g,h,i) perylene	< 314	ug/Kg			4/28/2015	14:32
Benzo (k) fluoranthene	< 314	ug/Kg			4/28/2015	14:32
Chrysene	< 314	ug/Kg			4/28/2015	14:32
Dibenz (a,h) anthracene	< 314	ug/Kg			4/28/2015	14:32
Fluoranthene	< 314	ug/Kg			4/28/2015	14:32
Fluorene	< 314	ug/Kg			4/28/2015	14:32
Indeno (1,2,3-cd) pyrene	< 314	ug/Kg			4/28/2015	14:32
Naphthalene	< 314	ug/Kg			4/28/2015	14:32
Phenanthrene	< 314	ug/Kg			4/28/2015	14:32
Pyrene	< 314	ug/Kg			4/28/2015	14:32
<u>Surrogate</u>	Per	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	zed
2-Fluorobiphenyl		54.8	46.3 - 96.9		4/28/2015	14:32
Nitrobenzene-d5		45.9	39.7 - 90.9		4/28/2015	14:32
Terphenyl-d14		63.1	56.8 - 119		4/28/2015	14:32
Method Reference(s):	EPA 8270D					
Propagation Data:	EPA 3550C					
Data File:	B04814.D					

### Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	< 10.9	ug/Kg		4/27/2015 14:13
1,3,5-Trimethylbenzene	< 10.9	ug/Kg		4/27/2015 14:13
Benzene	< 10.9	ug/Kg		4/27/2015 14:13

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Client:	<u>Groundwater &amp; F</u>	<u>Environ</u>	imental Ser	<u>vices</u>			
Project Reference:	Brightfields Tract	II					
Sample Identifier:	LNAPL-22 (14-15	5')					
Lab Sample ID:	151532-04			Dat	te Sampled:	4/23/2015	
Matrix:	Soil			Dat	te Received:	4/27/2015	
Ethylbenzene	< 10	).9	ug/Kg			4/27/2015	14:13
Isopropylbenzene	< 10	).9	ug/Kg			4/27/2015	14:13
m,p-Xylene	< 10	).9	ug/Kg			4/27/2015	14:13
Methyl tert-butyl Ether	< 10	).9	ug/Kg			4/27/2015	14:13
Naphthalene	< 27	7.3	ug/Kg			4/27/2015	14:13
n-Butylbenzene	< 10	).9	ug/Kg			4/27/2015	14:13
n-Propylbenzene	< 10	).9	ug/Kg			4/27/2015	14:13
o-Xylene	< 10	).9	ug/Kg			4/27/2015	14:13
p-Isopropyltoluene	< 10	).9	ug/Kg			4/27/2015	14:13
sec-Butylbenzene	< 10	).9	ug/Kg			4/27/2015	14:13
tert-Butylbenzene	< 10	).9	ug/Kg			4/27/2015	14:13
Toluene	< 10	).9	ug/Kg			4/27/2015	14:13
<u>Surrogate</u>		Perce	<u>nt Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	<u>zed</u>
1,2-Dichloroethane-d4			101	80.6 - 125		4/27/2015	14:13
4-Bromofluorobenzene	2		107	86.6 <b>-</b> 111		4/27/2015	14:13
Pentafluorobenzene			98.8	90.9 - 107		4/27/2015	14:13
Toluene-D8			99.6	90.8 - 109		4/27/2015	14:13
Method Referenc	<b>e(s):</b> EPA 8260C						
Data File:	EPA 5035A x22193.D						

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

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# **Analytical Report Appendix**

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard. sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

*"J"* = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"\*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

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### **GENERAL TERMS AND CONDITIONS** LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and Compensation.	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order. Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.
Limitations of Liability.	In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re- perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services. LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report. Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples. LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
Force Majeure.	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

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2    125	×	LNAPL -20 (14.15)	Soil	eni-555-	×	×											┢		0	2
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<u>о</u>	×		Soil		×	×	$\left  - \right $		┢──	L	┢──					┢─	╋──			
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***LAB USE ONLY**																				
SAMPLE CONDITION: Check box if acceptable or note deviation:		CONTAINER TYPE: PRESERVATION	IS:				HOLDING	TIME:					EMPER		s)		10.	6	)- 	
Sampled By:	5	Date/Time: Relinque $4/23/15$	uished B									Date	/Time		Total	Cos	<sup>#</sup>			
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PARADIGM		<u>Chain a</u>	of Custody Supple	<u>ement</u> Glan Pezzalu
lient:	<u>6100</u>	ndunter & Environmentel 20. 1522	Date:	4/27/15
ab Project ID:	<u>1-</u>	Sample Condition Per NELAC/ELAP 210	n Requirements /241/242/243/244	
Condition	NELA	C compliance with the sample conversion of the sample conversion of the sample conversion of the sample convers	ondition requirements upon No	n receipt N/A
ontainer Type	Comments		5035	
Fransferred to meth	 			
Headspace (<1 mL)	Comments			
Preservation	Comments			
Chlorine Absent (<0.10 ppm per t	– est strip) Comments _			
Holding Time	Comments _			
Temperature	Comments	4°C ice		
Sufficient Sampl	<b>e Quantity</b> Comments			

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### Analytical Report For

## **Groundwater & Environmental Services**

For Lab Project ID

### 151553

Referencing

Brightfields Tract II Prepared Friday, May 01, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

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179 Lake Avenue, Rochester, NY 14608

PHONE: 585-647-2530 TOLL

TOLL FREE: 800-724-1997 FAX: 585-647-3311

Laboratory Project Narrative

Client: Groundwater & Environmental Services Project Name: Brightfields Tract II Lab Project Number: 151553

Three soil samples were collected on 4/27/2015 and submitted to Paradigm for Volatile 8260 STARS and Semivolatile 8270 STARS analysis. The samples were received at the Paradigm laboratory on 4/28/2015 with NELAC compliance issues as noted on the Chain of Custody Supplement Sample Condition Report.

For VOCs, all analytical quality control measures including blanks, surrogates, calibrations, and Laboratory Control Spikes, were compliant within method specifications.

For SVOCs, all analytical quality control measures including blanks, surrogates, calibrations, and Laboratory Control Spikes, were compliant within method specifications.



Client:	Groundwater & Environmental Services		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-24 (14-14.5')		
Lab Sample ID:	151553-01	Date Sampled:	4/27/2015
Matrix:	Soil	Date Received:	4/28/2015

#### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	<u>Resul</u>	t <u>Units</u>		<b>Qualifier</b>	Date Anal	<u>yzed</u>
Acenaphthene	< 324	ug/Kg			4/30/2015	14:08
Acenaphthylene	< 324	ug/Kg			4/30/2015	14:08
Anthracene	< 324	ug/Kg			4/30/2015	14:08
Benzo (a) anthracene	< 324	ug/Kg			4/30/2015	14:08
Benzo (a) pyrene	< 324	ug/Kg			4/30/2015	14:08
Benzo (b) fluoranthene	< 324	ug/Kg			4/30/2015	14:08
Benzo (g,h,i) perylene	< 324	ug/Kg			4/30/2015	14:08
Benzo (k) fluoranthene	< 324	ug/Kg			4/30/2015	14:08
Chrysene	< 324	ug/Kg			4/30/2015	14:08
Dibenz (a,h) anthracene	< 324	ug/Kg			4/30/2015	14:08
Fluoranthene	< 324	ug/Kg			4/30/2015	14:08
Fluorene	< 324	ug/Kg			4/30/2015	14:08
Indeno (1,2,3-cd) pyrene	< 324	ug/Kg			4/30/2015	14:08
Naphthalene	< 324	ug/Kg			4/30/2015	14:08
Phenanthrene	< 324	ug/Kg			4/30/2015	14:08
Pyrene	< 324	ug/Kg			4/30/2015	14:08
<u>Surrogate</u>	Pe	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	zed
2-Fluorobiphenyl		55.5	46.3 - 96.9		4/30/2015	14:08
Nitrobenzene-d5		50.8	39.7 - 90.9		4/30/2015	14:08
Terphenyl-d14		75.4	56.8 - 119		4/30/2015	14:08
Method Reference(s):	EPA 8270D					
Preparation Date: Data File:	EPA 3550C 4/29/2015 B04870.D					

### Volatile Organics (Petroleum)

Analyte	Result	<u>Units</u>	<b>Qualifier</b>	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	8.87	ug/Kg		4/29/2015 04:21
1,3,5-Trimethylbenzene	< 8.55	ug/Kg		4/29/2015 04:21
Benzene	< 8.55	ug/Kg		4/29/2015 04:21

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Client:	<u>Groundwa</u>	ater & Envir	onmental Ser	vices			
Project Reference:	Brightfield	s Tract II					
Sample Identifier:	LNAPL-24	4 (14-14.5')					
Lab Sample ID:	151553-0	)1		Dat	e Sampled:	4/27/2015	
Matrix:	Soil			Dat	e Received:	4/28/2015	
Ethylbenzene		< 8.55	ug/Kg			4/29/2015	04:21
Isopropylbenzene		< 8.55	ug/Kg			4/29/2015	04:21
m,p-Xylene		< 8.55	ug/Kg			4/29/2015	04:21
Methyl tert-butyl Ether	•	< 8.55	ug/Kg			4/29/2015	04:21
Naphthalene		< 21.4	ug/Kg			4/29/2015	04:21
n-Butylbenzene		10.6	ug/Kg			4/29/2015	04:21
n-Propylbenzene		< 8.55	ug/Kg			4/29/2015	04:21
o-Xylene		< 8.55	ug/Kg			4/29/2015	04:21
p-Isopropyltoluene		< 8.55	ug/Kg			4/29/2015	04:21
sec-Butylbenzene		< 8.55	ug/Kg			4/29/2015	04:21
tert-Butylbenzene		< 8.55	ug/Kg			4/29/2015	04:21
Toluene		< 8.55	ug/Kg			4/29/2015	04:21
<u>Surrogate</u>		<u>Per</u>	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	<u>zed</u>
1,2-Dichloroethane-d4			103	80.6 - 125		4/29/2015	04:21
4-Bromofluorobenzene	<u>e</u>		108	86.6 <b>-</b> 111		4/29/2015	04:21
Pentafluorobenzene			99.3	90.9 - 107		4/29/2015	04:21
Toluene-D8			101	90.8 - 109		4/29/2015	04:21
Method Reference	ce(s): EPA	A 8260C					
Data File:	EPA x22	285.D					

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

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Client:	<u>Groundwater &amp; Environmental Services</u>		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-26 (14-15')		
Lab Sample ID:	151553-02	Date Sampled:	4/27/2015
Matrix:	Soil	Date Received:	4/28/2015

#### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	Resul	t <u>Units</u>		<b>Qualifier</b>	<b>Date Anal</b>	<u>yzed</u>
Acenaphthene	< 323	ug/Kg			4/30/2015	14:36
Acenaphthylene	< 323	ug/Kg			4/30/2015	14:36
Anthracene	< 323	ug/Kg			4/30/2015	14:36
Benzo (a) anthracene	< 323	ug/Kg			4/30/2015	14:36
Benzo (a) pyrene	< 323	ug/Kg			4/30/2015	14:36
Benzo (b) fluoranthene	< 323	ug/Kg			4/30/2015	14:36
Benzo (g,h,i) perylene	< 323	ug/Kg			4/30/2015	14:36
Benzo (k) fluoranthene	< 323	ug/Kg			4/30/2015	14:36
Chrysene	< 323	ug/Kg			4/30/2015	14:36
Dibenz (a,h) anthracene	< 323	ug/Kg			4/30/2015	14:36
Fluoranthene	< 323	ug/Kg			4/30/2015	14:36
Fluorene	< 323	ug/Kg			4/30/2015	14:36
Indeno (1,2,3-cd) pyrene	< 323	ug/Kg			4/30/2015	14:36
Naphthalene	< 323	ug/Kg			4/30/2015	14:36
Phenanthrene	< 323	ug/Kg			4/30/2015	14:36
Pyrene	< 323	ug/Kg			4/30/2015	14:36
<u>Surrogate</u>	Pe	rcent Recovery	<u>Limits</u>	<b>Outliers</b>	<b>Date Analy</b>	zed
2-Fluorobiphenyl		62.9	46.3 - 96.9		4/30/2015	14:36
Nitrobenzene-d5		59.3	39.7 - 90.9		4/30/2015	14:36
Terphenyl-d14		81.4	56.8 - 119		4/30/2015	14:36
Method Reference(s):	EPA 8270D					
Preparation Date: Data File:	EPA 3550C 4/29/2015 B04871.D					

### Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	24.4	ug/Kg		4/29/2015 04:45
1,3,5-Trimethylbenzene	< 7.55	ug/Kg		4/29/2015 04:45
Benzene	< 7.55	ug/Kg		4/29/2015 04:45

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Client:	<u>Groundwate</u>	<u>r &amp; Env</u>	ironmental Ser	<u>vices</u>			
Project Reference:	Brightfields T	'ract II					
Sample Identifier:	LNAPL-26 (2	14-15')					
Lab Sample ID:	151553-02			Dat	e Sampled:	4/27/2015	
Matrix:	Soil			Dat	e Received:	4/28/2015	
Ethylbenzene		< 7.55	ug/Kg			4/29/2015	04:45
Isopropylbenzene		< 7.55	ug/Kg			4/29/2015	04:45
m,p-Xylene		8.63	ug/Kg			4/29/2015	04:45
Methyl tert-butyl Ether		< 7.55	ug/Kg			4/29/2015	04:45
Naphthalene		< 18.9	ug/Kg			4/29/2015	04:45
n-Butylbenzene		8.79	ug/Kg			4/29/2015	04:45
n-Propylbenzene		< 7.55	ug/Kg			4/29/2015	04:45
o-Xylene		< 7.55	ug/Kg			4/29/2015	04:45
p-Isopropyltoluene		< 7.55	ug/Kg			4/29/2015	04:45
sec-Butylbenzene		< 7.55	ug/Kg			4/29/2015	04:45
tert-Butylbenzene		< 7.55	ug/Kg			4/29/2015	04:45
Toluene		< 7.55	ug/Kg			4/29/2015	04:45
<u>Surrogate</u>		<u>P</u>	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	<u>zed</u>
1,2-Dichloroethane-d4			105	80.6 - 125		4/29/2015	04:45
4-Bromofluorobenzene	2		108	86.6 - 111		4/29/2015	04:45
Pentafluorobenzene			100	90.9 - 107		4/29/2015	04:45
Toluene-D8			100	90.8 - 109		4/29/2015	04:45
Method Reference	e(s): EPA 82	50C					
Data File:	EPA 50 x22286	35A .D					

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

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Client:	Groundwater & Environmental Services		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-19		
Lab Sample ID:	151553-03	Date Sampled:	4/27/2015
Matrix:	Water	Date Received:	4/28/2015

#### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	Result	<u>Units</u>		<b>Qualifier</b>	Date Anal	<u>yzed</u>
Acenaphthene	< 10.0	ug/L			4/30/2015	15:04
Acenaphthylene	< 10.0	ug/L			4/30/2015	15:04
Anthracene	< 10.0	ug/L			4/30/2015	15:04
Benzo (a) anthracene	< 10.0	ug/L			4/30/2015	15:04
Benzo (a) pyrene	< 10.0	ug/L			4/30/2015	15:04
Benzo (b) fluoranthene	< 10.0	ug/L			4/30/2015	15:04
Benzo (g,h,i) perylene	< 10.0	ug/L			4/30/2015	15:04
Benzo (k) fluoranthene	< 10.0	ug/L			4/30/2015	15:04
Chrysene	< 10.0	ug/L			4/30/2015	15:04
Dibenz (a,h) anthracene	< 10.0	ug/L			4/30/2015	15:04
Fluoranthene	< 10.0	ug/L			4/30/2015	15:04
Fluorene	< 10.0	ug/L			4/30/2015	15:04
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L			4/30/2015	15:04
Naphthalene	< 10.0	ug/L			4/30/2015	15:04
Phenanthrene	< 10.0	ug/L			4/30/2015	15:04
Pyrene	< 10.0	ug/L			4/30/2015	15:04
Surrogate	Per	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	zed
2-Fluorobiphenyl		44.0	20.2 - 94.7		4/30/2015	15:04
Nitrobenzene-d5		76.3	44.4 - 95.7		4/30/2015	15:04
Terphenyl-d14		82.7	55.1 - 112		4/30/2015	15:04
Method Reference(s):	EPA 8270D					
Preparation Date: Data File:	EPA 3510C 4/29/2015 B04872.D					

### Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	<b>Qualifier</b>	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	< 2.00	ug/L		4/29/2015 15:25
1,3,5-Trimethylbenzene	< 2.00	ug/L		4/29/2015 15:25
Benzene	< 0.700	ug/L		4/29/2015 15:25

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Client:	<u>Ground</u>	water & Envi	ronmental Ser	<u>vices</u>			
Project Reference:	Brightfie	lds Tract II					
Sample Identifier:	LNAPL-	19					
Lab Sample ID:	151553	-03		Dat	te Sampled:	4/27/2015	
Matrix:	Water			Dat	te Received:	4/28/2015	
Ethylbenzene		< 2.00	ug/L			4/29/2015	15:25
Isopropylbenzene		< 2.00	ug/L			4/29/2015	15:25
m,p-Xylene		< 2.00	ug/L			4/29/2015	15:25
Methyl tert-butyl Ether		< 2.00	ug/L			4/29/2015	15:25
Naphthalene		< 5.00	ug/L			4/29/2015	15:25
n-Butylbenzene		< 2.00	ug/L			4/29/2015	15:25
n-Propylbenzene		< 2.00	ug/L			4/29/2015	15:25
o-Xylene		< 2.00	ug/L			4/29/2015	15:25
p-Isopropyltoluene		< 2.00	ug/L			4/29/2015	15:25
sec-Butylbenzene		< 2.00	ug/L			4/29/2015	15:25
tert-Butylbenzene		< 2.00	ug/L			4/29/2015	15:25
Toluene		< 2.00	ug/L			4/29/2015	15:25
<u>Surrogate</u>		<u>Pe</u>	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	zed
1,2-Dichloroethane-d4			94.1	82.3 - 115		4/29/2015	15:25
4-Bromofluorobenzene	9		105	85.5 - 111		4/29/2015	15:25
Pentafluorobenzene			103	91.2 - 107		4/29/2015	15:25
Toluene-D8			100	90.9 - 108		4/29/2015	15:25
Method Reference	e(s): E	EPA 8260C					
Data File:	x	22299.D					

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# **Analytical Report Appendix**

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard. sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

*"J"* = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"\*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

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### **GENERAL TERMS AND CONDITIONS** LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and Compensation.	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order. Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.
Limitations of Liability.	In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re- perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services. LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report. Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples. LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
Force Majeure.	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

