# Former American Linen Supply Co. Facility ERIE COUNTY, NEW YORK

Site Management Plan

# NYSDEC Site Number: C915241

# Prepared for:

AmeriPride Services, Inc. Acquired by Aramark Uniform & Career Apparel, LLC 8130 S. Meridian Street, Suite 1a, Indianapolis, Indiana 46217

> Prepared by: Haley & Aldrich of New York 200 Town Centre Drive, Suite 2 Rochester, New York 14623 585-359-9000

# **Revisions to Final Approved Site Management Plan:**

Revision #	Revisions By	Submitted Date	Summary of Revision	DEC Approval Date
1	Mill Race Commons, LLC	7/29/2021	Update to include NYSDEC-approved Change-in-Use construction project (drainage improvements and parking lot construction) performed in 2020 and decommissioning of MW 101.	
2	Mill Race Commons, LLC; Aramark Uniform & Career Apparel, LLC	9/20/2021	Updated to address additional comments as requested by NYSDEC.	

# OCTOBER 2014

TABLE OF CONTENTS	ii
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF APPENDICES	viii
SITE MANAGEMENT PLAN	2
1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRA	<b>AM</b> 2
1.1 INTRODUCTION	2
1.1.1 General	2
1.1.2 Purpose	3
1.1.3 Revisions	4
1.2 SITE BACKGROUND	4
1.2.1 Site Location and Description	4
1.2.2 Site History	5
1.2.3 Geologic Conditions	5
1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS	
1.3.1 Soil	9
1.3.2 Site-Related Groundwater	9
1.3.3 Site-Related Soil Vapor Intrusion	10
1.3.4 Underground Storage Tanks	10
1.3.5 Radiological Survey	11

1.4 SUMMARY OF REMEDIAL ACTIONS	11
1.4.1 Removal of Contaminated Materials from the Site	13
1.4.2 Site-Related Treatment Systems	15
1.4.3 Remaining Contamination	15
2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN	16
2.1 INTRODUCTION	16
2.1.1 General	16
2.1.2 Purpose	16
2.2 ENGINEERING CONTROLS	17
2.2.1 Engineering Control Systems	17
2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems	19
2.3 INSTITUTIONAL CONTROLS	19
2.3.1 Excavation Work Plan	21
2.3.2 Soil Vapor Intrusion Evaluation	22
2.4 INSPECTIONS AND NOTIFICATIONS	
2.4.1 Inspections	23
2.4.2 Notifications	24
2.5 CONTINGENCY PLAN	25
2.5.1 Emergency Telephone Numbers	25
2.5.2 Map and Directions to Nearest Health Facility	
2.5.3 Response Procedures	29

3.0 SITE MONITORING PLAN	29
3.1 INTRODUCTION	29
3.1.1 General	29
3.1.2 Purpose and Schedule	29
3.2 COVER SYSTEM MONITORING	31
3.2.1 Asphalt Cover Monitoring	31
3.2.2 Vegetated Cover Monitoring	32
3.3 MEDIA MONITORING PROGRAM	32
3.3.1 Groundwater Monitoring	32
3.3.2 Sub-slab Vapor and Indoor Air Monitoring	36
3.4 SITE-WIDE INSPECTION	37
3.5 MONITORING QUALITY ASSURANCE/QUALITY CONTROL	38
3.6 MONITORING REPORTING REQUIREMENTS	39
4.0 OPERATION AND MAINTENCE PLAN	40
4.1 Introduction	40
5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS	40

5.1 SITE INSPECTIONS	40
5.1.1 Inspection Frequency	
5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports	
5.1.3 Evaluation of Records and Reporting	
5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS	
5.3 PERIODIC REVIEW REPORT	43
5.4 CORRECTIVE MEASURES PLAN	44
6.0 SITE MANAGEMENT PLAN CERTIFICATION	44
6.1 Site Management Plan Certification For Updates Dated 9/20/21	45

# LIST OF TABLES

Table 1-Criteria for Cleanup, Import, and Re-use of Soil (in Tables Section)

Table 2 - Emergency Contact Numbers (in text)

Table 3 - Other Contact Numbers (in text)

Table 4 - Monitoring/Inspection Schedule (in text)

Table 5 - Monitoring Well Network Summary (in text)

Table 6 - Schedule of Monitoring/Inspection Reports (intext)

Table BI - Types of Stockpiles and Management Options (in Appendix B)

- Table B2 Types of Backfill Sources Pre-Screening Requirements (in Appendix B)
- Table B3 Recommended Sampling Frequency for Imported Materials

   Requiring Testing (in Appendix B)

# LIST OF FIGURES

Figure 1- Project Locus

Figure 2 - Pre-Remedy Site Investigation Location Plan

Figure 3 - Top of Rock/Refusal Contour

Figure 4 - Groundwater Contour

Figure 5 - Volatile Organic Compounds in Groundwater

Figure 6 - Post Remedial Excavation Extents

Figure 7 - August 2014 Soil Conditions - Volatile Organic Compounds

Figure 8 - August 2014 Soil Conditions - Semi-Volatile and Inorganic Analytes

Figure 9 - Location of Cover System Types

Figure 10 - Map of Route from Site to Hospital

- Figure 11- Groundwater Monitoring Well Network
- Figure 12 Site Map and Revised Cover System
- Figure 13 Residual Soil Conditions Beneath Demarcation Layer in Location of Cap Modification

# LIST OF APPENDICES

Appendix A - Environmental Easement and Site Metes & Bounds

Appendix B - Excavation Work Plan

Appendix C - Sample Health & Safety Plan

Appendix D - Generic Community Air Monitoring Plan

Appendix E - Monitoring Well Construction Logs

Appendix F - Field Sampling Forms and Logs

Appendix G - Quality Assurance Project Plan

Appendix H - Responsibilities of Site Owner and Remedial Party

Appendix I - Change-in-Use Completion Report

Appendix J – Decommissioning of MW 101 Report

#### SITE MANAGEMENT PLAN

### 1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

### **1.1 INTRODUCTION**

This document is required as an element of the remedial program at the property located at 822 Seneca Street in Buffalo, New York known as the Former American Linen Supply Co Facility (hereinafter referred to as the "Site") under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). The Site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index # C9 15241-03-11, Site #C915241, which was executed on May 17, 2011.

### 1.1.1 General

AmeriPride Services. Inc. entered into a BCA with the NYSDEC to remediate an approximately 2.91-acre property located in Buffalo, New York. This BCA required the Remedial Party, AmeriPride Services, Inc., to investigate and remediate contaminated media at the Site. A figure showing the site location and boundaries of this 2.91-acre Site is provided in Figures 1 and 2. The boundaries of the Site are more fully described in the metes and bounds site description that is part of the Environmental Easement (Appendix A).

After completion of the remedial work described in the Remedial Action Work Plan, some contamination was left in the subsurface at this Site, which is hereafter referred to as 'remaining contamination." This Site Management Plan (SMP) was prepared to manage remaining contamination at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. This SMP was initially prepared in October 2014 by Haley & Aldrich of New York, on behalf of AmeriPride Services, Inc. in accordance with the requirements in NYSDEC DER-I 0 Technical Guidance for Site Investigation and Remediation, dated May 2010, and the guidelines provided by NYSDEC. Parties who have made revisions to the SMP and the dates of those revisions are listed in the revisions log on the cover page of this SMP. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for the Site.

### 1.1.2 Purpose

The Site contains contamination left after completion of the remedial action. Engineering Controls have been incorporated into the site remedy to control exposure to remaining contamination during the use of the Site to ensure protection of public health and the environment. An Environmental Easement granted by Mill Race Commons, LLC. the Site Owner, to the NYSDEC, and recorded with the Erie County Clerk, will require compliance with this SMP and all ECs and ICs placed on the Site. The ICs place restrictions on site use, and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the Site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the Site after completion of the Remedial Action, including: (1) implementation and management of all Engineering and Institutional Controls; (2) media monitoring; and (3) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports. To address these needs, this SMP includes two plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; and (2) a Monitoring Plan for implementation of Site Monitoring.

This plan also includes a description of Periodic Review Reports for the periodic submittal of data, information, recommendations, and certifications to NYSDEC.

It is important to note that:

- This SMP details the Site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the environmental easement, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the BCA (Index #C9 15241-03-11; Site #C915241) for the Site, and thereby subject to applicable penalties.

### 1.1.3 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

### **1.2 SITE BACKGROUND**

### **1.2.1 Site Location and Description**

The Site is located in the City of Buffalo, Erie County, New York and is identified as the parcel with section 122.27, Block 1 and Lot 4 on the City of Buffalo Tax Map. The Site is an approximately 2.91-acre area bounded by Seymour Street beyond which are residential properties to the north, Seneca Street beyond which is a newly developed commercial property to the south, Lord Street beyond which are industrial properties and the flying Bison Brewery to the east, vacant and commercial properties to the southwest, and residential properties to the northwest. The boundaries of the Site are more fully described in Appendix A.

### 1.2.2 Site History

According to a Phase I Environmental Site Assessment Report by C.T. Male Associates, P.C., dated December 2004, the Site building was first developed in 1910. Prior to 1910, the Site is indicated to have been occupied by residential and commercial properties. Between 1910 and 1978, the Site appeared to be used as a book binding and printing facility.

Coverall Service and Supply Co., (Coverall) a uniform cleaning facility, reportedly first occupied the Site in 1978. The facility was used for dry cleaning operations until 1985. Available records indicate that dry cleaning with tetrachloroethylene (PCE) was conducted at the Site between 1978 and 1985; use and/or storage of PCE were not reported after 1985. The laundry operations occupied the first floor of the Site building as well as portions of the basement. Thorner Sydney Press occupied the second floor of the Site building as well as portions of the basement until 1997. According to a purchase agreement dated 1977, Thorner Sydney Press' lease agreement was initiated in 1965.

In April 2004, laundering operations ceased at the Site building. It was used as a laundry depot from April 2004 to spring 2005 and then as a fleet vehicle maintenance shop until July 2005. Operations moved out of the building at the end of July 2005, and it has been vacant since. The Site was acquired by Mill Race Commons, LLC on January 14, 2014.

### **1.2.3 Geologic Conditions**

### Geology

The Site is generally flat, sloping slightly to the south, and is situated approximately one mile north of the Buffalo River. The overburden materials (fill and soil) encountered at the Site range in thickness from approximately 14 to 23 feet thick. With the exception of in the former building basement area, which was filled with imported fill following removal of the basement slab, overburden materials at the Site generally consist of some combination of the following.

- Clean Cover: Consists of imported fill materials including soil, gravel, and seeded top soil that is present at the ground surface and to a depth ranging between 1 and 2 feet below ground surface (bgs) on the eastern landscaped portion of the site in the location of the former building slab. This material was imported as part of RA activities. Currently, landscaped areas surround the parking lot. See Figure 12.
  - **Historic Fill:** Consists of well graded gravel, sand, ash, slag, trace wood and brick, and some clay. A distinct ash fill layer (consisting of approximately 80% ash and slag) was encountered beneath the former first floor building slab area. The fill layer can be found beneath site cover (asphalt or clean cover) to a depth of up to 12 feet bgs. Deeper fill was encountered in proximity to underground storage tanks (USTs). A substantial portion of this historic fill present in the southeast corner of the site beneath the former dry-cleaning area was removed during IRM and remedial action activities, though this material is still present on the northern and western portions of the Site.
- **Unconsolidated Clay Fill:** Consists of brown or gray sandy or silty lean clay with sand and trace amounts of wood, ash and brick. This material differs from the historic fill described above in that it is primarily composed of clay with trace amounts of fill constituents.
- Swamp Deposits: Swamp deposits containing organic materials were identified in a small area in the center of the former building slab area. Swamp deposits that remain following remedial excavation activities are generally present in the upper 6 feet of soil.
- **Glaciolacustrinc Deposits:** Consist of native soil deposits of brown and gray clay with sand and silt. This layer may be encountered at depths from approximately I to 18 feet bgs.

**Glacial Till:** Consists of clayey and silty sands. This layer may be encountered at depths from approximately 12 to 20 feet bgs.

The surface of bedrock or drilling refusal was encountered between 13 and 20 feet bgs (El. 563 to El. 572). The site is situated in the Central Lowlands Physiographic Province, characterized by nearly flat-lying rocks of Devonian, Silurian and Ordovician Age. Bedrock underlying the site is mapped as middle Devonian Onondaga Limestone. Inferred bedrock contours are shown on Figure 3.

### Hydrogeology

Groundwater was encountered between El. 575 and El. 581 (January 2014). Groundwater elevation data suggest that groundwater flows toward the south with approximate hydraulic gradient of between 0.01 and 0.08 feet per foot (ft/ft). This southward flow direction is consistent with the expectation that groundwater may be locally controlled by the Buffalo River, which is located less than one mile south of the Site. Hydraulic conductivity was not measured as part of the RI, however hydraulic conductivities in lacustrine silts and clays in North America range between lxl0-4 and

I xi 0-8 m/day <sup>1</sup> · Groundwater flow is shown in Figure 4.

<sup>&</sup>lt;sup>1</sup> D.A. Stephenson, et. al, 1988

### **1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS**

A Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the Site. The results of the RI are described in detail in the following reports:

 Revised Remedial Investigation and Interim Remedial Measures Completion Report, Former American Linen Supply Co Facility, 822 Seneca Street, Buffalo, New York, BCA #C915241, dated 29 August 2014, prepared by Haley & Aldrich of New York.

Generally, the RI determined that contaminants of concern (COCs) were detected at concentrations in site fill and native soil above relevant standards, criteria, and guidelines (SCGs). COCs were identified based on the multiple detection of any one of a broad suite of organic and inorganic substances that are related to the former site operations and are present at concentrations higher than the relevant SCGs. The SCGs for the Site include the Part 375 Restricted Use Soil Cleanup Objectives (SCOs) for protection of groundwater, commercial use, and industrial use; and the NYS Ambient Water Quality Standards and Guidance Values (class GA) specified in NYSDEC TOGS 1.1.1 for groundwater. The COCs identified for Site soils include:

- Target chlorinated volatile organic compounds (CVOCs): tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans- 1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride in soil. The presence of Target CVOCs is consistent with the former dry-cleaning operations at the Site.
- Polycyclic aromatic hydrocarbons (PAHs) and heavy metals (arsenic, copper, lead, and mercury) in historic fill.

The remedial investigation data are described below.

### 1.3.1 Soil

Remedial investigations for soil conditions included borings, test pits, and surface samples collected from the former parking lot area, the soil beneath the basement slab, and the soil/fill beneath the slab of the slab-on-grade portion of the former building. Prior to soil removal IRM and RA activities, target CVOCs were detected at concentrations exceeding applicable criteria in shallow fill near a former waste oil underground storage tank (UST), and on the southern side of the first-floor slab near the former dry-cleaning operations (proximate to test pit locations TP-16 and TP-18 (Refer to Figure 2). Target CVOCs were also identified in deep native soil, likely as a result of impacted groundwater at depth rather than from a source within the soil at or above the sample location.

The PAHs and metals were identified sporadically within historic fill located throughout the top 5 to 12 feet of the overburden in the former parking lot and first floor slab areas. It is anticipated that those constituents are inherent to the fill itself. which is historic fill and not contaminated as a result of historical building operations.

### 1.3.2 Site-Related Groundwater

Groundwater samples were collected from discrete locations and from permanent monitoring wells located both on and offsite. Well locations are shown on Figures 2, 4 and 5. Consistent with former site dry-cleaning operations, target CVOCs were also identified in groundwater at concentrations exceeding groundwater standards in two locations on the southern side of the Site in and proximate to the former dry-cleaning area. Groundwater was encountered from approximately 2.75 and 10.5 feet below ground surface and appears to be flowing in a southerly direction (Figure 4). The groundwater table is present in dense lacustrine and glacial till overburden soils with low hydraulic conductivities. The highest total onsite target CVOC concentration detected as of December 2013 is approximately 140 ug/L, which was detected in MW-3 (post soil removal IRM).

Target CVOC concentrations detected offsite have been very close to or below the groundwater standards, and are indicative of natural attenuation and the downgradient edge of groundwater impacts.

A posting map showing site-wide groundwater conditions is included as Figure 5.

### **1.3.3 Site-Related Soil Vapor Intrusion**

Petroleum-related VOCs were detected in two soil vapor samples (SV-1 and SV-2) located on the southwestern portion of the Site (Figure 2). The detection of these compounds is likely due to the proximity of the sample locations to the former waste oil and fuel USTs. However, based on the low detections of those compounds in soi! and groundwater proximate to the soil vapor sample collection points, it does not appear that soil or groundwater are acting as a source of those vapor concentrations. It is possible that vapor has accumulated over time below the pavement present in that area.

In response to the soil vapor sample results, a soil vapor intrusion investigation was conducted in December 2013 in the basement of 798 Seneca Street, adjacent to the Site. The results identified low levels of PCE in the subslab vapor, indoor air, and outdoor air and low levels of TCE in the sub-slab vapor and outdoor air. When compared against Matrix 1 and Matrix 2 of the NYSDOH VI Guidance, no further action was recommended or required.

#### **1.3.4 Underground Storage Tanks**

The Phase I Environmental Site Assessment prepared by C.T. Male Associates, P.C., dated December 2004, identified five underground storage tanks (USTs) and one aboveground storage tank (AST) which were located at the Site. Four of the six tanks were previously closed-in-place and two were removed. Limited tank closure documentation exists. The tanks include a removed 10,000-gallon gasoline UST, a removed 1,000-gallon alcohol UST, a closed in-place 20,000-gallon diesel UST, a closed in-place 20,000-gallon No.6 oil UST, a closed in-place 1,500-gallon waste oil UST, and a closed in-place 5,000-gallon heating oil AST located within a vault beneath the sidewalk on the east side of the building along Lord Street.

Two (2) 20,000-gallon underground storage tanks (formerly for storage of diesel and No. 6 oil) are present beneath a concrete slab in the southwest area of the Site adjacent to the former building basement. During the investigation of the 20,000-gallon diesel storage tank and the 20,000-gallon No. 6 oil tank, test pits were advanced adjacent to the tanks. Visual and PID screening dictated where a sample was collected for analysis from the test pits. The sample was analyzed for SVOCs and VOCs. The results indicated that there were no significant petroleum impacts to the soil from the closed in- place tanks.

The closed in-place 5,000-gallon heating oil AST was removed from a subgrade vault in the eastern side of the basement during building demolition. The tank was scrapped, cleaned of oily sludge, and recycled offsite at Niagara Metals in Gasport, New York.

The 1,500-gallon waste oil UST was previously closed in place and filled with concrete. This closed UST was removed as part of remedial activities as described in Section 1.4 below.

### **1.3.5 Radiological Survey**

Gamma walkover survey was conducted by Greater Radiological Dimensions Inc. of Lewiston, New York in August 2014. The Site was traversed, and Gamma readings were compared to background. With the exception of two locations, readings were within background ranges at the Site. The higher readings in the two locations that were outside that range were attributed to building debris at the Site.

### **1.4 SUMMARY OF REMEDIAL ACTIONS**

The Site was remediated in accordance with the NYSDEC-approved work plans:

• Revised Interim Remedial Measure Work Plan, Soil Excavation and Oily Material Removal, The Former American Linen Supply Company Facility, *Buffalo, Erie County, New York, BCP Site* #C915241, dated July 2012, prepared by Haley & Aldrich of New York (Basement IRM).

- Revised Interim Remedial Measure Work Plan, Site Excavation and Grading, The Former American Linen Supply Co. Facility, Buffalo, Erie County, New York, dated September 2013, prepared by Haley & Aldrich of New York (Soil Removal IRM).
- Revised Alternatives Analysis Report and Remedial Action Work Plan, Former American Linen Supply Company Facility, 822 Seneca Street, Buffalo, New York, BCA #C915241, dated August 2014, prepared by Haley & Aldrich of New York.

The following is a summary of the Interim Remedial Measures and Remedial Actions performed at the Site:

- I. Removal of former industrial Site features including a sewer vault, USTs, and former building components and excavation of soil/fill exceeding Commercial/Industrial SCOs listed in Table 1 (included in the Tables section of this SMP). This is further described in Section 1.4.1 below.
- Construction and maintenance of a soil cover system consisting of at least one foot of NYSDEC-approved clean cover material placed over a demarcation layer over the eastern, landscaped portion of the Site to prevent human exposure to remaining contaminated soil/fill remaining at the Site;
- 3. Maintenance of an impervious asphalt cover over the western, paved area of the Site;
- 4. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site.
- 5. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the

Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, and (3) reporting;

Remedial activities were completed at the Site in 2012 through 2014.

### 1.4.1 Removal of Contaminated Materials from the Site

Prior to remedial activities, the former Site building and associated asbestoscontaining and presumed asbestos containing materials, lead based paint, and mercury and PCB containing electrical materials were removed. In addition, the full basement and slab was removed and backfilled with NYSDEC-approved backfill. Those activities were completed in conjunction with remedial investigation activities. Materials removed from the Site during remedial activities are described below.

A list of the soil cleanup objectives (SCOs) for the primary contaminants of concern (COCs) and applicable land use for this Site is provided in Table 1 (refer to Tables section of SMP). Note that Site specific protection of groundwater standards were established for this Site per the RAWP. A figure showing areas where excavation was performed is shown in Figure 6.

- **Removal of Basement Cisterns:** Two former cisterns were removed and stockpiled beneath poly sheeting as part of the Basement IRM and building demolition activities. The concrete was characterized for disposal purposes and disposed of offsite.
- Removal of Impacted Floor Slab and Soil: The slab between the cisterns and the soil beneath the slab and cisterns that appeared impacted by oily material were excavated and stockpiled on and beneath poly sheeting. The soils were excavated to approximately 5 to 10 feet below the basement slab and the stockpiled slab and soil were disposed off-site.
- **Removal of Stormwater Vault:** The onsite stormwater network of catch basins drained into a stormwater vault adjacent to Seneca Street. The vault's overflow was connected to the sewer main in Seneca Street. The poured concrete

storm water vault was decommissioned in October 2013 as part of the Soil

Removal IRM. Sediment within the vault was removed and disposed. To provide access for the removal of the vault walls and bottom, fill material adjacent to the north and east walls was removed and disposed with the sediment. The east and west walls and bottom were removed and crushed for disposal. The south and west walls were cut to approximately 18 inches below the Seneca Street sidewalk. The vault's pipe connection to the sewer at Seneca Street was through the south wall of the vault and was decommissioned by the installation of a brick and mortar plug in December 2013 with oversight from the City of Buffalo Sewer Authority. No sewer piping associated with the vault was removed and therefore no pipe bedding was encountered or excavated during the decommissioning of the stormwater vault.

- **Removal of Waste Oil UST:** The 1,500-gallon waste oil UST was previously closed in placed and filled with concrete. The tank was removed and impacted material surrounding the tank was excavated. Excavation was expanded at the north wall, south wail, and bottom due to confirmation sampling results exceeding the protection of groundwater SCOs. The final excavation was 17 ft wide by 18 ft long by 14 feet deep.
- Removal of Fill and Soils in the Former Dry-Cleaning Area Impacted by CVOCs: These excavations included initial targeted removal of shallow fill soils from test pits TP-16 and TP- I 8 as well as supplemental removal of residually impacted soils that remained in place following grading of the former dry-cleaning area.
  - *Removal a/shallow Fill Soils at TP-16 & TP-18:* Soil and fill from these locations were excavated until confirmation sample results indicated concentrations of CVOCs below the protection of groundwater SCOs or until bedrock was encountered, whichever occurred first.

- o *Removal of Fill in Former Dry-Cleaning Area and Site Grading:* Historic fill present beneath the former slab-on-grade area was initially excavated to approximately one foot below the site grade level with the surrounding sidewalk elevations per the City of Buffalo's demolition permit requirements as part of the Soil Removal IRM.
- Supplemental Soil Removal/ram the Former Dry-Cleaning Area: Following site grading, confirmation samples were collected in a grid formation from the base of the dry-cleaning area excavation. Additional excavation was conducted as part of the Remedial Action activities described in the Remedial Action Work Plan until confirmation sample results indicated concentrations of CVOCs below the site-specific protection of groundwater SCOs.
- **Backfill and Placement of Cover System:** Excavations were backfilled using clean imported cover material from NYSDEC-approved fill source locations to bring the site to grade. A cover system consisting of placement of a demarcation layer and at least one foot of approved clean cover and/or impervious pavement surface was installed over the site. The cover system is further described in Section 2.2.

### 1.4.2 Site-Related Treatment Systems

No long-term treatment systems were installed as part of the Site remedy.

### 1.4.3 Remaining Contamination

A total of 1,295 tons of soil and fill were removed from the Site following the IRM and RA activities conducted in 2013 and 2014. Target CVOCs in soil present above site-specific cleanup objectives present in shallow soils beneath the former building were removed via excavation to the extent practical so that they do not present a new source of impact to the groundwater in the absence of an impermeable cover. Target CVOCs were identified during remedial investigation activities and remain in deep native soils beneath the southern corner of the former building basement and

below the water table (Figure 7).

Historic fill that contains PAHs and metals remains beneath the paved areas on the western side of the site and beneath cover on the landscaped northern half of the former building slab-on-grade area (Figure 8). A majority of the historic fill that was present beneath the southern half of the former building slab (dry cleaning area) was removed during IRM and RA activities.

Groundwater at the site continues to be impacted by Target VOCs as documented in the August 2014 RI/IRM report; however, it has not significantly migrated offsite to- date. Given that industrial activity no longer occurs at the site, and with the removal of significant amounts of Target VOC impacted fill material from beneath the building, it is anticipated that groundwater conditions will improve with time. Groundwater will continue to be monitored as part of site management activities. Groundwater use is prohibited at the Site and it is serviced by public water.

### 2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

### **2.1 INTRODUCTION**

#### 2.1.1 General

Since remaining contaminated soil, groundwater, and soil vapor exists beneath the Site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/I Cs at the Site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

### 2.1.2 Purpose

This plan provides:

- A description of all EC/I Cs on the Site;
- The basic implementation and intended role of each EC/IC;
- A description of the key components of the ICs set forth in the Environmental Easement;

- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of EC/ICs, such as the implementation of the Excavation Work Plan for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the Site; and
- Any other provisions necessary to identify or establish methods for implementing the EC/ICs required by the site remedy, as determined by the NYSDEC.

# 2.2 ENGINEERING CONTROLS

### 2.2.1 Engineering Control Systems

### 2.2.1.1 Cover System

Exposure to remaining contamination above the commercial use and protection of groundwater SCOs in soil/fill at the Site is prevented by a cover system placed over the Site. This cover system is comprised of a minimum of 12 inches of clean soil, asphalt pavement, or concrete cover. Specifically, the cover system consists of the following elements as described below and shown on Figure 9:

- **Pavement Area:** This area was formerly parking lots and driveways associated with the former dry cleaner. The cover system in this area consists of asphalt and/or concrete.
- Former Building Slab Area: The area that was the slab-on-grade portion of the former building is improved with a demarcation layer consisting of geotextile fabric placed over remaining historic fill and native soils above which is a minimum of I foot of NYSDEC approved cover material that meets NYSDEC imported fill requirements for commercial use. The area was seeded for aesthetic purposes and erosion control.

• Former Building Basement Area: The area that was the location of the basement of the former Site building does not require site cover. The basement was removed and the excavation was subsequently backfilled with up to 10 feet of NYSDEC approved cover material that meets NYSDEC imported fill requirements for commercial use. The area was seeded for aesthetic purposes and erosion control.

The Excavation Work Plan that appears in Appendix B outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed and any underlying remaining contamination is disturbed.

Procedures for the inspection and maintenance of this cover are provided in the Monitoring Plan included in Section 4 of this SMP.

Select areas of the cover system were modified in 2020 during the implementation of the Change in Use Plan (see Figure 13). The purpose of the Change In Use Plan was to allow for (1) use of the site as a parking lot and (2) to replace and repair the deteriorating condition of the former parking lot which was left in place as part of the cover remedy under the original approved Site Remediation Plan. Changes to the cover system included:

- selected areas of the cover system were replaced with a layer of clean top soil over a woven geotextile demarcation layer. The minimum thickness of the soil cover placed in this area was 1' in order to meet the standard for a cover system outlined in the Certificate of Completion for the Site. Clean fill was imported to the Site for backfill as well as site cover modification and repairs. AFI collected samples of this soil prior to import to the site at a sampling frequency outlined by Table 5.4(e)10 in DER-10.
- the importation of type 7 asphalt to upgrade the existing asphalt area on the western portion of the property.
- After the placement of the minimum 1' of clean soil, the area was hydroseeded in order to stabilize the area.

• The new cover system for the Site can be seen in Figure 12.

### 2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

#### 2.2.2.1 Cover System

The cover system is a permanent control, and the quality and integrity of this system will be inspected at defined, regular intervals until which time the Environmental Easement is extinguished pursuant to ECL Article 71, Title 36.

### 2.2.2.2 Monitored Natural Attenuation

Groundwater monitoring activities will continue, as determined by the NYSDEC, until residual groundwater concentrations are found to be consistently below NYSDEC standards or have become asymptotic at an acceptable level over an extended period.

Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional source removal, treatment and/or control measures will be evaluated.

# 2.3 INSTITUTIONAL CONTROLS

A series of Institutional Controls is required by the Decision Document to: (I) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to commercial or industrial uses only. Adherence to these Institutional Controls on the Site is required by the Environmental Easement and will be implemented under this Site Management Plan. These Institutional Controls are:

• Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns:

- The Controlled Property may be used for Commercial use as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial use as described in 6 NYCRR Part 375-1.8(g)(2)(iv);
- All Engineering Controls must be operated and maintained as specified in this SMP;
- All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Erie County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- Operations, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.
- The potential for vapor intrusion must be evaluated for any buildings developed at the Site, and any potential impacts that are identified must be monitored or mitigated;

- Vegetable gardens and farming on the property are prohibited;
- The Site Owner will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

### 2.3.1 Excavation Work Plan

The Site has been remediated for commercial and industrial use. Any future intrusive work that will penetrate the soil cover, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system will be performed in compliance with the Excavation Work Plan (EWP) that is attached as Appendix B to this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the Site. A sample HASP is attached as Appendix C to this SMP that is in current compliance with DER- I 0, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations.

The Generic NYSDOH Community Air Monitoring Plan is attached as Appendix D. Based on future changes to State and federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re- submitted with the notification provided in Section A-I of the EWP. Any intrusive construction work will be performed in compliance with the EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (See Section 5).

The Site Owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining contamination, and for structures that may be affected by excavations (such as building foundations and bridge footings). The Site Owner will ensure that site development activities will not interfere with, or otherwise impair or compromise, the engineering controls described in this SMP.

#### 2.3.2 Soil Vapor Intrusion Evaluation

Prior to the construction of any enclosed structures located over areas that contain remaining contamination and the potential for soil vapor intrusion (SVI) has been identified, an SVI evaluation will be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, an SVI mitigation system may be installed as an element of the building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

Prior to conducting an SVI investigation or installing a mitigation system, a work plan will be developed and submitted to the NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York". Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

Preliminary (unvalidated) SVI sampling data will be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation. Validated SVI data will be transmitted to the property owner within 30 days of validation. If any indoor air test results exceed NYSDOH guidelines, relevant NYSDOH fact sheets will be provided to all tenants and occupants of the property within 15 days of receipt of validated data.

Future indoor air sampling at 798 Seneca Street may be required depending on future groundwater monitoring data (See Section 3).

SVI sampling results, evaluations, and follow-up actions will also be summarized in the next Periodic Review Report.

### 2.4 INSPECTIONS AND NOTIFICATIONS

### 2.4.1 Inspections

Inspections of all remedial components installed at the Site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive site- wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If Site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system; Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3). The reporting requirements are outlined in the Periodic Review Reporting section of this plan (Section 5).

If an emergency, such as a natural disaster or an unforeseen failure of

any of the ECs occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the EC/I Cs implemented at the Site by a Qualified Environmental Professional as determined by NYSDEC.

### 2.4.2 Notifications

Notifications will be submitted by the Site Owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the Brownfield Cleanup Agreement (BCA), 6NYCRR Part 375, and/or Environmental Conservation Law.
- 7 day advanced notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan. If the ground-intrusive activity qualifies as a change of use as defined in 6 NYCRR Part 375, the above mentioned 60-day advance notice is also required.
- Notice within 48-hours of any damage or defect to the foundation, structures
  or engineering control that reduces or has the potential to reduce the
  effectiveness of an Engineering Control and likewise any action to be taken
  to mitigate the damage or defect.
- Verbal notice by noon of the following business day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the Site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Brownfield Cleanup Agreement (BCA), and all approved work plans and reports, including this SMP
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing.

### **2.5 CONTINGENCY PLAN**

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the Site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the Site by a Qualified Environmental Professional as determined by NYSDEC.

### **2.5.1 Emergency Telephone Numbers**

In the event of any environmentally related situation or unplanned occurrence requiring assistance, the Site Owner or Site Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. These emergency contact lists must be maintained in an easily accessible location at the Site.

Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480
	(3 day notice required for utility markout)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362
Dig Safely NY	(1-800) 962-7692 or 811

# **Table 2: Emergency Contact Numbers**

## **Table 3: Other Contact Numbers**

Megan Kuczka	(716) 851-7220
NYSDEC	
Julia Kenney NYSDOH	(518) 402-7860

\* Note: Contact numbers subject to change and should be updated as necessary

## 2.5.2 Map and Directions to Nearest Health Facility

Site Location: 822 Seneca Street, Buffalo, NY

Nearest Hospital Name: Buffalo General Medical Center

Hospital Location: 100 High Street, Buffalo, NY

Hospital Telephone: (716) 859-5600

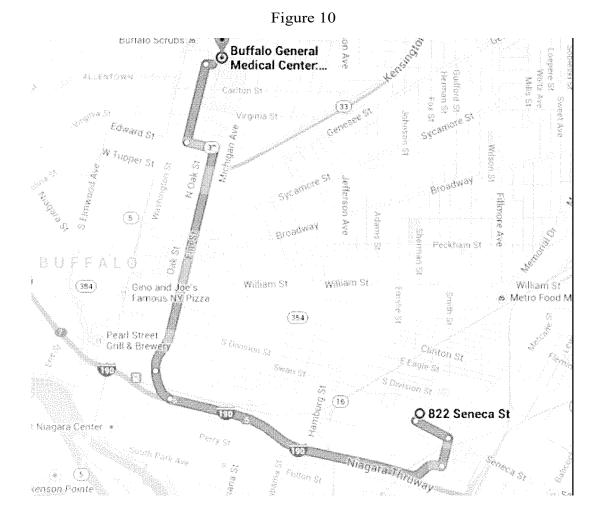
Directions to the Hospital:

- 1. Head southeast on Seneca Street toward Lord Street
- 2. Turn right at Smith Street
- 3. Turn right to merge onto 1-190 N toward Niagara Falls
- 4. Take exit 6 toward Elm Street
- 5. Keep left at the fork and merge onto Elm Street

- 6. Turn left at Goodell Street
- 7. Turn right at Ellicott Street
- 8. Turn right at High Street
- 9. Buffalo General Medical Center will be on the left

Total Distance: 3.5 miles

Total Estimated Time: 10 minutes



# Map Showing Route from the Site to the Hospital:

#### 2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 2). The list will also be posted prominently at the Site and made readily available to all personnel at all times.

### 3.0 SITE MONITORING PLAN

# **3.1 INTRODUCTION**

### 3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the soil cover system, and all affected site media identified below. This Monitoring Plan may only be revised with the approval of NYSDEC.

#### 3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (e.g., groundwater, indoor air, soil vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCOs for soil;
- Assessing achievement of the remedial performance criteria.
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this Monitoring Plan provides information on:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);
- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;
- · Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Periodic monitoring of the remedy and overall reduction in contamination on-site will be conducted per the table below for the first 5 years following receipt of the COC. The frequency thereafter will be determined by NYSDEC. Trends in contaminant levels in groundwater in the affected areas, will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. Monitoring programs are summarized in Table 4 and outlined in detail in Sections 3.2 and 3.3 below.

Monitoring Program	Frequency*	Matrix	Analysis
Cover System	Annual Inspection	N/A	Visual only
Groundwater	Semi-annual for 2 years; annual thereafter beginning 2017	Groundwater	Target CVOCs (PCE, TCE, cis-1.2- DCE, vinyl chloride)

Table 4:	Monitor	ring/Inspec	ction	Schedule

Soil Vapor/Indoo r Air	If two (2) consecutive groundwater monitoring events indicate increase in Target CVOC concentrations at MW- 102R, then soil vapor and indoor air sampling may be warranted at the 798 Seneca Street residence and will be discussed with the NYSDEC and NYSDOH.	Soil Vapor & Indoor Air	Target CVOCs (PCE, TCE, cis-1,2- DCE, vinyl chloride)
------------------------------	--	----------------------------	--

\* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH.

#### **3.2 COVER SYSTEM MONITORING**

The cover system must be maintained at all times, and must be replaced in-kind should it be breached as described in the Excavation Work Plan (Appendix 8).

The cover will be inspected on an annual basis. If significant areas of distress are noted, they will be repaired to a condition required by this SMP. The cover will be

repaired in-kind if it is damaged during any subsurface work (e.g. utilities). Monitoring of the cover will be reported in the Periodic Review Report.

#### 3.2.1 Asphalt Cover Monitoring

Based upon the findings of periodic inspections, the maintenance needs of the asphalt cover will be evaluated, and corrective actions will be taken when necessary. A brief summary of the key maintenance concerns and the respective corrective actions is provided below:

- <sup>1</sup>/<sub>2</sub> -inch or Greater Cracks or Pot Holes Exposing the Sub-Base will be sealed or repaired to restore the asphalt cover.
- Vegetation will be removed and the associated impact, hole, or crack will be sealed or repaired to restore the asphalt cover.

#### 3.2.2 Vegetated Cover Monitoring

Based upon the findings of periodic inspections, the maintenance needs of the vegetated cover will be evaluated and corrective actions will be taken when necessary. A brief summary of the key maintenance concerns and the respective corrective actions is provided below:

- Erosion Problems Observed: Areas where erosion problems (i.e., rills or gullies) are observed will be repaired by re-grading the localized area, adding the required fill material and/ or topsoil, and reseeding/ replanting as necessary.
- Indications of Animal, Rodent, or Insect Disturbance Observed: If burrowing animals are observed breaching the soil cover, as evidenced by exposed fill material, they will be eradicated by a licensed exterminator.

#### **3.3 MEDIA MONITORING PROGRAM**

#### 3.3.1 Groundwater Monitoring

Groundwater monitoring is currently performed by the Remedial Party on an annual basis.

Target chlorinated volatile organic compounds (CVOCs), including tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, and vinyl chloride, was initially monitored in the network of on-site and off-site wells described below, and is currently monitored on-site only.

The initial network of monitoring wells was installed to monitor both upgradient and down-gradient groundwater conditions at the Site. The network of onsite and off- site wells was designed based on the following criteria:

- Representation of the downgradient area to evaluate offsite migration to the south and east.
- Representation of overburden and bedrock groundwater conditions to evaluate natural degradation of dry cleaning-related compounds over time in the former

dry-cleaning area.

• The condition of the wells and accessibility for ongoing maintenance and monitoring.

The monitoring well network is summarized in the Table 5 below and incorporates changes since the initial network was established in 2014. MW-302 was formerly in the program but was damaged and unusable. The NYSDEC approved removal of well MW-302 from the sampling program on 5 May 2016. In 2018, groundwater monitoring results indicated that Target CVOCs concentrations were stabilizing close to or below the NYSDEC groundwater standards and significantly below pre-remediation conditions. In a letter dated 23 April 2019, NYSDEC approved reducing the groundwater sampling to on-site wells MW-102R, MW-105 and MW-106 as proposed in the 2019 Annual Periodic Review Report.

NYSDEC approved the removal of MW-101 via e-mail correspondence on 13 May 2020 in order for Mill Race Commons to complete upgrades to the parking lot. The work was performed on June 8th, 2020 by Earth Dimensions Inc. via tremie grouting in place. The flush mount protective casing was removed following grouting and the surface was restored with asphalt patch material. A NY State licensed professional geologist was onsite to observe the work on behalf of Benchmark. A copy of the Decommissioning Report is attached as Appendix "J." In June 2020, MW-101 was decommissioned by Mill Race Commons, LLC, the Site Owner, with the NYSDEC's approval via e-mail correspondence dated 13 May 2020. MW-102R was re-surveyed due to the cover system modifications (see Appendix E).

Baseline water quality data is shown on Figure 5. Monitoring well locations are shown on Figure 11. Groundwater contours from 2014 are included in Figure 4. Monitoring well construction logs are included in Appendix E for reference.

The sampling frequency may be modified with the approval of the NYSDEC. The SMP will be modified to reflect changes in sampling plans approved by NYSDEC. Deliverables for the groundwater monitoring program are specified below.

Well ID	Location	Casing Diameter	Screen Depth	Baseline Conditions (2013)	Analytes to be Tested
MW-101	Onsite Overburden	2 inch	13.2-18.2 ft.	Target CVOCs non- detect	Removed from program. Well decommissioned.
MW-102R	Onsite Overburden	2 inch	6.5-11.5 ft.	Cis-1,2-DCE and vinyl chloride above TOGS	Target CVOCs
MW-103	Onsite Overburden	2 inch	7.3-12.3 ft.	Target CVOCs non- detect	Water levels only
MW-104	On site Overburden	2 inch	8.1-13.1 ft.	Target CVOCs non- detect	Water levels only
MW-105	Onsite Overburden	2 inch	9.2-14.2 ft.	Cis-1,2-DCE above TOGS	Target CVOCs
I MW-106	Onsite Overburden	2 inch	9.4-14.4 ft.	Cis-1,2-DCE and vinyl chloride above TOGS	Target CVOCs
MW-301	Offsite Overburden	2 inch	13.5- 18.5 ft.	Target CVOCs not detected above TOGS	Water levels only
MW-302	Offsite Overburden	2 inch	12.8-17.5 ft.	Vinyl chloride slightly above TOGS	Removed from program. Well destroyed.
MW-303	Offsite Overburden	2 inch	11.1-15.8 ft.	Target CVOCs not detected above TOGS	Water levels only

Table 5: Monitoring Well Network Summary

#### **3.3.1.1 Sampling Protocol**

All monitoring well sampling activities will be recorded in groundwater sampling forms presented in Appendix F. Other observations (e.g., well integrity, etc.) will be noted on the well sampling log. The well sampling log will serve as the inspection form for the groundwater monitoring well network. Sampling protocol is as follows:

I. Prior to sampling, static water levels shall be measured from each well in the network and documented in the log (Appendix F).

- 2. Each well will be purged using a submersible pump or dedicated bailer three well volumes or until the well is dry, whichever occurs first.
- 3. Following purging, VOC samples will be collected using a dedicated bailer and collected in laboratory provide bottles.
- 4. The samples will be labeled as follows:

Well ID-Date (YYMMDD)-Time (24 hour) (e.g., MW102R-071713-1310)

 Samples will be cooled to 4°C or less and shipped/couriered to an ELAP Certified Laboratory for analysis of VOCs via EPA Method 8260.

#### 3.3.1.2 Monitoring Well Repairs, Replacement And Decommissioning

If biofouling or silt accumulation occurs in the on-site and/or off-site monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced (as per the Monitoring Plan), if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance. Monitoring wells will be visually inspected during each sampling event. Damaged or missing components (e.g., missing bolts, damaged well covers, poor surface seals, etc.) will be documented and the well will be repaired or replaced prior to the next sampling event.

The NYSDEC will be notified prior to any repair or decommissioning of monitoring wells for the purpose of replacement and the repair or decommissioning and replacement process will be documented in the subsequent periodic report. Well decommissioning without replacement will be done only with the prior approval of NYSDEC. Well abandonment will be performed in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be reinstalled in the nearest available location, unless otherwise approved by the NYSDEC.

#### 3.3.2 Sub-slab Vapor and Indoor Air Monitoring

Testing was conducted in December 2013 at adjacent 798 Seneca Street property as reported in the Revised Remedial Investigations and Interim Remedial Measure Completion Report dated 29 August 2014 Low levels of PCE and TCE were detected in

the sub-slab vapor and PCE was detected in the indoor air at that time. The detections however were well below the New York State Department of Health (NYSDOH) October 2006 Soil Vapor Intrusion Guidance thresholds for monitoring or mitigation.

If results of ongoing monitoring indicate that there is an increasing trend of CVOCs in MW-102R, and the adjacent property at 798 Seneca Street continues to be utilized as a residence, indoor air and sub-slab vapor monitoring may be warranted per discussion with the NYSDEC and NYSDOH. Sub-slab vapor and indoor air monitoring will include sampling for target CVOCs, including tetrachloroethene, trichloroethene, cis- 1,2-dichloroethene, and vinyl chloride.

If sub-slab vapor, indoor air, and outdoor air sampling is required per groundwater monitoring results in MW-I 02R, the sampling frequency will be determined with the approval of the NYSDEC.

#### **3.3.2.1 Sampling Protocol**

If sampling is required, it will be conducted by the Remedial Party in accordance the October 2006 NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York or the most recent prevailing guidance. Sampling protocol is as follows:

- Prior to sampling, an inventory of the basement of the structure will be conducted to remove and rule out potential indoor air sources that may impact the sample results.
- 2. A sub-slab vapor point will be installed beneath basement floor slab in a central location in accordance with the NYSDOH guidance that will be constructed of inert tubing and sealed with hydrated bentonite.

- 3. Approximately 24 hours following the inventory and point installation, a SUMMA canister calibrated with a flow controller to collect air over a 24-hour period will be connected to the sub-slab vapor point. Prior to connecting the can, a Helium Tracer Gas test will be used to assess for leaks to the point.
- Two additional SUMMA cans with 24-hour flow controllers will be set up

   one in the basement on an elevated surface to evaluate indoor air quality, and one outside of the residence in an upwind location to assess outdoor air quality.
- 5. The cans will be retrieved approximately 24 hours later and analyzed for target CVOCs (PCE, TCE, cis-1,2-DCE, and vinyl chloride) via EPA method TO-15.
- 6. The results will be reported in the subsequent Periodic Review Report. In addition, validated SVI data will be transmitted to the property owner within 30 days of validation. If any indoor air test results exceed NYSDOH guidelines, relevant NYSDOH fact sheets will be provided to all tenants and occupants of the property within 15 days of receipt of validated data.

#### **3.4 SITE-WIDE INSPECTION**

Site-wide inspections will be performed on a regular schedule once a year. Site- wide inspections will also be performed after all severe weather conditions that may affect Engineering Controls or monitoring devices. All inspections will be documented. During these inspections, an inspection form will be completed (Appendix F). The documentation will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- · The site management activities being conducted including, where

appropriate, confirmation sampling and a health and safety inspection;

• Confirm that site records are up to date.

#### **3.5 MONITORING QUALITY ASSURANCE/QUALITY CONTROL**

All sampling and analyses will be performed in accordance with the requirements of the Quality Assurance Project Plan (QAPP) prepared for the Site (Appendix G). Main Components of the QAPP include:

- QA/QC Objectives for Data Measurement;
- Sampling Program:
  - Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
  - Sample holding times will be m accordance with the NYSDEC ASP requirements.
  - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures:
  - All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
  - The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
- Analytical Procedures;
- Preparation of a Data Usability Summary Report (DUSR), which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy,

representativeness, comparability, and completeness for each analytical method.

- Internal QC and Checks;
- QA Performance and System Audits;
- Preventative Maintenance Procedures and Schedules;
- Corrective Action Measures.

#### **3.6 MONITORING REPORTING REQUIREMENTS**

Forms and any other information generated during regular monitoring events and inspections will be kept on file by the Site Owner or its representatives. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC on an annual basis in the Periodic Review Report. The report will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and

• A determination as to whether groundwater conditions have changed since the last reporting event.

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables arc summarized in Table 6 below.

**Table 6: Schedule of Monitoring/Inspection Reports** 

Task	<b>Reporting Frequency*</b>
Cover System Monitoring	Annual
Groundwater Monitoring	Annual
Soil-slab/ Indoor Air Monitoring	Reported Annually if Conducted

\* The frequency of events will be conducted as specified until otherwise approved by NYSDEC

#### 4.0 OPERATION AND MAINTENANCE PLAN

#### **4.1 INTRODUCTION**

The Site remedy does not rely on any mechanical systems, such as sub-slab depressurization systems or air sparge/ soil vapor extraction systems to protect public health and the environment. Therefore, the operation and maintenance of such components is not included in this SMP.

If mechanical systems are required in the future (i.e., if future site buildings are constructed which require a sub-slab depressurization system), then this SMP will be amended to include the operation and maintenance components.

### 5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS

#### **5.1 SITE INSPECTIONS**

#### 5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Monitoring Plan of this SMP. At a minimum, a

site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted whenever a severe condition has taken place, such as an erosion or flooding event that may affect the ECs.

#### 5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

All inspections and monitoring events will be recorded on the appropriate forms which are contained in Appendix F). Additionally, a general site-wide inspection form will be completed during the site-wide inspection (see Appendix F). These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including all media sampling data and system maintenance reports, generated for the Site during the reporting period will be provided in electronic format in the Periodic Review Report.

#### 5.1.3 Evaluation of Records and Reporting

The results of the inspection and site monitoring data will be evaluated as part of the EC/IC certification to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- The Site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP and FER.

#### 5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

After the last inspection of the reporting period, a Qualified Environmental Professional will prepare the following certification:

For each institutional or engineering control identified for the Site, I certify that all of the following statements are true:

• The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;

- The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site management plan for this control;
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the Site is compliant with the Environmental Easement;
- The engineering control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and
- The information presented in this report is accurate and complete;
- No new information has come to my attention, including groundwater monitoring data from wells located at the site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid; and
- I certify that all information and statements in this certification form are true.
   I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, <u>(Name)</u>, of <u>(Company)</u>, am certifying as <u>(owner or owners</u>)

representative), for the Site.

• *Every five years the following certification will be added*: The assumptions made in the qualitative exposure assessment remain valid.

The signed certification will be included in the Periodic Review Report described below.

#### **5.3 PERIODIC REVIEW REPORT**

A Periodic Review Report will be submitted to the Department every year, beginning fifteen months after the Certificate of Completion is issued. In the event that the Site is subdivided into separate parcels with different ownership, a single Periodic Review Repo11 will be prepared that addresses the Site described in Appendix A. The report will be prepared in accordance with NYSDEC DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the Site;
- Results of the required annual site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format;
- Data summary tables and graphical representations of contaminants of concern for groundwater, which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;

- A Site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the Decision Document.
  - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
  - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
  - o The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted, in hard-copy and in electronic format, to the NYSDEC Regional Office in which the Site is located, and in electronic format to the NYSDOH Bureau of Environmental Exposure Investigation.

#### **5.4 CORRECTIVE MEASURES PLAN**

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

#### **6.0 SITE MANAGEMENT PLAN CERTIFICATION**

I, Mark N. Ramsdell, P.E., certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Kansol Mark N. Ramsdell, P.E.

#### 6.1 SITE MANAGEMENT PLAN CERTIFICATION FOR UPDATES DATED 9/20/21

I, Thomas Forbes, P.E., certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Site Management Plan Update was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

1 Can &

Thomas H. Forbes, P.E.

4-1-21

Date



## TABLES

Table 1 – Criteria for Cleanup, Import, and Re-use of Soil

Tables 2 – 6 are located within the SMP text Tables B1 - B3 are located within the Appendix B text

TABLE 1 -CRITERIA FOR CLEANUP, IMPORT, AND RE-USE OF SOIL FORMER AMERICAN LINEN SUPPLY CO FACILITY BUFFALO, NEW YORK BCP SITE #C915241

	NYSDEC Soil Cleanup Objectives (Restricted Use)		Eastern United States	
	Protection of Groundwater (ppm)	Commercial Use (ppm)	Imported Fill Requirements (ppm)	Background Levels
Metals				
Arsenic	16 4	16 4	16 -	3-12
Barium	820	400	400	15-600
Beryllium	47	590	47	0-1.75
Cadmium	7.5	9.3	7.4	0.1-1
Chromium, hexavalent'	19	400	19	1.5-40
Chromium, trivalent'		1500	1500	1.5-40
Copper	1720	270	270	
Total Cyanide'	40	270		1-50
Lead	40		27	
	2000 -	1000	450	200-500
Manganese		10000 '	2000 -	50-5000
Fotal Mercury	0.73	2.8 *	0.73	0.001-0.2
Nickel	130	310	130	0.5-25
Setenium	4 4	1500	4 4	0.1-3.9
Silver	8.3	1500	8.3	
Zinc	2480	10000 /		
	2700	10000	2480	9-50
PCBs/Pestacides				
		<b>5</b> 00 3		
1,3,5-TP Acid (Silvex)	3.8	500 *	3.8	
.4'-DDE	17	62	17	·
4'-DDT	136	47	47	
,4'-DDD	14	. 92	14	
Aldrin	0.19	0.68	0,19	
lpha-BHC	0.02	3,4	1 1	
eta-BHC			0.02	**
	0.09	3	0.09	-
Thlordane (Alpha)	2.9	24	2.9	
elta-BHC	0.25	500 '	0.25	
Dibenzofuran	210	350	210	
Dieldrin	0.1	1.4	0.1	-
indosulfan I	102	200 *	102	
indosulfan II	102	200 *	102	
indosulfan sulfate	1000 "	200 *	200 1	
indrin	0.06	89	0.06	
leptachlor	0.38	15	0.38	
indane	0.1	9.2	0.1	
olychlorinated Biphenyls	3.2	L	1	
		· · · · · · · · · · · · · · · · · · ·	· ·	
emi-Volatile Organic Compounds				
cenaphthene	98	500 *	98	
cenapthylene	107	500 '	1	
niline			107	
		500	500	
nthracene	1000 '	500 '	500 3	
enz(a)anthracene	14	5.6	1 -	-
enzo(a)pyrene	22	. f*	1 4	
enzo(b)fluoranthene	1.7	5.6	1.7	
enzo(g.h.i)perylene	1000 *	500 '	500 *	
enzo(k)fluoranthene	1.7	56	1.7	-
hrysene	1.7		1.7	
ibenz(a,h)anthracene	1000	56		
		0.56	0.56	
uoranthene	1000 '	500 '	500 °	
uorene	386	500 '	386	
deno(1,2,3-cd)pyrene	8.2	5.6	5.6	
-Cresol	0.33 "	500 '	0,33 "	
aphthalene	12	500 '	12	-
itrobenzene				
	0.33 "	69 500 J	69	**
Cresol		500 3	0.33 "	
Cresol	0.33 "	500 '	0.33 "	
ntachlorophenol	0.8 "	6.7	0.8 "	
enanthrene	1000 '	500 '	500 "	
ienol	0.33 "	500 *	0.33 °	-
rene	1000 "	500 *	500	~

Haley Aldrich of New York G:\37319 (AmeriPride, 8 Lord Street, Buffalo)054 - SMP\Tables\Table 1\_SCOs\_F.xlsx

Page 1 of 2

#### TABLE 1 -

CRITERIA FOR CLEANUP, IMPORT, AND RE-USE OF SOIL FORMER AMERICAN LINEN SUPPLY CO FACILITY BUFFALO, NEW YORK BCP SITE #C915241

	NYSDEC Soil Cleanup Objectives (Restricted Use)			Eastern United States
	Protection of Groundwater (ppm)	Commercial Use (ppm)	Imported Fill Requirements (ppm)	Background Levels
			I	
Volatile Organic Compounds			<u></u>	
1.1.1-Trichloroethane	0.68	500 "	0.68	
1, 1-Dichloroethane	0.27	240	0.27	
1.1-Dichloroethene	0.33	500 '	0.33	
1.2-Dichlorobenzene	1.1	500 °	1.1	
1.2-Dichloroethane	0.02 4	30	0.02 -	
cis-1,2-Dichloroethene	0.25	500 '	0.25	
rans-1,2-Dichloroethene	0.19	500 *	0.19	
1.3-Dichlorobenzene	2.4	280	2.4	
1.4-Dichlorobenzene	1.8	130	1.8	
1.4-Dioxane	0,1 °	130	0.1 "	
Acetone	0.05	500 '	0.05	
Benzene	0.06	44	0.06	
Butylbenzene	12	500 *	12	
Carbon tetrachloride	0.76	22	0.76	
Chlorobenzene	1.1	500 °	1,1	
Chloroform	0.37	350	0.37	
Ethylbenzene	1	390	1	-
Hexachlorobenzene	3.2	6	3.2	
Methyl ethyl ketone	0,12	500 '	0.12	
Methyl tert-butyl ether	0.93	500 '	0.93	
Methylene Chloride	0,05	500 °	0.05	-+
1-Propylbenzene	3.9	500 *	3.9	
ec-Butylbenzene	11	500 °	11	-
ert-Butylbenzene	5.9	500 '	5.9	
Fetrachloroethane	1.8 '	150	1.8 "	
Foluene	0.7	500 '	0.7	
Frichloroethene	0.75*	200	0.75 *	
1,2,4-Trimethylbenzene	3.6	190	3.6	
1,3,5-Trimethylbenzene	8.4	190	8.4	
Vinyl Chloride	0.02	13	0.02	
Xylene (mixed)	1.6	500	1.6	

NOTES & ABBREVIATIONS:

- = No Standard or Value

\*\*The soil cleanup objectives herein are from the 6 NYCRR Part 375-6.8(b) dated 14 December 2006. In the event that

- revisions to the SCOs are published that post-date this SMP, the most recent iteration of the SCOs will be used I. The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the tot: species of thic contaminant is below the SCC
- 2. For considuants where the calculated SCO was lower than the rural soil background concentration determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site
- 3. The SCOs were capped at a maximum value of 500 ppm
- 4. This SCO is for the sum of endosulfan I, endosulfan II, and endosulfan sulfate
- 5. The SCOs for the protection of groundwater were capped at a maximum value of 1000 ppm
- 6. For constituents were the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.
- 7. The SCOs for metals were capped at a maximum value of 10,000 ppm
- 8. This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts)
- 9. The protection of groundwater and imported fill requirements for tetrachloroethene and trichloroethene are site specific per th 2014 Remedial Action Work Plan.

#### APPLICABILITY:

This table presents the NYSDEC approved applicable Soil Cleanup Objective The cleanup objectives should be used as follows

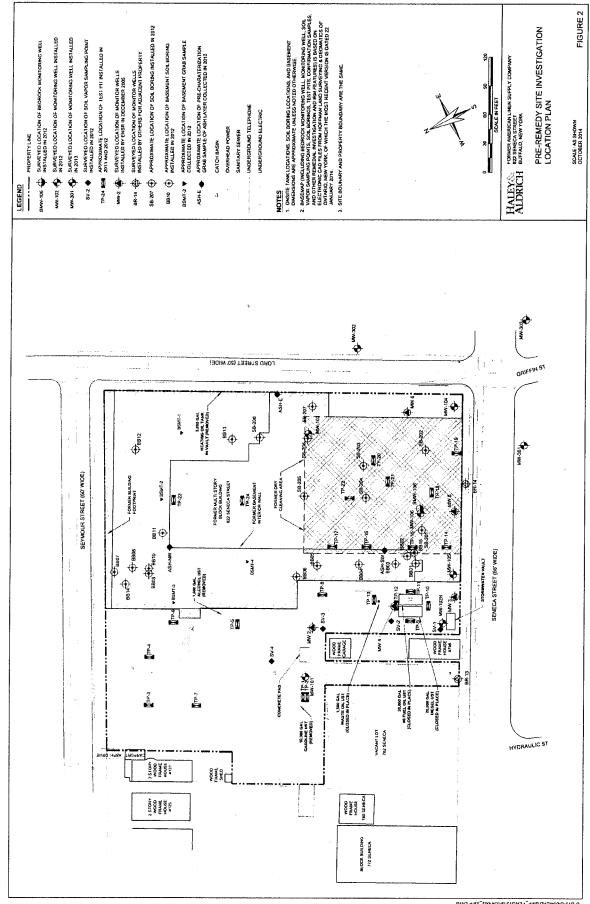
Refer to the Excavation Plan (Appendix B) for additional information.

## **FIGURES**

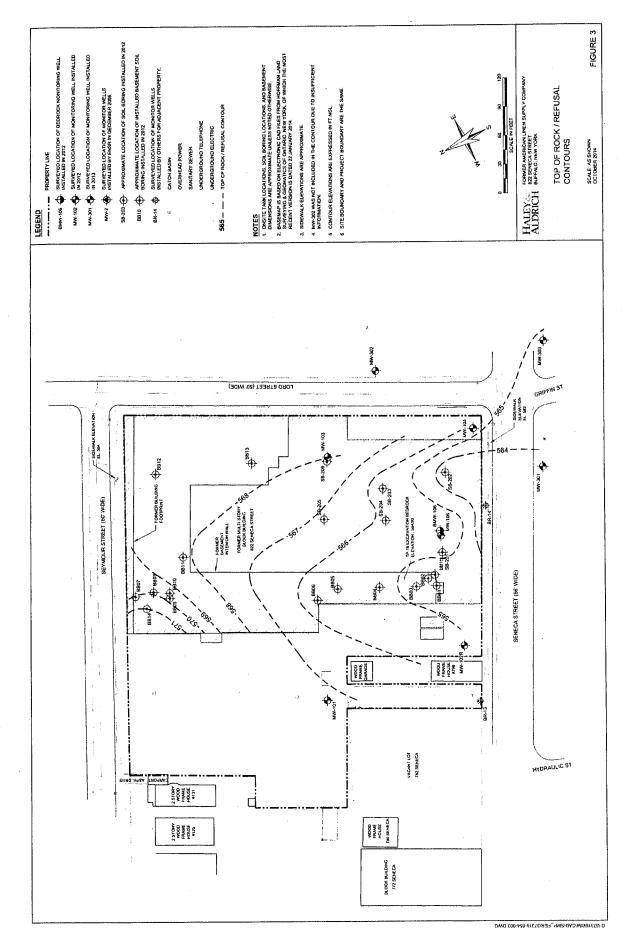
# Figures 1 through 9 and 11 through 13 included in this section

Figure 10 is located within the text of the SMP



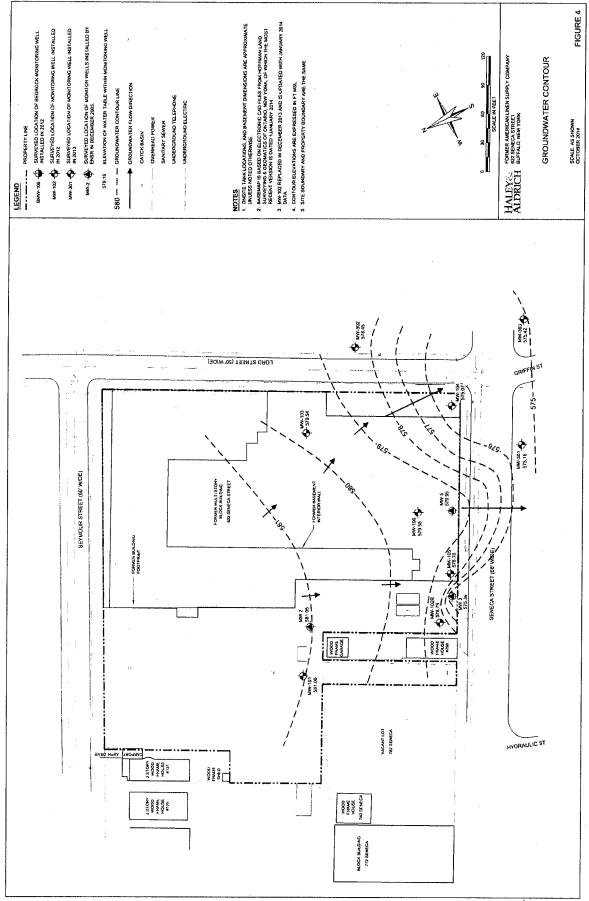


DWD 9142\_50054(CAD/SMP\_FER/37319-054-002\_56/P DWG

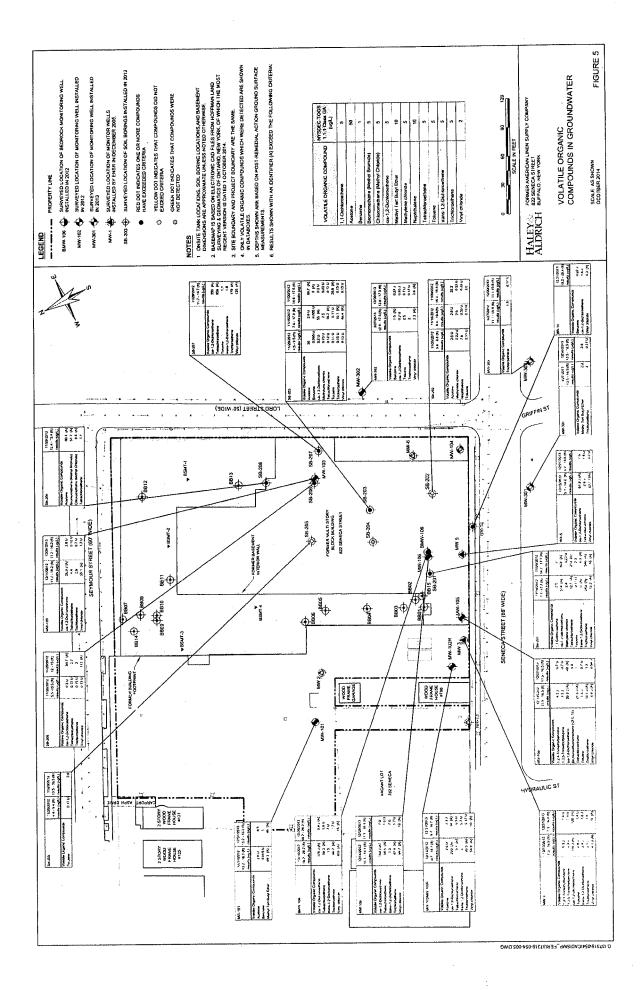


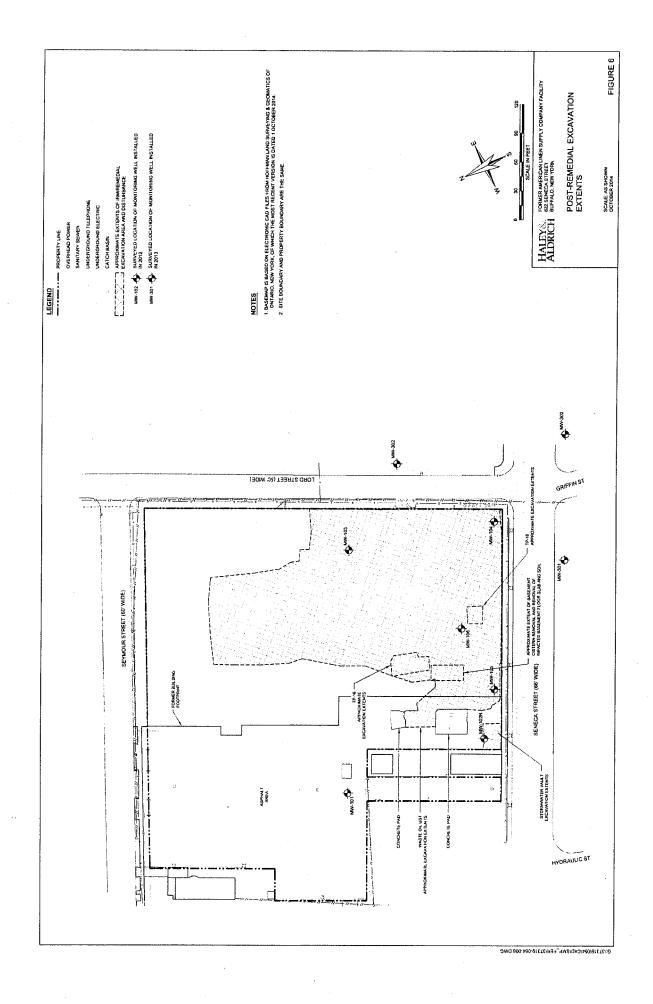
.

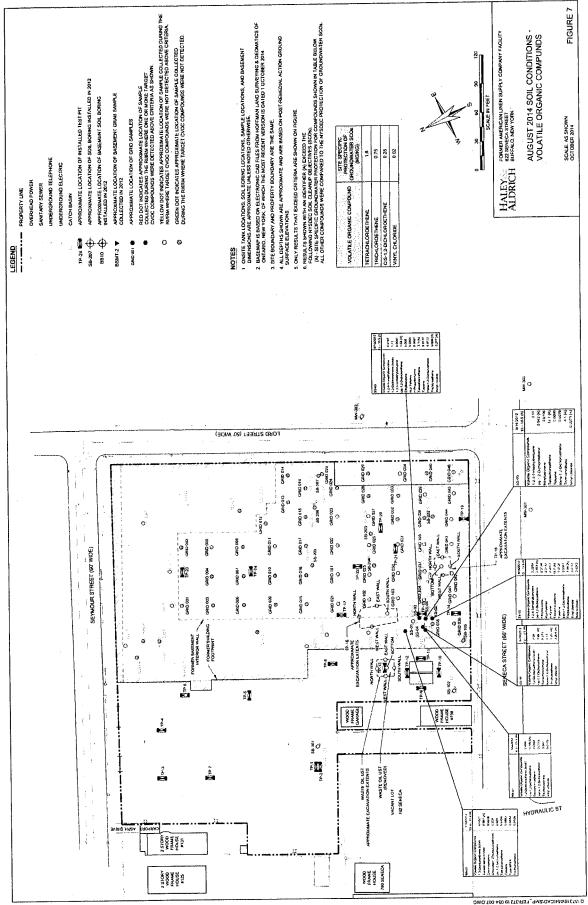
.