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INVIRONMENTAL		REPORT TO:				IP	NOICE .	ļ.						ŧ	
SERVICES, INC.	COMPANY	Groundwater & Environn	nental Services	COMPANY		-									2
79 Lake Avenue	ADDRESS	· 495 Aero Drive, Suite 3	w	ADDRESS				CTA	1	quy			SAVU -		of 1
ochester, NY 14608	CITY: PHONE:	Cheektowaga STATE: 800-287-7857 FAX: 866	NY ZIP: 14225 3-902-2187	PHONE:				FAX:	Ĩ	ļ	00005/2/2/	×.	șt D	ОТН	<b>2</b> 11
ROJECT NAME/SITE NAME:	ATTN:	Eric Popken		ATTN:	Eric Pop	iken					1	× 3	5		Pa
<b>Brightfields Tract II</b>	COMMEN	rs: Please provide a case na Cuntes # HD40115. JH10	arrative with final rep 01514	oort.											
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**LAB USE ONLY**															
SAMPLE CONDITION: Check bo: acceptable or note deviation:	x if o	SONTAINER TYPE:	PRESERVATIONS:		-		HOLDING TI	ME:			TEMPERATURE: $S^{oC}$ iced $H$	21/26/	09:00		
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## Chain of Custody Supplement

Client:	Groundwater & Environmental Services	Completed by:	Glenn Pezzulo
Lab Project ID:	151553	Date:	4/28/15
	Sample Condition Rea Per NELAC/ELAP 210/241/2	<b>uirements</b> 242/243/244	
Condition	NELAC compliance with the sample condition Yes	on requirements upo No	on receipt N/A
Container Type	s	<b>X</b> So3 S	
Transferred to method- compliant container			
Headspace (<1 mL) Comment:	why water		
Preservation Comment	voa Water		
Chlorine Absent (<0.10 ppm per test strip) Comment	s		
Holding Time Comment	s		
<b>Temperature</b> Comment	s 5°C icel		
Sufficient Sample Quantity Comment	s		

2072


### Analytical Report For

## **Groundwater & Environmental Services**

For Lab Project ID

### 152002

Referencing

**Brightfields Tract II** Prepared

Tuesday, May 26, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt. Page 1 of 11



Client:	<b>Groundwater &amp; Environmental Services</b>		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-1 (4-5')		
Lab Sample ID:	152002-01	Date Sampled:	5/19/2015
Matrix:	Soil	Date Received:	5/21/2015

#### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>		<b>Qualifier</b>	<b>Date Anal</b>	<u>yzed</u>
Acenaphthene	427	ug/Kg			5/22/2015	22:33
Acenaphthylene	< 304	ug/Kg			5/22/2015	22:33
Anthracene	316	ug/Kg			5/22/2015	22:33
Benzo (a) anthracene	< 304	ug/Kg			5/22/2015	22:33
Benzo (a) pyrene	< 304	ug/Kg			5/22/2015	22:33
Benzo (b) fluoranthene	< 304	ug/Kg			5/22/2015	22:33
Benzo (g,h,i) perylene	< 304	ug/Kg			5/22/2015	22:33
Benzo (k) fluoranthene	< 304	ug/Kg			5/22/2015	22:33
Chrysene	< 304	ug/Kg			5/22/2015	22:33
Dibenz (a,h) anthracene	< 304	ug/Kg			5/22/2015	22:33
Fluoranthene	< 304	ug/Kg			5/22/2015	22:33
Fluorene	407	ug/Kg			5/22/2015	22:33
Indeno (1,2,3-cd) pyrene	< 304	ug/Kg			5/22/2015	22:33
Naphthalene	< 304	ug/Kg			5/22/2015	22:33
Phenanthrene	1100	ug/Kg			5/22/2015	22:33
Pyrene	< 304	ug/Kg			5/22/2015	22:33
Surrogate	Per	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	zed
2-Fluorobiphenyl		64.0	35.9 - 103		5/22/2015	22:33
Nitrobenzene-d5		53.6	37.2 - 90.6		5/22/2015	22:33
Terphenyl-d14		81.3	58.2 - 113		5/22/2015	22:33
Method Reference(s):	EPA 8270D					
Preparation Date: Data File:	EPA 3550C 5/22/2015 B05301.D					

#### Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	443	ug/Kg		5/21/2015 16:35
1,3,5-Trimethylbenzene	102	ug/Kg		5/21/2015 16:35
Benzene	< 65.0	ug/Kg		5/21/2015 16:35

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Client:	<u>Groundwate</u>	r & Env	vironmental Ser	<u>vices</u>			
Project Reference:	Brightfields T	'ract II					
Sample Identifier:	LNAPL-1 (4-	-5')					
Lab Sample ID:	152002-01			Dat	e Sampled:	5/19/2015	
Matrix:	Soil			Dat	e Received:	5/21/2015	
Ethylbenzene		< 65.0	ug/Kg			5/21/2015	16:35
Isopropylbenzene		< 65.0	ug/Kg			5/21/2015	16:35
m,p-Xylene		< 65.0	ug/Kg			5/21/2015	16:35
Methyl tert-butyl Ether		< 65.0	ug/Kg			5/21/2015	16:35
Naphthalene		1430	ug/Kg			5/21/2015	16:35
n-Butylbenzene		122	ug/Kg			5/21/2015	16:35
n-Propylbenzene		< 65.0	ug/Kg			5/21/2015	16:35
o-Xylene		68.8	ug/Kg			5/21/2015	16:35
p-Isopropyltoluene		< 65.0	ug/Kg			5/21/2015	16:35
sec-Butylbenzene		< 65.0	ug/Kg			5/21/2015	16:35
tert-Butylbenzene		< 65.0	ug/Kg			5/21/2015	16:35
Toluene		< 65.0	ug/Kg			5/21/2015	16:35
<u>Surrogate</u>		I	Percent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	<u>zed</u>
1,2-Dichloroethane-d4			104	80.6 - 125		5/21/2015	16:35
4-Bromofluorobenzene	2		105	86.6 - 111		5/21/2015	16:35
Pentafluorobenzene			101	90.9 - 107		5/21/2015	16:35
Toluene-D8			99.0	90.8 - 109		5/21/2015	16:35
Method Referenc	e(s): EPA 82	60C					
Data File:	EPA 50 x22984	35A .D					

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt. Page 3 of 11



Client:	<b>Groundwater &amp; Environmental Services</b>		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-2 (3-5')		
Lab Sample ID:	152002-02	Date Sampled:	5/19/2015
Matrix:	Soil	Date Received:	5/21/2015

#### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>		<b>Qualifier</b>	Date Anal	<u>yzed</u>
Acenaphthene	646	ug/Kg			5/22/2015	23:01
Acenaphthylene	< 334	ug/Kg			5/22/2015	23:01
Anthracene	335	ug/Kg			5/22/2015	23:01
Benzo (a) anthracene	431	ug/Kg			5/22/2015	23:01
Benzo (a) pyrene	< 334	ug/Kg			5/22/2015	23:01
Benzo (b) fluoranthene	< 334	ug/Kg			5/22/2015	23:01
Benzo (g,h,i) perylene	< 334	ug/Kg			5/22/2015	23:01
Benzo (k) fluoranthene	< 334	ug/Kg			5/22/2015	23:01
Chrysene	446	ug/Kg			5/22/2015	23:01
Dibenz (a,h) anthracene	< 334	ug/Kg			5/22/2015	23:01
Fluoranthene	1040	ug/Kg			5/22/2015	23:01
Fluorene	843	ug/Kg			5/22/2015	23:01
Indeno (1,2,3-cd) pyrene	< 334	ug/Kg			5/22/2015	23:01
Naphthalene	< 334	ug/Kg			5/22/2015	23:01
Phenanthrene	544	ug/Kg			5/22/2015	23:01
Pyrene	1240	ug/Kg			5/22/2015	23:01
Surrogate	Per	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2-Fluorobiphenyl		55.3	35.9 - 103		5/22/2015	23:01
Nitrobenzene-d5		49.3	37.2 - 90.6		5/22/2015	23:01
Terphenyl-d14		82.5	58.2 - 113		5/22/2015	23:01
Method Reference(s):	EPA 8270D					
	EPA 3550C					
Preparation Date: Data File:	5/22/2015 B05302.D					

#### Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	<b>Qualifier</b>	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	14.7	ug/Kg		5/21/2015 16:59
1,3,5-Trimethylbenzene	< 9.44	ug/Kg		5/21/2015 16:59
Benzene	< 9.44	ug/Kg		5/21/2015 16:59

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Client:	<u>Groundwate</u>	er & Envi	<u>ronmental Ser</u>	<u>vices</u>			
Project Reference:	Brightfields 7	Fract II					
Sample Identifier:	LNAPL-2 (3	-5')					
Lab Sample ID:	152002-02			Dat	e Sampled:	5/19/2015	
Matrix:	Soil			Dat	e Received:	5/21/2015	
Ethylbenzene		< 9.44	ug/Kg			5/21/2015	16:59
Isopropylbenzene		< 9.44	ug/Kg			5/21/2015	16:59
m,p-Xylene		< 9.44	ug/Kg			5/21/2015	16:59
Methyl tert-butyl Ether		< 9.44	ug/Kg			5/21/2015	16:59
Naphthalene		< 23.6	ug/Kg			5/21/2015	16:59
n-Butylbenzene		< 9.44	ug/Kg			5/21/2015	16:59
n-Propylbenzene		< 9.44	ug/Kg			5/21/2015	16:59
o-Xylene		< 9.44	ug/Kg			5/21/2015	16:59
p-Isopropyltoluene		< 9.44	ug/Kg			5/21/2015	16:59
sec-Butylbenzene		< 9.44	ug/Kg			5/21/2015	16:59
tert-Butylbenzene		< 9.44	ug/Kg			5/21/2015	16:59
Toluene		< 9.44	ug/Kg			5/21/2015	16:59
<u>Surrogate</u>		<u>Pe</u>	ercent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	<u>zed</u>
1,2-Dichloroethane-d4			101	80.6 - 125		5/21/2015	16:59
4-Bromofluorobenzene	2		105	86.6 - 111		5/21/2015	16:59
Pentafluorobenzene			107	90.9 - 107		5/21/2015	16:59
Toluene-D8			100	90.8 - 109		5/21/2015	16:59
Method Reference	ce(s): EPA 82	60C					
Data File:	x22985	5.D					

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

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Client:	<u>Groundwater &amp; Environmental Services</u>		
Project Reference:	Brightfields Tract II		
Sample Identifier:	LNAPL-9 (6-8')		
Lab Sample ID:	152002-03	Date Sampled:	5/19/2015
Matrix:	Soil	Date Received:	5/21/2015

#### Semi-Volatile Organics (PAHs)

<u>Analyte</u>	Result	<u>Units</u>		<b>Qualifier</b>	Date Anal	<u>yzed</u>
Acenaphthene	479	ug/Kg			5/22/2015	23:29
Acenaphthylene	< 311	ug/Kg			5/22/2015	23:29
Anthracene	< 311	ug/Kg			5/22/2015	23:29
Benzo (a) anthracene	< 311	ug/Kg			5/22/2015	23:29
Benzo (a) pyrene	< 311	ug/Kg			5/22/2015	23:29
Benzo (b) fluoranthene	< 311	ug/Kg			5/22/2015	23:29
Benzo (g,h,i) perylene	< 311	ug/Kg			5/22/2015	23:29
Benzo (k) fluoranthene	< 311	ug/Kg			5/22/2015	23:29
Chrysene	< 311	ug/Kg			5/22/2015	23:29
Dibenz (a,h) anthracene	< 311	ug/Kg			5/22/2015	23:29
Fluoranthene	< 311	ug/Kg			5/22/2015	23:29
Fluorene	< 311	ug/Kg			5/22/2015	23:29
Indeno (1,2,3-cd) pyrene	< 311	ug/Kg			5/22/2015	23:29
Naphthalene	< 311	ug/Kg			5/22/2015	23:29
Phenanthrene	< 311	ug/Kg			5/22/2015	23:29
Pyrene	< 311	ug/Kg			5/22/2015	23:29
Surrogate	Pe	rcent Recovery	Limits	<u>Outliers</u>	Date Analy	zed
2-Fluorobiphenyl		52.3	35.9 - 103		5/22/2015	23:29
Nitrobenzene-d5		49.0	37.2 - 90.6		5/22/2015	23:29
Terphenyl-d14		75.4	58.2 - 113		5/22/2015	23:29
Method Reference(s):	EPA 8270D					
	EPA 3550C					
Preparation Date: Data File:	5/22/2015 B05303.D					

#### Volatile Organics (Petroleum)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
1,2,4-Trimethylbenzene	< 7.48	ug/Kg		5/21/2015 17:23
1,3,5-Trimethylbenzene	< 7.48	ug/Kg		5/21/2015 17:23
Benzene	< 7.48	ug/Kg		5/21/2015 17:23

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Client:	Groundwater & Environmental Services						
Project Reference:	Brightfields T	ract II					
Sample Identifier:	LNAPL-9 (6-	8')					
Lab Sample ID:	152002-03			Da	te Sampled:	5/19/2015	
Matrix:	Soil			Da	te Received:	5/21/2015	
Ethylbenzene		< 7.48	ug/Kg			5/21/2015	17:23
Isopropylbenzene		< 7.48	ug/Kg			5/21/2015	17:23
m,p-Xylene		< 7.48	ug/Kg			5/21/2015	17:23
Methyl tert-butyl Ether		< 7.48	ug/Kg			5/21/2015	17:23
Naphthalene		< 18.7	ug/Kg			5/21/2015	17:23
n-Butylbenzene		< 7.48	ug/Kg			5/21/2015	17:23
n-Propylbenzene		< 7.48	ug/Kg			5/21/2015	17:23
o-Xylene		< 7.48	ug/Kg			5/21/2015	17:23
p-Isopropyltoluene		< 7.48	ug/Kg			5/21/2015	17:23
sec-Butylbenzene		< 7.48	ug/Kg			5/21/2015	17:23
tert-Butylbenzene		< 7.48	ug/Kg			5/21/2015	17:23
Toluene		< 7.48	ug/Kg			5/21/2015	17:23
<u>Surrogate</u>		<u>Pe</u>	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	<u>zed</u>
1,2-Dichloroethane-d4			96.2	80.6 - 125		5/21/2015	17:23
4-Bromofluorobenzene			102	86.6 - 111		5/21/2015	17:23
Pentafluorobenzene			105	90.9 - 107		5/21/2015	17:23
Toluene-D8			97.0	90.8 - 109		5/21/2015	17:23
Method Reference	e(s): EPA 826	0C					
Data File:	EPA 503 x22986.1	5A D					

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

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# **Analytical Report Appendix**

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard. sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

*"J"* = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns. "NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"\*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted. "(1)" = Indicates data from primary column used for QC calculation.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt. Page 8 of 11

# **GENERAL TERMS AND CONDITIONS** LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.	Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.
Scope and	LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the
Compensation.	parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
	percent $(1-1/2\%)$ per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.
Prices.	Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.
Limitations of Liability.	In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re- perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
	LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results. All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB. Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance (c) the wightion of the Client of any analicable law (d) non-compliance by the Client with any
	environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.
Hazard Disclosure.	Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.
Sample Handling.	Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises. Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
	Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
	LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.
Legal Responsibility.	LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.
Assignment.	LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.
Force Majeure.	LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.
Law.	This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt. Page 9 of 11

				179 Lake Aver	nue, Rochester, NY 1460	)8 Office (585) 64	-7-2530 Fax (585	5) 647-3311		o T Q
				BEBODT TO.						
T ST	Ē	B		CLIENT: Groundwater & Environme	ental Services CLIE	NT:	San	ne		ਰ f-11
		•		ADDRESS: 495 Aero Drive, Suite 3	ADDI	RESS:			60081	0.0
<b>J</b>		•		CITY: Cheektowaga STATE: NY	· ZIP: 14225 CITY	• •	STATE:	ZIP:	Quotation #: JH040115,	JH101514 ge 1
				PHONE: 800-287-7857	РНО	NE:			Email:	Ра
PROJEC	T REFER	ENCE		ATTN: Eric Popken	ATTP	÷			epopken@gesonline.cor	
Bright	fields Tra	ict II		Matrix Codes: AQ - Aqueous Liquid NQ - Non-Aqueous Liquid	WA - Water WG - Groundwater	DW - Drin WW - Wa	king Water stewater	<b>SO</b> - Soil <b>SL</b> - Sludge	SD - Solid WP - Wipe PT - Paint CK - Caulk	OL - Oil AR - Air
							STED ANALYS	SIS		
DATE COLLECTED	TIME COLLECTED	m⊣-∞0™≅00	סג<ס	SAMPLE IDENTIFIER	×- ス - マ - ミ の m つ O C T M 図 Z C Z	Ø 7 m 2 − > - 1 2 0 0 8260 STARS VOCs 8270 STARS SVOCs			REMARKS	PARADIGM LAB SAMPLE NUMBER
5/19/15	506		×	LNAPL-1 (4-5-)	so ,	1 X X				6 1
5/19/15	35		×	LNAPL - 2 (3.5)	SO	1 × ×				0 2
5/19/15	145		×	LNAPL-9 (6-87)	SO V	1 × ×				03
Turnaround	Time			Report Supplements						
Availabili	ty continger	nt upon la	ab appr	oval; additional fees may apply.	BRICH	PRON	5 2	119115		
Standard 5 day		Batch Q	0	Basic EDD	Sampled By	7	, Date/	Time 10:3	Total Cost:	
Rush 3 day	×	Categor	A		Relinquished By	11/11	(Date)	Time /		
Rush 2 day		Categor	B		Booking By	144	- S	INC/15		
Rush 1 day							S/a		11:57 Filt:	
lease indicate:		Other please India	sate:	Other EDD	Received @ Lab By		Date	Time		L
<u>ل</u> ه Due COB	26 /ar/15				S°C icel	1 SI/12/5	1.40	See addi	tional page for sample co	nditions.
									۲ ۲	

See additional page for sample conditions.

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# Chain of Custody Supplement

Client:	Groundwater & Entr. Services	Completed by:	Glenn Pezzulo					
Lab Project ID:	152002	Date:	5/21/15					
	Sample Condition Red Per NELAC/ELAP 210/241/	<b>quirements</b> 242/243/244						
NELAC compliance with the sample condition requirements upon receiptConditionYesNoN/A								
Container Type		5035						
Comments								
Transferred to method- compliant container	· · · · · · · · · · · · · · · · · · ·							
Headspace (<1 mL) Comments								
Preservation Comments								
Chlorine Absent (<0.10 ppm per test strip) Comments								
Holding Time								
<b>Temperature</b> Comment	s S°C iceA							
Sufficient Sample Quantity Comment	s							



## <u>APPENDIX B</u>

Photo-documentation of Investigation Activities





Initial NAPL discovery at test pit LNAPL-1 (T2-E4 location) on February 3, 2015, which was excavated to top of bedrock. (Approximate depth 6 feet below the then current grade). Photo and description provided by AMEC.



Re-excavation at test pit LNAPL-1 on February 10, 2015. Photo and description provided by AMEC.





Bedrock exposed at test pit LNAPL-1. Photo and description provided by AMEC.



Test pit LNAPL-1 widened to three bucket-widths (as NAPL impact not as prominent as was observed on February 3, 2015). Photo and description provided by AMEC.





Test pit LNAPL-2 (~25 feet west of LNAPL-1) immediately following excavation on February 10, 2015. Photo and description provided by AMEC.





Accumulation of NAPL in test pit LNAPL-2 one day after excavation. Photo and description provided by AMEC.





Test pit LNAPL-3 – no NAPL observed. (Photo typical of additional Test Pits). Photo and description provided by AMEC.





View of test pit LNAPL-2 on March 20, 2015 with NAPL accumulated on surface of water.





View of test pit LNAPL-10 upon completion on April 23, 2015. No NAPL was observed.





View of test pit LNAPL-11 upon completion on April 23, 2015. No NAPL was observed.



View of test pit LNAPL-12 upon completion on April 23, 2015 showing slight sheen on water at bottom of test pit.





View of test pit LNAPL-13 upon completion on April 23, 2015.





View of test pit LNAPL-14 upon completion on April 23, 2015, showing sheen on water at bottom of test pit.



View of test pit LNAPL-15 upon completion on April 23, 2015. No NAPL was observed.





View of test pit LNAPL-16 upon completion on April 23, 2015, showing exposed bedrock.



View of test pit LNAPL-17 upon completion on April 23, 2015.





View of test pit LNAPL-20 during advancement on April 24, 2015, showing NAPL impacts.





View of soil excavated from test pit LNPAL-20, showing NAPL impacts. This was segregated and transported for landfill disposal.





View of test pit LNAPL-21 during advancement on April 24, 2015. No NAPL impacts were observed.





View of test pit LNAPL-23 during advancement on April 27, 2015. The test pit was terminated prior to reaching bedrock due to undermining and caving as shown in this photograph. No NAPL impacts were observed during advancement of the test pit.





View of test pit LNAPL-24, showing NAPL entering test pit on April 27, 2015.





View of test pit LNAPL-2 upon re-excavation on May 19, 2015.





View of test pit LNAPL-9 upon re-excavation on May 19, 2015.





View of a piece of the pipe that was removed from the subsurface at test pit LNAPL-20 on May 19, 2015.





View of hydrophobic sorbent pads on surface of test pit used for the collection of NAPL in May 2015.



### <u>APPENDIX C</u>

Test Pit Logs

G		T	EST F	PIT LOG		ID NO.: <b>LN</b>	APL-1 Repeat
PROJ ADDF JOB 1	IECT: Bi RESS: 30 NO.: 09	rightfields 01 Highlan 01616	Tract II nd Ave, Ni	iagara Falls, NY 14305	SURFAC WATER BOREH	CE ELEV.: DEPTH: 4' OLE DIAM.:NA	TOTAL DEPTH: 5' CASING ELEV.: NA WELL DIAM.: NA
Logged By:Eric PopkenDates Drilled:5/19/2015Excavating Company:OSCRig Type:Excavator			Drilling Meth Sampling M Soil Class. S Field Screen	hod: Test Pit lethod: Test Pit System: Modified Burmis ning: MiniRae 2000 w/	ter 10.6 eV Lamp		
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOLO	DGY	COMMENTS	COMPLETION DETAILS
0-				No recovery.			► NA
1-	9:00	19.9	1-3'	Clayey silt, little fine to sand, brown-gray, mo petroleum odors	o medium ist,		
2	0.02	22.3	3.5'				
4-	0.00	22.5		Sandy silt and fine to gravel, brown, wet, pe odors, LNAPL on wate	coarse etroleum er		
-						Sample collected for analysis.	æ
						Bedrock encountered at 5'.	

Location: Northing/Latitude: Easting/Longitude: Horizontal Datum: Vertical Datum:

General Comments:

Symbol Key: Apparent Water Level 👤

Soil Sample Location

GES	Т	EST F	PIT LOG		ID NO.: LN	APL-2 Repeat
PROJECT: B ADDRESS: 30 JOB NO.: 02	r & Envir Frightfields 001 Highla 901616	Onmenta Tract II nd Ave, N	al Services, inc. iagara Falls, NY 14305	SURFAC WATER BOREHO	E ELEV.: DEPTH: 4' DLE DIAM.:NA	TOTAL DEPTH: 5' CASING ELEV.: NA WELL DIAM.: NA
Logged By: Dates Drille Excavating Rig Type:	Eric Pe d: 5/19/20 Company: O NA	opken )15 SC		Drilling Meth Sampling Me Soil Class. S Field Screen	od: Test Pit ethod: Test Pit System: Modified Burmis ing: MiniRae 2000 w/	ter 10.6 eV Lamp
Depth (feet) Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOLC	DGY	COMMENTS	COMPLETION DETAILS
0 1- 9:15 2-	0.8	1-3'	Clayey silt, little fine to sand, brown, moist, products	o medium etroleum		✓ NA
3- 9:20 4- 5-	1.6	3-5'	Clayey silt, little to sor coarse sand, little to s coarse gravel, gray, w petroleum odor, LNAF	me fine to some fine to vet, PL on water	Sample collected for analysis. Bedrock encountered at 5'.	

Location: Northing/Latitude: Easting/Longitude: Horizontal Datum: Vertical Datum:

General Comments:

Symbol Key: Apparent Water Level

Soil Sample Location

LNAPL-2 Repeat p. 1 of 1

GE	Т	EST P	PIT LOG		ID NO.: LN	APL-9 Repeat
Groundwa	ter & Envir	onmenta	l Services, Inc.			Page 1 of 1
PROJECT: ADDRESS: JOB NO.:	Brightfields 3001 Highla 0901616	Tract II nd Ave, Ni	agara Falls, NY 14305	SURFAC WATER BOREHO	E ELEV.: DEPTH: <b>7'</b> DLE DIAM.: NA	TOTAL DEPTH: 8' CASING ELEV.: NA WELL DIAM.: NA
Logged E Dates Dr Excavatii Rig Type	By: Eric Po illed: 5/19/20 ng Company: O : NA	opken 015 SC		Drilling Meth Sampling Me Soil Class. S Field Screen	od: Test Pit ethod: Test Pit System: Modified Burmis ning: MiniRae 2000 w/	ter 10.6 eV Lamp
Depth Samp (feet) Time	e Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOLO	DGY	COMMENTS	COMPLETION DETAILS
0 1 - 2 - 9:3( 3 - 4 - 9:4( 5 -	) 0.0 ) 0.2	(reet) 2-4' 4-6'	No recovery.   Silty clay, little fine sardry to moist   Clayey silt, , little fine-sand, brown, moist to petroleum odors	nd, brown, medium wet,		► NA
6- 9:45 7- 8-	5 0.9	6-8'	Fine to coarse sand, to gravel, little silt, gray, v petroleum odors	race wet,	Sample collected from 6-8' for analysis. Bedrock encountered at 8'.	<b>■</b>

Location: Northing/Latitude: Easting/Longitude: Horizontal Datum: Vertical Datum:

General Comments:

Symbol Key: Apparent Water Level

Soil Sample Location
G	E	т	EST F	PIT LOG		ID NO.: LN	APL-10
PROJ ADDF JOB 1	IECT: BI RESS: 30 NO.: 09	tightfields 01 Highlan 01616	Donmenta Tract II nd Ave, Ni	al Services, Inc. iagara Falls, NY 14305	SURFACE WATER DE BOREHOLI	ELEV.: <b>578.610'</b> :PTH: <b>Not encountere</b> E DIAM.: <b>NA</b>	TOTAL DEPTH: 6.7' d CASING ELEV.: NA WELL DIAM.: NA
Logged By:Tom PalmerDates Drilled:4/23/2015Excavating Company:OSCRig Type:Excavator					Drilling Met Sampling M Soil Class. Field Scree	hod: Test Pit lethod: Test Pit System: Modified Burmis ning: MiniRae 2000 w/	ter 10.6 eV Lamp
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOL	OGY	COMMENTS	COMPLETION DETAILS
0-	9:30	0.0	0-2'	Clayey fill, brown, co brick, moist, no odor	ncrete,		← NA
2-	9:38	0.0	2-4'	Silty clay, brown, little moist, no odor	e gray clay,	-	
3- 4-	9:45	0.0	4-6'	Silty clay, brown, little moist, no odor	e gray clay,		
5- - 6-	9:50	0.0	6-6'8"	Silty clay, brown, little moist, no odor	e gray clay,	Bedrock encountered at 6'8". No sign of impacts, no samples collected.	
7_		<u> </u>	<u> </u>				I]

General Comments:

Location: Northing/Latitude: 1135679.636 Easting/Longitude: 1025167.858 Horizontal Datum: Vertical Datum: Symbol Key: Apparent Water Level 丈 Soil Sample Location 🔀

G			EST P	PIT LOG	ID NO.: LN	NAPL-11 Page 1 of 1
PROJ ADDR JOB N	ECT: Br RESS: 30 NO.: 09	ightfields 01 Highlar 01616	Tract II nd Ave, Ni	SURFAC agara Falls, NY 14305 WATER BOREH	E ELEV.: 582.464' DEPTH: Not encountere DLE DIAM.:NA	TOTAL DEPTH: 10.5' ed CASING ELEV.: NA WELL DIAM.: NA
Lc Da Ex Ri	ogged By: ates Drilled ccavating C g Type:	ter 10.6 eV Lamp				
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOLOGY	COMMENTS	COMPLETION DETAILS
0	10:43	0.0	0-2'	Silty clay, brown, moist, no odo		✓ NA
1-						
3-	10:48	0.3	2-4.5'	Silty clay, brown, moist, some brick debris, no odor		
4- - 5-	10:52	0.5	4.5-6'	Clay with silt, brown, moist, no odor		
6- 7-	10:56 11:00	0.0 0.0	6' 6-8'	Black organic silty layer Clay, dense, blue-gray, few thin black organic layers, no odor		
8- - -	11:03	0.0	8-10.5'	Silty clay, gray-brown, dry, no odor		
9- 10-					Bedrock encountered at 10.5'. No sign of impacts, no samples collected.	
<u>Locatio</u> Northin Easting Horizor	<u>n:</u> g/Latitude: /Longitude: ital Datum:	1135730.255 1025177.417	; 7	General Comments:		Symbol Key:Apparent Water LevelSoil Sample Location

LNAPL-11

p. 1 of 1

Vertical Datum:

G	ES	Т	ID NO.: <b>LN</b>	APL-12				
Grour PROJ ADDR JOB N	ECT: Br ESS: 30 IO.: 09	& Enviro rightfields 01 Highlau 01616	<mark>onmenta</mark> Tract II nd Ave, Ni	I <mark>I Services, Inc.</mark> S iagara Falls, NY 14305 E	SURFACE ELEV.: VATER DEPTH: SOREHOLE DIAM	580.991' Not encountered	Page 1 o TOTAL DEPTH: CASING ELEV.: WELL DIAM.:	of 1 10' NA NA
Lc Da E> Ri	ogged By: ates Drilled ccavating C g Type:	Test Pit Test Pit Modified Burmist MiniRae 2000 w/ 1	er 10.6 eV Lamp					
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOLOG	GY C	OMMENTS	COMPLETION DET	AILS
0	11:15	0.0	0-2'	Silty clay, brown, moist	, no odor		◄ NA	
1- 2- 3-	11:20	0.0	2-4'	Silty clay, brown, moist bricks and debris, no or	, some dor			
4- - 5-	11:26 11:30	0.0 0.0	4' 4-6'	Black organic silt Silty clay, brown, some organic material, no od	black or			
6- - 7-	11:35	0.0	6-8'	Silty clay, gray-brown to moist, no odor	o brown,			
8-	11:38	0.0	8-10'	Clay, gray to blue-gray, dry	dense,			
9- 10-	11:40	3.8	10'	Silty clay, blue-gray, co gravel, west, slight odo	arse r Bedroo 10'. Vi bottom collect	ck encountered at isible sheen at I, sample ed at 12:15.		8
Locatio Northin Easting Horizon	<u>n:</u> g/Latitude: /Longitude: ital Datum:	1135735.553 : 1025206.874	ş 1	General Comments:			<u>Symbol Key:</u> Apparent Water Level Soil Sample Location	<b>▼</b> ₩

LNAPL-12

p. 1 of 1

Vertical Datum:

G	TEST PIT LOG ID NO.: LNAPL-13											
Grou	ndwater	& Envir	onmenta	ai Services, Inc.								
	IECT: Bi	rightfields	Tract II	iagara Falla NV 14205		L = V : 578.326'	TOTAL DEPTH: 8.5'					
JOB	NO.: 09	01616	nu Ave, M	iagală Fallo, N I 14305	BOREHOLE	DIAM.: NA	WELL DIAM.: NA					
Lo	ogged By:	Tom Pa	almer		Drilling Metho	od: Test Pit						
D	ates Drilled	: 4/23/20	)15		Sampling Me	thod: Test Pit						
E: R	xcavating C ig Type:	ompany: OS Excava	SC ator		Soil Class. Sy Field Screeni	ystem: Modified Burmis ing: MiniRae 2000 w/	ter 10.6 eV Lamp					
Depth	Sample	Field	Sample				•					
(feet)	Time	Screen (ppmv)	Interval (feet)	SAMPLE LITHOLO	OGY	COMMENTS	COMPLETION DETAILS					
0												
07	12:45	0.0	0-2'	Silty fill, brown, large	concrete		► NA					
-					I							
1-												
2-	12:50	2.6	2-4'		<i>aroi</i>							
				mottled, moist, no od	or							
3-												
-				:								
4-	12:55	1.7	4-6'	Clay, brown, some si	lt, moist, no							
-				odor								
5-												
Ĵ												
6-	13.03	0.2	6_9'									
	13.03	0.2	0-0	Clay, gray, dense, dr	y, no odor							
-												
7-												
8-	13:07	26.4	8-8.5'	Clayey silt with grave	l, gray,	Bedrock encountered at						
-				saturated, slight odor	ł	bottom, sampled at	X					
						13.10.						
9 <sup></sup>				· ·			·]					
Locatio	n: n/l atitude:	1135708 240	9	General Comments:			Symbol Key: Apparent Water Level					

Northing/Latitude: **1135708.249** Easting/Longitude: **1025226.032** Horizontal Datum: Vertical Datum:

Soil Sample Location

LNAPL-13 p. 1 of 1

G	TEST PIT LOG ID NO.: LNAPL-14											
Grour	ndwater	& Enviro	onmenta	al Services, Inc.			Page 1 of 1					
PROJ	ECT: Bi	ightfields	Tract II		SURFACE I	ELEV.: 579.072'	TOTAL DEPTH: 6.5'					
ADDF	RESS: 30	01 Highlar	nd Ave, Ni	iagara Falls, NY 14305	WATER DE	PTH: Not encountere	d CASING ELEV.: NA					
JOB	NO.: 09	01616			BOREHOLE	= DIAM.: NA	WELL DIAM.: NA					
Lo	ogged By:	Tom Pa	almer		Drilling Met	hod: Test Pit						
E:	xcavating C	: 4/23/20 Company: 09	5 8C		Soil Class.	System: Modified Burmis	ter					
R	ig Type:	Excava	itor		Field Scree	ning: MiniRae 2000 w/	10.6 eV Lamp					
Depth	Sample	Field	Sample									
(feet)	Time	Screen (ppmv)	Interval (feet)	SAMPLE LITHOL	OGY	COMMENTS	COMPLETION DETAILS					
				I								
0_	13:16	0.0	0-2'	Silty fill with clay, bro	wn, brick		→ NA					
				debris, concrete debr	is							
-												
1-												
-												
2-	13:20	0.0	2-4'	Silty clay, brown, son	ne small							
				rubble, moist, no odo	r							
-												
3-												
4-	13:26	0.0	4-6'	Clayey silt, brown, m	oist, no odor							
5_												
<b>J</b>												
6-	10.00	0.0										
	13:30	0.0	6.0'	Clayey silt with some	gravel,	Bedrock encountered at						
				9.37, 377, 10 0001		6.5'. No sign of						
						collected.						
7_		L										
Locatio	<u>n:</u>			General Comments:			Symbol Key:					

Location: Northing/Latitude: 1135681.543 Easting/Longitude: 1025273.791 Horizontal Datum: Vertical Datum: Symbol Key:Apparent Water LevelSoil Sample Location

LNAPL-14 p. 1 of 1

Groun			EST F	PIT LOG		ID NO.: LN	APL-15 Page 1 of 1
PROJ ADDR JOB N	ECT: Br RESS: 30 NO.: 09	rightfields 01 Highlar 01616	Tract II nd Ave, Ni	iagara Falls, NY 14305	SURFACE WATER DE BOREHOLE	ELEV.: 575.447' PTH: Not encountere E DIAM.:NA	TOTAL DEPTH: 5' d CASING ELEV.: NA WELL DIAM.: NA
Logged By: Tom Palmer Dates Drilled: 4/23/2015 Excavating Company: OSC Rig Type: Excavator					Drilling Meth Sampling M Soil Class. Field Scree	hod: Test Pit lethod: Test Pit System: Modified Burmis ning: MiniRae 2000 w/	ter 10.6 eV Lamp
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOL	OGY	COMMENTS	COMPLETION DETAILS
0	13: 43	0.0	0-2'	Silty clay, brown, mo	ist, no odor		► NA
2- 3-	13:48	0.0	2-4'	Clayey silt, brown, le some cobbles and gr	nses of clay, avel		
4-	13:55	0.0	4-5'	Silt, blue-gray, moist	, no odor		
5-						Bedrock encountered at 5'. No sign of impacts, no samples collected.	
<u>Locatio</u> Northin Easting Horizon Vertical	<u>n:</u> g/Latitude: /Longitude: htal Datum: Datum:	1135640.952 1025261.779	2 9	General Comments:			Symbol Key: Apparent Water Level Soil Sample Location

Grour	<b>E</b> dwater			PIT LOG		ID NO.: I	NAPL-16 Page 1 of 1
PROJ ADDR JOB N	ECT: Br RESS: 30 NO.: 09	<sup>.</sup> ightfields 01 Highlaı 01616	Tract II nd Ave, Ni	iagara Falls, NY 14305	SURFACE WATER DE BOREHOLI	ELEV.: 575.489' EPTH: Not encounte E DIAM.:NA	TOTAL DEPTH: 4' ered CASING ELEV.: NA WELL DIAM.: NA
Lc Da E> Ri	ogged By: ates Drilled ccavating C g Type:	Tom Pa : 4/23/20 Company: OS Excava	almer 15 SC itor		Drilling Met Sampling M Soil Class. Field Scree	hod: Test Pit lethod: Test Pit System: Modified Burn ning: MiniRae 2000	nister w/ 10.6 eV Lamp
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOL	OGY	COMMENTS	COMPLETION DETAILS
0- 1- 2- 3- 4-	14:00	0.0	2-4'	Silty fill, rocks and so pieces, no odor	ome brick	Bedrock encountered at bottom with sheen.	at
<u>Locatio</u> Northin Easting Horizon	<u>n:</u> g/Latitude: /Longitude: htal Datum:	1135638.987 : 1025221.602	7	General Comments:			Symbol Key: Apparent Water Level v Soil Sample Location
Vertical	Datum:						LNAPL-16 p. 1 of 1