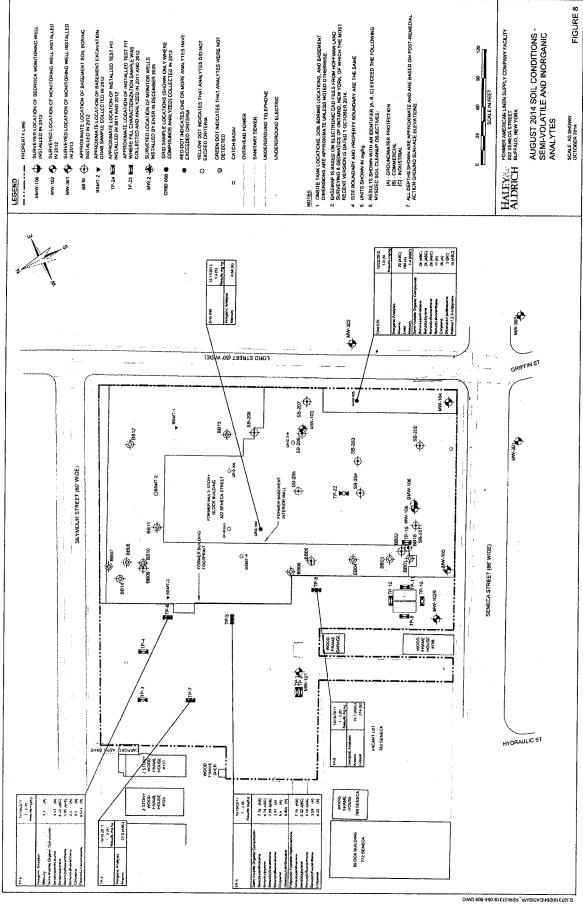


OWG 100-150-01 CT0/HET\_ HM2/0A0/120/01 CT0









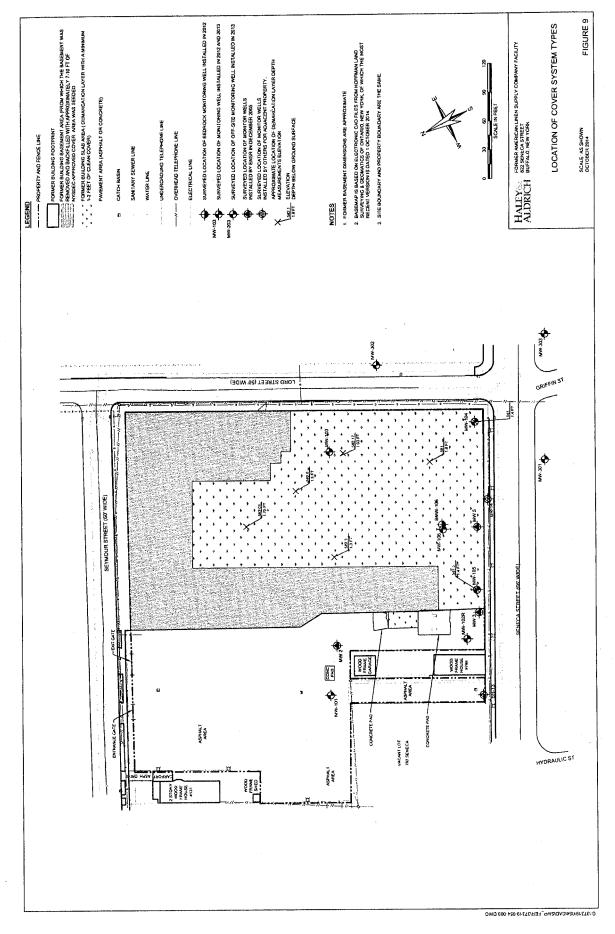
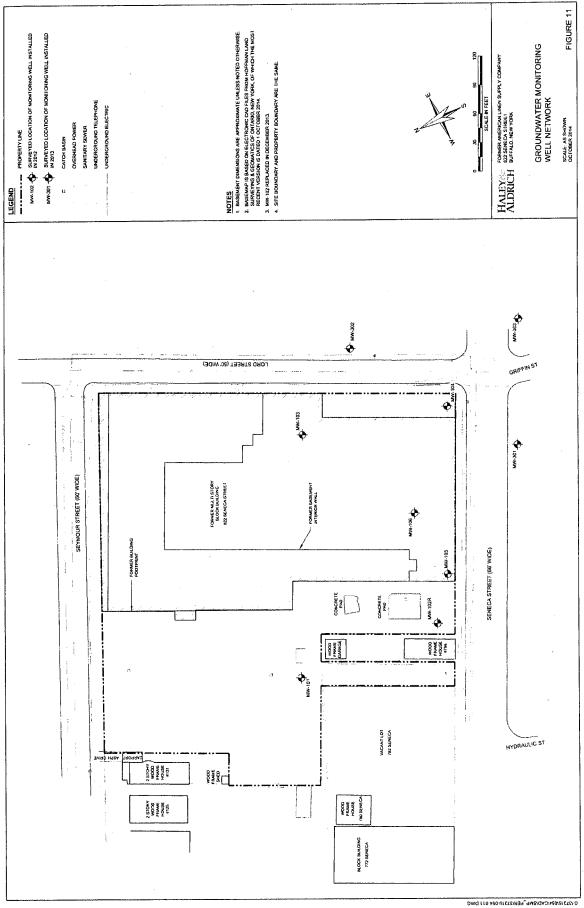
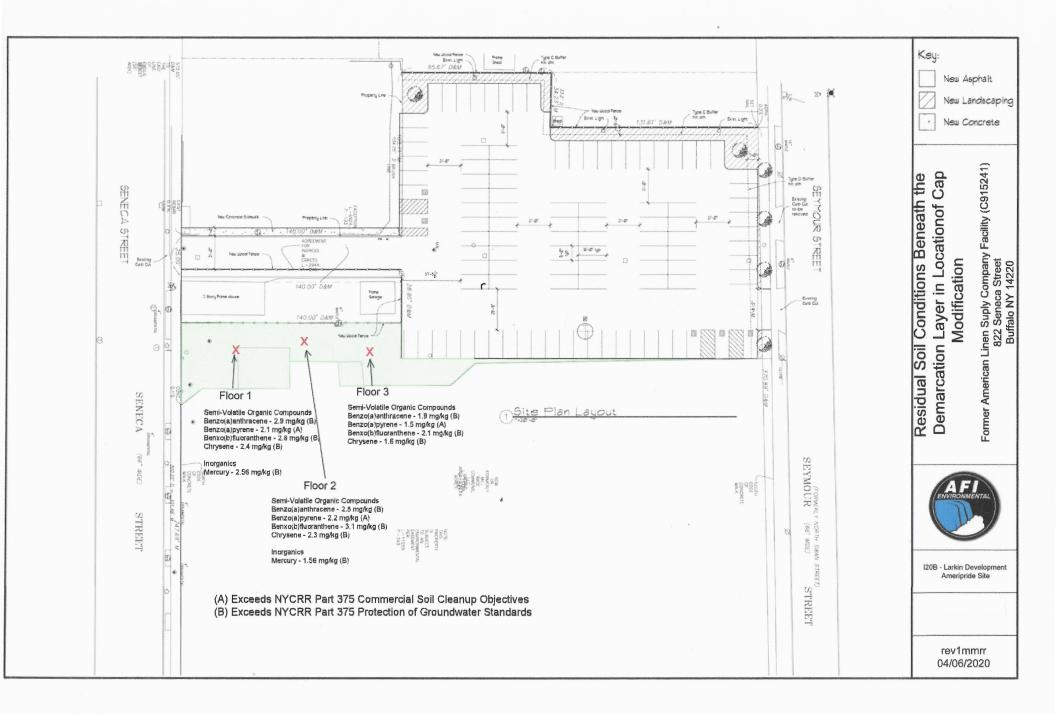


Figure 10 – Map of Route from Site to Hospital is located within the text of the SMP.







# APPENDIX A -

# **ENVIRONMENTAL EASEMENT & METES AND BOUNDS**

#### ERIE COUNTY CLERK'S OFFICE

County Clerk's Recording Page

Return to:

NIXON PEABODY, LLP 50 JERICHO QUADRANGLE STE 300 JERICHO, NY 11753

Party 1: MILL RACE COMMONS LLC

Party 2:

**Recording Fees:** 

RECORDING	\$70.00
COE CO \$1 RET	\$1.00
COE STATE \$14.25 GEN	\$14.25
COE STATE \$4.75 RM	\$4.75
MARKOFF FEE	\$0.50



Book Type: D Book: 11270 Page: 355 Page Count: 10 Doc Type: EASEMENT/RTWY Rec Date: 10/01/2014 Rec Time: 03:51:23 PM 2014199447 Control #: UserID: Donna Trans #: 14157288 Document Sequence Number TT20144488

## Consideration Amount: 0.00

BASIC MT	\$0.00
SONYMA MT	\$0.00
ADDL MT/NFTA	\$0.00
SP MT/M-RAIL	\$0.00
NY STATE TT	\$0.00
ROAD FUND TT	\$0.00

#### Total: \$90.50

STATE OF NEW YORK ERIE COUNTY CLERK'S OFFICE

WARNING – THIS SHEET CONSTITUTES THE CLERK'S ENDORSEMENT REQUIRED BY SECTION 319&316-a (5) OF THE REAL PROPERTY LAW OF THE STATE OF NEW YORK. DO NOT DETACH. THIS IS NOT A BILL.

> Christopher L. Jacobs County Clerk

County: Erie Site No: C915241 Brownfield Cleanup Agreement Index : C915241-03-11

## ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36

OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this <u>22</u><sup>hd</sup> day of <u>September</u>, 20<u>19</u>, between Owner(s) Mill Race Commons, LLC, a New York limited liability company, having an office at 726 Exchange Street, Suite 825, in the City of Buffalo, County of Erie, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 822 Seneca Street in the City of Buffalo, County of Erie and State of New York, known and designated on the tax map of the County Clerk of Erie as tax map parcel numbers: Section 122 Block 27 Lot 1-4, being the same as that property conveyed to Grantor by deed dated January 13, 2014 and recorded in the Erie County Clerk's Office in Liber and Page, Deed Book 11257, Page 343. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 2.917 +/- acres, and is hereinafter more fully described in the Land Title Survey dated December 8, 2010 and revised on June 2, 2014 prepared by Hoffman Land Surveying & Geomatics, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation [10/12]

Environmental Easement Page 1

199447 785-9

established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

**NOW THEREFORE**, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C915241-03-11, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. <u>Purposes</u>. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. <u>Institutional and Engineering Controls</u>. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

# Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv).

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Erie County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining

[10/12]

contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section Division of Environmental Remediation NYSDEC 625 Broadway Albany, New York 12233 Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation

[10/12]

County: Erie Site No: C915241 Brownfield Cleanup Agreement Index : C915241-03-11

# pursuant to Title 36 of Article 71 of the Environmental Conservation

Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved b the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5 the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. <u>Right to Enter and Inspect</u>. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. <u>Reserved Grantor's Rights</u>. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

[10/12]

County: Erie Site No: C915241 Brownfield Cleanup Agreement Index : C915241-03-11

#### 5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. <u>Notice</u>. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C915241 Office of General Counsel NYSDEC 625 Broadway Albany New York 12233-5500

With a copy to:

Site Control Section Division of Environmental Remediation NYSDEC 625 Broadway Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail [10/12]

and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. <u>Recordation</u>. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. <u>Amendment</u>. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. <u>Extinguishment.</u> This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. <u>Joint Obligation</u>. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Mill Race Commons, LLC:				
Ву:	2			
Print Name: Joseph A. Pe	trella			
Vice President Title: <del>Sole-Member</del>	Date:	May	29,	2014

#### **Grantor's Acknowledgment**

# STATE OF NEW YORK

COUNTY OF Eric ) ss:

)

On the  $\underline{M}$  day of  $\underline{M}$ , in the year 20  $\underline{M}$ , before me, the undersigned, personally appeared  $\underline{M}$ ,  $\underline{M}$ , \underline{M},  $\underline{M}$ ,  $\underline$ 

Notary Public - State of New York

Tara Marle Quinn Notary Public- State of New York No. 01QU6291174 Qualified in Erie County My Comm. Expires 10/15/20 THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By:

) ss: )

Rob**er**t W. Schick, Director Division of Environmental Remediation

#### Grantee's Acknowledgment

STATE OF NEW YORK COUNTY OF ALBANY

On the  $22^{44}$  day of  $22^{44}$ , in the year  $20^{14}$ , before me, the undersigned, personally appeared Robert Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and/that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary

David J. Chiusano Notary Public, State of New York No. 01CH5032146 Qualified in Schenectady County Commission Expires August 22, 2016

#### **SCHEDULE "A" PROPERTY DESCRIPTION**

All that tract or parcel of land situate in the city of Buffalo, County of Erie, State of New York, being part of Lot 17, Township 11, Range 8 of the Holland Land Company's Survey, bounded and described as follows:

Beginning at the intersection of west line of Lord Street and the south line of Seymour Street (AKA South Canal Street); thence,

westerly, along the said south line of Seymour street 371.9 feet more or less to a point on said southerly line, said point being on the line between the lands now or formerly of Alba C. Gomez on the west and the lands now or formerly American Linen Supply Company on the east; thence,

southerly on said line and at right angles to Seneca street (AKA Seneca Village Road), 130.9 feet more or less to a point, said point being a corner of said lands; thence,

northerly and parallel to said Seneca Street continuing on the line between said lands 33.2 feet more or less to a point, said point being on the easterly line of the lands now or formerly of Ibrahim Hernandez; thence,

southerly 95.7 feet more or less along the line between the lands of said Hernandez and the lands of said American Linen Supply Company to a point, said point being on the northerly line of the lands now or formerly of Anthony L. Guido Jr.; thence,

easterly and parallel to Seneca Street 103.3 feet more or less on the line between the lands said Guido on the south and the lands of said American Linen Supply Company on the north to a point, said point being a corner of the last mentioned lands; thence,

southerly and at right angles to Seneca Street 140 feet more or less, continuing on the line between the last mentioned lands to a point in the north line of said Seneca Street; thence,

easterly along the north line of said Seneca Street 25 feet more or less to a point on said northerly line, said point being on the line between the lands now or formerly of Luis F. and Rosa A. Rodriguez on the east and said American Linen Supply Company on the west; thence,

northerly and at right angles to Seneca Street 140 feet more or less to a point, said point being a corner of the last mentioned lands; thence, easterly continuing on the line between the last mentioned lands and parallel to Seneca Street 28.8 feet more or less to a point, said point being a corner of last mentioned lands; thence,

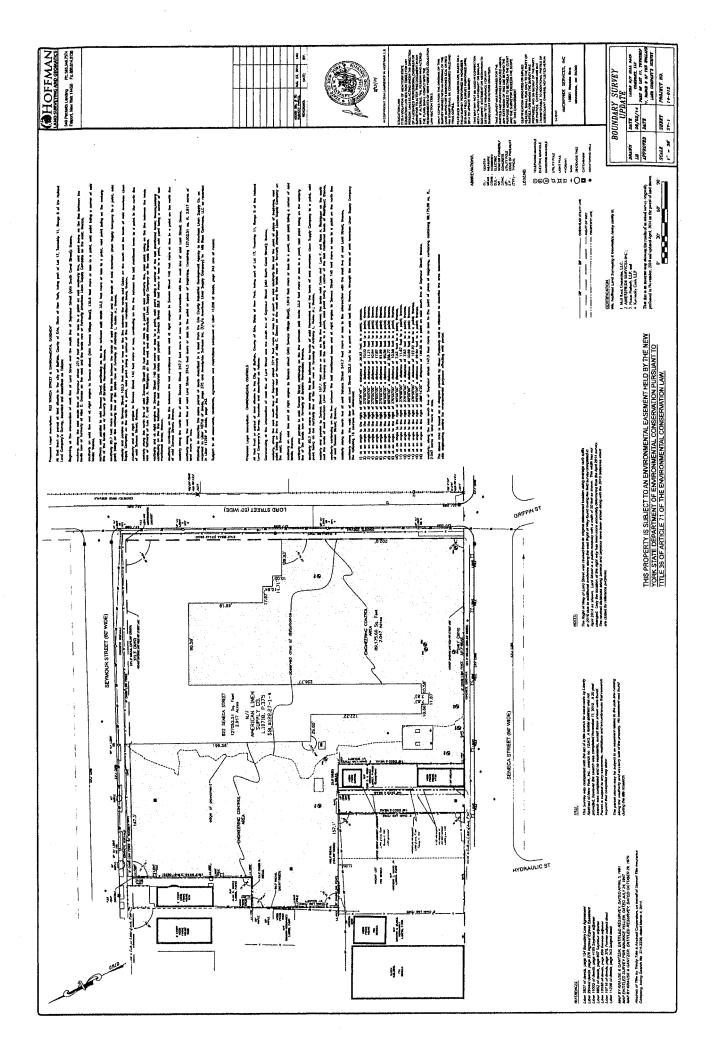
southerly continuing on the line between the last mentioned lands and at right angles to Seneca Street 140 feet more or less to a point on the north line of said Seneca Street; thence,

easterly along the north line of said Seneca Street 247.7 feet more or less to the intersection with the west line of said Lord Street: thence,

northerly along the west line of said Lord Street 374.5 feet more or less to the point or place of beginning. Containing 127,052.51 sq. ft, 2.917 acres of land more or less.

Intending to describe the same parcel of lands described in a deed from the Erie County Industrial Development Agency to American Linen Supply Co. as recorded in Liber 10718 of deeds, page 375 and Ameripride Services Inc. (f/k/a American Linen Supply Company) to Mill Race Commons, LLC as recorded in Liber 11259 of deeds, page 343.

Subject to all easements, covenants, agreements and restrictions contained in Liber 11259 of deeds, page 343 and of record.



# **APPENDIX B**-

# **EXCAVATION WORK PLAN**

Note: The January 2021 NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Guidelines, DER-10, and NYSDOH's current air monitoring procedures must be followed during onsite soil/fill management.

# **B-1 NOTIFICATION**

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site Owner or its representative will notify the Department. Currently, this notification will be made to:

Megan Kuczka Division of Environmental Remediation 270 Michigan Avenue Buffalo, New York 14203-2915 (716) 851-7220 Megan.Kuczka@dec.ny.gov

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control,
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work,
- A summary of the applicable components of this EWP,
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120,
- A copy of the contractor's health and safety plan, in electronic format, if it differs from the HASP provided in Appendix C of this SMP,
- Identification of disposal facilities for potential waste streams,
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

## **B-2 SOIL SCREENING METHODS**

Visual, olfactory and instrument-based soil screening will be performed by a Qualified Environmental Professional during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil. Characteristics of the types of stockpiles are shown in the table below.

Stockpile Characteristics	Reuse onsite without further testing (Section B-7)	May be reused onsite pending analytical testing (Section B-7)	Dispose offsite per applicable regulations and landfill requirements (Section B-4 through B-6)
Material excavated from above the demarcation layer that is not visually impacted with free product, oily material, solid waste, or other evidence of contamination (staining, odor, elevated PID hits).	$\checkmark$		
Material excavated from below the demarcation layer or material excavated from above the demarcation layer with evidence of impact (staining, odor, elevated PID hits)		$\checkmark$	
Material excavated that is visually impacted by oily material <sup>1</sup>			$\checkmark$

**Table B1: Types of Stockpiles and Management Options** 

 If this material is encountered during excavations, additional testing and reporting requirements may be required depending on the quantity and nature of impacted material identified. Refer to Section B-12 below.

#### **B-3 STOCKPILE METHODS**

Stockpiles of presumed impacted material (e.g. from beneath the demarcation layer) will be kept covered at all times with appropriately anchored tarps, or on and beneath poly-sheeting with minimum of 6-mil thickness. If stockpiles are located near drainage wastes, or are larger than can be contained by poly-sheeting, soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced. Soils may also be containerized in appropriate containers (drums, rolloffs, etc.) if quantities warrant such management.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC.

## **B-4 MATERIALS EXCAVATION AND LOAD OUT**

In the event that excavation and load out of materials is required the following will occur (also refer to Section B-5 below):

- A Qualified Environmental Professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.
- The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.
- The presence of utilities and easements on the Site will be investigated by the Qualified Environmental Professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the Site.

B-3

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-site soil tracking.

The Qualified Environmental Professional will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

# **B-5 MATERIALS TRANSPORT OFF-SITE**

In the event that Materials require transport offsite, the following will occur:

- All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.
- Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.
- Truck transport routes will be identified that will: (a) limit transport through residential areas and past sensitive sites; (b) take into account use of city mapped truck routes; (c) minimize off-site queuing of trucks entering the facility; (d) limit total distance to major highways; (e) promote safety in access to highways; and (f) consider overall safety in transport.
- Trucks will be prohibited from stopping and idling in the neighborhood outside the project site.
- Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during site remediation and development.

• Queuing of trucks will be performed on-site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

# **B-6 MATERIALS DISPOSAL OFF-SITE**

All soil/fill/solid waste excavated and removed from the Site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soils will be identified in the preexcavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility) without a beneficial use determination issued by NYSDEC.

# **B-7 MATERIALS REUSE ON-SITE**

#### **B-7.1** Criteria for Onsite Reuse

As noted in Section B-3 above, the following soils may be reused onsite:

• Material excavated from above the demarcation layer that is not visually impacted with free product, oily material, solid waste, or other evidence of contamination (staining, odor, elevated PID hits) may be reused onsite without further testing.

• Material excavated from below the demarcation layer or material excavated from above the demarcation layer with evidence of impact (staining, odor, elevated PID hits) may be reused onsite pending testing results described below.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

#### **B-7.2 Sampling for Reuse Protocol**

Soils that require testing prior to reuse will be tested as described below. If the soil will be disposed offsite, the disposal facility may require different and/or additional analysis. Chemical criteria for on-site reuse of material have been approved by NYSDEC and are listed in Table 1 of the SMP (refer to the Tables section of this SMP). Note that the SCOs listed in Table 1 represent the NYSDEC cleanup criteria as of the date of this SMP and include site-specific cleanup criteria for tetrachloroethene and trichloroethene as approved in the 2014 RAWP. Should those criteria be revised in the future, the most recent available cleanup criteria should be used.

- 1. Sampling will be conducted by a qualified Site Owner representative, consultant, or contractor.
- 2. Each sample will be collected using a decontaminated or new stainless steel, or plastic disposable device (hand trowel, shovel, scoop, hand augers, or other appropriate sampling equipment). To minimize the potential for cross-contamination, disposable sampling equipment will be used if possible. If sample equipment is reused, the equipment will be decontaminated prior to each use using the following procedure:
  - a. Potable water/non-phosphate detergent (i.e. Alconox ) solution wash
  - b. Potable or distilled water rinse

c. Wipe or air dry

- 3. For similarly stockpiled/containerized soils, collect two (2) discrete samples per 1,000 cubic yards of material in laboratory provided samplers for analysis for Volatile Organic Compounds (VOCs) via EPA Method 8260B, Semivolatile Organic Compounds (SVOCs) via EPA Method 8270C and RCRA 8 Metals via EPA Method 6010/7471.
- 4. Immediately upon collection, samples will be labeled and placed in coolers, chilled with ice to approximately 4°C. The sample labels will identify the soil stockpile or container group, sample type, time and date of collection, name of the sampler, and required analyses. Sealed sample coolers will be delivered with accompanying chain of custody documentation to an ELAP-certified laboratory for analysis.
- 5. Based on the results of the sampling:
  - a. If VOC concentrations are below the site-specific protection of groundwater SCOs, and SVOCs and metals are below the commercial use SCOs (Table 1 of the SMP), the soil may be reused onsite above the demarcation layer.
  - b. If VOC concentrations are below the site-specific protection of groundwater SCOs, but SVOCs and/or metals are above the commercial use SCOs (Table 1 of the SMP), the soil may be reused <u>onsite below the demarcation layer.</u>
  - c. If VOC concentrations are above the site-specific protection of groundwater SCOs, <u>the soil must be disposed of offsite</u> per applicable regulations and landfill requirements.

The Qualified Environmental Professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for re-use on-site will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

# **B-8 FLUIDS MANAGEMENT**

All liquids to be removed from the Site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the Site, but will be managed off-site.

Discharge of water generated during large-scale construction activities to surface waters (i.e., a local pond, stream or river) will be performed under a SPDES permit.

# **B-9 COVER SYSTEM RESTORATION**

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the Decision Document. The demarcation layer, consisting of geotextile fabric in the former slab-on-grade area or pavement in the former parking area (refer to Section 2.2.1.1) or equivalent material will be replaced to provide a visual reference to the top of the 'Remaining Contamination Zone', the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this Site Management Plan.

If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the 'Remaining Contamination. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

## **B-10 BACKFILL FROM OFF-SITE SOURCES**

All materials proposed for import onto the Site will be approved by the Qualified Environmental Professional and will be in compliance with provisions in this SMP prior to receipt at the Site. Refer to the table below for appropriate backfill sources and prescreening requirements.

B-8

Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

Material and source	May be used onsite without further testing	May be used onsite pending analytical testing (Section B- 10.1)	May not be used onsite
Commercially purchased bagged topsoil used for landscaping purposes.	$\checkmark$		
Gravel, rock, or stone (non-soil) consisting of virgin material from a permitted mine or quarry.	$\checkmark$		
Recycled concrete or brick from a DEC registered C&D processing facility <sup>1,2</sup> .	$\checkmark$		
Soil or sand imported from a virgin mine or pit.		$\checkmark$	
Material (including gravel, rock, stone, sand, soil, etc.) from sources other than a virgin mine or pit.		$\checkmark$	
Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites.			$\checkmark$
Material that meets the definition of solid waste.			$\checkmark$

# Table B2: Types of Backfill Sources Pre-Screening Requirements

1. Recycled material must conform to the requirements of Section 304 of the New York State Department of Transportation *Standard Specifications Construction and Materials Volume 1 (2002)*.

2. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

# **B-10.1 Sampling Protocols for Offsite Backfill Sources**

All imported soils that require testing will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are considered the lower of the protection of groundwater SCOs and commercial use SCOs and are listed in Table 1 of the SMP. The SCOs listed in Table 1 of the SMP represent the most recent iteration NYSDEC soil criteria prepared as of the date of this SMP. Should those soil criteria be revised in the future, the most recent available cleanup criteria should be used.

For the sources listed above that require analytical testing, the testing shall consist of the following in accordance with the May 2010 DER-10:

Target Compound List VOCs (EPA Method 8276B) Target Compound List SVOCs (EPA Method 8270C) Target Analyte List Metals (EPA Method 6010/7471) PCBs & Pesticides (EPA Method 8081)

Testing shall be performed by an ELAP-certified laboratory. The frequency of sampling will depend on the source of the material as follows:

- <u>Soil or sand from a virgin mine or pit</u>: Two (2) discrete samples for VOCs and one (1) composite sample for SVOCs, inorganic compounds, PCBs, and pesticides from the initial 100 cubic yards of material, only.
- <u>Materials from other sources</u>: Sample at a frequency based on the amount of material per the table below or at a frequency agreed upon with the NYSDEC.

B-11

# Table B3: Recommended Sampling Frequency for Imported Materials Requiring Testing

Soil Quantity (cubic yards)	<b>VOCs</b> (discrete samples)	SVOCs, Inorganics, PCBs & Pesticides (composite samples <sup>1</sup> )	
0-50	1	1	
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	4	2	
500-800	6	2	
800-1,000	7	2	
>1,000	Add an additional 2 VOC and 1 composite for each additional 1,000 cubic yards or consult the NYSDEC.		

**1.** 3-5 discrete samples from different locations in the fill being provided will comprise a composite sample for analysis.

al de la constitución de la constit

# **B-11 STORMWATER POLLUTION PREVENTION**

If construction or excavation is performed that exceeds the criteria for construction-related stormwater pollution prevention control, during the duration of construction and until cover is restored, Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

# **B-12 CONTINGENCY PLAN**

If underground tanks or other previously unidentified contaminant sources are found during post-remedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for full a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the periodic reports prepared pursuant to Section 5 of the SMP.

# **B-13 COMMUNITY AIR MONITORING PLAN**

The Contractor is required to perform air monitoring for its own activities, in conformance to the Contractor's HASP. In addition, the Contractor shall follow the community air monitoring procedures set forth in the NYSDOH Generic Community Air Monitoring Plan (CAMP), which is attached to this document as Appendix D.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

## **B-14 ODOR CONTROL PLAN**

This odor control plan is capable of controlling emissions of nuisance odors offsite. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

Reasonable and customary means will be employed to prevent on- and off-site nuisances. These measures may include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

# **B-15 DUST CONTROL PLAN**

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

• Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.

- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

# **B-16 OTHER NUISANCES**

If needed, a plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work. A plan will be developed and utilized by the contractor for all remedial work to ensure compliance with local noise control ordinances.

# APPENDIX C -

# SAMPLE HEALTH & SAFETY PLAN

# HALEY&z ALDRICH



# HALEY & ALDRICH, INC. SITE-SPECIFIC HEALTH & SAFETY PLAN

For

Former American Linen Supply Co Facility

Site Management

Buffalo, New York

Project/File No. <u>37319-054</u>

Prepared by: Claire L. Mondello

Date: <u>8/27/2014</u>

Revised by: Janice D. Szucs

Date: 9/14/2021

APPROVALS: The following signatures constitute approval of this Health & Safety Plan

Margaret B. Holt\_- Local H&S Coordinator

Date

Jance D. Szucs - Site Project Manager

Date

Note: This HASP has been developed for Haley & Aldrich purposes only and is not for use by others.





# TABLE OF CONTENTS

1.	PROJECT INFORMATION AND EMERGENCY RESOURCES	1
2.	SITE DESCRIPTION	5
3.	PROJECT TASK BREAKDOWN	7
4.	HAZARD ASSESSMENT	8
5.	PROTECTIVE MEASURES	19
6.	MONITORING PLAN AND EQUIPMENT	21
7.	DECONTAMINATION AND DISPOSAL METHODS	19
8.	CONTINGENCY PLANNING	22
9.	HEALTH & SAFETY PLAN ACKNOWEDGMENT FORM	24
10.	PRE-JOB SAFETY CHECKLIST	25
APPE	ENDIX A - HASP AMENDMENT FORM	

**APPENDIX B – ISSUANCE AND COMPLIANCE, SITE SAFETY OFFICER ROLES AND RESPONSIBILITIES, AND TRAINING REQUIREMENTS** 

Page i

Note: This HASP has been developed for Haley & Aldrich purposes only and is not for use by others.



1.



Site Specific Health & Safety Plan Former American Linen Supply Co Facility- Site Management September 2021

Project Name: Former American Lir Facility Site Management Plan	nen Supply Co	H&A File No.: 127836
Location: 822 Seneca Street, Buffal	o, New York	L,,,,,,,
Client/Site Contact:	Client: Becky Armbru Site: Brad Glass; (716	
H&A Project Manager: Phone Number: Emergency Phone Number:	Janice Szucs 585.321.4211 585.315.4761	
Local Health & Safety Coordinator: Emergency Phone Number:	Margaret Holt (585) 321-4214 (585) 721-2426	
<b>Nearest Hospital:</b> Address: (see map on next page) Phone Number:	Buffalo General Hospi 100 High Street Buffalo, NY 14210 (716) 859-5600	tal
Nearest Occ. Health Clinic: http://www.talispoint.com/liberty/ext/ Address: (see map on next page) Phone Number	Pulse Occupational Me 7616 Transit Road Buffalo, New York 142 716-204-2273	
Liberty Mutual Claim Policy	Updated annually	
Emergency Response Number:	911	· · · · · · · · · · · · · · · · · · ·
Other Local Emergency Response Number:	911	
Other Ambulance, Fire, Police, or Environmental Emergency Resources:	911	· · · · ·

**PROJECT INFORMATION AND EMERGENCY RESOURCES** 

#### Work Scope:

This Site-Specific Health and Safety Plan addresses the health and safety practices and procedures that will be employed by all Haley & Aldrich employees participating in the site characterization of the Project Site. This plan is based on an assessment of the site-specific health and safety risks available to Haley & Aldrich and Haley & Aldrich's experience with other project sites. The scope of work for the Site Characterization includes:

## Task #1: Site-Wide Groundwater Sampling

Site-wide groundwater sampling will occur at onsite wells. Static water levels will also be collected.

## Task #2: Excavation Monitoring (if needed):

Note: This HASP has been developed for Haley & Aldrich purposes only and is not for use by others.





If needed, oversight will be provide to screen soils beneath the demarcation layer during excavations for future development. Activities will include screening with a PID, collecting soil characterization samples for reuse and/or disposal, and conducting community air monitoring.

#### Task #3: Monitoring Well Closure, Maintenance, and Repair (if needed)

If during routine monitoring, wells are identified that are no longer functioning, those wells may be repaired (e.g. risers cut, new covers, etc.) or replaced. If a well is no longer needed, it will be decommissioned.

#### Task #4: Offsite SVI Investigation (if needed)

A vapor intrusion investigation consisting of a product inventory, installation of a sub-slab vapor point, 24 hour sampling of sub-slab vapor, indoor air, and outdoor air will be conducted at the property at 798 Seneca Street, adjacent to the subject site if requested by the NYSDEC.

#### Subcontractor(s) to be involved in on-site activities:

Firm Name	Work Activity
Excavation Contractor (TBD)	Site Excavations
Drilling Contractor (TBD)	Well repair, install, decommissioning

Projected Start Date: January 2015

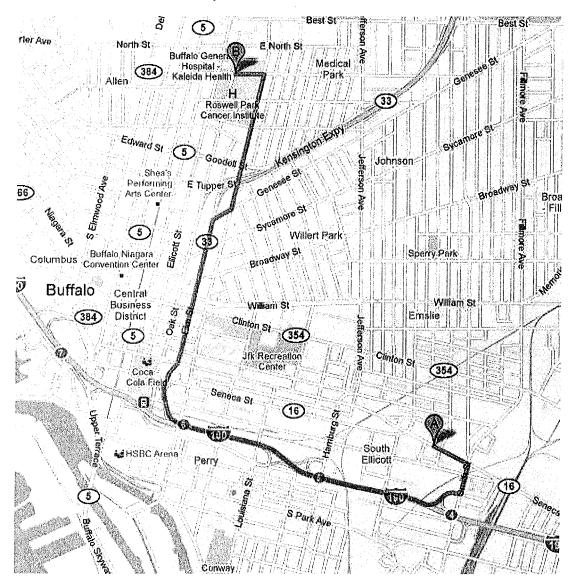
Projected Completion Date: <u>No Completion Date</u>

Estimated Number of Days to Complete Field Work: Varying number of days per year





### **Directions to the Nearest Hospital:**



Note: This HASP is developed for Haley & Aldrich purposes only and not for use by others.





822 Seneca St Buffalo, NY 1421

Buffalo, NY 14210

	1. Head southeast on Seneca St toward Lord St	
		0-2 mi
j~>	2. Take the 2nd right onto Smith St	
		0-1_mi
Å	3. Turn right to merge onto I-190 N toward Niagara Falls	
		t 4 mi
Ptr.	4. Take exit 6 toward Elm St	
		0 2 mi
17	5. Slight right at Carroll St/Center St/Elm St	
		6.2 mi
r÷	6. Turn right at Genesee St	
-	· · · · · · · · · ·	0.1 mi
*7	7. Take the 1st left onto Michigan Ave	
		0.8 mi
-	8. Turn left at High St	
-	-	0.1 mi
•	Kaleida Health-Buffalo General Division	
1	100 High Street	

Buffalo, NY 14203





# 2. SITE DESCRIPTION

#### Site Classification:

🔽 Industrial	Commercial	ſ <sup>−</sup> Other
L		

### **General Description:**

The Site is located at 822 Seneca Street in the City of Buffalo, Erie County, New York. The Site is identified on the City of Buffalo tax maps as the parcel with section 122.27, block 1, lot 4, and is approximately 2.91 acres. The Site is located on the west side of Lord Street and bound to the north by Seymour Street and the south by Seneca Street, and is approximately one mile north of the Buffalo River.

AmeriPride Services, Inc. owned the property from approximately 1978 (formerly as American Linen Supply Company) until January 2014, when it was sold to Mill Race Commons, LLC. The site was most recently used as an industrial dry cleaner/launderer. The site was formerly developed with an industrial building that was demolished in 2012. The Site is located in an urban area of mixed industrial, commercial land use. The Site is currently zoned for light industrial use.

#### Project Scope:

The site has undergone investigation and remediation under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) and is currently under site management. Site management activities include routine groundwater monitoring, routine site inspections, excavation monitoring and soil sampling as needed for future development, and indoor air/sub-slab vapor testing if needed based on changed site conditions.

### **Overview of Hazards:**

Potential hazards include the following:

- Excavations (hazards from heavy equipment and falling)
- Extreme weather
- Heavy equipment
- Utilities
- Fumes & Dust
- Chemical hazards from onsite contamination
- Noise
- Entering properties with unknown occupants (adjacent rental property)

Note: This HASP is developed for Haley & Aldrich purposes only and not for use by others.





Site Status: Indicate current activity status and describe operations at the site.

☐ Active

Inactive

□ Partially active

Other

Site Plan:

Is a site plan or sketch available?

## Work Areas:

Site management activities are site-wide with the exception of potential indoor air/sub-slab vapor sampling which would occur at the adjacent property located at 798 Seneca Street.





## PROJECT TASK BREAKDOWN

List and describe each distinct work task below.

3.

Task No.	Detailed Task Description	Employee(s)	Work Date(s) or Duration
1	Groundwater Monitoring	TBD	1 week per event
2	Excavation Monitoring and Soil Testing	TBD	As needed
3	Monitoring Well Repair, Install, Decommissioning	TBD	As needed
4	Sub-slab Vapor/Indoor Air Testing	TBD	3 days per event

Note: This HASP is developed for Haley & Aldrich purposes only and not for use by others.





		(2) Some and the second state of the second	
· · · · · · · · · · · · · · · · · · ·			
		ASSESSMENT	
· · · · ·	INALAND.	MODEODIVIEIVI	

Safety Data Sheets (SDS) of hazardous materials used during the execution of work shall be available on site. SDSs are required for chemicals used to prepare samples, calibration gases, etc. SDSs are not required for waste materials.

#### Chemical Hazards:

Does chemical analysis data indicate that the site is contaminated?  $\overrightarrow{V}$   $\overrightarrow{V}$   $\overrightarrow{V}$ 

Indicate the potential physical state of the hazardous materials at the site.

V Liquid V Solid/Particulate

Indicate the anticipated or actual class of compounds at the site.

☐ Asbestos	ল Inorganics
BTEX	/ <sup>™</sup> Pesticides
Chlorinated Solvents	C Petroleum products
lữ Heavy Metals	☞ Other PAHs

## Impacted Environments:

Indicate media in which contamination is expected.

I ⊂ Air	Groundwater
V Soil	☐ Sediment

☐ Surface water

C Other Specify

Note: This HASP is developed for Haley & Aldrich purposes only and not for use by others.





## Estimated concentrations:

Indicate medium of major chemicals expected to be encountered by onsite personnel.

Work Activity Groundwater Monitoring	Media GW	Chemical Chlorinated VOCs	Anticipated Concentration ND – 5 ppm
	A	VOCs	ND – 25,000 ug/m3
Excavation Monitoring and Soil Testing	SO GW A	Chlorinated VOC PAHs & Metals Chlorinated VOCs VOCs	ND – 100 ppm ND – 1000 ppm ND – 5 ppm ND – 25,000 ug/m3
Monitoring Well Repair, Install, Decommissioning	GW SO	Chlorinated VOCs Chlorinated VOCs PAHs	ND – 1000 ppb ND – 100 ppm ND – 150 ppm
Sub-slab Vapor/Indoor Air Testing	A	VOCs	ND – 25,000 ug/m3

(Media key: A = Air; GW = Groundwater; SW = Surface Water; SO = Soil; SE = Sediment)

## Chemicals of Concern:

**Trichloroethylene (TCE)** is a colorless, nonflammable, non-corrosive liquid has a "sweet" odor characteristic of some chlorinated hydrocarbons.

The compound is incompatible with strong caustics, it reacts with aluminum when acidic, and it is incompatible with active metals - barium, lithium, sodium, magnesium, and titanium. Decomposition of TCE, due to contact with hot metal or ultraviolet radiation, forms products including chlorine gas, hydrogen chloride, and phosgene. Dichloroacetylene may be formed from the reaction of alkali with TCE.

The Cal-OSHA PEL for TCE is 25 PPM as an 8-hour TWA; an acceptable ceiling concentration of 300 PPM; and a STEL of 200 PPM. The OSHA PEL for TCE is 100 ppm as an 8-hour TWA; an acceptable ceiling concentration of 200 ppm; and an acceptable maximum peak ceiling of 300 ppm for no more than 5 minutes in any 2-hour period. The standard routes of entry in the body are through inhalation, percutaneous absorption, ingestion, skin and eye contact. The points of attack are the respiratory system, heart, liver, kidneys, central nervous system and skin.

Exposure to TCE vapor may cause irritation of the eyes, nose, and throat. The liquid, if splashed in the eyes, may cause burning irritation and damage. Repeated or prolonged shin contact with the liquid may cause dermatitis. Acute exposure to TCE depresses the central nervous system exhibiting such symptoms as headache, dizziness, vertigo, tremors, nausea and vomiting, irregular heart beat, sleepiness, fatigue, blurred vision, and intoxication similar to that of alcohol. Unconsciousness and death have been reported. Alcohol may make the





symptoms of TCE overexposure worse. If alcohol has been consumed, the overexposed worker may become flushed. TCE addiction and peripheral neuropathy have been reported.

## Tetrachloethylene (PCE)

Tetrachloroethylene (PCE) is a colorless, nonflammable liquid with a mild, chloroform-like odor.

PCE is incompatible with strong oxidizers and metals such as lithium, beryllium and barium, caustic soda, sodium hydroxide, and potash. Decomposition of PCE, due to fire, forms products including hydrogen chloride, and phosgene.

The OSHA PEL for PCE is 100 ppm as an 8-hour TWA; an acceptable ceiling concentration of 200 ppm; and an acceptable maximum peak ceiling of 300 ppm for no more than 5 minutes in any 3-hour period. The standard routes of entry in the body are through inhalation, percutaneous absorption, ingestion, skin and eye contact. The points of attack are the respiratory system, heart, liver, kidneys, central nervous system, eyes, and skin.

Symptoms that may occur as a result of exposure to PCE include irritation to the eyes, skin, nose, and throat; respiratory system distress; nausea; flushed face and neck; incoordination; headache; drowsiness; skin erythema; and liver damage.

#### 1,1 and 1,2-Dichloroethylene (1,1-DCE; 1,2-DCE)

1,1 and 1,2-Dichloroethylene (1,1-DCE; 1,2-DCE) is a colorless, class IB flammable liquid with a slightly acrid, chloroform-like odor.

1,1 and 1,2-DCE is incompatible with strong oxidizers, strong alkalis, potassium hydroxide, and metals such as copper, and contains inhibitors to prevent polymerization.

The OSHA PEL for 1,2-DCE is 200 ppm as an 8-hour TWA. There is no OSHA PEL for 1,1-DCE. The 8-hour TWA for 1,1-DCE is 1.0 ppm. The standard routes of entry in the body are through inhalation, ingestion, skin and eye contact. The points of attack are the respiratory system, central nervous system, and eyes.

Symptoms that may occur as a result of exposure to 1,1 and 1,2-DCE include irritation to the eyes; respiratory system distress; central nervous system depression.

#### Vinyl Chloride (VC)

Vinyl Chloride (VC) is a colorless, liquid or flammable gas with a pleasant odor at high concentrations.

VC is incompatible with oxidizers, peroxides, and metals such as copper, aluminum, iron and steel. VC polymerizes in air, sunlight, or heat unless it is stabilized by inhibitors such as phenol. It attacks iron and steel in the presence of moisture.

The OSHA PEL for VC is 1 ppm as am 8-hour TWA, and an acceptable ceiling of 5 ppm in a 15 minute period. The standard routes of entry in the body are through inhalation, skin and eye





contact. The points of attack are the respiratory system, central nervous system, liver, blood, and lymphatic system.

Symptoms that may occur as a result of exposure to VC include weakness and exhaustion; abdominal pain; gastrointestinal bleeding; enlarged liver; and pallor or cyanosis of the extremities. Liquid VC can cause frostbite. VC can also cause liver cancer.

#### PAHs

Polycyclic aromatic hydrocarbons (PAHs) are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat. PAHs are usually found as a mixture containing two or more of these compounds, such as soot.

Some PAHs are manufactured. These pure PAHs usually exist as colorless, white, or pale yellow-green solids. PAHs are found in coal tar, crude oil, creosote, and roofing tar, but a few are used in medicines or to make dyes, plastics, and pesticides.

PAHs, as a group, are strongly hydrophobic, and therefore sorb to organic-based soil particles. Exposures to elevated levels of PAHs in the workplace could occur in coking, coal-tar, and asphalt production plants; smokehouses; and municipal trash incineration facilities.

Sorption of PAHs to soil and sediments increases with increasing organic carbon content and with increasing surface area of the sorbent particles. Lower molecular weight PAHs may also volatilize from soil. Due to this strong sorption to soil, PAHs do not tend to dissolve easily into and migrate with groundwater. Exposure from affected soil would tend to occur as a result of direct contact with affected soil or inhalation/ingestion of windborne affected soil.

#### Arsenic

The Occupational Safety and Health Administration has set limits of 10 microgram arsenic per cubic meter of workplace air (10  $\mu$ g/m3) for 8 hour shifts and 40 hour work weeks. Several studies have shown that inorganic arsenic can increase the risk of lung cancer, skin cancer, bladder cancer, liver cancer, kidney cancer, and prostate cancer. The World Health Organization (WHO), the Department of Health and Human Services (DHHS), and the EPA have determined that inorganic arsenic is a human carcinogen.

Breathing high levels of inorganic arsenic can give you a sore throat or irritated lungs. Ingesting high levels of inorganic arsenic can result in death. Lower levels of arsenic can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of "pins and needles" in hands and feet.

#### Lead

The Occupational Safety and Health Administration (OSHA) limits the concentration of lead in workroom air to 50 µg/cubic meter for an 8-hour workday. Lead can affect almost every organ and system in your body. The most sensitive is the central nervous system, particularly in children. Lead also damages kidneys and the immune system. The effects are the same whether it is breathed or swallowed. Exposure to lead is more dangerous for young and unborn children. Unborn children can be exposed to lead through their mothers. Harmful effects include





premature births, smaller babies, decreased mental ability in the infant, learning difficulties, and reduced growth in young children. These effects are more common after exposure to high levels of lead. In adults, lead may decrease reaction time, cause weakness in fingers, wrists, or ankles, and possibly affect the memory. Lead may cause anemia, a disorder of the blood. It can cause abortion and damage the male reproductive system. The connection between these effects and exposure to low levels of lead is uncertain.

#### Mercury

Mercury vapor is highly toxic via this route. Causes severe respiratory tract damage. Symptoms include sore throat, coughing, pain, tightness in chest, breathing difficulties, shortness of breath, headache, muscle weakness, anorexia, gastrointestinal disturbance, ringing in the ear, liver changes, fever, bronchitis and pneumonitis. Can be absorbed through inhalation with symptoms similar to ingestion. May cause burning of the mouth and pharynx, abdominal pain, vomiting, corrosive ulceration, bloody diarrhea. May be followed by a rapid and weak pulse, shallow breathing, paleness, exhaustion, tremors and collapse. Delayed death may occur from renal failure. Gastrointestinal uptake of mercury is less than 5% but its ability to penetrate tissues presents some hazard. Initial symptoms may be thirst, possible abdominal discomfort. Causes irritation and burns to skin. Symptoms include redness and pain. May cause skin allergy and sensitization. Can be absorbed through the skin with symptoms to parallel ingestion. Causes irritation and burns to eyes. Symptoms include redness, pain, and blurred vision; may cause serious and permanent eye damage. Chronic exposure through any route can produce central nervous system damage. May cause muscle tremors, personality and behavior changes. memory loss, metallic taste, loosening of the teeth, digestive disorders, skin rashes, brain damage and kidney damage. Can cause skin allergies and accumulate in the body. Repeated skin contact can cause the skin to turn gray in color. A suspected reproductive hazard; may damage the developing fetus and decrease fertility in males and females. Persons with nervous disorders, or impaired kidney or respiratory function, or a history of allergies or a known sensitization to mercury may be more susceptible to the effects of the substance.

The OSHA Acceptable Ceiling Concentration for mercury and mercury compounds: 0.1 mg/m3 (TWA), skin contact is a parameter in determining exposure for mercury.





TABLE 1 OCCUPATIONAL EXPOSURE LIMITS (CONCENTRATIONS IN AIR)

(CIRCLE CONTAMINANTS OF CONCERN, WRITE ADDITIONAL CONTAMINANTS AND EXPOSURE ON LAST PAGE)

CHEMIGAL	ROUTES OF	IDLH	Celling	STEL	PEL	TLV	REL	PID (IP eV)	FID	ODOR THRES- HOLD	IRRITATION THRESHOLD	ODOR DESCRIPTION
					VAPORS	& GASES						
Acatone	R, I, C	2500	•	750 JACOIN	1000	500	250	9.69	60	13	•	fragrent, mint-li
Ammonia	R, I, C	300		35 INOSH ACCIM	50	25	25	10.18**	-	0.5-2	10	Pungent suffoca
Benzene	R,A,I,C	Ca [500]	· · ·	1 (MODER): 2.5 (ACOPY	1	0.5	0.1	9.24	150	4.68	<u> </u>	odor Solvent, aroma
Carbon tetrachloride (Tetrachloromethane)	R,A,I,C	Ca [200]	20 [instantaneous] 200 [5 min peak in any 4	2 (мозн. кониці 10 (леан)	2	5	Са	11.47**	10	50	-	Sweet, pungen ether-like
Chlorobenzene	R,I,C	1000			75	10	-	9.07	200	0.68	· · ·	Almond-like
Chloroform	R,I,C	Ca (500)	50 <sub>(OSHA)</sub>	2 (NOSH CO-min)	1	10	1 .	11.42**	65	50		Sweet, pleasa
o-Dichlorobenzene	R,A,I,C	200	50 INIOSH, OSHA			25		9.06	50	0.3	E 20-30	Pleasant, aroma
p-Dichforobenzene	R,A,I,C	Ca [150]			75	10	Ca	8.00		0.18	E 80-160	Distinct, aroma
Dichlorodifluoromethane	R,C	15000	<u>-</u>		1000	1000	1000	8.98	15	0.10	2 80-160	mothball-like Ether-like when
(Freon 12)				· · · · · · · · · · · · · · · · · · ·	1							very high conc Distinct, chlorofo
1,1-Dichloroethane	R,I,C	3000	· ·	•	100	100	100	11.06**	80	200		like
1,2-Dichloroethane (Ethylene dichloride)	R,I,A,C	Ca (50)	100 <sub>joshaj</sub>	2 ppm <sub>(NIOSH)</sub> ; 200 ppm <sub>(OSHA, 5-min max peak is any 3 percent</sub>	50	10	1	11.05**	80	68	-	Chloroform-lik
1,1-Dichloroethylene (1,1- DCE, Vinylidene chloride)	R,A,I,C	Ca (ND)	-	-		5	Ca	10.00**	40	190	-	Chloroform-lik
1.2-Dichloroethylene	R,I,C	1000	-		200	200	200	9.65	50	0.85		Bitter, chlorofor like
Ethanol	R,I,C	3300	-	-	1000	1000	1000	10.47**	25	10	· ·	Weak, ether-lik
Ethylbenzene	R,I,C	800	· ·	125 MOSH ACOIN	100	100	100	8.76	100	2.3	E 200	wine-like Aromatic
Ethylene Glycol	R,I,C	ND	50 <sub>(Обна)</sub> 100 mg/m <sup>3</sup>	-	1	-		-	-			Odoriess
Formaldehyde	I,C	Ca (20)	0.1 (1005H, 15min) 0.3 (ACCUHI	2	0.75		Ca [0.016]	10.88**	•	0.83	-	Pungent, suffocating
<b>Basoline</b>	R,I,A,C	Ca (ND)	-	500 (OSHA: ACOIN	300	300		· ·	-	•	E 0.5	Petroleum-like
n-Hexane	R,I,C	. 1100	•	•	500	50	50	10.18	70	130	E.T 1400-1500	Gasoline-like
lydrogen Cyanide	R,A,I,C	50	4.7 [ACGIH SKA]	4.7 (NOSH - SKA)	10 <sub>[skin]</sub>		-			0.58	-	Bitter almond
lydrogen peroxide	R,I,C	75	-	•	1	1	1	10.54**	-	•	•	Sharp
dethanol	R,I.A,C	6000		250 (NOSH ACGIN IN)	200	200 [skin]	200	10.84**	12	1000	-	Pungent
Methyl Ethyl Ketone Peroxide	R,I,C	ND	0.2 INOSH ACGINI 0.7 (OSHA)	-	•		-	•	•	-	•	Characteristic oc
Methyl Chloroform (1,1,1- CA)	R,I,C	700	350 (MOSH, 15min)	450 <sub>(ACGIH)</sub>	350	350	Ca	11.00**	105	20-100	•	Chloroform-like
lethylene Chloride Dichloromethane, lethylene dichloride)	R,I,A,C	Ca (2300)		125	25	50	Ca	11.32**	100	25-50	E 5000	Chloroform-like
Nethyl Mercaptan	R,C	150	10 [OSHA] 0.5 [KOSH 15-min]		•	0.5	-	9.44	•	•	-	Garlic, rotten cabbage
MBK (Hexone)	R,I,C	500	·	75 INOSH ACGIN	100	50	50	9.30	-		•	Pleasant
laptha (coal tar)	R,I,C	1000	•	-	100	400	100	· ·	·	•		Aromatic
laphthalene	R,A,I,C	250		15 INOSH ACGIN	10	10	10	8.12	•	0.3	E 15	Mothball-like
otane	R,I,C	1000	385 (MOSH, 15-min)	-	500	300	75	9.82	80	48	•	Gasoline-like
entachlorophenol	R,A,I,C	2.5 mg/m <sup>3</sup>		•	0.5 mg/m <sup>3</sup> įskinį	0.5 mg/m <sup>3</sup> <sub>[skn]</sub>	0.5 mg/m <sup>3</sup> [skin]	•	•	•	- 1	Pungent when he benzene-like
henol	R,A,I,C	250	15.6 (NOSH, 15-min)	-	5 [skin]	5 (skin)	5 [sidn]	8.50	•	0.04	E.N.T. 68	Sweet, acrid
ropane	R,C	2100	•	•	1000	1000	1000	11.07**	80	1600	-	Odorless (commonly smel foul due to addition for odor detection
toddard Solvent (Mineral prits)	R,CI,I	20000 mg/m <sup>3</sup>	1800 mg/m <sup>3</sup>	•	500	100	350 mg/m <sup>3</sup>	-	•	1	E 400	Kerosene-like
tyrene	R,I,A,C	700	200 <sub>(ОЗНА)</sub>	100 (нгозн); 600 (озна. 5-тіп тахреакія алу 3 hours): 40 гастин	100	20	50	8.40	85	0.047	E 200-400	Sweet, floral
and the second s	R,I,A,C	Ca (100)	•	· .	5 <sub>(skin)</sub> .	1 <sub>(skin)</sub>	1 <sub>(skin)</sub>	11.10**	100	1.5	-	Pungent, chloroform-like
etrachloroethylene Perchloroethylene, Perc, SE)	R,I,A,C	Ca (150)	200 <sub>(OSHA)</sub>	300 (OSHA, 6-min max peak in any 3 hours), 100 (ACG) H	100	25	Ca	9.32	70	4.68	N.T513-690	Chloroform-like
oluene	R,A,I,C	500	300 <sub>(DSHA)</sub>	150 (NOSHA 500 (OSHA, 10-min max peak)	200	50	100	8.82	110	2.14	E300-400	Sweet, pungent, benzene-like
richloroethylene (TCE)	R,I,A,C	Ca (1000)	200 <sub>(ОЗНА]</sub>	300 JOSHA, 5-min max peak in any 2-boursti, 100 JAC OH	100	50	Ca	9.45	70	21.4	-	Chloroform-like
2,3-Trimethylbenzene	R,I,C	ND	-	-		-	25	8.48	•	·		Distinctive, aromatic
2,4-Trimethylbenzene	R,I,C	ND		-	•	-	25	8.27	-			Distinctive, aromatic
	R,I,C	ND			-		25	8.39				Distinctive,
3,5-Trimethylbenzene												
		800			100	20	100			200	E.N 200	Pipe-like
urpentine	R,A,I,C R,C	800 Ca (ND)	5 <sub>(05HA, 15-min)</sub>		100	20	100 Ca	9.99	•	200	E.N 200	Pine-like Pleasant odor at high concs.





CHEMICAL	ROUTES OF EXPOSURE	IDLH	Ceiling	<b>STEL</b>	PEL	TLV	REL	PIO (IP eV)	FID	ODOR THRES- HOLD	IRRITATION THRESHOLD	ODOR DESCRIPTION
			DUST	'S, MISTS, FUI	MES, AND M	ISCELLANE	OUS COMP	OUNDS				
Asbestos	R	Ca (ND)		•	0.1 fiber/cc	0.1 fiber/cc	0.1 fiber/cc		-	· ·	-	-
PCBs-42% Chlorine	R,A,I,C	Ca (5 mg/m <sup>3</sup> )	•	-	1 mg/m <sup>3</sup> (skin)	1 mg/m <sup>3</sup> [skin]	0.001 mg/m <sup>3</sup>	-	-	-	-	Mild, hydrocarbo
PCBs-54% Chlorine	R,A,I,C	Ca (5 mg/m <sup>3</sup> )		•	0.5 mg/m <sup>3</sup> [skn]	0.5 mg/m <sup>3</sup> (skn)	0.001 mg/m <sup>3</sup>	•	•	· · ·	•	Mild, hydrocarbo
Aluminum - metal dust	R,C	ND		•	15 mg/m <sup>3</sup> <sub>(1014)</sub> ; 5 mg/m <sup>3</sup> <sub>(respirable</sub>	10 mg/m <sup>3</sup>	10 mg/m° <sub>(NIN)</sub> ; 5 mg/m <sup>3</sup>		•	•		-
Aluminum - soluble salts	R,I,C	ND	-	-	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>		-	-	-	-
Arsenic- inorganic	R,A,I,C	Ca [5 mg/m <sup>3</sup> ]	0.002 mg/m <sup>3</sup>	•	0.01 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>	Ca	-	-	-	-	-
Barium:soluble compounds	R,I,C	50 mg/m <sup>3</sup>	-		0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>	•	-	•		-
Beryllium	R,C	Ca (4 mg/m <sup>3</sup> )	0.005 mg/m 0.025 mg/m <sup>3</sup> (озна, зо-ліп так реак) <sup>2</sup> 0.0005 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup> <sub>МССИН</sub>	0.002 mg/m <sup>3</sup>	0.002 mg/m <sup>3</sup>	Св		-			-
Cadmium dusts	R,I	Ca (9 mg/m <sup>3</sup> )	•	•	0.005 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>	Ca	•	-	•	-	•
Chromates (Cr(VI) Compounds) & Chromic Acid	R,I,C	Ca (15 mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> <sub>(ОБНА)</sub>	-	0.001 mg/m <sup>3</sup>	0.05 mg/m <sup>°</sup> <sub>(weler</sub> soluble); 0.01 mg/m <sup>3</sup>	Ca	•		-	-	-
Chromium (III) Compounds	R,I,C	25 mg/m <sup>3</sup>	•	-	0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>	-	. •	•	•	•
Chromium Metal	R.I.C	250 mg/m <sup>3</sup>	•	-	1 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>	-		-	-	-
Copper - dust & mist	R,I,C	100 mg/m <sup>3</sup>	•	· -	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>			•		-
.ead	R,I,C	100 mg/m <sup>3</sup>		•	0.050 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>	0.050 mg/m <sup>3</sup>		-	•	-	-
Manganése (compounds and fume)	R,I	500 mg/m <sup>3</sup>	5 mg/m <sup>3</sup> (DSHA)	3 mg/m <sup>3</sup> (MOSH)		0.2 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>	-	-	-	-	-
Mercury & Inorganic Mercury Compounds	R,I,A,C	10 mg/m³	0.1 mg/m <sup>3</sup> (NOSH: Skn); 0.1	•		0.025 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup> (stán)	•	-	-	•	-
Organo-Mercury Compounds	R,A,I,C	2 mg/m <sup>3</sup>	0.04 mg/m <sup>3</sup>	0.03 mg/m <sup>3</sup> <sub>(МОЗН)</sub>	0.01 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup> (akyt; 0.1 mg/m <sup>3</sup> (akyt; 1.5 mg/m <sup>3</sup> (metal);	0.01 mg/m <sup>3</sup>	•	•	•	•	-
Nickel (metal and compounds)	R,I,C	Ca [10 mg/m <sup>3</sup> ]	•		1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> (sokble inorganic compounds) 1 mg/m <sup>3</sup> (insokble	0.015 mg/m <sup>3</sup>	-	·	-	-	•
Particulate (Not otherwise egulated)	R, C	ND	-	-	15 mg/m <sup>3</sup> <sub>(kolal)</sub> ; 5 mg/m <sup>3</sup> <sub>(respirable)</sub>	10 mg/m <sup>3</sup> <sub>(rhabble)</sub> ; 3 mg/m <sup>3</sup> <sub>(respirable)</sub>	-	-		-	-	
Portland cement	R,I,C	5000 mg/m <sup>3</sup>		•	50 mppcf	10 mg/m <sup>3</sup>	10 mg/m° <sub>(lote)</sub> ; 5 mg/m <sup>3</sup>	-	-	-	-	-
elenium compounds	R,I,C	1 mg/m <sup>3</sup>	•		0.2 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>	•	-	•	-	•
illica, crystalline	R, C	Ca (25 mg/m <sup>3</sup> (oristobate, Hoymite) ; 50 mg/m <sup>3</sup> (quarz, Hook)	-	•	Dependent on silicon dioxide content of silica (see Appendix C of the NOSH Pocket Guide to	Dependent on minerology <sub>(see</sub> ACGIH 2005 TLVs and BEIs Handbook)	0.05 mg/m <sup>3</sup>	•	•		-	•
ilver (metal and soluble ompounds)	R,I,C	10 mg/m <sup>3</sup>	•	-	0.01 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>	•		-	-	•
hallium, soluble	R,A,I,C	15 mg/m <sup>3</sup>	•	-	0.1 mg/m <sup>3</sup> [sidn]	0.1 mg/m <sup>3</sup> (sish)	0.1 mg/m <sup>3</sup> [sion]	•	•	•		•
in (metal)	R,C	100 mg/m <sup>3</sup>		-	2 mg/m <sup>3</sup>	2	2 mg/m <sup>3</sup>	•	•	-		•
in (organic compounds)	R,A,I,C	25 mg/m <sup>3</sup>		-	0.1 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup> [stin]	0.1 mg/m <sup>3</sup> (skin)	-	•	-	-	-
inc oxide dust & fume	R	500 mg/m <sup>3</sup>	15 mg/m <sup>3</sup> MOSH durij	10 mg/m <sup>3</sup> <sub>NOSH ACOIH</sub>	15 mg/m <sup>3 (total dust)</sup> ; 5 mg/m <sup>3</sup> (tespirable dust); 5 mg/m <sup>3</sup> (turne)		5 mg/m <sup>3 (lots) dust).</sup> 5 mg/m <sup>3</sup> <sub>(furme)</sub>		-			•

#### TABLE 1 OCCUPATIONAL EXPOSURE LIMITS (CONCENTRATIONS IN AIR)

(CIRCLE CONTAMINANTS OF CONCERN, WRITE ADDITIONAL CONTAMINANTS AND EXPOSURE ON LAST PAGE)

NOTES & ABBREVIATIONS: All units in parts per million (ppm) unless otherwise noted.

IDLH: Immediately dangerous to life and health

R = Respiratory (Inhalation)

l = Ingestion A = Skin Absorption

C = Skin Contact

-: Not available

ND: Not detectable.

Ca = Carcinogen

\*\* = Use 11.7 eV lamp

IP: Ionization potential

eV: Electrovolts

Ceiling: Highest allowable instantaneous C = Skin and/or Eye Contact

STEL: Short-term exposure limit. Exposure period is 15 minutes unless otherwise indicated

PEL: OSHA Permissible Exposure Limit (legally-enforceable)

REL: NIOSH Recommended Exposure Limit

PID: Photoionization Detector

OSHA: United States Occupational Safety and Health Administration NIOSH: National Institute of Occupational Safety and Health

TLV: ACGIH Throshold Limit Value

ACGIH: American Conference of Governmental Industrial Hygienists

14





## **Physical Hazards:**

Indicate all hazards that may be present for each task. If any of these potential hazards are checked, it is the project manager's responsibility to determine how to eliminate/minimize the hazard to protect onsite personnel.

Copy and paste a checkmark "✓"into appropriate boxes.

Phys	Physical Hazard Checklist							
	Task 1	Task 2	Task 3	Task 4				
Potential Job Hazards	GW Mon.	Exc. Mon.	Well	SVI				
			Repair	Sampling				
Confined space entry*								
Underground utilities		<ul> <li>✓</li> </ul>	✓					
Overhead utilities		✓	✓					
Electrical hazards		1						
Excavations greater than 4' depth		1						
Open excavation fall hazards		✓						
Heavy equipment		1		· · ·				
Drilling hazards			· · ·	✓				
Noise (above 85 dBA)		✓	<ul> <li>✓</li> </ul>	1				
Traffic concerns	<ul> <li>✓</li> </ul>	✓	1					
Extreme weather conditions		1	✓					
Rough terrain for drilling equipment								
Buried drums								
Heavy lifting (more than 50 lbs)	✓							
High risk fire hazard		-						
Poisonous insects or plants								
Water hazards								
Use of a boat								
Lockout/Tagout requirements								
Other: Chemical Exposure	<b>1</b>	- 1	<ul> <li>✓</li> </ul>	✓				
Other: Unknown Building Occupants				1				

\*CONFINED SPACE ENTRY REQUIRES SPECIAL PROCEDURES, PERMITS AND TRAINING AND MUST BE APPROVED BY THE CORPORATE HEALTH & SAFETY MANAGER.





#### **Potential Activity Hazards and Hazard Controls:**

Copy and paste a checkmark "<" adjacent to potential activity hazards and relevant hazard controls.

#### Abrasions and Cuts 🖌 Access Asphyxiation Bacteria **Biological Hazards Bloodborne Pathogens** Cave Ins **Chemical/Thermal Burns** Chemicals√ Cold Stress√ Compressed Gases Confined Spaces Congestion **Defective Equipment** Dermatitis Dropping Materials/Tools to Lower Levels Drowning or Flowing Water Electrical Shock **Energized Equipment** Equipment Misuse 🗸 Ergonomics Excavations 🗸 Explosions Fatigue Fire Flammability Flying debris 🗸 Foreign Body in Eye 🗸 Frostbite/Cold ✓

Air Monitoring ✓ Appropriate Clothing/Monitoring Of Weather ✓ Appropriate Labels/Signage 🗸 Barricades/Fencing/Silt Fencing ✓ Buddy System - Attendant Chock Blocks ✓ **Confined Space Procedures** Decontamination Procedures√ **Derived Waste Management Plan** Drinking Water/Fluids Dust Abatement Measures ✓ **Emergency Action Plan Procedures** Equipment Inspection Equipment Manuals/Training Exclusion/Work Zones ✓ Exhaust Ventilation ✓ Eye Protection 🖌

#### POTENTIAL ACTIVITY HAZARDS

Fueling and Fuel Storage 🗸 Fugitive Dust 🖌 Fumes 🗸 Generated Wastes ✓ Guards removed Hazardous Materials 🖌 Heat Stress (cramps, exhaustion, stroke) Heavy Equipment Operation ✓ Heavy Equipment/Stability 🗸 Heavy Lifting ✓ High crime area (violence) High Winds Hoists, Rigging, Slings, Cables Housekeeping – Improper ✓ Illumination - Poor Impact 🗸 Inability to Maintain Communication Inclement Weather ✓ Inclines Insects/Reptiles Mold Moving Equipment, Conveyors or Vehicles V Muddy Site Conditions New Personnel Noise ✓ Odor ✔ Overhead Utilities 🖌 Overhead Work 🗸

Overloaded Equipment Oxygen deficiency Pinch Points ✓ Poisonous Plants Pressure Pressurized Lines Radiation Repetitive Motion 🗸 Rigging - Improper 🗸 Sharp Objects 🗸 Silicosis Slips, Trips, and Falls ✓ Sprains and Strains 🗸 Steam Sunburn 🗸 Surface Water Run-off Toxicity 🗸 Traffic Underground Utilities ✓ Uneven Terrain Unsafe Atmosphere Vibration Visibility - Poor Visitors Known/Unknown 🗸 VOC Emissions ✓ Weight 🗸 Work at Depth Work at Heights Work over Water Working on Ice

#### HAZARD CONTROLS

Fall Protection Fire Extinguisher 🗸 Flotation Devices/Lifelines Gloves ✓ Ground Fault Interrupter Grounded Hydraulic Attachments Grounded Equipment/Tanks Hand Signal Communication Hard Hat 🗸 Hazardous/Flammable Material Storage Hearing Protection ✓ High Visibility Safety Vest 🗸 Hoses, Access to Water Hotwork Procedures Isolation of Energy Sources(Lockout/Tagout) Machine/Equipment Guards

Manual Lifting Equipment Police Detail Proper Lifting Techniques 🗸 Proper Tool for Job 🗸 Proper Work Position/Tools Protective Equipment ✓ Radio Communication Respirator, (Specify Type) Safety Harness /Lanyard/Scaffold Security Escort Sloping, Shoring, Trench Box **Spill Prevention Measures** Spill Kits Stormwater Control Traffic Controls Procedures/Methods Vehicle Inspection Visitor Orientation Escort Window Cleaning/Defrost





## **Safety Meetings**

All H&A personnel visiting the site will be given an orientation safety meeting and are required to read and sign this HASP. Daily safety meetings will be conducted onsite and documented on a Health & Safety Tailgate Meeting Form.

## **Utility Locators and Underground Hazards**

Prior to drilling or excavating, Haley & Aldrich staff members will ensure that permission has been gained from the property owner to access the property. Contact site facilities personnel to assist with location of underground utilities. Before marking any proposed exploration location, it is critical that all readily available information on underground utilities and structures be obtained. The estimated location of utility installations, such as gas, electric, fuel, steam, sewer, telephone, fiber optic, water, drainage or any other underground installation that may be expected to be encountered during drilling work, will be identified with the appropriate authority. Appropriate authorities include client representatives, utility companies, nonprofit organizations (e.g., "Dig-Safe), and others.

## **Heavy Equipment**

Staff Members must be especially careful and alert when working with contractors who use heavy equipment, since equipment failure or breakage can lead to accidents and worker injury. Cranes and equipment for drilling, pile driving, test pitting and coring is of special concern. Should these devices fail during operation the likelihood of worker injury is high. Equipment of this nature should be visually inspected and checked for proper working order prior to the commencement of field work. Those that operate heavy equipment must meet all of the requirements to operate heavy equipment. Haley & Aldrich, Inc. staff members that supervise projects or are associated with such high risk projects that involve digging should use due diligence when working with a construction firm. Maintain visual contact with operators at all times and keep out of the strike zone whenever possible. Always approach heavy equipment with an awareness of the swing radius and traffic routes of each piece of equipment and never go beneath a hoisted load. High-visibility safety vests must be worn onsite at all times. Avoid fumes created by heavy equipment exhaust.

#### **Noise Reduction**

Site activities in proximity to heavy equipment often expose workers to excessive noise. It is anticipated that situations may arise when noise levels may exceed the OSHA Action Level of 85 dBA in an 8-hour time-weighted average (TWA). An example of this possibility is working in close proximity to the subcontractor during drilling activities onsite. If excessive noise levels occur, efforts will be made to control this by issuance of earplugs to all personnel and by implementing a system of hand signals understood by all.

## Work Site Access & Controls (Standard Precautions)

The work area is restricted to authorized personnel. Clearly define the work area before beginning activities for the day. Caution tape and safety cones must be provided as necessary for vehicular traffic concerns and to protect passers-by. Proper housekeeping is essential to





avoid creating hazards to pedestrian and vehicular traffic. Excavations in progress will not be left unattended at any time. Running equipment will not be left unattended at any time. Test borings and test pits will be backfilled upon completion and the area restored. Drilling equipment will be secured above test borings during work stoppages and at the end of the workday.

## Site Security

The site will be restricted by a locked chain-link fence.

## Weather Related Hazards

H&A employees and their subcontractors should be aware of potential health effects and/or physical hazards of working during inclement weather. Refer to OP1003-Cold Stress and OP1015-Heat Stress for discussion on weather hazards.





5.	JRES	

## **Personal Protective Equipment Requirements:**

Copy and paste a checkmark "✓"into appropriate boxes.

	Task 1	Task 2	Task 3	Task 4
Required PPE	GW Mon.	Exc. Mon.	Well	SVI
			Repair	Sampling
Hard hat		✓	. 1	
Safety glasses w/side shields	<ul> <li>✓</li> </ul>	$\checkmark$	<ul> <li>✓</li> </ul>	1
Steel-toe footwear		✓	✓	✓
Hearing protection (plugs, muffs)		<ul> <li>✓</li> </ul>	✓	✓
Tyvek ™ coveralls	1			
PE-coated Tyvek™ coveralls				
Boots, chemical resistant	1	✓	✓	
Boot covers, disposable				
Leather work gloves	-	1	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>
Inner gloves - <u>Nitrile</u>	✓	1		
Outer gloves - Enter material here			· · ·	
Tape all wrist/ankle interfaces				
Half-face respirator*				
Full-face respirator*				
Organic vapor cartridges	1			
Acid gas cartridges				
Other cartridges: Enter type here				
P-100 (HEPA) filters				
Face shield				
Personal Flotation Device (PFD)				
High-Visibility Safety Vest	✓	✓	. <b>√</b>	·
Other:				
Level of protection required [C or D]:	D	D	D	D

\* In the event of respirator use, H&A staff must be medically qualified, fit tested and clean shaven with no facial hair that will interfere with the seal.

The required PPE checked in any box above must be on site during the task being performed. Work shall not commence unless the required PPE is present.





## Site Safety Equipment Requirements:

Check all items that are required to be on site.

	Site Safety Equipment	
☐ Fire Extinguisher	First Aid Kit	☐ Flashlight
└─ Air horn/signaling device	🗹 Cellular Phone	Duct tape
Ladder	☐ Barricade tape	C Drum dolly
└─ Two-way radio	I Safety cones	□ Harness/Lanyard
<sup>└─</sup> Other Specify		

The required equipment checked in any box above must be on site during the task being performed. Work shall not commence unless the equipment is present.





6. MONITORING PLAN	AND EQUIPMENT						
Is air/exposure monitoring required at this work site for personal protection?  ▼Y ⊂ N							
Is perimeter monitoring required for community protection?							
	(for excavation monitoring only)						
Monitoring/Screening Equipment Requirements:							
Check all items that are required to be on site.							
Required Monitoring/Screening Equipment							
Photo-Ionization Detector (PID)	Combustible Gas Indicator (CGI)						
Photo-Ionization Detector (PID)	└─ Multiple Gas Detector						
☐ Photovac Micro Tip (PID)	✓ Dust Monitors (RAMs) (for excavation monitoring only)						
Circle Contraction	Colorimetric tubes						
Photovac Gas Chromatagraph (GC)	Other PPB Meter (for SVI Sampling only)						

The required equipment checked in any box above must be on site. Work shall not commence unless the equipment is present.

## Standard Action Levels and Required Responses:

Exposure Guidelines for common contaminants are listed in Table 1 - Occupational Exposure Limits in the Chemical Hazards section above.

Requirements for PPE upgrades based on monitoring are in Table 2 - Monitoring Methods, Action Levels and Protective Measures following the Specific Monitoring Requirements section below.

Action levels for readings obtained with a multiple gas detector are listed below.

Instrument	Normal	<b>Operating levels</b>	Action levels – required responses
Oxygen Meter	20.9%	Between 19.5- 23.5%	Below 19.5 %: leave area, requires supplied air Above 23.5%: leave area, fire hazard
CGI	0%	Less than 10%	Greater than 10%: fire/explosion hazard; cease work
Hydrogen Sulfide	0%	Less than 10 ppm.	Greater than 15 ppm (or 10 ppm for 8 hrs) requires supplied air respirator





Carbon	0%	Less than 25 ppm	Greater than 200 ppm for 1 hour (or
Monoxide			25 ppm for 8 hrs) requires supplied air respirator

## Standard Air Monitoring Plan (Volatiles):

- Prior to the beginning of work obtain background readings with the PID away from the site.
- Monitor the breathing zone when site soil is exposed (e.g., while drilling or excavating is occurring, etc.) with the PID.
- Monitoring should be conducted most frequently (e.g., every 15-30 minutes) when drilling or excavation first begins in a particular area and when soil is removed from the hole. After this, and if no exceedances of exposure limits are noted (see below), monitoring may be conducted less frequently (e.g., every 60 minutes).
- H&A general exposure limits will be used when a mixture of potentially volatile chemicals are suspected to be present in soil at the site.

In summary, if a reading of 10 ppm above background is detected with the PID for 5 minutes or longer, back away for a few minutes. Screen the air again after any vapors/gases have been given a chance to dissipate. If 10 ppm above background is still noted, evacuate the area and call the LHSC and PM for further guidance.

- Record monitoring data and PPE upgrades in field book or on Record of Field Monitoring form and maintain with project files.
- Air monitoring for exposure should be based on the frequency established under the Standard Air Monitoring Plan or under the Specific Monitoring Requirements. Record time, location and results of monitoring and actions taken based upon the readings.

## **Standard Dust Control Measures and Monitoring Plan:**

## **Dust Control Measures:**

It is anticipated that exposure to airborne dust can be mitigated during work operations as necessary to control dust emissions by means of limiting the area of exposed soils and through the use of water sprays. If dust emissions cannot be controlled by these standard measures, additional measures may be employed such as the use of a tackifier (if approved) to stabilize soil exposures or by covering exposed soil and stockpiles with tarpaulins, plastic sheeting or geotextile fabric. Otherwise cease work immediately and contact the Project Manager or the Corporate Health & Safety Manager for assistance. It is not permissible for dust emissions to escape from the site at any time and perimeter dust monitoring may be required to insure public safety.

## Dust Monitoring:

Respirable Aerosol Monitors (RAM) can be used to monitor total dust levels in work zones and/or at the site perimeter. These instruments do not give specific readings of contaminant concentration (e.g. metals, asbestos, etc.). Depending upon the contaminants present, it may be mandatory for all workers to upgrade to level C protection using a half-face air-purifying





respirator with HEPA (P-100) filters if dust levels cannot be adequately controlled during any of the on-site tasks. The H&A Site Safety Officer (SSO) will determine PPE upgrades based upon visual determination as necessary and the OSHA PEL for each known or suspected contaminant. The OSHA PEL/STEL for Respirable Nuisance Dust is 5 mg/m<sup>3</sup> (8 hour TWA). Action levels for fugitive dust at the site perimeter are based upon the daily PM<sub>10</sub> dust standard of 0.15 mg/m<sup>3</sup> in the National Ambient Air Quality Standard for Inhalable Dust (NAAQS).

Personal dust monitoring using an industrial hygiene pump and a filter cassette may be conducted on each day of operations. In such cases samples are collected from workers with the greatest potential dust exposure and analyzed by an accredited laboratory for specific contaminants.

## **Specific Monitoring Requirements:**

Monitoring requirements and frequency is indicated by task and location below.

VOC Monitoring:

Applicable tasks: #1

Frequency: Screen work area prior to groundwater sampling once well is open. Description: Air will be screened using a PID (Mini Rae 2000) for the presence of volatiles

## VOC Monitoring:

Applicable tasks: #2 and # 3

Frequency: Continuously in worker breathing space when soil is disturbed. Description: In the event that soil excavation occurs, the soils will be screened using a PID (Mini Rae 2000) for the presence of volatiles

### VOC Monitoring:

Applicable tasks: #4

Frequency: Screen basement area for sources of air impacts prior to sampling and during installation of sub-slab vapor points.

Description: Air will be screened using a PID that registers in the ppb range for the presence of volatiles

## Community Particulate and VOC Monitoring:

Applicable tasks: # 2

Frequency: 1 reading every 15 minutes from each monitoring station. Description: In accordance with NYSDOH generic CAMP guidance for both VOCs and particulates. Refer to the site-specific Community Air Monitoring Program





TABLE 2 Last Revised September 2002

#### MONITORING METHOD, ACTION LEVELS AND PROTECTIVE MEASURES

INSTRUMENT	HAZARD	ACTION LEVEL	ACTION RESPONSE
Respirable Dust Monitor	Total Particulates	> 5 mg/m <sup>3</sup>	Upgrade to Level C Protection
OVA, HNU <sup>(2)</sup> , Photovac Microtip	Total Organic Vapors	Background	Level D Protection
		10 ppm > background or lowest OSHA permissible exposure limit, whichever is lower, or as modified for this task. Sustained for >5 minutes in the breathing zone.	Upgrade to Level C - site evacuation may be necessary for specific compounds
		50 ppm over background, unless lower values required due to respirator protection factors	Cease work; upgrade to Level B <sup>(3)</sup> may be required
Explosimeter <sup>(4)</sup> (LEL)	Flammable/Explosive Atmosphere	<10% Scale Reading	Proceed with work
		10-15% Scale Reading	Monitor with extreme caution
		>15% Scale Reading	Evacuate site
0xygen Meter <sup>(5)</sup>	Oxygen-Deficient	19.5% - 23.5% 0 <sub>2</sub>	Normal - Continue work
	Atmosphere	< 19.5% 0 <sub>2</sub> > 23.5% 0 <sub>2</sub>	Evacuate site; oxygen deficient Evacuate site; fire hazard
Radiation Meter <sup>(6)</sup>	Ionizing Radiation	0.1 Millirem/Hour	If > 0.1, radiation sources may be present <sup>(7)</sup> Evacuate site; radiation hazard
Drager Tubes	Vapors/Gases	Species Dependent > 1 ppm vinyl chloride > 1 ppm benzene > 1 ppm 1,1-DCE	Consult Table 1 or other resources for concentration toxicity/detection data. Upgrade to Level C if concentration of compounds exceed thresholds shown at left; May need to cease work if other levels exceeded - site specific
Gas Chromatograph (GC)	Organic Vapors	3 ppm total OV > background or > lowest specific OSHA	On-site monitoring or tedlar bag sample collection for off-site/laboratory analysis

Notes:

1. Monitor breathing zone.

2. Can also be used to monitor some inorganic species.

3. Positive pressure demand self contained breathing apparatus

4. Lower explosive limit (LEL) scale is 0-100%. LEL for most gasses is 15%.

5. Normal atmospheric oxygen concentration at sea level is 20%

6. Background gamma radiation is ~0.01-0.02 millirems/hour.

7. Contact H&A Health and Safety staff immediately.





a service and the service of the ser Service of the servic Service of the service

## Calibration and Use of Equipment:

Calibrate all monitoring equipment in accordance with manufacturers requirements, H&A calibration (OP) standards and site specific requirements (e.g., at the beginning and end of each work day). Calibration of equipment shall be documented in the field notes or Daily Field Report (DFR). Documentation should include:

- Date/time
- Zero reading before calibration
- Concentration of calibration gas
- Reading obtained with calibration gas before adjusting span\
- Final reading obtained with calibration gas after adjusting span

Page 18 of 39





7. DECONTAMINATION AND DISPOSAL METHODS

## Personal Hygiene Safeguards:

The following minimum personal hygiene safeguards shall be adhered to:

- No smoking or tobacco products on any Hazwoper project.
- No eating or drinking in the exclusion zone.
- It is required that personnel present on site wash hands before eating, smoking, taking medication, chewing gum/tobacco, using the restroom, or applying cosmetics and before leaving the site for the day.
- It is recommended that personnel present on site shower or bathe at home at the end of each day of working on the site.

## Standard Personal Decontamination Procedures:

Outer gloves and boots should be decontaminated periodically as necessary and at the end of the day. Brush off solids with a hard brush and clean with soap and water or other appropriate cleaner whenever possible. Remove inner gloves carefully by turning them inside out during removal. Wash hands and forearms frequently. It is good practice to wear work-designated clothing while on-site which can be removed as soon as possible. Non-disposable overalls and outer work clothing should be bagged onsite prior to laundering. If gross contamination is encountered on-site contact the Project Manager and LHSC to discuss proper decontamination procedures. The steps required for decontamination will depend upon the degree and type of contamination but will generally follow the sequence below.

- 1. Remove and wipe clean hard hat
- 2. Rinse boots and gloves of gross contamination
- 3. Scrub boots and gloves clean
- 4. Rinse boots and gloves
- 5. Remove outer boots
- 6. Remove outer gloves
- 7. Remove Tyvek coverall
- 8. Remove respirator, wipe clean and store
- 9. Remove inner gloves

#### Location of Decontamination Station:

N/A

#### **Disposal of PPE:**

PPE that is not grossly contaminated can be bagged and disposed in regular trash receptacles. PPE that is grossly contaminated must be bagged (sealed) and field personnel should communicate with the Project Manager to determine proper disposal.





## **Tools & Equipment Decontamination:**

All decontamination should be conducted at the site and not at the office or lab.

Check all equipment and materials needed for decontamination of tools and other equipment.

☐ Acetone	✓ Distilled water	Poly sheeting
🗹 Alconox soap	✓ Drums for water	Steam cleaner
🔽 Brushes	☐ Hexane	☐ Tap water
🗹 Disposal bags	Methanol	☐ Washtubs
5 gallon pails	Other Paper towels	

## **Standard Equipment Decontamination Procedures:**

Air monitoring instrumentation and delicate instruments that are difficult to decontaminate or sensitive to water should be protected from contamination during use through the use of plastic sheeting. To the extent possible, efforts should be taken to limit the degree of contamination to hand tools and sampling equipment during use. Proper PPE must be worn while performing decontamination, including the wearing of chemical safety goggles and gloves. Storage or transport of decontamination solvents in squirt bottles is not permitted as they may discharge their contents upon ambient temperature change or leak if overturned. Standard equipment decontamination procedures are as follows. Any additional requirements are listed under Specific Equipment Decontamination Procedures below.

Pretreatment of heavily contaminated equipment may be conducted as necessary:

- 1. Remove gross contamination using a brush or wiping with a paper towel
- 2. Soak in a solution of Alconox and water (if possible)
- 3. Wipe off excess contamination with a paper towel
- 4. Clean with hexane or acetone and allow to dry

Standard decontamination procedure:

- 1. Wash using a solution of Alconox and water
- 2. Rinse with potable water
- 3. Rinse with methanol
- 4. Rinse with distilled water

## **Specific Equipment Decontamination Procedures:**

- 1. Wash using a solution of Alconox and water
- 2. Rinse with potable water
- 3. Dispose of dedicated sampling equipment in drums





## Standard Disposal Methods for Contaminated Materials:

Excess sample solids, decontamination materials, rags, brushes, poly sheeting, etc. that are determined to be free of contamination through field screening can usually be disposed into client-approved, on-site trash receptacles. Uncontaminated wash water may be discarded onto the ground surface away from surface water bodies in areas where infiltration can occur. Contaminated materials must be segregated into liquids or solids and drummed separately for off site disposal. Any additional requirements are listed under Specific Disposal Methods for Contaminated Materials below.

### Specific Disposal Methods for Contaminated Materials:

If onsite trash receptacles are not available, excess sample solids, decontamination materials, rags, brushes, poly sheeting, etc. that are determined to be free of contamination through field screening will be disposed of in drums staged onsite for future disposal.

## Disposal Methods for Contaminated Soils:

Contaminated soil cuttings and spoils must be drummed for disposal off-site unless otherwise specifically directed. Soil cuttings and spoils determined to be free of contamination through field screening can usually be returned to the boreholes or excavations from which they came. Any additional requirements are listed under Specific Disposal Methods for Contaminated Soils below.

## Specific Disposal Methods for Contaminated Soils:

Large quantities of soils removed for excavation purposes will be staged on and beneath polysheeting prior to characterization and offsite disposal.





## CONTINGENCY PLANNING

How H&A responds to an emergency depends on whether we are at an active facility or another other location. Many active facilities have very stringent requirements for the mitigation of emergencies. Therefore, the PM is responsible for identifying any specific requirements from the client contact.

8.

As a rule of thumb, the following are H&A's basic responses to handling Emergencies. Typically, H&A does not mitigate emergencies. When Clients request or require specific functions such as First Aid/CPR trained personnel on site, we typically conform. Before any Project Manager or LHSC agrees to something more stringent, many issues should be considered such as training, safety, feasibility of an adequate response, insurance requirements, and much more.

## Fire:

- <u>Major Fires</u> Major fires will be mitigated by the local fire departments or by client's onsite fire/emergency response departments.
- <u>Incipient Stage Fires</u> -Incipient stage fires will be extinguished by on-site personnel using fire extinguishers. Only those who have received annual training may use an extinguisher.

## Medical:

All H&A employee injuries and illnesses will be reported to the PM and to HP at <u>hpinjuryreporting@haleyaldrich.com</u> and documented using the Incident Reporting Form. This form is available on HANK.

- First Aid First aid will be addressed using the on-site first aid kit. H&A employees are not required or expected to administer first aid/CPR to any H&A, Contractor, or Civilian personnel at any time and it is H&A's position that those who do are doing it on their behalf and not as a function of their job.
- Trauma Based upon the nature of the injury, the injured party may be transported to the nearest hospital or emergency clinic by on-site personnel or by ambulance. First response to a trauma incident is to call 911 or facility security. H&A staff members are expected to assist in ancillary roles only such as directing ambulances to the scene. It is the discretion of the staff member on site whether an ambulance should be procured in remote locations where ambulance services will not be effective.

#### Hazardous Materials Spill:

- Small incidental spills (e.g. pint of motor oil) caused by H&A employees and/or by the contractor will be mitigated by the H&A staff member and/or the contractor.
- Large spills (e.g. large leak from heavy equipment fuel tank). The contractor is responsible for cleanup. In the event that it posses a serious human or environmental threat, the local Fire Department and/or client emergency response department will be contacted. Once emergency has been mitigated typically clean up will be provided by a vendor.





#### **Rescue:**

H&A employees will not enter any confined spaces for rescue purposes.

#### Weather Related Emergencies:

H&A employees and their subcontractors should be aware of potential health effects and/or physical hazards of working during inclement weather. If applicable, safeguards against the effects and hazards of heat stress, cold stress, frostbite, thunderstorms, and lightning, etc., should be included with the section pertaining to physical hazards in this HASP.

#### **Evacuation Alarms:**

Evacuation alarms and/or emergency information will be communicated among personnel on site through verbal communication.

## **Emergency Services:**

Emergency services will be summoned via on-site or cellular phone.

## Emergency Evacuation Plan:

The site evacuation plan is as follows:

- 1. Establish a designated meeting area to conduct a head count in the event of an emergency evacuation.
- 2. If the work area is not near an emergency exit, exit via the closest route and meet at the designated meeting area.
- 3. Notify emergency response personnel (fire, police and ambulance) of the number of missing or unaccounted for employees and their suspected location.
- 4. Administer first aid will in the meeting area as necessary.

Under no circumstances should any personnel re-enter the site area without the approval of the corporate H&S manager, the H&S coordinator, and the fire department official in charge.





9.	HEALTH & SAFETY PLAN ACKNOWEDGMENT FORM	
		and the second

## Note: Only H&A employees sign this page.

I hereby acknowledge receipt and briefing on this Health & Safety Plan prior to the start of onsite work and declare that I understand and agree to follow the provisions and procedures set forth herein while working on this site.

PRINTED NAME	SIGNATURE	DATE
		••••••
······································		
ан 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		





## 10. PRE-JOB SAFETY CHECKLIST

The following checklist is designed to help Project Managers verify that all Health & Safety requirements are satisfied for projects involving site work and to aid in the preparation of the site-specific HASP.

Please initial and date the appropriate box once each requirement has been satisfied prior to commencement of site work.

#	Project H&S Requirements	Approval by PM or LHSC (initial each box or place NA)	Date Approved
1	Project site history has been researched and summarized, current site conditions have been determined and documentation of previous investigations, risk analyses and chemical data has been assembled and summarized.		
2	Project work scope has been outlined and potential chemical and physical hazards associated with work tasks have been identified.		· · · · ·
3	Task Safety Analysis has been performed and attached to the HASP.		
4	H&A personnel to be involved with the project have been identified and are current with medical surveillance, OSHA 40 hour and 8 hour refresher training. Hazwoper site supervisor requirements are satisfied.		
5	Additional training requirements have been met: e.g. nuclear density gauge, DOT, Confined Space Entry, Competent Person Training for Excavation, OSHA 10 hour certification, Railway Safety Training, etc.		
6	H&A personnel that may be required to wear a respirator are medically qualified and have current certification of fit testing.		
7	Client's additional H&S requirements have been met: e.g. facility safety orientations, safety documentation, meetings, special PPE requirements		
8	H&A subcontractors have met H&A's minimum requirements including: current OSHA 40 hour training, medical surveillance, written HASP, insurance, SDSs.		•
9	SDSs are on site and available for chemicals on site.		·····
10	Safety equipment is available: e.g. flashlight, telephone, ladders, traffic cones, barricade tape, fire extinguisher, first aid kit, PPE, respiratory protection, air and dust monitoring instrumentation (calibrated), personal flotation device (PFD), 90' life line with ring, decontamination equipment, etc.		
11	HASP and supporting documentation is complete and signed by all members.		





## APPENDIX A HASP Amendment Form

This Appendix is to be used whenever there is an immediate change in the project scope that would require an amendment to the HASP. For project scope changes associated with "add-on" tasks, the changes must be made in the body of the HASP. Before changes can be made, a review of the potential hazards must be initiated by the H&A Project Manager.

Amendment No.	
Site Name:	
Work Assignment No.:	
Date:	
Type of Amendment:	
Reason for Amendment:	
Alternate Safeguard Procedures:	
Required Changes in PPE:	

Project Manager Signature:	 Date:	 

Local Health and Safety Coordinator: \_\_\_\_\_ Date: \_\_\_\_\_

This original form must remain on site with the original HASP. If additional HASPs are in the field, it is the Project Manager's responsibility to forward a signed copy of this amendment to those who have copies.

Page A-1





## APPENDIX B Issuance and Compliance Site Safety Officer Role and Responsibilities Training Requirements

This Health & Safety Plan (HASP) has been prepared in accordance with the requirements of Title 29 the Code of Federal Regulations (CFR) Section 1910.120/1926.65 to provide guidance for the protection of onsite personnel from physical harm and chemical exposure while working at the subject site.

The specific requirements of this HASP include precautions for hazards that exist during this project and may be revised as new information is received or as site conditions change.

- This HASP must be signed by all Haley & Aldrich (H&A) staff members who will work on the project, including H&A visitors. By signing the Health and Safety Plan Acknowledgement Form personnel are acknowledging that they are aware of the specific hazards of the site and agree to follow the provisions and procedures required to safeguard themselves and others from those hazards.
- This HASP or a current signed copy must be retained at the site at all times when H&A staff members are present.
- Deviations from this HASP are not permitted without prior approval from the above signed. Unauthorized deviations may constitute a violation of H&A company procedures/policies and may result in disciplinary action.
- Revisions to this HASP must be outlined within the contents of the HASP. If immediate or minor changes are necessary, the LHSC and H&A Project Manager may use Appendix A (HASP Amendment Form), located in the back of this HASP. Any revision to the HASP requires personnel to be informed of the changes and that they understand the requirements of the change.
- This HASP is not for H&A Subcontractor use. Each subcontractor engaged is responsible for all matters relating to the health and safety of their personnel and the safe operation of their equipment. This HASP will be made available as a reference so that subcontractors are informed of the potential hazards associated with the site to the extent we are aware. Subcontractors must develop their own HASP which must be, at a minimum, at least as protective as this HASP.
- This Site Specific HASP provides only site-specific descriptions and work procedures. General safety and health compliance programs in support of this HASP (e.g., injury reporting, medical surveillance, personal protective equipment (PPE) selection, etc. are described in detail in the H&A Corporate Health and Safety Program Manual and within Standard Operating Procedures (OPs). Both the manual and OPs can be located on the Company Intranet. When appropriate, users of this HASP should always refer to these resources and incorporate to the extent possible. The manual and OPs are available to clients and regulators per request.





## Site Safety Officer:

The site safety officer (SSO) is defined as the individual responsible to the employer with the authority and knowledge necessary to implement the HASP and verify compliance with applicable health and safety requirements.

The H&A Project Manager may designate any person as the site safety officer (SSO) and determines the order of authority on site. Usually the highest ranking person on site is the SSO. A site safety officer must be on site at all times. When none of the designated SSOs are present on site, the senior person for H&A on site will default to the SSO. This project has identified the following hierarchy for SSO.

1.		1. A. A.	
2			

## Site Safety Officer Roles and Responsibilities:

The SSO is responsible for field implementation of this HASP and enforcement of safety rules and regulations. SSO functions include:

- Act as H&A's liaison for health and safety issues with client, staff, subcontractors, and agencies.
- Verify that utility clearance has been performed by H&A subcontractors.
- Oversee day-to-day implementation of the HASP by H&A employees on site.
- Interact with subcontractor project personnel on health and safety matters.
- Verify use of required PPE as outlined in the HASP.
- Inspect and maintain H&A safety equipment, including calibration of air monitoring instrumentation used by H&A.
- Perform changes to HASP and document in Appendix A of the HASP as needed and notify appropriate persons of changes.
- Investigate and report on-site accidents and incidents involving H&A and its subcontractors.
- Verify that site personnel are familiar with site safety requirements (e.g., the hospital route and emergency contact numbers).
- Report accidents, injuries, and near misses to the H&A PM and Local Health and Safety Coordinator (LHSC) as needed.

The SSO will conduct initial site safety orientations with site personnel (including subcontractors) and conduct toolbox and safety meetings thereafter with H&A employees and H&A subcontractors at regular intervals and in accordance with H&A policy and contractual obligations. The SSO will track the attendance of site personnel at H&A orientations, toolbox

в-2





talks, and safety meetings. Subcontractors will document training and provide training rosters to the H&A SSO.

The SSO will report accidents such as injury, overexposure, or property damage to the Local Health and Safety Coordinator, to the Project Manager, and to the safety managers of other onsite consultants and contractors. The SSO will consult with the safety managers of other on-site consultants and subcontractors on specific health and safety issues arising over the course of the project, as needed.

### Health and Safety Training Requirements:

Personnel will not be permitted to supervise or participate in field activities until they have been trained to a level required by their job function and responsibility. H&A staff members, contractors, subcontractors, and consultants who have the potential to be exposed to contaminated materials or physical hazards must complete the training described in the following sections.

The H&A Project Manager/LHSC will be responsible for maintaining and providing to the client/site manager documentation of H&A staff members' compliance with required training as requested. Records shall be maintained per OSHA requirements.

## 40-Hour Health and Safety Training

The 40-Hour Health and Safety Training course provides instruction on the nature of hazardous waste work, protective measures, proper use of personal protective equipment, recognition of signs and symptoms which might indicate exposure to hazardous substances, and decontamination procedures. It is required for all personnel working on-site, such as equipment operators, general laborers, and supervisors, who may be potentially exposed to hazardous substances, health hazards, or safety hazards consistent with 29 CFR 1910.120.

## 8-hour Annual Refresher Training

Personnel who complete the 40-hour health and safety training are subsequently required to attend an annual 8-hour refresher course to remain current in their training. When required, site personnel must be able to show proof of completion (i.e., certification) at an 8-hr refresher training course within the past 12 months.

### 8-Hour Supervisor Training

On-site managers and supervisors directly responsible for, or who supervise staff members engaged in hazardous waste operations, should have eight additional hours of Supervisor training in accordance with 29 CFR 1910.120. Supervisor Training includes, but is not limited to, accident reporting/investigation, regulatory compliance, work practice observations, auditing, and emergency response procedures.

#### **Additional Training for Specific Projects**





H&A personnel will ensure their personnel have received additional training on specific instrumentation, equipment, confined space entry, construction hazards, etc., as necessary to perform their duties. This specialized training will be provided to personnel before engaging in the specific work activities including:

- Client specific training or orientation
- Competent person excavations
- Confined space entry (entrant, supervisor, and attendant)
- Heavy equipment including aerial lifts and forklifts
- First aid/ CPR
- Use of fall protection
- Use of nuclear density gauges
- Asbestos awareness

## APPENDIX D -

# GENERIC COMMUNITY AIR MONITORING PLAN

## New York State Department of Health Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

#### **Community Air Monitoring Plan**

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

Continuous monitoring will be required for all <u>ground intrusive</u> activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells. **Periodic monitoring** for VOCs will be required during <u>non-intrusive</u> activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

## VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a **continuous** basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

#### Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored **continuously** at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m<sup>3</sup>) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m<sup>3</sup> above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m<sup>3</sup> above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m<sup>3</sup> of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

June 20, 2000

P:\Bureau\Common\CommunityAirMonitoringPlan (CAMP)\GCAMPR1.DOC

## APPENDIX E -

# MONITORING WELL CONSTRUCTION LOGS

September 2021

Appendix E - Monitoring Information and Historical Water Levels Tomer American Linen Supply Go Facility Buffalo, New York. BCP Site #C315241

Ground Surface         Caning         Ground Surface         Caning         Ground Surface         Caning         Florention         Mell Screen         Elevention         Mell Screen         Caning Eleven		Well	Information (I	Well Information (Pre-Soil Removal IRM)	IRM)	Wei	Well Information (Post-Soil Ren	ost-Soil Removal IRM)	RM!	Well	Well Information [Post-Remedia  Action]	Remedial Action			Itme 2016 Strues		20	
Surface         Control         Grand Surface         Grand Surface         Grand Surface         Grand Surface         Grand Surface         Grand Surface         Mult Screen						Ground											n7 sunr	Aavine 17
Benefor         Eleverion         Ref Eleverion         Weil Screen         Eleverion         Weil Screen         Kear Eleverion         Weil Screen         Kear Eleverion           285:53         385:53         355:54         75         355:54         75         355:54         355:54         355:54         75         352:34         352		Ground Surface				Surface	Casing			Ground Surface	_							
58:55         58:54         58:53         13.21 to 13.7 th         58:53         13.21 to 13.7 th         58:53         13.21 to 13.7 th         58:53         58:53         59:54         58:53         59:54         59:55         59:54         59:55         59:54         59:55         59:54         59:55         59:54         79:74         79:74         79:74         70:71         70:74         70:74         70:74         70:74         70:74         70:74         70:74         70:74         70:74         70:74         70:74         70:74         70:74         70:74         70:74         70:74         70:74         70:74         70:72         70:71         70:72         70:72         70:71         70:72         70:71         70:72         70:71         70:72         70:71         70:72         70:71         70:72         70:71         70:72         70:72         70:71         70:72         70:72         70:72	Well ID	Elevation	Elevation	<b>Riser Elevation</b>		Elevation		<b>Riser Elevation</b>	Well Screen	Elevation	<b>Casing Elevation</b>	Riser Elevation		Casing Elevation	Riser Elevation	Well Screen	Ricer Elevention	Holl Correct
38.3       38.2.1       38.5.3       120.17       38.5.3       38.5.1       37.0.417       -	MW-101	585.5	585.63	585.27	13.2 to 18.2 ft.		585.49	585.77	13.7 to 18.7 ft	585 E	COLE	Τ						liaane nam
William       SSL2	COLUMN TO A	ALL CONTRACTOR OF A CONTRACT OF A CONTRACTACT OF A CONTRACT OF A CONTRACT OF A CONTRAC	COLOR OF COLOR	the sector of th	ALCONTROL DE LA CONTROL DE LA	-51	Construction of the second	Change and a second second	Cardination of the second seco	Manager and a second second		C.COC	TL 7 OT OT 7 CT	1	-	1	i a	POLICIES EXCICATION NUMBER OF COMPANY
85:3       56:3:1       12:0:17.H       52:5       55:5:3       55:0:17.H       52:5       55:1       55:5       55:1       55:5       55:4       71:5       55:5       55:2       55:4       71:5       55:1       55:2       55:4       71:5       55:1       55:4       55:1       5	THE WORK	the production of the production of the	THE REPORT OF THE PARTY OF THE	CHURCH STREET,	LECTORE REPORTED AND AND AND AND AND AND AND AND AND AN	5	大学のないのないの	AND	STATISTICS STATISTICS			<b>HARDER HEREIT</b>	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	ļ,	o Representation			
S67         S82.4         146 0.196 ft, 382.4         S83.4         S83.48         S10.43.41.4         S22.48         S83.48         S83.48         S10.43.41.4         S23.48         S24.48	W-102R	N/A	N/A	N/A	N/A		585.27	585.3	12 to 17 ft.			S85.37	9.7 to 14.7 ft.	Į			8	
S2.4       S55.1       11306.63 ft       S2.4       S55.1       11306.63 ft       S2.4       S2.0       11304.63 ft       S2.4	W-103	586.7	588.78	588.84	14.6 to 19.6 ft.	583	586.48	586.36	10.9 to 15.9 ft.	583.3	585.6		11 7 to 16 7 th	583.7	10,000	4	CT'70C	TICTTOIC'S
582         584.68         106 to 15.6 ft         582.8         584.7         544.7         582.8         584.7         544.7         582.8         584.7         544.7         582.8         582.41         541.0 to 15.1 ft         582.41         541.0 to 15.1 ft         582.41         541.0 to 15.1 ft         582.41         540.1 to 15.1 ft         552.42         540.1 to 14.4 ft           581.7         581.7         581.7         581.7         581.7         581.7         581.7         581.7         581.7         581.70         581.0 ft         582.43         540.0 to 14.4 ft           582.4         582.4         582.1 ft         582.1 ft         582.1 ft         582.43         540.0 to 14.4 ft         582.43         540.1 ft         540.1 ft         540.1 ft         540.1 ft         582.43         540.1 ft         540.1 ft	MW-104	582.4	585.17	585.17	11.3 to 16.3 ft.	582.4	585.12	585.13	11.3 to 16.3 ft.	582.4	5851		11 2 to 16 2 ft	1 100			1	1
366         5877         5878         100 615 ft         582.4         9240 142 ft         940 142 ft           366         5877         5877         587.8         110 615 ft         582.4         94 0442 ft           385         587.7         587.3         582.4         95 0445 ft         582.4         94 0442 ft           582.5         582.14         135 0455 ft         582.13         584.1         582.4         94 0442 ft           582.5         582.14         135 0455 ft         582.13         584.1         582.4         94 0444 ft           582.4         582.14         135 0455 ft         582.13         584.1         582.4         94 0444 ft           582.4         582.4         582.5         582.3         582.4         94 0444 ft           582.4         582.4         582.4         582.4         54.044 ft         56.044 ft           582.4         582.4         582.3         582.4         54.044 ft         56.044 ft           582.4         582.4         582.4         54.044 ft         582.4         54.044 ft           582.4         582.4         582.4         582.146 ft         582.4         54.044 ft           582.4         582.4         582.4 <td>W-105</td> <td>\$87</td> <td>584.68</td> <td>CRAGO</td> <td>10 6 40 15 6 4</td> <td></td> <td>0, 10,</td> <td></td> <td></td> <td></td> <td></td> <td>7.00</td> <td>1 C'07 M C'TY</td> <td>4.700</td> <td>00.285</td> <td>8.1 to 13.1 ft.</td> <td>:</td> <td>•</td>	W-105	\$87	584.68	CRAGO	10 6 40 15 6 4		0, 10,					7.00	1 C'07 M C'TY	4.700	00.285	8.1 to 13.1 ft.	:	•
386         587/3         587/3         587/3         587/3         587/3         587/3         582/3         582/3         582/4         94/014/4         782/3         582/4         94/014/4         782/3         582/3         582/3         582/3         582/3         582/3         582/3         582/3         582/4         94/014/4         782/3         582/4         94/014/4         782/3         582/3			5	5		700	00.400	204-02	10.0 LO	6785	584.7	584.7	11.5 to 16.5 ft.	582.8	582.41	9.2 to 14.2 ft.	1	1
82.5 52.3 52.14 13.5 to 18.5 ft 58.5 52.23 52.14 13.5 to 18.5 ft 58.5 52.14 13.5 to 18.5 ft 13.5 to 13.5 13	90T-M	586	587.7	587.89	14.2 to 19.2 ft.	S81.4	584.23	584.11	9.6 to 14.6 ft	582.9	584.3	584.16	11.1 to 16.1 ft	587.8	CF C85	0.4 to 1.4 &		1
581.7         581.35         12.8 to 17.5 ft.         581.7	W-301	582.5	582.53	582.14	13.5 to 18.5 ft.	582.5	582.53	582.14	13.5 to 18.5 ft	582.5	587 53	587 14	13 6 40 10 5 4				1	1
522.4         521.70         11.11 to 15.8 ft         56.5         56.5         56.5         56.5         57.75         57.79         57.10         57.11 to 15.8 ft         56.5         56.5	W-302	581.7	581.77	58135	12 8 to 17 5 ft	5817	1 12	C01 3C	47 2 4 1 7 5 6					Turnerstersterstersterstersterster	-			ı
52.4 53.23 531.79 11.1 to 15.8 th 532.4 532.4 532.4 532.4 532.4 532.4 532.4 532.4 532.4 532.4 532.43 11.1 to 15.8 th mean mean mean mean mean mean mean mean							7/1700	nc.tor	11 C /T 01 077T	/.100	7/180	CE-18C	12.8 to 17.5 ft.	a particular of the second sec	CONTRACT NOTIFICATION	BRINE NUCLEURING		
i Water Levels	W-303	582.4	582.43	581.79	11.1 to 15.8 ft.	582.4	582.43	S81.79	11.1 to 15.8 ft.	582.4	582.43	581.79	11.1 to 15.8 ft.					
Historical Water Lavels																		
Historia: Water Levels December   Morid: 2013																		
December March 2013				Historical	Water Levels			_										
			December	March 2013														

	December 2012	2012	feet (from	March 2013	January 2014	January 2014
Well ID	feet [from TOR]	Elevation	TOR	Elevation	(from TOR)	Elevation
101-WM	6.12	ST-6/S	5.73	579.54	4.22	581
201-WM	3.89	578.22	3.85	578.26	N/A	N/A
MW-102R	N/A	N/A	N/A	N/A	6.51	578.79
E01-WM	9.62	579.22	6.6	578.94	6.82	579.54
MW-104	10.41	574.76	10.46	574.71	10.05	575.08
201-WM	8.72	575.96	9.22	575.46	8.86	575.82
MW-106	8.71	579.1 <b>8</b>	20.6	578.87	4.56	579.55
MW-301	N/A	N/A	7.37	574.77	6.98	S75.16
MW-302	N/A	N/A	3.7	S77.65	2.90	578.45
MW-303	N/A	N/A	6.7	575.09	6.37	S75.42

Notes and Abbreviations: TOR = Top of Riser 1. Elevation datum is NAVD 1988.

Haley Aldrich of New York \\haleyaldrich.com\share\G7Projects\127836\008 - 2021 Site Management\SMP Update\2021-0914\_Monitoring Well Information\_REV Sep2021.xitsr

Page 1 of 1

# APPENDIX F -

# FIELD SAMPLING FORMS AND LOGS

# **Static Water Levels**

Location (Site/Facility Name):	
Location (Address):	
Client:	

Date: Performed By:

Job Number:

Well ID	Riser Elevation* (NAVD 1988)	Water Level (from Top of Riser)	Well Condition/Notes	Repairs Needed?
MW-102R	582.13			
MW-103	582.64			
MW-104	582.00			
MW-105	582.41	· · · · · ·		
MW-106	582.42			
MW-301	582.14			
MW-303	581.79		· · · · · · · · · · · · · · · · · · ·	

\* - Riser elevations for MW-301 and MW-303 last surveyed in 2014.

- Riser elevations for MW-103, MW-104, MW-105 and MW-106 last surveyed in 2016.

- Riser elevation for MW-102R last surveyed in 2021.

# APPENDIX G -

# QUALITY ASSURANCE PROJECT PLAN

# QUALITY ASSURANCE PROJECT PLAN FORMER AMERICAN LINEN SUPPLY COMPANY FACILITY 822 SENECA STREET BUFFALO, NEW YORK NYSDEC BCP SITE ID: C915241

# by

Haley & Aldrich of New York Rochester, New York

for

AmeriPride Services, Inc. Minneapolis, Minnesota

File No. 33587-054 October 2014

# **Quality Assurance Project Plan**

TITLE: Quality Assurance Project Plan, Former American Linen Supply Co Facility Site Management Plan

Prepared By/Date:

Haley & Aldrich of New York, October 2014

10 eng M. QA Officer

Claire L. Mondello

Haley & Aldrich Project Manager

10/29/2014

10/29/2014

Date

Date

Date of Issue: October 2014

#### **EXECUTIVE SUMMARY**

This Quality Assurance Project Plan (QAPP) presents the organization, objectives, planned activities, and specific quality assurance / quality control (QA/QC) procedures associated with the site monitoring at the Former American Linen Supply Co Facility in Buffalo, New York ("the Site") in accordance with the New York State Department of Environmental Conservation (NYSDEC). Protocols for sample collection, sample handling and storage, chain-of-custody procedures, and laboratory and field analyses are described here in or specifically referenced to related investigation documents.

The QA/QC procedures described in this QAPP have been developed to be generally consistent with current NYSDEC technical and administrative guidance memoranda and addresses the requirements described in the NYSDEC 6 NYCRR Part 375 Environmental Remediation Programs, 14 December 2006; and NYSDEC Technical Guidance for Site Investigation and Remediation, DER-10, 3 May 2010.

TA	BLE OF	CONTENTS	•	
822	SENEC	A STREET	I	
BU	FFALO,	NEW YORK	I	
1	PRO	PROJECT DESCRIPTION		
	1.1	Project Objectives and Decision Statement	1-1	
	1.2	Site Description	1-1	
	1.3	Site History	1-1	
	1.4	Target Parameter List and Intended Data Use	1-2	
	1.5	Sampling Locations	. 1-2	
	1.6	Project Schedule	1-2	
2	PRO	JECT ORGANIZATION AND RESPONSIBILITIES	2-1	
	2.1	Management Responsibilities	2-1	
	2.2	Quality Assurance Responsibilities	2-1	
	2.3	Laboratory Responsibilities	2-2	
	2.4	Field Responsibilities	2-3	
3	QUA	LITY ASSURANCE OBJECTIVES FOR MEASUREMENT DATA	3-1	
	3.1	Precision	3-1	
	3.2	Accuracy	3-1	
	3.3	Representativeness	3-2	
	3.4	Completeness	3-3	
	3.5	Comparability	3-3	
	3.6	Decision Rules	3-4	
	3.7	Level of Quality Control Effort	3-5	
4	SAM	PLING PROCEDURES	4-1	
	4.1	Sample Containers	4-1	
	4.2	Sample Labeling	4-1	
	4.3	Field QC Sample Collection	4-1	
5	CUS	CUSTODY PROCEDURES		
	5.1	Field Custody Procedures	5-1	
	5.2	Laboratory Chain-of-Custody Procedures	5-3	
	5.3	Storage of Samples	5-4	
	5.4	Final Project Files Custody Procedures	5-4	
6	CAL	IBRATION PROCEDURES AND FREQUENCY	6-1	

		Quality Assurance Pre Former American Linen Supply Co Facility Site Manager Octo		
	6.1 6.2	Field Instrument Calibration Procedures Laboratory Instrument Calibration Procedures	6-1 6-1	
7	ANALYTICAL PROCEDURES			
	7.1 7.2	Field Analytical Procedures Laboratory Analytical Procedures	7-1 7-1	
8	INTE	RNAL QUALITY CONTROL CHECKS	8-1	
	8.1 8.2	Field Quality Control Laboratory Procedures	8-1 8-1	
9	DATA	A REDUCTION, VALIDATION AND REPORTING	9-1	
	9.1 9.2 9.3	Data Reduction Data Validation Data Reporting	9-1 9-1 9-4	
10	PERF	ORMANCE AND SYSTEM AUDITS	10-1	
	10.1 10.2	Field Performance and System Audits Laboratory Performance and System Audits	10-1 10-1	
11	PREV	ENTIVE MAINTENANCE	11-1	
	11.1 11.2	Field Instrument Preventive Maintenance Laboratory Instrument Preventive Maintenance	11-1 11-1	
12		IFIC ROUTINE PROCEDURES USED TO ASSESS DATA PRECISION, JRACY, AND COMPLETENESS	12-1	
	12.1 12.2	Field Measurements Laboratory Data	12-1 12-1	
13	CORF	RECTIVE ACTION	13-1	
	13.1 13.2 13.3	Field Corrective Action Laboratory Corrective Action Corrective Action During Data Validation and Data Assessment	13-1 13-1 13-1	
14	QUAL	LITY ASSURANCE (QA) REPORTS	14-1	
15	REFE	RENCES	15-1	

TABLES

**APPENDIX A – Summary of Field and Laboratory Parameters APPENDIX B – Applicable QAPP Worksheets** 

# LIST OF TABLES

Title

Table 1

Sample Container, Preservation Methods, Shipping, and Packaging Requirements

#### **1 PROJECT DESCRIPTION**

This Quality Assurance Project Plan (QAPP) has been prepared on behalf of AmeriPride Services, Inc. (AmeriPride). The QAPP is a component of the NYSDEC Site Management Plan (SMP) that also includes an Excavation Management Plan (EMP) and Health and Safety Plan (HASP).

# 1.1 **Project Objectives and Decision Statement**

The primary objectives for data collection activities include:

- Collect and evaluate data necessary to monitor the nature and extent of groundwater impacts, and;
- Characterize environmental media for reuse or disposal as necessary during site management activities.

Associated specific objectives for field and laboratory data collection are discussed in Section 1.4 of this plan.

# 1.1.1 Project Status/Phase

The project status and management approach are presented in the SMP. Section 1 summarizes the Site background. Section 2 describes the applicable engineering and institutional controls (IC/ECs). Section 3 describes the site monitoring plan. Section 4 describes operations and maintenance of site systems.

# 1.1.2 QAPP Preparation Guidelines

This QAPP has been prepared in accordance with the United States Environmental Protection Agency, (1999). <u>EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations</u>. EPA QA/R-5 Interim Final, November 1999.

#### 1.2 Site Description

The general Site description is provided in Section 1 of the SMP and is incorporated herein by reference.

Site LocationSMP Figure 1Site PlanSMP Figure 2

#### 1.3 Site History

The Site history is provided in Section 1 of the SMP and incorporated herein by reference.

# 1.4 Target Parameter List and Intended Data Use

#### 1.4.1 Target Parameter List

The SMP monitoring program will include the sampling and analysis of environmental media for the presence of organic and inorganic constituents based on the historical use of the Site. The parameters of analysis are presented in Table 1 with the associated laboratory reporting and method detection limits determined by the project laboratory in accordance with the provisions of the Federal Register, Volume 49, Number 209, October 26, 1984 pp. 198-199.

#### 1.4.1.1 Laboratory Parameters

The laboratory parameters include target compound list (TCL) for volatile organic compounds (VOC) in soil and groundwater in accordance with EPA Method 8260B. In addition, some soil samples will be analyzed for TCL semi-volatile organic compounds (SVOCs) by EPA Method 8270C, target analyte list (TAL) metals by EPA Methods 6010/7471, and polychlorinated biphenyls (PCBs) and pesticides by EPA Methods 8081 as needed for disposal, reuse, or import to the site. If required, sub-slab vapor and indoor air samples will be analyzed for VOCs via EPA Method TO-15.

Concurrent with sample collection, several field parameters will be determined. For soils and solid matrices, field parameters will include visual observations, odor identification, and VOC screening using handheld monitoring equipment.

# 1.5 Sampling Locations

The SMP provides a summary and rationale for the location of groundwater samples. Soil sample locations will be identified as needed for the characterization of excavated soils for off-site disposal or on-site reuse as backfill, and the import of soils to the Site,. The person responsible for making such decisions will be the Project Manager whose responsibilities are described in Section 2.0 of this QAPP.

#### 1.6 **Project Schedule**

Site management activities are intended to be ongoing. The schedule of project monitoring presented in the SMP Table 6.

# 2 PROJECT ORGANIZATION AND RESPONSIBILITIES

This section defines the roles and responsibilities of the individuals who will perform the SMP activities. The Site Manager will have the primary responsibility for implementation of the SMP. The selected analytical laboratory will perform the analyses of environmental samples collected at the Site.

#### 2.1 Management Responsibilities

A description of the project organization is presented in the SMP. Management responsibilities of key personnel include:

#### Owners' Representative

The Owners' Representative is responsible for implementing the project, and has the authority to commit the resources necessary to meet project objectives and requirements. The Owners Representative will establish project policy and procedures to address the specific needs of the project and will also respond to issues related to community outreach. He/she will provide the primary point of contact and represent the project team at regulatory agency and public meetings.

#### Project Director/Project Engineer

The Project Director/Engineer will provide final review and approval of significant submittals to NYSDEC and may participate in technical meetings. The Project Director/Engineer will ensure that overall technical quality is maintained. He/she will be actively involved in the direction of the project and has overall responsibility for the project. The Project Engineer is also responsible for certifying the Periodic Review Report.

#### Project Manager

The Project Manager is responsible for managing the implementation of the SMP and coordinating the collection of data in accordance with the requirements of this QAPP. The Project Manager is responsible for technical quality control and project oversight. The Project Manager responsibilities include the following:

- Review work performed to ensure quality, responsiveness, and timeliness;
- Be responsible for the preparation and quality of interim and final reports;
- Communicate with the Owners' Representative Project Manager concerning the progress of the project;
- Assure corrective actions are taken for deficiencies cited during audits of SMP activities; and
- Overall Site health and safety plan compliance.

# 2.2 Quality Assurance Responsibilities

The Quality Assurance (QA) team will consist of a Quality Assurance Officer, and qualified staff with the responsibilities described as follows:

#### Quality Assurance (QA) Officer

The QA Officer reports directly to the Owners' Representative Project Manager and will be responsible for ensuring that QA/QC procedures are followed. The QA Officer will be responsible for overseeing the review of field and laboratory data. Additional responsibilities include the following:

- Assure the application and effectiveness of the QAPP by the project staff and the analytical laboratory;
- Conduct internal QA/QC of the SMP monitoring activities;
- Provide input to the Project Director, and Project Manager as to corrective actions that may be required as a result of the above-mentioned evaluations;
- Prepare and review data validation and audit reports;
- Approval of the QAPP.

The QA Officer will be assisted by the data validation staff in the evaluation and validation of field and laboratory generated data.

#### Data Validation Staff

The data validation staff will be independent of the laboratory and familiar with the analytical procedures performed. The validation will include a review of the criterion as prescribed by the guidelines presented in Section 12.2 of this document and be presented in a formal written report for submittal to the QA Officer.

#### NYSDEC Quality Assurance Officer

The NYSDEC Quality Assurance Officer may review this QAPP, conduct external performance and system audits of the project laboratory (as needed); and review and evaluate field and analytical laboratory procedures.

#### 2.3 Laboratory Responsibilities

Laboratory services in support of the SMP include the following personnel:

# Laboratory Project Manager

The Laboratory Project Manager will report directly to the QA Officer and Project Manager, and will be responsible for ensuring all resources of the laboratory are available on an as-required basis. The Laboratory Project Manager will also be responsible for the approval of the final analytical reports.

#### Laboratory Operations Manager

The Laboratory Operations Manager will report to the Laboratory Project Manager and will be responsible for coordinating laboratory analysis, supervising in-house chain-of-custody reports, scheduling sample analyses, overseeing data review and overseeing preparation of analytical reports.

#### Laboratory QA Officer

The Laboratory QA Officer will have sole responsibility for review and validation of the analytical laboratory data. The Laboratory QA Officer will provide Case Narrative descriptions of any data quality issues encountered during the analyses conducted by the laboratory. The QA Officer will review QA/QC documentation and define appropriate corrective action procedures as needed.

#### Laboratory Sample Custodian

The Laboratory Sample Custodian will report to the Laboratory Operations Manager and will be responsible for the following:

- Receive and inspect the incoming sample containers;
- Record the condition of the incoming sample containers;
- Sign appropriate documents;
- Verify chain-of-custody and its correctness;
- Notify the Project Manager and Operations Manager of sample receipt and inspection;
- Assign a unique identification number and customer number, and enter each into the sample receiving log;
- Initiate transfer of samples to lab sections; and
- Control and monitor access/storage of samples and extracts.

#### Laboratory Technical Personnel

The laboratory technical staff will have the primary responsibility in the performance of sample analysis and the execution of the QA procedures developed to determine the data quality. These activities will include the proper preparation and analysis of the project samples in accordance with the contract laboratory's Quality Assurance Manual and associated Standard Operating Procedures.

#### 2.4 Field Responsibilities

# Field Coordinator

The Field Coordinator is responsible for the overall operation of the field team and reports directly to the Project Director and Project Manager. The Field Coordinator works with the Site Health and Safety Officer (HSO) to conduct operations in compliance with the project Health and Safety Plan (HASP). The Field Coordinator will facilitate communication and coordinate efforts between the Project Manager and the field team members.

Other responsibilities include the following:

- Develop and implement field-related work plans, ensuring schedule compliance, and adhere to project requirements;
- Coordinate and manage field staff;
- Perform field system audits;
- Oversee quality control for technical data provided by the field staff;
- Prepare and approve text and graphics required for field team efforts;
- Coordinate and oversee technical efforts of subcontractors assisting the field team;
- Identify problems in the field; resolve difficulties in consultation with the Project Director, QAO, and Project Manager; implement and document corrective action procedures and,
- Participate in preparation of the final reports.

# Field Team Personnel

Field Team Personnel will be responsible for the following:

- Perform field activities in compliance with the SMP and this QAPP;
- Immediately report any accidents and/or unsafe conditions to the Project Manager and,
- Take precautions to prevent injury.

#### **3** QUALITY ASSURANCE OBJECTIVES FOR MEASUREMENT DATA

The SMP and associated QAPP are designed to produce data to achieve the project objectives and meet or exceed the minimum standard requirements for the field and laboratory analytical methods. The overall project data quality objective (DQO) is to develop and implement procedures for field sampling, handling, chain-of-custody, laboratory analysis, and reporting that achieve the project objectives. The following section is a general discussion of the criteria that will be used to measure and achieve the project DQO.

# 3.1 Precision

#### 3.1.1 Definition

Precision will be determined by collecting and analyzing field duplicate samples and by creating and analyzing laboratory duplicates from one or more of the field samples. Precision is defined as a quantitative measure of the degree to which two or more measurements are in agreement. Precision will be stated in terms of relative percent difference (RPD). The analytical results from the field duplicate samples will provide data on sampling precision. The results from duplicate samples created by the laboratory will provide data on analytical precision.

#### 3.1.2 Field Precision Sample Objectives

Field precision will be assessed through collection and measurement of field duplicate samples at a rate of 1 duplicate per 20 samples.

# 3.1.3 Laboratory Precision Sample Objectives

Laboratory precision will be assessed through the analysis of laboratory control samples (LCS/LCSD) samples. The analytical data will be presented in summary table format. The DQO criteria for laboratory LCS/LCSD analyses are provided in Appendix A.

#### 3.2 Accuracy

#### 3.2.1 Definition

Accuracy relates to the bias in a measurement system. Bias is the difference between the observed and the "true" value. Sources of error are the sampling process, field contamination, preservation techniques, sample handling, sample matrix interference, sample preparation and analytical procedure limitations.

#### 3.2.2 Field Accuracy Objectives

Sampling bias will be assessed by evaluating the results of equipment rinse and trip blanks. Equipment rinse and trip blanks will be collected as appropriate for each sampling effort.

Equipment rinse blanks will be collected by passing ASTM Type II water over and/or through the respective sampling equipment utilized during the sampling effort. One equipment rinse blank will be collected for each type of non-dedicated sampling equipment used for the sampling effort.

Equipment rinse blanks will be analyzed for the target parameters for which environmental media have been collected. (Note: If dedicated or disposable sampling equipment is used, equipment rinse samples will not be collected as part of that field effort.)

Trip blank samples will be prepared by the laboratory and provided within each transportation cooler for volatile organic compound (VOC) containers. Trip blank samples will be analyzed for the VOCs for which environmental media have been collected for analysis.

#### 3.2.3 Laboratory Accuracy Objectives

Analytical bias will be assessed through the use of known laboratory control samples (LCS) and site specific matrix spike (MS) and matrix spike duplicate (MSD) sample analyses. LCS analyses will be performed with each analytical batch of project samples to determine the accuracy of the analytical system.

One (1) set of MS/MSD analyses will be performed with each batch of twenty (20) project samples to assess the accuracy of identification and quantification of analytes within the site-specific sample matrices. Additional sample volume will be collected at sample locations selected for MS/MSD analyses so that method detection limits (MDLs) and laboratory reporting limits (RLs) can be met.

The accuracy of organic parameter analyses is also monitored through the analysis of system monitoring or surrogate compounds. Surrogate compounds are added to each sample, standard, blank, and QC samples prior to the sample preparation and analysis. Surrogate compound percent recoveries provide information on the effect of the sample matrix on the accuracy of the analyses. The results of the LCS and MS/MSD analyses and surrogate compounds will be presented in a summary table reporting format and evaluated versus the laboratory specific acceptance criteria presented in Appendix A.

#### 3.3 **Representativeness**

#### 3.3.1 Definition

Representativeness expresses the degree to which sample data accurately and precisely represent a characteristic of a population, a parameter variation at a sampling point or an environmental condition. Representativeness is a qualitative parameter that is dependent upon the design of the sampling program. The representativeness criterion is satisfied by proper selection of sampling locations and quantity of samples collected.

# 3.3.2 Measures to Ensure Representativeness of Field Data

Representativeness will be addressed by prescribing sampling techniques and the rationale used to select sampling locations.

Sampling will generally be biased unless otherwise noted in the SMP; that is, sampling associated with the soil and groundwater will be based on site knowledge and/or the observed presence/absence of potential contaminants. Specific sampling technique descriptions, which allow consistency, repetitiveness and thus representativeness, are provided in the SMP.

#### 3.3.3 Measures to Ensure Representativeness of Laboratory Data

Representativeness in the laboratory is ensured by using proper analytical procedures and analyzing duplicate samples. By definition, duplicate samples are collected and analyzed to be representative of a given point in space and time which provide both precision and representativeness information.

#### 3.4 **Completeness**

#### 3.4.1 Definition

Completeness is a measure of the amount of valid (usable) data obtained from a measuring system compared to the total amount of the data obtained or anticipated. The completeness goal for all data uses is that a sufficient amount of valid data be generated so that decisions can be made related to the intended data use with a high degree of confidence. The evaluation of the data completeness will be performed at the conclusion of each sampling and analysis effort.

#### 3.4.2 Field Completeness Objectives

Completeness is a measure of the amount of valid measurements obtained from all measurements taken versus the number proposed in the SMP. Field completeness objective for this project will be greater than (>) 90 percent (%).

#### 3.4.3 Laboratory Completeness Objectives

Laboratory data completeness objective is a measure of the amount of valid data obtained from all laboratory measurements. Corrective actions such as revised sample handling procedures will be implemented if problems are noted. The completeness of the data generated will be determined by comparing the amount of valid data, based on independent validation, with the total data set. The completeness goal will be >90%.

# 3.5 **Comparability**

3.5.1 Definition

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared to another.

#### 3.5.2 Measures to Ensure Comparability of Field Data

Sample data should be comparable to other measurement data for similar samples and sample conditions. This goal is achieved through using standard operating procedures (SOP) to collect, preserve, store and analyze representative samples, and the reporting of analytical results. The field SOP for the various activities to be conducted during this investigation will provide guidelines to generate reproducible results.

#### 3.5.3 Measures to Ensure Comparability of Laboratory Data

Comparability of laboratory data will be maintained through the use of Standard Reference Materials (SRM) obtained from either EPA Cooperative Research and Development Agreement (CRADA) suppliers or the National Institute of Standards and Technology (NIST) for the preparation of instrument calibration and LCS solutions.

The reported results for the sample analyses will also be presented in standard units of mass of contaminant within a known volume of environmental media.

The units for various sample matrices are described as follows:

- Solid Matrices milligrams (mg) contaminant per kilogram (kg) of media (Dry Weight).
- Aqueous Matrices micrograms (ug) contaminant per liter (L) of media for organic analyses, and milligrams per liter for inorganic analyses.
- Gaseous Matrices micrograms (ug) contaminant per cubic meter (M<sup>3</sup>) of media

#### 3.6 **Decision Rules**

#### 3.6.1 Definition

The decision rule is a statement that prescribes a course of action or non-action to be taken, based on assumptions to test its logical and empirical consequences.

#### 3.6.2 Decision Rule Objective

The rationale for sample locations, sample number and analytical parameters is provided in the SMP. The decision rule for the sampling and analysis data collected is as follows:

1. Samples will be collected at discrete locations to provide a comprehensive assessment of impacted media.

2. Sample data will be compared to regulatory action levels to determine the appropriate action as defined in the SMP.

#### 3.7 Level of Quality Control Effort

Equipment rinse, trip and method blank samples; field and laboratory duplicate samples; and laboratory control and matrix spike samples will be prepared and analyzed to determine the analytical data quality.

Equipment rinse blanks will be prepared by field personnel and submitted for analysis of target parameters. Equipment rinse blank samples will be analyzed to check for contamination of equipment introduced during sampling at the Site. One (1) equipment rinse blank will be collected from non-dedicated equipment per sampling event.

Trip blanks are used to assess the potential for contamination during sample storage and shipment. The trip blank will consist of ASTM Type II water that has been provided with the sample containers to be used for sampling VOC. Trip blanks will be preserved and handled in the same manner as the project samples. One (1) trip blank will be included along with each shipment cooler containing project samples to be analyzed for VOCs.

**Method blank** samples will be prepared by the laboratory and analyzed concurrently with all project samples to assess potential contamination introduced during the analytical process.

Field duplicate samples are analyzed to determine sampling and analytical reproducibility. One (1) field duplicate will be collected for every 20 or fewer investigative samples collected for laboratory analysis.

**Matrix spikes** will provide information to assess the precision and accuracy of the analysis of the target parameters within the environmental media collected. One (1) matrix spike/matrix spike duplicate (MS/MSD) will be collected for every 20 or fewer investigative samples per sample matrix (i.e. soil or groundwater).

(Note: Soil MS/MSD samples require triple sample volume for VOC only. Aqueous MS/MSD samples require triple the normal sample volume for VOC analysis and double the volume for the remaining parameters.)

#### 4 SAMPLING PROCEDURES

Samples of soil and groundwater will be obtained during the SMP program. The SMP describes each of the sampling tasks and project objectives.

The SMP and EMP provide the standard operating procedures (SOP) for sampling of each environmental media including soil stockpiles and groundwater.

#### 4.1 Sample Containers

Sample containers for each sampling task will be provided by the project laboratory. The containers will be cleaned by the manufacturer to meet or exceed the analyte specifications established in the EPA, "Specifications and Guidance for Obtaining Contaminant-Free Sample Containers", April 1992, OSWER Directive #9240.0-0.5A. Certificates of analysis for each lot of sample containers used will be maintained by the laboratory and will be available upon request.

The appropriate sample containers, preservation method, maximum holding times, and shipping information for each target parameter and sampling task are provided in Table 1.

#### 4.2 Sample Labeling

Each sample will be labeled with a unique sample number that will facilitate tracking and crossreferencing of sample information. Equipment rinse blank and field duplicate samples also will be numbered with a unique sample numbers.

# 4.3 Field QC Sample Collection

#### 4.3.1 Equipment Rinse Blank Sample Collection

Equipment rinse blank samples will be collected when non-dedicated sampling equipment is used to collect samples. Equipment rinse blanks consist of distilled water that has been routed through decontaminated sampling equipment and collected into the appropriate containers. The containers will be filled in order of decreasing analyte volatility (i.e., VOC first, SVOC second and followed by the containers for the remaining analyses).

# 4.3.2 Field Duplicate Sample Collection

#### 4.3.2.1 Water Samples

Field duplicate samples will be collected using the following procedure:

- 1. The first sample container is filled to the proper level and sealed. The procedure is repeated for the second sample container.
- 2. The samples are properly labeled as specified in Section 4.2.

- 3. Steps 1 through 4 are repeated for the bottles for each analysis. The samples are collected in order of decreasing analyte volatility as detailed in Section 4.3.1.
- 4. Chain-of-custody documents are executed.
- 5. The samples will be packaged as specified in Table 1.

#### 4.3.2.2 Soil Samples

Soil field duplicates will be collected as specified in the following:

- 1. The split-spoon sampler or trowel will be retrieved from the sampling point.
- 2. Soil for VOC analysis will be removed from the sampling device.
- 3. Soil for non-VOC analysis will be removed from the sampling device and placed in a stainless steel mixing bowl. The soil will be thoroughly homogenized using stainless steel utensils and the sample containers will be filled in order of decreasing analyte volatility as described in Section 4.3.1.

# 5 CUSTODY PROCEDURES

Custody is one of several factors necessary for the admissibility of environmental data as evidence in a court of law. Custody procedures help to satisfy the two major requirements for admissibility: relevance and authenticity. Sample custody is addressed in three parts: field sample collection, laboratory analysis and final project files.

Custody of a sample begins when it is collected by or transferred to an individual and ends when that individual relinquishes or disposes of the sample. A sample or project file is under custody if:

- 1. the item is in actual possession of a person;
- 2. the item is in the view of the person after being in actual possession of the person;
- 3. the item was in actual possession and subsequently stored to prevent tampering; or
- 4. the item is in a designated and identified secure area.

#### 5.1 Field Custody Procedures

Field personnel will keep written records of field activities on applicable preprinted field forms or in a bound field notebook to record data collecting activities. These records will be written legibly in ink and will contain pertinent field data and observations. Entry errors or changes will be crossed out with a single line, dated and initialed by the person making the correction. Field forms and notebooks will be periodically reviewed by the Field Coordinator.

The beginning of each entry in the logbook or preprinted field form will contain the following information:

- Date
- Start time
- Weather
- Names of field personnel (including subcontractors)
- Level of personal protection used at the Site
- Names of all visitors and the purpose of their visit.

For each measurement and sample collected, the following information will be recorded:

- Detailed description of sample location,
- Equipment used to collect sample or make measurement and the date equipment was calibrated,
- Time sample was collected,
- Description of the sample conditions,
- Depth sample was collected (if applicable),
- Volume and number of containers filled with the sample; and,
- Sampler's identification.

#### 5.1.1 Field Procedures

Data quality can be affected by sample collection activities. If the integrity of collected samples is questionable, the data, regardless of its analytical quality, will also be questionable.

The following procedure describes the process to maintain the integrity of the samples:

- Upon collection samples are placed in the proper containers. In general, samples collected for organic analysis will be placed in pre-cleaned glass containers and samples collected for inorganic analysis will be placed in pre-cleaned plastic (polyethylene) bottles.
- Samples will be assigned a unique sample number and will be affixed to a sample label.
- Samples will be properly and appropriately preserved by field personnel in order to minimize loss of the constituent(s) of interest due to physical, chemical or biological processes.
- Appropriate volumes will be collected to ensure that the appropriate reporting limits can be successfully achieved and that the required QC sample analyses can be performed.

# 5.1.2 Transfer of Custody and Shipment Procedures

- A chain-of-custody (COC) record will be completed at the time of sample collection and will accompany each shipment of project samples to the laboratory. The field personnel collecting the samples will be responsible for the custody of the samples until the samples are relinquished to the laboratory. Sample transfer will require the individuals relinquishing and receiving the samples to sign, date and note the time of sample transfer on the COC record.
- Samples will be shipped or delivered in a timely fashion to the laboratory so that holding-times and/or analysis times as prescribed by the methodology can be met.
- Samples will be transported in containers (coolers) which will maintain the refrigeration temperature for those parameters for which refrigeration is required in the prescribed preservation protocols.
- Samples will be placed in an upright position and limited to one layer of samples per cooler. Additional bubble wrap or packaging material will be added to fill the cooler. Shipping containers will be secured with tape for shipment to the laboratory.
- If samples are split with the NYSDEC representatives, a separate chain-of-custody will be prepared and marked to indicate with whom the samples are shared. The person

relinquishing the samples will require the representative's signature acknowledging sample receipt.

- If samples are sent by a commercial carrier, a bill of lading will be used. Commercial carriers will not sign the custody record as the custody record is sealed inside the sample cooler.
- Samples will be shipped to the laboratory courier or transported by courier to the laboratory the day of collection.

# 5.2 Laboratory Chain-of-Custody Procedures

A sample custodian will be designated by the laboratory and will have the responsibility to receive all incoming samples. Once received, the custodian will document if the sample is received in good condition (i.e., unbroken, cooled, etc.) and that the associated paperwork, such as chain-of-custody forms have been completed.

The custodian will sign the COC and document if sufficient sample volume has been received to complete the analytical program. The sample custodian will then place the samples into secure, limited access storage (refrigerated storage, if required). The sample custodian will assign a unique number to each incoming sample for use in the laboratory. The unique number will then be entered into the sample-receiving log with the verified time and date of receipt noted.

The laboratory will begin the analyses requested on the chain-of-custody form in accordance with the appropriate methodologies. Samples will be removed from secure storage in accordance with the laboratory internal chain-of-custody procedures.

#### 5.3 Storage of Samples

Empty sample bottles will be returned to secure and limited access storage after the available volume has been consumed by the analysis. Upon completion of the entire analytical work effort, samples will be disposed of by the sample custodian. The excess samples will be stored at least thirty (30) days after the final laboratory reports have been issued to the Project Manager. Disposal of excess samples and empty containers will be completed in accordance with all Federal, State and local requirements.

#### 5.4 Final Project Files Custody Procedures

The final project files will be the central repository for all documents with information relevant to sampling and analysis activities as described in this QAPP. The Project Manager will be the custodian of the project file. The project files including all relevant records, reports, logs, field notebooks, pictures, subcontractor reports and data reviews will be maintained in a secured, limited access area and under custody of the Project Director or his designee.

The final project file will include the following:

- Project plans and drawings
- Field data records
- Sample identification documents and soil boring/monitoring well logs
- All chain-of-custody documentation
- Correspondence
- References, literature
- Laboratory data deliverables
- Data validation and assessment reports
- Progress reports, QA reports
- Final report

The laboratory will be responsible for maintaining analytical logbooks, laboratory data and sample chain of custody documents. Raw laboratory data files and copies of hard copy reports will be inventoried and maintained by the laboratory for a period of six (6) years at which time the laboratory will contact the Project Manager regarding the disposition of the project related files.

# 6 CALIBRATION PROCEDURES AND FREQUENCY

#### 6.1 Field Instrument Calibration Procedures

Several field instruments will be used for both on-site screening of samples and for health and safety monitoring, as described in the Health and Safety Plan (HASP). On-site air monitoring for health and safety purposes may be accomplished using several different organic vapor detection devices, such as a Photo-ionization Detector (PID), Combustible Gas Indicator (CGI), and/or Draeger tubes.

Field instruments will be calibrated in accordance with the instrument manufacturer's requirements and checked during field activities to verify performance.

#### 6.2 Laboratory Instrument Calibration Procedures

Reference materials of known purity and quality will be utilized for the analysis of environmental samples. The laboratory will carefully monitor the preparation and use of reference materials including solutions, standards and reagents through well-documented procedures.

All solid chemicals and acids/bases used by the laboratory will be rated as "reagent grade" or better. All gases will be "high" purity or better. All Standard Reference Materials (SRMs) or Performance Evaluation (PE) materials will be obtained from approved vendors of the National Institute of Standards and Technology (formerly National Bureau of Standards), the U.S. EPA Environmental Monitoring Support Laboratories (EMSL), or reliable Cooperative Research and Development Agreement (CRADA) certified commercial sources.

#### 7 ANALYTICAL PROCEDURES

Analytical procedures to be utilized for analysis of environmental samples will be based on referenced U.S. EPA promulgated analytical protocols.

#### 7.1 Field Analytical Procedures

Field analytical procedures include qualitative measurement of Volatile Organic Compounds (VOC) during the collection of soil samples.

#### 7.2 Laboratory Analytical Procedures

Laboratory analyses will be based on the U.S. EPA methodology requirements promulgated in:

■ "Test Methods for Evaluating Solid Waste," SW-846 EPA, Office of Solid Waste, and promulgated updates, 1986.

The laboratory reporting limits (RLs) and associated method detection limits (MDLs) for the target analytes and compounds for the environmental media to be analyzed are presented in Table 1.

# 7.2.1 List of Project Target Compounds and Laboratory Detection Limits

A complete list of project target compounds and project reporting limits for each analyte is listed in Table 1. MDLs have been experimentally determined by the project laboratory using the method provided in 40 CFR, Part 136 Appendix B.

#### 7.2.2. List of Method Specific Quality Control (QC) Criteria

The laboratory method specific procedures will include a section that presents the minimum QC requirements for the project analyses. Section 8.0 references the frequency of the associated QC samples for each sampling effort and matrix.

# 8 INTERNAL QUALITY CONTROL CHECKS

This section presents the internal quality control checks that will be employed for field and laboratory measurements.

#### 8.1 Field Quality Control

#### 8.1.1 Equipment Rinse Blanks

Internal quality control checks will include analysis of equipment blanks to validate successful equipment cleaning activities. Whenever possible, dedicated equipment will be employed to reduce the possibility of cross-contamination of samples.

The frequency of equipment rinse sample preparation will be for each type of non-dedicated sampling equipment on which decontamination procedures have been performed as part of each sampling event.

#### 8.1.2 Trip Blanks

Trip blanks samples will be prepared by the project laboratory using ASTM Type II or equivalent water placed within pre-cleaned 40 milliliter (ml) VOC vials equipped with teflon septa. Trip blanks will accompany each sample delivery group (SDG) of environmental samples collected for analysis of VOCs.

Trip blank samples will be placed in each cooler that stores and transports project samples that are to be analyzed for VOCs.

# 8.2 Laboratory Procedures

Procedures which contribute to maintenance of overall laboratory quality assurance and control include appropriately cleaned sample containers, proper sample identification and logging, applicable sample preservation, storage and analysis within prescribed holding times, and use of controlled materials. Note that field duplicate samples and matrix spike samples will only be collected for environmental monitoring samples, only (i.e. groundwater monitoring), and not for soil import, reuse, or disposal sampling or for sub-slab vapor or indoor air samples.

#### 8.2.1 Field Duplicate Samples

The precision or reproducibility of the data generated will be monitored through the use of field duplicate samples. Field duplicate analysis will be performed at a frequency of 1 in 20 project samples.