G	E	т	EST F		NAPL-17		
PROJ ADDF JOB 1	ECT: BI ESS: 30	a Enviro rightfields 01 Highlan 01616	Tract II nd Ave, N	ai Services, Inc. iagara Falls, NY 14305	SURFACE I WATER DE BOREHOLE	ELEV.: <b>576.267'</b> PTH: <b>Not encounter</b> E DIAM.:NA	TOTAL DEPTH: 4.5' ed CASING ELEV.: NA WELL DIAM.: NA
Lo Di Ex Ri	ogged By: ates Drilled xcavating C ig Type:	Tom Pa : 4/23/20 Company: OS Excava	almer 15 SC ator		Drilling Meth Sampling M Soil Class. Field Screet	hod: Test Pit lethod: Test Pit System: Modified Burmis ning: MiniRae 2000 w/	ster / 10.6 eV Lamp
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOL	OGY	COMMENTS	COMPLETION DETAILS
0	14:22	33.8	0-1'	Silt, black, rotten wor gravel, moderate odd	od debris, or		- NA
1-	14:28	0.4	1-2'	Silty clay, gray, some with brown clay, mois	e mottling st, no odor		
2- 3-	14:30	0.7	2-4'	Silty clay, brown and mottled, moist, no oc	gray, lor	On east wall at 2.5' small spot of black liquid entering test pit.	
4-		3.7 48.6	4-4.5' 4.5'	Silty clay, gray, dry, r	no odor layer with odor	Sheen encountered, sampled at 15:00	88
<u>Locatio</u>	<u>n:</u>			General Comments:			Symbol Key:

Location: Northing/Latitude: 1135631.236 Easting/Longitude: 1025191.142 Horizontal Datum: Vertical Datum: Symbol Key:Apparent Water LevelSoil Sample Location

LNAPL-17 p. 1 of 1

G	E	т	EST F	PIT LOG			APL-18
Grour	ndwater	& Enviro	onmenta	al Services, Inc.			
	ECT: Bi	rightfields 01 Highlau	Tract II nd Ave. Ni	iagara Falls. NV 14305	WATER DF	=∟⊑∨.: 580.551' PTH: Not encountera	TOTAL DEPTH: 9.5' ed CASING ELEV.: NA
JOBN	10.: 09	01616			BOREHOLE	DIAM.:NA	WELL DIAM.: NA
Lo	gged By:	Eric Po	pken		Drilling Meth	nod: Test Pit	
Da Ex	ates Drilled	: 4/24/20 Company: <b>O</b> §	15 SC		Sampling M Soil Class. S	ethod: Test Pit System: Modified Burmis	ter
Ri	g Type:	Excava	tor		Field Screer	ning: MiniRae 2000 w/	10.6 eV Lamp
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOL	OGY	COMMENTS	COMPLETION DETAILS
0-1	0.25	0.0	0.0'				
	8:35	0.0	0-2	Fill gravel and sand, moist, bricks, roots	dark brown,		
1-							
-							
2-	8:40	0.0	2-4'	Clayey silt, brown, tre	ee		
-				roots/organics, moist	, no odors		
3-							
-							
1-							
4	8:45	0.0	4-6'	Silty clay, brown-gray	y, mosit, no		
-				<b>—</b>			
5-							
-							
6-	8:50	0.0	6-8'				
-				Silty clay, brown-gray	y, mosit, no		
7-							
•							
1							
8-	8:55	0.0	8-9.5'	Silty clay, brown-gray	y, mosit, no		
9-				Silty clay, gray, fine t	o coarse		
				gravel, no odors		Rock encountered at 9.5'. No sign of	
10						impacts, no samples collected.	
	<b>.</b>						Symbol Korr
Locatio Northin	<u>n:</u> g/Latitude:	1135609.189	)	General Comments:			Symbol Key: Apparent Water Level 🛫
Easting Horizor	/Longitude Ital Datum:	: 1025162.826	)				Soil Sample Location

Vertical Datum:

LNAPL-18 p. 1 of 1

G	TEST PIT LOG ID NO.: LNAPL-19										
		* & Envir	Onmenta	al Services, Inc. SURFAG	CE ELEV.: 581.515'						
ADDF	RESS: 30	01 Highla	nd Ave, N	iagara Falls, NY 14305 WATER	DEPTH: 10.5'	CASING ELEV.: NA					
	NO.: 09	01616 Eric Po	onken	BOREH	DLE DIAM.: NA	WELL DIAM.: NA					
D	ates Drilled	: 4/24/20	)15	Samplir Samplir	g Method: Test Pit	. ,					
R	ig Type:	Excava	SC ator	Field So	reening: MiniRae 2000 w	ister v/ 10.6 eV Lamp					
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOLOGY	COMMENTS	COMPLETION DETAILS					
0-	-	-	0-4'			■ NA					
-											
1-											
2-											
3-											
-											
4-	9:30	0.5	4-6'	Black organic layer, slight odor							
-				Clay and silt, gray							
5-											
6-	0.05	22.4	0.7								
-	9:35	33.1	6-7	Silty clay, gray, hard, odor detected, no staining							
7-	9:40	48.2	7-8'		)r						
-				detected							
8-	9:45	41.2	8-10'	Clay and silt, gray-brown, trace	—						
_ م_											
<b>J</b>											
10 -	9:50	52.1	10-10.5'	Clay and silt, gray-brown, trace							
-				fine sand, odor	10.5'. NAPL on water after 15 minutes,	×					
11 _					sampled at 9:50.						
Locatio	n:			General Comments:		Symbol Key:					

Northing/Latitude: 1135758.856 Easting/Longitude: 1025232.113 Horizontal Datum: Vertical Datum: Symbol Key: Apparent Water Level 🛫

Soil Sample Location

LNAPL-19 p. 1 of 1

G	E	т	EST F	PIT LOG		ID NO.: LNAPL-20			
Grour	ndwater	& Envir	onmenta	Il Services, Inc.			Page 1 of 1		
PROJ	ECT: Bi	rightfields	Tract II		SURFACE I	ELEV.: 583.410'	TOTAL DEPTH: 15'		
ADDF	RESS: 30	01 Highla	nd Ave, Ni	agara Falls, NY 14305	WATER DE	PTH: 14'	CASING ELEV.: NA		
JOBN	NO.: 09	01616			BOREHOLE	E DIAM.: NA	WELL DIAM.: NA		
Lo	ogged By:	Eric Po	opken		Drilling Meth	nod: Test Pit			
D: E:	ates Drilled	: 4/24/20	SC		Sampling M	ethod: Test Pit System Modified Burmis	ter		
R	ig Type:	Excava	tor		Field Scree	ning: MiniRae 2000 w/	10.6 eV Lamp		
Denth	Sample	Field	Sample						
(feet)	Time	Screen (ppmv)	Interval (feet)	SAMPLE LITHOL	OGY	COMMENTS	COMPLETION DETAILS		
0-	_	_	0-4'						
-	-	-	0-4	Fill clay cover, no sa	mple				
1-									
-									
2-									
3_									
4-	10.45	25	4-6'	Black organic laver					
-		210							
5-					ce organics				
6-	10:50	5.8	6-8'	Silty clay, brown, mo	ist, brick,				
7-				∴ slight odor					
-									
8-	10:55	6.2	8-10'						
-				Clay, gray, trace org	anics				
9-									
40									
10-	11:00	19.2	10-12'	Clay, gray, trace org	anics	Pipe uncovered running east-west at 10-10.5'.			
11 –						12" diameter, steel.			
-									
12 -	11:15	14.6	12-14'	Clay gray trace are	anice				
				Ciay, gray, trace org	anics				
13 –									
11									
14	11:25	28.6	14-15'	Sand and gravel, gra	ay, trace silty		R8		
15 –					isi pir	Rock encountered			

General Comments:

Location: Northing/Latitude: 1135775.123 Easting/Longitude: 1025188.148 Horizontal Datum: Vertical Datum: Symbol Key: Apparent Water Level 🗴

Soil Sample Location

LNAPL-20 p. 1 of 1

G	TEST PIT LOG ID NO.: LNAPL-21											
Grou	ndwater	& Envir	onmenta	Il Services, Inc.			Page 1 of 1					
	JECT: BI	ightfields	Tract II	iagana Falla NV 14205		LEV.: 583.363'	TOTAL DEPTH: 20'					
JOB	NO.: 09	01 111gina 01616	llu Ave, M	lagara Falls, 101 14505	BOREHOLE	DIAM.: NA	WELL DIAM.: NA					
L	ogged By:	Eric Po	opken		Drilling Meth	nod: Test Pit						
D	ates Drilled	: 4/24/20	015		Sampling M	ethod: Test Pit						
R	ig Type:	Company: O	SC ator		Field Screer	ning: MiniRae 2000 w	ster / 10.6 eV Lamp					
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOL	OGY	COMMENTS	COMPLETION DETAILS					
•					I							
0-	-	-	0-4'	Fill clay cover, no sa	mple		<ul> <li>Partially backfilled</li> </ul>					
1-							for safety					
2-												
3-												
4-	_	0.6	4-6'									
5-		0.0	40	Clayey silt, brown-gr	ay, trace fine el, trace fill							
6												
0- - 7-	-	0.1	6-8'	Fill, gravel, sand, brid organics	ck, clay,							
- 8-	12:00	24.6	9 10'			Sample collected at	Ref. 1					
- 9_	12.00	24.0	0-10	Silty clay, brown, har slight odor	rd, moist,	12:00						
40												
10 - - 11 -	-	3.0	10-12'	Silty clay, brown, trad moist, slight odor	ce gravel,							
- 12 -	_	0.2	12-14									
13 -	-	0.2	12-14	Silty clay, brown, trac moist, slight odor	ce gravel,							
14 -	-	0.1	14-15'	Silty clay, brown, trac moist, slight odor	ce gravel,							
15 -	-	4.6	15-18'	Silty clay, brown, trad	ce gravel,	Rock encountered.						
16 -				moist to wet, slight o	aor							
17 -												
18 -	-	-	18-20'				-					
- 19				wet, slight odor	ce gravel,	Test nit caving in						
20 -				Ħ		cannot advance, no bedrock encountered.						

Location: Northing/Latitude: 1135825.831 Easting/Longitude: 1025181.697 Horizontal Datum: Vertical Datum:

General Comments:

Symbol Key: Apparent Water Level 🛫

Soil Sample Location

LNAPL-21 p. 1 of 1

G	TEST PIT LOG ID NO.: LNAPL-22									
Grou	ndwater	& Envir	onmenta	al Services, Inc.			Page 1 of 1			
PROJ ADDF JOB 1	JECT: BI RESS: 30 NO.: 09	rightfields 01 Highla 01616	Tract II nd Ave, Ni	iagara Falls, NY 14305	SURFACE E WATER DE BOREHOLE	ELEV.: <b>583.372'</b> PTH: <b>12'</b> E DIAM.: <b>NA</b>	TOTAL DEPTH: 19' CASING ELEV.: NA WELL DIAM.: NA			
Logged By: Eric Popken Dates Drilled: 4/24/2015 Excavating Company: OSC Rig Type: Excavator					Drilling Meth Sampling M Soil Class. S Field Screer	nod: Test Pit ethod: Test Pit System: Modified Burmi ning: MiniRae 2000 w	ster / 10.6 eV Lamp			
Depth Sample Field Sample Interval (feet) (ppmv) (feet) SAMPLE LITHOL				SAMPLE LITHOL	.OGY	COMMENTS	COMPLETION DETAILS			
0 1- 2- 3-	-	-	0-4'	Fill clay cover, no sa	mple		<ul> <li>Partially backfilled for safety</li> </ul>			
4- 5-	-	5.2	4-6'	Clayey silt, gray, trac coarse sand, trace b	ce fine to ricks					
6- 7-	-	6.2	6-8'	Clayey silt, brown, tr coarse sand, trace b	ace fine to ricks					
8- - 9- -	-	6.1	8-10'	Silty clay, brown, tra	ce brick	Sample collected at 14:00				
10 - - 11 -	-	36.0	10-12'	Silty clay, brown, tra fragments	ce brick					
12 - 13 -	14:00	66.6	12-14'	Fine to coarse sand Gigg gray, product on gra Odor	and gravel, vel, wet,		8			
14 - - 15 -	-	11.6	14-16'	Fine to coarse sand gray, product on gra odor	and gravel, vel, wet,	NAPL at 14-15'.				
16 - - 17 -		4.1	16-18'	Fine to coarse sand Grading	and gravel,					
18 - 19 -	-	5.0	18-19'	Fine to coarse sand gray, wet, sheen, od	and gravel, or	Rock encountered,				

Location: Northing/Latitude: 1135797.665 Easting/Longitude: 1025223.290 Horizontal Datum: Vertical Datum:

General Comments:

Symbol Key: Apparent Water Level 🛫 Soil Sample Location

LNAPL-22 p. 1 of 1

G	TEST PIT LOG ID NO.: LNAPL-23									
Grour	ndwater	& Envir	onmenta	al Services, Inc.			Page 1 of 1			
PROJ ADDF JOB N	IECT: BI RESS: 30 NO.: 09	rightfields 01 Highlar 01616	Tract II nd Ave, Ni	iagara Falls, NY 14305	SURFACE WATER DE BOREHOLI	ELEV.: <b>583.666'</b> EPTH: <b>12'</b> E DIAM.: <b>NA</b>	TOTAL DEPTH: 21' CASING ELEV.: NA WELL DIAM.: NA			
Logged By: Eric Popken Dates Drilled: 4/27/2015 Excavating Company: OSC Rig Type: Excavator			opken 915 SC ator	Drilling Method: Test Pi Sampling Method: Test Pi Soil Class. System: Modifie Field Screening: MiniR;			ter 10.6 eV Lamp			
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOL	JOGY	COMMENTS	COMPLETION DETAILS			
0- 1- 2- 3-	-	-	0-4'	Fill clay cover, no sa	ample		<ul> <li>Partially backfilled for safety</li> </ul>			
4- 5-	9:25	0.2	4-6'	Fill clay and silt, fine gravel and sand, brid organics	e to coarse cks, wood,					
6- - 7-	9:35	0.6	6-8'	Black organic layer,	silt, slight					
8- - 9-	9:40	0.8	8-10'	Silty clay, gray, trace	e fince sand					
10 - - 11 -	9:45	0.3	10-12'	Fine to coarse grave gray, wet, water in te odors	el and sand, est pit, no					
12 - 13 - 14 - 15 -	9:50	0.4	12-16'	Clayey silt, brown, fi sand, little fine to co moist, wet, no odors	ine to coarse arse gravel,	Water in test pit.				
16 - 17 -	10:00	0.2	16-18'	Clayey silt, brown, fi Clayey silt, brown, fi Sand, little fine to co Clayer Sand, wet, no odors	ne to coarse arse gravel,					
18 - 19 -	10:55	0.2	18-20'	Fine to coarse grave Gra	el and sand, rated	Rock encountered, sheen encountered. Test Pit caving at 20-				
20 - 21 -						21', cannot advance. No samples collected.				

General Comments:

Location: Northing/Latitude: 1135778.281 Easting/Longitude: 1025147.661 Horizontal Datum: Vertical Datum: <u>Symbol Key:</u> Apparent Water Level 🛛 🛫

Soil Sample Location

G	TEST PIT LOG ID NO.: LNAPL-24									
Grou	ndwater	& Envir	onmenta	al Se	ervices, Inc.			Page 1 of 1		
PROJ ADDF JOB 1	IECT: BI RESS: 30 NO.: 09	rightfields 01 Highlar 01616	Tract II nd Ave, N	iagar	a Falls, NY 14305	SURFACE WATER DE BOREHOLI	ELEV.: 581.689' :PTH: 14' E DIAM.:NA	TOTAL DEPTH: 14.5' CASING ELEV.: NA WELL DIAM.: NA		
Logged By:Eric PopkenDates Drilled:4/27/2015Excavating Company:OSCRig Type:Excavator				Drilling Met Sampling M Soil Class. Field Scree	hod: Test Pit lethod: Test Pit System: Modified Burmi ning: MiniRae 2000 w	ster / 10.6 eV Lamp				
Depth (feet)	epth Sample Field Sample Interval SAMPLE LITHO			SAMPLE LITHOL	OGY	COMMENTS	COMPLETION DETAILS			
0- - 1- - 2- - 3- - 4-	- 11:30	-	0-4'	$\mathbf{\tilde{O}}$	Fill clay cover, no sar	mple		- NA		
5-	11:30	-	5-6'		Clayey silt, gray		-			
6- 7-	11:35	14.2	6-8'		Silty clay, gray, trace no odors	fine sand,				
8- - 9- -	11:40	5.5	8-10'	H :   :   :   :   :   :	Silty clay, gray, trace no odors	fine sand,				
10 - - 11 -	11:45	5.6	10-12'	:    :    :    :    :    :    :    :	Silty clay, gray, trace no odors	fine sand,	_			
12 - 13 -	11:50	36.8	12-14'	H NOOOO	Fine to coarse grave gray, dark NAPL on v pit, large boulders wi	l and sand, water in test th NAPL	-			
14 - 15 -	12:00	40.1	14-14.5'		/ Fine to coarse grave gray, dark NAPL on v pit, large boulders wi	l and sand, water in test th NAPL	Water in test pit. Bedrock encountered, sample collected at 12:00.	88		
- •										

General Comments:

Location:

Northing/Latitude: **1135798.626** Easting/Longitude: **1025266.444** Horizontal Datum: Vertical Datum: Symbol Key: Apparent Water Level 🛫

Soil Sample Location

LNAPL-24 p. 1 of 1

G	TEST PIT LOG ID NO.: LNAPL-25									
Grou	ndwater	& Envir	onmenta	al Services, Inc.			Page 1 of 1			
PRO. ADDF JOB I	JECT: B1 RESS: 30 NO.: 09	rightfields 01 Highlaı 01616	Tract II nd Ave, N	iagara Falls, NY 14305	SURFACE I WATER DE BOREHOLE	ELEV.: 582.558' PTH: Not encountere E DIAM.:NA	TOTAL DEPTH: 22' cd CASING ELEV.: NA WELL DIAM.: NA			
Logged By:Eric PopkenDates Drilled:4/27/2015Excavating Company:OSCRig Type:Excavator				Drilling Method:Test PitSampling Method:Test PitSoil Class. System:Modified BurmisterField Screening:MiniRae 2000 w/ 10.6 eV Lamp						
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOL	OGY	COMMENTS	COMPLETION DETAILS			
0-										
0- 1- 2- 3-	12:10	0.1	0-4'	Fill clay cover, no sa	mple		■ NA			
4- 5-	12:15	0.0	4-6'	Fine to medium sand	d, red-brown,					
6- 7-	12:20	1.5	6-8'	Black organic layer,	wood pieces					
8- - 9-	12:25	3.7	8-10'	Silty clay, gray						
10 - 11	12:30	0.6	10-12'	Silty clay, gray						
12 – 13 –	12:35	0.2	12-14'	Fine to coarse sand brown, occasional bo	and gravel, oulders, no					
14 - 15 - 16 - 17 -	12:45	0.4	14-18'	Clayey silt, brown, tr trace fine sand, mois	ace gravel, st					
- 18 - - 19 -	13:00	0.1	18-20'	Clayey silt, brown, tr	ace gravel, st					
20 - 21 - 22 -	13:15	0.1	20-22'	Rock and fine to coa	irse gravel	Possible bedrock encountered, test pit caving in, cannot advance.				