Precision will be measured in terms of the absolute value of the relative percent difference (RPD) as expressed by the following equation:

$$RPD = \frac{\left| \frac{RI - R2}{(RI - R2)} \right|}{2} X100\%$$

Acceptance criteria for duplicate analyses performed on solid matrices will be 50 % and aqueous matrices will be 30%. RPD values outside these limits will require an evaluation of the sampling and/or analysis procedures by the project QA Officer and/or laboratory QA Director. Corrective actions may include re-analysis of additional sample aliquots and/or qualification of the data for use.

#### 8.2.2 Matrix Spike Samples

Ten percent of each project sample matrix for each analytical method performed will be spiked with known concentrations of the specific target compounds/analytes.

The amount of the compound recovered from the sample compared to the amount added will be expressed as a percent recovery. The percent recovery of an analyte is an indication of the accuracy of an analysis within the site-specific sample matrix. Percent recovery will be calculated for MS/MSD using the following equation.

% Recovery = 
$$\frac{Spiked Sample - Background}{Known Value of Spike} \times 100\%$$

If the quality control value falls outside the control limits (UCL or LCL) due to sample matrix effects, the results will be reported with appropriate data qualifiers. To determine the effect non-compliant MS recoveries have on the reported results, the recovery data will be evaluated as part of the validation process.

#### 8.2.3 Laboratory Control Sample (LCS) Analyses

The laboratory will perform LCS analyses prepared from Standard Reference Materials (SRMs). The SRMs will be supplied from an independent manufacturer and traceable to NIST materials with known concentrations of each target analyte to be determined by the analytical methods performed. In cases where an independently supplied SRM is not available, the LCS may be prepared by the laboratory from a reagent lot other than that used for instrument calibration.

The laboratory will evaluate LCS analyses in terms of percent recovery using the most recent laboratory generated control limits.

LCS recoveries that do not meet acceptance criteria will be deemed invalid. Analysis of project samples will cease until an acceptable LCS analysis has been performed. If sample analysis is performed in association with an out-of-control LCS sample analysis, the data will be deemed invalid.

Corrective actions will be initiated by the QA Officer and/or laboratory QA officer to investigate the problem. After the problem has been identified and corrected, the solution will be noted in the instrument run logbook and re-analysis of project samples will be performed, if possible.

The analytical anomaly will be noted in the sample delivery group (SDG) Case Narrative and reviewed by the data validator. The data validator will confirm that appropriate corrective actions were implemented and recommend the applicable use of the affected data.

# 8.2.4 Surrogate Compound/Internal Standard Recoveries

For VOCs, surrogates will be added to each sample prior to analysis to establish purge and trap efficiency. Quantitation will be accomplished via internal standardization techniques.

The recovery of surrogate compounds and internal standards will be monitored by laboratory personnel to assess possible site-specific matrix effects on instrument performance.

For semi-volatile organics analyses, surrogates will be added to the raw sample to assess extraction efficiency. Internal standards will be added to all sample extracts and instrument calibration standard immediately before analysis for quantitation via internal standardization techniques.

Surrogate compound/internal standard recoveries that do not fall within accepted QC limits for the analytical methodology performed will have the analytical results flagged with data qualifiers as appropriate by the laboratory and will not noted in the laboratory report Case Narrative.

To ascertain the effect non-compliant surrogate compound/internal standard recoveries may have on the reported results, the recovery data will be evaluated as part of the validation process. The data validator will provide recommendations for corrective actions including but not limited to additional data qualification.

#### 8.2.5 Calibration Verification Standards

As presented in Section 7.0 of this plan, calibration verification (CV) standards will be utilized to confirm instrument calibrations and performance throughout the analytical process. CV standards will be prepared as prescribed by the respective analytical protocols. Continuing calibration will be verified by compliance with method-specific criteria prior to additional analysis of project samples. Non-compliant analysis of CV standards will require immediate corrective action by the project laboratory QA officer and/or designated personnel. Corrective

action may include re-analysis of each affected project sample, a detailed description of the problem, the corrective action undertaken, the person who performed the action, and the resolution of the problem.

# 8.2.6 Laboratory Method Blank Analyses

Method blank sample analysis will be performed as part of each analytical batch for each methodology performed. If target compounds are detected in the method blank samples, the reported results will be flagged by the laboratory in accordance with standard operating procedures. The data validator will provide recommendations for corrective actions including but not limited to additional data qualification.

# 9 DATA REDUCTION, VALIDATION AND REPORTING

All data generated through field activities or by the laboratory operation shall be reduced and validated prior to reporting in accordance with the following procedures:

#### 9.1 Data Reduction

# 9.1.1 Field Data Reduction Procedures

Field data reduction procedures will be minimal in scope compared to those implemented in the laboratory setting. The pH, conductivity, temperature, turbidity and VOC readings collected in the field will be generated from direct read instruments if applicable for the type of sampling being conducted. The data will be written into field logbooks immediately after measurements are taken. If errors are made, data will be legibly crossed out, initialed and dated by the field member, and corrected in a space adjacent to the original entry.

#### 9.1.2 Laboratory Data Reduction Procedures

Laboratory data reduction procedures are provided by the appropriate chapter of USEPA, Test Methods for Evaluating Solid Waste", SW-846, Third Edition. All calculations will be checked at the conclusion of each day. Errors will be noted; corrections made with the original notations crossed out legibly. Analytical results for soil samples shall be calculated and reported on a dry weight basis.

Quality control data (e.g., laboratory duplicates, surrogates, matrix spikes, and matrix spike duplicates) will be compared to the method acceptance criteria. Data considered to be acceptable will be entered into the laboratory information management system (LIMS).

Data summaries will be sent to the Laboratory QA Officer for review. Unacceptable data shall be appropriately qualified in the project report. Case narratives will be prepared which will include information concerning data that fell outside acceptance limits and any other anomalous conditions encountered during sample analysis.

#### 9.2 Data Validation

Data validation procedures shall be performed for both field and laboratory operations as described below:

#### 9.2.1 Procedures Used to Evaluate Field Data

Procedures to evaluate field data for this project will include review of field logbooks and checking for transcription errors to project specific documents. This task will be the responsibility of the Field QAO/Project Coordinator.

#### 9.2.2 Procedures to Validate Laboratory Data

Validation of the analytical data will be performed by the QA Officer or designee using the following documents as guidance for the review process:

"U.S.EPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review", EPA-540/R-99/008, October 1999 and the "U.S. EPA Contract Laboratory Program (CLP) National Functional Guidelines for Inorganic Data Review ", EPA-540/R-02-008, July 2002.

The specific data qualifiers used will be as presented and defined in the CLP National Functional Guidelines. Validation will be performed by qualified personnel at the direction of the QA Officer. Data review and validation will consist of two tiers of assessment that incorporates an approach similar to "Innovative Approaches to Data Validation", U.S.EPA Region III, June 1995.

The completeness of each data package will be evaluated by the Data Validator. Completeness checks will be administered on all data to determine whether deliverables specified in the QAPP are present. The validator will determine whether all required items are present and request copies of missing deliverables.

Tier I data validation will be performed for the laboratory quality control summary data deliverables associated with the routine groundwater monitoring program and soil management activities. The following QA/QC elements will be evaluated:

Organic Analysis

i) technical holding times;

ii) GC/MS instrument performance check;

iii) method, trip and equipment rinsate blanks;

iv) system monitoring compounds (surrogate spikes);

- v) MS/MSD results;
- vi) laboratory control samples; and
- vii) field duplicate samples.

Inorganic Analysis

i) technical holding times;

ii) blanks;

iii) laboratory control samples;

- iv) MS/MSD results; and
- v) field duplicates.

Tier II validation will only be completed at which time AmeriPride applies for delisting and an expanded package of the final round of groundwater data is obtained. The following will be evaluated during tier II validation:

Organic Analyses

- i) technical holding times;
- ii) GC/MS instrument performance check;
- iii) initial and continuing calibration;
- iv) blanks;
- v) system monitoring compounds (surrogate spikes);
- vi) MS/MSD results;
- vii) laboratory control samples;
- viii) internal standard performance;
- ix) system performance;
- x) target compound identification (GC/MS analyses); and
- xi) field duplicates

Inorganic Analyses

i) technical holding times;

ii) initial and continuing calibration;

iii) blanks;

- iv) interference check samples;
- v) laboratory control samples;
- vi) matrix duplicate sample analysis;
- vii) matrix spike sample analysis;
- viii) ICP interference check sample;
- ix) ICP serial dilution;

- x) ICP/MS internal standard performance;
- xi) sample result verification; and
- xii) field duplicates.

#### 9.3 Data Reporting

Data reporting procedures shall be carried out for field and laboratory operations as indicated below:

#### 9.3.1 Field Data Reporting

Field data reporting shall be conducted principally through the transmission of report sheets containing tabulated results of all measurements made in the field and documentation of all field calibration activities.

#### 9.3.2 Laboratory Data Reporting

The laboratory data reporting package will be sufficient to perform a data validation in accordance with protocols described above. The NYSDEC Analytical Services Protocol (ASP) Category A deliverables will be used for interim groundwater sampling.

Sampling performed to support the delisting and site closure activities will be reported with NYSDEC ASP Category B deliverables. The NYSDEC reserves the right to request Category B deliverables and full validation as deemed necessary for soil management activities.

Quality Assurance Project Plan ormer American Linen Supply Co Facility Site Management Plan October 2014 Page 10-1

### **10 PERFORMANCE AND SYSTEM AUDITS**

A performance audit is an independent quantitative comparison with data routinely obtained in the field or the laboratory. Performance audits include two separate, independent parts: internal and external audits.

### 10.1 Field Performance and System Audits

### 10.1.1 Internal Field Audit Responsibilities

Internal audits of field activities will be initiated at the discretion of the Owners' Representative Project Manager and will include the review of sampling and field measurements. The audits will verify that all procedures are being followed. Internal field audits will be conducted once during each phase of the sampling and at the conclusion of the project. The audits will include examination of the following:

- Field sampling records, screening results, instrument operating records
- Sample collection
- Handling and packaging in compliance with procedures
- Maintenance of QA procedures
- Chain-of-custody reports

### 10.1.2 External Field Audit Responsibilities

External audits may be conducted by the Project Coordinator at any time during the field operations. These audits may or may not be announced and are at the discretion of the NYSDEC. The external field audits can include (but are not limited to) the following:

- Sampling equipment decontamination procedures
- Sample bottle preparation procedures
- Sampling procedures
- Examination of health and safety plans
- Procedures for verification of field duplicates
- Field screening practices

### 10.2 Laboratory Performance and System Audits

### 10.2.1 Internal Laboratory Audit Responsibilities

The laboratory system audits are typically conducted by the laboratory QA Officer or designee on an annual basis. The system audit will include an examination of laboratory documentation including: sample receiving logs, sample storage, chain-of-custody procedures, sample preparation and analysis and instrument operating records. Quality Assurance Project Plan ormer American Linen Supply Co Facility Site Management Plan October 2014 Page 10-2

At the conclusion of internal system audits, reports will be provided to the laboratory's operating divisions for appropriate comment and remedial/corrective action where necessary. Records of audits and corrective actions will be maintained by the Laboratory QA Officer.

# 10.2.2 External Laboratory Audit Responsibilities

External audits will be conducted as required, by the New York State Department of Health (NYSDOH) or designee. External audits may include any of the following:

- Review of laboratory analytical procedures
- Laboratory on-site visits
- Submission of performance evaluation samples for analysis

Failure of any of the above audit procedures can lead to laboratory disqualification, and another suitable laboratory will have to be chosen. An on-site review can consist of:

- Sample receipt procedures
- Custody, sample security and log-in procedures
- Review of instrument calibration logs
- Review of QA procedures
- Review of log books
- Review of analytical SOPs
- Personnel interviews

A review of a data package from samples recently analyzed by the laboratory can include (but not be limited to) the following:

- Comparison of resulting data to the SOP or method
- Verification of initial and continuing calibrations within control limits
- Verification of surrogate recoveries and instrument timing results
- Review of extended quantitation reports for comparisons of library spectra to instrument spectra, where applicable
- Assurance that samples are run within holding times.

Quality Assurance Project Plan Former American Linen Supply Co Facility Site Management Plan October 2014 Page 11-1

### 11 PREVENTIVE MAINTENANCE

### 11.1 Field Instrument Preventive Maintenance

The field equipment preventive maintenance program is designed to ensure the effective completion of the sampling effort and to minimize equipment down time. Program implementation is concentrated in three areas:

- Maintenance responsibilities.
- Maintenance schedules.
- Inventory of critical spare parts and equipment.

The maintenance responsibilities for field equipment will be assigned to the task leaders in charge of specific field operations. Field personnel will be responsible for daily field checks and calibrations and for reporting any problems with the equipment. The maintenance schedule will follow the manufacturer's recommendations. In addition, the field personnel will be responsible for determining that critical spare parts are included with the field equipment. An adequate inventory of spare parts will be maintained. The inventory will primarily contain parts that are subject to frequent failure, have limited useful lifetimes and/or cannot be obtained in a timely manner.

### 11.2 Laboratory Instrument Preventive Maintenance

Analytical instruments at the laboratory will undergo routine and/or preventive maintenance. The extent of the preventive maintenance will be a function of the complexity of the equipment.

Generally, annual preventive maintenance service will involve cleaning, adjusting, inspecting and testing procedures designed to deduce instrument failure and/or extend useful instrument life. Between visits, routine operator maintenance and cleaning will be performed according to manufacturer's specifications by laboratory personnel.

Maintenance records will be placed on file at the laboratory and can be made available upon request.

Quality Assurance Project Plan Former American Linen Supply Co Facility Site Management Plan October 2014 Page 12-1

### 12 SPECIFIC ROUTINE PROCEDURES USED TO ASSESS DATA PRECISION, ACCURACY, AND COMPLETENESS

### 12.1 Field Measurements

Field generated information will be reviewed for validity. The review will be performed by the Field QA Officer and typically include evaluation of bound logbooks/forms, data entry and calculation checks. Field data completeness will be assessed by the QA Officer through review the field results for compliance with the established QC criteria that are specified in Section 3.0 of this QAPP.

Field data completeness will be calculated using the following equation:

% Completeness =  $\frac{\text{Valid (usable) Data Obtained}}{\text{Total Data Planned}} \times 100$ 

### 12.2 Laboratory Data

Surrogate, internal standard and matrix spike recoveries will be used to evaluate data quality. The laboratory quality assurance/quality control program will include the following elements:

- Precision, in terms of relative percent difference (RPD), will be determined by duplicate sample analysis with each batch of project samples. RPD is defined as the absolute difference of duplicate measurements divided by the mean of these analyses normalized to percentage.
- Accuracy, in terms of percent recovery (recovery of known constituent additions) will be determined by the analysis of matrix spike (MS) samples. The frequency of MS analyses will be one (1) project sample MS/MSD per twenty (20) project samples. MS samples will be collected of groundwater during routine monitoring only. MS samples are not required for characterization of soil for reuse, import, or disposal.
- One method blank will be prepared and analyzed with each batch of project samples. The total number of method blank sample analyses will be determined by the laboratory analytical batch size.
- Standard Reference Materials (SRMs) will be used for each analysis. Sources of SRM's include the U.S. EPA, commercially available material from CRADA certified vendors and/or laboratory produced solutions. SRMs, when available and appropriate, will be processed and analyzed on a frequency of one per set of samples.
- Completeness is the evaluation of the amount of valid data generated versus the total set of data produced from a particular sampling and analysis event. Valid data is determined by independent confirmation of compliance with method-specific and project-specific data quality

 $\frac{Number of Valid Sample Results}{Total Number of Samples Planned} X 100 = \% Complete$ 

Quality Assurance Project Plan Former American Linen Supply Co Facility Site Management Plan October 2014 Page 12-2

objectives. The calculation of data set completeness will be performed by the following equation.

Quality Assurance Project Plan Former American Linen Supply Co Facility Site Management Plan October 2014 Page 13-1

### **13 CORRECTIVE ACTION**

### 13.1 Field Corrective Action

Project personnel will be responsible for ensuring the quality of the sampling procedures and environmental data and as such, will be responsible for initiating corrective action when appropriate. Any Field Team member may initiate corrective action procedures by reporting in writing the nature of the suspected problem to the Project Director, Project Manager or Project QA Officer. Corrective action is intended to address unacceptable procedures or deficient quality control performance.

The corrective action procedures will be as follows:

- Identify/define the problem.
- Assign responsibility for investigating the problem.
- Investigate/determine the cause of the problem.
- Determine an appropriate corrective action to eliminate the problem.
- Implement the corrective action.
- Evaluate the effectiveness of the corrective action.
- Verify that the corrective action has eliminated the problem.
- Prepare a written record detailing the problem, corrective action utilized and solution of the problem.
- Submit the Corrective Action Record (CAR) to the Owners' Representative.

The Project Manager will begin corrective action by relating the problem to appropriate personnel.

### 13.2 Laboratory Corrective Action

The following paragraphs define the corrective action decision process relative to possible noncompliant events encountered during laboratory analysis of the project samples. Corrective actions will be initiated by the laboratory QA personnel and will be implemented by laboratory staff chemists under the oversight of the laboratory QA personnel. As with field corrective actions, the laboratory QA personnel will document the problem, the corrective action undertaken and the resolution of the problem. The corrective actions will be performed prior to release of the data from the laboratory.

### 13.3 Corrective Action During Data Validation and Data Assessment

The QA Officer may identify the need for corrective action during either the data validation or data assessment processes. Potential types of corrective action may include re-sampling by the field team or re-analysis of samples by the laboratory (if possible). These actions are dependent upon the ability to mobilize the field team, whether the data to be collected is necessary to meet the required quality assurance objectives (e.g., the holding time for samples is not exceeded). If the QA Officer identifies a corrective action during data assessment, the Project Manager will be responsible for approving the implementation of corrective action.

Quality Assurance Project Plan Former American Linen Supply Co Facility Site Management Plan October 2014 Page 14-1

### 14 QUALITY ASSURANCE (QA) REPORTS

Critically important to the successful implementation of the SMP monitoring program is a reporting system that provides the means by which the program can be reviewed, problems identified and programmatic changes made to improve the plan.

QA reports to management include:

- Audit reports, internal and external audits with responses
- Performance evaluation sample results; internal and external sources
- Daily QA/QC exception reports/corrective actions

QA/QC corrective action reports will be prepared by the QA Officer when appropriate and presented to the project and/or laboratory management personnel so that performance criteria can be monitored for all analyses from each analytical department. The updated trend/QA charts prepared by the laboratory QA personnel will be distributed and reviewed by various levels of the laboratory management.

Quality Assurance Project Plan Former American Linen Supply Co Facility Site Management Plan October 2014 Page 15-1

### **15 REFERENCES**

United States Environmental Protection Agency, (1999). <u>EPA Requirements for Quality Assurance</u> Project Plans for Environmental Data Operations. EPA QA/R-5 Interim Final, November 1999.

United States Environmental Protection Agency (1991). <u>Preparation Aids for the Development of</u> <u>Category I Quality Assurance Project Plans.</u> U.S. EPA/600/8-91/003, Risk Reduction Engineering Laboratory, Office of Research and Development, Cincinnati, Ohio, February 1991.

United States Environmental Protection Agency, (1993). <u>Data Quality Objectives Process for</u> <u>Superfund Interim Final Guidance.</u> U.S. EPA/540/R-93-071, Office of Solid Waste and Emergency Response (OSWER), September 1993.

United States Environmental Protection Agency, (1992). Specifications and Guidance for Contaminant-Free Sample Containers. OSWER Directive 9240.0-05A, April 1992.

United States Environmental Protection Agency. U.S. EPA Contract Laboratory Program National Functional Guidelines for Organic Data Review. U.S. EPA 540/R-99-012.

United States Environmental Protection Agency. <u>U.S. EPA Contract Laboratory Program National</u> Functional Guidelines for Organic Data Review. U.S. EPA 540/R-94-013.

United States Environmental Protection Agency. <u>Test Methods for Evaluating Solid Waste</u>, Office of Solid Waste, U.S. EPA, SW-846, November 1986, with updates.

New York State Department of Environmental Conservation, NYSDEC Analytical Services Protocol (ASP), Bureau of Environmental Investigation, 1991 with updates.

New York State Department of Environmental Conservation, NYSDEC, Division of Environmental Remediation, Technical Guidance for Site Investigation and Remediation, DER-10, May 2010.

"Site Management Plan, Former American Linen Supply Co. Facility, Erie County, New York, NYSDEC Site Number C915241," dated 29 October 2014. Prepared by Haley & Aldrich of New York.

October 2014

# TABLE 1 FORMER AMERICAN LINEN SUPPLY CO FACILITY SITE MANAGEMENT PLAN SUMMARY OF ANALYTICAL METHOD, PRESERVATIVE, HOLDING TIME AND SAMPLE SIZE REQUIREMENTS

Analysis/Method	Sample Type	Preservation	Holding Time	Volume/Weight	Contuiner
TCL Volatiles/8260	Soil	McOH, Cool, 4°C	14 days	20 g	40 ml Amber VOA vial (Terracore or Broore)
TCL Semi-Volatiles/8270	Soil	Cool, 4°C	14 days	20 g	4.0 oz. Glass Jar*
TAL Metals/6010/7471	Soil	Cool, 4°C	180 days (6010)/28 days (7471)	20 g	4.0 oz. Głass Jar*
Pesticides/8081	Soil	Cool, 4°C	14 days	20 g	4.0 oz. Glass Jar*
PCBs/8082	Soil	Cool, 4°C	1 Year	20 g	4.0 oz. Glass Jar*
TCL Volatijes/8260	Water	Cool, 4°C, HCl to pH 2	14 days	120 mi	3 x 40 mL VOA Vials*
Volatiles/TO-15	Air	None	30 days	l Liter	2 - 6 Liter Summa Canister

Notes:

1. \* - Glass 4-oz. jar with septum sealed lid.

Methods derived from test methods for evaluating solid waste, U.S. EPA Office of Solid Waste document No. SW-846, revised 12/87.
 Refer to text for additional information.

Haley Aldrich of New York G:\37319 (AmeriPride, 8 Lord Street, Buffalo)\054 - SMP\Appendix G - QAPP\2014\_1002-HANY-QAPP\_Table 1.xlsx

# APPENDIX A

# Summary of Field and Laboratory Parameters

\*The parameters included in this appendix were provided by Alpha Analytical Services as an example. Field and laboratory parameters should meet or exceed these values.

Pe	Pesticides in s	soil EPA 80	8081A	
	* MDL	RL	LCS/MS	<b>MS/MSD</b>
Analytes	ug/Kg	ug/Kg	% Rec	% RPD
4'4-DDD	2.854	80	25-150%	< 50%
4,4'-DDE	1.851	ω	35-140%	< 50%
4,4'-DDT	6.418	15	30-155%	< 50%
Aldrin	2.816	80	25-140%	< 50%
Alpha-BHC	0.946	3.33	60-130%	< 50%
Beta-BHC	3.032	8	65-125%	< 50%
Chlordane	26.503	65	N/A	< 50%
cis-Chlordane	2.787	10	65-125%	< 50%
Delta-BHC	1.565	ω	45-135%	< 50%
Dieldrin	2.501	5	30-130%	< 50%
Endosulfan I	1.889	8	50-110%	< 50%
Endosulfan II	2.675	ω	30-130%	< 50%
Endosulfan sulfate	1.523	3.33	55-135%	< 50%
Endrin	1.368	3.33	55-135%	< 50%
Endrin Aldehyde	3.485	10	40-150%	< 50%
Endrin ketone	2.060	8	75-125%	< 50%
Heptachlor	1.795	4	30-145%	< 50%
Heptachlor epoxide	4,493	15	30-130%	< 50%
Lindane	1.489	3.33	60-125%	< 50%
Methoxychlor	4.681	15	55-150%	× 50%
Toxaphene	42.126	150	N/A	%0 <u>5</u> >
trans-Chlordane	2.638	10	60-125%	< 50%
Ň	Non-Standard	d Compounds	spu	
Alachior	3.416	10	40-140%	< 50%
Hexachlorobenzene	2.004	8	25-140%	%09 >
Surro	Surrogate(s)		% Rec	Recovery

2,4,5,6-Tetrachloro-m-xylene	30-150%
Decachlorobiphenyl	30-150%

\* Pest 10 & 11 2009 Microwave, Pest 10 SOX 2007, Pest 11 SOX 2007 - highest MDL

Pest	Pesticides in Liquid EPA		8081A	
	MDL *	RL	LCS/MS	<b>MS/MSD</b>
Analytes	ug/L	ug/L	% Rec	% RPD
4,4'-DDD	0.00464	0.04	30-135%	< 50%
4,4'-DDE	0.00381	0.04	70-125%	< 50%
4,4'-DDT	0.00432	0.04	45-140%	< 50%
Aldrin	0.00216	0.02	45-140%	< 50%
Alpha-BHC	0.00439	0.02	60-125%	< 50%
Beta-BHC	0.00560	0.02	60-125%	< 50%
Chlordane	0.04626	0.2	N/A	< 50%
cis-Chlordane	0.00666	0.02	65-120%	< 50%
Delta-BHC	0.00467	0.02	55-135%	< 50%
Dieldrin	0.00429	0.04	65-125%	< 50%
Endosulfan I	0.00345	0.02	15-135%	< 50%
Endosulfan II	0.00519	0.04	35-140%	< 50%
Endosulfan sulfate	0.00481	0.04	60-135%	< 50%
Endrin	0.00429	0.04	60-135%	< 50%
Endrin Aldehyde	0.00810	0.04	35-145%	< 50%
Endrin ketone	0.00477	0.04	65-135%	< 50%
Heptachlor	0.00310	0.02	50-140%	< 50%
Heptachlor epoxide	0.00415	0.02	65-130%	< 50%
Lindane	0.00434	0.02	60-125%	< 50%
Methoxychlor	0.00684	0.2	55-145%	× 50%
Toxaphene	0.06299	0.2	N/A	< 50%
trans-Chlordane	0.00627	0.02	65-125%	< 50%
N	Non-Standard	d Compounds	spu	
Alachior	0.00514	0.1	40-140%	< 50%
Hexachlorobenzene	0.00639	0.02	40-140%	< 50%
Surro	Surrogate(s)		% Rec	% Recovery
2,4,5,6-Tetrachloro-m-xylene	-xylene		30-1	30-150%
Decachlorobiphenyl			30-1	30-150%

\* Pest 10 2007 & Pest 11 2007 - highest MDL

Page 1 of 18

	PCBs in se	PCBs in soil EPA 8082	32	
	* TOW	RL	LCS/MS	<b>MS/MSD</b>
Analytes	ug/Kg	ug/Kg	% Rec	% RPD
Aroclor 1016	6.577	33.3	40-140%	< 50%
Aroclor 1221	10.045	33.3		< 50%
Aroclor 1232	7.074	33.3		< 50%
Aroclor 1242	6.32	33.3		< 50%
Aroclor 1248	4.029	33.3		< 50%
Aroclor 1254	5.25	33.3		< 50%
Aroclor 1260	5.78	33.3	40-140%	< 50%
Aroclor 1262	2.463	33.3		×09 ×
Aroclor 1268	4.831	33.3		< 50%
c			- C / O	

% Recovery	30-150%	30-150%	
Surrogate(s)	2,4,5,6-Tetrachloro-m-xylene	Decachlorobiphenyl	

\* Pest 2 2009 , Pest 7 2008, Pest 9 2008, Pest 12 2009, Pest 13 2012 SOX & Microwave - Highest MDL

MDL *         RL           is         ug/L         ug/L           0.066         0.25           0.058         0.25           0.058         0.25           0.037         0.25           0.072         0.25           0.067         0.25           0.072         0.25           0.067         0.25           0.067         0.25           0.038         0.25           0.037         0.25           0.038         0.25           0.038         0.25           0.036         0.25	4	PCBs in Liquid EPA 8082	uid EPA 8(	<b>)</b> 82	
s ug/L ug/L ug/L ug/L 0.066 0.25 0.058 0.25 0.055 0.25 0.055 0.25 0.055 0.025		MDL *	RL	<b>LCS/MS</b>	<b>MS/MSD</b>
0.066         0.25           0.058         0.25           0.037         0.25           0.037         0.25           0.037         0.25           0.012         0.25           0.067         0.25           0.067         0.25           0.067         0.25           0.038         0.25           0.038         0.25           0.036         0.25	Analytes	ug/L	ug/L	% Rec	% RPD
0.058         0.25           0.037         0.25           0.037         0.25           0.072         0.25           0.067         0.25           0.067         0.25           0.067         0.25           0.038         0.25           0.036         0.25           0.036         0.25           0.036         0.25	Arocior 1016	0.066	0.25	40-140%	< 30%
0.037 0.25 0.072 0.25 0.067 0.25 0.041 0.25 0.038 0.25 0.035 0.25	Aroclor 1221	0.058	0.25		< 30%
0.072 0.25 0.067 0.25 0.038 0.25 0.035 0.25 0.035 0.25	Aroclor 1232	0.037	0.25		< 30%
0.067 0.25 0.041 0.25 0.038 0.25 0.035 0.25	Aroclor 1242	0.072	0.25		< 30%
0.041 0.25 0.038 0.25 0.035 0.25	Aroclor 1248	0.067	0.25		< 30%
0.038 0.25 0.035 0.25	Aroclor 1254	0.041	0.25		< 30%
0.035	Aroclor 1260	0.038	0.25	40-140%	< 30%
	Aroclor 1262	0.035	0.25		< 30%
0.UZ3	Arocior 1268	0.029	0.25		< 30%

Surrogate(s)	% Recovery
2,4,5,6-Tetrachloro-m-xylene	30-150%
Decachtorobiphenyt	30-150%

\* Pest 7 2008, Pest 9 2008 - highest MDL

Pe	Pesticides in Liquid EPA	Liquid EP/	A 608	
	MDL *	RL	LCS/MS	<b>USM/SM</b>
Analytes	ng/L	ng/L	% Rec	% RPD
4,4'-DDD	0.00498	0.04	30-150%	< 30%
4,4'-DDE	0.00350	0.02	30-150%	< 30%
4,4'-DDT	0.00524	0.02	30-150%	< 30%
Aldrin	0.00345	0.02	30-150%	< 30%
Alpha-BHC	0.00380	0.02	30-150%	< 30%
Beta-BHC	0.00598	0.02	30-150%	< 30%
Chlordane	0.04170	0.2	30-150%	< 30%
cis-Chlordane	0.00414	0.02	30-150%	< 30%
Delta-bhc	0.00272	0.02	30-150%	< 30%
Dieldrin	0.00295	0.04	30-150%	< 30%
Endosulfan I	0.00607	0.02	30-150%	< 30%
Endosulfan II	0.00400	0.04	30-150%	< 30%
Endosulfan sulfate	0.00524	0.04	30-150%	< 30%
Endrin	0.00434	0.02	30-150%	< 30%
Endrin Aldehyde	0.00257	0.04	30-150%	< 30%
Endrin ketone	0.00496	0.04	30-150%	< 30%
Heptachlor	0.00396	0.02	30-150%	< 30%
Heptachlor epoxide	0.00619	0.02	30-150%	< 30%
Lindane	0.00295	0.02	30-150%	< 30%
Methoxychlor	0.00583	0.2	30-150%	< 30%
Toxaphene	0.12560	0.2	30-150%	< 30%
trans-Chlordane	0.00801	0.02	30-150%	< 30%
Surro	Surrogate(s)		% Recovery	overy
2,4,5,6-Tetrachloro-m-xylene	n-xylene		30-150%	50%
Decachlorobiphenyl		-	30-150%	50%

\* Pest 9 2008, Pest 10 2008 - highest MDL

RL ug/L 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5		PCBs in	PCBs in Liquid EPA 608	A 608	
ug/L         ug/L           0.0918         0.5           0.0549         0.5           0.0550         0.5           0.0550         0.5           0.0633         0.5           0.0550         0.5           0.0633         0.5		* JOM	RL	LCS/MS	<b>USW/SW</b>
0.0918         0.5           0.0549         0.5           0.0690         0.5           0.0550         0.5           0.0553         0.5           0.0633         0.5           0.0553         0.5           0.0553         0.5           0.0533         0.5	Analytes	ug/L	ng/L	% Rec	% RPD
0.0549 0.5 0.0690 0.5 0.0550 0.5 0.0863 0.5 0.639 0.5 0.0322 0.5	Arocior 1016	0.0918	0.5	40-126%	< 30%
0.0690 0.5 0.0550 0.5 0.0863 0.5 0.639 0.5 0.0322 0.5	Aroclor 1221	0.0549	0.5		< 30%
0.0550 0.5 0.0863 0.5 0.0639 0.5 0.0322 0.5	Aroclor 1232	0.0690	0.5		< 30%
0.0863 0.5 0.0639 0.5 0.0322 0.5	Aroclor 1242	0.0550	0.5		< 30%
0.0639 0.5 0.0322 0.5	Aroclor 1248	0.0863	0.5		< 30%
0.0322 0.5	Aroclor 1254	0.0639	0.5		< 30%
	Aroclor 1260	0.0322	0.5	40-127%	< 30%

Surrogate(s)	% Recovery
2,4,5,6-Tetrachloro-m-xylene	30-150%
Decachlorobiphenyl	30-150%

\* Pest 9 2008, Pest 10 2008 - highest MDL

He	erbicides i	Herbicides in Soil EPA 8151A	N 8151A	
	MDL *	RL	LCS/MS	<b>MS/MSD</b>
Analytes	ug/Kg	ug/Kg	% Rec	% RPD
2,4,5-TP (Silvex)	9.20	167	30-150%	< 30%
2,4,5-T	10.41	167	30-150%	< 30%
2,4-D	20.25	167	30-150%	< 30%
2,4-DB	11.66	167	30-150%	< 30%
Dalapon	10.36	33.3	30-150%	< 30%
Dicamba	9.72	33.3	30-150%	< 30%
Dichloroprop	10.71	33.3	30-150%	< 30%
Dinoseb	11.66	33.3	30-150%	< 30%
MCPP	956.60	3300	30-150%	< 30%
MCPA	1042.28	3300	30-150%	< 30%

% Recovery	30-150%	
Surrogate(s)	DCAA	

\* Pest 8 2007 Highest MDL

MDL* RL LCS/W	MDL *	RL	LCS/MS	<b>MS/MSD</b>
Analytes	ug/L	ug/L	% Rec	% RPD
2,4,5-TP (Silvex)	0.391	2	30-150%	< 25%
2,4,5-T	0.488	2	30-150%	< 25%
2,4-D	0.544	10	30-150%	< 25%
2,4-DB	1.016	10	30-150%	< 25%
Dalapon	0.454	20	30-150%	< 25%
Dicamba	0.304	1	30-150%	< 25%
Dichloroprop	0.465	10	30-150%	< 25%
Dinoseb	0.552	5	30-150%	< 25%
MCPA	28.486	500	30-150%	< 25%
MCPP	30.881	200	30-150%	< 25%

Surrogate(s) % Recovery DCAA 30-150%

\* Pest 8 2007, Pest 12 2009 - Highest MDL

Page 4 of 18

VOCs in	Soil - Low	EPA 8260B		
		RL	LCS/MS	<b>MS/MSD</b>
Analytes	ug/Kg	ug/Kg	% Rec	% RPD
1,1,1,2-Tetrachloroethane	0.318	1	83-119	< 30%
1,1,1-Trichloroethane	0.111	1.	78-121	< 30%
1,1,2,2-Tetrachloroethane	0.171	1	70-123	< 30%
1,1,2-Trichloroethane	0.125	1.5	73-114	< 30%
1,1-Dichloroethane	0.178	1.5	79-113	< 30%
1,1-Dichloroethene	0.206	-	65-135	< 30%
1,1-Dichloropropene	0.456	5	75-119	< 30%
1,2,3-Trichlorobenzene	0.168	4	71-123	< 30%
1,2,3-Trichloropropane	0.163	4	68-118	< 30%
1,2,4,5-tetramethylbenzene	0.130	4	70-130	< 30%
1,2,4-Trichlorobenzene	0.120	4	79-129	< 30%
1,2,4-Trimethylbenzene	0.573	4	82-123	< 30%
1,2-Dibromo-3-chloropropane	0.790	4	68-118	< 30%
1,2-Dibromoethane	0.178	4	84-112	< 30%
1,2-Dichlorobenzene	0.183	4	85-115	< 30%
1,2-Dichloroethane	0.146	1	75-119	< 30%
1,2-Dichloropropane	0.228	3.5	74-114	< 30%
1,3,5-trichlorobenzene	0.230	4		< 30%
1,3,5-Trimethylbenzene	0.143	4	79-123	< 30%
1,3-Dichlorobenzene	0.183	4	85-116	< 30%
1,3-Dichloropropane	0.173	4	69-117	< 30%
1,4-Dichloro-2-butane	0.783	10	70-130	< 30%
1,4-Dichlorobenzene	0.242	4	85-116	< 30%
1,4-Dioxane	17.413	100	65-136	< 30%
2.2-Dichloropropene	0.226	2	80-125	< 30%
2-Butanone	0.355	10	76-120	< 30%
2-Chloroethylvinyl ether	0.176	20		< 30%
2-Chlorotoluene	0.160	4	74-119	< 30%
2-Hexanone	0.151	10	73-126	°< 30%
4-Chlorotoluene	0.133	4	75-122	< 30%
4-ethyltoluene	0.117	4	70-130	< 30%
4-methyl-2-pentanone	0.244	10	74-130	< 30%
Acetone	3.103	10	54-140	< 30%
Acrylonitrile	0.238	4	70-130	< 30%
Benzene	0.118		75-125	< 30%
Bromobenzene	0.208	5	85-115	< 30%
Bromochloromethane	0.197	4	80-122	< 30%

VOCs in 5	Soil - High	EPA 8260B		
	WDL *	1	LCS/MS	<b>USW/SW</b>
Analytes	ug/Kg	ug/Kg	% Rec	% RPD
1,1,1,2-Tetrachloroethane	15.91	50	75-119	< 30%
1,1,1-Trichloroethane	5.54	50	84-112	< 30%
1,1,2,2-Tetrachloroethane	8.53	50	74-114	< 30%
1,1,2-Trichloroethane	15.21	75	85-115	< 30%
1,1-Dichloroethane	8.88	75	83-119	< 30%
1,1-Dichloroethene	10.29	50	70-123	< 30%
1,1-Dichloropropene	22.78	250	68-118	< 30%
1,2,3-Trichlorobenzene	8.40	200	69-117	< 30%
	11.24	200		< 30%
1,2,4,5-tetramethylbenzene	6.51	200	79-123	< 30%
1,2,4-Trichlorobenzene	39.49	200	85-116	< 30%
1,2,4-Trimethylbenzene	28.65	200	70-130	< 30%
1,2-Dibromo-3-chloropropane	39.49	200	71-123	< 30%
1,2-Dibromoethane	8.89	200	68-118	< 30%
1,2-Dichlorobenzene	9.16	200	79-129	< 30%
1,2-Dichloroethane	7.31	50	82-123	< 30%
1,2-Dichloropropane	11.42	175	85-116	< 30%
1,3,5-trichlorobenzene	11.48	200	80-125	< 30%
1,3,5-Trimethylbenzene	7.17	200	75-122	< 30%
1,3-Dichlorobenzene	9.16	200	76-120	< 30%
1,3-Dichloropropane	8.65	200	74-119	< 30%
1,4-Dichlorobenzene	12.09	200	74-130	< 30%
1,4-Dichlorobutane	39.17	500		< 30%
1,4-Dioxane	721.13	5000		< 30%
2,2-Dichloropropane	11.28	250	73-126	< 30%
2-Butanone	17.76	500	70-130	< 30%
2-Chloroethylvinyl ether	30.80	1000	73-111	< 30%
2-Chlorotoluene	7.99	200	65-136	< 30%
2-Hexanone	9.41	500		< 30%
4-Chlorotoluene	7.69	200	70-130	< 30%
4-ethyltoluene	5.85	200		< 30%
4-Methyl-2-pentanone	12.22	500		< 30%
Acetone	155.17	500	54-140	< 30%
Acrylonitrile	11.89	200	70-130	< 30%
Benzene	5.90	50	75-125	< 30%
Bromobenzene	10.42	250	85-115	< 30%
Bromochloromethane	9.85	200	80-122	< 30%

Page 5 of 18

L

MDL *         RL BMD, RL analytes         MDL *         RL analytes           Ichloromethane         0.229         1           Dim         0.415         4           Dim         0.415         4           Dim         0.206         2           disulfide         1.101         4           tetrachloride         0.210         1           biromomethane         0.348         1           biromomethane         0.316         2           Dichloroethane         0.316         2           Dichloroethane         0.149         1           Dichloropropene         0.149         1           Dichloroethane         0.140         4           Dichloromethane         0.143         4           Dichloromethane         0.143         4           Dichloromethane         0.143         4           Dichloromethane         0.143         4           Methane         0.123         20           Dichloromethane         0.143         4           Dichloromethane         0.143         4           Dichloromethane         0.143         4           Dichloromothane         0.143         4 <th>VOCs in</th> <th>Soil - Low</th> <th>EPA 8260B</th> <th>_</th> <th></th>	VOCs in	Soil - Low	EPA 8260B	_	
Analytes         ug/kg         ug/kg <thug kg<="" th="">         ug/kg         ug/kg</thug>		MDL *	RL	LCS/MS	<b>MS/MSD</b>
ichloromethane         0.229         1 $0.415$ 0.415         4 $0.415$ 0.415         4 $0.415$ 0.206         2 $0.1101$ 1.101         4 $0.206$ 0.20         2 $0.1010$ 0.210         1 $0.208$ 1         1 $0.208$ 0.316         2 $0.208$ 0.316         2 $0.308$ 1         1 $0.316$ 0.316         2 $0.0308$ 1         1 $0.316$ 0.316         1 $0.149$ 0.149         1 $0.149$ 0.149         1 $0.1400$ 0.140         4 $0.1400$ 0.140         4 $0.1400$ 0.140         4 $0.1400$ 0.140         4 $0.1400$ 0.140         4 $0.1400$ 0.140         4 $0.1400$ 0.140         4 $0.1400$ 0.140	Analytes	ug/Kg	ug/Kg	% Rec	% RPD
0.415 $0.415$ $4$ ethane $0.206$ $2$ disulfide $1.101$ $4$ tetrachloride $0.210$ $1$ enzene $0.238$ $1$ enzene $0.348$ $1$ bromomethane $0.348$ $1$ bromomethane $0.316$ $2$ off $0.316$ $2$ bromomethane $0.316$ $2$ off $0.316$ $2$ off $0.149$ $1$ off $0.149$ $1$ off $0.149$ $1$ off $0.127$ $4$ off $0.127$ $4$ off $0.123$ $4$ off $0.140$ $4$ <	Bromodichloromethane	0.229	1	80-115	< 30%
ethane         0.206         2         1           disulfide         1.101         4         1           tetrachloride         0.210         1         4           tetrachloride         0.210         1         1           enzene         0.348         1         1           bromomethane         0.348         1         1           bromomethane         0.316         2         1           bromomethane         0.316         2         1           bromomethane         0.316         1         1         1           brothoropene         0.149         1         1         1         1           brothoropene         0.149         1	Bromoform	0.415	4	75-124	< 30%
disulfide $1.101$ $4$ tetrachloride $0.210$ $1$ tetrachloride $0.348$ $1$ brommethane $0.348$ $1$ brommethane $0.346$ $1$ brommethane $0.316$ $2$ thane $0.316$ $2$ thane $0.316$ $2$ intane $0.316$ $2$ intane $0.316$ $2$ intane $0.149$ $1$ Dichloroptopene $0.149$ $1$ Dichloroptopene $0.127$ $4$ Dichloromethane $0.123$ $4$ Dichloromethane $0.164$ $4$ Dichloromethane $0.1017$ $4$ Dichloromethane $0.164$ $4$ Dichloromethane <td< td=""><td>Bromomethane</td><td>0.206</td><td>2</td><td>57-147</td><td>&lt; 30%</td></td<>	Bromomethane	0.206	2	57-147	< 30%
tetrachloride         0.210         1           tetrachloride         0.348         1           enzene         0.348         1           birornomethane         0.346         1           thane         0.316         2           thane         0.316         2           thane         0.316         2           thane         0.370         15           thane         0.370         15           birbinorethane         0.149         1           Dichloropropene         0.127         4           Dichloropropene         0.123         20           methane         0.164         4           Dichloromethane         0.147         4           Dichloromethane         0.147         4           Dichloromethane         0.143         4           Dichloromethane         0.168         10           Methane         0.273         4           Inconbutadiene         0.168         4           Inconbutadiene         0.168         4           Inconbutadiene         0.169         4           Inconbutadiene         0.168         1           Inconbutadiene         0.1	Carbon disulfide	1.101	4	59-112	< 30%
enzene         0.348         1           ibromomethane         0.308         1           ibromomethane         0.316         2           ittane         0.316         2           Dichloroethene         0.149         1           Olichloroethane         0.127         4           Dichloromethane         0.123         20           methane         0.164         4           Vane         0.123         20           interval         0.140         4           other         0.140         4           other         0.140         4           other         0.140         4           interval         0.166         4           orbutatiene         0.168         1           interval         0.218         1           interval         0.273         4           interval         0.273         4           interval         0.200         5           interter	Carbon tetrachloride	0.210	1	75-123	< 30%
Ibromomethane         0.308         1           thane         0.316         2           thane         0.370         1.5           thane         0.370         1.5           thane         0.370         1.5           iethane         0.168         4           Dichloroethene         0.149         1           Dichloroethene         0.127         1           Namethane         0.123         20           offilluoromethane         0.123         20           offilluoromethane         0.140         4           offilluoromethane         0.168         1           offilluoromethane         0.168         1           offilluoromethane         0.168         1           offilluoromethane         0.168         1	Chlorobenzene	0.348	1	75-125	< 30%
thane $0.316$ $2$ $1.5$ orm $0.370$ $1.5$ $1.5$ rethane $0.168$ $4$ $1.5$ Dichloroethene $0.149$ $1$ $1.5$ Dichloroethene $0.127$ $1.5$ $1$ Dichloroethene $0.127$ $1$ $1$ Dichloroethene $0.123$ $20$ $1$ Dichloroethene $0.123$ $20$ $1$ Mathane $0.123$ $20$ $1$ Mathane $0.123$ $20$ $10$ Same thack $0.128$ $10$ $4$ Interthane $0.147$ $4$ $10$ Partacylate $0.140$ $20$ $4$ $10$ Interthal ether $0.168$ $10$ $4$ $10$ Ithenzene $0.168$ $10$ $10$ $10$ Ithenzene $0.168$ $10$ $10$ $10$ Ithenzene $0.10168$ $1$ $10$ <td>Chlorodibromomethane</td> <td>0.308</td> <td>1</td> <td>79-116</td> <td>&lt; 30%</td>	Chlorodibromomethane	0.308	1	79-116	< 30%
mm $0.370$ $1.5$ $1.5$ ethane $0.168$ $4$ $1.5$ $1.5$ Dichloroethene $0.149$ $1$ $1.5$ $1.5$ Dichloroethene $0.127$ $1$ $1.5$ $1.5$ Dichloroethene $0.123$ $20$ $1.5$ $1.5$ Mathematic $0.123$ $20$ $1.5$ $1.5$ $1.5$ Mathematic $0.164$ $0.123$ $20$ $1.5$ $1.5$ $1.5$ Mathematic $0.164$ $0.140$ $4$ $1.5$ $1.5$ $1.5$ Partace $0.147$ $0.2168$ $1.0$ $2.0$ $1.5$ <	Chloroethane		2	50-151	< 30%
nethane $0.168$ $4$ Dichloroethene $0.149$ $1$ Dichloroethene $0.127$ $1$ Dichloropropene $0.127$ $1$ Dichloropropene $0.123$ $20$ methane $0.123$ $20$ methane $0.164$ $4$ odifluoromethane $0.164$ $4$ pyl ether $0.140$ $4$ nzene $0.164$ $4$ nzene $0.164$ $4$ nzene $0.164$ $4$ nzene $0.167$ $4$ nzene $0.147$ $1$ nzene $0.147$ $1$ nzene $0.168$ $1$ norbutatiene $0.168$ $4$ norbutatiene $0.168$ $4$ norbutatiene $0.168$ $1$ nethorzene $0.168$ $4$ norbutatiene $0.103$ $4$ norbutatiene $0.103$ $4$ <t< td=""><td>Chloroform</td><td>0.370</td><td>1.5</td><td>78-114</td><td>&lt; 30%</td></t<>	Chloroform	0.370	1.5	78-114	< 30%
Dichloroethene $0.149$ $1$ $1$ Dichloroptopene $0.127$ $1$ $1$ Name $0.123$ $20$ $1$ Name $0.123$ $20$ $1$ Name $0.123$ $20$ $1$ Name $0.164$ $4$ $4$ Mathematic $0.164$ $4$ $4$ Mathematic $0.164$ $4$ $4$ Mathematic $0.164$ $4$ $4$ Public $0.147$ $1$ $4$ Increase $0.147$ $1$ $4$ Increase $0.147$ $1$ $4$ Increase $0.168$ $4$ $1$ Inberzene $0.168$ $4$ $4$ Inberzene $0.104$ $2$ $4$ Inberzene $0.104$ $2$ $4$ Inberzene $0.103$ $4$ $4$ Inberzene $0.103$ $4$ $4$ <	Chloromethane		4	52-120	< 30%
Dichloropropene         0.127         1           Dichloropropene         0.123         20           xane         0.164         4           Mathane         0.164         4           offiluoromethane         0.164         4           pyl ether         0.140         4           pyl ether         0.147         4           pyl ether         0.147         1           nzene         0.147         1         4           nzene         0.147         1         4           nzene         0.147         1         1           nzene         0.147         1         1           nzene         0.147         1         1           nzene         0.147         1         1           nzene         0.168         1         1           nzene         0.168         1         1           orbutholene         0.168         4         1           orbutholene         0.168         4         1           deretate         0.168         4         1           deretate         0.168         4         1           deretate         0.169         4 </td <td>cis-1,2-Dichloroethene</td> <td>0.149</td> <td>1</td> <td>85-117</td> <td>&lt; 30%</td>	cis-1,2-Dichloroethene	0.149	1	85-117	< 30%
xane         0.123         20           methane         0.164         4           diffuoromethane         0.164         4           pyl ether         0.140         4           pyl ether         0.140         4           pyl ether         0.140         4           pyl ether         0.147         4           nzene         0.147         1           nzen         0.266         5           ter         0.168         10           dorbutatiene         0.168         1           orbutatiene         0.168         4           vicobacane         0.168         4           vicobacane         0.168         1           orbutatiene         0.168         4           vicobacane         0.168         4           vicobacane         0.1046         4           erbutyl ether	cis-1,3-Dichloropropene	0.127	1	77-110	< 30%
methane         0.164         4         4           diffuoromethane         0.218         10         10           pyl ether         0.140         4         4           etate         0.819         20         20           rizene         0.147         1         1           internation         0.168         10         1           internation         0.168         10         1           internation         0.168         1         1           intorbutatione         0.168         1         1           intorbutatione         0.168         1         1           intorbutatione         0.168         1         1           intorbutatione         0.1046         1         1           intorbutatione         0.103         4         1           intorbutatione         0.1046         1         1           intorbutatione         0.1046	cyclohexane	0.123	20		< 30%
odiffuoromethane         0.218         10         10           pyl ether         0.140         4         20           cetate         0.819         20         20           rizene         0.147         1         1         1           nizene         0.147         1         1         1           nizene         0.147         1         1         1           nizene         0.266         5         1         1           ter         0.233         4         1         1         1           ter         0.168         10         4         1	Dibromomethane	0.164	4	81-116	< 30%
ppl ether         0.140         4         4           retate         0.819         20         20           rizene         0.147         1         1         1           nizene         0.147         1         1         1         1           nizene         0.147         1         1         1         1         1           nizene         0.168         10         10         1 <td>Dichlorodifluoromethane</td> <td>0.218</td> <td>10</td> <td>30-146</td> <td>&lt; 30%</td>	Dichlorodifluoromethane	0.218	10	30-146	< 30%
cetate         0.819         20           nizene         0.147         1           ner         0.147         1           ter         0.147         1           ter         0.147         1           ter         0.266         5           ethacrylate         0.168         10           t-butyl ether         0.423         4           13         0.273         4           orobutadiene         0.422         4           /lbenzene         0.168         1           orobutadiene         0.169         4           vibenzene         0.168         4           vibenzene         0.103         4           vicohexane         0.1046         4           vicohexane         0.103         4           vicohexane         0.1046         4           erbutyl ether         0.103         4           benzene         0.138         1           encerete         0.126         1           benzene         0.126         1           pyltoluene         0.125         1           pyltoluene         0.206         1	Diisopropyl ether	0.140	4	66-118	< 30%
Inzene         0.147         1           Ticzene         0.266         5           ethacrylate         0.168         10           T-butyl ether         0.168         10           T-butyl ether         0.423         4           Jorobutadiene         0.273         4           Jorobutadiene         0.273         4           Jorobutadiene         0.273         4           Jorobutadiene         0.168         1           Orobutadiene         0.168         4           Vibenzene         0.168         4           Stochate         0.168         4           Stochexane         0.168         4           Stochexane         0.104         2           Stochexane         0.103         4           Stochexane         0.1046         4           Inchloritie         0.138         4           Inchlore         0.138         4           Ibenzene         0.126         1           Ibenzene         0.126         1           Ibenzene         0.125         1           Ibenzene         0.126         1	Ethyl Acetate	0.819	20		< 30%
ter         0.266         5           ethacrylate         0.168         10           t-butyl ether         0.423         4           13         0.273         4           orobutadiene         0.422         4           /lbenzene         0.422         4           viberzene         0.466         4           viberzene         0.168         1           orobutadiene         0.168         1           viberzene         0.168         4           viberzene         0.168         4           viberzene         0.103         4           ert-butyl ether         0.104         2           etrzene         0.138         1           benzene         0.138         1           benzene         0.126         1           erbenzene         0.271         2           erbenzene         0.266         1           pyltoluene         0.125         1	Ethyl benzene	0.147	1	81-121	< 30%
ethacrylate         0.168         10           t-butyl ether         0.423         4           13         0.273         4           orobutadiene         0.422         4           orobutadiene         0.422         4           orobutadiene         0.422         4           orobutadiene         0.466         4           vibenzene         0.168         1           otothexane         0.168         1           otothexane         0.168         4           vibenzene         0.103         4           orothexane         0.104         2           ert-butyl ether         0.138         4           encree         0.138         1           benzene         0.138         1           benzene         0.126         1           orotot         0.323         2           byftoluene         0.125         1           oroto         0.125         1	ethyl ether	0.266	5	67-129	< 30%
t-butyl ether     0.423     4       13     0.273     4       orobutadiene     0.273     4       /lbenzene     0.422     4       /lbenzene     0.168     1       vibenzene     0.168     4       vibenzene     0.168     4       vibenzene     0.168     4       vibenzene     0.168     4       vibenzene     0.103     4       ne chloride     2.000     5       ne chloride     0.104     2       ert-butyl ether     0.138     4       entee     0.138     4       enzene     0.138     1       benzene     0.136     1       enzene     0.126     1       enzene     0.126     1       poltoluene     0.125     1       poltoluene     0.126     1	Ethyl-methacrylate	0.168	10	70-130	< 30%
13     0.273     4       13     0.273     4       orobutadiene     0.422     4       /lbenzene     0.168     1       vicetate     0.168     4       byclohexane     0.699     4       vicetate     0.699     4       byclohexane     0.699     4       rectate     0.103     4       ne chloride     2.000     5       net chloride     0.104     2       ert-butyl ether     0.138     4       encree     0.138     4       enzene     0.138     4       blenzene     0.138     1       benzene     0.126     1       pytoluene     0.271     2       pytoluene     0.125     1		0.423	4	73-111	< 30%
orobutadiene         0.422         4           (Ibenzene         0.168         1           cetate         0.166         4           syclohexane         0.466         4           syclohexane         0.699         4           rechonde         2.000         5           ne chloride         2.000         5           ert-butyl ether         0.138         4           ent-butyl ether         0.138         4           ent-butyl ether         0.138         4           enzene         0.138         4           blenzene         0.138         4           blenzene         0.126         1           enzene         0.126         1           enzene         0.126         1           enzene         0.126         1           pyltoluene         0.125         1           pyltoluene         0.126         1	Freon-113	0.273	4	-	< 30%
(Ibenzene         0.168         1           ccetate         0.466         4           byclohexane         0.466         4           cyclohexane         0.699         4           ne chloride         2.000         5           ne chloride         2.000         5           ert-butyl ether         0.104         2           ert-butyl ether         0.138         4           enzene         0.138         1           enzene         0.138         1           blenzene         0.126         1           enzene         0.126         1           blenzene         0.126         1           pytoluene         0.125         1           pytoluene         0.126         1	Hexachlorobutadiene	0.422	4	67-126	< 30%
Accetate         0.456         4           yyclohexane         0.699         4           ne chloride         2.000         5           ne chloride         2.000         5           ert-butyl ether         0.104         2           ert-butyl ether         0.138         4           ert-butyl ether         0.138         4           enzene         0.138         1           enzene         0.138         1           benzene         0.126         1           enzene         0.126         1           benzene         0.271         2           enerene         0.233         2           benzene         0.160         4           pytoluene         0.125         1           pytoluene         0.125         1	Isopropylbenzene	0.168	<b>4</b>	79-123	< 30%
Syclohexane         0.699         4           ne chloride         2.000         5           ert-butyl ether         0.104         2           ert-butyl ether         0.138         4           elne         0.138         1           enzene         0.138         1           enzene         0.138         1           benzene         0.126         1           enzene         0.126         1           benzene         0.126         1           enzene         0.126         1           benzene         0.126         1           olitoluene         0.125         1           pytoluene         0.125         1	Methyl acetate	0.466	4		< 30%
ne chloride         2.000         5           ert-butyl ether         0.104         2           eltene         0.1038         4           eltere         0.138         4           enzene         0.138         1           benzene         0.136         1           benzene         0.126         1           certere         0.126         1           benzene         0.126         1           benzene         0.126         1           optiouene         0.125         1           pytoluene         0.125         1           pytoluene         0.125         1	methyl cyclohexane	0.699	4		< 30%
ert-butyl ether         0.104         2           eine         0.138         4           enzene         0.138         1           enzene         0.198         1           benzene         0.136         1           benzene         0.126         1           benzene         0.126         1           benzene         0.126         1           benzene         0.126         1           optoluene         0.125         1           pytoluene         0.125         1           optorolene         0.125         1	Methylene chloride	2.000	5	71-115	< 30%
liene 0.138 4 1 enzene 0.198 1 benzene 0.198 1 enzene 0.126 1 en 0.271 2 ene 0.271 2 benzene 0.160 4 pytoluene 0.125 1 n/benzene 0.206 1	Methyl-tert-butyl ether	0.104	2	66-113	< 30%
enzene         0.198         1           blenzene         0.126         1           e         0.271         2           ane         0.273         2           ene         0.160         4           blenzene         0.156         1           pyltoluene         0.126         1           pyltoluene         0.126         1	Naphthalene	0.138	4	73-114	< 30%
Ibenzene         0.126         1         1           e         0.271         2         2           ene         0.233         2         2           ene         0.160         4         1           pyltoluene         0.125         1         2           pyltoluene         0.206         1         2	n-Butylbenzene	0.198	1	72-128	< 30%
e 0.271 2 1 ene 0.323 2 la 0.322 ene 0.323 2 la 0.322 pytoluene 0.125 1 la pytoluene 0.126 1 la 10.000 2 la 0.000 2 la 10 la 10.000 2 la 10.0000 2 la 10.00000 2 la 10.0000 2 la 10.0000 2 la 10.00000 2 la 10.0000000 2 la 10.00000000	n-Propylbenzene	0.126	1	73-125	< 30%
ene 0.323 2 1 Ibenzene 0.160 4 pyltoluene 0.125 1 vibenzene 0.206 1	o-Xylene	0.271	2	82-125	< 30%
Ibenzene         0.160         4           pyltoluene         0.125         1           (Ibenzene         0.206         1	p/m-Xylene	0.323	7	83-120	< 30%
pyltoluene 0.125 1 vibenzene 0.206 1 0.206 3	p-diethylbenzene	0.160	4	70-130	< 30%
Vlbenzene 0.206 1	p-isopropyitoluene	0.125	-	84-126	< 30%
, 0000	sec-Butylbenzene	0.206	+	73-123	< 30%
	Styrene	0.309	2	85-121	< 30%

	MDL *	RL	LCS/MS	<b>GSM/SM</b>
Analytes	ug/Kg	ug/Kg	% Rec	% RPD
Bromodichloromethane	11.45	50	80-115	< 30%
Bromoform	20.74	200	75-124	< 30%
Bromomethane	16.90	100	57-147	< 30%
Carbon disulfide	55.06	200	59-112	< 30%
Carbon tetrachloride	10.51	50	75-123	< 30%
Chlorobenzene	17.38	50	75-125	< 30%
Chlorodibromomethane	15.39	50	79-116	< 30%
Chloroethane	15.80	100	50-151	< 30%
Chloroform	18.51	75	78-114	< 30%
Chloromethane	39.16	200	52-120	< 30%
cis-1,2-Dichloroethene	7.47	50	85-117	< 30% -
cis-1,3-Dichloropropene	6.36	50	77-110	< 30%
Cyclohexane	31.26	1000	81-116	< 30%
Dibromomethane	8.18	200	30-146	< 30%
Dichlorodifluoromethane	10.91	500	81-121	< 30%
Diisopropyl ether	6.98	200		< 30%
Ethyl Acetate	40.97	1000	67-129	
Ethyl benzene	7.37	50	70-130	< 30%
Ethyl ether	13.28	250	67-126	< 30%
Ethyl methacrylate	8.38	500	79-123	< 30%
Ethyl-Tert-Butyl-Ether	21.16	200		< 30%
Freon-113	13.66	200	70-130	< 30%
Hexachlorobutadiene	21.12	200	71-115	< 30%
Isopropylbenzene	8.38	50	66-113	< 30%
Methyl Acetate	23.30	200	73-114	< 30%
methyl cyclohexane	34.97	200	72-128	< 30%
Methylene chloride	100.00	250	73-125	< 30%
Methyl-tert-butyl ether	5.21	100	82-125	< 30%
Naphthalene	38.48	200	83-120	< 30%
n-Butylbenzene	9.88	50	84-126	< 30%
n-Propylbenzene	6.29	50	73-123	< 30%
o-Xylene	13.54	100	85-121	< 30%
p/m-Xylene	16.13	100	78-119	< 30%
p-Diethylbenzene	7.99	200	82-122	< 30%
p-lsopropyltaluene	9.56	50	66-111	< 30%
sec-Butylbenzene	10.29	50	75-125	
Styrene	15.47	100	78-113	< 30%

Page 6 of 18

VOCs in	VOCs in Soil - Low EPA 8260B	EPA 82605	8	
	MDL *	RL	LCS/MS	<b>USW/SW</b>
Analytes	ug/Kg	ng/Kg	% Rec	% RPD
Tert-Butyl Alcohol	0.907	20		< 30%
tert-Butylbenzene	0.561	4	78-119	< 30%
Tertiary-amyl methyl ether	0.576	4	76-117	< 30%
Tetrachloroethene	0.140	1	82-122	< 30%
Tetrahydrofuran	0.375	4	66-111	< 30%
Toluene	0.112	1.5	75-125	< 30%
trans-1,2-Dichloroethene	0.212	1.5	78-113	< 30%
trans-1,3-Dichloropropene	0.121	1	77-119	< 30%
trans-1,4-Dichloro-2-butene	0.448	5	70-130	< 30%
Trichloroethene	0.152	1	75-125	< 30%
Trichlorofluoromethane	0.121	4	73-139	< 30%
Vinyl Acetate	0.480	10	70-130	< 30%
Vinyl chloride	0.082	2	67-121	< 30%

Surrogate(s)	% Recovery
dibromofluoromethane	70-130%
1,2-dichloroethane-d4	70-130%
toluene-d8	70-130%
4-bromofluorobenzene	70-130%

\* Curly 2005, Charlie 2010. VOA100 2011, VOA 104 2011 - Highest MDL

	VUCS IN SOIL - HIGH EPA 8260B	EPA 8260	8	
	* MDL	RL	LCS/MS	MS/MSD
Analytes	ug/Kg	ng/Kg	% Rec	% RPD
Tert-Butyl Alcohol	45.37	1000		< 30%
tert-Butylbenzene	28.04	200	77-119	< 30%
Tertiary-Amyl Methyl Ether	28.80	200	76-117	< 30%
Tetrachloroethene	7.01	50	70-130	< 30%
Tetrahydrofuran	18.75	200	75-125	< 30%
Toluene	5.60	75	73-139	< 30%
trans-1,2-Dichloroethene	10.58	75	70-130	< 30%
trans-1, 3-Dichloropropene	6.04	50	67-121	< 30%
trans-1,4-Dichloro-2-butene	19.58	250	79-113	< 30%
Trichloroethene	7.61	50	65-135	< 30%
Trichlorofluoromethane	6.07	200	75-119	< 30%
Vinyl acetate	23.98	500	78-121	< 30%
Vinyt chloride	7.06	100	73-114	< 30%

Surronate(s)	% Becover
(c) and come	10 NECUVELY
dibromofluoromethane	70-130%
1,2-dichloroethane-d4	70-130%
toluene-d8	70-130%
4-bromofluorobenzene	70-130%

\* Curly 2005, Charlie 2010. VOA100 2011, VOA 104 2011 - Highest MDL

)))).	sn Liquid El	EPA 8260B		
	WDL *	RL	LCS/MS	<b>USW/SW</b>
Analytes	ug/L	ug/L	% Rec	% RPD
1,1,1,2-Tetrachloroethane	0.165	0.5	64-125	< 20%
1,1,1-Trichloroethane	0.158	0.5	67-123	< 20%
1,1,2,2-Tetrachloroethane	0.192	0.5	67-124	< 20%
1,1,2-Trichloroethane	0.261	0.75	70-125	< 20%
1,1-Dichloroethane	0.181	0.75	73-119	< 20%
1,1-Dichioroethene	0.216	0.5	61-145	< 20%
1,1-Dichloropropene	0.256	2.5	72-118	< 20%
1,2,3-Trichlorobenzene	0.234	2.5	75-125	< 20%
1,2,3-Trichloropropane	0.428	5	64-127	< 20%
N)	0.542	2		< 20%
	0.220	2.5	75-125	< 20%
1,2,4-Trimethylbenzene	0.191	2.5	75-121	< 20%
1,2-Dibromo-3-chloropropane	0.650	2.5	41-144	< 20%
1,2-Dibromoethane	0.202	2	70-119	< 20%
1,2-Dichlorobenzene	0,184	2.5	75-125	< 20%
	0.160	0.5	71-125	< 20%
	0.296	1.75	70-120	< 20%
1,3,5-trichlorobenzene	0.109	2		< 20%
1,3,5-Trimethylbenzene	0.211	2.5	64-121	< 20%
1,3-Dichlorobenzene	0.186	2.5	75-125	< 20%
1,3-Dichloropropane	0.212	2.5	71-122	< 20%
1;4-Dichloro-2-butane	0.464	5		< 20%
1,4-Dichlorobenzene	0.215	2.5	75-125	< 20%
1,4-Dioxane	75.706	250	56-162	< 20%
2,2-Dichloropropane	0.204	2.5	63-133	< 20%
2-Butanone	1.939	ъ	63-138	< 20%
2-Chloroethylvinyl ether	0.402	10	75-125	< 20%
2-Chiorotoiuene	0.182	2.5	75-125	< 20%
2-Hexanone	0.578	5 2	57-128	< 20%
4,-Methy-2-pentanone	0.824	5	59-126	< 20%
4-Chlorotoluene	0.185	2.5	75-125	< 20%
4-Ethyltoluene	0.340	2		< 20%
Acetone	1.561	5	58-148	< 20%
Acrylonitrile	0.430	5	70-102	< 20%
Benzene	0.194	0.5	76-127	< 20%
Bromobenzene	0.184	2.5	75-125	< 20%
Bromochloromethane	0.329	2.5	74-123	< 20%

Page 8 of 18

VOCs	VOCs in Liquid E	EPA 8260B		
	WDL *	RL	LCS/MS	<b>MS/MSD</b>
Analytes	ug/L	ng/L	% Rec	% RPD
Bromodichloromethane	0.192	0.5	67-121	< 20%
Bromoform	0.277	2	54-136	< 20%
Bromomethane	0.256	1	39-139	< 20%
Carbon disulfide	0.299	5	51-121	< 20%
Carbon tetrachloride	0.165	0.5	63-132	< 20%
Chlorobenzene	0.192	0.5	75-130	< 20%
Chlorodibromomethane	0.189	0.5	63-119	< 20%
Chloroethane	0.233	1	55-138	< 20%
Chloroform	0.198	0.75	75-125	< 20%
Chloromethane	0.281	2.5	64-130	< 20%
cis-1,2-Dichloroethene	0.187	0.5	75-125	< 20%
cis-1,3-Dichloropropene	0.144	0.5	75-125	< 20%
Cyclohexane	0.271	10		< 20%
Dibromomethane		5	76-126	< 20%
Dichlorodifluoromethane	0.300	5	36-147	< 20%
Diisopropyl Ether	0.165	2	75-125	< 20%
Ethyl acetate	0.716	10	75-125	< 20%
Ethyl benzene	0.171	0.5	79-118	< 20%
Ethyl ether	0.265	2.5	59-134	< 20%
Ethyl-methacrylate	0.606	5		< 20%
Ethyl-Tert-Butyl-Ether	0.382	2	75-125	< 20%
Freon -113	0.234	10	70-130	< 20%
Halothane	0.149	2	70-130	< 20%
Hexachlorobutadiene	0.230	0.5	63-123	< 20%
Isopropylbenzene	0.187	0.5	73-122	< 20%
Methyl Acetate		10		< 20%
Methyl cyclohexane	0.396	10		< 20%
Methylene chloride	0.289	5	74-121	< 20%
Methyl-tert-butyl ether	0.539		63-112	< 20%
Naphthalene		2.5	75-125	< 20%
n-Butylbenzene	0.196	0.5	53-136	< 20%
n-Propylbenzene		0.5	69-127	< 20%
o-Xylene	0.330	÷	75-125	< 20%
p/m-Xylene	0.348	-	75-125	< 20%
p-Diethylbenzene	0.392	2		< 20%
p-lsopropyltoluene	0.188	0.5	73-127	< 20%
sec-Butylbenzene	0.181	0.5	70-124	< 20%

Page 9 of 18

VOCs	VOCs in Liquid EPA 8260B	PA 8260B		
	MDL *	ᆋ	LCS/MS	<b>MS/MSD</b>
Analytes	ug/L	ng/L	% Rec	% RPD
Styrene	0.366	٢	70-122	< 20%
Tert butyl Alcohol	0.402	10	80-129	< 20%
tert-Butylbenzene	0.215	2.5	70-122	< 20%
Tertiary-Amyl Methyl Ether	0.184	2	66-124	< 20%
Tetrachloroethene	0.181	0.5	70-130	< 20%
Tetrahydrofuran	1.299	2	58-123	< 20%
Toluene	0.227	0.75	76-125	< 20%
trans-1,2-Dichloroethene	0.202	0.75	75-125	< 20%
trans-1,3-Dichloropropene	0.164	0.5	75-125	< 20%
trans-1,4-Dichloro-2-butene	0.173	2.5	70-118	< 20%
Trichloroethene	0.175	0.5	71-120	< 20%
Trichlorofluoromethane	0.280	2.5	62-150	< 20%
Vinyl acetate	0.304	5	83-124	< 20%
Vinyl chloride	0.268		55-140	< 20%
			1	

CC.	0/ Docovers
ourrogate(s)	/ VELOVELY
dibromofluoromethane	70-130%
1,2-dichloroethane-d4	70-130%
toluene-d8	70-130%
4-bromofluorobenzene	70-130%

J7, Quimby Con1/2 -2007, Jack Con1/2- 2008, Gonzo 2009, VOA101 2011 - I

Page 10 of 18

SVOCs	in Soil -	EPA 8270		
	MDL *	RL	LCS/MS	<b>MS/MSD</b>
Analytes	ug/Kg	ug/Kg	% Rec	% RPD
1,2,4,5-Tetrachlorobenzene	26.675	167	40-117%	× 50%
1,2,4-Trichlorobenzene	30.785	167	38-107%	< 50%
1,2-Dichlorobenzene	27.116	167	40-140%	< 50%
1,3-Dichlorobenzene	30.215	167	40-140%	< 50%
1,4-Dichlorobenzene	34.472	167	28-104%	< 50%
1-chloro-2-nitrobenzene	53.670	167		< 50%
1-Methyinaphthalene	34.217	167		< 50%
2,3,4,6-Tetrachlorophenol	41.946	167		< 50%
2,4,5-Trichlorophenol	54.135	167	30-130%	< 50%
2,4,6-Trichlorophenol	31.489	100	30-130%	< 50%
2,4-Dichlorophenol	29.371	150	30-130%	< 50%
2,4-Dimethylphenol	49.877	167	30-130%	< 50%
2,4-Dinitrophenol	228.543	800	4-130%	< 50%
	26.784	167	28-89%	< 50%
2,6-Dinitrotoluene	37.981	167	40-140%	< 50%
2-Chloroaniline	29.878	167		< 50%
2-Chloronaphthalene	28.888	167	40-140%	< 50%
2-Chlorophenol	37.444	167	25-102%	< 50%
2-Methylnaphthalene	29.332	200	40-140%	< 50%
2-Methylphenol	40.939	167	30-130%	< 50%
2-Nitroaniline	47.003	167	47-134%	< 50%
2-Nitrophenol	29.064	360	30-130%	< 50%
3,3'-Dichlorobenzidine	36.082	167	40-140%	< 50%
3,3'-Dimethylbenzidine	103.735	330	15-115%	< 50%
3-Chloroaniline	50.654	250		< 50%
3-Methylphenol/4-Methylphen	42.574	233	30-130%	< 50%
	46.110	167	26-129%	< 50%
4,6-Dinitro-o-cresol	61.225	433	10-130%	< 50%
4-Bromophenyl phenyl ether	38.428	167	40-140%	< 50%
4-Chloroaniline	44.207	167	40-140%	< 50%
4-Chiorophenyl phenyl ether	32.996	167	40-140%	< 50%
4-Nitroaniline	44.944	333	41-125%	< 50%
4-Nitrophenol	54.158	233	11-114%	< 50%
Acenaphthene	34.490	133	31-137%	< 50%
Acenaphthylene	31.238	133	40-140%	< 50%

2005	in Liquid	EPA 8270	_	
	WDL *	R	LCS/MS	<b>MS/MSD</b>
Analytes	ng/L	ng/L	% Rec	% RPD
1,2,4,5-Tetrachlorobenzene	0.652	10	2-134%	< 30%
1,2,4-Trichlorobenzene	0.669	ۍ ۲	39-98%	< 30%
1,2-Dichlorobenzene	0.547	2	40-140%	< 30%
1,3-Dichtorobenzene	0.550	2	40-140%	< 30%
1,4-Dichlorobenzene	0.551	2	36-97%	< 30%
1-chloro-2-nitrobenzene	0.634	5		< 30%
1-Methylnaphthalene	0.636	2		< 30%
2,3,4,6-Tetrachlorophenol	0.654	5		< 30%
	0.447	5	30-130%	< 30%
2,4,6-Trichlorophenol	0.448	5	30-130%	< 30%
2,4-Dichlorophenol	0.429	5	30-130%	< 30%
2,4-Dimethylphenol	1.243	5	30-130%	< 30%
	1.408	20	20-130%	< 30%
2,4-Dinitrotoluene	0.446	5	24-96%	< 30%
2,6-Dinitrotoluene	0.459	5	40-140%	< 30%
2-Chloroaniline	0.349	5		< 30%
2-Chloronaphthalene	0.474	2	40-140%	< 30%
2-Chlorophenol	0.340	2	27-123%	< 30%
2-Methylnaphthalene	0.548	2	40-140%	< 30%
2-Methyiphenol	0.528	5	30-130%	< 30%
2-Nitroaniline	0.398	£	52-143%	< 30%
2-Nitrophenol	0.475	9	30-130%	< 30%
3,3'-Dichlorobenzidine	0.852	ъ	40-140%	< 30%
3-Chloroaniline	1.119	10		< 30%
3-Methylphenol/4-Methylphen	0.471	5	30-130%	< 30%
3-Nitroaniline	0.590	5	25-145%	< 30%
4,6-Dínitro-o-cresol	0.587	9	20-164%	< 30%
4-Bromophenyl phenyl ether	0.674	7	40-140%	< 30%
4-Chloroaniline	0.829	5	40-140%	< 30%
4-Chlorophenyl phenyl ether	0.611	2	40-140%	< 30%
4-Nitroaniline	0.551	5	51-143%	< 30%
4-Nitrophenol	1.224	6	10-80%	< 30%
Acenaphthene	0.547	2	37-111%	< 30%
Acenaphthylene	0.503	2	45-123%	< 30%
Acetophenone	0.552	5	39-129%	< 30%

Page 11 of 18

ľ

SVOCS	in Soil -	EPA 8270		
	MDL *	RL	<b>LCS/MS</b>	<b>MS/MSD</b>
Analytes	ug/Kg	ug/Kg	% Rec	% RPD
Acetophenone	37.894	167	14-144%	< 50%
Aniline	34.039	200	40-140%	< 50%
Anthracene	27.776	100	40-140%	× 50%
a-Terpineol	41.094	167		< 50%
Atrazine	27.121	133		< 50%
Azobenzene	33.369	167		< 50%
Benzaldehyde	43.827	220		< 50%
Benzidine	95.442	567		< 50%
Benzo(a)anthracene	30.452	100	40-140%	< 50%
Benzo(a)pyrene	28.618	133	40-140%	< 50%
Benzo(b)fluoranthene	29.970	100	40-140%	< 50%
Benzo(ghi)perylene	33.842	133	40-140%	< 50%
Benzo(k)fluoranthene	31.868	100	40-140%	< 50%
Benzoic acid	145.546	540		< 50%
Benzyi alcohoi	38.665	167	40-140%	< 50%
Biphenyl	27.338	380		< 50%
Bis(2-chloroethoxy)methane	33.111	180	40-117%	< 50%
Bis(2-chloroethyl)ether	26.237	150	40-140%	< 50%
Bis(2-chloroisopropyl)ether	36.058	200	40-140%	< 50%
Bis(2-ethylhexyl)phthalate	39.445	167	40-140%	< 50%
Butyl benzyl phthalate	32.642	167	40-140%	< 50%
Caprolactam	46.218	167		< 50%
Carbazole	30.943	167	54-128%	< 50%
Chrysene	32.791	100	40-140%	< 50%
Dibenzo(a,h)anthracene	31.286	100	40-140%	< 50%
Dibenzofuran	29.473	167	40-140%	< 50%
Dichloran	42.675	180		< 50%
Diethyl phthalate	27.814	167	40-140%	< 50%
Dimethyl phthalate	26.863	167	40-140%	< 50%
Di-n-butylphthalate	32.243	167	40-140%	< 50%
Di-n-octylphthalate	37.623	167	40-140%	< 50%
Diphenamid	30.883	167		< 50%
Fluoranthene	28.309	õ	40-140%	< 50%
Fluorene	32.401	167	40-140%	< 50%
Hexachlorobenzene	28.923	100	40-140%	< 50%

SVOCs	s in Liquid	EPA 8270		
	MDL *	RL	LCS/MS	<b>MS/MSD</b>
Analytes	ug/L	ug/L	% Rec	% RPD
Aniline	0.465	2	40-140%	< 30%
Anthracene	0.473	2	40-140%	< 30%
a-Terpineol	0.460	5		< 30%
Atrazine	2.248	-10		< 30%
Azobenzene	0.576	2	40-140%	< 30%
Benzaldehyde	0.596	5		%0E >
Benzo(a)anthracene	0.822	2	40-140%	< 30%
Benzo(a)pyrene	0.484	2	40-140%	< 30%
Benzo(b)fluoranthene	0.483	2	40-140%	< 30%
Benzo(ghi)perylene	0.531	2	40-140%	< 30%
Benzo(k)fluoranthene	0.486	2	40-140%	%0E >
Benzoic acid	1.010	50		< 30%
Benzyl alcohol	0.473	2		< 30%
Biphenyl	0.502	2		< 30%
Bis(2-chloroethoxy)methane	0.399	5	40-140%	< 30%
Bis(2-chloroethyl)ether	0.387	2	40-140%	< 30%
Bis(2-chloroisopropyl)ether	0.504	2	40-140%	< 30%
Bis(2-ethylhexyl)phthalate	1.400	e	40-140%	< 30%
Butyl benzyl phthalate	0.459	5	40-140%	< 30%
Caprolactam	0.389	6		< 30%
Carbazole	0.529	- 2	55-144%	< 30%
Chrysene	0.562	2	40-140%	< 30%
Dibenzo(a,h)anthracene	0.484	2	40-140%	< 30%
Dibenzofuran	0.473	7	40-140%	< 30%
Dichloran	0.700	5		< 30%
Diethyl phthalate	0.451	2	40-140%	< 30%
Dimethyl phthalate	0.449	S	40-140%	< 30%
Di-n-butylphthalate	0.543	5	40-140%	< 30%
Di-n-octylphthalate	0.533	5	40-140%	< 30%
Diphenamid	0.577	5		< 30%
Fluoranthene	0.510	2	40-140%	< 30%
Fluorene	0.490	2	40-140%	< 30%
Hexachlorobenzene	0.646	2	40-140%	< 30%
Hexachlorobutadiene	0.810	2	40-140%	< 30%
Hexachlorocyclopentadiene	2.060	20	40-140%	< 30%

Page 12 of 18

SVOC	SVOCs in Soil - EPA 8270	EPA 8270		
	WDL *	RL	LCS/MS	<b>GSW/SW</b>
Analytes	ug/Kg	ug/Kg	% Rec	% RPD
Hexachlorobutadiene	36.213	167	40-140%	< 50%
Hexachlorocyclopentadiene	107.246	478	40-140%	< 50%
Hexachloroethane	30.375	133	40-140%	< 50%
Indeno(1,2,3-cd)pyrene	37.047	133	40-140%	< 50%
Isophorone	35.539	150	40-140%	< 50%
m-Toluidine	29.069	300		< 50%
Naphthalene	36.149	167	40-140%	× 50%
Nitrobenzene	35.214	133	40-140%	< 50%
NDPA/DPA	39.719	150		< 50%
n-Nitrosodimethylamine	26.621	333		< 50%
n-Nitrosodi-n-propylamine	35.898	167	32-121%	< 50%
p-Chloro-m-cresol	40.262	167	26-103%	< 50%
Pentachloronitrobenzene	44.458	150	42-153%	< 50%
Pentachlorophenol	35.691	133	17-109%	< 50%
Phenanthrene	27.307	100	40-140%	< 50%
Phenol	40.882	167	26-90%	< 50%
Pyrene	30.097	100	35-142%	× 50%
Pyridine	37.303	667	10-93%	%0 <u>9</u> >

Surrogate(s)	% Recovery
2,4,6-Tribromophenol	0-136%
2-Fluorobiphenyl	30-120%
2-Fluorophenol	25-120%
4-Terphenyl-d14	18-120%
Nitrobenzene-d5	23-120%
Phenol-d6	10-120%

\* Buffy '12, GCMS5 '12, GCMS7 '12, Juliet '12, SV103 '12 - Highest MDL 30-gram Extraction

SVOC	SVOCs in Liquid EPA 8270	EPA 8270			
	MDL *	RL	LCS/MS	<b>USW/SW</b>	
Analytes	ug/L	ug/L	% Rec	% RPD	
Hexachloroethane	0.665	2	40-140%	< 30%	
Indeno(1,2,3-cd)pyrene	0.477	2	40-140%	< 30%	
Isophorone	0.349	5	40-140%	< 30%	
m-Toluidine	0.588	10		< 30%	
Naphthalene	0.725	2	40-140%	< 30%	
Nitrobenzene	0.701	2	40-140%	< 30%	
NDPA/DPA	0.505	2	40-140%	< 30%	
n-Nitrosodimethylamine	0.554	2		< 30%	
n-Nitrosodi-n-propylamine	0.392	5	29-132%	< 30%	
p-Chloro-m-cresol	0.500	2	23-97%	< 30%	
Pentachlorophenol	1.215	10	9-103%	< 30%	
Phenanthrene	0.488	2	40-140%	< 30%	
Phenol	0.265	5	12-110%	< 30%	
Pyrene	0.438	2	26-127%	< 30%	
Pyridine	0.649	5	10-66%	< 30%	

surrogate(s)	% Recovery
2,4,6-Tribromophenol	10-120%
2-Fluorobiphenyl	15-120%
2-Fluorophenol	21-120%
4-Terphenyl-d14	33-120%
Nitrobenzene-d5	23-120%
Phenol-d6	10-120%

\* GCMS5 '11, Buffy '11, Juliet '11, GCMS7 '11 - Highest MDL 2-Liter Extraction

Page 13 of 18

SVOC	SVOCs in Soil - EPA 8270SIM	PA 8270SI	W	
	* MDL	RL	LCS/MS	<b>USM/SM</b>
Analytes	ug/Kg	ng/Kg	% Rec	% RPD
1-Methylnaphthalene	0.911	6.67	40-140%	< 50%
2-Chloronaphthalene	1.762	6.67	40-140%	< 50%
2-Methylnaphthalene	0.794	6.67	40-140%	< 50%
Acenaphthene	0.895	6.67	40-140%	< 50%
Acenaphthylene	0.801	6.67	40-140%	< 50%
Anthracene	0.901	6.67	40-140%	< 50%
Benzo (a) anthracene	1.041	6.67	40-140%	< 50%
Benzo (a) pyrene	1.542	6.67	40-140%	< 50%
Benzo (b) fluoranthene	1.587	6.67	40-140%	< 50%
Benzo (ghi) perylene	1.874	6.67	40-140%	< 50%
Benzo (k) fluoranthene	1.612	6.67	40-140%	< 50%
Chrysene	1.111	6.67	40-140%	< 50%
Dibenzo (a,h) anthracene	1.856	6.67	40-140%	< 50%
Fluoranthene	0.961	6.67	40-140%	< 50%
Fluorene	0.754	6.67	40-140%	< 50%
Hexachlorobenzene **	0.880	6.67	40-140%	< 50%
Hexachlorobutadiene	0.820	6.67	34-107%	< 50%
Hexachioroethane	0.877	6.67	29-106%	< 50%
Indeno (1,2,3-cd) pyrene	1.876	6.67	40-140%	× 50%
Naphthalene	0.909	6.67	40-140%	< 50%
Pentachlorophenoi **	4.844	26.67	17-109%	< 50%
Phenanthrene	0.829	6.67	40-140%	< 50%
Pyrene	0.793	6.67	35-142%	< 50%
Surrouate(s)	tols)		% Ror	% Recovery

Surrogate(s)	% Recovery
2,4,6-Tribromophenol	0-136%
2-Fluorobiphenyl	30-120%
2-Fluorophenol	25-120%
4-Terphenyl-d14	18-120%
Nitrobenzene-d5	23-120%
Phenol-d6	10-120%

\* Dakota '11, Mork '11, Mindy '12 MW. Mork '12, Dakota '12 SOX - Highest MDL. 30 gram Extraction

MDL         RL         LCS/MS         MS/MSD           J-Malytes         ug/L         % Rec         % RPD           1-Methylnaphthalene         0.0560         0.2         40-140%         < 40%           2-Chloronaphthalene         0.0660         0.2         40-140%         < 40%           2-Chloronaphthalene         0.0660         0.2         40-140%         < 40%           Acenaphthene         0.0660         0.2         40-140%         < 40%           Acenaphthene         0.0630         0.2         40-140%         < 40%           Actinaphthalene         0.0630         0.2         40-140%         < 40%           Actinacene         0.0630         0.2         40-140%         < 40%           Benzo (a) purene         0.0710         0.2         40-140%         < 40%           Benzo (b) fluoranthene         0.0730         0.2         40-140%         < 40%           Benzo (c) purene         0.0730         0.2         40-140%         < 40%           Benzo (ghi) perylene         0.0730         0.2         40-140%         < 40%           Benzo (ghi) perylene         0.0730         0.2         40-140%         < 40%           Dibenzo (a), purtacene         0	SVOCS	SVOCs in Liquid EPA 8270SIM	EPA 8270S	MI	
ug/L         ug/L         % Rec         %           0.0560         0.2         40-140%         <           0.0660         0.2         40-140%         <           0.0660         0.2         40-140%         <           0.0660         0.2         40-140%         <           0.0660         0.2         40-140%         <           0.0650         0.2         40-140%         <           0.0650         0.2         40-140%         <           0.00500         0.2         40-140%         <           0.00500         0.2         40-140%         <           0.00700         0.2         40-140%         <           0.00700         0.2         40-140%         <           0.00700         0.2         40-140%         <           0.00700         0.2         40-140%         <           0.00700         0.2         40-140%         <           0.00700         0.2         40-140%         <           0.00700         0.2         40-140%         <           0.00680         0.2         40-140%         <           0.00730         0.2         40-140%		* Jam	RL	LCS/MS	<b>MS/MSD</b>
0.0560         0.2         40-140% $<$ 0.0660         0.2         40-140% $<$ 0.0660         0.2         40-140% $<$ 0.0660         0.2         40-140% $<$ 0.06500         0.2         40-140% $<$ 0.06500         0.2         40-140% $<$ 0.05500         0.2         40-140% $<$ 0.06500         0.2         40-140% $<$ 0.00500         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00700         0.2	Analytes	ug/L	ng/L	% Rec	% RPD
0.0660         0.2         40-140% $<$ 0.0600         0.2         40-140% $<$ 0.0640         0.2         40-140% $<$ 0.06500         0.2         37-11% $<$ 0.05500         0.2         40-140% $<$ 0.05500         0.2         40-140% $<$ 0.05500         0.2         40-140% $<$ 0.00500         0.2         40-140% $<$ 0.00500         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00700         0.2         40-140% $<$ 0.00730         0.2         40-140% $<$ 0.00730         0.2         40-140% $<$ 0.00730         0.2         40-140% $<$ 0.00730         0.2         40-140% $<$ 0.00730         0.2         40-140% $<$ 0.00730         0.2	1-Methylnaphthalene	0.0560	0.2	40-140%	< 40%
0.0600 $0.2$ $40-140%$ $<$ $0.0640$ $0.2$ $37-111%$ $<$ $0.0500$ $0.2$ $37-111%$ $<$ $0.0500$ $0.2$ $40-140%$ $<$ $0.0570$ $0.2$ $40-140%$ $<$ $0.06570$ $0.2$ $40-140%$ $<$ $0.06570$ $0.2$ $40-140%$ $<$ $0.06500$ $0.2$ $40-140%$ $<$ $0.0700$ $0.2$ $40-140%$ $<$ $0.07700$ $0.2$ $40-140%$ $<$ $0.07700$ $0.2$ $40-140%$ $<$ $0.0730$ $0.2$ $40-140%$ $<$ $0.0430$ $0.2$ $40-140%$ $<$ $0.0730$ $0.2$ $40-140%$ $<$ $0.0730$ $0.2$ $40-140%$ $<$ $0.0730$ $0.2$ $40-140%$ $<$ $0.0730$ $0.2$ $40-140%$ $<$ $0.00570$ $0.2$	2-Chloronaphthalene	0.0660	0.2	40-140%	< 40%
0.0640         0.2         37-111% $<$ 0.0500         0.2         40-140% $<$ 0.0650         0.2         40-140% $<$ 0.06570         0.2         40-140% $<$ 0.06570         0.2         40-140% $<$ 0.06570         0.2         40-140% $<$ 0.06570         0.2         40-140% $<$ 0.0680         0.2         40-140% $<$ 0.0700         0.2         40-140% $<$ 0.07700         0.2         40-140% $<$ 0.0700         0.2         40-140% $<$ 0.0730         0.2         40-140% $<$ 0.0730         0.2         40-140% $<$ 0.0730         0.2         40-140% $<$ 0.00510         0.2         40-140% $<$ 0.00570         0.2         40-140% $<$ 0.00650         0.2         40-140% $<$ 0.00650         0.2         40-140% $<$ 0.00650         0.2	2-Methylnaphthalene	0.0600	0.2	40-140%	< 40%
0.0500         0.2         40-140% $<$ 0.0630         0.2         40-140% $<$ cene         0.0570         0.2         40-140% $<$ cene         0.0570         0.2         40-140% $<$ thene         0.0710         0.2         40-140% $<$ thene         0.0710         0.2         40-140% $<$ thene         0.0700         0.2         40-140% $<$ thene         0.0730         0.2         40-140% $<$ thene         0.0139         0.8         40-140% $<$ thene         0.0139         0.2         40-140% $<$ thene         0.0139         0.2         40-140% $<$ thene         0.0139         0.2         40-140%	Acenaphthene	0.0640	0.2	37-111%	< 40%
0.0630         0.2         40-140% $<$ cene         0.0570         0.2         40-140% $<$ chene         0.0570         0.2         40-140% $<$ thene         0.0710         0.2         40-140% $<$ thene         0.0710         0.2         40-140% $<$ thene         0.0710         0.2         40-140% $<$ thene         0.0730         0.2         40-140% $<$ thene         0.0730         0.2         40-140% $<$ thracene         0.0730         0.2         40-140% $<$ thracene         0.0730         0.2         40-140% $<$ thracene         0.0730         0.2         40-140% $<$ there         0.0730         0.2         40-140% $<$ there         0.0730         0.2         40-140% $<$ there         0.0740         0.2         40-140% $<$ there         0.0750         0.2         40-140% $<$ there         0.0750	Acenaphthylene	0.0500	0.2	40-140%	< 40%
cene $0.0570$ $0.2$ $40^{-140\%}$ $<$ thene $0.0710$ $0.2$ $40^{-140\%}$ $<$ thene $0.0710$ $0.2$ $40^{-140\%}$ $<$ ene $0.0700$ $0.2$ $40^{-140\%}$ $<$ ene $0.0700$ $0.2$ $40^{-140\%}$ $<$ ene $0.0700$ $0.2$ $40^{-140\%}$ $<$ thracene $0.0730$ $0.2$ $40^{-140\%}$ $<$ hracene $0.0730$ $0.2$ $40^{-140\%$ $<$ $0.0430$ $0.2$ $40^{-140\%$ $<$ $<$ $0.0430$ $0.2$ $40^{-140\%$ $<$ $<$ $0.0570$ $0.2$ $40^{-140\%$ $<$ $<$ $0.0570$ $0.2$ $40^{-140\%$ $<$ $<$ $0.0550$ $0.2$ $40^{-140\%$ $<$ $<$ $0.0540$ $0.2$ $40^{-140\%$ $<$ $<$ $0.0540$ $0.2$ $40^{-$	Anthracene	0.0630	0.2	40-140%	< 40%
0.0650         0.2         40-140% $<$ thene         0.0710         0.2         40-140% $<$ ene         0.0700         0.2         40-140% $<$ ene         0.0700         0.2         40-140% $<$ thene         0.0730         0.2         40-140% $<$ thene         0.0490         0.2         40-140% $<$ hracene         0.0730         0.2         40-140% $<$ nacene         0.0730         0.2         40-140% $<$ ene         0.0710         0.2         40-140% $<$ ene         0.0710         0.2         40-140% $<$ ene         0.0750         0.2         40-140% $<$ ene         0.0750         0.2         40-140% $<$ ene         0.0750         0.2         40-140% $<$ ene         0.0650         0.2         40-140% $<$ ene         0.0750         0.2         40-140% $<$ ene         0.0640         0.2 <th< td=""><td>Benzo (a) anthracene</td><td>0.0570</td><td>0.2</td><td>40-140%</td><td>&lt; 40%</td></th<>	Benzo (a) anthracene	0.0570	0.2	40-140%	< 40%
thene $0.0710$ $0.2$ $40-140\%$ $<$ ene $0.0700$ $0.2$ $40-140\%$ $<$ thene $0.0700$ $0.2$ $40-140\%$ $<$ thene $0.0730$ $0.2$ $40-140\%$ $<$ thracene $0.0490$ $0.2$ $40-140\%$ $<$ hracene $0.0730$ $0.2$ $40-140\%$ $<$ $0.0430$ $0.2$ $40-140\%$ $<$ $0.0430$ $0.2$ $40-140\%$ $<$ $0.0570$ $0.2$ $40-140\%$ $<$ $0.0570$ $0.2$ $40-140\%$ $<$ $0.0570$ $0.2$ $40-140\%$ $<$ $0.0790$ $0.2$ $40-140\%$ $<$ $0.0640$ $0.2$ $40-140\%$ $<$ $0.0640$ $0.2$ $40-140\%$ $<$ $0.0640$ $0.2$ $40-140\%$ $<$ $0.0640$ $0.2$ $40-140\%$ $<$ $0.0640$ <th< td=""><td>Benzo (a) pyrene</td><td>0.0690</td><td>0.2</td><td>40-140%</td><td>&lt; 40%</td></th<>	Benzo (a) pyrene	0.0690	0.2	40-140%	< 40%
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Benzo (b) fluoranthene	0.0710	0.2	40-140%	< 40%
0.0680         0.2         40-140%         <           ne         0.0490         0.2         40-140%         <	Benzo (ghi) perylene	0.0700	0.2	40-140%	< 40%
0.0490 $0.2$ $40-140%$ $<$ ne $0.0730$ $0.2$ $40-140%$ $<$ $0.0430$ $0.2$ $40-140%$ $<$ $0.0570$ $0.2$ $40-140%$ $<$ $0.0570$ $0.2$ $40-140%$ $<$ $0.0710$ $0.2$ $40-140%$ $<$ $0.0710$ $0.2$ $40-140%$ $<$ $0.0710$ $0.2$ $40-140%$ $<$ $0.0650$ $0.2$ $40-140%$ $<$ $0.0650$ $0.2$ $40-140%$ $<$ $0.0640$ $0.2$ $40-140%$ $<$ $0.0640$ $0.2$ $40-140%$ $<$ $0.0640$ $0.2$ $40-140%$ $<$ $0.0640$ $0.2$ $40-140%$ $<$ $0.0640$ $0.2$ $40-140%$ $<$ $0.0640$ $0.2$ $40-140%$ $<$ $0.00570$ $0.2$ $40-140%$ $<$	Benzo (k) fluoranthene	0.0680	0.2	40-140%	< 40%
o (a,h) anthracene         0.0730         0.2         40-140%         <           ithene         0.0430         0.2         40-140%         <	Chrysene	0.0490	0.2	40-140%	< 40%
Ithene         0.0430         0.2         40-140% $<$ ie         0.0570         0.2         40-140% $<$ inlorobenzene **         0.0139         0.8         40-140% $<$ inlorobenzene **         0.0139         0.8         40-140% $<$ inlorobutadiene         0.0710         0.2         40-140% $<$ inlorobutadiene         0.0710         0.2         40-140% $<$ inlorobutadiene         0.0790         0.2         40-140% $<$ inlorobutadiene         0.0790         0.2         40-140% $<$ inlorobutadiene         0.0640         0.2         40-140% $<$ inlorophenol **         0.1875         0.8         9-103% $<$ ithrene         0.0570         0.2         26-127% $<$		0.0730	0.2	40-140%	< 40%
le $0.0570$ $0.2$ $40-140\%$ $<$ llorobenzene ** $0.0139$ $0.8$ $40-140\%$ $<$ llorobutadiene $0.0710$ $0.2$ $40-140\%$ $<$ llorobutadiene $0.0710$ $0.2$ $40-140\%$ $<$ llorobutadiene $0.0790$ $0.2$ $40-140\%$ $<$ lloropthane $0.0790$ $0.2$ $40-140\%$ $<$ lloropthane $0.0790$ $0.2$ $40-140\%$ $<$ alene $0.0640$ $0.2$ $40-140\%$ $<$ inhorophenol ** $0.1875$ $0.8$ $9-103\%$ $<$ inhrene $0.0570$ $0.2$ $40-140\%$ $<$	Fluoranthene	0.0430	0.2	40-140%	< 40%
Ilorobenzene **         0.0139         0.8         40-140%         <           Ilorobutadiene         0.0710         0.2         40-140%         <	Fluorene	0.0570	0.2	40-140%	< 40%
Ilorobutadiene $0.0710$ $0.2$ $40-140\%$ $<$ Iloroethane $0.0650$ $0.2$ $40-140\%$ $<$ (1,2,3-cd) pyrene $0.0790$ $0.2$ $40-140\%$ $<$ (1,2,3-cd) pyrene $0.0790$ $0.2$ $40-140\%$ $<$ alene $0.0640$ $0.2$ $40-140\%$ $<$ hlorophenol ** $0.1875$ $0.8$ $9-103\%$ $<$ hlorophenol ** $0.0640$ $0.2$ $40-140\%$ $<$ ithrene $0.0570$ $0.2$ $26-127\%$ $<$		0.0139	0.8	40-140%	< 40%
Iloroethane         0.0650         0.2         40-140%         <           (1,2,3-cd) pyrene         0.0790         0.2         40-140%         <	Hexachlorobutadiene	0.0710	0.2	40-140%	< 40%
(1,2,3-cd) pyrene         0.0790         0.2         40-140%         <           alene         0.0640         0.2         40-140%         <	Hexachloroethane	0.0650	0.2	40-140%	< 40%
alene         0.0640         0.2         40-140%         <           hlorophenol **         0.1875         0.8         9-103%         <	Indeno (1,2,3-cd) pyrene	0.0790	0.2	40-140%	< 40%
hlorophenol **         0.1875         0.8         9-103%         <           nthrene         0.0640         0.2         40-140%         <	Naphthalene	0.0640	0.2	40-140%	< 40%
office         0.0640         0.2         40-140%         <           0.0570         0.2         26-127%         <	Pentachlorophenol **	0.1875	0.8	9-103%	< 40%
0.0570 0.2 26-127%	Phenanthrene	0.0640	0.2	40-140%	< 40%
	Pyrene	0.0570	0.2	26-127%	< 40%

2-Fluorobiphenyl	15-120%
2-Fluorophenol	21-120%
4-Terphenyl-d14	33-120%
Nitrobenzene-d5	23-120%
Phenol-d6	10-120%
* MANANANA 90' APACIA ON APACINA ANALASA	

% Recovery

Surrogate(s)

2,4,6-Tribromophenol

10-120% 15-120% 21-120%

\* Mork'08, Mindy '08, Dakota '08 - highest MDL \*\* Mork '10, Mindy '10, Dakota '10 - Highest MDL

Page 14 of 18

	Trace Metals	als Liquid	-EPA 6010B	8
	* JOW	RL	LCS .	<b>USW/SW</b>
Element	mg/L	mg/L	% Rec	%Rec/RPD
Aluminum	0.022277	0.1	80-120%	75-125%/ <20%
Antimony	0.009563	0.05	80-120%	75-125%/ <20%
Arsenic	0.003423	0.005	80-120%	75-125%/ <20%
Barium	0.002734	0.01	80-120%	75-125%/ <20%
Beryllium	0.00035	0.005	80-120%	75-125%/ <20%
Boron	0.008154	0.03	80-120%	75-125%/ <20%
Cadmium	0.000635	0.005	80-120%	75-125%/ <20%
Calcium	0.0217	0.1	80-120%	75-125%/ <20%
Chromium	0.00203	0.01	80-120%	75-125%/ <20%
Cobalt	0.004856	0.02	80-120%	75-125%/ <20%
Copper	0.004642	0.01	80-120%	75-125%/ <20%
Iron	0.0173	0.05	80-120%	75-125%/ <20%
Lead	0.002802	0.01	80-120%	75-125%/ <20%
Magnesium	0.044941	0.1	80-120%	75-125%/ <20%
Manganese	0.002445	0.01	80-120%	75-125%/ <20%
Molybdenum	0.011358	0.05	80-120%	75-125%/ <20%
Nickel	0.003945	0.025	80-120%	75-125%/ <20%
Potassium	0.798578	2.5	80-120%	75-125%/ <20%
Selenium	0.003277	0.01	80-120%	75-125%/ <20%
Silicon	0.139321	0.5	80-120%	75-125%/ <20%
Silver	0.002008	0.007	80-120%	75-125%/ <20%
Sodium	0.7952	2	80-120%	75-125%/ <20%
Strontium	0.001915	0.01	80-120%	75-125%/ <20%
Thallium	0.006234	0.02	80-120%	75-125%/ <20%
Tin	0.010996	0.05	80-120%	75-125%/ <20%
Titanium	0.001891	0.01	80-120%	75-125%/ <20%
Vanadium	0.002229	0.01	80-120%	75-125%/ <20%
Zinc	0.005409	0.05	80-120%	75-125%/ <20%

\* Trace 3 '09 & Trace 4 '09, Trace 5 '12 - highest MDL

MDL           MDL           mg/Kg           0.891088           0.891086           0.382505           0.109346           0.136903           0.109346           0.109346           0.114004           0.0326175           0.104004           0.014004           0.109346           0.114004           0.1055396           0.114004           0.194223           0.194223           0.194223           0.194223           0.194223           0.194223           0.194223           0.194223           0.112074           m           0.185684           0.185684           0.185683           0.194233           0.194233           0.157813           0.157813           0.157813           0.157813           0.157813           0.157813           0.157813           0.157813           0.157813           0.157813           0.157813           0.157813           0.157813			
ment         mg/Kg           num         0.891088           nny         0.382505           c         0.136903           c         0.136903           nm         0.382505           nm         0.382505           nm         0.136903           nm         0.136903           nm         0.136346           nm         0.014004           nm         0.025396           nm         0.0868           nm         0.0868           nm         0.081206           nm         0.081206           nm         0.081206           num         0.081206           num         0.081206           num         0.081206           num         0.0194223           n         0.12074           nmessium         1.797658           num         0.1692           num         0.157813           num         0.157813           num         0.157813           num         0.157813           num         0.157813           num         0.157813           num         0.157813 <t< th=""><th>RL</th><th>LCS/MS</th><th>MSD</th></t<>	RL	LCS/MS	MSD
Num         0.891088           nny         0.382505           c         0.136903           nm         0.382505           nm         0.136903           nm         0.136903           nm         0.136903           nm         0.136903           nm         0.14004           nm         0.014004           nm         0.025396           nm         0.0868           num         0.0868           num         0.0868           num         0.081206           num         0.081206           num         0.0194223           r         0.194223           r         0.194223           r         0.194223           r         0.194223           r         0.194223           r         0.194223           nm         0.157654           nm         0.157654           nm         0.13108           nm         0.13108           nm         0.13108           nm         0.13108           nm         0.13108           nm         0.13108           nm	g mg/Kg	% Rec	RPD
Dny         0.382505           c         0.136903           um         0.136903           um         0.136903           um         0.136903           um         0.136903           um         0.014004           m         0.326175           um         0.0368           m         0.868           m         0.868           m         0.868           m         0.081206           num         0.081206           num         0.0194223           er         0.194223           er         0.194223           er         0.185684           0.195684         0.112074           situm         1.797658           nnese         0.097792           denum         0.157813           situm         0.157813           m         0.13108           m         0.13108           n         0.13108           n         0.13108           n         0.13108           n         0.13108           n         0.1313           n         0.077662           n	88 4	75-125%	< 35%
c 0.136903 um 0.014004 um 0.014004 um 0.014004 m 0.326175 um 0.0868 m 0.868 m 0.868 ium 0.8684 0.194223 r 0.194223 r 0.194223 r 0.194223 r 0.194223 r 0.194223 r 0.194223 m 0.185684 0.112074 0.13792 anum 0.43302 um 0.157813 m 31.94312 um 0.157813 m 31.94312 um 0.157813 m 0.13708 um 0.157813 m 0.13708 m 0.13662 um 0.076652 m 0.075652 m 0.075652	05 2	75-125%	< 35%
1         0.109346           um         0.014004           um         0.0326175           um         0.326175           um         0.326175           m         0.3688           m         0.3688           m         0.868           m         0.868           m         0.868           m         0.868           n         0.185684           n         0.194223           stium         1.797658           ann         0.157913           stium         0.157813           ann         0.157813           n         0.13108           n         0.13108           n         0.13108           n         0.1313           n         0.1313           n         0.1313           n         0.1313           n         0.1439823      <	03 0.4	75-125%	< 35%
um 0.014004 um 0.0326175 um 0.0326396 m 0.0868 n 0.081206 0.194223 r 0.185684 0.194223 r 0.185684 0.194223 r 0.185684 0.197658 sium 1.797658 nnese 0.097792 denum 0.454302 denum 0.454302 denum 0.157813 m 31.94312 um 0.157813 m 31.94312 um 0.157813 m 31.94312 um 0.157813 m 0.13708 m 0.157813 m 0.157813 m 0.157813 m 0.157813 m 0.157813 m 0.15782 m 0.07662 m 0.076652 m 0.076652 m 0.075652		75-125%	< 35%
0.326175           um         0.326175           m         0.025396           m         0.868           nium         0.81206           r         0.194223           r         0.194223           r         0.194223           r         0.194223           r         0.194223           asium         1.797658           annese         0.097792           denum         0.454302           denum         0.454332           denum         0.454332           denum         0.454332           denum         0.157813           mm         31.94312           um         0.13108           m         0.13133 <td>04 0.2</td> <td>75-125%</td> <td>&lt; 35%</td>	04 0.2	75-125%	< 35%
Ium         0.025396           im         0.868           nium         0.868           11um         0.081206           er         0.194223           er         0.194223           er         0.194223           er         0.194223           er         0.185684           0.12074         0.952           esium         1.797658           anese         0.097792           denum         0.454302           denum         0.454302           m         31.94312           ium         0.13108           n         N/A           n         0.13108           n         0.13108           n         0.13108           n         0.13108           n         0.13108           n         0.13108           n         0.07662           n         0.07662           n         0.07662           n         0.075652	75 1.2	75-125%	< 35%
Inum         0.868           nium         0.081206           er         0.194223           er         0.112074           0.112074         0.097292           esium         1.797658           anese         0.097792           denum         0.454302           oilitz074         0.017074           esium         1.797658           anese         0.097792           denum         0.454302           denum         0.454302           denum         0.454302           inum         0.13108           n         N/A           n         0.13108           n         0.075652           n         0.075652	96 0.4	75-125%	< 35%
Ium         0.081206           er         0.194233           er         0.194233           er         0.194233           er         0.185684           0.12074         0.112074           esium         1.797658           anese         0.097792           denum         0.454302           ol.157813           sium         0.157813           n         0.13108           n         N/A           n         0.13108           n         0.076622           n         0.076622           n         0.076652           n         0.075652		75-125%	< 35%
t 0.194223 er 0.185684 0.185684 0.185684 0.1797658 0.097792 anese 0.097792 denum 0.454302 0.157813 0.157813 0.157813 0.157813 0.13108 n N/A 0.13108 n 0.13108 n 0.0313 n 0.075652 n 0.007562 n 0.007562 n 0.007562 n 0.007562 n 0.075652 n 0.0756552 n 0.055652 n 0.0556555	06 0.4	75-125%	< 35%
er 0.185684 0.692 0.692 0.112074 anese 0.097792 denum 0.454302 0.157813 0.097792 denum 0.454302 0.157813 0.157813 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.07662 10 0.076652 10 0.076652	23 0.8	75-125%	< 35%
0.692 0.112074 seium 1.797658 anese 0.097792 denum 0.454302 0.157813 0.157813 0.157813 0.157813 0.157813 0.157813 0.157813 0.157813 0.157813 0.13108 0.157813 0.000313 0.07662 1.000 0.076652 1.000 0.0007552 1.00075552 1.000755552 1.000755552 1.000755552 1.000755552 1.000755552 1.000755552 1.000755552 1.000755552 1.000755552 1.000755552 1.000755552 1.000755555 1.000755555 1.000755555 1.000755555 1.000755555 1.000755555 1.0007555555 1.0007555555 1.0007555555 1.00075555555555555555555555555555555555		75-125%	< 35%
0.112074           esturn         1.797658           anese         0.097792           denum         0.454302           denum         0.454302           out         0.157813           sium         0.157813           n         0.157813           n         0.157813           n         0.157813           n         0.157813           n         0.13108           n         N/A           n         0.13108	2	75-125%	< 35%
ssium 1.797658 anese 0.097792 denum 0.454302 0.157813 31.94312 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.05652 mm 0.076652 mm 0.076652	74 2	75-125%	< 35%
anese 0.097792 denum 0.454302 bium 0.157813 0.157813 0.157813 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 0.13108 m 0.07662 m 0.07662 m 0.07662		75-125%	< 35%
denum 0.454302 bium 0.157813 0.157813 0.157813 0.13108 0.13108 0.13108 0.13108 0.13108 0.07662 0.000313 m 0.07662 m 0.249359 m 0.076652 m 0.076652	92 0.4	75-125%	< 35%
0.157813 sium 31.94312 n 0.13108 n N/A 0.13108 m 31.94312 n/A 0.13108 m 0.13108 m 0.131808 ium 0.07662 im 0.07662		75-125%	< 35%
sium 31.94312 um 0.13108 N/A 0.13108 m 0.13108 m 0.13108 m 0.13108 m 0.13108 m 0.07662 m 0.439829 m 0.076652		75-125%	< 35%
Itum 0.13108 N/A N/A N/A 0.080313 m 31.808 itum 0.07662 m 0.439823 m 0.07662	12 100	75-125%	< 35%
n N/A N/A 0.080313 m 31.808 ium 0.07662 ium 0.249359 ium 0.249359 ium 0.249359 ium 0.249359 ium 0.076652 ium	0.8	75-125%	< 35%
m 0.080313 m 31.808 ium 0.07662 im 0.249359 m 0.439823 m 0.076652	N/A	N/A	N/A
31.808 0.07662 0.249359 0.439823 0.075652	13 0.4	75-125%	< 35%
0.07662 0.249359 0.439823 0.075652	80	75-125%	< 35%
0.249359 0.439823 0.075652	32 2	75-125%	< 35%
0.439823	59 0.8	75-125%	< 35%
0.075652	23 4	75-125%	< 35%
0 100010	52 0.4	75-125%	< 35%
	78 0.4	75-125%	< 35%
Zinc 0.216342 2		75-125%	< 35%

Page 15 of 18

Element Aluminum				
t l	MDL *	RL	LCS/MS	<b>OSW/SW</b>
	ng/L	ug/L	% Rec	%Rec/RPD
	1.945737	10	80-120%	< 20%
Antimony	0.11186	0.5	80-120%	< 20%
Arsenic (	0.161049	0.5	80-120%	< 20%
Barium (	0.078126	0.5	80-120%	< 20%
Beryllium (	0.124308	0.5	80-120%	< 20%
Cadmium (	0.049833	0.2	80-120%	< 20%
Calcium	32.07137	100	80-120%	< 20%
Chromium (	0.150481	1	80-120%	< 20%
Cobalt (	0.023759	0.2	80-120%	< 20%
Copper (	0.108009	Ŧ	80-120%	< 20%
Iron	12.49011	50	80-120%	< 20%
Lead (	0.166202	Ļ	80-120%	< 20%
Magnesium 2	23.38641	70	80-120%	< 20%
	0.136177	0.5	80-120%	< 20%
Ē	0.166736	0.5	80-120%	< 20%
Nickel (	0.079984	0.5	80-120%	< 20%
Potassium	27.03	100	80-120%	< 20%
Selenium (	0.271706	5	80-120%	< 20%
	0.077899	0.25	80-120%	< 20%
	14.71076	100	80-120%	< 20%
_	0.028279	0.2	80-120%	< 20%
Tin **	0.06086	0.5	80-120%	< 20%
Vanadium (	0.136343	5	80-120%	< 20%
Zinc	1.189299	10	80-120%	< 20%

\* ICPMS '11, ICPMSX '11 - Highest MDL \*\* ICPMSX '12

< 20% < 20% < 20% < 20% < 20% < 20% < 20% < 20% < 20% < 20% < 20% < 20% < 20% < 20% < 20% MSD RPD < 20% < 20% < 20% < 20% < 20% < 20% < 20% < 20% < 20% LCS/MS % Rec 75-125% Trace Metals Soil - EPA 6020 mg/Kg 0.05 0.05 0.02 0.05 20 0.06 0.05 0.05 0.02 0.03 0.02 0.2 0.3 0.2 0.2 0.2 50 9 <del>1</del>5 9 0.1 2 9 0.001459 0.006215 0.602445 0.041379 0.003785 0.630053 0.002434 0.059465 0.006863 0.000929 0.003472 0.005657 0.084585 0.002492 1.707592 0.003817 0.012551 0.00205 0.000577 0.00654 0.006241 mg/Kg 0.00133 0.00302 0.566647 MDL Molybdenum Manganese Magnesium Element Potassium Chromium Vanadium Aluminum Beryllium Cadmium Selenium Antimony Calcium hallium Arsenic Copper Sodium Barium Cobalt Vickel Silver ead Zinc гол Ē

Page 16 of 18

	Mercui	y Liquid -	Mercury Liquid - EPA 245.1 & 7470A	
	* MDL	RL	rcs	<b>USW/SW</b>
Element	mg/L	mg/L	% Rec	%Rec/RPD
Mercuny	0.000631		80-120% - 7470A 85-115% - 245.1	100C- 1 100CF 0Z
	10000000	0.000		0/ NZ< 10/ NCI -N1

\* FIMS3 '11 & FIMS4 '11 - MDL

M				
	MDL	RL	LCS/MS	<b>MS/MSD</b>
Element mo	mg/Kg	mg/Kg	% Rec	%Rec/RPD
Mercury 0.01	0.017642	0.08	80-120%	80-120% 70-130% / < 20%

\* FIMS3 '10 & FIMS4 '10 - Highest MDL

			Wet Che	mistry Pa	Wet Chemistry Parameters -Soil-		
					Accuracy	MS/DUP	
Parameter	Method	MDL	RL	(units)	LCS/MS	RPD	<b>MDL</b> Instrument and Date
Cyanide-total	EPA 9010B	0.234	+	mg/Kg	mg/Kg 80-120% / 65-135%	< 40%	Lachat Nick 2012
Cyanide-total	SM 4500CN-CE	0.234	1	mg/Kg	mg/Kg 90-110% / 90-110%	< 35%	Lachat Nick 2012

Page 18 of 18

### Alpha Analytical TO-15 Full Scan; Standard NY List

Analyte	CAS #	RL	MDL	Units	LCS Criteria	MS RPD	Duplicate RPD	Surrogati Criteria
1,1,1-Trichloroethane	71-55-6	0.2	0.057	ppbV	70-130	25	25	
1,1,2,2-Tetrachloroethane	79-34-5	0.2	0.0548	ppbV	70-130	25	25	
1,1,2-Trichloroethane	79-00-5	0.2	0.0667	ppbV	70-130	25	25	
1,1-Dichloroethane	75-34-3	0.2	0.0771	ppbV	70-130	25	25	
1,1-Dichloroethene	75-35-4	0.2	0.0566	ppbV	70-130	25	25	
L,2,4-Trichlorobenzene	120-82-1	0.2	0.0611	ppbV	70-130	25	25	ļ
1,2,4-Trimethylbenzene	95-63-6	0.2	0.0694	ppbV	70-130	25	25	ļ
,2-Dibromoethane	106-93-4	0.2	0.0779	ppbV	70-130	25	25	
1,2-Dichlorobenzene	95-50-1	0.2	0.0614	ppbV	70-130	25	25	
L,2-Dichloroethane	107-06-2	0.2	0.0552	ppbV	70-130	25	25	
,2-Dichloropropane	78-87-5	0.2	0.0697	ppbV	70-130	25	25	
.3,5-Trimethylbenzene	108-67-8	0.2	0.0584	ppbV	70-130	25	25	
,3-Butadiene	106-99-0	0.2	0.0799	ppbV	70-130	25	25	1
,3-Dichlorobenzene	541-73-1	0.2	0.0637	ppbV	70-130	25	25	
,4-Dichlorobenzene	106-46-7	0.2	0.0361	ppb∨	70-130	25	25	
,4-Dioxane	123-91-1	0.2	0.078	ppbV	70-130	25	25	
,2,4-Trimethylpentane	540-84-1	0.2	0.0659	ppbV	70-130	25	25	
-Butanone	78-93-3	0.2	0.0472	ppbV	70-130	-25	25	
-Hexanone	591-78-6	0.2	0.0604	ppbV	70-130	25	25	
-Chloropropene	107-05-1	0.2	0.0812	ppbV	70-130	25	25	
-Ethyltoluene	622-96-8	0.2	0.0776	ppbV	70-130	25	25	1
cetone	67-64-1	1	0.165	ppbV	70-130	25	25	
enzene	71-43-2	0.2	0.0537	ppbV	70-130	25	25	
Benzyl chloride	100-44-7	0.2	0.0645	ppbV	70-130	25	25	
romodichloromethane	75-27-4	0.2	0.0656	ppbV	70-130	25	25	
romoform	75-25-2	0.2	0.0523	ppbv ppbv	70-130	25	25	
romomethane	74-83-9	0,2	0.0696	ppbV	70-130	25	25	
arbon disulfide	75-15-0	0.2	0.0345	ppbV	70-130	25	25	
arbon tetrachloride	56-23-5	0.2	0.0471	ppbV	70-130	25	25	
hlorobenzene	108-90-7	0.2	0.0789				25	
hloroethane	75-00-3	0.2	0.0767	ppbV	70-130	25 25	25	
				ppbV	70-130			· · · · · · · · · · · · · · · · · · ·
hløroform	67-66-3	0.2	0.0531	ppbV	70-130	25	25	
hloromethane	74-87-3	0.2	0.0958	ppb∨	70-130	25	25	
is-1,2-Dichloroethene	156-59-2	0.2	0.0587	ppbV	70-130	25	25	
is-1,3-Dichloropropene	10061-01-5	0.2	0.0745	ppbV	70-130	25	25	
yclohexane	110-82-7	0.2	0.0656	ppbV	70-130	25	25	
ibromochloromethane	124-48-1	0.2	0.0747	ppbV	70-130	25	25	
ichlorodifluoromethane	75-71-8	0.2	0.0466	ppbV	70-130	25	25	
thyl Alcohol	GCDAI06	2.5	0.542	ppbV	70-130	25	25	
thyl Acetate	141-78-6	0.5	0.131	ppbV	70-130	25	25	
thylbenzene	100-41-4	0.2	0.0555	ppbV	70-130	25	25	
,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	0.2	0.0511	ppbV	70-130	25	25	
,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.2	0.0419	ppbV	70-130	25	25	
lexachlorobutadiene	87-68-3	0.2	0.0732	ppbV	70-130	25	25	
o-Propyl Alcohol	67-63-0	0.5	0.0525	ppbV	70-130	25	25	
lethylene chloride	75-09-2	1	0.299	ppbV	70-130	25	25	
-Methyl-2-pentanone	108-10-1	0.2	0.0607	ppbV	70-130	25	25	
ethyl tert butyl ether	1634-04-4	0.2	0.0528	ppbV	70-130	25	25	
/m-Xylene	179601-23-1	0.4	0.139	ppbV	70-130	25	25	
Xylene	95-47-6	0.2	0.0631	ppbV	70-130	25	25	
vlene (Total)	1330-20-7	0.2	0.0631	рроу	70-130	25	25	
eptane	142-82-5	0.2	0.0553	ppbv	70-130	25	25	
Heptane	142-82-5	0.2	0.0553	ppbV	70-130	25	25	
Hexane	110-54-3	0.2	0.0518	ppbv	70-130	25	25	
opylene	115-07-1	0.2	0.0929	pp0v	70-130	25	25	h <del>.</del>
vrene	100-42-5	0.5	0.0929	ppbV	70-130	25	25	
etrachloroethene	127-18-4	0.2	0.0758	ppbV	70-130	25	25	
atrahydrofuran	109-99-9	0.2	0.0608	ppbV	70-130	25	25	
bluene				ppbV				
	108-88-3	0.2	0.0628	ppbV	70-130	25	25	
ans-1,2-Dichloroethene	156-60-5	0.2	0.074	ppbV	70-130	25	25	
ans-1,3-Dichloropropene	10061-02-6	0.2	0.0693	ppbV	70-130	25	25	
ichloroethene	79-01-6	0.2	0.071	ρpb∨	70-130	25	25	
ichlorofluoromethane	75-69-4	0.2	0.0416	ppbV	70-130	25	25	
nyl acetate	108-05-4	0.2	0.0567	ppbV	70-130	25	25	
ny! bromide	593-60-2	0.2	0.0699	ρpbV	70-130	25	25	
nyl chloride	75-01-4	0.2	0.0378	ppbV	70-130	25	25	
rt-Butyl Alcohol	75-65-0	0.5	0.0599	ppbV	70-130	25	25	
2-Dichloroethane-d4	17060-07-0	-						70-130
oluene-d8	2037-26-5							70-130
romofluorobenzene	460-00-4	····		1		1		70-130
				1				
· · · · · · · · · · · · · · · · · · ·				1				
Please Note that the PL in	formation prov	idad in th	is table is calcul	ated velag a	100% Calla	e factor 16	all/Collde onk	

Please Note that the RL information provided in this table is calculated using a 100% Solids factor (Soli/Solids only) Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Im

B

8 Walkup Drive, Westborough, MA 01581 + 508-898-9220 - www.alphalab.com Manscriet AVA - Mahwah, Na - Albana, NY - Bidhala, NY



Alpha Analytical TO-15 SIM; 7 NYS Decision Matrix Compounds; Standard NY List

							SM		Duplicate	Surrogate
Analyte	CAS #	귛	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria
1,1,1-Trichloroethane	71-55-6	0.02	0.007	Vdqq	70-130	25		25	25	
1,1-Dichloroethene	75-35-4	0.02	0.007	Vådq	70-130	25		25	25	
Carbon tetrachloride	56-23-5	0.02	800'0	٨qdd	70-130	25		25	25	
cis-1,2-Dichloroethene	156-59-2	0.02	0.0066	Vdqq	70-130	25		25	25	
Tetrachloroethene	127-18-4	0.02	0.008	Vdqq	70-130	25		25	25	
Trichloroethene	29-01-6	0.02	0.007	Vodq	70-130	25		25	25	
Vinyl chloride	75-01-4	0.02	0.007	Vdqq	70-130	25		25	25	
1,2-Dichloroethane-d4	0-20-090/1									70-130
Toluene-d8	2037-26-5									70-130
Bromoflucrobenzene	460-00-4									70-130
ALANA MARKANIA	a start the future strength of the state is entried to strength of an above of an strength of the strength of t	Jod in this table	in aution to at	1.00 40 0000						

Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

# APPENDIX B

# Applicable QAPP Worksheets

\*The worksheets included in this appendix were provided by Alpha Analytical Services as an example.

Title: Revision Number: Revision Date: Page 1 of **6** 

# QAPP Worksheet #12: Measurement Performance Criteria (UFP-QAPP Manual Section 2.6.2)

(EPA 2106-G-05 Section 2.2.6)

Laboratory: Alpha Analytical, Westborough, MA

Matrix: Soils and Waters

Analytical Group or Method: 8260

Concentration Level: LOW		· · ·
Data Quality Indicator (DQI)	QC sample or measurement performance activity	Measurement Performance Criteria
Analytical Precision (laboratory)	Laboratory Control Sample Duplicates	RPD ≤ 20%
Analytical Precision (laboratory)	Matrix Spike Duplicates (at client's request)	RPD ≤ 30%
Analytical Accuracy/Bias (laboratory)	Laboratory Control Samples	Generally, 70-130%R ~ analyte specific
Analytical Accuracy/Bias (matrix interference)	Matrix Spike/ Matrix Spike Duplicates (at client's request)	Generally, 40-140%R – analyte specific
Accuracy/Extraction efficiency	Surrogates	70-130%R
Overall accuracy/bias (contamination)	Method blank	No target compounds ≥ RL
Sensitivity	LOD verification (spiked at 1-4xDL)	Detected
Completeness	See Worksheet #34	See Worksheet #34

Title: Revision Number: Revision Date: Page 2 of **6** 

> Laboratory: Alpha Analytical, Westborough, MA Matrix: Soils and Waters Analytical Group or Method: 8270

Data Quality Indicator (DOI)	QC sample or measurement	Maserrement Darformanco Critoria
	performance activity	
Analytical Precision (laboratory)	Laboratory Control Sample Duplicates	RPD ≤ 50%
Analytical Precision	Matrix Spike Duplicates	RPD ≤ 50%
lianoi atoi y/	(at clickly a substrained and the substrained	
Analytical Accuracy/Bias	Laboratory Control Camalor	Generally, 40-140%R for Base Neutrals; 30-130%R for Acids,
(laboratory)		analyte specific
Analytical Accuracy/Bias	Matrix Spike/ Matrix Spike Duplicates	Generally, 40-140%R for Base Neutrals; 30-130%R for Acids,
(matrix interference)	(at client's request)	analyte specific
Accuracy/Extraction		
efficiency	Suirugates	Generality, 30-150%K, analyte specific
Overall accuracy/bias		
(contamination)		No target compounds 2 RL
Sensitivity	LOD verification (spiked at 1-4xDL)	Detected
Completeness	See Worksheet #34	See Worksheet #34

Revision Number: Revision Date: Page **3** of **6** Title:

Laboratory: Alpha Analytical, Westborough, MA Matrix: Soils and Waters Analytical Group or Method: Herbicides

	performance activity	
/Bias		
ecision curacy/Bias	Control Comple Duplicator	000 / JEW
ecision curacy/Bias	בפתחו פנחו ל בסוונו חו ספונולוב התלוונפובא	20X2 2 UN
:curacy/Bias	Matrix Spike Duplicates	
curacy/Bias	request)	NrD 2 30%
		30 1 F 00/ B
		V0/DCT-DC
Analytical Accuracy/Bias Matrix Spike	Matrix Spike/ Matrix Spike Duplicates	30 1 EO0/ D
(matrix interference) (at client's request)	request)	10/0CT-0C
Accuracy/Extraction		20 1 E 08/ B
efficiency		N%/DCT-DC
Overall accuracy/bias	1	
(contamination)		NU LARGET LUTTIPUUTIUS Z KL
Sensitivity LOD verifica	verification (spiked at 1-4xDL)	Detected
Completeness See Worksh	Worksheet #34	See Worksheet #34

Title: Revision Number: Revision Date: Page 4 of 6

> Laboratory: Alpha Analytical, Westborough, MA Matrix: Soils and Waters

Matrix: Solis and Waters Analytical Group or Method: Pesticides

COLICETICI ALIVITI LEVEL. LUVY		
Data Quality Indicator (DQI)	QC sample or measurement performance activity	Measurement Performance Criteria
Overall Drecision	Field Duplicates	RPD ≤ 30%
	(at client's request)	
Analytical Precision	Matrix Spike Duplicates	
(laboratory)	(at client's request)	KPU ≤ 30%
Analytical Accuracy/Bias	-	
(laboratory)	Laboratory Control Samples	30-150%R
Analytical Accuracy/Bias	Matrix Spike/ Matrix Spike Duplicates	
(matrix interference)	(at client's request)	3U-1-2U%R
Accuracy/Extraction		
efficiency	auri ogates	30-150%R
Overall accuracy/bias		
(contamination)	INELINOU DIANK	No target compounds $\geq$ RL
Sensitivity	LOD verification (spiked at 1-4xDL)	Detected
Completeness	See Worksheet #34	See Worksheet #34

Title: Revision Number: Revision Date: Page 5 of 6

Laboratory: Alpha Analytical, Westborough, MA

Matrix: Soils and Waters Analytical Group or Method: PCBs

CONCENTINALION LEVEL. LOV		
Data Quality Indicator (DQI)	QC sample or measurement performance activity	Measurement Performance Criteria
Analytical Precision (laboratory)	Laboratory Control Sample Duplicates	RPD ≤ 30%
Analytical Precision (laboratory)	Matrix Spike Duplicates (at client's request)	RPD ≤ 30%
Analytical Accuracy/Bias (laboratory)	Laboratory Control Samples	40-140%R
Analytical Accuracy/Bias (matrix interference)	Matrix Spike/ Matrix Spike Duplicates (at client's request)	40-140%R
Accuracy/Extraction efficiency	Surrogates	30-150%R
Overall accuracy/bias (contamination)	Method blank	No target compounds ≥ RL
Sensitivity	LOD verification (spiked at 1-4xDL)	Detected
Completeness	See Worksheet #34	See Worksheet #34

> Laboratory: Alpha Analytical, Westborough, MA Matrix: Soils and Waters Analytical Group or Method: Petro

Concentration Level: LOW

Data Quality Indicator (DQI)	QC sample or measurement performance activity	Measurement Performance Criteria
Analytical Precision (laboratory)	Laboratory Control Sample Duplicates	RPD ≤ 30%
Analytical Precision (laboratory)	Matrix Spike Duplicates (at client's request)	RPD ≤ 30%
Analytical Accuracy/Bias (laboratory)	Laboratory Control Samples	40-140%R
Analytical Accuracy/Bias (matrix interference)	Matrix Spike/ Matrix Spike Duplicates (at client's request)	40-140%R
Accuracy/Extraction efficiency	Surrogates	30-130%R
Overall accuracy/bias (contamination)	Method blank	No target compounds ≥ RL
Sensitivity	LOD verification (spiked at 1-4xDL)	Detected
Completeness	See Worksheet #34	See Worksheet #34

### QAPP Worksheet #23: Analytical SOP's (UFP-QAPP Manual Section 3.2.1) (EPA 2106-G-05 Section 2.3.4)

	Title, Date, and URL (if available)	Definitive or Screening Data	Matrix/Analytical Group	SOP Option or Equipment Type	<sup>‡</sup> Modified for Project? Y/N
2550	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Definitive	Waters, Soils	GC/MS	
Spe Sei	Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Definitive	Waters, Soils	GC/MS	
10 6 5 0	Determination of Organochlorine Pesticides by Gas Chromatography/Electron Capture Detection (GC/ECD)	Definitive	Waters, Soils	GC/ECD	
a the a	Determination of Polychlorinated Biphenyls (PCBs) as Aroclors by Gas Chromatography/Electron Capture Detection (GC/ECD)	Definitive	Waters, Soils	GC/ECD	
ΰž	Chlorinated Herbicides by GC Using Methylation Derivatization	Definitive	Waters, Soils	GC/ECD	
SQU	Non-halogenated Organics by Gas Chromatography – Total Petroleum Hydrocarbons	Definitive	Waters, Soils	GC/FID	
щŵ	Extraction of Water Samples by Separatory Funnel	Definitive	Waters/Organic Preparatory	GC/MS GC/FID GC/ECD	
ЩĘ	Extraction of Soil Samples by Microwave	Definitive	Soils/Organic Preparatory	GC/MS GC/FID GC/ECD	

SOP #	Title, Date, and URL (if available)	Definitive or Screening Data	Matrix/Analytical Group	SOP Option or Equipment Type	*Modified for Project? Y/N
1964	Preparation of Samples for Chlorinated Herbicides Analysis by GC	Definitive	Waters and Soils/Organic Preparatory	GC/ECD	
1955	Sulfur Cleanup	Definitive	Waters and Soils/Organic Preparatory	GC/ECD	
1962	Florisil Cleanup Procedure	Definitive	Waters and Soils/Organic Preparatory	GC/ECD	
1960	Sulfuric Acid Cleanup Procedure	Definitive	Waters and Soils/Organic Preparatory	GC/ECD	
1954	Soxhlet Extraction	Definitive	Soils/Organic Preparatory	GC/MS GC/FID GC/ECD	
± A hrief «	t A brief summary of project-specific SOP modifications must be movided on this mortshoot or meaning	ations must be need	wided on this worksheet or		

t A brief summary of project-specific SOP modifications must be provided on this worksheet or referenced.

## QAPP Worksheet #24: Analytical Instrument Calibration (UFP-QAPP Manual Section 3.2.2) (EPA 2106-G-05 Section 2.3.6)

node; ce criteria;	Perform in full SCAN mode; e SOP for BFB acceptance crite	Prior to each ICAL; At the beginning of analytical sequence; Every 12hrs	1
ndards; be ≤ RL; or 10% of 3% but ≤ 30% egression); egression)	Minimum of 5 standards; Low standard mether 8 RL; %RSD ≤ 20 except for 10% of mpounds may be > 20% but ≤ 30 mpounds may be > 20% but ≤ 30 ms2D; r ≥ 0.99 (linear regression); r² ≥ 0.99 (non-linear regression)	$\label{eq:constraint} \begin{tabular}{lllllllllllllllllllllllllllllllllll$	
apply – see SOP; ndard source initial calibration	3 ≤ 30; exclusions apply – see SO Prepared using standard source erent than used for initial calibrat	%D s 30; exclusions apply – see SOP; Prepared using standard source different than used for initial calibration	
0% of compounds ut ≤ 30%D; al standards must of the mid-level on standard	S 20 except for 20% of compt may be > 20 but ≤ 30%D; a counts of internal standards e within 50–200% of the mid- initial calibration standard	%D \$ 20 except for 20% of compounds         At the beginning of every       may be > 20 but \$ 30%D;         analytical sequence; Every 12       Area counts of internal standards must be within 50–200% of the mid-level initial calibration standard	

SOP Ref			2111	
Title/positian responsible for Corrective Action			Analyst	
Corrective Action (CA)	Perform instrument/injection port maintenance as necessary; Retune instrument	Review integrations and calculations; Perform and document remedial action as required; Repeat calibration	Re-analyze ICV if analytical error is suspected; Recalibrate as needed	Review integrations and calculations; Evaluate samples bracketed by falling CCV for obvious matrix interference; Re-analyze samples as needed;
Acceptance Criteria	Perform in full SCAN mode; See SOP for DFTPP criteria	Minimum of 5 standards; Low standard must be ≤ RL; %RSD ≤ 20%; r ≥ 0.99 (Inear regression) or r <sup>2</sup> ≥ 0.99 (non-linear regression); If linear regression is used, recalculated concentration of the lowest calibration point is within 30% of the true value, All RFs must meet the minimum RFs listed in SOP	%D ≤ 30%; Sporadic marginal failure accepted; Prepared using standard source different than used for initial calibration	<ul> <li>%D 5 20 except for 20% of compounds may be &gt; 20 but must be reported as estimated if present;</li> <li>All RFs must meet the minimum RFs listed in SOP;</li> <li>Area counts of internal standards must be within 50–200% of the ind-level initial calibration standard;</li> <li>The retention times of the internal standards must be within +0.05 RRT of the previous daily standard.</li> </ul>
Frequency	Prior to each ICAL; At the beginning of analytical sequence; Every 12 hours	Initial instrument setup; After non-routine instrument service; CCV/ICV criteria are not met	Immediately after each ICAL	At the beginning of every analytical sequence; Every 12 hours
Calibration Range		Water: 1-200ng	Solid: 1-200ng	
Calibration Procedure	Decafluorotriphenyl- phosphine (DFTPP) tune	Initial Calibration (ICAL)	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
Instrument		svoc	(GC/MS)	

Intle/position responsible for SOP Corrective Ref Action		2129 Analyst 2116 2128	
Title/position responsible for Corrective Action		Ana	
Corrective Action (CA)	Review integrations and calculations; Perform and document remedial action as required; Repeat calibration	Re-analyze ICV if analytical error is suspected; Recalibrate as needed	Review integrations and calculations; Evaluate samples bracketed by failing CCV for obvious matrix interference; Re-analyze samples as needed
Acceptance Criteria	Minimum of 5 standards; Low standard must be ≤ RL; %RSD ≤ 20 or r ≥ 0.99 (linear regression), If linear regression is used, recalculated concentration of the lowest calibration point is within 30% of the true value	PCBs and Herbicides %D ≤ 15; Pesticides %D ≤ 20; Prepared using standard source different than used for initial calibration	PCBs and Pesticides %D < 20; Herbicides %D < 15; Area counts of internal standards must be within 50–200% of the mid-level initial calibration standard. The retention times of the internal standards must be within +0.05 RRT of the previous daily standard.
Frequency	Initial instrument setup; After non-routine instrument service; CCV/iCV criteria are not met	Immediately after each ICAL	At the beginning and end of every analytical sequence; Every 12 hours
Calibration Range	Method specific	PCBs 0.1-10 ug/mL Pesticides 0.0005-0.2 ug/mL	Herbicides 0.05–2.0 ug/mL
Calibration Procedure	Initial Calibration (ICAL)	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
Instrument		PCB, Pesticides, Herbicides (GC/ECD)	

Laboratory: Alpha Analytical, Westborough, MA

•

Minimum of 5 standards; Low standard must be ≤ RL; %RSD ≤ 20% or r ≥ 0.99 (linear recression) Review integrations and calculations; Perform and document remedial action as required;		Minimum of 5 standards; Low standard must be ≤ RL; %RSD ≤ 20% or
		CCV/ICV criteria are not met r≥ 0.99 (linear regression)
%D ≤ 305; Prepared using standard source different than used for initial calibration Recralibrate as needed		IL %D ≤ 305; Immediately after each ICAL Prepared using standard source different than used for initial calibration mL
%D ≤ 20%	At the beginning of every analytical sequence; Every 12 hours	
	Immediately after each ICAL At the beginning of every analytical sequence; Every 12 hours	

QAPP Worksheet #25: Analytical Instrument and Equipment Maintenance, Testing, and Inspection (UFP-QAPP Manual Section 3.2.3) (EPA 2106-G-05 Section 2.3.6)

Instrument / Equipment	Maintenance Activity	Testing Activity	Inspection Activity	Frequency	Acceptance Criteria	Corrective Action	Title/position responsible for corrective action	Reference
GC/MS	Inlet Maintenance: Septa, Injection port liner, clip column	Passing Tune/CCAL; overall chromatogram	Instrument performance and sensitivity	Frequency is dependent on degree of contamination and standard recovery	See SOP	See SOP	Analyst or Section Supervisor	See specific analysis SOP
GC/MS	Column	Passing Tune/ICAL/ ICV; overall chromatogram	Instrument performance and sensitivity	Frequency is dependent on degree of contamination and standard recovery	See SOP	See SOP	Analyst or Section Supervisor	See specific analysis SOP
GC/MS	Source cleaning : Filaments, insulators	Tuning	Instrument performance and sensitivity	Frequency is dependent on degree of contamination and standard recovery	See SOP	See SOP	Analyst or Section Supervisor	See specific analysis SOP
GC/MS	Pump	Complete MS pump down.	Air and water check	Frequency is dependent on vacuum within instrument	See SOP	See SOP	Analyst or Section Supervisor	See specific analysis SOP

Page 1 of 2

Instrument / Equipment	Maintenance Activity	Testing Activity	Inspection Activity	Frequency	Acceptance Criteria	Corrective Action	Title/position responsible for corrective action	Reference
GC/ECD/FID	Inlet Maintenance: Septa, Injection port liner, clip column	Passing CCAL; overall chromatogram	Instrument performance and sensitivity	Frequency is dependent on degree of contamination and standard recovery	See SOP	See SOP	Analyst or Section Supervisor	See specific analysis SOP
GC/ECD/FID	Column	Passing CCAL; overall chromatogram	Instrument performance and sensitivity	Frequency is dependent on degree of contamination and standard recovery	See SOP	See SOP	Analyst or Section Supervisor	See specific analysis SOP

Page 2 of 2

# QAPP Worksheet #28: Analytical Quality Control and Corrective Action (UFP-QAPP Manual Section 3.4 and Tables 4, 5, and 6) (EPA 2106-G-05 Section 2.3.5)

Laboratory: Alpha Analytical, Westborough, MA Matrix: Soils/Waters

Matrix: Jolis/ Waters

Analytical Group: VOA

**Project-Specific** MPC Title/position of Quality Assurance responsible for corrective person action Laboratory Analyst / Officer be stopped and the source reoccurring, analyses must of contamination must be Qualify data as needed. **Corrective Action** eliminated or reduced Report data if sample sample results ND. If attempt to eliminate. Reanalyze blank and before analyses can affected samples (if Identify source and results >5x blank or sufficient sample contamination is widespread or remains). continue. Acceptance Criteria above the reporting Method/SOP No analyte at or limit. Analytical Method/SOP: 8260/SOP#2108 Number/Frequency One per preparatory batch of up to 20 samples QC Sample Method Blank

				Title/position of	
QC Sample	Number/Frequency	Method/SOP Acceptance Criteria	Corrective Action	person responsible for corrective action	Project-Specific MPC
	One each per preparatory batch of up to 20 samples.	Generally, 70-130% Recovery; 20% RPD – analyte specific	Correct problem; reanalyze LCS/LCSD and all samples in associated batch for failed analytes. If problem persists, contact Project Manager.	Analyst / Laboratory Quality Assurance Officer	
	One each per preparatory batch of up to 20 samples. Per Client's Request	Generally, 70-130% Recovery; 20% RPD – analyte specific	Report if associated with passing LCS/LCSD. Discuss in narrative.	Laboratory Analyst/Section Supervisor	

Matrix: Soils/Waters

Analytical Group: SVOC Analytical Method/SOP: 8270/SOP#2111

Method/SOP Acceptance Criteria
No analyte at or
above the reporting
limit.