Location: Northing/Latitude: 1135844.640 Easting/Longitude: 1025257.985 Horizontal Datum: Vertical Datum: General Comments:

Symbol Key: Apparent Water Level 🛫

Soil Sample Location

G	TEST PIT LOG ID NO.: LNAPL-26								
Grou	ndwater	& Envir	onmenta	al Services, Inc.			Page 1 of 1		
PROJ ADDF JOB 1	IECT: B1 RESS: 30 NO.: 09	rightfields 01 Highlaı 01616	Tract II nd Ave, N	iagara Falls, NY 14305	SURFACE WATER DE BOREHOL	ELEV.: <b>580.560'</b> EPTH: <b>14'</b> E DIAM.:N <b>A</b>	TOTAL DEPTH: 15' CASING ELEV.: NA WELL DIAM.: NA		
Logged By:Eric PopkenDates Drilled:4/27/2015Excavating Company:OSCRig Type:Excavator				Drilling Met Sampling M Soil Class. Field Scree	hod: Test Pit Iethod: Test Pit System: Modified Burmi ning: MiniRae 2000 w	ister 7/ 10.6 eV Lamp			
Depth (feet)	Sample Time	Field Screen (ppmv)	Sample Interval (feet)	SAMPLE LITHOL	.OGY	COMMENTS	COMPLETION DETAILS		
0- 1-	14:00	0.0	0-2'	Fill clay cover			- NA		
2- 3-	14:05	0.3	2-4'	Fill sand and gravel, organics	clay, bricks,				
4- 5-	14:10	0.8	4-6'	Clayey silt, brown-gr	ray, hard, no				
6- 7-	14:15	1.3	6-8'	Clayey silt, brown-gr	ray, hard, no				
8- 9-	14:20	1.6	8-10'	Silty clay, gray-brow	n				
10 - _ 11 -	14:25	5.8	10-12'	Silty clay, gray-brow	n				
12 - 13 -	14:30	14.2	12-14'	Fine to coarse sand, fine to coarse gravel	, gray, little I, wet, water	Sulfur odor.			
14 - 15 -	14:35	31.8	14-15'	Fine to coarse sand fine to coarse sand fine to coarse gravel fine to coarse gravel	, gray, little I, wet, water	Water in test pit. Rock encountered, - sample collected at 14:35.	<b>₩</b>		

Location:

Northing/Latitude: **1135780.183** Easting/Longitude: **1025299.257** Horizontal Datum: Vertical Datum: General Comments:

Symbol Key: Apparent Water Level 🛫

Soil Sample Location

LNAPL-26 p. 1 of 1

G	TEST PIT LOG ID NO.: LNAPL-27									
Grou	ndwater	& Envir	onmenta	al Services, Inc.			Page 1 of 1			
PRO.	JECT: B	rightfields	Tract II		SURFACE	ELEV.: 580.230'	TOTAL DEPTH: 10'			
ADDF	RESS: 30	01 Highlar	nd Ave, N	liagara Falls, NY 14305	WATER DE	EPTH: 9.5'	CASING ELEV .: NA			
JOB	NO.: 09	01616			BOREHOLI	E DIAM.: NA	WELL DIAM.: NA			
L	ogged By:	Eric Po	opken		Drilling Met	hod: Test Pit				
D	ates Drilled	: 5/19/20	115		Sampling N	lethod: Test Pit				
R	ig Type:	Excava	sC ator		Field Scree	ning: MiniRae 2000 w/	ter 10.6 eV Lamp			
Danth Sample Field Sample							×			
(feet)	Time	Screen	Interval (feet)	SAMPLE LITHOL	.OGY	COMMENTS	COMPLETION DETAILS			
		(ppint)	(icci)							
0-	10:10	0.0	0-2'				➡ NA			
-				gravel, organics, no	odors					
1-										
-										
2-	10.15	0.0	2 /'			-				
	10.15	0.0	2-4	Fill, clay and silt, bro	own, brick, odors					
3-										
-										
4										
4	10:20	0.1	4-6'	Silty clay, brown, dry	/ to moist,					
-				odors	i sand, no					
5-										
6-	10:25	0.0	6-8'	Silty clay, brown, dry	/ to moist,	-				
-				trace fine to medium	n sand, no					
7-										
_										
1										
8-	10:30	0.1	8-9.5'	Silty clay brown dr	/ to moist					
				trace fine to medium	i sand, no					
				odors						
9-				Fine to coarso cond	and gravel					
	10:35	0.2	9.5-10'	little silt, gray, wet, n	io sheen or	N N N N N N N N N N N N N N N N N N N	×			
10 -						Rock encountered at				
						10'. No sign of impacts,				
Locatio	on:			General Comments:			Symbol Key:			

Location: Northing/Latitude: 1135736.980 Easting/Longitude: 1025277.490 Horizontal Datum: Vertical Datum:

Symbol Key: Apparent Water Level 🛫

Soil Sample Location



## APPENDIX D

Soil Disposal Records

1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d Corporation			Ticket: Date: Time:	1002434542 3/13/2015 08:22:05 - 08:22:57 Scale
Truck: Customer: Carrier: Generator:	PARISO-246 0250310002/Modern Disposal Roll Off - PARI-003/PARISO INC. CARMEN Truck B 0250310002/Modern Disposal Roll Off -	∢ Type: Route: Profile:	Tare: Net: TA BROKER/SUB OUT VARIOUS M15-2798/BRIGHTFIELDS - A	82960 26900 36060 BR( DDITI	) POU In Scale INBOUR ) POU P.T. ) POU WO: 0001105684
Service Site: Comment:	0005730094 BRIGHTFIELDS- TRACT II		Overtity II-it		`
291100/Niagara F	alls DC DEC Approved Waste		18.03 TON		
Driver:	<u>&gt;</u>		Weighmaster: Deb Lehm	an	
· · · · · ·					

.

	IODERN				Ticket:	10024	3454	9	
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d Corporation				Date: Time:	3/13/2 08:29:0	015 00 - 0 Sca	)8:29:31 le	
				Gross:	60080	) POU	In	Scale INB(	OUN
Truck:	PARISO-102			Tare:	25900	) POU		P.T.	
Customer:	0250310002/Modern Disposal Roll Off -			Net:	34180	) POU			
Carrier:	PARI-004/PARISO, B TRANSPORT	Truck Type:	TA						
		Route: Profile:	BROKER/SUB OUT M15-2798/BRIGHT	VARIOUS FIELDS - A	BR( DDITI:	WC	): 00	001105685	
Generator:	0250310002/Modern Disposal Roll Off -								
Service Site: Comment:	0005730094 BRIGHTFIELDS- TRACT II			•					
Origin	Materials & Services		Quantity	Unit					_
291100/Niagara F	alls DC DEC Approved W	aste	17.09	TON					-

Weighmaster: Deb Lehman

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	IODERN				Ticket:	10024	3457	
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d Corporation 4107				Date: Time:	3/13/2 09:26:3	015 32 - ( Sca	9:27:00 le
<b>`</b> ,				Gross:	61840	) POU	In	Scale INBOUN
Truck:	PARISO-246			Tare:	26900	) POU		P.T.
Customer:	0250310002/Modern Disposal Roll Off -			Net:	3494(	) POU		
Carrier:	PARI-003/PARISO INC. CARMEN	Truck Type:	TA					
		Route:	BROKER/SUB OUT	VARIOUS	BRC	WC	): 0(	001105686
	1. A.	Profile:	M15-2798/BRIGHTF	FIELDS - A	DDITI			
Generator:	0250310002/Modern Disposal Roll Off -							
Service Site:	0005730094 BRIGHTFIELDS- TRACT II		,					
Comment:								
Origin	Materials & Services		Quantity	Unit				
291100/Niagara H	Falls DC DEC Approved W	aste	17.47	TON	`			

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Driver:

Weighmaster: Deb Lehman

1445 Pletcher Roa Model City, NY 14	LODERN Corporation				Ticket: Date: Time:	10024 3/13/2 09:32:5	34580 015 57 - 09 Scale	9:33:30 e
(710) 734-8220				Gross:	58480	POU	In	Scale INBOUN
Truck:	PARISO-102			Tare:	25920	POU	Out	Manual Wt M
Customer:	0250310002/Modern Disposal Roll Off -			Net:	32560	POU		
Carrier:	PARI-004/PARISO, B TRANSPOR	Truck Type:	TA					
	· ·	Route:	BROKER/SUB OUT	VARIOUS	BRC	WC	: 00	01105687
		Profile:	M15-2798/BRIGHTE	FIELDS - A	DDITI			
Generator:	0250310002/Modern Disposal Roll Off -							
Service Site:	0005730094 BRIGHTFIELDS- TRACT II							
Comment:			•					
Origin	Materials & Services		Quantity	Unit				
291100/Niagara H	Falls DC DEC Approved W	aste	16.28	TON				

Weighmaster: Deb Lehman

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	IODERN		Ticket:	100243462	
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	a Corporation	· · · · · · · ·	Date: Time:	3/13/2015 10:28:44 - Sca	10:29:06 hle
		Gros	s: 62400	0 POU In	Scale INBOUN
Truck:	PARISO-246	Tar	e: 26900	0 POU	P.T.
Customer:	0250310002/Modern Disposal Roll Off -	Ne	t: 35500	0 POU	
Carrier:	PARI-003/PARISO INC. CARMEN Truck Type: TA				
	Route: BROF	KER/SUB OUT VARIOU	IS BRC	WO: 0	001105688
	Profile: M15-2	2798/BRIGHTFIELDS -	ADDITI		
Generator:	0250310002/Modern Disposal Roll Off -				
Service Site:	0005730094 BRIGHTFIELDS- TRACT II				
Comment:					
Origin	Materials & Services	Quantity Unit			-
291100/Niagara F	alls DC DEC Approved Waste	17.75 TON			

Weighmaster: Deb Lehman

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	IODERN				Ticket:	10024	<b>3463</b>	
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d Corporation				Date: Time:	3/13/2 10:32:2	015 29 - 1 Scal	0:32:46 le
				Gross:	57820	POU	In	Scale INBOUN
Truck:	PARISO-102			Tare:	25900	POU		P.T.
Customer:	0250310002/Modern Disposal Roll Off -			Net:	31920	POU		
Carrier:	PARI-004/PARISO, B TRANSPORT	Truck Type:	TA					
		Route:	BROKER/SUB OUT	VARIOUS	BRC	WC	): 00	01105689
		Profile:	M15-2798/BRIGHTFI	ELDS - A	DDITI			
Generator:	0250310002/Modern Disposal Roll Off -							
Service Site:	0005730094 BRIGHTFIELDS- TRACT II							
Comment:								
Origin	Materials & Services		Quantity	Unit				
291100/Niagara H	alls DC DEC Approved W	aste	15.96	TON				

Weighmaster: Deb Lehman

	IODERN						
	Corporation				Ticket:	1002434	672
1445 Pletcher Roa	d				Date:	3/13/201	5
Model City, NY 14	107				Time:	11:33:26	- 11:34:22
(716) 754-8226						Scal	ie .
	-			Gross:	70220	) POUIn	Scale INBOUN
Truck:	PARISO-246			Tare:	26900	) POU	P.T.
Customer:	0250310002/Modern Disposal Roll Off -			Net:	43320	) POU	
Carrier:	PARI-003/PARISO INC. CARMEN	Truck Type:	TA				
		Route:	BROKER/SUB OUT	VARIOUS	BRC	WO:	0001105690
		Profile:	M15-2798/BRIGHT	FIELDS - A	DDI'.		
Generator:	0250310002/Modern Disposal Roll Off -						
Service Site:	0005730094 BRIGHTFIELDS- TRACT II						
Comment:							
Origin	Materials & Services		Quantity	Unit			
291100/Niagara F	Calls DC DEC Approved W	aste	21.66	TON			

Driver: \_

Weighmaster: Deb Lehman

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ITE HAR BINDE HAR GIRLS MILL 198

	IODERN							
1445 Diotohon Dou	Corporation					Ticket:	1002434	677
1445 Fletcher Roa						Date:	3/13/201	5
Model City, NY 14	107					Time:	11:41:59	- 11:42:50
(/16) /54-8226							Scal	le
					Gross:	70820	POUIn	Scale INBOUN
Truck:	PARISO-102				Tare:	25900	POU	P.T.
Customer:	0250310002/Modern Disposal Roll Off -				Net:	44920	POU	
Carrier:	PARI-004/PARISO, B TRANSPORT	Truck Type:	TA					r
1		Route:	BROKER/SU	BOUT	VARIOUS	BRC	WO:	0001105691
		Profile:	M15-2798/BI	UGHTFI	ELDS - Al	DDI'.		
Generator:	0250310002/Modern Disposal Roll Off -							
Service Site:	0005730094 BRIGHTFIELDS- TRACT II							
, Comment:								
Origin	Materials & Services		(	Quantity	Unit			
291100/Niagara F	Calls         DC DEC Approved W	aste	·	22.46	TON			 i

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Driver:

Weighmaster: Deb Lehman

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1445 Pletcher Roa Model City, NY 1 (716) 754-8226	<b>10D</b> ad 4107	<b>EKI</b> Corporat	ion	ب	× •	(I	Ticket: Date: Time:	100243629 3/20/2015 08:01:42 - 0 Sca	8 8 08:02:33 1e Scale INTROL	Th
Truck: Customer: Carrier: Driver: Generator: Service Site:	2080-TA 0250310002/M LEWI-003/LEV MALJOH/Malc 0250310002/M 0005730094 BE	odern Disposal VISTON TRUC come Johannes odern Disposal RIGHTFIELDS	Roll Off - CKIN( 7 Roll Off - G- TRACT II	Truck Type: Route: Profile: PO:	TA MJOHANNES/ M15-2798/BRI	MALCOM JC GHTFIELDS	re: 30600 et: 38480 HANN - ADDITI	POU POU WO: 00	901109474	J <b>r</b>
Comment: Origin		Materials &	& Services		Ou	antity Unit				
291100/Niagara I		DC DEC	Approved Was	 te		.24 TON				
Driver:	MALS	Percity Pr	es 24	320	Weighma	ister: Deb Leł	iman			
							*****			

	IODERN						
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d 4107 Corporation				Ticket: Date: Time:	1002436 3/20/201 08:05:05 Sca	5301 15 - 08:05:43 1le
				Gross:	65040	POUIn	Scale INBOUN
Truck:	PARISO-229			Tare:	27080	POU	P.T.
Customer:	0250310002/Modern Disposal Roll Off -			Net:	37960	POU	
Carrier:	PARI-003/PARISO INC. CARMEN	Truck Type:	TA				
		Route:	BROKER/SUB OUT	<b>VARIOUS</b>	BRC	WO:	0001109479
		Profile:	M15-2798/BRIGHT	FIELDS - A	DDL		
Generator:	0250310002/Modern Disposal Roll Off -	PO:					
Service Site:	0005730094 BRIGHTFIELDS- TRACT II						
Comment:							
Origin	Materials & Services		Quantit	y Unit			
291100/Niagara I	Falls DC DEC Approved W	aste	18.98	TON			

Driver: \_\_\_\_

Weighmaster: Deb Lehman

<b>MODERN</b>						
Corporation				Ticket:	1002436	305
Model City NY 14107				Date:	3/20/201	5
(716) 754-8226				Time:	08:11:22 Sca	- 08:12:19 1e
			Gross:	63980	POUIn	Scale INBOUN
Truck: PARISO-246			Tare:	26900	POU	P.T.
Customer: 0250310002/Modern Disposal Roll Off -			Net:	37080	POU	
Carrier: PARI-003/PARISO INC. CARMEN	Truck Type:	TA				
	Route:	BROKER/SUB OUT V	VARIOUS	BRC	WO:	0001109480
Generator 0250210002/Medam Disposel Ball Off	Profile:	M15-2798/BRIGHTFI	ELDS - Al	DDI.		
Service Site: 0005730094 BRIGHTFIELDS- TRACT I	T					
Comment:	•					
Origin Materials & Services		Quantity	Unit			
291100/Niagara Falls DC DEC Approved V	Waste	18.54	TON			

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Weighmaster: Deb Lehman

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445 Distate D		Corpora	tion					Ticket:	1002436	308
445 Fletcher Koad Model City, NY 141 716) 754-8226	07	-						Date: Time:	3/20/201 08:22:08 Sca	.5 - 08:22:34 le
Truck: P Customer: 0 Carrier: P	ARISO-217 250310002/N ARI-003/PAF	10dem Disposa USO INC. CAI	al Roll Off - RMEN	Truck Type:	TA	•	Gross: Tare: Net:	62880 25500 37380	) POUIn ) POU ) POU	Scale INBO P.T.
Generator: 0 Service Site: 0	250310002/N 005730094 B	fodern Disposs RIGHTFIELD	al Roll Off - S- TRACT II	Route: Profile: PO:	BROK M15-2	ER/SUB OUT ` 798/BRIGHTF)	VARIOUS I ELDS - AI	BRC DDI:	WO:	0001109481
Comment: Drigin		Materials	& Services			Ouantity	Unit			
291100/Niagara Fa	lls	DC DEC	C Approved V	Vaste		18.69	TON			
_										~
										·
						•				
Driver:			<b>-</b>			Weighmaster:	Deb Lehma	ın <sub>.</sub>		
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445 Pletcher Road Model City, NY 14107 (716) 754-8226		~ ~		Ticket: Date: Time:	10024365 3/20/2019 09:04:39	331 5 - 09:05:13 cale		
Truck: 2080-TA Customer: 0250310002/Modern Disposal Roll Off - Carrier: LEWI-003/LEWISTON TRUCKIN( Driver: MALJOH/Malcome Johannes Generator: 0250310002/Modern Disposal Roll Off - Service Site: 0005730094 BRIGHTFIELDS- TRACT II	Truck Type: Route: Profile:	TA MJOHANNES/MALC M15-2798/BRIGHTFI	Gross: Tare: Net: OM JOHAI ELDS - AD	68260 30600 37660 N DITI	POU In POU POU WO:	Scale INB P.T. 0001109476	ADC	
Comment: Origin Materials & Services		Quantity	T Init					
201100 Nigger Falls DC DEC Approved W	Vacte	18 83	TON					
Driver: <u>MRL Johns</u>	:080	Weighmaster:	Deb Lehmar	1				
					· · ·		4	