QC Sample	Number/Frequency	Method/SOP Acceptance Criteria	Corrective Action	Title/position of person responsible for corrective action	Project-Specific MPC
ICS/LCSD	One each per preparatory batch of up to 20 samples	Generally, 40-140% Recovery, 50% RPD – analyte specific	Correct problem, reprep and reanalyze LCS/LCSD and all samples in associated batch for failed analytes. If problem persists, contact Project Manager.	Analyst / Laboratory Quality Assurance Officer	
MSM/SM	One each per preparatory batch of up to 20 samples. Per Client's Request	Generally, 40-140% Recovery, 50% RPD – analyte specific	Report if associated with passing LCS/LCSD. Discuss in narrative.	Laboratory Analyst/Section Supervisor	

Revision Number: Revision Date: Page 5 of 12 Title:

Matrix: Soils/Waters

Analytical Group: Pesticides

Analytical Metl	Analytical Method/SOP: 8081 /SOP#2116	10			
QC Sample	Number/Frequency	Method/SOP Acceptance Criteria	Corrective Action	Title/position of person responsible for corrective action	Project-Specific MPC
Method Blank	One per preparatory	No analyte at or above the reporting	Identify source and	Analyst / Laboratory	
	samples	limit.	Re-extract and/or	Quality Assurance	
			reanalyze blank and	Officer	
			affected samples (if		
		-	sufficient sample		
			remains).		
		-	Qualify data as needed.		
			Report data if sàmple		
			results >5x blank or		
			sample results ND. If		
,			contamination is		
			widespread or	•	
			reoccurring, analyses must		
			be stopped and the source		
			of contamination must be		
			eliminated or reduced		
			before analyses can		-
			continue.		

Matrix: Soils/Waters Analytical Group: PCBs Analytical Method/SOP: 8082 /SOP#2129

.

i																				
	Project-Specific MPC																			
	Title/position of person responsible for corrective action	Analyst /	Laboratory	Quality Assurance	Officer															
	Corrective Action	Identify source and	attempt to eliminate.	Re-extract and/or	reanalyze blank and	affected samples (if	sufficient sample	remains).	Qualify data as needed.	Report data if sample	results >5x blank or	sample results ND. If	contamination is	widespread or	reoccurring, analyses must	be stopped and the source	of contamination must be	eliminated or reduced	before analyses can	continue.
n.	Method/SOP Acceptance Criteria	No analyte at or	above the reporting	limit.																
Alialytical Nictiou/ JUL . 0002 / JUL #2123	Number/Frequency	One per preparatory	batch of up to 20	samples																
HIAIYULAI IVICUI	QC Sample	Method	Blank																	

.

Project-Specific MPC		
Title/position of person responsible for corrective action	Analyst / Laboratory Quality Assurance Officer	Laboratory Analyst/Section Supervisor
Corrective Action	Correct problem, reprep and reanalyze LCS/LCSD and all samples in associated batch for failed analytes. If problem persists, contact Project Manager.	Report if associated with passing LCS/LCSD. Discuss in narrative.
Method/SOP Acceptance Criteria	QC acceptance criteria 40-140% Recovery, Aqueous RPD 30%, Soil RPD 50%	40-140% Recovery, Aqueous RPD 30%, Soil RPD 50%
Number/Frequency	One per preparatory batch of up to 20 samples	One each per preparatory batch of up to 20 samples. Per Client's Request
QC Sample	LCS/LCSD	MSD/WSD

Revision Number: Revision Date: Page 9 of 12 Title:

Matrix: Soils/Waters Analytical Group: Herbicides Analytical Method/SOP: 8151/SOP#2128

QC Sample	Number/Frequency	Method/SOP Acceptance Criteria	Corrective Action	Title/position of person responsible for corrective action	Project-Specific MPC
Method	One per preparatory	No analyte at or	Identify source and	Analyst /	
	batch of up to 20	above the reporting	attempt to eliminate.	Laboratory	
	samples	limit.	Re-extract and/or	Quality Assurance	
			reanalyze blank and	Officer	
			affected samples (if		
			sufficient sample		
			remains).		
			Qualify data as needed.		
			Report data if sample		
			results >5x blank or		
			sample results ND. If		
			contamination is		
			widespread or		
			reoccurring, analyses must		
			be stopped and the source		
			of contamination must be		
			eliminated or reduced		
			before analyses can		
			continue.		

-	T	
Project-Specific MPC		
Title/position of person responsible for corrective action	Analyst / Laboratory Quality Assurance Officer	Laboratory Analyst/Section Supervisor
Corrective Action	Correct problem, reprep and reanalyze LCS/LCSD and all samples in associated batch for failed analytes. If problem persists, contact Project Manager.	Report if associated with passing LCS/LCSD. Discuss in narrative.
Method/SOP Acceptance Criteria	QC acceptance criteria 40-140% Recovery, 25% RPD	QC acceptance criteria 40-140% Recovery. 30% RPD
Number/Frequency	One each per preparatory batch of up to 20 samples	One each per preparatory batch of up to 20 samples. Per Client's Request
QC Sample	ICS/ICSD	MIS/MISD

Matrix: Soils/Waters Analytical Group: TPH Analytical Method/SOP: 8015

	Project-Specific MPC																		
	Title/position of person responsible for corrective action	Analyst / Laboratory	Quality Assurance	Officer	-														
	Corrective Action	Identify source and attempt to eliminate.	Re-extract and/or	reanalyze blank and	affected samples (if	sufficient sample	remains).	Qualify data as needed.	Report data if sample	results >5x blank or	sample results ND. If	contamination is	widespread or	reoccurring, analyses must	be stopped and the source	of contamination must be	eliminated or reduced	before analyses can	continue.
Δ.	Method/SOP Acceptance Criteria	No analyte at or above the reporting	limit.								-						-		
Analytical Method/SUP: 8012 /SUP#2123	Number/Frequency	One per preparatory batch of up to 20	samples									-							_
Analytical wern	QC Sample	Method Blank													<u> </u>				

Z	Number/Frequency	Method/SOP Acceptance Criteria	Corrective Action	Title/position of person responsible for corrective	Project-Specific MPC
				action	
One ( arep: to 20	One each per preparatory batch of up to 20 samples	QC acceptance criteria 40-140% Recovery. 40% RPD.	Correct problem, reprep and reanalyze LCS/LCSD and all samples in associated batch for failed analytes. If problem persists, contact Project Manager.	Analyst / Laboratory Quality Assurance Officer	
Dne orep Per C	One each per preparatory batch of up to 20 samples. Per Client's Request	QC acceptance criteria 60-140% Recovery. 40% RPD.	Report if associated with passing LCS/LCSD. Discuss in narrative.	Laboratory Analyst/Section Supervisor	

## QAPP Worksheet #24: Analytical Instrument Calibration (UFP-QAPP Manual Section 3.2.2) (EPA 2106-G-05 Section 2.3.6)

Instrument	Calibration Procedure	Calibration Range	Frequency	Acceptance Criteria	Corrective Action (CA)	Title/position responsible for Corrective Action	SOP Reference
ICP-MS	Tune verification; External; multipoint	Varies by element	Daily or as required	CC > 0.998; ICV 95-105%; CCV 90-110%; ICB/CCB < ±RL	Clean, inspect, adjust/recalibrate	ICP-MS Analyst, Dept. Manager	2156 rev.3
CP	Response verification; External; multi- point	Varies by element	Daily or as required	CC > 0.995; ICV 90-110%; CRI 70-130%; CCV 90-110%; ICB/CCB < ±RL	Clean, inspect, adjust/recalibrate	ICP Analyst, Dept. Manager	2144 rev 2
CVAA	External; multi- point	0.2-10 ppb	Per digestion batch	CC > 0.995; ICV 90-110%; CCV 90-110%; ICB/CCB < ±RL	Clean, inspect, adjust/recalibrate	CVAA Analyst, Dept. Manager	2145 rev. 2 2146 rev. 3

# QAPP Worksheet #19 & 30: Sample Containers, Preservation, and Hold Times (UFP-QAPP Manual Section 3.1.2.2) (EPA 2106-G-05 Section 2.3.2)

Laboratory: Alpha Analytical, Westborough, MA

List any required accreditations/certifications:

Back-up Laboratory:

Sample Delivery Method:

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
Trace Metals by ICP	Soil	EPA 6010C / 2144	Amber 250ml unpreserved	4 ± 2°C	N/A	180 days	
Trace Metals by ICP	Liquid	EPA 6010C / 2144	Plastic 500ml	HNO3 preserved	N/A	180 days	
Trace Metals by ICP	Liquid	EPA 200.7 / 2149	Plastic 500ml	HNO3 preserved	N/A	180 days	
Trace Metals by ICPMS	Liquid	EPA 6020A / 2156	Plastic 500ml	4 ± 2°C 1:1 Nitric acid to a pH of <2	N/A	180 days	
Trace Metals by ICPMS	Liquid	EPA 200.8 / 2159	Plastic 500ml	4 ± 2°C 1:1 Nitric acid to a pH of <2	N/A	180 days	

Page 1 of 11

,

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
Trace Metals by ICPMS	Soil	EPA 6020A / 2156	Amber 250ml unpreserved	4 ± 2°C	N/A	180 days	
Mercury	Liquid	EPA 7470A / 2145	Plastic 500ml	HNO3 to a pH of <2.	N/A	28 days	
Mercury	Liquid	EPA 245.1 / 2153	Plastic 500ml	HNO3 to a pH of <2.	A/N	28 days	
Mercury	Soil	EPA 7471B / 2146	Amber 250mt unpreserved	4 ± 2°C	N/A	28 days	
Volatile Organic Compounds	Liquid	EPA 8260C / 2108	2, 40-ml VOA vials w/ PTFE- faced silicone septum	4 ± 2°C 1:1 HCL to a pH of <2.	14 days	14 days	
Volatile Organic Compounds	Liquid	EPA 624 / 2022	2, 40-ml VOA vials	4 ± 2°C	A/A	Unpreserved – 7 days 1:1 HCL - 14 days Acrolein – 3days	
Volatile Organic Compounds	Soil	EPA 8260C / 2108	2, 40-ml VOA vials	4 ± 2°C	14 days	14 days	
Purgeable Organic Compounds	Liquid	EPA 524.2 / 2107	2, 40-ml VOA vials, Ascorbic Acid/HCl preserved	1:1 HCL to a pH of <2.	Preserved - 14 days Unpreserved - 24 hours	14 days	
Volatile Petroleum Hydrocarbons	Liquid	MA VPH / 2120	2, 40-ml VOA vials, HCl preserved	1:1 HCL to a pH of <2.	A/N	14 days	

Page 2 of 11

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
Volatile Petroleum Hydrocarbons	Soil	MA VPH / 2120	2, 40-ml VOA vials	4 ± 2°C	N/A	28 days	
Gasoline Range Organics	Liquid	EPA 8015C(M) / 2126	2, 40-ml VOA vials, HCl preserved	1:1 HCL to a pH of <2. 4 ± 2°C	14 days	14 days	
Gasoline Range Organics	Soil	EPA 8015C(M) / 2126	1, 40-mL VOA vial, MeOH preserved	Methanol 4 ± 2°C	14 days	14 days	
Semivolatile Organics	Liquid	EPA 8270D / 2111	2, 1-liter amber glass jars	4 ± 2°C	7 days	40 days	
Semivolatile Organics	Liquid	EPA 625 / 2110	2, 1-liter amber glass jars	4 ± 2°C	7 days	40 days	
Semivolatile Organics by SIM	Liquid	EPA 8270D SIM / 2109	2, 1-liter amber glass jars	4 ± 2°C	7 days	40 days	
Semivolatile Organics	Soil	EPA 8270D / 2111	1, 250mL amber glass jar	4 ± 2°C	14 days	40 days	
Semivolatile Organics by SIM	Soil	EPA 8270D- SIM / 2109	1, 250mL amber glass jar	4 ± 2°C	14 days	40 days	
EBD/DBCP	Liquid	EPA 504.17 2113	2, 40mL vials	3-5mg of sodium thiosulfate crystals 4 ± 2°C	14 days	24 hours	
Pesticides	Liquid	EPA 8081B / 2116	2, 1-liter amber glass jars	4 ± 2°C	7 days	40 days	

Page 3 of 11

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
Pesticides	Soil	EPA 8081B / 2116	1, 250mL amber glass jar	4 ± 2°C	14 days	40 days	
PCB	Liquid	EPA 8082A / 2129	2, 1-liter amber glass jars	4 ± 2°C	7 days	40 days	
PCB	Soil	EPA 8082A / 2129	1, 250mL amber glass jar	4 ± 2°C	14 days	40 days	
Pesticide & PCB	Liquid	EPA 608 / 2122	2, 1-liter amber glass jars	4 ± 2°C	7 days	40 days	
Herbicides	Liquid	EPA 8151A / 2128	2, 1-liter amber glass jars	4 ± 2°C	7 days	40 days	
Herbicides	Soil	EPA 8151A / 2128	1, 250mL amber glass jar	4 ± 2°C	14 days	40 days	
PCB – Oil	Oil	EPA 600/4- 81-045 / 2123	Glass jar	4 ± 2°C	14 days	40 days	
Extractable Petroleum Hydrocarbons	Liquid	MA EPH / 2119	2, 1-liter amber glass jars	1:1 HCL to a pH of <2. 4 ± 2°C	14 days	40 days	
Extractable Petroleum Hydrocarbons	Soil	MA EPH / 2119	1, 250mL amber glass jar	4 ± 2°C	14 days	40 days	
NJ Extractable Petroleum Hydrocarbons	Liquid	NJ EPH / 2131	2, 1-liter amber glass jars	1:1 HCL to a pH of <2. 4 ± 2°C	14 days	40 days	
NJ Extractable Petroleum Hydrocarbons	Soil	NJ EPH / 2131	1, 250mL amber glass jar	4 ± 2°C	14 days	40 days	

Page 4 of 11

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
TPH Diesel Range Organics	Liquid	EPA 8015C(M) / 2125	2, 1-liter amber glass jars	4 ± 2°C	7 days	40 days	
TPH Diesel Range Organics	Soil	EPA 8015C(M) / 2125	1, 250mL amber glass jar	4 ± 2°C	14 days	40 days	
CT – Extractable Total Petroleum Hydrocarbons	Liquid	СТ-ЕТРН / 2127	2, 1-liter amber glass jars	4 ± 2°C	7 days	40 days	
CT – Extractable Total Petroleum Hydrocarbons	Soil	СТ-ЕТРН / 2127	1, 250mL amber glass jar	4 ± 2°C	14 days	40 days	
Explosives	Liquid	EPA 8330A / 2250	2, 1-liter amber glass jars	4 ± 2°C	7 days	40 days	
Explosives	Soil	EPA 8330A / 2250	1, 250mL amber glass jar	4 ± 2°C	14 days	40 days	
Perchlorate	Liquid	EPA 332.0 & 6860 / 2251	1, 120mL plastic or amber glass	4 ± 2°C	28 days	28 days	
Perchlorate	Soil	EPA 6860 / 2251	1, 250mL amber glass jar	4 ± 2°C	28 days	28 days	
Н	Liquid	EPA 9040B & SM 4500H-B/ 2202	1, 250mL plastic or amber glass	4 ± 2°C	AIN	ASAP, within 24 hours	
Н	Soil	EPA 9045D & 9040C / 2202	1, 4oz glass jar	4 ± 2°C	N/A	ASAP, within 24 hours	

Page 5 of 11

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
Hexavalent Chromium	Liquid	SM 3500Cr- D / 2204	1, 500mL Plastic	4 ± 2°C	N/A	24 hours	
Hexavalent Chromium	Soil	SM 3500Cr- D & EPA 7196A / 2204	1, 500mL Plastic	4 ± 2°C	30 days	7 days	
Biochemical Oxygen Demand	Liquid	SM 5210B / 2205	1, 1-liter Plastic	4 ± 2°C	N/A	48 hours	
Chemical Oxygen Demand	Liquid	SM 5220D, EPA 410.4 / 2208	1, 250mL Plastic	1:1 H₂SO₄ to a pH of <2. 4 ± 2°C	V/N	28 days	
Nitrogen, Ammonia	Liquid	SM4500NH3 -BH, EPA 350.1 / 2206	1, plastic 500ml	H2SO4 preserved 4 ± 2°C	V/N	28 days	
Nitrogen, Ammonia	Soil	SM4500NH3 -BH, / 2206	1, 250mL amber glass jar	4 ± 2°C	N/A	28 days	
Nitrogen, Total Kjeldahl	Liquid	SM 4500Norg-C, EPA 351.1 / 2207	1, plastic 500ml	H2SO4 preserved 4 ± 2°C	V/N	28 days	
Nitrogen, Total Kjeldahl	Soil	SM 4500Norg-C, / 2207	1, 250mL amber glass jar	4 ± 2°C	A/N	28 days	
Oil & Grease	Liquid	EPA 1664A / 2209	2, 1-liter amber glass jars	1:1 HCL to a pH of <2. 4 ± 2°C	N/A	28 days	

Page 6 of 11

Anaiyte/ Anaiyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
Total Petroleum Hydrocarbons	Liquid	EPA 1664A / 2209	2, 1-liter amber glass jars	1:1 HCL to a pH of <2. 4 ± 2°C	VIN	28 days	
Total Cyanide	Liquid	SM 4500CN- CE / 2210	1, Plastic 250ml NaOH preserved	50% sodium hydroxide pH > 12 4 ± 2°C	14 days	14 days	
Total Cyanide	Soil	EPA 9010C, 9012B, 9014(M) / 2210	1, 250mL amber glass jar	4 ± 2°C	14 days	14 days	
Phenol, Total	Liquid	EPA 510AC, EPA 420.1 / 2211	1, 1-liter amber glass jars	H2SO4 preserved, pH≺4 4 ± 2°C	NIA	28 days	
Phenol, Total	Soil	EPA 9065 / 2211	1, 250mL amber glass jar	4 ± 2°C	28 days	24 hours	
Sulfate	Liquid	EPA 426C, 375.4, SM 4500SO4-E / 2212	1, Plastic 500ml	4 ± 2°C	NIA	28 days	
Sulfate	Soil	EPA 9038 / 2212	1, 250mL amber glass jar	4 ± 2°C	NA	28 days	
Alkalinity	Liquid	SM 2320B / 2213	1, Plastic 500ml	4 ± 2°C	N/A	14 days	
Acidity	Liquid	SM 2310B / 2232	1, Plastic 250ml	4 ± 2°C	N/A	14 days	

.

Page 7 of 11

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
Inorganic Anions by IC	Liquid	EPA 300.07 2214	1, Plastic 500ml	4 ± 2°C	ΥN	NO3 - 48 hours Br, Cl, F, SO4 - 28 days	
Total Organic Carbon	Liquid	SM 5310C / 2215	2, Vial H2SO4 preserved	1:1 H₂SO₄ pH <2, 4 ± 2°C	N/A	28 days	
Chloride	Liquid	SM 4500CI- E, EPA 9251 / 2216	1, Plastic 250ml	4±2°C	NIA	28 days	
Nitrate, Nitrite & Nitrate/Nitrite	Liquid	EPA 353.2, 354.1, SM4500NO3 -F, 4500NO2-B / 2217	1, Plastic 250ml	Individual: unpreserved Combined: 1:1 H <sub>2</sub> SO4 4 ± 2°C	NIA	Individual: 48 hours Combined: 28 days	
Total Solids Dried Total Volatile Solids	Liquid	SM 2540B / 2218	1, Plastic 500ml	4 ± 2°C	N/A	7 days	
Total Dissolved Solids Total Volatile Dissolved Solids	Liquid	SM 2540C / 2219	1, Plastic 500ml	4 ± 2°C	AIN	7 days	
Total Suspended Solids Total Volatile Suspended Solids	Liquid	SM 2540D / 2220	1, Plastic 1- Liter	4 ± 2°C	A/N	7 days	

Page 8 of 11

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
Percent Solids	Soil	SM 2540G / 2229	1, Plastic 2oz	4 ± 2°C	N/A	7 days	
Fixed & Volatile Solids	Soil	SM 2540G / 2241	1, 250mL amber glass jar	4 ± 2°C	N/A	7 days	
Solids, Settable	Liquid	SM 2540F / 2240	1, Plastic 1- Liter	4 ± 2°C	N/A	48 hours	
Total Sulfide	Liquid	EPA 376.2, SM 4500S2- AD / 2221	2, Plastic 250ml	2N zinc Acetate and 6N NaOH	N/A	7 days	
Total Sulfide	Soil	EPA 9030B / 2221	1, 250mL amber glass jar	2N zinc Acetate and 6N NaOH	A/A	7 days	
MBAS	Liquid	SM 5540C / 2222	1, Plastic 1- Liter	4 ± 2°C	NA	48 hours	
Fluoride	Liquid	SM 4500F- BC / 2223	1, Plastic 500ml	4 ± 2°C	28 days	48 hours	
Turbidity	Liquid	SM 2130B, EPA 180.1 / 2224	1, Plastic 500ml	4±2°C	N/A	48 hours	
Orthophosphate	Liquid	SM 4500P-E / 2225	1, Plastic 250ml	4 ± 2°C	N/A	48 hours	
Phosphorous	Liquid	SM 4500P- E, 4500P-B / 2226	1, Plastic 500ml	H₂SO₄, pH < 2 4 ± 2°C	N/A	28 days	
Flashpoint	Soil	EPA 1010/ 2227	1, 250mL amber glass jar	4 ± 2°C	N/A	N/A	

Page 9 of 11

Anaiyte/ Anaiyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
łgnitability	Soil	EPA 1030 / 2238	1, 250mL amber glass jar	N/A	N/A	14 days	
Reactive Sulfide & Cyanide	Liquid	SW-846 Ch. 7 / 2228	1, 500mL amber glass jar	4 ± 2°C	N/A	7 days	
Reactive Sulfide & Cyanide	Soil	SW-846 Ch. 7 / 2228	1, 250mL amber glass jar	4 ± 2°C	N/A	14 days	
Specific Conductance	Liquid	SM 2510B, EPA 120.1, 9050 / 2230	1, Plastic 250ml	4 ± 2°C	A/A	28 days	
Color	Liquid	STM 2120B / 2231	1, 500mL amber glass jar	4 ± 2°C	N/A	24 Hours	
Formaldehyde	Liquid	EPA 8315A / 2233	1, 1-liter amber glass jars	4 ± 2°C	3 days	3 days	
Sulfite	Liquid	SM 4500SO32B, EPA 377.17 2234	1, Plastic 250ml	4 ± 2°C	N/A	24 hours	
Ferrous Iron	Liquid	SM 3500-Fe D / 2235	1, Plastic 250ml	4 ± 2°C	Y/N	24 hours	
Chlorine (Residual)	Liquid	SM 4500-CI -D, EPA 330.1 / 2236	1, Plastic 500ml	N/A	<b>V</b> /V	24 hours	
Oxidation – Reduction Potential	Liquid	ASTMD1498 (M) / 2237	1, Plastic 500ml	N/A	N/A	24 hours	
Oxidation – Reduction Potential	Soit	ASTM D1498 (M) / 2237	1, 250mL amber glass jar	N/A	N/A	28 days	

Page 10 of 11

Analyte/ Analyte Group	Matrix	Method/ SOP	Container(s) (number, size & type per sample)	Preservation	Preparation Holding Time	Analytical Holding Time	Data Package Turnaround
Physiologically Available Cyanide	Liquid	EPA 9014(M) / 2239	1, Plastic 250ml NaOH preserved	50% sodium hydroxide pH > 12 4 ± 2°C	14 days	14 days	
Physiologically Available Cyanide	Soil	EPA 9014(M) / 2239	1, 250mL amber glass jar	4 ± 2°C	14 days	14 days	
Tannin & Lignin	Liquid	SM 5550B / 2242	1, Plastic 500ml	4 ± 2°C	N/A	NIA	
Nitrite (Manual)	Liquid	SM 4500NO2-B / 2243		4 ± 2°C	N/A	48 hours	
Paint Filter	Soil	EPA 9050B / 2244	1, 250mL amber glass jar	4 ± 2°C	N/A	N/A	
Odor	Liquid	SM 2150B / 2245	1, 1-liter amber glass jars	4 ± 2°C	N/A	24 hours	
Dissolved Oxygen	Liquid	SM 45000- C, EPA 360.2 / 2249	1, 300mL BOD bottle	Manganeous Sulfate, Alkali- lodide-Azide, store in dark at temperature of water source	NA	8 hours	
Free Cyanide	Soil	EPA 9016	1, 250mL amber glass jar	4 ± 2°C, in the dark	14 days	24 hours	

Page 11 of 11

> QAPP Worksheet #23: Analytical SOP's (UFP-QAPP Manual Section 3.2.1) (EPA 2106-G-05 Section 2.3.4)

					*
Title, Da	Title, Date, and URL (if available)	Definitive or Screening Data	Matrix/Analytical Group	SOP Option or Equipment Type	'Modified for Project? Y/N
Inductivel emission : 2/2007, re	Inductively coupled plasma-atomic emission spectrometry (ICP-AES), 2/2007, rev. 3 6010C	Definitive	Aqueous, Solids, Sludges, and Groundwater	Argan ICP	Z
Inductive spectron	Inductively coupled mass spectrometry, 2/2007,rev.1 6020A	Definitive	Aqueous, Solids, Sludges, and Groundwater	ICP-MS	z
Mercur) Wastes, Vapor) 2	Mercury in Solid and Semi Solid Wastes, (Semi-Automated Cold- Vapor) 2/2007, rev. 2 7471B	Definitive	Solids, Sludges and Wastes	CVAA	Z
Mercur) Automa 09/1994	Mercury In Liquid Waste (Semi- Automated Cold-Vapor Technique) 09/1994, Rev. 1 7470a	Definitive	Mobility-procedure extracts, aqueous wastes, and ground waters	СVАА	z
Acid Di <u>i</u> and Soi 12/1996	Acid Digestion of Sediments, Sludges, and Soils Using Block Digestion, 12/1996, rev 2, 3050B	Definitive	sediments, sludges, and soil samples	Hot Block digestion	z

SOP #	Title, Date, and URL (if available)	Definitive or Screening Data	Matrix/Analytical Group	SOP Option or	*Modified for Project?
				cquipment lype	N/X
2134	Acid Digestion of Waters for Total	Definitive	Surface and Groundwater	Hot Block digestion	z
rev. 2	Recoverable or Dissolved Metals for		Samples		-
	Analysis by ICP Spectroscopy, 7/1992,				
	rev 1 3005A				
2132	Microwave Assisted Acid Diaestion of	Definitive	Adilanis and Extraction	Microscono Discosticos	
rev.2	Aqueous Samples and Extracts.		Leachates		2
	12/1997, 3015A				
‡ A hrief	t A brief summary of oroiert-snerific SOB modifications must be arouided on this unable to the second	ations must be are	wided on this workshoot or a		

<sup>‡</sup> A brief summary of project-specific SOP modifications must be provided on this worksheet or referenced.

# QAPP Worksheet #25: Analytical Instrument and Equipment Maintenance, Testing, and Inspection (UFP-QAPP Manual Section 3.2.3) (EPA 2106-G-05 Section 2.3.6)

Laboratory: Alpha Analytical, Westborough, MA

Instrument / Equipment	Maintenance Activity	Testing Activity	Inspection Activity	Frequency	Acceptance Criteria	Corrective Action	Title/position responsible for corrective action	Reference
iCP-MS	Introduction system cleaning. Torch and Cones cleaning. Rough pump oil change	Nebulizer backpressure monitoring. Vacuum reading.	Software monitored. Oil reservoir.	Continuous	<2.4 PSI Neb. <2.1X104 vacuum	Clean and restore Change oil, evacuate ballast	ICP-MS Analyst	1558 QM 2156 rev.3 ICP
<u>c</u>	Introduction system cleaning. Torch Clean Flow adjustment. Cell conditioning	Nebulization monitoring	Visual	Daily	Flow consistent and unobstructed	Dismantle, clean	ICP Analyst	1558 QM 2144 rev. 2
СVАА	Sensitivity Test	Adjust and rerun	Flow rate acceptance	Adjust and rerun	Flow rate acceptance	Adjust, line replacement	Analyst	1558 QM 2145 rev.2 2146 rev.3

Page 1 of 2

Title: Revision Number: Revision Date: Page 2 of 2

Instrument / Equipment	Maintenance Activity	Testing Activity	Inspection Activity	Frequency	Acceptance Criteria	Corrective Action	Title/position responsible for corrective action	Reference
	Sample delivery tubing	Inspect for wear	Visual	Daily inspection Weekly replacement	Uptake acceptance	Replacement	Analyst	1558 QM 2145 rev.2 2146 rev.3
		Lamp output		Semi-annual	Low standard sensitivity	Replacement of lamp	Analyst	1558 QM 2145 rev.2 2146 rev.3
	Autosampler control arms	Freely moving, sample position acquired		Daily	Working condition	Lubricate with silicon	Analyst	1558 QM 2145 rev.2 2146 rev.3

Page 2 of 2

Title: Revision Number: Revision Date: Page 1 of 1

# QAPP Worksheet #26 & 27: Sample Handling, Custody, and Disposal (UFP-QAPP Manual Section 3.3) (EPA 2106-G-05 Section 2.3.3)

Sampling Organization: Project Specific

Laboratory: Alpha Analytical, Westborough, MA

Method of sample delivery (shipper/carrier): UPS, Fed-EX or laboratory courier

Number of days from reporting until sample disposal: Project Specific

Activity	Organization and title or position of person responsible for the activity	SOP reference
Sample labeling	Client-assigned field staff	N/A
Chain-of-custody form completion	Client-assigned field staff	N/A
Packaging	Client-assigned field staff	N/A
Shipping coordination	Client-assigned field staff	N/A
Sample receipt, inspection, & log-in	Laboratory Log-In/Custody Staff	1559
Sample custody and storage	Laboratory Log-In/Custody Staff	1559, 1560
Sample disposal	Laboratory Log-In/Custody Staff	1559, 1560

Page 1 of 1

#### APPENDIX H –

#### RESPONSIBILITIES OF SITE OWNER AND REMEDIAL PARTY

#### **Responsibilities**

The responsibilities for implementing the Site Management Plan ("SMP") for the Former American Linen Supply Co. facility site (the "site"), number **C915241**, and are divided between the Site Owner and a Remedial Party, as defined below. The Site Owner is currently listed as:

Mill Race Commons, LLC (the "Site Owner"). 726 Exchange Street, Suite 825 Buffalo, NY, 14210 716-856-8400

Solely for the purposes of this document and based upon the facts related to a particular site and the remedial program being carried out, the term Remedial Party ("RP") refers to any of the following: certificate of completion holder, volunteer, applicant, responsible party, and, in the event the New York State Department of Environmental Conservation ("NYSDEC") is carrying out remediation or site management, the NYSDEC and/or an agent acting on its behalf. The RP is:

Aramark Union & Career Apparel, LLC 8130 S. Meridian Street, Suite 1a Indianapolis, Indiana 46217 317-371-6132

Nothing in Appendix H shall supersede the provisions of an Environmental Easement, Consent Order, Consent Decree, agreement, or other legally binding document that affects rights and obligations relating to the Site.

Responsibilities are based on the following referenced documents and agreements:

- Environmental Easement dated 22 September 2014 and recorded with the Erie County Clerk on 1 October 2014 (attached as Appendix A of the SMP)
- "Site Access Agreement" between AmeriPride Services, Inc. and Mill Race Commons, LLC dated 13 January 2014.
- "Real Property Purchase Agreement" between AmeriPride Services Inc and Mill Race Commons, LLC dated 3 April 2013.

#### Site Owner's Responsibilities:

- 1) The Site Owner shall follow the provisions of the SMP as they relate to future construction and excavation at the site.
- 2) In accordance with a periodic time frame determined by the NYSDEC, the Site Owner shall periodically certify, in writing, that all Institutional and Engineering Controls set forth in a(n) Environmental Easement remain in place and continue to be complied with. The Site Owner shall provide a written certification to include the certification in the site's Periodic Review Report (PRR) certification to the NYSDEC.

- 3) In the event the Site is delisted, the Site Owner remains bound by the Environmental Easement and shall submit, upon request by the NYSDEC, a written certification that the Environmental Easement is still in place and has been complied with.
- 4) The Site Owner shall grant access to the Site to the RP and the NYSDEC and its agents for the purposes of performing activities required under the SMP and assuring compliance with the SMP.
- 5) The Site Owner is responsible for assuring the security of the remedial components located on its property to the best of its ability. In the event that damage to the remedial components or vandalism is evident, the Site Owner shall notify the site's RP and NYSDEC in accordance with the timeframes indicated in Section [2.4.2]-Notifications.
- 6) In the event some action or inaction by the Site Owner adversely impacts the Site, the Site Owner must notify the RP and the NYSDEC in accordance with the time frame indicated in [Section 2.4.2]- Notifications and (ii) coordinate the performance of necessary corrective actions with the RP.
- 7) If the NYSDEC determines that an update of the SMP is necessary, the Site Owner shall update the SMP and obtain final approval from the NYSDEC. Within 5 business days after NYSDEC approval, the Site Owner shall submit a copy of the approved SMP to the Remedial Party.
- 8) The Site Onwer shall notify the NYSDEC of any damage to or modification of the systems as required under Section [2.4.2]- Notifications ] of the SMP.
- 9) Prior to a change in use that impacts the remedial system or requirements and/or responsibilities for implementing the SMP, the Site Owner shall submit to the NYSDEC for approval an amended SMP.
- 10) Any change in use, change in ownership, change in site classification (e.g., delisting), reduction or expansion of remediation, and other significant changes related to the site may result in a change in responsibilities and, therefore, necessitate an update to the SMP and/or updated legal documents. The Site Owner shall contact the Department to discuss the need to update such documents.
- 11) The Site Owner must notify the RP and the NYSDEC of any change in ownership of the site property (identifying the tax map numbers in any correspondence) and provide contact information for the new owner of the Site. 6 NYCRR Part contains notification requirements applicable to any construction or activity changes and changes in ownership. Among the notification requirements is the following: Sixty days prior written notification must be made to the NYSDEC. Notification is to be submitted to the NYSDEC Division of Environmental Remediation's Site Control Section. Notification requirements for a change in use are detailed in Section 2.4 of the SMP. A 60-Day Advance Notification Form and Instructions are found at <a href="http://www.dec.ny.gov/chemical/76250.html">http://www.dec.ny.gov/chemical/76250.html</a>.
- 12) In accordance with the tenant notification law, within 15 days of receipt, the Site Owner must supply a copy of any vapor intrusion data, that is produced with respect to structures and that exceeds NYSDOH or OSHA guidelines on the Site, whether produced by the NYSDEC, RP, or Site Owner, to the tenants on the property. The owner must otherwise comply with the

tenant and occupant notification provisions of Environmental Conservation Law Article 27, Title 24.

#### **Remedial Party Responsibilities**

- 1) The RP must follow the SMP provisions regarding any construction and/or excavation it undertakes at the site.
- 2) The RP shall report to the NYSDEC all activities required for the media monitoring program, monitoring, and reporting. Such reporting includes, but is not limited to, electronic data deliverables.
- 3) Before accessing the Site to undertake a specific activity, the RP shall provide the Site Owner advance notification that shall include an explanation of the work expected to be completed. The RP shall provide to (i) the owner, upon the owner's request, (ii) the NYSDEC, and (iii) other entities, if required by the SMP, a copy of any data generated during the site visit and/or any final report produced.
- 4) The RP shall notify the NYSDEC and the owner of any changes in RP ownership and/or control and of any changes in the party/entity responsible for the media monitoring program The RP shall provide contact information for the new party/entity. Such activity constitutes a Change of Use pursuant to 375-1.11(d) and requires 60-days prior notice to the NYSDEC. A 60-Day Advance Notification Form and Instructions are found at http://www.dec.ny.gov/chemical/76250.htm.

Change in RP ownership and/or control and/or site ownership does not affect the RP's obligations with respect to the site unless a legally binding document executed by the NYSDEC releases the RP of its obligations.

Future Site Owners and RPs and their successors and assigns are required to carry out the activities set forth above.

#### APPENDIX I -

## CHANGE IN USE COMPLETION REPORT MAY 2021

 $\label{eq:constraint} \left\| f_{i} - f_{i} \right\|_{L^{\infty}(W_{i})} = \left\| f_{i} - f_{i} \right\|_{L^{$ 

## Change in Use Completion Report

## **Prepared For:**

Mill Race Commons LLC 726 Exchange Street Buffalo, New York 14210

## **Project Location:**

Former American Linen Supply Company Facility 822 Seneca Street Buffalo, New York 14210

## **Prepared By:**



AFI Environmental PO Box 4049 Niagara Falls, New York 14304 (716) 283-7645

www.afienvironmental.com

## May 2021



8644 Buffalo Ave Niagara Falls, New York 14304 www.afienvironmental.com

### **Table of Contents**

1.0	Introduction and Background
1.1	Site Location and Description4
1.2	Site History
2.0	
Chang	ge in Use Construction Activities
2.1	Parking Lot Repairs and Upgrades
2.2	Storm Drainage Upgrades4
2.3	Asphalt and Concrete Removal 5
2.4	Cover Replacement
2.5	Well Modifications 5
2.6	Imported Fill 5
2.7	Exported Fill
3.0	Remaining Soil Conditions
4.0	Community Air Monitoring Plan
5.0	Change in Use Completion7
Figure	es
Tables	5
Apper	ndix A
Apper	ndix B
Apper	ndix C
Apper	ndix D
Apper	ndix E
Apper	ndix F



#### **Figures**

Figure 1	Site Location Map
Figure 2	Site Map
Figure 3	Remaining Contamination Data Map
<u>Tables</u> Table 1	Imported Fill material

#### **Appendices**

Appendix A	Photo Log of Change in Use Construction Activities		
Appendix B	Imported Fill Weigh Tickets		
Appendix C	Request to Import Fill		
Appendix D	Exported Fill Documentation: Waste Characterization Analytics, Contained-In determinations, Waste Disposal Tickets		
Appendix E	Remaining Contamination Laboratory Reports		
Appendix F	Community Air Monitoring Pan (CAMP) Data		



#### **1.0 Introduction and Background**

#### 1.1 Site Location and Description

The Site is located in the City of Buffalo, Erie County, New York and is identified as the parcel with section 122.27, Block I and Lol 4 on the City of Buffalo Tax Maps. The Site is an approximately 2.91 -acre area bounded by Seymour Street beyond which are residential properties to the north, Seneca Street beyond which is a vacant former industrial property to the south, Lord Street beyond which are industrial properties and the flying Bison Brewery to the east, vacant and commercial properties to the southwest and residential properties to the northwest.

#### 1.2 Site History

Over the history of the Site, it has been used for various commercial and industrial uses including use as a laundering facility. A remedial Investigation at the site was conducted, which identified UST's, soil contamination and groundwater contamination from historic site uses. Remedial activities on-site were completed from 2012 to 2014. Activities included the removal of basement cisterns, removal of the impacted floor slab and soil beneath the historic building, removal of the on-site stormwater vault, removal of the closed in place waste oil UST, removal of fill and soils in the former dry-cleaning area that had been impacted by CVOCs, removal of the fill from the former dry-cleaning area and site grading, backfill and placement of a cover system. A Site Management Plan and Environmental Easement were developed to manage the remaining contamination on-site. The site was acquired by Mill Race Commons, LLC in 2013.

#### 2.0 Change in Use Construction Activities

AFI Environmental on behalf of Mill Race Commons, LLC, submitted a change in Use Work Plan and Supplemental Work Plan to the Department, which were approved on May 04, 2020 and August 27, 2020, respectively. A photo log of all change in use construction that was completed can be seen in **Appendix A**. A Site Location Map can be seen in **Figure 1**. An updated Site Map can be seen in **Figure 2**. Change in Use construction activities began in May of 2020 and were completed in April 2021.

#### 2.1 Parking Lot Repairs and Upgrades

The paved area of the Site was upgraded and repaired by Northeast Diversification paving. The area was leveled prior to an approximately 2" thick topcoat of Type 7 asphalt being placed over the existing asphalt layers. The weigh tickets of the imported asphalt and binder material can be seen in **Appendix B**. A total of 510.18 tons of asphalt was placed at the site. A photo log of parking lot repairs and upgrades can be seen in **Appendix A**.

#### 2.2 Storm Drainage Upgrades

The Change in Use for the Site for use as an intermitted parking lot included the replacement of four (4) catch basins and the associated piping. The connection from the southernmost catch basin to the combined sewer system running along Seneca street was not replaced and tied back into the

upgraded drainage network. A photo log of the upgrades to the stormwater catchment system can be seen in **Appendix A**. Drainage basins that were removed a replaced were cleaned of soils and cleaned prior to their transportation and disposal as construction and demolition debris.

#### 2.3 Asphalt and Concrete Removal

Selected regions of the asphalt and concrete cover system were removed from the site. The area of hard cover removal was directly to the east of the 798 Seneca Street Lot. This region of hard cap removal was located directly above the two (2) abandoned underground storage tanks (USTs). The asphalt and concrete as well as soils beneath the cap system were excavated and disposed of to a depth of 1' to allow for placement of a soft cover cap in this area that is consistent with existing grade. The concrete asphalt and soil resulting from this excavation work was disposed of as a non-=hazardous waste due to de-listing by the NYSDEC at the Chaffee Landfill.

#### 2.4 Cover Replacement

The selected areas of the cover system modification were replaced with a layer of clean topsoil imported from CJ Krantz organics and placed on a woven geotextile demarcation layer. The minimum thickness of the soil cover placed in this area was 1' in order to meet the standard for a cover system to meet Commercial Use Standards as consistent with the site closure as outlined in the Certificate of Completion for the Site. Cover Replacement activities can be seen in the photo log attached in **Appendix A**. The new cover system for the Site can be seen in **Figure 2**. After the placement of the minimum 1' of clean soil, the area was hydroseeded in order to stabilize the area.

#### 2.5 Well Modifications

As part of the Site Management Plan for the Site a groundwater monitoring well network is present for the Site. As indicated and approved by the Department in the two Change in Use Work Plans prepared by AFI Environmental dated 05/05/2020 and 08/27/2020 all monitoring wells were noted during change in use construction activities and remain for monitoring requirements as outlined in the Site Management Plan.

During the cap modification of the area directly to the east of the 798 Seneca street lot, the top of Casing (TOC) of monitoring well 102R (MW 102R) was modified to match the installed grade of the clean fill cap. The top of this well was reduced 40" by cutting the PVC casing that extended above grade. A road box was placed and secured in concrete to protect the well.

#### 2.6 Imported Fill

In order to complete the change in use approved by the Department, clean fill was imported to the site for backfill as well as site cover modification and repairs.

A total of four catch basins and corresponding pipes were replaced to enhance drainage of the existing paved areas that are to be utilized as an intermittent parking lot as approved by the Department. Replacement of the four catch basins and associated piping required an appropriate base for placement and backfill utilizing clean material. Due to the historic Site uses and contamination left in place as described in the Final Engineering Report for the Former American Linen Supply Company Facility (C915241) are RCRA regulated and is not suitable for reuse. The

detailed process of handling and managing the soils from construction activities are outlined in **Section 2.6 Exported Fill.** In order to properly place the new catch basins and drain lines, AFI Environmental submitted a request for the import of number one stone and 2" Crusher Run Stone from the New Enterprise Stone and Lime Quarry located on Wherle Drive in Williamsville NY. The request for the import of this material was approved by the department on June 8, 2020 and can be seen in **Appendix C**.

As outlined by the preliminary site plans and cap modifications plans that were submitted to the Department certified clean topsoil was required for Change in Use construction. The soil selected for import was the premium topsoil mix from CJ Krantz. AFI collected samples of this soil prior to import to the site at a sampling frequency outlined by Table 5.4(e)10 in DER-10. Two separate requests to import the topsoil were approved by the Department and can be seen in **Appendix C**.

Repairs and upgrades to the existing asphalt area on the western portion of the property required the import of type 7 asphalt.

A detailed volume of imported material for change in use construction activities can be seen in **Table 1**. Requests for the import of fill, approval documentation from the Department and material delivery tickets can be seen in **Appendix C**.

#### 2.7 Exported Fill

Repairs and upgrade to the site completed under the CIU WP and Amendment to the CIU WP required excavation of soils and fill material containing contamination that was left in place beneath the demarcation layer. Due to the previous uses of the site, excavated soils require management as a hazardous waste. An exception to managing excavated soils as hazardous waste was approved via the issuance of a Contained-in determination from the NYSDEC Division of Materials Management. The contained-in determinations and waste characterization analytics for excavated soils have been attached in **Appendix D**. All soil excavated during the CIU construction activities were delisted via the contained in determination process. A non-hazardous waste profile was created at Chaffee Landfill, operated by Waste Management. Scale Tickets from waste management can be seen in **Appendix D**, please note that non-hazardous manifests were not signed and/or collected by the disposal facility due to the Covid-19 pandemic. A total of 581.68 tons of soil was de-listed from being hazardous waste and disposed of.

#### 3.0 Remaining Soil Conditions

During Cap modification activities, soil samples were collected from the base of the excavation to document the remaining soil characteristics beneath the demarcation layer in the area of asphalt and concrete directly to the east of the 798 Seneca Street lot. A data map showing the remaining soil characteristics of selected contaminant of concern based on the Site Management Plan and Final Engineering Report can be seen in **Figure 3**. Laboratory reports of the samples collected to document remaining contamination beneath the demarcation layer in the area of cap modification directly to the east of the 798 Seneca Street property can be seen in **Appendix E**.

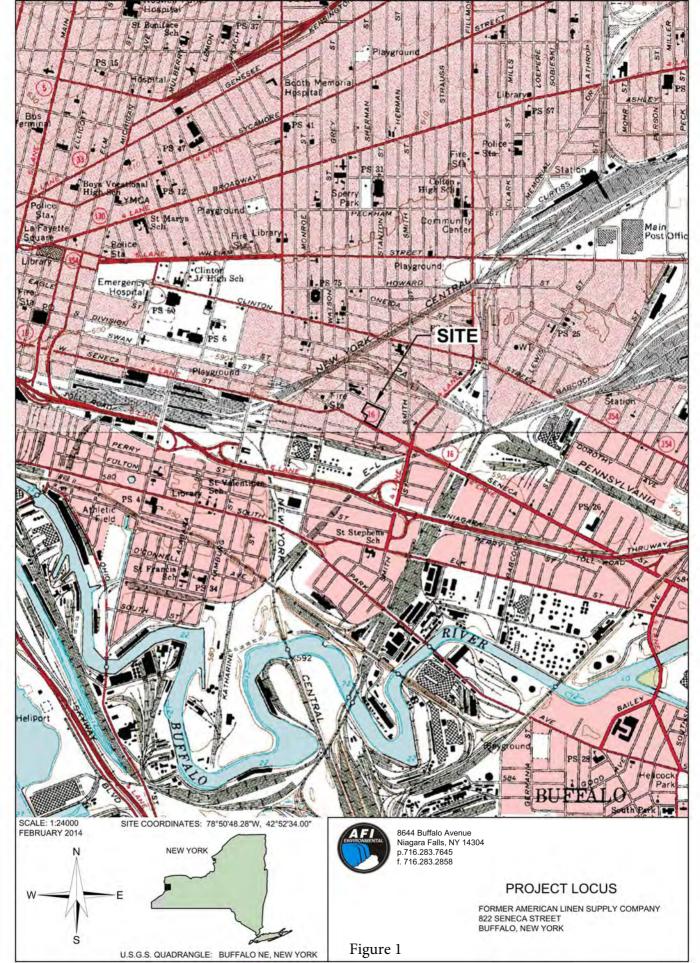
#### 4.0 Community Air Monitoring Plan

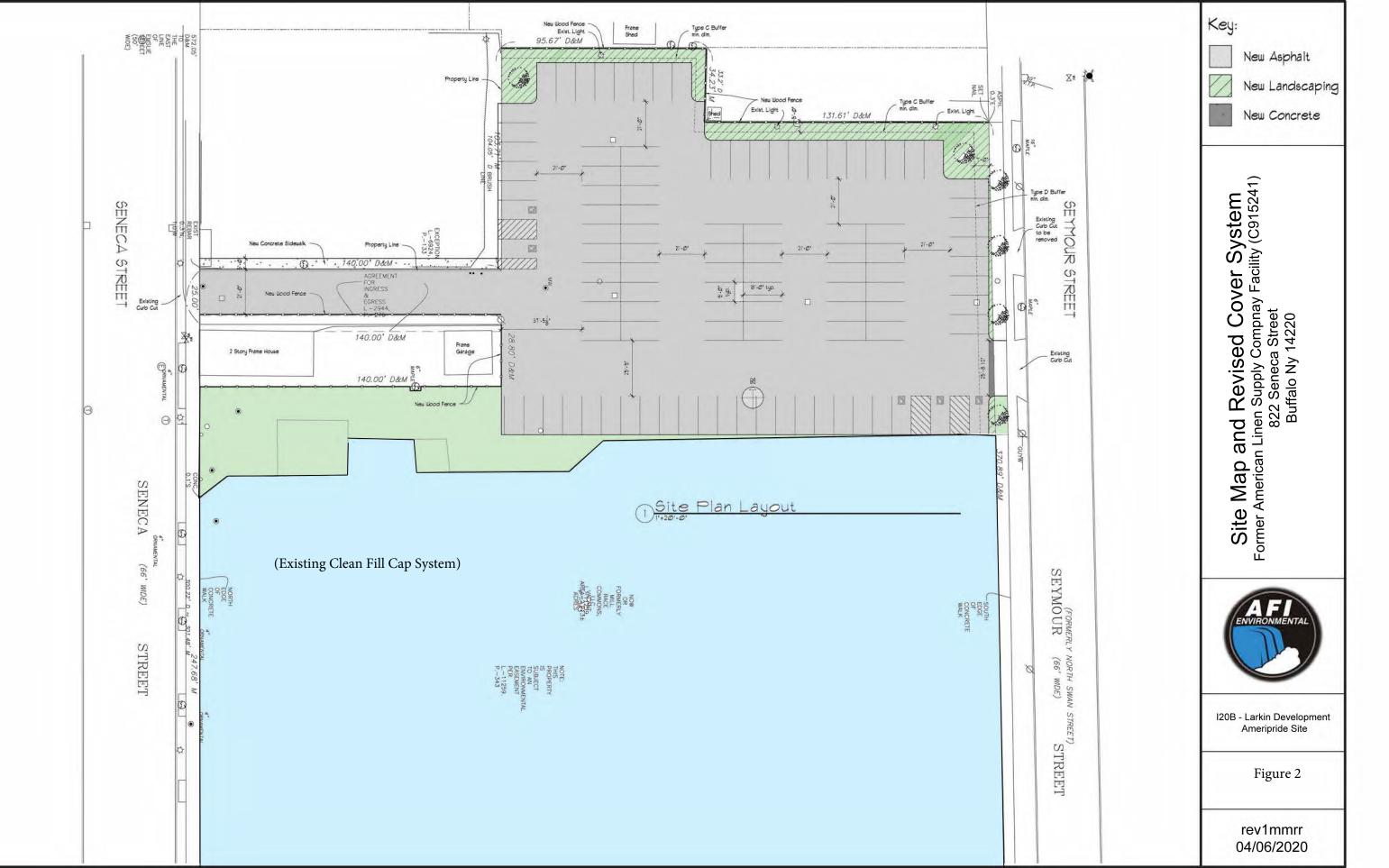
During all Change in Use construction activities particulate and VOC concentrations in air were monitored following the guidelines set forth in the New York State Department of Health Generic Community Air Monitoring Plan. A DustTrak II monitor was utilized for air monitoring purposes and this data can be seen in **Appendix F**.

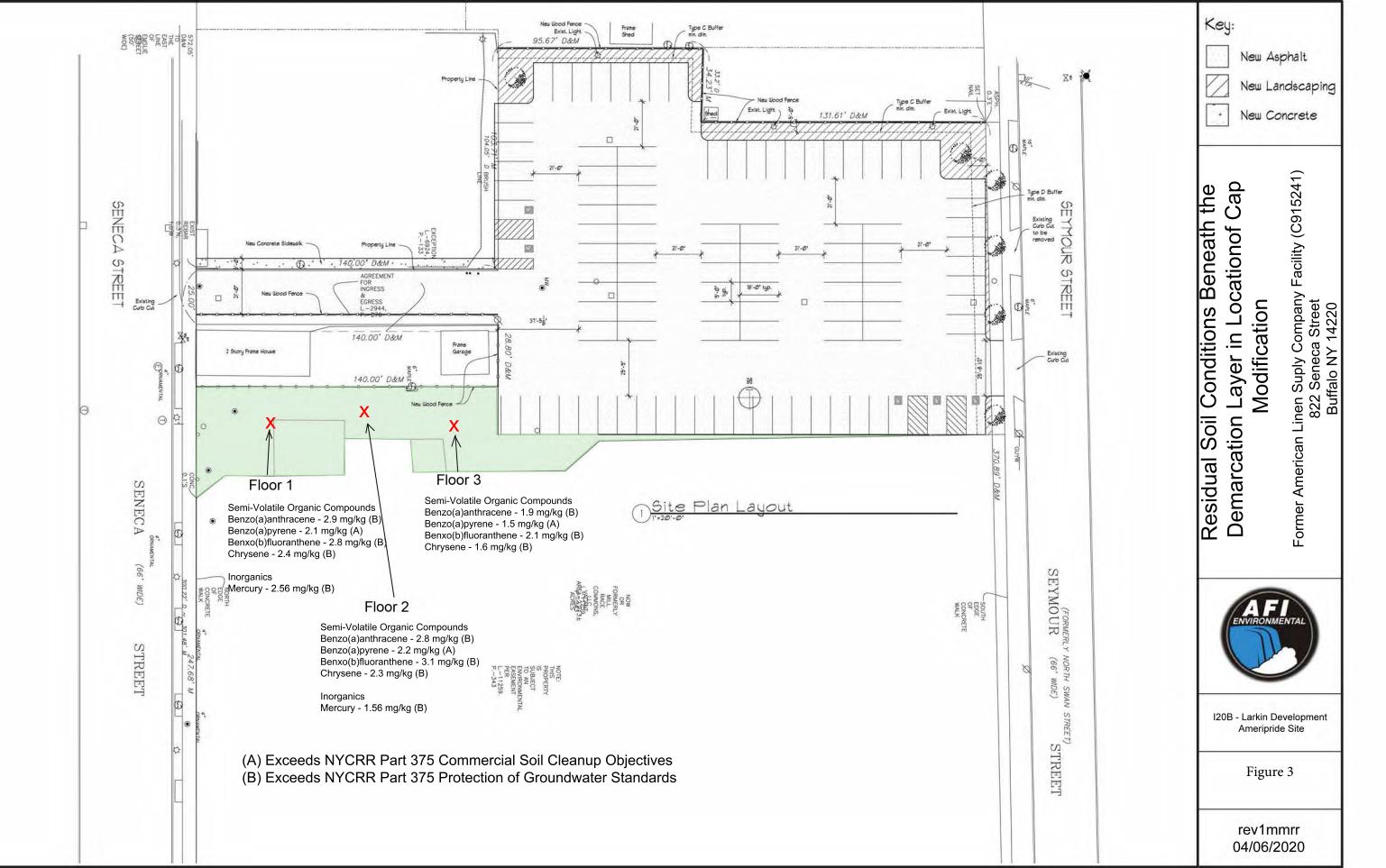
#### 5.0 Change in Use Completion

Change in use activities for the Former American Linen Supply Company Facility, NYSDEC Site C915241 began in May 2020 as approved by the Department with the required 60-day notice for change in use. Construction activities took place through the remainder of 2020 and beginning of 2021, coming to a completion of April 2021.

## **Figures**







## **Tables**

Table 1Former American Linen Supply Company Facility Change in<br/>Use Quantities and Source of Soil/Fill Imported<br/>I20B Larkin Development Ameripride Site<br/>822 Seneca Street<br/>Buffalo, New York 14210<br/>Site ID. C915241

Material	Quantity	Source
No.1 Stone	22.00 tons	New Enterprise Stone & Lime
2" Crusher Run	64.26 tons	New Enterprise Stone & Lime
Tpe 7F2 Asphalt	510.18 tons	New Enterprise Stone & Lime
Top Soil	455.00 CY	CJ Krantz

## Appendix A

Photo Log of Change in Use Construction Activities

	Change in Use Photo Log	
Photo 31 – Beginning the removal of asphalt concrete and soils to the east of the 798 Seneca Street property	Photo 32 – Stockpiled asphalt removed from the area to the east of 798 Seneca Street	Photo 33 – Concrete vault above the two (2) Closed in place(CIP) USTs
Photo 34 – PID readings of soils near the CIP USTs	Photo 35 –Excavation near the western CIP UST	Photo 36 – PID measurements of soil encountered in the NE portion of the excavation near the CIP USTs
Photo 37 – PID measurements of soil encountered in the SE portion	Photo 38 – PID measurements of soil encountered in the NW portion	Photo 39 – PID measurements of soil encountered in the SW portion
of the excavation near the CIP USTs	of the excavation near the CIP USTs	of the excavation near the CIP USTs
0018	0010	0010



	Change in Use I noto Log	
Photo 40 – PID measurements of the excavated soils in between the two CIP USTs	Photo 41 – Removal of asphalt, concrete and impacted soil in the area to the east of 798 Seneca Street, Viewed from the S	Photo 42 – Removal of asphalt, concrete, and impacted soil in the area to the east of 798 Seneca Street, Viewed from the NE
Photo 43 –Removal of asphalt, concrete and impacted soil in the area to the east of 798 Seneca Street, Viewed from the NW	Photo 44 –Geotextile placement viewed from the NW	Photo 45 – Clean fill placement viewed from the NW
Photo 46 – Geotextile placement viewed from the NE	Photo 47 – Geotextile placement viewed from the SE	Photo 48 –Geotextile placement viewed from the SW

viewed from the NE



	Change in Use Flioto Log	· · · · · · · · · · · · · · · · · · ·
Photo 49 – Final Grading viewed	Photo 50 – Final grading viewed	Photo 51 – Final grading viewed
from the SW	from the SE	from the NW
Photo 52 – Final Grading of area	Photo 53 – Hydroseeding after final	Photo 54 – Hydroseeding after final
viewed from the south	grading	grading



	Change in Use Photo Log	
Photo 1 – Saw cutting of existing	Photo 2 – Saw cutting of existing	Photo 3 – Saw cutting of existing
pavement	pavement	pavement along Seymore Street
Photo 4 – Excavation in the NW corner of the site for landscaping	Photo 5 – Stockpile of excavated soils	Photo 6 – Excavation floor in NW corner of the property
Photo 7 – NW corner after backfill with 2' of clean soil from CJ Krantz	Photo 8 – Removal of Existing Fence posts	Photo 9 – Stockpiled soil for disposal, removal of fence posts
Photo 10 – Excavation of catch	Photo 11 – Excavation after catch	Photo 12 – Placement of new catch
basin for replacement	basin has been removed	basin



	Change in Use Photo Log	
Photo 13 –Placement of new catch	Photo 14 – New catch basin and	Photo 15 – Auguring for placement
basin	associated drainage lines	of new fence
Photo 16 – PID measurement of soils during drainage enhancements	Photo 17 – Removed catch basin awaiting disposal	Photo 18 – Asphalt patch after the drainage upgrades have been completed
Photo 19 – Asphalt patch after the drainage upgrades have been completed	Photo 20 – Leveling of asphalt prior to topcoat	Photo 21 – Viewing parking area from the NW corner of the site prior to placement of topcoat



	Change in Use I noto Log	
Photo 22 – Viewing parking area	Photo 23 – Viewing parking area	Photo 24 – Leveled surfaces of
from the NE corner of the site prior	from the SE corner of the site prior	asphalt adjacent to new catch basin
to placement of topcoat	to placement of topcoat	prior to topcoat
Photo 25 –Placement of topcoat in the NW corner of the Site	Photo 26 – Topcoat that has been placed at the site entrance adjacent to 798 Seneca Street	Photo 27 – Viewing the Site from the SW after the placement of topcoat
Photo 28 – Viewing the Site from	Photo 29 – Viewing the Site from	Photo 30 – Viewing the area to the
the NW after the placement of	the NE after the placement of	East of 798 Seneca Street prior to
topcoat	topcoat	asphalt and concrete removal





Imported Fill Scale Tickets



	- 54230100 - WEHRLE			61 586-9633			
RDER NO. 00233168 DLD TO:	TICKET NUMB 50239732	ERSCALE	and the second	NUAL W		DATE 07/02/2020	TIME
Michael Serafatilan						USTOMER 8329	6:48 am
3029 Broadway							
Checktowaga, NY 14	227-					HONE	
ПР ТО						20 # 2020 SEASO	NAL CUSTOM 21/2
					G	UOTE	
					s	TATE NY	
					2	ONE	
RODUCTID	PRODUCT DESCRIP	TON			Construction of the Construction		
0300 OB NAME / LOCATIO	STONE 2' CRUSHER	RUN					
020 SEASONAL CUS					lterr	1	
OB REQUIRED NUMI COUNTY: ERIE							
AG NO	2020 SEASONAL CUST AXLES TRUCK	UM- 21/23	CARRIER NAM	F			
22136MJ	O BONO3		Dig it Of New	Vork LLC			82815
FREIGHT	FREIGHT COLLECT		ACCUMULA QUANTITI			PAYMENT ME CREDIT	
US WEIGHT 70.460	35.23 Ton	GROSS	ORDERED 0.00		MATERIAL		
			TODAY AND A SHORE	LOADS	HAUL		
29,940	14.97 Ton	TARE	20.26 TODATE	LOADS			
40.520	20.26 Ton	NET	257.58	13	CHARGES		
20.26		Ton	ACCUMULATED C		TAX		
WEIGHED BY		Anno ann an ann an Air		LOAD	THIS.		
145			and the second	aterenteren in States Salar tutter 201 serer für ihrener tit	and a second second state and a second state of the second state o		
				JOB AI	REIVAL TIME	JOB DE	PARTURE TIME
NEPECTOR'S SIGN	ATURE		ERY ACRIMONT POLY ACCUPTANCE				
NSPECTOR'S SIGN		a a secondara da	ZERY ACHROWLEDGES ACEL PHANE				PARTORE TIME
INSPECTOR'S SIGNA	ATURE	R RECEIPTER.	ISER ACHION, ESSES ACEL MARCE				
NSPECTOR'S SIGNA	ATURE	A RICE PICK.	MEY ADHOW, EDGES ACELFYARE				
NSPECTOR'S SIGNA	ATURE	A NICEPTER.	iesty achiever. Achees acce prante				
NSPECTOR'S SIGNA	ATURE	a nicembe.	ACRY ACHION, ESGEN ACEL PLANCE				
NSPECTOR'S SIGNA	ATURE	A NICOPTE	YEEV ACHOWLEDGES AGELPTANE				
NSPECTOR'S SIGNA	ATURE	i nceret.	DER KENION, ESCER NEEL PANE				
NSPECTOR'S SIGNA	ATURE	A NICE PIEL	JERV ADHON, EDIES ACEL PARCE				
NSPECTOR'S SIGNA	ATURE	A NICEPTER.	INTER ACTION ACCESSION				
NSPECTOR'S SIGNA	ATURE		DEN KONON ESSEE NOET MANG				
NSPECTOR'S SIGNA	ATURE	A NICEPUEL.	AGEN ACHION. ESGEN ACEEPIAACE				
NSPECTOR'S SIGNA	ATURE	A HICE PUEL	KEY ACHOW, ESGES ACEL PARE				
NSPECTOR'S SIGNA	ATURE	A NICEPTER.	YEST ACHOWLESGES AGEL MARE				
NSPECTOR'S SIGNA	ATURE						
NSPECTOR'S SIGNA	ATURE	A HICE PIER	KEN ACHON, ESCES ACEL PARE				
INSPECTOR'S SIGNA	ATURE						
INSPECTOR'S SIGNA	ATURE						
INSPECTOR'S SIGNA	ATURE						
INSPECTOR'S SIGNA							
NSPECTOR'S SIGNA					104 196 ALCAR 144		19723 OWERS NOT TO COME TO THE TOP TO ALL BARGESTS COOP AT COME TO THE TO ALL BARGESTS COOP AT COME TO THE TO ALL BARGESTS COOP AT COME TO THE TO ALL BARGESTS COOP AT COME TO ALL BARGESTS COME TO ALL BARGESTS COME TO ALL BARGESTS COME TO ALL BARGESTS COME TO ALL BARGESTS





ORDER NO. 1000265574			ET NUMBE	R	SI 1	LO		H0096	PLANT ID.	DATE 10	/27/2020	TIME 9:	14 am
SOLD TO: Northeast Diversif #2 Cadby Industri Lancaster, NY 14	al Park									CUSTOM	ER: 81564		
SHIP TO:										QUOTE: STATE NY ZONE: JMF: Mix:			-
JOB NAME / LOCA 2020 500 Seneca	St- 51	_										ITEM	
JOB REQUIRED NU COUNTY: ERIE	MBERS	2020 500	Seneca St	- 51								PAYME	NT METHOD
TAG NO.	AXL	ES T	RUCK		CA	RRIER NA	ME						REDIT
MIX CODE	PRO	DUCT	B71NE52 DESCRIPT	ION								1.00	
261072 WEIGHED BY	1	TYPE 3 E	BINDER FS			_						15.95	REQUESTED Ton
A	uto Print		Delete)					HOT N PF	NIXED ASPHA	ALT CAN C	AUSE THE	RMAL BURN	S WEAR
INSPECTOR'S SIG	NATURE								RIVAL TIM		-	DEPARTUR	
RECEIVED ABOVE	MATER	ial in g	OOD CON	DITION				A SERVIC	E CHARGE	LIED TO A	KCEED THE LL AMOUNT DUE.	MAXIMUM A	ALLOWABLE DAYS PAST
Min		2027	4219	5238	9505	10060		44	7	_			
Target		2187	4379	5398	9665	10210		458					
Max	30	2347	4539	5558	9825	10360	6	469	Э				
Time: No:	Tare	AG4	AG3	AG2	AG1	RP1	Tare	e CM:	Total	DRY	WET		
09:11:42 1	0	2160	4380	5400	9800	10138	-3	5 460	10598				
09:12:46 2 09:14:11 3	0	2140	4380	5340	9520	10309	1	5 465	5 10774				
09:14:11 3	20	2180	4400	5360	9640	10072		5 45	5 10527				
	Total	Net L	oaded:	31,89	99 1b	15	.95 t	n			Control %Moistu %AC in %Virgin %AC in	re RAP: RAP: AC:	Auto 6.10 % 6.00 % 4.33 % 4.62 %
Truck Tare:	919 lb 20 lb 899 lb	- 9	5.96 Ton 0.01 Ton 15.95 Ton	Today Lo To Date Today Q To Date	Loads uantity:		95 Ton 95 Ton						





DRDER NO. 1000265574		CKET NUMBER	2	SIL 1	0		H009		ANT ID.	DATE 10/	27/2020	11:03	8 am
SOLD TO:									C	USTOME	ER: 81564		
Northeast Diversificat #2 Cadby Industrial P	ark								਼ਿ	HONE:			
Lancaster, NY 14086	5								F	0 #: 202	0 500 Sen	eca St- 51	
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1								-	0	UOTE:			
SHIP TO:										TATE NY			
										JMF:			
										Mix:			
									-			ITEM	
JOB NAME / LOCATIC 2020 500 Seneca S	N t- 51			-								DAVMEN	T METHO
IOB REQUIRED NUM	RERS	500 Seneca St	- 51							-		CR	EDIT
COUNTY: ERIE	AXLES	TRUCK		CA	RRIER NA	ME						CARRIE	RCODE
	0	B71B19	-									TONS RE	QUESTER
MIX CODE 261072	PRODU	CT DESCRIPT	ON				-					12.03	Ton
WEICHED BY		52559#1T					н	OT MIX	ED ASPHA	LT CAN C	AND USE E	RMAL BURNS	non.
Auto		Not Delete)				-	JOE	_	VAL TIM		JOB	DEPARTUR	ETIME
INSPECTOR'S SIGNA	TURE												LOWADIE
RECEIVED ABOVE M	ATERIAL	N GOOD CON	NOITION				A SE	RVICE	CHARGE I	LIED TO A	CEED THE	MAXIMUM AL	AYS PAST
x						_					DUE.		
Min	220	30 4746	5892	10692	11316			503					
Target	24	60 4926	6072	10872	11485			515					
Max	30 26	10 5106	6252	11052	11654	6		527			1.1.1		
Time: No: T	are A	G4 AG3	AG2	AG1	RP1	Tar	e	CM1	Total	DRY	WET		
11:06:08 1	0 24	60 4960	6100	10900	11501		0	510	12011				
11:08:02 2	0 24	30 4920	6060	10820	11534		5	515	12049				
and the state of the	otal Ne	t Loaded:	24,0	60 1b	12	.03	tn				Control		Aut 6.10 %
											*Moisti %AC in	RAP:	6.00 %
											%Virgir		4.26 %
											%AC in		4.59 %
Truck Gross : 24,0		12.04 Ton	Today		3								
	20 lb	0.01 Ton 12.03 Ton		e Loads Quantity	3	87 To	n						
Truck Net: 24,00	50 lb	12.03 100		e Quantity		.87 To .87 To							

Plant #: 54510371 Ticket #: 50668030 PICKUP





n rk				CUSTOME PHONE:	ER: 81564		
				PO #: 202	0 500 Senec	a St- 51	*
				QUOTE: STATE NY ZONE: JMF: Typ Mix:	e7F2		
N <sub>E1</sub>						ITEM	
FRS	Ch 54					PAYMENT ME CREDIT	
2020 500 Seneca		CARRIER NA	ME			CARRIER CO	ODE
PRODUCT DESCRI	TION					TONS REQUE	ESTED
TYPE 7F2,F3 TO	P-HIGH FRICTIO	NC		ACOUNTCAN			
Print (Do Not Delete)			PROTE	CTIVE CLOTHING	AND USE EY	E PROTECTION	
TURE			JOB ARRIV	AL TIME	JOB DE	EPARTURE TI	ME
ATERIAL IN GOOD CO	ONDITION		A SERVICE CI BY LAW WILL	HARGE NOT TO E BE APPLIED TO A	EXCEED THE N ALL AMOUNTS DUE.	AXIMUM ALLOV	VABLE PAST
		626					
			Total DRY	WET			
0		0.5			%Moistur %AC in F %Virgin	RAP: 6 RAP: 6 AC: 5	Auto .10 % .00 % .84 % .08 %
20 lb 0.01	fon To Date L	oads 1 Jantity: 1	10.92 Ton 10.92 Ton				ĩ
	51         BERS         2020 500 Seneca         AXLES       TRUCK         PRODUCT DESCRII         TYPE 7F2,F3 TO         Print (Do Not Delete)         TURE         ATERIAL IN GOOD CO         4554       9636         4719       9801         0       4884       9966         are       AG2       AG3         0       4680       10020         0       4660       9660         otal Net       Loaded         58 lb       10.93       1         20 lb       0.01       1	51           BERS 2020 500 Seneca St- 51           AXLES 0         TRUCK B71NE42           PRODUCT DESCRIPTION TYPE 7F2,F3 TOP-HIGH FRICTION           Print (Do Not Delete)           TURE           ATERIAL IN GOOD CONDITION           4554         9636         10208           4719         9801         10363           0         4884         9966         10518           are         AG2         AG1         RP1         To           0         4660         10020*         10302         0           0         4660         9660         10261         0261           otal         Net         Loaded:         21,838           58 lb         10.93         Ton         Today Lo           20 lb         0.01         Ton         To Date L           38 lb         10.92         Ton         Today Qu	51         BERS 2020 500 Seneca St- 51         AXLES       TRUCK B71NE42       CARRIER NA 0         PRODUCT DESCRIPTION TYPE 7F2,F3 TOP-HIGH FRICTION         Print (Do Not Delete)         TURE         ATERIAL IN GOOD CONDITION         4554       9636       10208       626         4719       9801       10363       637         0       4884       9966       10518       6         are       AG2       AG1       RP1       Tare       CM1         0       4680       10020*       10302       0       635         0       4660       9660       10261       5       640         otal Net Loaded:       21,838 lb       1         58 lb       10.93 Ton       Today Loads       1         58 lb       10.93 Ton       Today Loads       1         58 lb       10.92 Ton       Today Quantity.       1	51         ERS         2020 500 Seneca St-51         AXLES       TRUCK         CARRIER NAME         PRODUCT DESCRIPTION TYPE 7F2,F3 TOP-HIGH FRICTION         HOT MIXED PROTE         PRODUCT DESCRIPTION TYPE 7F2,F3 TOP-HIGH FRICTION         Print (Do Not Delete)         JOB ARRIV.         JOB ARRIV.         ATERIAL IN GOOD CONDITION       A SERVICE OF BY LAW WILL         4554       9636       10208       626         4719       9801       10363       637         0       4884       9966       10518       6         are       AG2       AG1       RP1       Tare       CM1       Total       DRY       M         0       4680       10020*       10302       0       635       10937       0       4660       9660       10261       5       640       10901         0       4660       9660       10261       5       640       10.92 tn         58       10.93       Ton       Today Loads       1       10.92 tn         58       10.92       Ton	Mix           Mix           Mix           AXLES         TRUCK         CARRIER NAME           0         B71NE42         CARRIER NAME         PRODUCT DESCRIPTION           PRODUCT DESCRIPTION           TYPE 7F2,F3 TOP-HIGH FRICTION           Print (Do Not Delete)           PROTECTIVE CLOTHING           ATERIAL IN GOOD CONDITION         A SERVICE CHARGE NOT TO E BY LAW WILL BE APPLIED TO / DO ARRIVAL TIME           ATERIAL IN GOOD CONDITION         A SERVICE CHARGE NOT TO E BY LAW WILL BE APPLIED TO / DO ARRIVAL TIME           4554         9636         10208         626           4719         9801         10363         637           0         4884         9966         10518         6           are         AG2         AG1         RP1         Tare         CM1         Total         DRY         WET           0         4660         10020*         10302         0         635         10937           0         4660         9660         10261         5         640         10.92 tn           58 lb         10.93         Ton         Today Loads	4       51         2020 500 Seneca St-51       AXLES         AXLES       TRUCK B71NE42       CARRIER NAME         PRODUCT DESCRIPTION TYPE 72,F3 TOP-HIGH FRICTION       HOT MIXED ASPHALT CAN CAUSE THERM PROTECTIVE CLOTHING AND USE EY PROTECTIVE CLOTHING AND USE EY         Print (Do Not Delete)       JOB ARRIVAL TIME       JOB DE         TURE       JOB ARRIVAL TIME       JOB DE         ATERIAL IN GOOD CONDITION       A SERVICE CHARGE NOT TO EXCEED THE M BY LAW WILL BE APPLIED TO ALL AMOUNTS DUE.       JOB ARRIVAL TIME         4554       9636       10208       626         4719       9801       10363       637         0       4884       9966       10518       6         are       AG2       AG1       RP1       Tare       CM1         0       4660       10020*       10302       6 35       10937         0       4660       10261       5       640       10901         0tal       Net       Loaded:       21,838 1b       10.92 tn       Control         %AC in N         58 lb       10.92 Ton       Today Quantily       10.92 Ton       10.92 Ton	Mix         ITEM           51         PAYMENT MI CREDIT           2020 500 Seneca St-51         CARRIER NAME           AXLES         TRUCK 0         CARRIER NAME           O         BYINE42         CARRIER NAME           PRODUCT DESCRIPTION TYPE 7F2,F3 TOP-HIGH FRICTION         TONS REQUI 10.92 To           Print (Do Not Delete)         HOT MIXED ASPHALT CAN CAUSE THERMAL BURNS WE PROTECTIVE CLOTHING AND USE EVE PROTECTION TURE         JOB ARRIVAL TIME           JOB ARRIVAL TIME         JOB DEPARTURE TI JOB ARRIVAL TIME         JOB DEPARTURE TI JOB ARRIVAL TIME         JOB DEPARTURE TI JOB ARRIVAL TIME           ATERIAL IN GOOD CONDITION         A SERVICE CHARGE NOT TO EXCEED THE MAXIMUM ALLOW BY LAW WILL BE APPLIED TO ALL AMOUNTS OVER30 DAYS DUE.           4554         9636         10208         626           4719         9801         10363         637           0         4884         9966         10518         6 648           are         AG2         AG1         RP1         Tare         CM1< Total

Contact us for all your spring lime needs.

Plant #: 54510371 Ticket #: 50668051 PICKUP





510371 - COMO SS HO ORDER NO. 1000265574	TICKE 50668	T NUMBER		SILO 1				PLANT ID.	10/3	27/2020	TIME 2:23 p	m
SOLD TO: Northeast Diversificatio #2 Cadby Industrial Par Lancaster, NY 14086-	n k								CUSTOME PHONE: PO #: 202			
SHIP TO:									QUOTE: STATE NY ZONE: JMF: Type Mix:	97F2		
JOB NAME / LOCATION											ITEM	
2020 500 Seneca St- JOB REQUIRED NUMB	ERS				-						PAYMENT	DIT
COUNTY: ERIE	2020 500	) Seneca St- RUCK	- 51	CAR	RIER	VAME					CARRIER	RCODE
TAG NO.	0	B71B19	011	-						-	TONS RE	QUESTED
MIX CODE 262875	PRODUCT TYPE 7F	DESCRIPTI 2,F3 TOP-H	HIGH FRIC	TION	_		UOT		HALT CAN C	AUSE THE	RMAI BURNS	Ton
WEIGHED BY	Print (Do Not	Delete)					P	ROTECTIVE	CLOTHING	AND USE B	YE PROTECT	ION.
INSPECTOR'S SIGNAT							JOB A	RRIVAL TI	ME	JOB	DEPARTURE	
	TERIAL IN G	BOOD CON	DITION				A SERV BY LAW	ICE CHARG / WILL BE AI	PPLIED TO A	CEED THE	E MAXIMUM ALI TS OVER30 DA	LOWABLE
Min	4554	9636	10208		626							
Target	4719		10363	6	637 648							
Max 3		9966	10518 RP1	Tare	CM1	Total	DR	Y WET				
Time t	re AG2	AG1		0	635	10957						
* 14:18:39 1 2		10040* 9820	10322	5	630	11032						
11.19.00 -	0 4760 0 4740	9780	10268	5	635	10903	2					
14.21.00 -	0 4660	9780	10343	5	635	10978	i.					
	otal Net 3	Loaded:	43,8	70 lb		21.94	tn				n AC:	Auto 6.10 % 6.00 % 5.78 % 6.04 %
Truck Gross : 43,89 Truck Tare : 2	0 lb 0 lb	21.95 Ton 0.01 Ton		Loads te Loads	2							
Truck Net : 43,87		21.94 Ton	Today	Quantity. te Quantity	r.	32.86 To 32.86 To						

Contact us for all your spring lime needs. Plant # Original - Customer

Plant #: 54510371 Ticket #: 50668053 PICKUP





		CKET NUMBER 1412416		ILO 1	PLA H0250	NT ID.	DATE 10/27/2020	TIME 10:50 am
SOLD TO: Northeast Diversi #2 Cadby Industri Lancaster, NY 14	fication al Park					PH	USTOMER: 815 HONE: 0 #: 2020 500 S	
Ship to:			-			ST	IOTE: ATE NY DNE: JMF: Mix:	
JOB NAME / LOCA 2020 500 Senec	TION							ITEM
JOB REQUIRED N COUNTY: ERIE	UMBERS	500 Seneca St-	51					PAYMENT METHO CREDIT
TAG NO.	AXLES	TRUCK B51NE41		ARRIER	AME			CARRIER CODE
MIX CODE	PRODU	CT DESCRIPTIC E 7F2,F3 TOP-HI						TONS REQUESTE 22.06 Ton
262875 WEIGHED BY	The Street of	1.0	GHERICHON	-	HOT MIXE	D ASPHA	T CAN CAUSE T	HERMAL BURNS WEAR SE EYE PROTECTION.
INSPECTOR'S SIG	Mike Wawrzyn GNATURE	iak			JOB ARRIV			DB DEPARTURE TIME
RECEIVED ABOV	E MATERIAL	IN GOOD COND	ITION		A SERVICE O BY LAW WIL	HARGE N BE APPL	OT TO EXCEED IED TO ALL AMO DUE.	THE MAXIMUM ALLOWABLE UNTS OVER30 DAYS PAST
	73,380 lb 29,260 lb	36.69 Ton 14.63 Ton	Today Loads To Date Load					

Plant #: 54510373 Ticket #: 51412416 PICKUP

TO

New Enterprise Stone & Lime Co., Inc. 500 Como Park Blvd Buffalo, New York 14227 Phone: (716) 826-7310 Fax: (716) 826-1342 http://www.nesl.com



	HOT MIX AS	CKET NUMBER	6) 826-7310 S	ILO		PLANT ID. H0250	DATE 10/27/202	20	TIME 11:08 am
DER NO. 1000265574	- 1 12	1412417		S1		102.30	CUSTOMER: 8	1564	
D TO:							PHONE:		
Northeast Diversific #2 Cadby Industria	Park						PO #: 2020 500	Seneca	st- 51
ancaster, NY 140	86-							Joeneo	
				S			QUOTE: STATE NY		
HIP TO:							ZONE:		
							JMF: Mix:		
							Mix.	T	ITEM
OB NAME / LOCA 2020 500 Senec	TION a St- 51							-	PAYMENT METH
OR REOLURED N	UNIDEDC.	a con Canaca S	51. 51					-+	CARRIER COD
COUNTY: ERIE	202 AXLES	0 500 Seneca S		CARRIER	RNAME			-	1 4 4 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1
AG NO. 48214JY	3	B51B19							TONS REQUES 21.98 Ton
MIX CODE	PROD	UCT DESCRIP PE 7F2,F3 TOP	P-HIGH FRI	CTION			ASPHALT CAN CAUS	SE THER	MAL BURNS WEAR
262875 WEIGHED BY						PROTE	CTIVE CLOTHING AN		EPARTURE TIME
	Mike Wawrzy	niak				JOB ARRIV			
INSPECTOR'S SI		1000				A SERVICE CH	ARGE NOT TO EXCL	EED THE	MAXIMUM ALLOWA
RECEIVED ABO	E MATERIA	L IN GOOD CC	NDITION			BY LAW WILL	ARGE NOT TO EXCL BE APPLIED TO ALL DU	1 uno all	TS OVERSU DATS P
Х									
<u>^</u>									
~									
	70.940 lb	35.42		day Loads	2				
Truck Gross :	70,840 lb 26,880 lb	35.42 13.44	Ton To	Date Loads	2	04 702			
		13.44	Ton To Ton To	Date Loads day Quantity.	2 44	0.04 Ton			
Truck Gross : Truck Tare :	26,880 lb	13.44	Ton To Ton To	Date Loads	2 44	0.04 Ton 1.04 Ton			
Truck Gross : Truck Tare :	26,880 lb	13.44	Ton To Ton To	Date Loads day Quantity.	2 44				
Truck Gross : Truck Tare :	26,880 lb	13.44	Ton To Ton To	Date Loads day Quantity.	2 44				

Plant #: 54510373 Ticket #: 51412417 PICKUP

Void - Customer Do Not Accept

D

New Enterprise Stone & Lime Co., Inc. 500 Como Park Blvd Buffalo, New York 14227 Phone: (716) 826-7310 Fax: (716) 826-1342 http://www.nesl.com



RDER NO.	3 HOT MIX ASP	KET NUMBE	R	SILO		PLANT H0250	ID. DAT	/27/2020	TIME 12:31 pm
1000265574	514	412420		S1		10230	CUSTON	NER: 81564	
OLD TO: Northeast Diversi #2 Cadby Industr Lancaster, NY 14	ial Park						PHONE:	)20 500 Sen	
HIP TO:							QUOTE: STATE N ZONE: JMF: Mix:	Y	
							Wite.		ITEM
OB NAME / LOC/ 2020 500 Sene	ca St- 51								PAYMENT METHO
OB REQUIRED I	NUMBERS 2020	500 Seneca	St- 51						CARRIER CODE
AG NO. 32384mk	AXLES	TRUCK B51NE	52	CARRI	ER NAME				TONS REQUESTE
VIX CODE 262875		CT DESCRI	PTION P-HIGH FRIC	TION				LOAUCE THE	21.13 ION
262875 WEIGHED BY						PROTEC	TIVE CLOTHI	NG AND OOL	EYE PROTECTION.
INSPECTOR'S S	Mike Wawrzyni	ак				JOB ARRIVA	LTIME	JOB	DEPARTURE TIME
			NOTION		-	A SERVICE CH.	ARGE NOT TO	EXCEED TH	E MAXIMUM ALLOWABI
RECEIVED ABO	VEMATERIAL	N GOOD O	, and the second s			BY LAW WILL B	SE APPLIED	DUE.	
Truck Gross :	72,280 lb	36.14	Ton Toda	ay Loads	3				
Truck Gross : Truck Tare : Truck Net :	72,280 lb 30,020 lb 42,260 lb		Ton Toda Ton To I Ton Toda	ay Loads Date Loads ay Quantity. Date Quantity.	3 65.17	Ton Ton			

Plant #: 54510373 Ticket #: 51412420 PICKUP



10373 - COMO #3		CKET NUMB	ER	SILO S1		PLANT ID H0250	). DATE 10/27	/2020	1:56 pm
RDER NO. 1000265574	51	412424		51		110.000	CUSTOMER	81564	
DLD TO: Northeast Diversifi #2 Cadby Industria	al Park						PHONE: PO #: 2020	500 Sone	oca St- 51
Lancaster, NY 140	086-						PO #: 2020 QUOTE:	500 Sene	
HIP TO:							STATE NY ZONE: JMF: Mix:		
									ITEM
OB NAME / LOCA 2020 500 Senec	a St- 51								PAYMENT METHO
OB REQUIRED N COUNTY: ERIE	2020	500 Seneca	St- 51						CARRIER CODE
TAG NO.	AXLES 0	TRUCK B51NE			ER NAME				TONS REQUESTE
VIX CODE 262875	PRODU	E 7F2,F3 TC	PTION P-HIGH FI	RICTION		1		USE THE	21.93 Ton RMAL BURNS WEAR EVE PROTECTION.
MEICHED BY	Mike Wawrzyr	01.11				PROTECTIV	E CLOTHING /	110 000	DEPARTURE TIME
INSPECTOR'S SI		iidh				JOB ARRIVAL			
						A SERVICE CHAR	GE NOT TO EX	CEED THE	MAXIMUM ALLOWABL
RECEIVED ABOV	/E MATERIAL	IN GOOD C				BY LAW WILL BE	APPLIEDIOAL		
	73,200 lb 29,340 lb	IN GOOD C	Ton To	oday Loads o Date Loads	4	BY LAW WILL BE	APPLIEDIOAL	L ANOUN	

Plant #: 54510373 Ticket #: 51412424 PICKUP





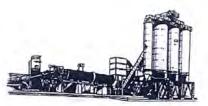
1000265574 SOLD TO:		TICKET NUMBE 51412425	R	SILO S1		PLANT ID H0250	DATE 10/27/	2020	TIME 2:01 pm
Northeast Dive #2 Cadby Indus Lancaster, NY	strial Park					1	CUSTOMER: PHONE:		en St 51
				(1997)		+	PO #: 2020 5	00 Sene	ca St- 51
Ship to:							QUOTE: STATE NY ZONE: JMF: Mix:		
JOB NAME / LOG 2020 500 Sen	CATION								ITEM
JOB REQUIRED COUNTY: ER	NUMBERS	20 500 Seneca S	t- 51						PAYMENT METHO CREDIT
TAG NO.	AXLES	1		CARRIER	NAME				CARRIER CODE
MIX CODE 262875	PROD	PE 7F2,F3 TOP-	ION	ON	-				TONS REQUESTE 9.90 Ton
WEIGHED BY	Mike Wawrzy	6				HOT MIXED ASP	HALT CAN CAU	SE THER	MAL BURNS WEAR YE PROTECTION.
INSPECTOR'S		max	JOB ARRIVAL T		JOB D	EPARTURE TIME			
	OVE MATERIA	IN GOOD CON	DITION			A SERVICE CHARG BY LAW WILL BE A	E NOT TO EXCI PPLIED TO ALL DU	AMOUNT	MAXIMUM ALLOWABLE S OVER30 DAYS PAST
Truck Gross :	49,320 lb	24.66 Tor	n Today Loa	ads 5					
Truck Gross : Truck Tare : Truck Net :	49,320 lb 29,520 lb 19,800 lb	24.66 Tor 14.76 Tor 9.90 Tor	To Date Lo	oads 5	97.00 T	on			





ORDER NO. 1000265574			TICKET N 5066808		ER	5	SILO			PLANT ID		DATE 10/28/2020	TIME 12:4	6 pm
SOLD TO: Northeast Dive #2 Cadby Indu Lancaster, NY	strial F	tion Park		-							PHC	TOMER: 8156	4	o hui
SHIP TO:											QUO STAT ZON	FE NY E: IF: Type 7F2	neca St- 51	
JOB NAME / LO 2020 500 Ser	CATIC neca S	DN t- 51											ITEM	
JOB REQUIRED COUNTY: ER	NUM	BERS 2020	0 500 Ser	neca S	St- 51									
TAG NO.		AXLES	TRUC B7	K 1B19	-	C	ARRIEF	NAME					CARRIE	RCODE
MIX CODE 262875		PRODU TYP	E 7F2,F3	CRIPT	FION HIGH FRI	CTION	1						TONS RE 22.06	QUESTED Ton
WEIGHED BY	Auto	Print (Do	Not Dele	te)								CAN CAUSE THE THING AND USE		
INSPECTOR'S S	GIGNA	TURE							JOB AF	RRIVAL TIN	ΛE	JOB	DEPARTUR	E TIME
RECEIVED ABO	VE M	ATERIAL	IN GOOD	CON	DITION							TO EXCEED THE TO ALL AMOUN DUE.		
Min.		45		536	10208		626							
Targ Max		47: 0 488		301 966	10363 10518	6	637 648							
Time: No	: Ta	re A	52 <i>I</i>	AG1	RP1	Tare	CM1	Total	DRY	WET				
12:39:46	1	0 456	50 97	780	10663*	0	635							
	2 2			340	10441 10188	5	630 630							
12:43:18		1			10297	5	635							
	То	tal Net	Loade	ed:	44,1	19 lb		22.06 t	n			Contro %Moist %AC in %Virgi %AC in	ure RAP: RAP: n AC:	Auto 6.10 % 6.00 % 5.73 % 6.05 %
ruck Tare:	14,139 20	lb	0.01	Ton Ton	Today L To Date	Loads	1 4	22.06 Ton						
ruck Net: 4	14,119		22.06	100	Today C To Date	Quantit	y.	75.91 Ton						
Contact us for a				7						510371 7	Ticke	t #: 50668081	PICKUP	





ORDER NO. 1000265574	TICKET NUMBE 50668084	R	SILO 1		PLAN	T ID.	DATE 10/28/2020	0 TIME 1:03	pm
SOLD TO: Northeast Diversification #2 Cadby Industrial Park Lancaster, NY 14086-						P	USTOMER: 81 HONE: O #: 2020 500 \$		
SHIP TO:	7					S	UOTE: TATE NY CONE: JMF: Type 7F2 Mix:		
JOB NAME / LOCATION 2020 500 Seneca St- 5	1							ITEM	
JOB REQUIRED NUMBER COUNTY: ERIE	RS 2020 500 Seneca S	t- 51						PAYMEN	T METHOD
	XLES TRUCK		CARRIER	NAME					R CODE
MIX CODE F	RODUCT DESCRIPT	TION						TONS RE	QUESTED
262875 WEIGHED BY Auto Pri	TYPE 7F2,F3 TOP nt (Do Not Delete)	HIGH FRICTION		1				21.36 THERMAL BURNS SE EYE PROTEC	WEAR
INSPECTOR'S SIGNATU					JOB ARRIVA	LTIME	E JO	OB DEPARTUR	ETIME
	ERIAL IN GOOD CON	DITION		-	A SERVICE CH/ BY LAW WILL B	RGE N E APPI	NOT TO EXCEED LIED TO ALL AMO DUE.	THE MAXIMUM A DUNTS OVER30 D	LLOWABLE AYS PAST
Min	4451 9418	9977	612						
Target	4612 9579	10128	623 634						
Max 30 Time: No: Tare	4773 9740 AG2 AG1	10279 6 RP1 Tare		Total	DRY WI	T			
12:55:38 1 0	4680 9600	10032 -		10652					
12:58:05 2 20	4520 9660		5 625 5 620	10717 10705					
13:00:45 3 0 13:03:26 4 0	4540 9540 4760 9540								
	al Net Loaded:	42,717 lk	0	21.36 t	n		%Moi %AC %Vir	rol Mode sture RAP: in RAP: gin AC: in Mix:	Auto 6.10 % 6.00 % 5.81 % 6.07 %
Truck Gross : 42,737 lb Truck Tare : 20 lb Truck Net : 42,717 lb	0.01 Ton	To Date Load	ls: 5 ity:	43.42 Ton 97.27 Ton					

Void - Customer Do Not Accept





4510373 - COMO # ORDER NO. 1000265574	-	FICKET NUMB 51412427	ER S	SILO S4		PLANT ID. H0250	DATE 10/28/20		TIME 7:17 am
SOLD TO: Northeast Diversil #2 Cadby Industri Lancaster, NY 14	al Park						CUSTOMER: 8 PHONE: PO #: 2020 500		St- 51
SHIP TO:							QUOTE: STATE NY ZONE: JMF: Mix:		
JOB NAME / LOCA 2020 500 Senec	TION a St- 51								rem .
JOB REQUIRED N COUNTY: ERIE	UMBERS 202	0 500 Seneca S	St- 51						AYMENT METHO CREDIT
TAG NO. 32384mk	AXLES	TRUCK B51NE5	2	CARRIE	RNAME				CARRIER CODE
MIX CODE 262875	PROD	UCT DESCRIP DE 7F2,F3 TOP	TION	ION				Т	ONS REQUESTED 21.07 Ton
WEIGHED BY			HIGHTHIOT			HOT MIXED AS	PHALT CAN CAUSE	THERMAN	BURNS WEAR
INSPECTOR'S SIG	like Wawrzyr		JOB DEP	ARTURE TIME					
RECEIVED ABOVE	EMATERIAL	IN GOOD COM	NDITION		/ E	SERVICE CHAR	GE NOT TO EXCEED APPLIED TO ALL AM DUF	O THE MAX	KIMUM ALLOWABLE VER30 DAYS PAST
	2,400 lb	36.20 Tor							
	0,260 lb 2,140 lb	15.13 Tor 21.07 Tor		antity.	21.07 Ton 118.07 Ton				

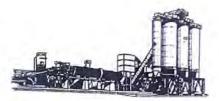
Plant #: 54510373 Ticket #: 51412427 PICKUP





OLD TO:		KET NUMBER 412428	SILO S4		PLAN <sup>-</sup> H0250	T ID.	DATE 10/28/20	020	TIME 7:19 am
Northeast Diversification #2 Cadby Industrial Par Lancaster, NY 14086-	ark					P	USTOMER: 8 HONE: 0 #: 2020 50		ica St- 51
HIP TO:						S	UOTE: TATE NY CONE: JMF: Mix:		
OB NAME / LOCATION 2020 500 Seneca St	N - 51								ITEM
OB REQUIRED NUME COUNTY: ERIE	BERS	500 Seneca St-	51						PAYMENT METHO CREDIT
AG NO.	AXLES	TRUCK B51NE41		RIER NAME					CARRIER CODE
AIX CODE 262875	PRODUC	T DESCRIPTION	ON IIGH FRICTION						TONS REQUESTER 22.01 Ton
WEIGHED BY Mike	ak	HOT MIXED / PROTEC	ASPHA	LT CAN CAUSE	USE E	MAL BURNS WEAR YE PROTECTION			
Mike Wawrzyniak         P           INSPECTOR'S SIGNATURE         JOB A							E	JOB D	EPARTURE TIME
RECEIVED ABOVE M	ATERIAL II	N GOOD COND	NITION		A SERVICE CHA BY LAW WILL B	ARGE N E APP	NOT TO EXCEE LIED TO ALL AI DUE.	MOUNT	MAXIMUM ALLOWABLE S OVER30 DAYS PAST





SOLD TO: Northeast Diversification #2 Cadby Industrial Park Lancaster, NY 14086- SHIP TO: JOB NAME / LOCATION 2020 500 Seneca St- 51 JOB REQUIRED NUMBERS COUNTY: ERIE 2020 500 Seneca St- 51 TAG NO. AXLES TRUCK 0 AXLES TRUCK 0 B51B22 CARRIE MIX CODE PRODUCT DESCRIPTION 262875 YOP-HIGH FRICTION WEIGHED BY Mike Wawrzyniak INSPECTOR'S SIGNATURE RECEIVED ABOVE MATERIAL IN GOOD CONDITION X	NAME HOT MIXED ASPH PROTECTIVE JOB ARRIVAL TIM	CTIVE CLOTHING AND U	Seneca St- 51 ITEM PAYMENT METHO CREDIT CARRIER CODE TONS REQUESTI 21.93 Ton THERMAL BURNS WEAR
JOB NAME / LOCATION         2020 500 Seneca St- 51         JOB REQUIRED NUMBERS         COUNTY:       ERIE       2020 500 Seneca St- 51         TAG NO.       AXLES       TRUCK       CARRIE         MIX CODE       PRODUCT DESCRIPTION       CARRIE         262875       TYPE 7F2,F3 TOP-HIGH FRICTION       WEIGHED BY         Mike Wawrzyniak       INSPECTOR'S SIGNATURE       RECEIVED ABOVE MATERIAL IN GOOD CONDITION	HOT MIXED ASPH PROTECTIVE JOB ARRIVAL TIM	QUOTE: STATE NY ZONE: JMF: Mix: DASPHALT CAN CAUSE T CTIVE CLOTHING AND U	ITEM PAYMENT METHO CREDIT CARRIER CODE TONS REQUESTO 21.93 Ton THERMAL BURNS WEAR SE EYE PROTECTION.
2020 500 Seneca St- 51         JOB REQUIRED NUMBERS COUNTY: ERIE         2020 500 Seneca St- 51         TAG NO.       AXLES 0       TRUCK B51B22       CARRIE         MIX CODE 262875       PRODUCT DESCRIPTION TYPE 7F2,F3 TOP-HIGH FRICTION         WEIGHED BY Mike Wawrzyniak       Mike Wawrzyniak         INSPECTOR'S SIGNATURE       RECEIVED ABOVE MATERIAL IN GOOD CONDITION	HOT MIXED ASPH PROTECTIVE JOB ARRIVAL TIM	CTIVE CLOTHING AND U	PAYMENT METHO CREDIT CARRIER CODE TONS REQUESTI 21.93 Ton THERMAL BURNS WEAR SE EYE PROTECTION.
COUNTY:     ERIE     2020 500 Seneca St- 51       TAG NO.     AXLES     TRUCK     CARRIE       MIX CODE     PRODUCT DESCRIPTION     CARRIE       262875     TYPE 7F2,F3 TOP-HIGH FRICTION       WEIGHED BY     Mike Wawrzyniak       INSPECTOR'S SIGNATURE       RECEIVED ABOVE MATERIAL IN GOOD CONDITION	HOT MIXED ASPH PROTECTIVE JOB ARRIVAL TIM	CTIVE CLOTHING AND U	CREDIT CARRIER CODE TONS REQUESTI 21.93 Ton THERMAL BURNS WEAR SE EYE PROTECTION.
0     B51B22       MIX CODE 262875     PRODUCT DESCRIPTION TYPE 7F2,F3 TOP-HIGH FRICTION       WEIGHED BY     Mike Wawrzyniak       INSPECTOR'S SIGNATURE     RECEIVED ABOVE MATERIAL IN GOOD CONDITION	HOT MIXED ASPH PROTECTIVE JOB ARRIVAL TIM	CTIVE CLOTHING AND U	TONS REQUEST 21.93 Ton THERMAL BURNS WEAR SE EYE PROTECTION.
262875 TYPE 7F2,F3 TOP-HIGH FRICTION WEIGHED BY Mike Wawrzyniak INSPECTOR'S SIGNATURE RECEIVED ABOVE MATERIAL IN GOOD CONDITION	A SERVICE CHARGE	CTIVE CLOTHING AND U	21.93 Ton THERMAL BURNS WEAR SE EYE PROTECTION.
Mike Wawrzyniak INSPECTOR'S SIGNATURE RECEIVED ABOVE MATERIAL IN GOOD CONDITION	A SERVICE CHARGE	CTIVE CLOTHING AND U	SE EYE PROTECTION.
INSPECTOR'S SIGNATURE RECEIVED ABOVE MATERIAL IN GOOD CONDITION	JOB ARRIVAL TI		
	A SERVICE CHARGE		
	BY LAW WILL BE AP	HARGE NOT TO EXCEED BE APPLIED TO ALL AMO DUE.	THE MAXIMUM ALLOWABL DUNTS OVER30 DAYS PAST
Truck Gross :72,280 lb36.14TonToday Loads3Truck Tare :28,420 lb14.21TonTo Date Loads8Truck Net :43,860 lb21.93TonToday Quantity.			





ORDER NO. 1000265574		CKET NUMBER 1412430	SILO S4	PLANT ID. H0250	DATE 10/28/2020	TIME 7:58 am
SOLD TO: Northeast Divers #2 Cadby Indust Lancaster, NY 1	rial Park				CUSTOMER: 81564 PHONE: PO #: 2020 500 Ser	
SHIP TO:					QUOTE: STATE NY ZONE: JMF: Mix:	
JOB NAME / LOC 2020 500 Sene						ITEM
JOB REQUIRED		500 Seneca St- 51				PAYMENT METHOD CREDIT
TAG NO. 48214JY	AXLES 3	TRUCK B51B19	CARRIER N	AME		CARRIER CODE
MIX CODE 262875		CT DESCRIPTION 7F2,F3 TOP-HIGH F	RICTION			TONS REQUESTED 21.94 Ton
WEIGHED BY	Mike Wawrzyni			HOT MIXED ASP PROTECTIV	HALT CAN CAUSE THE	RMAL BURNS WEAR EYE PROTECTION.
INSPECTOR'S SI				JOB ARRIVAL T	IME JOB	DEPARTURE TIME
RECEIVED ABOY	VE MATERIAL I	N GOOD CONDITION	1	A SERVICE CHARG BY LAW WILL BE A	E NOT TO EXCEED THE PPLIED TO ALL AMOUN DUE.	MAXIMUM ALLOWABLE TS OVER30 DAYS PAST

Truck Gross :	71,140 lb	35.57	Ton	Today Loads	4	
Truck Tare:	27,260 lb	13.63	Топ	To Date Loads	9	
Truck Net :	43,880 lb	21.94	Ton	Today Quantity.		86.95 Ton
				To Date Quantity.		183.95 Ton

Plant #: 54510373 Ticket #: 51412430 PICKUP





ORDER NO. 1000265574		CKET NUMBER 1412431	SILO	S4	-	PLANT ID. H0250	DATE 10/28/2020	TIME 8:37 am
SOLD TO: Northeast Diversifi #2 Cadby Industria Lancaster, NY 140	al Park						CUSTOMER: 8156 PHONE: PO #: 2020 500 Se	
SHIP TO:							QUOTE: STATE NY ZONE: JMF: Mix:	
JOB NAME / LOCA 2020 500 Seneca	TION a St- 51							ITEM
JOB REQUIRED NU COUNTY: ERIE	UMBERS	500 Seneca St-	51					PAYMENT METHO CREDIT
TAG NO.	AXLES	TRUCK B51NE42		CARRIER	RNAME			CARRIER CODE
MIX CODE 262875	PRODU	CT DESCRIPTIC		1				TONS REQUESTED
WEIGHED BY	like Wawrzyni		GITTRETION			HOT MIXED AS	PHALT CAN CAUSE THE	RMAL BURNS WEAR
INSPECTOR'S SIG		dr				JOB ARRIVAL	The second se	DEPARTURE TIME
RECEIVED ABOVE	E MATERIAL I	N GOOD COND	ITION			A SERVICE CHAR BY LAW WILL BE	GE NOT TO EXCEED THI APPLIED TO ALL AMOUN DUE.	E MAXIMUM ALLOWABLE ITS OVER30 DAYS PAST
		36.03 Ton	Today Loads	\$ 5				
	2,060 lb 9,660 lb	14.83 Ton	To Date Load					
Truck Net: 42	2,400 lb	21.20 Ton	Today Quant To Date Qua		108.15 To 227.09 To			





ORDER NO. 1000265574			ICKET N		ER	SILO S4		PLAN H0250	IT ID.	DATE 10/28/2020	TIME 9:57 am
SOLD TO: Northeast Dive #2 Cadby Indu Lancaster, NY	ustrial Pa	rk		-					P	USTOMER: 81564 HONE: D #: 2020 500 Ser	
SHIP TO:									ST ZC	JOTE: 'ATE NY DNE: JMF: Mix:	
JOB NAME / LO 2020 500 Ser	CATION	51									ITEM
JOB REQUIRED	D NUMB	ERS	500 Ser	eca St	- 51						PAYMENT METHO
TAG NO. 32384mk		AXLES	TRUC			CARR	IER NAME				CARRIER CODE
MIX CODE 262875	-	PRODUC	T DES	CRIPT				_			TONS REQUESTED
WEIGHED BY			Color Base	TOP-I			-	HOT MIXED A	SPHAL	T CAN CAUSE THER	MAL BURNS WEAR
INSPECTOR'S S		/awrzynia JRE	ik	_	_			JOB ARRIVAL		OTHING AND USE E	EPARTURE TIME
RECEIVED ABO	OVE MAT	ERIAL IN	GOOD	CON	DITION			A SERVICE CHAI BY LAW WILL BE	RGE NO	T TO EXCEED THE ED TO ALL AMOUNT DUE.	MAXIMUM ALLOWABLE S OVER30 DAYS PAST
Υ.											
	72,260 lb 30,160 lb		36.13 15.08	Ton Ton	Today Loads To Date Loads	6					
Same a contra	42,100 lb		21.05		Today Quantit To Date Quan	y.	129.20 Ton 226.20 Ton				

Plant #: 54510373 Ticket #: 51412435 PICKUP

Void - Customer Do Not Accept





LD TO:	.2439	S4	PLANT ID. H0250	DATE 10/28/2020	TIME 10:11 am		
lortheast Diversification 2 Cadby Industrial Park ancaster, NY 14086-				CUSTOMER: 8156 PHONE: PO #: 2020 500 Ser			
IP TO:				QUOTE: STATE NY ZONE: JMF: Mix:			
B NAME / LOCATION 2020 500 Seneca St- 51					ITEM		
B REQUIRED NUMBERS OUNTY: ERIE 2020 500	Seneca St- 51				PAYMENT METHOD CREDIT		
	RUCK B51NE41	CARRIER NAM	ΙE		CARRIER CODE		
CODE PRODUCT (	DESCRIPTION 2,F3 TOP-HIGH FRICTI				TONS REQUESTED		
EIGHED BY Mike Wawrzyniak				PHALT CAN CAUSE THEF			
INSPECTOR'S SIGNATURE JOB ARRIVAL TIME JOB I							
CEIVED ABOVE MATERIAL IN G	OOD CONDITION			E NOT TO EXCEED THE PPLIED TO ALL AMOUNT DUE.			
ick Tare: 29,500 lb 1	6.70 Ton Today Loa 4.75 Ton To Date Lo	ads 12					
ick Net : 43,900 lb 2	21.95 Ton Today Qua To Date Qu	ntity. 151.1					

Plant #: 54510373 Ticket #: 51412439 PICKUP





10002655	74		ICKET N		R SI	LO S4		PLANT ID. H0250	DATE 10/28	/2020	TIME 10:33 am
SOLD TO: Northeast D #2 Cadby Ir Lancaster, I	ndustrial Pa	ark				3			CUSTOMER PHONE: PO #: 2020		
SHIP TO:									QUOTE: STATE NY ZONE: JMF: Mix:		
JOB NAME / 2020 500 \$	LOCATION Seneca St-	N 51									ITEM
JOB REQUIR COUNTY:		ERS 2020	500 Sen	eca St-	- 51						PAYMENT METHOD CREDIT
TAG NO.		AXLES 0	TRUC B51	< B22		CARRI	ER NAME				CARRIER CODE
MIX CODE 262875		PRODU	CT DESC 7F2,F3	CRIPTI	ON IIGH FRICTIC	N					TONS REQUESTED 21.96 Ton
WEIGHED BY		Wawrzyni	ak								MAL BURNS WEAR
INSPECTOR'								JOB ARRIVAL 1			EPARTURE TIME
RECEIVED A	BOVE MA	TERIAL I	N GOOD	COND	ITION					AMOUNT	MAXIMUM ALLOWABLE S OVER30 DAYS PAST
							•				





DRDER NO. 1000265574		TICKET NUI 51412446	MBER	SILO S4		PLANT ID. H0250	DATE 10/28/	2020	TIME 10:52 am
SOLD TO: Northeast Divers #2 Cadby Industr Lancaster, NY 1-	rial Park						CUSTOMER: PHONE: PO #: 2020 5		
SHIP TO:							QUOTE: STATE NY ZONE: JMF: Mix:		
JOB NAME / LOC/ 2020 500 Sene			-						ITEM
JOB REQUIRED N COUNTY: ERIE		0 500 Sene	ca St- 51						PAYMENT METHOD CREDIT
TAG NO. 48214JY	AXLES 3	TRUCK B51E	319	CAR	RIER NAME				CARRIER CODE
MIX CODE 262875	PROE	UCT DESC PE 7F2,F3	RIPTION	FRICTION					TONS REQUESTED 21.95 Ton
WEIGHED BY	Mike Wawrzy	niak				HOT MIXED AS PROTECTI	PHALT CAN CAU	SE THER D USE E	RMAL BURNS WEAR YE PROTECTION.
INSPECTOR'S SI						JOB ARRIVAL	TIME	JOB	DEPARTURE TIME
RECEIVED ABOV	VE MATERIA	IN GOOD	CONDITION	N		A SERVICE CHAR BY LAW WILL BE	I GE NOT TO EXCE APPLIED TO ALL DUI	AMOUNT	MAXIMUM ALLOWABLE I'S OVER30 DAYS PAST
X Truck Gross :	71,120 lb 27,220 lb	- IN GOOD ( 35.56 13.61	Ton To	oday Loads	9	A SERVICE CHAR BY LAW WILL BE	APPLIED TO ALL	AMOUNT	MAXIMUM ALLOWABLE

Plant #: 54510373 Ticket #: 51412446 PICKUP





AXLES 0 PRODUC TYPE 7 ike Wawrzyniał NATURE	00 Seneca St- 51 TRUCK B51NE42 T DESCRIPTION 7F2,F3 TOP-HIG K	H FRICTION	RIER NAME	HOT MIXE PROT JOB ARRI	PHC PO # QUO STA ZON JN M ED ASPHALT ECTIVE CLO	#: 2020 500 Sen TE: TE NY IE: AF: lix: CAN CAUSE THE DTHING AND USE	
St- 51 MBERS 2020 50 AXLES 0 PRODUC TYPE 7 ike Wawrzyniał NATURE	TRUCK B51NE42 T DESCRIPTION 7F2,F3 TOP-HIG	H FRICTION	RIER NAME	HOT MIXE PROT JOB ARRI	STA ZON JN M ED ASPHALT ECTIVE CLO	TE NY IE: IF: Iix: T CAN CAUSE THE DTHING AND USE	PAYMENT METH CREDIT CARRIER CODE TONS REQUEST 20.95 Ton RMAL BURNS WEAR EYE PROTECTION.
St- 51 MBERS 2020 50 AXLES 0 PRODUC TYPE 7 ike Wawrzyniał NATURE	TRUCK B51NE42 T DESCRIPTION 7F2,F3 TOP-HIG	H FRICTION	RIER NAME	HOT MIXE PROT JOB ARRI	ECTIVE CLO	OTHING AND USE	PAYMENT METH CREDIT CARRIER CODE TONS REQUEST 20.95 Ton RMAL BURNS WEAR EYE PROTECTION.
AXLES 0 PRODUC TYPE ike Wawrzyniak	TRUCK B51NE42 T DESCRIPTION 7F2,F3 TOP-HIG	H FRICTION	RIER NAME	HOT MIXE PROT JOB ARRI	ECTIVE CLO	OTHING AND USE	CREDIT CARRIER CODE TONS REQUEST 20.95 Ton RMAL BURNS WEAR EYE PROTECTION.
I PRODUC TYPE 7	B51NE42 T DESCRIPTION 7F2,F3 TOP-HIG	H FRICTION	RIER NAME	HOT MIXE PROT JOB ARRI	ECTIVE CLO	OTHING AND USE	TONS REQUEST 20.95 Ton RMAL BURNS WEAR EYE PROTECTION.
ike Wawrzyniał	7F2,F3 TOP-HIGE	HFRICTION		JOB ARRI	ECTIVE CLO	OTHING AND USE	20.95 Ton RMAL BURNS WEAR EYE PROTECTION.
ike Wawrzyniał NATURE	X			JOB ARRI	ECTIVE CLO	OTHING AND USE	EYE PROTECTION.
NATURE		ON		JOB ARRI		JOB	DEPARTURE TIME
	GOOD CONDITI	ON		1.0500/005		2010 C	
				BY LAW WI	CHARGE NC	TO EXCEED TH ED TO ALL AMOUN DUE.	E MAXIMUM ALLOWAI NTS OVER30 DAYS PA
			-1				
71,520 lb 29,620 lb 41,900 lb	35.76 Ton 14.81 Ton 20.95 Ton	Today Quantity					
2	9,620 lb	9,620 lb 14.81 Ton	9,620 lb 14.81 Ton To Date Loads 1,900 lb 20.95 Ton Today Quantity	1,520 lb 35.76 Ton Today Loads 10 9,620 lb 14.81 Ton To Date Loads 15 1.900 lb 20.95 Ton Today Quantity. 216	1,520 lb 35.76 Ton Today Loads 10 9,620 lb 14.81 Ton To Date Loads 15 1,900 lb 20.95 Ton Today Quantity. 216.01 Ton	1,520 lb 35.76 Ton Today Loads 10 9,620 lb 14.81 Ton To Date Loads 15 1,900 lb 20.95 Ton Today Quantity. 216.01 Ton	1,520 lb 35.76 Ton Today Loads 10 9,620 lb 14.81 Ton To Date Loads 15 1,900 lb 20.95 Ton Today Quantity. 216.01 Ton





1000265574		KET NUMBER 412453	SILO S4	PLANT ID H0250	DATE 10/28/2020	TIME 11:44 am
OLD TO: Northeast Diversific #2 Cadby Industrial Lancaster, NY 140	ation Park				CUSTOMER: 81564 PHONE: PO #: 2020 500 Sen	
SHIP TO:					QUOTE: STATE NY ZONE: JMF: Mix:	
JOB NAME / LOCAT 2020 500 Seneca	FION a St- 51					ITEM
JOB REQUIRED NU COUNTY: ERIE	JMBERS 2020	500 Seneca St- 51				PAYMENT METHO
TAG NO. 32384mk	AXLES	TRUCK B51NE52	CARRIER	NAME		CARRIER CODE
MIX CODE 262875	PRODUC	CT DESCRIPTION 7F2,F3 TOP-HIGH	FRICTION			TONS REQUESTE
WEIGHED BY	Aike Wawrzyni			HOT MIXED ASP	PHALT CAN CAUSE THE	RMAL BURNS WEAR
INSPECTOR'S SIG				JOB ARRIVAL T		DEPARTURE TIME
RECEIVED ABOVI	E MATERIAL I	N GOOD CONDITI	ON			E MAXIMUM ALLOWABL
Truck Gross : Truck Tare : Truck Net :	72,000 lb 30,140 lb 41,860 lb	36.00 Ton 15.07 Ton 20.93 Ton	Today Loads 11 To Date Loads 17 Today Quantity.	236.94 Ton		

Plant #: 54510373 Ticket #: 51412453 PICKUP





1000265574		CKET NUME	ER	SILO S4		PLANT H0250	ID. D.	ATE 10/28/2020	TIME 12:08 pm
OLD TO: Northeast Diversi #2 Cadby Industr Lancaster, NY 14	ial Park						PHON	OMER: 81564 IE: 2020 500 Sen	
Ship to:							QUOT STATE ZONE JMF Mix	E: 2 NY :	
JOB NAME / LOCA 2020 500 Sene									ITEM
JOB REQUIRED N COUNTY: ERIE	NUMBERS 2020	) 500 Seneca	St- 51						PAYMENT METHO CREDIT
TAG NO.	AXLES 0	TRUCK B51NE	41	CARRIE	ER NAME				CARRIER CODE
MIX CODE 262875	PRODU	JCT DESCRI E 7F2,F3 TO	PTION P-HIGH FRICTI	N		-			TONS REQUESTE 8.60 Ton
WEIGHED BY	Mike Wawrzy	niak				HOT MIXED AS PROTECT	SPHALT C	AN CAUSE THE HING AND USE	RMAL BURNS WEAR EYE PROTECTION.
INSPECTOR'S SI						JOB ARRIVAL	TIME	JOB	DEPARTURE TIME
	/E MATERIAL	IN GOOD CO	ONDITION			A SERVICE CHAP BY LAW WILL BE	APPLIED	TO ALL AMOUN	E MAXIMUM ALLOWABLE TS OVER30 DAYS PAST
								DUE.	
	46,680 lb 29,480 lb	23.34	Fon Today Lo Fon To Date I					DUE.	

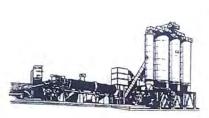
Plant #: 54510373 Ticket #: 51412456 PICKUP





ORDER NO. 1000265574				ET NUMBE 8075	R		SILO 1		PLAN	r ID.	DATE 10/28/	/2020	TIME 12:16 pm
SOLD TO: Northeast Dive #2 Cadby Indu Lancaster, NY	strial F	Park								PH	JSTOMER: IONE: ) #: 2020 5		ca St- 51
SHIP TO:										ST. ZC	IOTE: ATE NY DNE: JMF: Mix:		
JOB NAME / LC 2020 500 Se	CATIC neca S	DN t- 51											ITEM
JOB REQUIRED			020 500	) Seneca S	t- 51								PAYMENT METHOL CREDIT
TAG NO.		AXLE		RUCK B71NE41	-	0	CARRIER	NAME					CARRIER CODE
MIX CODE 261085		PRO	DUCT	DESCRIPT 2 ,F3 TOP	ION	ICTION						1	TONS REQUESTED 13.51 Ton
WEIGHED BY	A			Sec. Sec.					HOT MIXED A	SPHAL	T CAN CAU	SE THERM	MAL BURNS WEAR
INSPECTOR'S		TURE	Jo Not	Delete)					JOB ARRIVAL				EPARTURE TIME
	OVE M	ATERIA	AL IN G	OOD CON	DITION				A SERVICE CHA BY LAW WILL B	RGE NO E APPLI	DT TO EXCE ED TO ALL DU	AMOUNTS	MAXIMUM ALLOWABLE S OVER30 DAYS PAST
Min			3578	8308		549							
Tar	get	Q	3713	8443		558							
Max			3848	8578	6	567	make 1	DDV	WET				
Time: No	o: T	are	AG2	AG1	Tare	CM1	Total	DRY	WEI				
12:11:31			3700	8460	0	555 555	9015 8975						
12:14:34	- F.		3720 3680	8420 8460	5	565	9025						
12:15:59				oaded:		015 lb		13.51	tn		C	ontrol	Mode Aut
Truck Gross : Truck Tare :	27,035	5 lb ) lb		3.52 Ton 0.01 Ton		Loads	1						
Truck Net :	27,015			13.51 Ton	Today	Quantit te Quan	y.	13.51 To 13.51 To					
Contact us for	all voi	ur sprir	na lime	needs.				PI	ant #: 545103	71 Tic	cket #: 50	668075	PICKUP





54510371 - CC	DMO SS	HOT	MIX AS	PHALT	(716)	826-7310						
ORDER NO. 10002655	74			CKET NUME 0668077	BER		SILO 1		PLANT	ID.	DATE 10/28/2020	TIME 12:26 pm
SOLD TO: Northeast I #2 Cadby I Lancaster,	ndustria	I Park								PH	JSTOMER: 8156 HONE: D #: 2020 500 Se	4
SHIP TO:										QL ST ZC	JOTE: ATE NY DNE: JMF: Mix:	
JOB NAME / 2020 500	Seneca	St- 51										ITEM
JOB REQUIF COUNTY:	RED NU	MBER	S 2020 5	00 Seneca	St- 51							PAYMENT METHOD CREDIT
TAG NO.			LES 0	TRUCK B71BEC	ск		CARRIER	NAME				CARRIER CODE
MIX CODE 261085		PF	RODUC	T DESCRIF 7F2 ,F3 TO	TION	RICTION						TONS REQUESTED
WEIGHED BY	Y Au	to Prin		ot Delete)					HOT MIXED A	SPHAL	T CAN CAUSE THE	21.98 Ton ERMAL BURNS WEAR
INSPECTOR				or Delete)					JOB ARRIVAL			EYE PROTECTION.
RECEIVED A	BOVE	MATER	RIAL IN	GOOD CO	NDITION							
x									A SERVICE CHAP BY LAW WILL BE	APPL	OT TO EXCEED TH IED TO ALL AMOUN DUE.	E MAXIMUM ALLOWABLE NTS OVER30 DAYS PAST
Mi	n		4373	10154		671					1997	
Ta Ma	rget x	30	4538 4703		6	682 693						
	No: 1		AG2		Tare	CM1	Total	DRY	WET			
12:22:27	1	0	4520	10280	5	680	10960	5	WHI			
12:23:40 12:24:52		0	4480 4580	21010	5 5	675	10975					
12:26:03		0	4540		5	690 675	11050 10975					
	I	otal	Net	Loaded:	43,	960 lb		21.98 t	n		Contro	l Mode Auto
Truck Gross : Truck Tare:	43,98	0 lb 0 lb		21.99 Ton 0.01 Ton		y Loads ate Loads	2					
Truck Net:	43,96			21.98 Ton	Today	Quantity te Quant		35.49 Ton 35.49 Ton				
Contact us for	r all you	ur spri	ng lim	e needs.				Play	1 # 54510074	Tie	Lat # 500000-	
				1.				Fial	10#. 040103/1	1 IC	ket #: 50668077	PICKUP

Void – Customer Do Not Accept





ORDER NO. 1000265574		KET NUMBE 68092	R	S	ILO		PLANT	D.	DATE 10/28/	2020	TIME 3:07 p	m
SOLD TO: Northeast Diversificat #2 Cadby Industrial P Lancaster, NY 14086	ark							P	USTOMER: HONE:		ca St- 51	
SHIP TO:								Q	UOTE: TATE NY ZONE: JMF: Mix:			
JOB NAME / LOCATIO 2020 500 Seneca S	N - 51					-					ITEM	
JOB REQUIRED NUM COUNTY: ERIE	BERS	00 Seneca S	it- 51								PAYMENT	
TAG NO.		TRUCK B71NE52	<u>e.e.</u>	0	ARRIER	NAME					CARRIER	RCODE
MIX CODE 261085	PRODUCT	DESCRIPT	TION	ICTION							TONS REC 12.00	QUESTED
WEIGHED BY	Print (Do No	t Delete)				1	HOT MIXED A		LT CAN CAUS			
INSPECTOR'S SIGNA							JOB ARRIVAL				EPARTURE	
RECEIVED ABOVE M	ATERIAL IN	GOOD CON	DITION				A SERVICE CHA BY LAW WILL BE			AMOUNTS		
	4770 4950 5130	11256 11436	6	732 744 756 CM1	Total	DRY	WET					
15:03:51 1	are AG2 0 4960	11380	Tare 0	745	12125	DRI	WEI					
	0 4960 otal Net		5 23,	745 990 lb	11865	12.00 t	n		Co	ontrol	Mode	Aut
Truck Gross : 24,010 Truck Tare : 20 Truck Net : 23,990	lb	12.01 Ton 0.01 Ton 12.00 Ton	To Da Today	Loads te Loads Quantity te Quant	y.	47.49 To 47.49 To						

Contact us for all your spring lime needs.

Plant #: 54510371 Ticket #: 50668092 PICKUP

NUMBER	DUMPING INSTRUCTIONS:	Because the and mainten: OF THE MEI beyond curb all responsible This walver v all towing cos	RECEIVED BY: X	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	C.O.D.	(NEAR)	NAME	AM PM HS	Since 1939 TOPSOIL - M www.krantzt
RECEIVED BX: X RECEIVED BX: X RAME Response of the products and by CJ. Knext Togolar Land and and and and and and and and and	TRUCTIONS:	response of the products sold by C.J. Krantz Topsoil I race by parties other than the seller, THERE ARE NC RCHANTABILITY AND FITNESS FOR PARTICULAR without the authority of a contractor, owner, agent or without the authority of a contractor, owner, agent or lity for damage and delay. All customers will accept to the second second second second second second vill release C.J. Krantz Topsoil Inc. from any damage ats for trucks. A \$35.00 returned check fee plus all co	×		C.O.D. YOUR TRUCK	Buffalo	01/1	PJO N	TOPSOIL - MULCH - COMPOST - STONE www.krantztopsoil.com - 1(800)TOPSOIL (716
C.D. VURTORS (OFF) NAME DECENSES DECEMBENSION NAME DECENSES DECEMBENSION NAME DECENSES DECEMBENSION NAME DECENSES DECEMBENSION NOTING INSTRUCTIONS NAME DECEMBENS NAME		nc. are vulnerable to both climactic conditions WARRANTIES, EXPRESSED OR IMPLIED 3 PURPOSE. Materials will not be delivered agent believed to be the agent who assumes all responsibility for dumping beyond the curb. caused by our vehicles. Customer will accept caused by our vehicles. Customer will apply.	TOTAL	202			plowing	DATE 741/20	4032 • Fax
REPEARING of the products sold by C.J. Krantz To NERCHANTABILITY AND FITNESS FOR PARTY OCCUR WHOLE HEARS OF INCLOSED INC. TO NERCHANTABILITY OF A SS. 00 returned check fee plus NSTRUCTIONS:	DUMP	» → » ⊂ O » m	RECEN	1000 本 02 本 05 本 05 本	] [:	INEAP	ADDR	AM	
	NG INSTRUCTIONS:	recause the response of the product nd maintenance by parties other th PF THE MERCHANTABILITY AND eyond curb without the authority of ll responsibility for damage and dela Il responsibility for damage C.J. Krantz T his waiver will release C.J. Krantz T his waiver will release C.J. Krantz T	VED BY: X			$W_{\rm V}$	ss v	ASNO	Soll - MULCH - COMPO
		s sold by C.J. Krantz Topsoil Inc. a an the seller, THERE ARE NO WY FITNESS FOR PARTICULAR PL a contractor, owner, agent or agei ay. All customers will accept full re opsoil Inc. from any damage caus opsoil Inc. from any damage caus		RD LOAD OF: Premiving	YOUR TRUCK 96	fald	Seneca	١	ANTZ NICS ST · STONE ST · STONE Clarence, NY 14032 (716) 741-3850 · Fax 741-8489
		ap all all all all all all all all all a			CHARGE	1 1 1	1	DATE 1.1.20	741-8489

TOPSOIL MULCH COMPOST STONE       8960 Lapp Rd. Clarence, NY 14032 (716) 741-3850 · Fax 741-8489       TOPSOIL MULCH COMPOST STONE www.krantztopsoil.com · 1(800)TOPSOIL       8960 Lapp Rd. Clarence, NY 14032 (716) 741-3850 · Fax 741-8489         AM PM       AS PD PM       DATE       1/21/2.0       AM PM       DATE       1/21/2.0       DATE       1/21/2.0       DATE       1/21/2.0       DATE       1/21/2.0       DATE       1/2.1/2.0       DATE       1/2.0       DATE       1/2.0       DATE       1/2.0       1/2.0       DATE       1/2.0       DATE       1/2.0	1) .20 YARD LOAD OF premium 2:30 Z/ .10. S VARD LOAD OF prem	ASPD ASPD ASPD ASPD ASPD ARSS CTIONS (OFF) N) BUTTO N) BUTTO N) BUTTO N) BUTTO N) BUTTO N) N H N N H N H N N H H N N H H H N N H H H H H H H
Dan's Snow NAME Dan's S	U. (J. CHAR YOUR TRUCK #95 CHAR	Dan's S
Senera St ADDRESS 822 S	YOUR TRUCK #95       CHARGE       PHONE         BB       C.O.D.       YOUR TRUCK #92.1	DIRECTIONS (OFF) (NEAR) (TOWN) $BUTfall 2$
UFFORECTONS (OFF) UFFORE UFFORE (NEAR) (NEAR) (TOWN) BUFFORE		YOUR TRUCK #95 CHAR
Serveda St address Bas S uffallo UNERTRUCK HAGS CHARGE BB JIE MILLIN ZIZO VARD LOAD OF: <u>DIRE MILLIN</u> ZIZO VARD LOAD OF: <u>DIRE MILLIN</u> ZIZO JIO 'S VARD LOAD		- Dre
P. S. C. N. C. A. S. K. ADDRESS BOOK SILES TAX	SALES TAX RECEIVED BY: X	20YARD LOAD OF: Drem
ADRESS BADRESS	SALES TAX TOTAL TO	Image:

New Heitz Site Services, LLC

8644 Buffalo Avenue Niagara Falls, NY 14304 716-299-8885 accounting@new-heitz.com



# INVOICE

**BILL TO** 

AFI Environmental 8644 Buffalo Ave Niagara Falls, New York 14304 
 INVOICE #
 1234C

 DATE
 12/09/2020

 DUE DATE
 01/08/2021

 TERMS
 Net 30

<b>NEW HEITZ JOB #</b> P19001	<b>SITE LOCATION</b> 822 Seneca St, Buffalo, NY	<b>CUSTOMER</b> I20B- Larkin	<b>JOB #</b> Dev. AmeriPric	le
DATE	DESCRIPTION	QTY	RATE	AMOUNT
12/08/2020	Topsoil & Delivery	1	8,880.00	8,880.00

This invoice reflects the cost of topsoil and delivery fees from CJ Krantz, to BALANCE DUE **\$8,880.00** 822 Seneca St.

Contractor Exempt Cert ST-120.1 form on file.

4/7/2021 LC Store: 1	.0 822 Seneca, St.	Associate. Pag	ge 1
Ordered: 4/7/2021	DELIVERY OF	RDER 1/8/2021 Time 9-1	-
	8960 Lapp Rd Clarence Ctr, NY 14032 (716) 741-3850 FAX (716) 741-84	Due Date: 4/8/2021 Deliver To: AFI ENVIRONMENTAL 822 SENECA ST BUFFALO, NY 14210 777-2729	kin
Order Status: Open	•.	INSTRUCTIONS: ACROSS FROM THE NEW LARI BUILDING APARTMENTS CREDIT CARD	
<b>Item Name</b> Premium Topsoil yard Delivered	Size Order yard 40	a 40 \$37.00 \$1,15	
		Total Qty Ordered: 4C 0 40	_
Percent Unfilled: 100		Local Sales Ta) 8.75 % Tax: + \$1 Shipping: + \$ TOTAL: \$1,6	\$29.50

Thank you for your patronage!

Because the response of the products sold by C.J. Krantz Inc. are vulnerable to both climatic conditions and maintenance by parties other than the seller, THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED OF THE MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Materials will not be delivered beyond the curb without the authority of a contractor, owner, agent or agent believed to be the agent who assumes all responsibility for damage and delay. All customers will accept full responsibility for dumping beyond the curb. In the event the load cannot be placed in the area that is the customers first choice, an alternative dumping location must be used. Any delivery that is rejected by the customer will face a \$75.00 returned load fee. This waiver will release C.J. Krantz Inc. from liability for any damage caused by our vehicles. Customer will accept all towing costs for our trucks if applicable. A \$40.00 returned check fee plus all collection and legal fees plus 25% will apply. Not all products sold by C.J. Krantz are Organic.

I have read the above disclaimer and accept all of its terms and conditions:



Requests to Import Fill



# **NEW ENTERPRISE STONE & LIME CO., INC.**

500 Como Park Boulevard • Buffalo NY 14227

Office: (716) 826-7310 Fax: (716) 826-1342 Dispatch: (716) 566-9690

May 6, 2020

Brandon Quinn AFI Environmental PO Box 4049 Niagara Falls, NY 14304

Re: 822 Seneca St.

Dear Brandon,

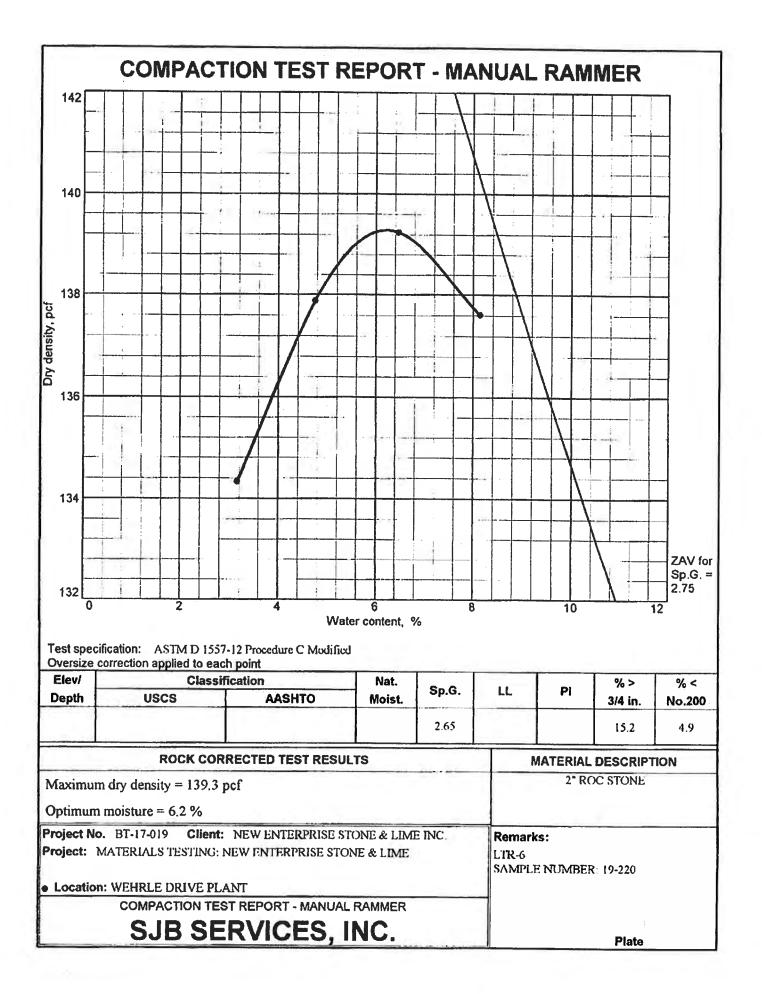
The Crushed Limestone Subbase material to be supplied to the above referenced project was extracted, crushed, and screened at our Lancaster, NY facility. The material is produced from a virgin stone source, un-impacted by hazardous materials or contaminants and free of loam, organic matter including clay. The Quarry is a NYSDOT approved source; the source number is 5-3R.

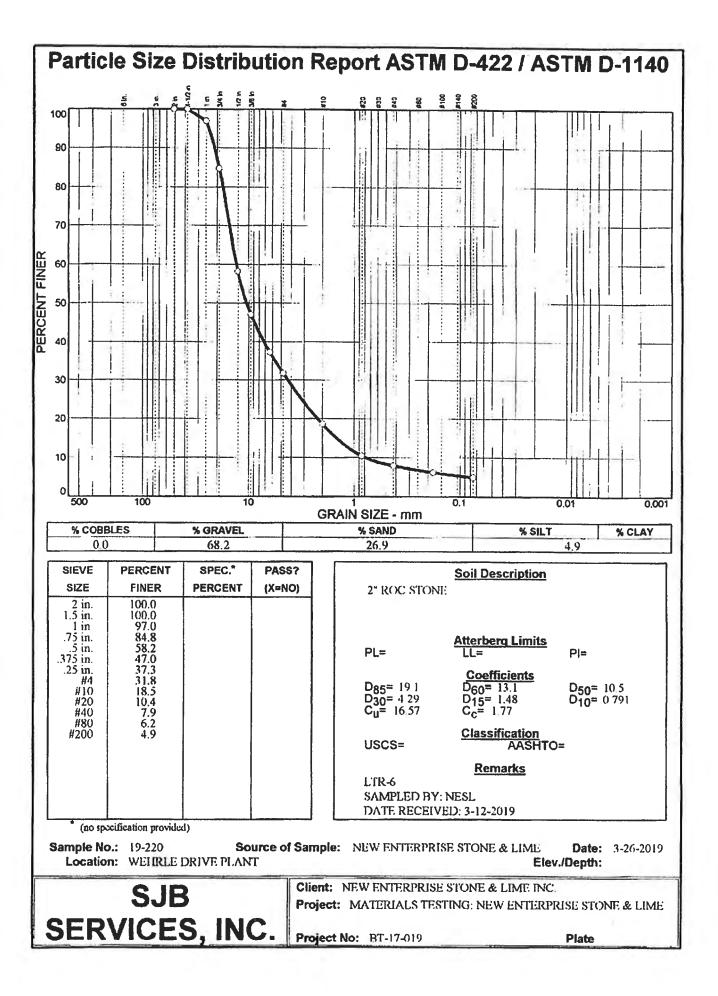
Attached, you will find a gradation test including the #80 sieve which show the percent passing to be <10%.

Sincerely,

" unt Resetants

Curt Resetarits Vice President, Sales







Western New York Office 5167 South Park Avenue Hamburg, NY 14075 Phone: (716) 649-8110 Fax: (716) 649-8051

# Laboratory Test Report

# PROJECT: Material Testing: New Enterprise Stone & Lime

CLIENT: New Enterprise Stone & Lime

**DATE:** March 30, 2018

#### PROJECT NO.: BT-17-019 REPORT NO.: LTR-4

#### **SAMPLE INFORMATION:**

Sample No. 18-315 was collected by the Client, and received at SJB Services Inc. on March 29, 2018. Sample is described as Size #1 stone material from the New Enterprise Stone & Lime Wehrle Drive Plant 23. Material is for use at the Depew School Project. The results of this report relate only to the items inspected or tested. The report shall not be reproduced, expect in full, without the written approval of SJB Services, Inc.

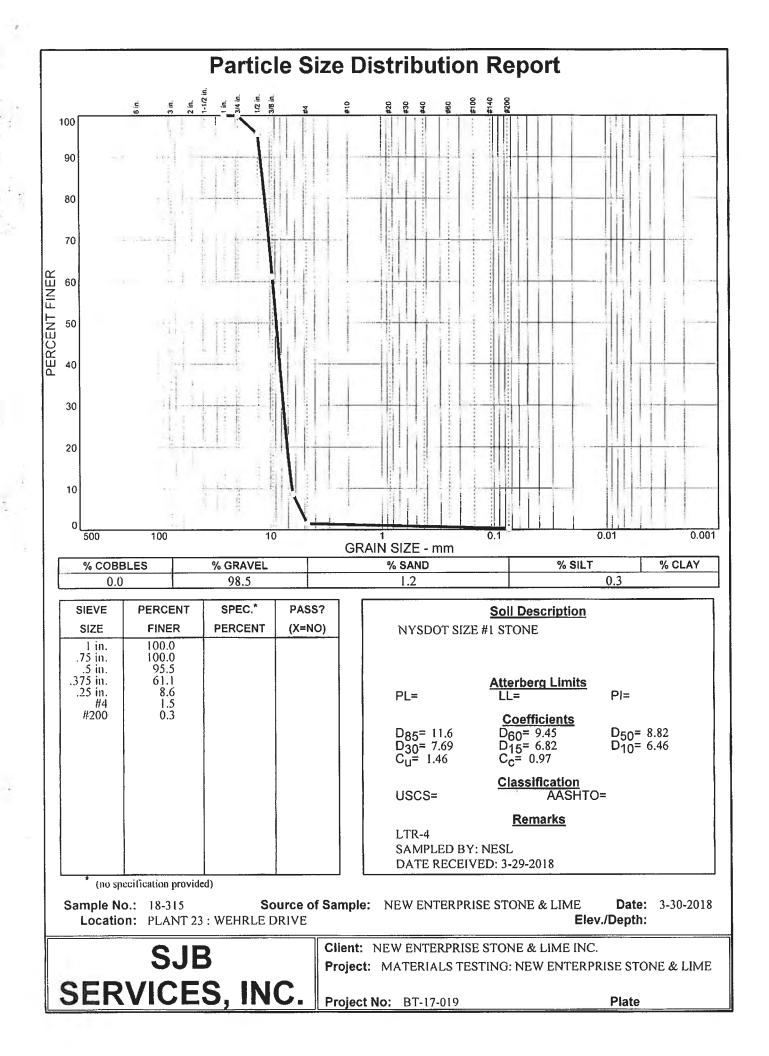
ASTM C-136: Sieve Analysis of Fine and Coarse Aggregates

Sieve Size	Percent Passing	SPECIFICATION NYSDOT Table 703-4 Size #1
1""	100.0	100 %
3/4"	100.0	
1/2"	95.5	90-100 %
<sup>3</sup> / <sub>8</sub> "	61.1	
1/4"	8.6	0-15 %
#4	1.5	
#200	0.3	0 - 1 %

SJB Services, Inc.

Paul Gregorczyk

Laboratory Manager





## <u>NEW YORK STATE</u> DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# Request to Import/Reuse Fill or Soil



\*This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.\*

# **SECTION 1 – SITE BACKGROUND**

The allowable site use is:

Have Ecological Resources been identified?

Is this soil originating from the site?

How many cubic yards of soil will be imported/reused?

If greater than 1000 cubic yards will be imported, enter volume to be imported:

# SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone?

Does it contain less than 10%, by weight, material that would pass a size 80 sieve?

Is this virgin material from a permitted mine or quarry?

Is this material recycled concrete or brick from a DEC registered processing facility?

# **SECTION 3 - SAMPLING**

Provide a brief description of the number and type of samples collected in the space below:

*Example Text:* 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.5 (other material), no chemical testing needed.

## **SECTION 3 CONT'D - SAMPLING**

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

*Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.* 

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

# **SECTION 4 – SOURCE OF FILL**

Name of person providing fill and relationship to the source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

The information provided on this form is accurate and complete.

Signature

Date

Print Name

Firm



## <u>NEW YORK STATE</u> DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# Request to Import/Reuse Fill or Soil



\*This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.\*

# **SECTION 1 – SITE BACKGROUND**

The allowable site use is:

Have Ecological Resources been identified?

Is this soil originating from the site?

How many cubic yards of soil will be imported/reused?

If greater than 1000 cubic yards will be imported, enter volume to be imported:

# SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone?

Does it contain less than 10%, by weight, material that would pass a size 80 sieve?

Is this virgin material from a permitted mine or quarry?

Is this material recycled concrete or brick from a DEC registered processing facility?

# **SECTION 3 - SAMPLING**

Provide a brief description of the number and type of samples collected in the space below:

*Example Text:* 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.5 (other material), no chemical testing needed.

## **SECTION 3 CONT'D - SAMPLING**

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

*Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.* 

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

# **SECTION 4 – SOURCE OF FILL**

Name of person providing fill and relationship to the source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

The information provided on this form is accurate and complete.

Signature

Date

Print Name

Firm

## **Brandon Quinn**

From:	Kuczka, Megan E (DEC) <megan.kuczka@dec.ny.gov></megan.kuczka@dec.ny.gov>		
Sent:	Monday, June 8, 2020 10:38 AM		
То:	Brandon Quinn; Walia, Jaspal (DEC)		
Cc:	stwsbillh@aol.com; afibillh@gmail.com; Meghan Chadsey; Gary Kriner; 'Michael Myers'; Joseph		
	Petrella		
Subject:	Re: NYSDEC Facility #C915241 - Import of Fill		

Brandon,

Jaspal and I have reviewed your request to import 2" Crusher Run Stone and #1 Stone at the Former American Linen Supply Company site (C915241) and find it acceptable for use.