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1445 Pletcher Road Model City, NY 14 (716) 754-8226	d LIOT	•	Ticket: 10024363333 Date: 3/20/2015 Time: 09:09:04 - 09:09:24 Scale
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Gross: 64660 POU In Scale INBOUN
Truck:	PARISO-229		Tare: 27080 POU P.T.
Customer:	0250310002/Modern Disposal Roll Off -		Net: 37580 POU
Carrier:	PARI-003/PARISO INC. CARMEN	Truck Type:	TA
		Route: Profile:	BROKER/SUB OUT VARIOUS BRC WO: 0001109483 M15-2798/BRIGHTFIELDS - ADDITI
Generator:	0250310002/Modern Disposal Roll Off -		
Service Site: Comment:	0005730094 BRIGHTFIELDS- TRACT II		
Origin	Materials & Services		Quantity Unit
291100/Niagara F	alls DC DEC Approved W	aste	18.79 TON

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Weighmaster: Deb Lehman

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	INDERN							
					Ticket:	100243	6344	
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d Corporation				Date: Time:	3/20/20 09:15:5	)15 9 - 09:16:28 Scale	
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Gross:	63300	POU	In Scale INBO	UN
Truck:	PARISO-246			Tare:	26900	POU	<b>P.</b> T.	
Customer:	0250310002/Modern Disposal Roll Off -			Net:	36400	POU		
Carrier:	PARI-003/PARISO INC. CARMEN	Truck Type:	TA					
		Route:	BROKER/SUB OUT	VARIOUS	BRC	wo	: 0001109484	
		Profile:	M15-2798/BRIGHTF	IELDS - A	DDITI			
Generator:	0250310002/Modern Disposal Roll Off -							
Service Site:	0005730094 BRIGHTFIELDS- TRACT II							
Comment:								
Origin	Materials & Services		Quantity	Unit				
291100/Niagara H	alls DC DEC Approved Wa	aste	18.20	TON		1		

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## Weighmaster: Deb Lehman

	IODERN					Ticket:	10024	363 <i>5</i>	7	
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d 4107					Date: Time:	3/20/2 09:30:3	015 35 - ( Sca	)9:30:52 le	
					Gross:	61500	POU	In	Scale IN	BOUN
Truck:	PARISO-217				Tare:	25500	POU		P.T.	
Customer:	0250310002/Modern Disposal Roll Off -				Net:	36000	POU			
Carrier:	PARI-003/PARISO INC. CARMEN	Truck Type:	TA							
		Route:	BROKER/SUB	JUT	VARIOUS I	BRC	WC	): 0(	00110948	35
•		Profile:	M15-2798/BRIG	HTF	IELDS - AL	DDITI				
Generator:	0250310002/Modern Disposal Roll Off -									
Service Site:	0005730094 BRIGHTFIELDS- TRACT II									
Comment:										
Origin	Materials & Services		Qua	ntity	Unit			-		
291100/Niagara F	alls DC DEC Approved Wa	aste	18.0	)0	TON					

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Weighmaster: Deb Lehman

1445 Pletcher Roa Model City, NY 14 (716) 754-8226 Truck: Customer: Carrier: Driver: Generator: Service Site: Comment:	2080-TA 0250310002/Modern Disposal Roll Off- LEWI-003/LEWISTON TRUCKINC MALJOH/Malcome Johannes 0250310002/Modern Disposal Roll Off- 0005730094 BRIGHTFIELDS- TRACT II	uck Type: Route: Profile:	TA MJOHANNES/MAL M15-2798/BRIGHTF	Gross: Tare: Net: COM JOHAT	Ticket: 1002 Date: 3/20 Time: 10:00 72340 POU 30600 POU 41740 POU NN W	2436389 /2015 5:43 - 10:07:11 Scale In Scale INBOU P.T.	<b>1</b>		
Origin	Materials & Services		Quantity	Unit					
291100/Niagara F Driver:	alls DC DEC Approved Waste	5-c-	20.87 Weighmaster:	TON Deb Lehmar	a				
-	Y								
	IODERN				Ticket:	100243	639		
--	---------------------------------------	-------------	------------------	-------------	----------------	--------------------	---------------------	----------------	----
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d 4107			·	Date: Time:	3/20/20 10:08:5	)15 1 - 1 Sca	10:09:29 Ie	
(11)				Gross:	68120	POU	In	Scale INBO	UN
Truck:	PARISO-229			Tare:	27080	POU		P.T.	
Customer:	0250310002/Modern Disposal Roll Off -			Net:	41040	POU			
Carrier:	PARI-003/PARISO INC. CARMEN	Truck Type:	TA .						
		Route:	BROKER/SUB OUT	VARIOUS	BRC	WO	: 00	001109486	
	i	Profile:	M15-2798/BRIGHTH	FIELDS - AI	DDITI				
Generator:	0250310002/Modern Disposal Roll Off -								
Service Site:	0005730094 BRIGHTFIELDS- TRACT II								
Comment:									
Origin	Materials & Services		Quantity	Unit					-
291100/Niagara F	Calls DC DEC Approved W	aste	20.52	TON					

445 Pletcher Roz fodel City, NY 1 716) 754-8226	ad 4107	Wi porguon				Gross:	Date: Time: 66800	3/20/20 10:28:0 POU	)15 8 - 10:28:2 Scale In Scale	INBOUN	
Truck: Customer: Carrier:	PARISO-246 0250310002/Moo PARI-003/PARIS	dem Disposal Roll Off SO INC. CARMEN	- Truck Typ Rout Profil	e: TA e: BRO	KER/SUB OUT	Tare: Net: VARIOUS	26900 39900 BR(	POU POU WO	P.T. : 000110	9487	
Generator: Service Site: Comment:	0250310002/Moo 0005730094 BRI	dem Disposal Roll Off IGHTFIELDS- TRACI	сп ГП	5. 14115	-2736/DAGIIII						
Drigin		Materials & Service	s		Quantity	Unit					
291100/Niagara I	Falls	DC DEC Approved	d Waste		19.95	TON					
										-	
						2					
Driver:					Weighmaster:	Deb Lehma	n				
	e e e		1					·			

	IODERN			Ticke	t: 100243641	
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d LIO7	•		Date Time	e: 3/20/2015 e: 10:32:14 - Sca	10:32:41 ale
Truck: Customer:	PARISO-217 0250310002/Modern Disposal Roll Off -			Gross: 664 Tare: 255 Net: 409	00 POU In 00 POU 00 POU	Scale INBOUN P.T.
Carrier:	PARI-003/PARISO INC. CARMEN	Truck Type: Route: Profile:	TA BROKER/SUB OUT M15-2798/BRIGHTF	VARIOUS BRC	WO: 0	001109490
Generator: Service Site: Comment:	0250310002/Modern Disposal Roll Off - 0005730094 BRIGHTFIELDS- TRACT II					
Origin	Materials & Services		Quantity	Unit		
291100/Niagara F	alls DC DEC Approved W	aste	20.45	TON		

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Truck: 2080-TA         Customer: 0250310002/Modern Disposal Roll Off-         Carrier: LEWI-003/LEWISTON TRUCKIN(         Driver: MALJOH/Malcome Johannes         Rc         Pro         Generator: 0250310002/Modern Disposal Roll Off-         Service Site: 0005730094 BRIGHTFIELDS- TRACT II         Comment:         Origin         Materials & Services         291100/Niagara Falls         DC DEC Approved Waste	Gross: 67280 POU In Scale INBOUN Tare: 30600 POU P.T. Net: 36680 POU ype: TA nute: MJOHANNES/MALCOM JOHANN WO: 0001109475 file: M15-2798/BRIGHTFIELDS - ADDITI Quantity Unit 18.34 TON Weighmaster: Deb Lehman
Driver: MA! Johaway 2080	Quantity Unit 18.34 TON Weighmaster: Deb Lehman
Origin     Materials & Services       291100/Niagara Falls     DC DEC Approved Waste	Quantity Unit 18.34 TON Weighmaster: Deb Lehman
291100/Niagara Falls DC DEC Approved Waste	18.34 TON Weighmaster: Deb Lehman
Driver: MA! Johanne 2000	Weighmaster: Deb Lehman
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1445 Pletcher Road     Tion       Model City, NY 14107     T	icket: 1002436463 Date: 3/20/2015 Fime: 11:30:57 - 11:31:35 Scale
(716) 754-8226 Gross: G	68880 POU In Scale INBOUN 26900 POU P.T. 41980 POU
Carrier: PARI-003/PARISO INC. CARMEN Truck Type: TA Route: BROKER/SUB OUT VARIOUS BF Profile: M15-2798/BRIGHTFIELDS - ADD	RC WO: 0001109489
Generator: 0250310002/Modern Disposal Roll Off - Service Site: 0005730094 BRIGHTFIELDS- TRACT II Comment:	
OriginMaterials & ServicesQuantity Unit291100/Niagara FallsDC DEC Approved Waste20.99TON	

Driver: \_\_\_\_\_

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## Weighmaster: Deb Lehman

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<b>M</b> N	INDERN								
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	Corporation 4107					Ticket: Date: Time:	10024 3/20/2 11:40:1	3647 015 13 - 1 Sca	'0 11:40:30 Je
					Gross:	68540	POU	In	Scale INBOUN
Truck:	PARISO-217				Tare:	25500	POU		P.T.
Customer:	0250310002/Modern Disposal Roll Off -				Net:	43040	POU		
Carrier:	PARI-003/PARISO INC. CARMEN	Truck Type:	TA						
		Route: Profile:	BROKER/S M15-2798/J	SUB OUT BRIGHTF	VARIOUS TIELDS - AI	BR( DDITI(	WC	): 0(	001109482
Generator:	0250310002/Modern Disposal Roll Off -		·						
Service Site: Comment:	0005730094 BRIGHTFIELDS- TRACT II								
Origin	Materials & Services			Quantity	Unit				
291100/Niagara F	alls DC DEC Approved V	Vaste	<u> </u>	21.52	TON				

Weighmaster: Deb Lehman

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ANN	IODERN								
	Corporation					Ticket:	10024	3647' 015	7
1445 Pletcher Roa Model City, NY 14	a 1107					Time:	11:50:0	)1 - 1 Scal	1:50:24
(716) 7 <b>54-8226</b>					Gross:	66820	) POU	In	Scale INBOUN
Truck:	PARISO-229				Tare:	27080	) POU		P.T.
Customer:	0250310002/Modern Disposal Roll Off -				Net:	39740	) POU		
Carrier:	PARI-001/PARISO INC, CARMEN Tr	uck Type:	TA						
		Route:	BROKER/S	SUB OUT	VARIOUS	BRC	WC	): 00	01109491
		Profile:	M15-2798/	BRIGHTF	TELDS - AI	DDITI			
Generator:	0250310002/Modern Disposal Roll Off -								
Service Site:	0005730094 BRIGHTFIELDS- TRACT II								
Comment:									
Origin	Materials & Services			Quantity	Unit				
291100/Niagara F	alls DC DEC Approved Waste	2		19.87	TON				
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Driver: \_\_\_

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	Corp	oration					Ticket: Date:	10024. 3/20/2	36510 015		
Model City, NY 141	07						Time:	12:48:3	31 - 12:48	8:57	
(716) 754-8226						C	60-00		Scale	Ja DIDO	תור
Truck: 24	080-TA					Tare:	30600	POU	In Sca P.T		JOR
Customer: 02	250310002/Modern Di	isposal Roll Off -				Net:	37680	) POU			
Carrier: L	EWI-003/LEWISTON	TRUCKIN(	Truck Type:	TA	4 AT CO	MICHA	NN	wc	00011	00477	
Diivel. iv		ames	Profile:	M15-2798/BRIG	HTFIE	LDS - AL	DITI	•••	. 00011	103477	
Generator: 0.	250310002/Modern Di	isposal Roll Off -									
Comment:	005730094 BRIGHTF	IELDS- TRACT II									
Origin	Mat	erials & Services		Qua	ntity U	nit					
291100/Niagara Fal	ls DC	DEC Approved Was	ste	18.8	4 1	ON					
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Driver: 7	nac John	<u></u> es 20		Weighmas	ter: De	b Lehma	n 				
Driver: 4	na John	<u></u> es 20		Weighmas	ter: De	b Lehma	n 				
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Driver:	na John			Weighmas	ter: De	b Lehma	n 				

445 Pletcher Road	DERN			Ticket: Date:	1002437 3/25/201	<b>1</b> 1370 15
Truck: PARISO-2: Customer: 025031000 Carrier: PARI-003/1	38 2/Modern Disposal Roll Off - PARISO INC. CARMEN	Truck Type: Route: Profile:	TA PARISO/PARISO M15-2798/BRIGHTF	Time: Gross: 74120 Tare: 27280 Net: 46840 FIELDS - ADDI.	08:11:39 Scs ) POUIn ) POU ) POU ) POU WO:	- 08:12:15 le Scale INBOUN P.T. 0001112597
Generator: 025031000 Service Site: 000573009 Comment:	2/Modern Disposal Roll Off - 4 BRIGHIFIELDS- TRACT II	PO:				
rigin	Materials & Services		Quantity	Unit		
291100/Niagara Falls	DC DEC Approved W	aste	23.42	TON		
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Driver			Weighmagter	Deh I ehman		
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MOD	DERN				
45 Pletcher Road odel City, NY 14107 16) 754-8226	Corporation			Ticket Date Time	:: 1002437374 :: 3/25/2015 :: 08:19:44 - 08:21:14
Truck: PARISO-26 Customer: 0250310002/ Carrier: PARI-002/Pa	Modern Disposal Roll Off -	Truck Tune-	TA	Gross: 695 Tare: 251 Net: 443	Scale 00 POUIn Scale INBOUI 80 POU P.T. 20 POU
Generator: 0250310002/ Service Site: 0005730094	Modern Disposal Roll Off - BRIGHTFIELDS- TRACT II	Route: Profile: PO:	BROKER/SUB OUT M15-2798/BRIGHTF	VARIOUS BRC IELDS - ADDI	WO: 0001112598
igin	Materials & Services		Quantity	Unit	
91100/Niagara Falls	DC DEC Approved W	aste	22.16	TON	
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Driver:			Weighmaster:	Deb Lehman	
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1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d 4107					Ticket: Date: Time:	1002437: 3/25/201: 08:25:45 Scal	379 5 - 08:26:11 e
Truck: Customer: Carrier:	PARISO-101 0250310002/Modern Disposal Roll Off - PARI-004/PARISO, B TRANSPOR	Truck Type: Route: Profile:	TA BROKE M15-27	R/SUB OUT V 98/BRIGHTFI	Gross: Tare: Net: /ARIOUS ELDS - Al	70560 25960 44600 BRC DDI'.	) POUIn ) POU ) POU WO:	Scale INBOUN P.T. 0001112599
Generator: Service Site: Comment: Origin	0250310002/Modern Disposal Roll Off - 0005730094 BRIGHTFIELDS- TRACT II Materials & Services	PO:		Quantity	Unit		1	-
291100/Niagara I	falls DC DEC Approved W	aste		22.30	TON			

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	Corporation				Ticket:	1002437	424	
1445 Pletcher Roa	d				Date:	3/25/201	5	
Model City, NY 14 (716) 754-8226	4107	-			11me:	09:25:31 S	- 09:26:07 Scale	
				Gross:	79120	POU E	n Scale INBO	UN I
Truck:	PARISO-238			Tare:	27280	POU	P.T.	
Customer:	0250310002/Modern Disposal Roll Off -			Net:	51840	POU		
Carrier:	PARI-003/PARISO INC. CARMEN	Truck Type:	TA					
		Route:	PARISO/PARISO			WO:	0001112601	
		Profile:	M15-2798/BRIGHT	FIELDS - A	DDITI			
Generator:	0250310002/Modern Disposal Roll Off -							
Service Site:	0005730094 BRIGHTFIELDS- TRACT II							
Comment:							-	
Origin	Materials & Services		Quantit	y Unit				_
291100/Niagara H	alls DC DEC Approved W	aste	25.92	TON				

Weighmaster: Deb Lehman

1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d 4107			Ticket: Date: Time:	1002437427 3/25/2015 09:32:01 - 09:32:30 Scale
Truck: Customer: Carrier: Generator:	PARISO-26 0250310002/Modern Disposal Roll Off PARI-002/Pariso Hauling 0250310002/Modern Disposal Roll Off	- Truck Type: TA Route: Bi Profile: M	A ROKER/SUB OUT 15-2798/BRIGHTF	Tare: 25180 Net: 45500 VARIOUS BRC TELDS - ADDITI	POU P.T. POU P.T. WO: 0001112603
Service Site: Comment:	0005730094 BRIGHTFIELDS- TRACI	Т II			
Origin 291100/Niagara F	Materials & Service	S I Waste	Quantity 22.75	Unit	
	X				
Driver:	:		Weighmaster:	Deb Lehman	
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M4 Protecter Read       Corporation       Dec: 2252015"         State Read       Sate       Sate         Track: PARISO-10       Sate       Gross: 69806 POU         Curner: PARI-004/PARISO, BTRANSPOR       Track: 7987800HTTELDS - ADDITH       Not: 2990 POU         Cartier: PARI-004/PARISO, BTRANSPOR       Materials & Services       Wo: 0001112600         Profile: M15-27987800HTTELDS - ADDITH       Corporation       Wo: 0001112600         Parities: M15-27987800HTTELDS - ADDITH       Corporation       21.93       TON         291100N1agaes Falls       DC DEC Approved Waste       21.93       TON         Driver:	MMO	DERN				Ticket	100243	7431	
Gross: 6980 POU In Seit Disposal Rell Off- Customer: 0250310002/Modern Disposal Rell Off- Carrier: PARI-004/PARISO, BTRANSPORI Generator: 0250310002/Modern Disposal Roll Off- Service Site: 000730004 ERICITETELLS: TAACT II Commanie: Driver:	145 Pletcher Road Iodel City, NY 14107 '16) 754-8226	Corporation				Date: Time:	3/25/20 09:35:48	15 3 - 09:36:19 Scale	
Generator: 0230310002/Modern Disposal Roll Off- Service Site: 0005710002Modern Disposal Roll Off- Commet: Drigh Materials & Services Quantity Unit 231100/Niagan Falls DC DEC Approved Wark 21:95 TON	Truck: PARISO- Customer: 02503100 Carrier: PARI-004	101 02/Modern Disposal Roll Off - /PARISO, B TRANSPOR1	Truck Type: TA Route: BRO	DKER/SUB OUT	Gross: Tare: Net: VARIOUS I	69860 25960 43900 BRC	POU POU POU WO:	In Scale IN P.T. 000111260	BOUN 10
Jegin     Materials & Services     Quantity Unit       291100/Niagan Falls     DC DEC Approved Waste     21.95     TON	Generator: 02503100 Service Site: 00057300 Comment:	02/Modern Disposal Roll Off - 194 BRIGHTFIELDS- TRACT II	Profile: MI	5-2798/BRIGHT	FIELDS - AL	יוומנ			
29100/Niagen Falls DC DEC Approved Wasts 21.93 TON	rigin	Materials & Services	<b></b>	Quantity	Unit				
Driver:	91100/Niagara Falls	DC DEC Approved Wa	iste	21.95	TON				
Driver:      Weighmaster: Deb Lehman								•	
	Driver:			Weighmaster:	Deb Lehma	n			
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1445 Pletcher Road Model City, NY 14107 (716) 754-8226 Truck: PARISO-23				Gross: Tare:	Ticket: Date: Time: 69520 27280	1002437473 3/25/2015 10:41:45 - 10:42:24 Scale POU In Scale INB POU P.T. POU P.T.
Customer: 025031000 Carrier: PARI-003/F Generator: 025031000	2/Modern Disposal Roll Off - PARISO INC. CARMEN 2/Modern Disposal Roll Off -	Truck Type: Route: Profile:	TA PARISO/PARISO M15-2798/BRIGHTF	Net TELDS - AI	42240	WO: 0001112605
Service Site: 000573009 Comment:	4 BRIGHTFIELDS- TRACT II					
Origin 291100/Niagara Falls	DC DEC Approved W	/aste	Quantity 21.12	Unit TON	7	
271100/11/162/021 0120	20220.pp.0.00					
Driver:			Weighmaster:	Deb Lehm	n	
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1445 Pletcher Road Model City, NY 14 (716) 754-8226	Corporation					Ticket: Date: Time:	10024 3/25/2 10:46:	3747 015 06 - 1 Sca	'8 10:46:27 Je
()					Gross:	6342	0 POU	In	Scale INBOUN
Truck:	PARISO-26				Tare:	2518	0 POU		P.T.
Customer:	0250310002/Modern Disposal Roll Off -				Net:	3824	0 POU		
Carrier:	PARI-002/Pariso Hauling	Truck Type:	TA						•
		Route:	BROKER/SUB C	UT VAR	SUOL	BRC	WC	): O	001112602
		Profile:	M15-2798/BRIG	HTFIELI	DS - Al	DDITI			
Generator:	0250310002/Modern Disposal Roll Off -		-						
Service Site:	0005730094 BRIGHTFIELDS- TRACT II								
Comment:									
Origin	Materials & Services	•	Quar	tity Uni	t				
291100/Niagara F	alls DC DEC Approved W	/aste	19.1	2. TC	N				

Driver: \_\_\_\_\_

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Weighmaster: Deb Lehman

1445 Pletcher Roa Model City, NY 14 (716) 754-8226	PARISO-101	<b>ERN</b> prporation			Gross:	Ticket: 10024: Date: 3/25/24 Time: 10:48:4 65300 POU 25960 POU	87480 015 17 - 10:49:17 Scale In Scale INBOUP P T.	I.
Customer: Carrier:	0250310002/Mode PARI-004/PARISO	m Disposal Roll Off - , B TRANSPORI	Truck Type: Route:	TA BROKER/SUB OU	Net: T VARIOUS	39340 POU BRC WO	: 0001112604	
Generator: Service Site: Comment:	0250310002/Mode 0005730094 BRIG	m Disposal Roll Off - HTFIELDS- TRACT II	Profile:	M15-2798/BRIGH	IFIELDS - AJ	יחוסט		
Origin		Materials & Services		Quanti	ty Unit			
291100/Niagara F	alls	DC DEC Approved W	/aste	1 <b>9</b> .67	TON			
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Driver:	<u> </u>			Weighmaster	: Deb Lehma	10		

45 Pletcher Road odel City, NY 14107 16) 754-8226	<b>RN</b> oration		Ticket: Date: 1 Time: 1	1002437516 3/25/2015 1:45:08 - 11:45:27 Scale
Truck: PARISO-238 Customer: 0250310002/Modern D Carrier: PARI-003/PARISO INC	risposal Roll Off - C. CARMEN Truck Type Route Profile	:: TA :: PARISO/PARISO :: M15-2798/BRIGHTFIEL)	Tare: 27280 I Net: 39020 I DS - ADDITI	OU         In         Scale INBOUR           POU         P.T.         POU           POU         WO:         0001112608
Generator: 0250310002/Modern D Service Site: 0005730094 BRIGHTF Comment:	visposal Roll Off - TELDS- TRACT II	· · ·	-	
ngin Mai 91100/Niagara Falls D(	C DEC Approved Waste	Quantity Uni	it 	
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Driver:		Weighmaster: Deb	Lehman	

	IUULDIN			Ticket	1002437517
1445 Platabar Dog	Corporation			Date:	3/25/2015
Model City NV 1	107			Time:	11:49:24 - 11:49:41
(716) 754-8226	107				Scale
( )				Gross: 6110	) POU In Scale INBOUN
Truck:	PARISO-26			Tare: 2518	POU P.T.
Customer:	0250310002/Modern Disposal Roll O	ff-		Net: 3592	) POU
Carrier:	PARI-002/Pariso Hauling	Truck Type:	TA		
		Route:	BROKER/SUB OUT	VARIOUS BRC	WO: 0001112607
Generator: Service Site: Comment:	0250310002/Modern Disposal Roll O 0005730094 BRIGHTFIELDS- TRAC	Profile: ff - CT II	M15-2798/BRIGHT	FIELDS - ADDITI(	
Origin	Materials & Servi	ces	Quantity	/ Unit	
291100/Niagara I	alls DC DEC Approv	ed Waste	17.96	TON	•
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1445 Pletcher Road Model City, NY 14107	Corporation				Ticket: 1002 Date: 3/25 Time: 11:57	2437521 /2015 7:14 - 11:57:3	9
(716) 754-8226 Truck: PARISO Customer: 0250310 Carrier: PARI-00	9-101 )002/Modern Disposal Roll Off - )4/PARISO, B TRANSPOR)	Truck Type: Route:	TA BROKER/SUB OUT	Gross: Tare: Net: TVARIOUS I	66080 POU 25960 POU 40120 POU BRC W	Scale In Scale P.T. O: 0001112	INBOUN 2606
Generator: 0250310 Service Site: 0005730 Comment:	0002/Modern Disposal Roll Off - 0094 BRIGHTFIELDS- TRACT II	Profile:	M15-2798/BRIGHT	FIELDS - AI	DITI		
Origin	Materials & Services		Quantity	/ Unit			
291100/Niagara Falls	DC DEC Approved W	aste	20.06	TON	**		
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Driver:			Weighmaster:	Deb Lehmai	n		
			ಜಾಗಳು ನಾಡಕಾರ ಪ್ರಶಭ್ಯತ್ರಗಳನ್ನು		NITE STATE	*****	
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1445 Pletcher Road Model City, NY 14 (716) 754-8226	HI07 PARISO-238			Gross:	Ticket: Date: Time: 69540 27280	1002437551 3/25/2015 12:49:36 - 12 Scale POU In POU	1002437551 3/25/2015 12:49:36 - 12:50:10 Scale POU In Scale INBOUN		
Customer: Carrier:	0250310002/Modern Disposal Roll Off - PARI-003/PARISO INC. CARMEN	Truck Type: Route: Profile:	TA PARISO/PARISO M15 2708/BBICHT	Net:	42260	POU WO: 000	)1112611		
Generator: Service Site: Comment:	0250310002/Modern Disposal Roll Off - 0005730094 BRIGHTFIELDS- TRACT II	Prome:	MIJ-2/98/BRIGHT	FIELDS - AI					
Origin	Materials & Services		Quantity	y Unit					
291100/Niagara F	alls DC DEC Approved Wa	aste	21.13	TON	~ 1				
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Driver:			Weighmaster:	Deb Lehma	n				
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1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d 4107	orporation	2			Ticket: 1 Date: 3 Time: 12	002437557 /25/2015 2:57:21 - 12:57 Scale	:47
Truck: Customer: Carrier:	PARISO-26 0250310002/Mod PARI-002/Pariso I	ern Disposal Roll Off - Iauling	Truck Type: Route:	TA BROKER/SUB OU'	Gross: Tare: Net: T VARIOUS	69400 P 25180 P 44220 P BRC	OU In Sca OU P.T OU WO: 00011	le INBOUN 12610
Generator: Service Site: Comment:	0250310002/Mode 0005730094 BRIC	em Disposal Roll Off - HTFIELDS- TRACT I	Profile:	M15-2798/BRIGH1	FIELDS - AI	DDTT		
Origin		Materials & Services		Quantit	y Unit	2		
291100/Niagara F	alls	DC DEC Approved W	Waste	22.11	TON	т. т.		
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Driver:				weighnaster.	Deo Lenina	11		
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1445 Pletcher Roa Model City, NY 14 (716) 754-8226 Truck: Customer: Carrier:	PARISO-101 0250310002/Modern Disposal Roll Off - PARI-004/PARISO, B TRANSPORT	Truck Type: Poute:	TA BROKER/SUB OUT V	Tid E T Gross: 6 Tare: 2 Net: 4	cket: 10024375 Date: 3/25/2013 ime: 13:02:29 57900 POU In 25960 POU 41940 POU	563 5 13:02:52 cale Scale INBOUN P.T.	
Generator: Service Site: Comment:	0250310002/Modern Disposal Roll Off - 0005730094 BRIGHTFIELDS- TRACT II	Profile:	M15-2798/BRIGHTFII	ELDS - ADD	ITI	JUUTI 12609	
Origin	Materials & Services		Quantity (	Unit			
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Driver:			Weighmaster: D	Deb Lehman			
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1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d 4107 Corporation	n		Ticket: Date: Time:	10024376 3/25/2015 13:54:28 -	13 13:54:53					
Truck: Customer: Carrier:	PARISO-238 0250310002/Modern Disposal Ro PARI-003/PARISO INC. CARMI	) 11 Off - 2N Truck Type:	TA	Gross: 7316 Tare: 2728 Net: 4588	Scalo 50 POUIn 80 POU 80 POU	Scale INBOUN P.T.					
Generator: Service Site:	0250310002/Modern Disposal Ro 0005730094 BRIGHTFIELDS- 1	Route: Profile: bil Off - RACT II	PARISO/PARISO M15-2798/BRIGHTF	IELDS - ADDI	WO: (	0001112858					
Comment:		_	`								
Origin	Materials & S	ervices	Quantity	Unit							
291100/Niagara F	alis DC DEC Ap	proved waste	22.94	ION							
	x										
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Driver:			Weighmaster:	Deb Lehman							
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AAA DALE CONTROLOGIES AND	Corporation Corporation	Truck Type: Route: Profile:	TA BROKER/SUB OUT M15-2798/BRIGHT	Gross: Tare: Net: I VARIOUS FIELDS - AI	Ticket: 1002 Date: 3/25 Time: 14:02 69560 POU 25180 POU 44380 POU BRC V DDITI(	2437616 /2015 3:47 - 14:04:15 Scale J In Scale INBO J P.T. J	עני
Generator: 0250310002 Service Site: 0005730094 Comment:	2/Modern Disposal Roll Off - 1 BRIGHTFIELDS- TRACT I	I					
Origin	Materials & Services		Quantit	y Unit			
Driver:			Weighmaster:	Deb Lehma	an		

A Contraction of the second se	OCORPORATION 01 02/Modern Disposal Roll Off - PARISO, B TRANSPOR 02/Modern Disposal Roll Off - 04 BRIGHTFIELDS- TRACT II	Truck Type: Route: Profile:	TA BROKER/SUB OUT M15-2798/BRIGHTF	Gross: Tare: Net: VARIOUS J TELDS - AI	Ticket: D Date: 3 Time: 1 70960 F 25960 F 45000 F BRC DDITI'	100243761 3/25/2015 4:08:56 - Sca ?OU In ?OU ?OU . WO: 0	19 14:09:17 ale Scale INBOUT P.T. 001112859	
Origin	Materials & Services		Quantity	Unit				
291100/Niagara Falls	DC DEC Approved W	aste	22.50	TON				
Driver:			Weighmaster:	Deb Lehma	I			

	IODERN	Tick	et: 10024	<b>43765</b>	
1445 Pletcher Roa	Corporation	Da Tin	te: 3/25/2	2015	4.57.06
Model City, NY 14 (716) 754-8226	107		10. 11.00	Scal	e
(110) 154-8220		Gross: 70	520 POU	In	Scale INBOUN
Truck:	PARISO-238	Tare: 27	280 POU		P.T.
Customer:	0250310002/Modern Disposal Roll Off -	Net: 43	240 POU		
Carrier:	PARI-003/PARISO INC. CARMEN Truck Type: TA				
	Route: PARISO/PARISO		W	D: 00	01112862
	Profile: M15-2798/BRIGHTFIEL	DS - ADDI	,Te		÷
Generator:	0250310002/Modern Disposal Roll Off -				
Service Site:	0005730094 BRIGHTFIELDS- TRACT II				
Comment:	No. 1. B. Carriera				
Origin	Materials & Services Quality On				
291100/Niagara F	alls DC DEC Approved Waste 21.62 TO	ON			

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16) 754-8226 Truck: Customer:	PARISO-26 0250310002/Mod	ern Disposal Roll Off -			Gross: Tare: Net:	61320 25180 36140	S POU L POU POU	cale Scale INBOUN P.T.	<u>×</u>
Carrier: Generator: Service Site: Comment:	PARI-002/Pariso 1 0250310002/Mod 0005730094 BRIG	Hauling em Disposal Roll Off - GHTFIELDS- TRACT II	Truck Type: Route: Profile:	TA BROKER/SUB OUT M15-2798/BRIGHTF	VARIOUS TELDS - AI	BRC DDITI:	WO:	00011128 <b>6</b> 4	
rigin 91100/Niagara I	Falls	Materials & Services DC DEC Approved V	Vaste	Quantity 18.07	Unit TON				
Driver:				Weighmaster:	Deb Lehma	n		·	

Truck: Customer: Carrier:	PARISO-101 0250310002/Modern Disposal PARI-004/PARISO, B TRANS	Roll Off - SPORI T	ruck Type: Route:	TA BROKER/SUB OUT	Gross: Tare: Net: VARIOUS	45900 25960 19940 BRC	So POU In POU POU WO: 1	cale Scale INB( P.T. 0001112863
Generator: Service Site: Comment:	0250310002/Modern Disposal 0005730094 BRIGHTFIELDS	Roll Off - S- TRACT II	Profile:	M15-2798/BRIGH11	fields - Ai	DDTTF		
Origin	Materials	& Services		Quantity	Unit			
291100/Niagara Fa	alls DC DEC	Approved Wast	te	9.97	TON			
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<b>T</b> . 1				WI-internet	Dat I -t-	_		
Driver:				weignmaster:	Deo Lemna	n		
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1445 Pletcher Road Model City, NY 14 (716) 754-8226	IODERN Corporation		म्हिल्लो महत्व -			Ticket: Date: Time:	10024 3/27/2 08:03:2	38005 015 26 - 08:04:03 Scale
Truck: Customer: Carrier: Driver:	2081-TA 0250310002/Modern Disposal Roll Off - LEWI-003/LEWISTON TRUCKIN( MALJOH/Malcome Johannes 0250310002/Modern Disposal Roll Off -	Truck Type: Profile: PO:	TA M15-279	8/BRIGHT	Gross: Tare: Net: FIELDS - AI	75560 30600 44960 DJTTI	POU POU POU WC	In Scale INBOUN P.T. D: 0001113410
Service Site: Comment: Origin	0005730094 BRIGHTFIELDS- TRACT II Materials & Services			Quantit	y Unit			
	·							
Driver:	PAL- Johnans 20	-81		ighmaster:	Deb Lehma	a		



AN	IODERN								
445 Pletcher Roa Model City, NY 14 716) 754-8226	Corporation 4107				Ticket: Date: Time:	1002438 3/27/201 08:05:39 Sca	006 5 - 08:06:11 le		
Truck: Customer:	PARISO-243 0250310002/Modern Disposal Roll Off -	Truck Tuner	Та	Gross: Tare: Net:	71800 26840 44960	) POUIn ) POU ) POU	Scale INBOU P.T.		
Generator: Service Site:	0250310002/Modern Disposal Roll Off - 0005730094 BRIGHTFIELDS- TRACT	Route: Profile: PO:	BROKER/SUB OUT VA M15-2798/BRIGHTFIEL	RIOUS : DS - Al	BRC DDL	WO:	0001113411		
Origin	Materials & Services		Quantity Ur	uit					
291100/Niagara F	Falls DC DEC Approved	Waste	22.48 T	ON					
	,								
Driver			Weighmaster: De	h Lehm:	an				
Billion.									
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1445 Pletcher Road Model City, NY 14107 (716) 754-8226	DERN Corporation	Ticket: 1002438033 Date: 3/27/2015 Time: 09:02:35 - 09:03:04 Scale
Truck: 2081-TA Customer: 025031000 Carrier: LEWI-003 Driver: MALJOH/	)2/Modern Disposal Roll Off - /LEWISTON TRUCKIN( Tr Malcome Johannes )2/Modern Disposal Roll Off -	Tare: 30600 POU P.T. Net: 41240 POU uck Type: TA Route: MJOHANNES/MALCOM JOHANN WO: 0001113405 Profile: M15-2798/BRIGHTFIELDS - ADDITI
Service Site: 000573009	4 BRIGHTFIELDS- TRACT II	
Origin	Materials & Services	Quantity Unit
Driver: <u>proc</u>	Johnwars 20	SY Weighmaster: Deb Lehman
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1445 Pletcher Roa			- -		·		Ticket: Date: Time:	100243 3/27/20	38046 015 2 00-11-25
Model City, NY 14 (716) 754-8226	4107						I IIIC.	07.11.0	Scale
Truck: Customer:	PARISO-243 0250310002/Mo	dem Disposal Rol	l Off -			Gross: Tare: Net:	67220 26840 40380	POU POU POU	In Scale INBOUN P.T.
Carrier:	PARI-003/PARIS	SO INC. CARME	N Truck' R Pr	Type: toute: ofile:	TA BROKER/SUB OUT M15-2798/BRIGHT	T VARIOUS I FIELDS - AI	BR( DDITI:	wo	: 0001113412
Generator: Service Site: Comment:	0250310002/Mo 0005730094 BR	dem Disposal Rol IGHTFIELDS- TF			Quarti				
291100/Niecom E	(	DC DEC Ann	round Whate		Quantity	/ Unit			
291100/Magara r	ans	DC DEC App	roved waste		20.19	ION			
Driver:					Weighmaster:	Deb Lehma	n ·		

45 Pletcher Road odel City, NY 14107	Corporation			Ticke Da Tin	et: 10024380 te: 3/27/2013 te: 10:15:35	092 5 - 10:16:02
16) 754-8226				Carrow 70	S IOO DOLL I-	cale
Truck: PARISO-2 Customer: 025031000 Carrier: PARI-003/	43 )2/Modern Disposal Roll Off - PARISO INC. CARMEN	Truck Type:	ТА	Tare: 26 Net: 43	840 POU 840 POU 260 POU	P.T.
		Route:	BROKER/SUB OUT	VARIOUS BRC	WO:	0001113413
Generator: 025031000 Service Site: 000573009 Comment:	)2/Modern Disposal Roll Off - 94 BRIGHTFIELDS- TRACT	гоше: П	M15-2798/BRIGH11	IELDS - ADDII	ι,	
rigin	Materials & Services		Quantity	' Unit		
91100/Niagara Falls	DC DEC Approved	Waste	21.63	TON		ς.
				. ,		
-						
Driver:			Weighmaster:	Deb Lehman		
		- 1				·
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1445 Pletcher Road Model City, NY 14107 (716) 754-8226 Truck: 2081- Customer: 02503 Cartier: LEWI Driver: MALJ	FA 10002/Modern Disposal Roll Off- 003/LEWISTON TRUCKIN( OH/Malcome Johannes	Truck Type: TA Route: MJO Profile: M15	HANNES/MALC -2798/BRIGHTF	Gross: 72 Tare: 30 Net: 42 OM JOHANN ELDS - ADDIT	et: 1002438 te: 3/27/201 te: 10:49:43 920 POU I 600 POU 320 POU WO: I	106 5 - 10:50:11 cale n Scale INBOUT P.T. 0001113408	
Service Site: 00057	30094 BRIGHTFIELDS- TRACT II						
Origin	Materials & Services		Quantity	Unit			
Driver: <u>fn a</u>	- Johowves	7081	Weighmaster:	Deb Lehman			
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1445 Pla Model ( (716) 75	etcher Roa City, NY 14 54-8226	<b>IOD</b> 4 +107	<b>ERN</b> Corporation	on				Ticket: Date: Time:	1002438 3/27/201 11:19:33 Sca	124 5 - 11:19:53 le	
(	Truck: Customer: Carrier:	PARISO-243 0250310002/M MDS-001/MOI	odern Disposal i DERN DISPOSA	Roll Off - AL	Truck Type: Route: Profile:	TA BROKER/SUB OU M15-2798/BRIGHT	Gross: Tare: Net: T VARIOUS TFIELDS - A	72680 26840 45840 BRC DDI <sup>r</sup> .	POUIn POU POU WO:	Scale INBOUN P.T. 0001113414	
C Ser (	Generator: Tvice Site: Comment:	0250310002/M 0005730094 BI	odern Disposal ) RIGHTFIELDS-	Roll Off - TRACT II							
Origin			Materials &	: Services		Quanti	ty Unit	, <b></b>	بدانين وشراقا السعاد	******	
291100	)/Niagara F	alls	DC DEC A	Approved W	aste	22.92 <sup>·</sup>	TON				
1											
	Driver:					Weighmaster	: Deb Lehm	an			
					and the second secon			1 1919			
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	10DF	RN		5			A NH NH NH NH NH M				
	d Cc	orporation		-77		Ticket: 1002 Date: 3/27/	438138 2015				
Model City, NY 14	4107					Time: 11:45	:53 - 11:46:19 Scale				
(110) 754-8226	2ብՁ1₋፹▲				Gross:	76840 POU	In Scale INBC	ገሙ			
Truck: Customer:	2001-1A 0250310002/Mode	m Disposal Roll Off -		<b>T</b> 4	Tare: Net:	30000 POU 46240 POU	<b>г.</b> Т.				
Carrier: Driver:	LEW1-003/LEWIS MALJOH/Malcome	ION TRUCKIN( Johannes	Truck Type: Route:	ia MJOHANNES/MAI	LCOM JOHA	NN W	D: 0001113406				
	0250310002/Moder	n Disposal Roll Off	Profile:	M15-2798/BRIGH1	TFIELDS - A	DDITI					
Generator: Service Site:	0005730094 BRIG	HTFIELDS- TRACT	Ш								
Comment: Origin	\	Materials & Services	*******	Quantit	y Unit	1 yes an 42 % y y s - ~-					
291100/Niagara F	alls	DC DEC Approved	Waste	23.12	TON	, _ <b></b> ,,,,,,,,, _					
					ſ						
Driver:	MALJ	Sharre Z	001	Weighmaster:	Deb Lehma	<b>D</b>					
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ANN	IODERN					Ticket:	100243			
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d Corporation					Date: Time:	3/27/20 12:25:4	015  5 - 1  Scal	2:26:11 le	
					Gross:	75060	POU	In	Scale II	BOUN
Truck:	PARISO-243				Tare:	26840	POU		P.T.	
Customer:	0250310002/Modern Disposal Roll Off -				Net:	48220	POU			
Carrier:	PARI-003/PARISO INC. CARMEN	Truck Type:	TA							
		Route:	BROKER/SUB	OUT	VARIOUS	BRC	WO	: 00	011134	15
		Profile:	M15-2798/BRI	GHTF	ELDS - AI	DDITI				
Generator:	0250310002/Modern Disposal Roll Off -									
Service Site:	0005730094 BRIGHTFIELDS- TRACT II									
Comment:										
Origin	Materials & Services		Qu	antity	Unit					
291100/Niagara H	alls DC DEC Approved W	aste	24	.11	TON					

1445 Pletcher Road Model City, NY 14107	DERN	~ ~		Ticket: 10024 Date: 3/27/2 Time: 12:44:	138185 2015 216 - 12:44:39 Scale
(716) 754-8226 Truck: 2081-TA Customer: 025031000 Carrier: LEWI-003/ Driver: MALJOH/N Generator: 025031000 Service Site: 000573009 Comment:	2/Modern Disposal Roll Off - LEWISTON TRUCKIN( Truck Malcome Johannes 2/Modern Disposal Roll Off - 4 BRIGHTFIELDS- TRACT П	Type: TA Route: MJOHANNES/M rofile: M15-2798/BRIGH	Gross: Tare: Net: ALCOM JOHA ITFIELDS - AI	71060 POU 30600 POU 40460 POU NN W( DDITI:	In Scale INBOUN P.T. D: 0001113409
Origin	Materials & Services	Quant	tity Unit		
291100/Niagara Falls	DC DEC Approved Waste	20.23	TON		
Driver: <u>614</u>	Johpung 20	Weighmaste	r: Deb Lehma	2	
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AN	INDERN							
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d 1107 Corporation		·		Ticket: Date: Time:	100243 3/27/20 13:30:4	8219 )15 5 - 13:31 Scale	:14
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Gross:	67900	) POU	In Sca	le INBOUN
Truck:	PARISO-243			Tare:	26840	) POU	P.T	
Customer:	0250310002/Modern Disposal Roll Off -			Net:	41060	) POU		
Carrier:	PARI-003/PARISO INC. CARMEN	Truck Type:	TA					
	·	Route:	BROKER/SUB OU	T VARIOUS	BRC	WO:	: 00011	13416
		Profile:	M15-2798/BRIGHT	FIELDS - A	DDITI			
Generator:	0250310002/Modern Disposal Roll Off -							
Service Site:	0005730094 BRIGHTFIELDS- TRACT II							
Comment:								
Origin	Materials & Services		Quantit	y Unit				
291100/Niagara F	alls DC DEC Approved W	aste	20.53	TON				

Weighmaster: Deb Lehman

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1445 Pletcher Road Model City, NY 14 (716) 754-8226 Truck: Customer: Carrier: Driver: Generator: Service Site: Comment:	1000 d 107 2081-TA 0250310002/Mo LEWI-003/LEW MALJOH/Malco 0250310002/Mo 0005730094 BR	ERN Corporation dem Disposal Roll Off- ISTON TRUCKIN( me Johannes dem Disposal Roll Off- IGHTFIELDS- TRACT	Truck Type: Route: Profile:	TA MJOHANNES/MAL4 M15-2798/BRIGHTF	Gross: Tare: Net: COM JOHA TELDS - AI	Ticket: 10 Date: 3/ Time: 13 63940 PC 30600 PC 33340 PC NN DDITT	0243822 27/2015 :44:05 - 1 Sca OU In OU WO: 00	9 13:44:19 le Scale INBOU P.T. 001113407	
Comment: Origin		Materials & Services		Quantity	Unit				
291100/Niagara F Driver:	mal		₩asie 2081	Weighmaster:	Deb Lehma	n		- ·	
			•••••••••••••••••••••••••••••••••••••••	-					

AN	IODERN								
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	Corporation 1107	,			Ticket: Date: Time:	100243 3/27/20 14:47:2	38273 015 2 - 14 Scale	1:47:47	
(110) / 0 / 0220 T-velu	D4 D100 040			Gross:	74580	POU	In	Scale INBOUN	
ITUCK:	PAKISU-243			Tare:	20840	POU		P.1.	
Customer:	0250310002/Modern Disposal Koll Off -			Net:	47740	POU			
Carrier:	PARI-003/PARISO INC. CARMEN Truck	k Type:	TA					•	
		Route:	BROKER/SUB OUT	VARIOUS	BRC	WO	: 000	01114128	
	^ P	Profile:	M15-2798/BRIGHTF	TELDS - A	DDITI				
Generator:	0250310002/Modern Disposal Roll Off -								
Service Site:	0005730094 BRIGHTFIELDS- TRACT II								
Comment:									
Origin	Materials & Services		Quantity	Unit					
291100/Niagara F	alls DC DEC Approved Waste		23.87	TON					

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Weighmaster: Deb Lehman

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1445 Pletcher Road Model City, NY 1410' (716) 754-8226	ODERN Corporation		<b>~~</b>	~		Ticket: Date: Tîme:	10024 3/27/2 14:50:0	3827' 015 )7 - 1 Scal	7 4:50:25 e	
					Gross:	73840	POU	In	Scale INI	30UN
Truck: 202	81-TA				Tare:	30600	POU		P.T.	
Customer: 023	50310002/Modern Disposal Roll Off -				Net:	43240	POU			,
Carrier: LE	WI-003/LEWISTON TRUCKING	Truck Type:	TA							
Driver: MA	LJOH/Malcome Johannes	Route:	MJOHANNE	ES/MALO	COM JOHA	NN	WO	: 00	0111412	1
		Profile:	M15-2798/B	RIGHTF	IELDS - AL	DITI				
Generator: 025	50310002/Modern Disposal Roll Off -									
Service Site: 000	5730094 BRIGHTFIELDS- TRACT II									
Comment:										
Origin	Materials & Services			Quantity	Unit					
291100/Niagara Falls	DC DEC Approved Wa	aste		21.62	TON					

Driver: MAC Johnwes 2051

1445 Pletcher Road Model City, NY 14107 (716) 754-8226	DERN Corporation	GIO	6813		Ticket: Date: Time:	100243 6/9/201 08:07:2	5836 15 20 - C Sca	3 08:08:00 le
Truck: 2080-TA Customer: 02503100 Carrier: LEWI-003 Driver: DAVEKR	02/MODERN DISPOSAL ROI /LEWISTON TRUCKIN( UK/Grapple Dave	Truck Type: Route: Profile;	TA MKRUKOW/DAVE M15-2823/BRIGHT	Gross: Tare: Net; KRUKOWS	67200 30600 36600 KI	POU POU POU WO:	In : 00	Scale INBOUN P.T. 01158144
Generator: 025031000 Service Site: 000573009 Comment: Origin	02/MODERN DISPOSAL ROI 04 BRIGHTFIELDS- TRACT II Materials & Services		0		biit			
291100/Niagara Falls	DC Industrial Waste -	General	Quantit 18.30	y Unit TON				•••

Driver: DAVID KRUKOWSKI 1882 Weighmaster: Deb Lehman

A A	IODERN								
1445 Pletcher Roa Model City, NY 14 (716) 754-8226	d 4107 Corporation	610	6814		,	Ticket: Date: Time:	100245 6/9/201 08:14:5	8374 5 1 - 0 Scal	4 8:15:28 le
Trank	D020 m4				Gross:	75760	POU	In	Scale INBOUN
ITUCK:	PF30-1A				Tare:	27580	) POU		P.T.
Customer:	0250310002/MODERN DISPOSAL ROI				Net:	48180	POU		
Carrier:	FOUR-003/FOURNIER, PAUL	Truck Type:	TA						
		Route:	BROKER/SU	JB OUT	VARIOUS I	BRC	WO	: 00	01158048
		Profile:	M15-2823/B	RIGHTE	IELDS - AI	DDITC			
Generator:	0250310002/MODERN DISPOSAL ROI			220000	2220.00				
Service Site: Comment:	0005730094 BRIGHTFIELDS- TRACT II							•	
Origin	Materials & Services		Sec. 1	Quantity	Unit				
291100/Niagara I	Falls DC Industrial Waste - 0	General		24.09	TON				

1445 Pletcher Roa Model City, NY 14 (716) 754-8226		<b>ERN</b> Corporation	G10	6815		Ticket: 1002 Date: 6/9/2 Time: 08:23	458383 015 :49 - 08:24:09 Scale
Truck: Customer: Carrier:	PF29-TA 0250310002/MO FOUR-003/FOU	DERN DISPOSAL ROI RNIER, PAUL	Truck Type: Route:	TA BROKER/SUB OUT	Gross: Tare: Net: VARIOUS I	71660 POU 28220 POU 43440 POU BRC W	In Scale INBOUN P.T. O: 0001158067
Generator: Service Site: Comment:	0250310002/MO 0005730094 BRI	DERN DISPOSAL ROI GHTFIELDS- TRACT I	Profile:	M15-2823/BRIGHT	FIELDS - AI	DDITC	
Origin		Materials & Services		Quantity	/ Unit	2	
291100/Niagara F	alls	DC Industrial Waste	- General	21.72	TON		
Driver:				Weighmaster:	Deb Lehmar	1	
	(4)						

1445 Pletcher Road Model City, NY 14 (716) 754-8226	IODERN Corporation	610	6816		Ticket: 10 Date: 6/ Time: 08	0024583 9/2015 :30:12 - Sc	89 08:30:38 cale
Truck: Customer: Carrier:	PF33-TA 0250310002/MODERN DISPOSAL ROI FOUR-003/FOURNIER, PAUL	Truck Type:	TA	Gross: Tare: Net:	68220 PC 27620 PC 40600 PC	DU In DU DU	Scale INBOUN P.T.
Generator: Service Site:	0250310002/MODERN DISPOSAL ROI 0005730094 BRIGHTFIELDS- TRACT II	Route: Profile:	BROKER/SUB OUT M15-2823/BRIGHTF	VARIOUS I IELDS - AI	BRC DDITC	WO: (	0001158062
Comment: Origin 291100/Niagara F	Materials & Services alls DC Industrial Waste -	General	Quantity 20.30	Unit			

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	DDERN	1				
1445 Pletcher Road Model City, NY 14107 (716) 754-8226	Corporation	61	06817		Date: 6/9/20 Time: 08:34:	58392 015 06 - 08:34:33 Scale
Truck: PF3: Customer: 0250 Carrier: FOL Generator: 0250 Service Site: 0005	2-TA 0310002/MODERN DISPOSAL ROI JR-003/FOURNIER, PAUL 0310002/MODERN DISPOSAL ROI 5730094 BRIGHTFIELDS- TRACT II	Truck Type: Route: Profile:	TA BROKER/SUB OUT M15-2823/BRIGHTF	Gross: Tare: Net: VARIOUS I TIELDS - AL	69660 POU 28760 POU 40900 POU BRC WO DDITC	In Scale INBOUN P.T. D: 0001158056
Comment:	16					
Origin	Materials & Services		Quantity	Unit		
291100/Niagara Falls	DC Industrial Waste -	General	20.45	TON		
	н. -					
Driver						
Diiver.			Weighmaster:	Deb Lehmar	1	
14	- a -	4				
		-				

<b>MN</b>	IODERN	Ticket: 1002458785
1445 Pletcher Roa	d	Date: 6/10/2015
Model City, NY 1-	4107	Time: 07:37:20 - 07:38:02
(716) 754-8226	6-10	6G10 Scale
	0.10	Gross: 70520 POU In Scale INBOUN
Truck:	2081-TA	Tare: 30600 POU P.T.
Customer:	0250310002/MODERN DISPOSAL ROI	Net: 39920 POU
Carrier:	LEWI-003/LEWISTON TRUCKINC Truck Type:	TA
Driver:	MALJOH/Malcome Johannes Route: Profile:	MJOHANNES/MALCOM JOHANN WO: 0001159030 M15-2823/BRIGHTFIELDS - ADDITC
Generator:	0250310002/MODERN DISPOSAL ROI	
Service Site:	0005730094 BRIGHTFIELDS- TRACT II	
Comment:		
Origin	Materials & Services	Quantity Unit
291100/Niagara H	Calls DC Industrial Waste - General	19.96 TON

Driver: MAL Johannes 2081

1445 Pletcher Roz Model City, NY 1 (716) 754-8226	<b>IODERN</b> Corporation	Gu	06819		Ticket: 1002 Date: 6/10 Time: 07:51	2458799 /2015 1:36 - 07:52:02 Scale
Truck: Customer: Carrier:	PF30-TA 0250310002/MODERN DISPOSAL ROI FOUR-003/FOURNIER, PAUL	Truck Type: Route:	TA BROKER/SUB OUT	Gross: Tare: Net:	68680 POU 27580 POU 41100 POU BRC W	In Scale INBOUN P.T.
Generator: Service Site: Comment:	0250310002/MODERN DISPOSAL ROI 0005730094 BRIGHTFIELDS- TRACT II	Profile:	M15-2823/BRIGHT	FIELDS - AI	DDITC	0. 0001139035
Origin	Materials & Services		Quantity	/ Unit		
291100/Niagara F	alls DC Industrial Waste -	General	20.55	TON		

1445 Pletcher Ros Model City, NY I (716) 754-8226	Ad 4107	61	06870	<b></b>	Ticket: Date: o Time: 0	10024588 6/10/2015 07:52:59 -	02 07:53:20
Truck: Customer: Carrier:	PF33-TA 0250310002/MODERN DISPOSAL ROI FOUR-003/FOURNIER, PAUL	Truck Type:	TA	Gross: Tare: Net:	65660 H 27620 H 38040 H	Sc POU In POU POU	ale Scale INBOUN P.T.
Generator: Service Site: Comment:	0250310002/MODERN DISPOSAL ROI 0005730094 BRIGHTFIELDS- TRACT II	Profile:	BROKER/SUB OI M15-2823/BRIGH	JT VARIOUS   TFIELDS - AI	BRC DDITC	WO: 0	001159036
Origin	Materials & Services		Quant	ity IT_:+			
291100/Niagara F	alls DC Industrial Waste - (	General	19.02	TON		••••••••	

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1445 Pletcher Road Model City, NY 14107 (716) 754-8226	ERN	GI	06821	Gross:	Ticket: 1002458807 Date: 6/10/2015 Time: 07:57:45 - 07:58:09 Scale 76200 POU In Scale INBOLD
Customer: 0250310002/N Carrier: MAWH-003/N Generator: 0250310002/N	ODERN DISPOSAL ROI IAWHINEY TRUCKI IODERN DISPOSAL ROI	Truck Type: Route: Profile:	TA BROKER/SUB OUT M15-2823/BRIGHTI	Tare: Net: VARIOUS I FIELDS - AI	29220 POU P.T. 46980 POU BRC WO: 0001159037 DDITC
Comment:	RIGHTFIELDS- TRACT II				
291100/Niagara Falls	DC Industrial Worts		Quantity	Unit	
		Colora	23.49	ION	
Dite					
Driver:			Weighmaster:	Deb Lehman	