Sincerely,

#### Megan Kuczka

Environmental Program Specialist 1, Division of Environmental Remediation

#### New York State Department of Environmental Conservation

270 Michigan Avenue, Buffalo, NY 14203 P: (716) 851-7220 | F: (716) 851-7226 | <u>Megan.Kuczka@dec.ny.gov</u> www.dec.ny.gov



From: Brandon Quinn <Brandon.Quinn@afienvironmental.com>
Sent: Friday, June 5, 2020 4:16 PM
To: Kuczka, Megan E (DEC) <Megan.Kuczka@dec.ny.gov>; Walia, Jaspal (DEC) <jaspal.walia@dec.ny.gov>
Cc: stwsbillh@aol.com <stwsbillh@aol.com>; afibillh@gmail.com <afibillh@gmail.com>; Meghan Chadsey
<meghan.chadsey@afienvironmental.com>; Gary Kriner <gkriner@taurcap.com>; 'Michael Myers'
<Mmyers@larkindg.com>; Joseph Petrella <joep@larkindg.com>
Subject: NYSDEC Facility #C915241 - Import of Fill

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Megan and Jaspal,

Please see the attached documents requesting the import of 2" Crusher Run Stone and #1 Stone for the parking lot and drainage repairs and upgrades at the Former American Linen Supply Company Site (#C915241) located at 822 Seneca Street in Buffalo NY. Please Let me know if you need any more information or have any questions.

**Brandon Quinn** Geologist/Project Manager

AFI Environmental PO Box 4049 Niagara Falls, NY 14304

Phone: 716-283-7645 Fax: 716-283-2858 Cell: 716-777-2729



#### <u>NEW YORK STATE</u> <u>DEPARTMENT OF ENVIRONMENTAL CONSERVATION</u>

## Request to Import/Reuse Fill or Soil



\*This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.\*

# **SECTION 1 – SITE BACKGROUND**

The allowable site use is:

Have Ecological Resources been identified?

Is this soil originating from the site?

How many cubic yards of soil will be imported/reused?

If greater than 1000 cubic yards will be imported, enter volume to be imported:

# SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone?

Does it contain less than 10%, by weight, material that would pass a size 80 sieve?

Is this virgin material from a permitted mine or quarry?

Is this material recycled concrete or brick from a DEC registered processing facility?

# **SECTION 3 - SAMPLING**

Provide a brief description of the number and type of samples collected in the space below:

*Example Text:* 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.5 (other material), no chemical testing needed.

#### **SECTION 3 CONT'D - SAMPLING**

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

*Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.* 

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

# **SECTION 4 – SOURCE OF FILL**

Name of person providing fill and relationship to the source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

The information provided on this form is accurate and complete.

Signature

Date

Print Name

Firm

### **Brandon Quinn**

From:	Kuczka, Megan E (DEC) <megan.kuczka@dec.ny.gov></megan.kuczka@dec.ny.gov>
Sent:	Tuesday, July 7, 2020 9:22 AM
То:	Brandon Quinn; Walia, Jaspal (DEC)
Subject:	Re: Former American Linen Supply Company Facility (C915241) Request to Import Fill

Brandon,

I have reviewed and hereby accept your request to import 50-100 cubic yards of topsoil to the Former American Linen Supply Company Facility.

Sincerely,

#### Megan Kuczka

Environmental Program Specialist 1, Division of Environmental Remediation

#### New York State Department of Environmental Conservation

270 Michigan Avenue, Buffalo, NY 14203 P: (716) 851-7220 | F: (716) 851-7226 | Megan.Kuczka@dec.ny.gov

www.dec.ny.gov

_		
×	10.0	

From: Kuczka, Megan E (DEC) <Megan.Kuczka@dec.ny.gov>
Sent: Monday, July 6, 2020 3:08 PM
To: brandon.quinn@afienvironmental.com <brandon.quinn@afienvironmental.com>; Walia, Jaspal (DEC)
<jaspal.walia@dec.ny.gov>
Subject: Re: Former American Linen Supply Company Facility (C915241) Request to Import Fill

Brandon,

Thank you for submitting the Request to Import Form. I will review and reach out with any questions.

Sincerely,

#### Megan Kuczka

Environmental Program Specialist 1, Division of Environmental Remediation

New York State Department of Environmental Conservation 270 Michigan Avenue, Buffalo, NY 14203 P: (716) 851-7220 | F: (716) 851-7226 | Megan.Kuczka@dec.ny.gov

### **Brandon Quinn**

From:	Kuczka, Megan E (DEC) <megan.kuczka@dec.ny.gov></megan.kuczka@dec.ny.gov>
Sent:	Friday, February 26, 2021 8:45 AM
То:	Brandon Quinn
Subject:	Re: Former American Linen Supply Company Facility

Brandon -

The topsoil is acceptable for use at the Former American Linen Supply site. In the future, please make sure to submit the Import Request Form and Data prior to bringing any materials onsite.

I hope craziness calms down for you soon.

Sincerely,

Megan Kuczka

Environmental Program Specialist 1, Division of Environmental Remediation

#### New York State Department of Environmental Conservation

From: Brandon Quinn <Brandon.Quinn@afienvironmental.com>
Sent: Monday, July 6, 2020 11:12 AM
To: Kuczka, Megan E (DEC) <Megan.Kuczka@dec.ny.gov>; Walia, Jaspal (DEC) <jaspal.walia@dec.ny.gov>
Subject: Former American Linen Supply Company Facility (C915241) Request to Import Fill

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Megan and Jaspal,

Please see the attached documentation and Request to Import up to 100 Cubic Yards of topsoil at the Former American Linen Supply Company Facility (#C915241). The soil sample results do not show any exceedances of DER-10 Unrestricted Use allowable constituent levels for imported fill or soil. Please let me know if this soil is acceptable for import to the site. I attached the Laboratory Results as well as a comparison table.

Thank you,

**Brandon Quinn** Geologist/Project Manager AFI Project Number: I20B-Larkin Development AmeriPride Site

AFI Environmental PO Box 4049 Niagara Falls, NY 14304

Phone: 716-283-7645 Fax: 716-283-2858 Cell: 716-777-2729



#### <u>NEW YORK STATE</u> <u>DEPARTMENT OF ENVIRONMENTAL CONSERVATION</u>

## Request to Import/Reuse Fill or Soil



\*This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.\*

# **SECTION 1 – SITE BACKGROUND**

The allowable site use is:

Have Ecological Resources been identified?

Is this soil originating from the site?

How many cubic yards of soil will be imported/reused?

If greater than 1000 cubic yards will be imported, enter volume to be imported:

# SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone?

Does it contain less than 10%, by weight, material that would pass a size 80 sieve?

Is this virgin material from a permitted mine or quarry?

Is this material recycled concrete or brick from a DEC registered processing facility?

# **SECTION 3 - SAMPLING**

Provide a brief description of the number and type of samples collected in the space below:

*Example Text:* 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.5 (other material), no chemical testing needed.

#### **SECTION 3 CONT'D - SAMPLING**

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

*Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.* 

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

# **SECTION 4 – SOURCE OF FILL**

Name of person providing fill and relationship to the source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

The information provided on this form is accurate and complete.

Signature

Date

Print Name

Firm

### **Brandon Quinn**

From:	Kuczka, Megan E (DEC) <megan.kuczka@dec.ny.gov></megan.kuczka@dec.ny.gov>
Sent:	Friday, February 26, 2021 8:45 AM
То:	Brandon Quinn
Subject:	Re: Former American Linen Supply Company Facility

Brandon -

The topsoil is acceptable for use at the Former American Linen Supply site. In the future, please make sure to submit the Import Request Form and Data prior to bringing any materials onsite.

I hope craziness calms down for you soon.

Sincerely,

Megan Kuczka

Environmental Program Specialist 1, Division of Environmental Remediation

#### New York State Department of Environmental Conservation

# Appendix D

Exported Fill Documentation: Waste Characterization Analytics, Contained-In determinations, Waste Disposal Tickets Waste Characterization Laboratory Reports



Client:	AFI Environmental					
Project Reference:	I20B-Larkin Development A	20B-Larkin Development Ameripride Site				
Sample Identifier:	Ameripride Trench 1 2020	00728				
Lab Sample ID:	203531-01		Date Sampled:	7/28/2020		
Matrix:	Soil		Date Received:	7/30/2020		
<u>Ignitability</u>						
<u>Analyte</u>	Result	<u>Units</u>	<b>Qualifier</b>	<b>Date Analyzed</b>		
Ignitability	No Burn	mm / sec		7/31/2020		

Method Reference(s): EPA 1030



Client:	<u>AFI Env</u>	vironmental			
Project Reference:	I20B-La	rkin Developmen	t Ameripride Sit	e	
Sample Identifier:	Ameri	pride Trench 1 20	200728		
Lab Sample ID:	20353	1-01		Date Sampled:	7/28/2020
Matrix:	Soil			Date Received:	7/30/2020
RCRA Metals (IC	<u>P)</u>				
Analyte		Result	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
Arsenic		8.09	mg/Kg		8/3/2020 18:17
Barium		99.2	mg/Kg		8/3/2020 18:17
Cadmium		3.74	mg/Kg		8/3/2020 18:17
Chromium		14.2	mg/Kg		8/3/2020 18:17
Lead		98.4	mg/Kg		8/3/2020 18:17
Selenium		< 5.40	mg/Kg		8/4/2020 17:30
Silver		0.567	mg/Kg		8/4/2020 17:16
Method Refere	ence(s):	EPA 6010C EPA 3050B			
Preparation D Data File:	ate:	7/31/2020 200803B			



Client:	AFI Environn	<u>nental</u>					
Project Reference:	I20B-Larkin Development Ameripride Site						
Sample Identifier:	Ameripride	French 1 2	0200728				
Lab Sample ID:	203531-01			Dat	te Sampled:	7/28/2020	
Matrix:	Soil			Dat	te Received:	7/30/2020	
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		<b>Qualifier</b>	Date Analy	vzed
PCB-1016		< 0.0295	mg/Kg			7/31/2020	02:14
PCB-1221		< 0.0295	mg/Kg			7/31/2020	02:14
PCB-1232		< 0.0295	mg/Kg			7/31/2020	02:14
PCB-1242		< 0.0295	mg/Kg			7/31/2020	02:14
PCB-1248		< 0.0295	mg/Kg			7/31/2020	02:14
PCB-1254		< 0.0295	mg/Kg			7/31/2020	02:14
PCB-1260		< 0.0295	mg/Kg			7/31/2020	02:14
PCB-1262		< 0.0295	mg/Kg			7/31/2020	02:14
PCB-1268		< 0.0295	mg/Kg			7/31/2020	02:14
<b>Surrogate</b>		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene			67.7	17.8 - 74		7/31/2020	02:14
Method Referen							
Preparation Da	EPA 354 te: 7/30/20						



Client:	AFI Environmental		
Project Reference:	I20B-Larkin Development Ameripride Site		
Sample Identifier:	Ameripride Trench 1 20200728		
Lab Sample ID:	203531-01	Date Sampled:	7/28/2020
Matrix:	Soil	Date Received:	7/30/2020

## Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 300	ug/Kg		7/31/2020 01:38
1,2,4,5-Tetrachlorobenzene	< 300	ug/Kg		7/31/2020 01:38
1,2,4-Trichlorobenzene	< 300	ug/Kg		7/31/2020 01:38
1,2-Dichlorobenzene	< 300	ug/Kg		7/31/2020 01:38
1,3-Dichlorobenzene	< 300	ug/Kg		7/31/2020 01:38
1,4-Dichlorobenzene	< 300	ug/Kg		7/31/2020 01:38
2,2-Oxybis (1-chloropropane)	< 300	ug/Kg		7/31/2020 01:38
2,3,4,6-Tetrachlorophenol	< 300	ug/Kg		7/31/2020 01:38
2,4,5-Trichlorophenol	< 300	ug/Kg		7/31/2020 01:38
2,4,6-Trichlorophenol	< 300	ug/Kg		7/31/2020 01:38
2,4-Dichlorophenol	< 300	ug/Kg		7/31/2020 01:38
2,4-Dimethylphenol	< 300	ug/Kg		7/31/2020 01:38
2,4-Dinitrophenol	< 1200	ug/Kg		7/31/2020 01:38
2,4-Dinitrotoluene	< 300	ug/Kg		7/31/2020 01:38
2,6-Dinitrotoluene	< 300	ug/Kg		7/31/2020 01:38
2-Chloronaphthalene	< 300	ug/Kg		7/31/2020 01:38
2-Chlorophenol	< 300	ug/Kg		7/31/2020 01:38
2-Methylnapthalene	286	ug/Kg	J	7/31/2020 01:38
2-Methylphenol	< 300	ug/Kg		7/31/2020 01:38
2-Nitroaniline	< 300	ug/Kg		7/31/2020 01:38
2-Nitrophenol	< 300	ug/Kg		7/31/2020 01:38
3&4-Methylphenol	< 300	ug/Kg		7/31/2020 01:38
3,3'-Dichlorobenzidine	< 300	ug/Kg		7/31/2020 01:38



					200001
Client:	<u>AFI Envir</u>	<u>onmental</u>			
Project Reference:	I20B-Lark	in Developmeı	nt Ameripride Sit	te	
Sample Identifier:	Ameripri	de Trench 1 20	0200728		
Lab Sample ID:	203531-0	01		Date Sampled:	7/28/2020
Matrix:	Soil			Date Received:	7/30/2020
3-Nitroaniline		< 300	ug/Kg		7/31/2020 01:38
4,6-Dinitro-2-methyl	phenol	< 599	ug/Kg		7/31/2020 01:38
4-Bromophenyl pher	ıyl ether	< 300	ug/Kg		7/31/2020 01:38
4-Chloro-3-methylph	nenol	< 300	ug/Kg		7/31/2020 01:38
4-Chloroaniline		< 300	ug/Kg		7/31/2020 01:38
4-Chlorophenyl phen	ıyl ether	< 300	ug/Kg		7/31/2020 01:38
4-Nitroaniline		< 300	ug/Kg		7/31/2020 01:38
4-Nitrophenol		< 300	ug/Kg		7/31/2020 01:38
Acenaphthene		807	ug/Kg		7/31/2020 01:38
Acenaphthylene		202	ug/Kg	J	7/31/2020 01:38
Acetophenone		< 300	ug/Kg		7/31/2020 01:38
Anthracene		1770	ug/Kg		7/31/2020 01:38
Atrazine		< 300	ug/Kg		7/31/2020 01:38
Benzaldehyde		< 300	ug/Kg		7/31/2020 01:38
Benzo (a) anthracene	e	3110	ug/Kg		7/31/2020 01:38
Benzo (a) pyrene		2630	ug/Kg		7/31/2020 01:38
Benzo (b) fluoranthe	ne	2570	ug/Kg		7/31/2020 01:38
Benzo (g,h,i) perylen	e	1380	ug/Kg		7/31/2020 01:38
Benzo (k) fluoranthe	ne	1950	ug/Kg		7/31/2020 01:38
Bis (2-chloroethoxy)	methane	< 300	ug/Kg		7/31/2020 01:38
Bis (2-chloroethyl) e	ther	< 300	ug/Kg		7/31/2020 01:38
Bis (2-ethylhexyl) ph	ithalate	< 300	ug/Kg		7/31/2020 01:38
Butylbenzylphthalate	е	< 300	ug/Kg		7/31/2020 01:38
Caprolactam		< 300	ug/Kg		7/31/2020 01:38
Carbazole		800	ug/Kg		7/31/2020 01:38



				· · · · · · · · · · · · · · · · · · ·		
Client:	AFI Environ	<u>mental</u>				
Project Reference:	I20B-Larkin	Developmer	t Ameripride Site			
Sample Identifier:	Ameripride	Trench 1 20	200728			
Lab Sample ID:	203531-01			Date Sampled:	7/28/2020	
Matrix:	Soil			Date Received:	7/30/2020	
Chrysene		2850	ug/Kg		7/31/2020 0	)1:38
Dibenz (a,h) anthracene	9	565	ug/Kg		7/31/2020 0	)1:38
Dibenzofuran		735	ug/Kg		7/31/2020 0	)1:38
Diethyl phthalate		< 300	ug/Kg		7/31/2020 0	)1:38
Dimethyl phthalate		< 300	ug/Kg		7/31/2020 0	)1:38
Di-n-butyl phthalate		< 300	ug/Kg		7/31/2020 0	)1:38
Di-n-octylphthalate		< 300	ug/Kg		7/31/2020 0	01:38
Fluoranthene		6780	ug/Kg		7/31/2020 0	01:38
Fluorene		1080	ug/Kg		7/31/2020 0	01:38
Hexachlorobenzene		< 300	ug/Kg		7/31/2020 0	)1:38
Hexachlorobutadiene		< 300	ug/Kg		7/31/2020 0	)1:38
Hexachlorocyclopentad	liene	< 1200	ug/Kg		7/31/2020 0	)1:38
Hexachloroethane		< 300	ug/Kg		7/31/2020 0	)1:38
Indeno (1,2,3-cd) pyren	ie	1360	ug/Kg		7/31/2020 0	)1:38
Isophorone		< 300	ug/Kg		7/31/2020 0	)1:38
Naphthalene		409	ug/Kg		7/31/2020 0	)1:38
Nitrobenzene		< 300	ug/Kg		7/31/2020 0	)1:38
N-Nitroso-di-n-propyla	mine	< 300	ug/Kg		7/31/2020 0	)1:38
N-Nitrosodiphenylamin	ie	< 300	ug/Kg		7/31/2020 0	)1:38
Pentachlorophenol		< 599	ug/Kg		7/31/2020 0	)1:38
Phenanthrene		6120	ug/Kg		7/31/2020 0	)1:38
Phenol		< 300	ug/Kg		7/31/2020 0	)1:38
Pyrene		5520	ug/Kg		7/31/2020 0	)1:38



Client:	AFI Environmen	tal						
Project Reference:	I20B-Larkin Deve	lopment Ameripride	e Site					
Sample Identifier:	Ameripride Tren	Ameripride Trench 1 20200728						
Lab Sample ID:	203531-01		Date	e Sampled:	7/28/2020			
Matrix:	Soil		Date	e Received:	7/30/2020			
<u>Surrogate</u>		Percent Recovery	Limits	<u>Outliers</u>	Date Analy	zed		
2,4,6-Tribromophenol		63.6	37.8 - 85.8		7/31/2020	01:38		
2-Fluorobiphenyl		61.6	40.4 - 80.4		7/31/2020	01:38		
2-Fluorophenol		58.9	38.8 - 77.4		7/31/2020	01:38		
Nitrobenzene-d5		58.1	37.4 - 75.9		7/31/2020	01:38		
Phenol-d5		62.9	40.4 - 78		7/31/2020	01:38		
Terphenyl-d14		66.1	40.2 - 90		7/31/2020	01:38		
Method Referen Preparation Dat Data File:	EPA 3546							



Client:	AFI Environn	nental			
Project Reference:	I20B-Larkin D	evelopment	t Ameripride Site		
Sample Identifier: Lab Sample ID: Matrix:	Ameripride 7 203531-01 Soil	French 1 20	200728	Date Sampled: Date Received:	7/28/2020 7/30/2020
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
1,1,1-Trichloroethane		< 4.09	ug/Kg		8/3/2020 20:55
1,1,2,2-Tetrachloroeth	ane	< 4.09	ug/Kg		8/3/2020 20:55
1,1,2-Trichloroethane		< 4.09	ug/Kg		8/3/2020 20:55
1,1-Dichloroethane		< 4.09	ug/Kg		8/3/2020 20:55
1,1-Dichloroethene		< 4.09	ug/Kg		8/3/2020 20:55
1,2,3-Trichlorobenzen	e	< 10.2	ug/Kg		8/3/2020 20:55
1,2,4-Trichlorobenzen	e	< 10.2	ug/Kg		8/3/2020 20:55
1,2-Dibromo-3-Chloro	propane	< 20.4	ug/Kg		8/3/2020 20:55
1,2-Dibromoethane		< 4.09	ug/Kg		8/3/2020 20:55
1,2-Dichlorobenzene		< 4.09	ug/Kg		8/3/2020 20:55
1,2-Dichloroethane		< 4.09	ug/Kg		8/3/2020 20:55
1,2-Dichloropropane		< 4.09	ug/Kg		8/3/2020 20:55
1,3-Dichlorobenzene		< 4.09	ug/Kg		8/3/2020 20:55
1,4-Dichlorobenzene		< 4.09	ug/Kg		8/3/2020 20:55
1,4-Dioxane		< 40.9	ug/Kg		8/3/2020 20:55
2-Butanone		< 20.4	ug/Kg		8/3/2020 20:55
2-Hexanone		< 10.2	ug/Kg		8/3/2020 20:55
4-Methyl-2-pentanone		< 10.2	ug/Kg		8/3/2020 20:55
Acetone		< 20.4	ug/Kg		8/3/2020 20:55
Benzene		< 4.09	ug/Kg		8/3/2020 20:55
Bromochloromethane		< 10.2	ug/Kg		8/3/2020 20:55
Bromodichloromethar	ie	< 4.09	ug/Kg		8/3/2020 20:55
Bromoform		< 10.2	ug/Kg		8/3/2020 20:55



			Lub I I oject i Di	200001
Client:	<u>AFI Environmental</u>			
Project Reference:	I20B-Larkin Developmer	nt Ameripride Sit	e	
Sample Identifier:	Ameripride Trench 1 20	)200728		
Lab Sample ID:	203531-01		Date Sampled:	7/28/2020
Matrix:	Soil		Date Received:	7/30/2020
Bromomethane	< 4.09	ug/Kg		8/3/2020 20:55
Carbon disulfide	< 4.09	ug/Kg		8/3/2020 20:55
Carbon Tetrachloride	< 4.09	ug/Kg		8/3/2020 20:55
Chlorobenzene	< 4.09	ug/Kg		8/3/2020 20:55
Chloroethane	< 4.09	ug/Kg		8/3/2020 20:55
Chloroform	< 4.09	ug/Kg		8/3/2020 20:55
Chloromethane	< 4.09	ug/Kg		8/3/2020 20:55
cis-1,2-Dichloroethene	< 4.09	ug/Kg		8/3/2020 20:55
cis-1,3-Dichloropropene	e < 4.09	ug/Kg		8/3/2020 20:55
Cyclohexane	< 20.4	ug/Kg		8/3/2020 20:55
Dibromochloromethane	e < 4.09	ug/Kg		8/3/2020 20:55
Dichlorodifluoromethar	ne < 4.09	ug/Kg		8/3/2020 20:55
Ethylbenzene	< 4.09	ug/Kg		8/3/2020 20:55
Freon 113	< 4.09	ug/Kg		8/3/2020 20:55
Isopropylbenzene	< 4.09	ug/Kg		8/3/2020 20:55
m,p-Xylene	< 4.09	ug/Kg		8/3/2020 20:55
Methyl acetate	< 4.09	ug/Kg		8/3/2020 20:55
Methyl tert-butyl Ether	< 4.09	ug/Kg		8/3/2020 20:55
Methylcyclohexane	< 4.09	ug/Kg		8/3/2020 20:55
Methylene chloride	< 10.2	ug/Kg		8/3/2020 20:55
o-Xylene	< 4.09	ug/Kg		8/3/2020 20:55
Styrene	< 10.2	ug/Kg		8/3/2020 20:55
Tetrachloroethene	< 4.09	ug/Kg		8/3/2020 20:55
Toluene	< 4.09	ug/Kg		8/3/2020 20:55
trans-1,2-Dichloroethen	ne < 4.09	ug/Kg		8/3/2020 20:55



Client:	AFI Environmental						
Project Reference:	ce: I20B-Larkin Development Ameripride Site						
Sample Identifier:	Ameripride	French 1	20200728				
Lab Sample ID:	203531-01			Date	e Sampled:	7/28/2020	
Matrix:	Soil			Date	e Received:	7/30/2020	
trans-1,3-Dichloropro	pene	< 4.09	ug/Kg			8/3/2020	20:55
Trichloroethene		< 4.09	ug/Kg			8/3/2020	20:55
Trichlorofluorometha	ne	< 4.09	ug/Kg			8/3/2020	20:55
Vinyl chloride		< 4.09	ug/Kg			8/3/2020	20:55
<u>Surrogate</u>		Pe	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	<u>zed</u>
1,2-Dichloroethane-d4	Ļ		102	75 - 134		8/3/2020	20:55
4-Bromofluorobenzen	e		65.0	59.5 - 129		8/3/2020	20:55
Pentafluorobenzene			98.9	88.8 - 118		8/3/2020	20:55
Toluene-D8			83.7	84 - 114	*	8/3/2020	20:55
Internal standard	outliers indicate proba	ble matrix in	terference				

Internal standard outliers indicate probable matrix interference
Method Reference(s): EPA 8260C

Ŀ

Data File:

EPA 5035A - L x72233.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.



Client:	AFI Environn	<u>nental</u>			
Project Reference:	I20B-Larkin D	evelopment	t Ameripride Site		
Sample Identifier:	Ameripride	French 1 202	200728		
Lab Sample ID:	203531-01			Date Sampled:	7/28/2020
Matrix:	Soil			Date Received:	7/30/2020
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
Percent Solids		87.4	%		8/3/2020
Method Referen	ce(s): Par%M				

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:	AFI Environmental		
Project Reference:	I20B-Larkin Development Ameripride Site		
Sample Identifier:	Ameripride Trench 1 20200728		
Lab Sample ID:	203531-01A	Date Sampled:	7/28/2020
Matrix:	TCLP Extract	Date Received:	7/30/2020

### **TCLP Semi-Volatile Organics**

Analyte	Result	<u>Units</u>	Regulatory Limit	<u>Qualifier</u>	Date Anal	yzed
1,4-Dichlorobenzene	< 40.0	ug/L	7500		8/3/2020	16:39
2,4,5-Trichlorophenol	< 40.0	ug/L	400000		8/3/2020	16:39
2,4,6-Trichlorophenol	< 40.0	ug/L	2000		8/3/2020	16:39
2,4-Dinitrotoluene	< 40.0	ug/L	130		8/3/2020	16:39
Cresols (as m,p,o-Cresol)	< 80.0	ug/L	200000		8/3/2020	16:39
Hexachlorobenzene	< 40.0	ug/L	130		8/3/2020	16:39
Hexachlorobutadiene	< 40.0	ug/L	500		8/3/2020	16:39
Hexachloroethane	< 40.0	ug/L	3000		8/3/2020	16:39
Nitrobenzene	< 40.0	ug/L	2000		8/3/2020	16:39
Pentachlorophenol	< 80.0	ug/L	100000		8/3/2020	16:39
Pyridine	< 40.0	ug/L	5000		8/3/2020	16:39
<u>Surrogate</u>	Perce	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		95.5	53.8 - 116		8/3/2020	16:39
2-Fluorobiphenyl		81.8	36.5 - 95.3		8/3/2020	16:39
2-Fluorophenol		72.9	11.1 - 99.3		8/3/2020	16:39
Nitrobenzene-d5		82.1	49.4 - 100		8/3/2020	16:39
Phenol-d5		73.3	10 - 103		8/3/2020	16:39
Terphenyl-d14		89.8	54.3 - 109		8/3/2020	16:39
Method Reference(s):	EPA 8270D					
Preparation Date: Data File:	EPA 1311 / 3510C 8/3/2020 B48334.D					



Client:	AFI Environm	<u>ental</u>					
Project Reference:	I20B-Larkin De	evelopme	ent Ameriprid	e Site			
Sample Identifier:	Ameripride T	rench 1 2	20200728				
Lab Sample ID:	203531-01A			Date S	Sampled:	7/28/2020	
Matrix:	TCLP Extract			Date	Received:	7/30/2020	
TCLP Pesticides							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	<b>Regulatory Limit</b>	<u>Qualifier</u>	Date Analy	yzed
Chlordane		< 2.00	ug/L	30		7/31/2020	17:56
Endrin		< 1.00	ug/L	20		7/31/2020	17:56
gamma-BHC (Lindane)	)	< 1.00	ug/L	400		7/31/2020	17:56
Heptachlor		< 1.00	ug/L	8		7/31/2020	17:56
Heptachlor Epoxide		< 2.00	ug/L	8		7/31/2020	17:56
Methoxychlor		< 1.00	ug/L	10000		7/31/2020	17:56
Toxaphene		< 20.0	ug/L	500		7/31/2020	17:56
<u>Surrogate</u>		Per	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Decachlorobiphenyl (1	.)		74.7	19.3 - 157		7/31/2020	17:56
Tetrachloro-m-xylene	(1)		66.2	33.3 - 107		7/31/2020	17:56
Method Referen	ce(s): EPA 8081	В					

Preparation Date:

EPA 1311 / 3510C 7/31/2020



Client:	AFI Environmental			
Project Reference:	I20B-Larkin Development	Ameripric	le Site	
Sample Identifier:	Ameripride Trench 1 202	200728		
Lab Sample ID:	203531-01A		Date Sampled:	7/28/2020
Matrix:	TCLP Extract		Date Received:	7/30/2020
TCLP RCRA Metal	<u>s (ICP)</u>			
<u>Analyte</u>	Result	<u>Units</u>	Regulatory Limit Qualifier	Date Analyzed
Arsenic	< 0.500	mg/L	5	7/31/2020 13:44
Barium	0.777	mg/L	100	7/31/2020 13:44
Cadmium	< 0.0250	mg/L	1	7/31/2020 13:44
Chromium	< 0.500	mg/L	5	7/31/2020 13:44
Lead	< 0.500	mg/L	5	7/31/2020 13:44
Selenium	< 0.200	mg/L	1	7/31/2020 13:44
Silver	< 0.500	mg/L	5	7/31/2020 13:44

Method Reference(s):	EPA 6010C
	EPA 1311 / 3005A
Preparation Date:	7/31/2020
Data File:	200731C



Client:	AFI Environme	<u>ental</u>					
Project Reference:	I20B-Larkin Dev	velopm	ient Ameriprid	e Site			
Sample Identifier:	Ameripride Tr	ench 1	20200728				
Lab Sample ID:	203531-01A			Date S	Sampled:	7/28/2020	
Matrix:	TCLP Extract			Date I	Received:	7/30/2020	
TCLP Volatile Orge	<u>anics</u>						
<u>Analyte</u>		Result	t <u>Units</u>	<b>Regulatory Limit</b>	<u>Qualifier</u>	Date Anal	yzed
1,1-Dichloroethene	•	< 20.0	ug/L	700		8/4/2020	14:25
1,2-Dichloroethane		< 20.0	ug/L	500		8/4/2020	14:25
2-Butanone	•	< 100	ug/L	200000		8/4/2020	14:25
Benzene	•	< 20.0	ug/L	500		8/4/2020	14:25
Carbon Tetrachloride		< 20.0	ug/L	500		8/4/2020	14:25
Chlorobenzene	•	< 20.0	ug/L	100000		8/4/2020	14:25
Chloroform	•	< 20.0	ug/L	6000		8/4/2020	14:25
Tetrachloroethene	•	< 20.0	ug/L	700		8/4/2020	14:25
Trichloroethene	•	< 20.0	ug/L	500		8/4/2020	14:25
Vinyl chloride	•	< 20.0	ug/L	200		8/4/2020	14:25
<u>Surrogate</u>		Pe	rcent Recovery	<b>Limits</b>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4			99.8	70.9 - 139		8/4/2020	14:25
4-Bromofluorobenzene	9		69.0	59.5 - 129		8/4/2020	14:25
Pentafluorobenzene			101	89.3 - 117		8/4/2020	14:25
Toluene-D8			86.9	82.9 - 115		8/4/2020	14:25
Method Reference							
Data File:	EPA 1311 / x72246.D	/ 5030C					



Client:	AFI Environmental				
Project Reference:	I20B-Larkin Development A	meripride Site			
Sample Identifier:	Ameripride Trench 2 20200728				
Lab Sample ID:	203531-02		Date Sampled:	7/28/2020	
Matrix:	Soil		Date Received:	7/30/2020	
<u>Ignitability</u>					
<u>Analyte</u>	Result	<u>Units</u>	<u>Qualifier</u>	<b>Date Analyzed</b>	
Ignitability	No Burn	mm / sec		7/31/2020	

Method Reference(s): EPA 1030



Client:	AFI Env	<u>ironmental</u>			
Project Reference:	I20B-La	rkin Development	Ameripride Sit	e	
Sample Identifier:	Amerip	oride Trench 2 202	200728		
Lab Sample ID:	203531	-02		Date Sampled:	7/28/2020
Matrix:	Soil			Date Received:	7/30/2020
RCRA Metals (ICF	2)				
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
Arsenic		7.24	mg/Kg		8/3/2020 18:21
Barium		80.2	mg/Kg		8/3/2020 18:21
Cadmium		1.82	mg/Kg		8/3/2020 18:21
Chromium		16.7	mg/Kg		8/3/2020 18:21
Lead		142	mg/Kg		8/3/2020 18:21
Selenium		< 11.4	mg/Kg		8/4/2020 17:35
Silver		0.288	mg/Kg	J	8/3/2020 18:21
Method Refere		EPA 6010C EPA 3050B			
Preparation Da Data File:	ate:	7/31/2020 200803B			



Client:	AFI Environn	<u>iental</u>					
Project Reference:	I20B-Larkin D	evelopme	ent Ameriprido	e Site			
Sample Identifier:	Ameripride T	French 2 2	0200728				
Lab Sample ID:	203531-02			Dat	e Sampled:	7/28/2020	
Matrix:	Soil			Dat	e Received:	7/30/2020	
<u>PCBs</u>							
<u>Analyte</u>		<u>Result</u>	<u>Units</u>		<b>Qualifier</b>	Date Analy	vzed
PCB-1016		< 0.0315	mg/Kg			7/31/2020	02:38
PCB-1221		< 0.0315	mg/Kg			7/31/2020	02:38
PCB-1232		< 0.0315	mg/Kg			7/31/2020	02:38
PCB-1242		< 0.0315	mg/Kg			7/31/2020	02:38
PCB-1248		< 0.0315	mg/Kg			7/31/2020	02:38
PCB-1254		0.0503	mg/Kg			7/31/2020	02:38
PCB-1260		< 0.0315	mg/Kg			7/31/2020	02:38
PCB-1262		< 0.0315	mg/Kg			7/31/2020	02:38
PCB-1268		< 0.0315	mg/Kg			7/31/2020	02:38
<b>Surrogate</b>		Perc	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
Tetrachloro-m-xylene			48.0	17.8 - 74		7/31/2020	02:38
Method Referen	nce(s): EPA 808 EPA 354						
Preparation Dat	te: 7/30/20	20					



Client:	AFI Environmental		
Project Reference:	I20B-Larkin Development Ameripride Site		
Sample Identifier:	Ameripride Trench 2 20200728		
Lab Sample ID:	203531-02	Date Sampled:	7/28/2020
Matrix:	Soil	Date Received:	7/30/2020

## Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 603	ug/Kg		7/31/2020 18:34
1,2,4,5-Tetrachlorobenzene	< 603	ug/Kg		7/31/2020 18:34
1,2,4-Trichlorobenzene	< 603	ug/Kg		7/31/2020 18:34
1,2-Dichlorobenzene	< 603	ug/Kg		7/31/2020 18:34
1,3-Dichlorobenzene	< 603	ug/Kg		7/31/2020 18:34
1,4-Dichlorobenzene	< 603	ug/Kg		7/31/2020 18:34
2,2-Oxybis (1-chloropropane)	< 603	ug/Kg		7/31/2020 18:34
2,3,4,6-Tetrachlorophenol	< 603	ug/Kg		7/31/2020 18:34
2,4,5-Trichlorophenol	< 603	ug/Kg		7/31/2020 18:34
2,4,6-Trichlorophenol	< 603	ug/Kg		7/31/2020 18:34
2,4-Dichlorophenol	< 603	ug/Kg		7/31/2020 18:34
2,4-Dimethylphenol	< 603	ug/Kg		7/31/2020 18:34
2,4-Dinitrophenol	< 2410	ug/Kg		7/31/2020 18:34
2,4-Dinitrotoluene	< 603	ug/Kg		7/31/2020 18:34
2,6-Dinitrotoluene	< 603	ug/Kg		7/31/2020 18:34
2-Chloronaphthalene	< 603	ug/Kg		7/31/2020 18:34
2-Chlorophenol	< 603	ug/Kg		7/31/2020 18:34
2-Methylnapthalene	< 603	ug/Kg		7/31/2020 18:34
2-Methylphenol	< 603	ug/Kg		7/31/2020 18:34
2-Nitroaniline	< 603	ug/Kg		7/31/2020 18:34
2-Nitrophenol	< 603	ug/Kg		7/31/2020 18:34
3&4-Methylphenol	< 603	ug/Kg		7/31/2020 18:34
3,3'-Dichlorobenzidine	< 603	ug/Kg		7/31/2020 18:34



Client:	<u>AFI Envir</u>	onmental			
Project Reference:	I20B-Lark	in Developmen	t Ameripride Sit	te	
Sample Identifier:	Ameripr	ide Trench 2 20	200728		
Lab Sample ID:	203531-	02		Date Sampled:	7/28/2020
Matrix:	Soil			Date Received:	7/30/2020
3-Nitroaniline		< 603	ug/Kg		7/31/2020 18:3
4,6-Dinitro-2-methyl	phenol	< 1210	ug/Kg		7/31/2020 18:3
4-Bromophenyl phen	ıyl ether	< 603	ug/Kg		7/31/2020 18:3
4-Chloro-3-methylph	ienol	< 603	ug/Kg		7/31/2020 18:3
4-Chloroaniline		< 603	ug/Kg		7/31/2020 18:3
4-Chlorophenyl phen	ıyl ether	< 603	ug/Kg		7/31/2020 18:3
4-Nitroaniline		< 603	ug/Kg		7/31/2020 18:3
4-Nitrophenol		< 603	ug/Kg		7/31/2020 18:3
Acenaphthene		831	ug/Kg		7/31/2020 18:3
Acenaphthylene		< 603	ug/Kg		7/31/2020 18:34
Acetophenone		< 603	ug/Kg		7/31/2020 18:34
Anthracene		1810	ug/Kg		7/31/2020 18:3
Atrazine		< 603	ug/Kg		7/31/2020 18:34
Benzaldehyde		< 603	ug/Kg		7/31/2020 18:3
Benzo (a) anthracene	<u>e</u>	3750	ug/Kg		7/31/2020 18:3
Benzo (a) pyrene		3420	ug/Kg		7/31/2020 18:3
Benzo (b) fluoranthe	ne	3410	ug/Kg		7/31/2020 18:3
Benzo (g,h,i) perylene	e	1910	ug/Kg		7/31/2020 18:3
Benzo (k) fluoranthe	ne	2470	ug/Kg		7/31/2020 18:3
Bis (2-chloroethoxy)	methane	< 603	ug/Kg		7/31/2020 18:3
Bis (2-chloroethyl) et	ther	< 603	ug/Kg		7/31/2020 18:3
Bis (2-ethylhexyl) ph	thalate	< 603	ug/Kg		7/31/2020 18:3
Butylbenzylphthalate	e	< 603	ug/Kg		7/31/2020 18:34
Caprolactam		< 603	ug/Kg		7/31/2020 18:34
Carbazole		893	ug/Kg		7/31/2020 18:3-



				200110,000121	200001	
Client:	AFI Environ	<u>mental</u>				
Project Reference:	I20B-Larkin	Developmer	nt Ameripride Site			
Sample Identifier:	Ameripride	Trench 2 20	)200728			
Lab Sample ID:	203531-02			Date Sampled:	7/28/2020	
Matrix:	Soil			Date Received:	7/30/2020	
Chrysene		3520	ug/Kg		7/31/2020	18:34
Dibenz (a,h) anthracene	2	737	ug/Kg		7/31/2020	18:34
Dibenzofuran		751	ug/Kg		7/31/2020	18:34
Diethyl phthalate		< 603	ug/Kg		7/31/2020	18:34
Dimethyl phthalate		< 603	ug/Kg		7/31/2020	18:34
Di-n-butyl phthalate		< 603	ug/Kg		7/31/2020	18:34
Di-n-octylphthalate		< 603	ug/Kg		7/31/2020	18:34
Fluoranthene		8490	ug/Kg		7/31/2020	18:34
Fluorene		1080	ug/Kg		7/31/2020	18:34
Hexachlorobenzene		< 603	ug/Kg		7/31/2020	18:34
Hexachlorobutadiene		< 603	ug/Kg		7/31/2020	18:34
Hexachlorocyclopentad	iene	< 2410	ug/Kg		7/31/2020	18:34
Hexachloroethane		< 603	ug/Kg		7/31/2020	18:34
Indeno (1,2,3-cd) pyren	e	1840	ug/Kg		7/31/2020	18:34
Isophorone		< 603	ug/Kg		7/31/2020	18:34
Naphthalene		314	ug/Kg	J	7/31/2020	18:34
Nitrobenzene		< 603	ug/Kg		7/31/2020	18:34
N-Nitroso-di-n-propyla	mine	< 603	ug/Kg		7/31/2020	18:34
N-Nitrosodiphenylamin	e	< 603	ug/Kg		7/31/2020	18:34
Pentachlorophenol		< 1210	ug/Kg		7/31/2020	18:34
Phenanthrene		6140	ug/Kg		7/31/2020	18:34
Phenol		< 603	ug/Kg		7/31/2020	18:34
Pyrene		6650	ug/Kg		7/31/2020	18:34



Client:	<u>AFI Environment</u>	al					
Project Reference:	I20B-Larkin Development Ameripride Site						
Sample Identifier:	Ameripride Tren	Ameripride Trench 2 20200728					
Lab Sample ID:	203531-02		Date Sampled:		7/28/2020		
Matrix:	Soil		Date	e Received:	7/30/2020		
<u>Surrogate</u>		Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed	
2,4,6-Tribromophenol		43.3	37.8 - 85.8		7/31/2020	18:34	
2-Fluorobiphenyl		42.5	40.4 - 80.4		7/31/2020	18:34	
2-Fluorophenol		40.4	38.8 - 77.4		7/31/2020	18:34	
Nitrobenzene-d5		36.7	37.4 - 75.9	*	7/31/2020	18:34	
Phenol-d5		44.5	40.4 - 78		7/31/2020	18:34	
Terphenyl-d14		44.3	40.2 - 90		7/31/2020	18:34	
Method Referen Preparation Dat Data File:	EPA 3546 te: 7/30/2020						
Method Referen	EPA 3546				,,		



Client:	AFI Environn	nental			
<b>Project Reference:</b>	I20B-Larkin D	evelopmen	t Ameripride Site		
Sample Identifier: Lab Sample ID: Matrix:	Ameripride 7 203531-02 Soil	French 2 20	200728	Date Sampled: Date Received:	7/28/2020 7/30/2020
Volatile Organics					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
1,1,1-Trichloroethane		< 4.06	ug/Kg		8/3/2020 21:17
1,1,2,2-Tetrachloroeth	ane	< 4.06	ug/Kg		8/3/2020 21:17
1,1,2-Trichloroethane		< 4.06	ug/Kg		8/3/2020 21:17
1,1-Dichloroethane		< 4.06	ug/Kg		8/3/2020 21:17
1,1-Dichloroethene		< 4.06	ug/Kg		8/3/2020 21:17
1,2,3-Trichlorobenzen	e	< 10.1	ug/Kg		8/3/2020 21:17
1,2,4-Trichlorobenzen	e	< 10.1	ug/Kg		8/3/2020 21:17
1,2-Dibromo-3-Chloro	propane	< 20.3	ug/Kg		8/3/2020 21:17
1,2-Dibromoethane		< 4.06	ug/Kg		8/3/2020 21:17
1,2-Dichlorobenzene		< 4.06	ug/Kg		8/3/2020 21:17
1,2-Dichloroethane		< 4.06	ug/Kg		8/3/2020 21:17
1,2-Dichloropropane		< 4.06	ug/Kg		8/3/2020 21:17
1,3-Dichlorobenzene		< 4.06	ug/Kg		8/3/2020 21:17
1,4-Dichlorobenzene		< 4.06	ug/Kg		8/3/2020 21:17
1,4-Dioxane		< 40.6	ug/Kg		8/3/2020 21:17
2-Butanone		< 20.3	ug/Kg		8/3/2020 21:17
2-Hexanone		< 10.1	ug/Kg		8/3/2020 21:17
4-Methyl-2-pentanone	•	< 10.1	ug/Kg		8/3/2020 21:17
Acetone		< 20.3	ug/Kg		8/3/2020 21:17
Benzene		< 4.06	ug/Kg		8/3/2020 21:17
Bromochloromethane		< 10.1	ug/Kg		8/3/2020 21:17
Bromodichloromethar	ie	< 4.06	ug/Kg		8/3/2020 21:17
Bromoform		< 10.1	ug/Kg		8/3/2020 21:17



			,	
Client:	<u>AFI Environmental</u>			
Project Reference:	I20B-Larkin Developmer	nt Ameripride Sit	te	
Sample Identifier:	Ameripride Trench 2 20	)200728		
Lab Sample ID:	203531-02		Date Sampled:	7/28/2020
Matrix:	Soil		Date Received:	7/30/2020
Bromomethane	< 4.06	ug/Kg		8/3/2020 21:17
Carbon disulfide	< 4.06	ug/Kg		8/3/2020 21:17
Carbon Tetrachloride	< 4.06	ug/Kg		8/3/2020 21:17
Chlorobenzene	< 4.06	ug/Kg		8/3/2020 21:17
Chloroethane	< 4.06	ug/Kg		8/3/2020 21:17
Chloroform	< 4.06	ug/Kg		8/3/2020 21:17
Chloromethane	< 4.06	ug/Kg		8/3/2020 21:17
cis-1,2-Dichloroethene	< 4.06	ug/Kg		8/3/2020 21:17
cis-1,3-Dichloropropene	e < 4.06	ug/Kg		8/3/2020 21:17
Cyclohexane	< 20.3	ug/Kg		8/3/2020 21:17
Dibromochloromethane	e < 4.06	ug/Kg		8/3/2020 21:17
Dichlorodifluoromethar	ne < 4.06	ug/Kg		8/3/2020 21:17
Ethylbenzene	< 4.06	ug/Kg		8/3/2020 21:17
Freon 113	< 4.06	ug/Kg		8/3/2020 21:17
Isopropylbenzene	< 4.06	ug/Kg		8/3/2020 21:17
m,p-Xylene	< 4.06	ug/Kg		8/3/2020 21:17
Methyl acetate	< 4.06	ug/Kg		8/3/2020 21:17
Methyl tert-butyl Ether	< 4.06	ug/Kg		8/3/2020 21:17
Methylcyclohexane	< 4.06	ug/Kg		8/3/2020 21:17
Methylene chloride	< 10.1	ug/Kg		8/3/2020 21:17
o-Xylene	< 4.06	ug/Kg		8/3/2020 21:17
Styrene	< 10.1	ug/Kg		8/3/2020 21:17
Tetrachloroethene	< 4.06	ug/Kg		8/3/2020 21:17
Toluene	< 4.06	ug/Kg		8/3/2020 21:17
trans-1,2-Dichloroether	ne < 4.06	ug/Kg		8/3/2020 21:17



Client:	AFI Environn	nental					
Project Reference:	I20B-Larkin D	evelopn	ient Ameripride	Site			
Sample Identifier:	Ameripride	French 2	20200728				
Lab Sample ID:	203531-02			Date	e Sampled:	7/28/2020	
Matrix:	Soil			Date	e Received:	7/30/2020	
trans-1,3-Dichloropro	pene	< 4.06	ug/Kg			8/3/2020	21:17
Trichloroethene		< 4.06	ug/Kg			8/3/2020	21:17
Trichlorofluorometha	ne	< 4.06	ug/Kg			8/3/2020	21:17
Vinyl chloride		< 4.06	ug/Kg			8/3/2020	21:17
<u>Surrogate</u>		Pe	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	zed
1,2-Dichloroethane-d4	:		105	75 - 134		8/3/2020	21:17
4-Bromofluorobenzen	e		63.4	59.5 - 129		8/3/2020	21:17
Pentafluorobenzene			99.5	88.8 - 118		8/3/2020	21:17
Toluene-D8			83.8	84 - 114	*	8/3/2020	21:17
Internal standard	outliers indicate proba	ble matrix in	terference				

Internal standard outliers indicate probable matrix interference
Method Reference(s): EPA 8260C

1

Data File:

EPA 5035A - L x72234.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.



Client:	AFI Environn	<u>nental</u>			
Project Reference:	I20B-Larkin D	evelopment	Ameripride Site		
Sample Identifier:	Ameripride	French 2 202	200728		
Lab Sample ID:	203531-02			Date Sampled:	7/28/2020
Matrix:	Soil			Date Received:	7/30/2020
Percent Solids					
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	Qualifier	<b>Date Analyzed</b>
Percent Solids		87.7	%		8/3/2020
Method Referen	<b>ce(s):</b> Par%M				

ELAP does not offer this test for approval as part of their laboratory certification program.



Client:	AFI Environmental		
Project Reference:	I20B-Larkin Development Ameripride Site		
Sample Identifier:	Ameripride Trench 2 20200728		
Lab Sample ID:	203531-02A	Date Sampled:	7/28/2020
Matrix:	TCLP Extract	Date Received:	7/30/2020

### **TCLP Semi-Volatile Organics**

Analyte	<u>Result</u>	<u>Units</u>	Regulatory Limit	Qualifier	Date Anal	yzed
1,4-Dichlorobenzene	< 40.0	ug/L	7500		8/3/2020	17:08
2,4,5-Trichlorophenol	< 40.0	ug/L	400000		8/3/2020	17:08
2,4,6-Trichlorophenol	< 40.0	ug/L	2000		8/3/2020	17:08
2,4-Dinitrotoluene	< 40.0	ug/L	130		8/3/2020	17:08
Cresols (as m,p,o-Cresol)	< 80.0	ug/L	200000		8/3/2020	17:08
Hexachlorobenzene	< 40.0	ug/L	130		8/3/2020	17:08
Hexachlorobutadiene	< 40.0	ug/L	500		8/3/2020	17:08
Hexachloroethane	< 40.0	ug/L	3000		8/3/2020	17:08
Nitrobenzene	< 40.0	ug/L	2000		8/3/2020	17:08
Pentachlorophenol	< 80.0	ug/L	100000		8/3/2020	17:08
Pyridine	< 40.0	ug/L	5000		8/3/2020	17:08
Surrogate	Perc	ent Recovery	<u>Limits</u>	<b>Outliers</b>	<b>Date Analy</b>	zed
2,4,6-Tribromophenol		88.2	53.8 - 116		8/3/2020	17:08
2-Fluorobiphenyl		78.8	36.5 - 95.3		8/3/2020	17:08
2-Fluorophenol		71.3	11.1 - 99.3		8/3/2020	17:08
Nitrobenzene-d5		80.1	49.4 - 100		8/3/2020	17:08
Phenol-d5		71.3	10 - 103		8/3/2020	17:08
Terphenyl-d14		82.0	54.3 - 109		8/3/2020	17:08
Method Reference(s):	EPA 8270D					
Preparation Date: Data File:	EPA 1311 / 3510C 8/3/2020 B48335.D					



Client:	AFI Environm	<u>ental</u>					
Project Reference:	I20B-Larkin De	evelopme	ent Ameriprid	e Site			
Sample Identifier:	Ameripride Ti	rench 2 2	20200728				
Lab Sample ID:	203531-02A			Date S	Sampled:	7/28/2020	
Matrix:	TCLP Extract			Date l	Received:	7/30/2020	
TCLP Pesticides							
Analyte		<u>Result</u>	<u>Units</u>	<b>Regulatory Limit</b>	<b>Qualifier</b>	Date Analy	yzed
Chlordane		< 2.00	ug/L	30		7/31/2020	18:15
Endrin		< 1.00	ug/L	20		7/31/2020	18:15
gamma-BHC (Lindane)	)	< 1.00	ug/L	400		7/31/2020	18:15
Heptachlor		< 1.00	ug/L	8		7/31/2020	18:15
Heptachlor Epoxide		< 2.00	ug/L	8		7/31/2020	18:15
Methoxychlor		< 1.00	ug/L	10000		7/31/2020	18:15
Toxaphene		< 20.0	ug/L	500		7/31/2020	18:15
<u>Surrogate</u>		Per	<u>cent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	Date Analy	<u>zed</u>
Decachlorobiphenyl (1	.)		80.1	19.3 - 157		7/31/2020	18:15
Tetrachloro-m-xylene	(1)		66.2	33.3 - 107		7/31/2020	18:15
Method Referen	<b>ce(s):</b> EPA 8081	В					

Preparation Date:

EPA 1311 / 3510C 7/31/2020



Client:	AFI Environn	<u>nental</u>					
Project Reference:	I20B-Larkin D	evelopmen	t Ameripric	le Site			
Sample Identifier:	Ameripride 7	French 2 20	200728				
Lab Sample ID:	203531-02A			Date S	ampled:	7/28/2020	
Matrix:	TCLP Extract	;		Date R	Received:	7/30/2020	
TCLP RCRA Meta	<u>ls (ICP)</u>						
<u>Analyte</u>		<u>Result</u>	<u>Units</u>	<b>Regulatory Limit</b>	<u>Qualifier</u>	Date Analy	zed
Arsenic		< 0.500	mg/L	5		7/31/2020	13:48
Barium		1.26	mg/L	100		7/31/2020	13:48
Cadmium		< 0.0250	mg/L	1		7/31/2020	13:48
Chromium		< 0.500	mg/L	5		7/31/2020	13:48
Lead		< 0.500	mg/L	5		7/31/2020	13:48
Selenium		< 0.200	mg/L	1		7/31/2020	13:48
Silver		< 0.500	mg/L	5		7/31/2020	13:48
Method Refere	ence(s): EPA 601	0C					

Method Reference(s):	EPA 6010C
	EPA 1311 / 3005A
Preparation Date:	7/31/2020
Data File:	200731C



Client:	AFI Environm	<u>ental</u>					
Project Reference:	I20B-Larkin De	velopm	ient Ameriprid	e Site			
Sample Identifier:	Ameripride Ti	rench 2	20200728				
Lab Sample ID:	203531-02A			Date S	Sampled:	7/28/2020	
Matrix:	TCLP Extract			Date l	Received:	7/30/2020	
TCLP Volatile Org	<u>anics</u>						
<u>Analyte</u>		Result	t <u>Units</u>	<u>Regulatory Limit</u>	<u>Qualifier</u>	Date Analy	zed
1,1-Dichloroethene		< 20.0	ug/L	700		8/4/2020	14:48
1,2-Dichloroethane		< 20.0	ug/L	500		8/4/2020	14:48
2-Butanone		< 100	ug/L	200000		8/4/2020	14:48
Benzene		< 20.0	ug/L	500		8/4/2020	14:48
Carbon Tetrachloride		< 20.0	ug/L	500		8/4/2020	14:48
Chlorobenzene		< 20.0	ug/L	100000		8/4/2020	14:48
Chloroform		< 20.0	ug/L	6000		8/4/2020	14:48
Tetrachloroethene		< 20.0	ug/L	700		8/4/2020	14:48
Trichloroethene		< 20.0	ug/L	500		8/4/2020	14:48
Vinyl chloride		< 20.0	ug/L	200		8/4/2020	14:48
<u>Surrogate</u>		Pe	rcent Recovery	<u>Limits</u>	<u>Outliers</u>	<b>Date Analy</b>	zed
1,2-Dichloroethane-d4			108	70.9 - 139		8/4/2020	14:48
4-Bromofluorobenzene	9		68.2	59.5 - 129		8/4/2020	14:48
Pentafluorobenzene			101	89.3 <b>-</b> 117		8/4/2020	14:48
Toluene-D8			85.8	82.9 - 115		8/4/2020	14:48
Method Reference							
Data File:	EPA 1311 x72247.D	/ 5030C					



# **Analytical Report Appendix**

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

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

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.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

# 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.
	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
Limitations of	may incur additional fees. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-
Liability.	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 the 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.

Standard 5 day	Turnaround Time	7/29/20 /2:00	DATE COLLECTED COLLECTED	PROJECT REFERENCE Izub- Larkin Developin Ameripride Site	PARADIGM	
None Required Batch QC Category A Category B Other	Tupon lat	XX	m⊣-007500	EFERENCE Development	A A	
None Required Batch QC Category A Category B Category B			ອ > ⁊ ຄ			
None Required Basic EDD NYSDEC EDD Other EDD please indicate EDD needed:	Naround Time Report Supplements	Ameripride Trench   20200128 Ameripride Trench 2 20200128	SAMPLE IDENTIFIER	NNEG	REPORT TO: CLENT: AF I GALIRONMENTAL ADDRESS: CAYY BUFFALO OTT: STATE: NY ZIP MURAGARA CAUS	
Relinquished By Received By Received By Received By Received @ Lab By C C C C c J 7 /30 / Ja Ja o		28 SO	× - 2 - マ 2 の m じ 0 C	WA - Water WG - Groundwater	HAIN	
1885		~ ~	0 2 F 4 = 2 m 2 0 0	ATTN:		
Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time Date/Time	7/25	K C X X X C F K X	TCLP VOCS TCLP SVOCS TCLP Metals TCLP Metals TCLP PCBs reacting solfide Tgnitability TCLP Herb/Pest TCL VOCS	DW - Drinking Water WW - Wastewater	CHAIN OF CUSTODY INVOICE TO: ADDRESS: ZIP 1Y 304 PHONE:	511166 (505) 071-2530 1 av (555) v
terfime $2 \frac{\sqrt{20}}{2} \frac{\sqrt{20}}{20}$ terfime terfime terfime	1 02 Martin	× × × ×	TCL SVOCS RCRA 8 metuls TS - 0/0 Solid pro EF	iC - Soit	ĕ	1100-110
ISOON PILE	tccp holow	× ×suspect soils	60 7/30/2020	SD - Solid PT - Paint	LAB PROJE 20353 / Quotation #: Email: Brandwo	
Date/Time Total Cost $\frac{7/2  ^{2} \sqrt{20}  \sqrt{5  02}}{\frac{7/2  ^{2} \sqrt{20}  \sqrt{5  02}}{\frac{7/2  \sqrt{20}  \sqrt{5  02}}}$ P.I.F. Date/Time P.I.F. Date/Time $\frac{5}{20  20  20  100\%}$ P.I.F. Date/Time $\frac{5}{20  20}$	exhart				B PROJEC	
		00	PARADIGM LAB SAMPLE NUMBER	AR - Air	สมกัก (	

L J

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM	<u>Cha</u>	<u>tin of Custody Sup</u>	<u>plement</u>
Client:	AFI	Completed by:	molyait
Lab Project ID:	20353   Sample Cond Per NELAC/ELA	<b>Date:</b>	7/30/2020
Condition	NELAC compliance with the same Yes		pon receipt N/A
Container Type Comments	Γχ	5035	
ransferred to method- ompliant container			[X]
eadspace <1 mL) Comments	ACCLUPA		Γ¥
eservation Comments			Ц Ц
			□¥_]
– D <b>lding Time</b> Comments			
mperature Comments 6	(jul)		thet
mpliant Sample Quantity/Typ			

CLIENT: Work Order: Reference: PO#:	Paradigm Environmental 200731027 I20B Larking Developme Project# : 20353	ent / Ameri	pride Sit		Collection I Lab Sample	e ID: 203531 Date: 7/28/20 ID: 200731 trix: SOIL	020
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
MERCURY - SW (Pre	/ 7471B p: SW7471B - 8/3/2020	)					Analyst: AVB
Mercury		1.07	0.230	Z	µg/g-dry	1	8/3/2020 2:56:01 PM
MOISTURE CON	NTENT-ASTM D2216 (NOT	ELAP CER	TIFIED)				Analyst: <b>TSZ</b>
Percent Moisture		13.1	0.1		wt%	1	8/4/2020
-	ELAP CERTIFIED Prep: E335.4 - 8/3/2020	)					Analyst: <b>KB</b>
Reactive Cyanide	e	ND	1.0		µg∕g	1	8/4/2020 1:07:07 PM
	ELAP CERTIFIED Prep: E335.4 - 8/3/2020	)					Analyst: <b>NK</b>
Reactive Sulfide		ND	10		µg∕g	1	8/5/2020
REACTIVITY - S	W 7.3.4.2, NOT ELAP CEF	RTIFIED					Analyst: NK
Reactivity	Non F	Reactive	0			1	8/5/2020

# Adirondack Environmental Services, Inc

**Qualifiers:** 

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Date: 05-Aug-20

## **Adirondack Environmental Services, Inc**

CLIENT:Paradigm EnvironmentalWork Order:200731027Reference:I20B Larking Development / Ameripride SitPO#:Comparison (Comparison (

**Date:** 05-Aug-20

 Client Sample ID:
 203531-01A

 Collection Date:
 7/28/2020

 Lab Sample ID:
 200731027-002

 Matrix:
 TCLP-EXTRACT

**Project# :** 203531

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
TCLP HERBICIDES - EPA 8321B					Analyst: <b>KF</b>
( Prep: SW3535A - 7/31/	2020 )				
2,4,5-TP (Silvex)-TCLP	ND	0.10	mg/L	1	7/31/2020 6:22:57 PM
2,4-D-TCLP	ND	0.10	mg/L	1	7/31/2020 6:22:57 PM
Surr: Acifluorfen	67.6	52.5-128	%REC	1	7/31/2020 6:22:57 PM
Surr: DCAA	105	56.2-139	%REC	1	7/31/2020 6:22:57 PM
TCLP MERCURY - SW1311/7470A					Analyst: AVE
( Prep: SW7470A - 8/3/2	.020 )				-
Mercury-TCLP	ND	0.002	mg/L	1	8/3/2020 2:28:54 PM

**Qualifiers:** 

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

CLIENT:	Paradigm Environmental			<b>Client Sample</b>	<b>ID:</b> 20353	1-02		
Work Order:	200731027			Collection Da	ate: 7/28/2	7/28/2020		
<b>Reference:</b>	I20B Larking Developme	ent / Amer	ipride Sit	Lab Sample l	<b>D:</b> 20073	1027-003		
PO#:				Mat	rix: SOIL			
	<b>Project# :</b> 203531	1						
Analyses		Result	RL	Qual Units	DF	Date Analyzed		
MERCURY - SW (Pre	/ 7471B ep: SW7471B - 8/3/2020	)				Analyst: <b>AVB</b>		
Mercury		0.556	0.240	μg/g-dry	1	8/3/2020 3:04:29 PM		
MOISTURE COM	NTENT-ASTM D2216 (NOT	ELAP CER	TIFIED)			Analyst: TSZ		
Percent Moisture	9	16.8	0.1	wt%	1	8/4/2020		
	FELAP CERTIFIED Prep: E335.4 - 8/3/2020	)				Analyst: <b>KB</b>		
Reactive Cyanid	е	ND	1.0	μg/g	1	8/4/2020 1:08:44 PM		
	T ELAP CERTIFIED Prep: E335.4 - 8/3/2020	)				Analyst: <b>NK</b>		
Reactive Sulfide		ND	10	μg/g	1	8/5/2020		
REACTIVITY - S	SW 7.3.4.2, NOT ELAP CER	RTIFIED				Analyst: NK		
Reactivity	Non R	Reactive	0		1	8/5/2020		

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

T - Tentitively Identified Compound-Estimated Conc.

Page 3 of 4

Date: 05-Aug-20

# Adirondack Environmental Services, Inc

## **Adirondack Environmental Services, Inc**

CLIENT:Paradigm EnvironmentalWork Order:200731027Reference:I20B Larking Development / Ameripride SitPO#:Comparison of the second secon

**Date:** 05-Aug-20

 Client Sample ID:
 203531-02A

 Collection Date:
 7/28/2020

 Lab Sample ID:
 200731027-004

 Matrix:
 TCLP-EXTRACT

**Project# :** 203531

Analyses	Result	RL Qual	Units	DF	Date Analyzed
TCLP HERBICIDES - EPA 8321B					Analyst: <b>KF</b>
( Prep: SW3535A - 7/31/2020	))				
2,4,5-TP (Silvex)-TCLP	ND	0.10	mg/L	1	7/31/2020 6:44:30 PM
2,4-D-TCLP	ND	0.10	mg/L	1	7/31/2020 6:44:30 PM
Surr: Acifluorfen	56.3	52.5-128	%REC	1	7/31/2020 6:44:30 PM
Surr: DCAA	80.0	56.2-139	%REC	1	7/31/2020 6:44:30 PM
TCLP MERCURY - SW1311/7470A					Analyst: AVB
( Prep: SW7470A - 8/3/2020	)				-
Mercury-TCLP	ND	0.002	mg/L	1	8/3/2020 2:30:36 PM

**Qualifiers:** 

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Comments: Holding Time:	Comments:	Container Type:	**LAB USE ONLY BELOW THIS LINE^ Sample Condition: Per NELAC/ELAP 210/241/242/243/244	9 8	7	47/25/2020 11245	020	7/25/2020	17/28/2000 1200		133315 Ja	TOMO LANGESTE NAME:			PARADIGM	
			NE~~ 41/242/24							מע⊲מ	COMMENTS:	ATTN:	PHONE:	CITY:	COMPANY:	
		Y N Sampled By	13/244 NELAC Compliance			y is the is	Ameriprise Trench 2 2020 0728 Soil	6	Omeninide Trench 12020028 Soil	SAMPLE LOCATIONFIELD ID R H	s: Please email results to reporting@paradigitienv.com	Reporting	FAX:	STATE: ZIP:	Paradigm Environmental	179 Lake Avenue, Rochester, NY 14608
7/3//2	1 7/3/2020 083 Date/Time	Date/Time								REACTIVITY Total Hy Total Hy HCLP Herb	REQUESTED ANALYSIS	ATTN: Accounts Payable		CITY: STATE:	COMPANY: Same ADDRESS:	( 14608 Office (585) 647-2530 Fax (585) 647-3311 CUSTODY INVOICE TO: V
443pm	0 83	Total Cost:				1000	203531-02	1	20353/-0/	1750 Coutris raining buck of Swight and the standing remarks samplen	Date Due: 8/7/2020 to		STD	ZIP: TURNAROUND TIME: (WORKING DAYS)		ADIRONDACK: EI



314 North Pearl Street \* Albany, New York 12207 \* (518) 434-4546 \* Fax (518) 434-0891

# TERMS, CONDITIONS & LIMITATIONS

All service rendered by the Adirondack Environmental Services, Inc. are undertaken and all rates are based upon the following terms:

- (a) Neither Adirondack Environmental Services, Inc., nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of Adirondack Environmental Services, Inc.'s performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against Adirondack Environmental Services, Inc. arising out of its work.
- (b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.
- (c) Adirondack Environmental Services, Inc. reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an Adirondack Environmental Services, Inc. report by other than our customer does not constitute a representation of Adirondack Environmental Services, Inc. as to the accuracy of the contents thereof.
- (d) In no event shall Adirondack Environmental Services, Inc., its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.
- (e) No deviation from the terms set forth herein shall bind Adirondack Environmental Services, Inc. unless in writing and signed by a Director of Adirondack Environmental Services, Inc.
- (f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and Adirondack Environmental Services, Inc. is not responsible for the accuracy of this information.
- (g) Payments by Credit Card/Purchase Cards are subject to a 3% additional charge.



#### ANALYTICAL REPORT

Lab Number:	L2047640
Client:	AFI Environmental
	8644 Buffalo Avenue
	PO Box 4049
	Niagara Falls, NY 14304
ATTN:	Brandon Quinn
Phone:	(716) 283-7645
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP
Project Number:	T20B-LARKIN DEV.
Report Date:	11/09/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Serial\_No:11092012:21

Project Name:T20B-LARKIN DEVELOPMENT AMERIPProject Number:T20B-LARKIN DEV.

 Lab Number:
 L2047640

 Report Date:
 11/09/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2047640-01	PARKING LOT CIU 3 20201028	3 SOIL	822 SENECA ST. BUFFALO NY	10/28/20 16:30	10/30/20
L2047640-02	PARKING LOT CIU 4 20201028	3 SOIL	822 SENECA ST. BUFFALO NY	10/28/20 16:35	10/30/20



# Project Name:T20B-LARKIN DEVELOPMENT AMERIPProject Number:T20B-LARKIN DEV.

 Lab Number:
 L2047640

 Report Date:
 11/09/20

#### **Case Narrative**

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.



Project Name:T20B-LARKIN DEVELOPMENT AMERIPProject Number:T20B-LARKIN DEV.

 Lab Number:
 L2047640

 Report Date:
 11/09/20

#### **Case Narrative (continued)**

#### **Report Submission**

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Sample Receipt

L2047640-01 and -02: The analysis of TCLP Volatiles was not received in the recommended container. The analysis was performed at the client's request.

L2047640-01 and -02: The water-preserved VOA vials for Volatile Organics Low-Level analysis were received at the laboratory beyond the 48 hour holding time required for freezing. The client was notified and the results of the analysis are reported.

#### **TCLP** Semivolatiles

L2047640-01: One or more of the internal standard recoveries is outside the acceptance criteria; however, the internal standard is within criteria for the target compounds; therefore, the results are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Melissa Sturgis Melissa Sturgis

Authorized Signature:

Title: Technical Director/Representative

Date: 11/09/20



# ORGANICS



# VOLATILES



		Serial_No	p:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-01	Date Collected:	10/28/20 16:30
Client ID:	PARKING LOT CIU 3 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	11/05/20 12:47		
Analyst:	MKS		
Percent Solids:	84%		
TCLP/SPLP Ext. Da	ate: 11/04/20 13:22		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
TCLP Volatiles by EPA 1311 - Westborough Lab							
Chloroform	ND		ug/l	7.5	2.2	10	
Carbon tetrachloride	ND		ug/l	5.0	1.3	10	
Tetrachloroethene	ND		ug/l	5.0	1.8	10	
Chlorobenzene	ND		ug/l	5.0	1.8	10	
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10	
Benzene	ND		ug/l	5.0	1.6	10	
Vinyl chloride	ND		ug/l	10	0.71	10	
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10	
Trichloroethene	ND		ug/l	5.0	1.8	10	
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10	
2-Butanone	ND		ug/l	50	19.	10	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	103		70-130	
Toluene-d8	96		70-130	
4-Bromofluorobenzene	95		70-130	
dibromofluoromethane	103		70-130	



		Serial_No	o:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-01	Date Collected:	10/28/20 16:30
Client ID:	PARKING LOT CIU 3 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	11/04/20 09:23		
Analyst:	MKS		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Lo	w - Westborough Lab					
Methylene chloride	ND		ug/kg	5.2	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.28	1
Tetrachloroethene	0.62		ug/kg	0.52	0.20	1
Chlorobenzene	ND		ug/kg	0.52	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.73	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.52	0.18	1
Bromodichloromethane	ND		ug/kg	0.52	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.52	0.16	1
Bromoform	ND		ug/kg	4.2	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.52	0.17	1
Benzene	ND		ug/kg	0.52	0.17	1
Toluene	ND		ug/kg	1.0	0.57	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	4.2	0.98	1
Bromomethane	ND		ug/kg	2.1	0.61	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
Chloroethane	ND		ug/kg	2.1	0.47	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1
Trichloroethene	ND		ug/kg	0.52	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640				
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20				
	SAMPLE RESULTS						
Lab ID:	L2047640-01	Date Collected:	10/28/20 16:30				
Client ID:	PARKING LOT CIU 3 20201028	Date Received:	10/30/20				
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified				

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Wes	stborough Lab					
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
o/m-Xylene	ND		ug/kg	2.1	0.59	1
o-Xylene	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.96	1
Acetone	ND		ug/kg	10	5.0	1
Carbon disulfide	ND		ug/kg	10	4.8	1
2-Butanone	ND		ug/kg	10	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.29	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.2	1.0	1
sopropylbenzene	ND		ug/kg	1.0	0.11	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.28	1
Methyl Acetate	ND		ug/kg	4.2	1.0	1
Cyclohexane	ND		ug/kg	10	0.57	1
1,4-Dioxane	ND		ug/kg	84	37.	1
Freon-113	ND		ug/kg	4.2	0.73	1
Methyl cyclohexane	ND		ug/kg	4.2	0.63	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	97		70-130	
Toluene-d8	91		70-130	
4-Bromofluorobenzene	96		70-130	
Dibromofluoromethane	103		70-130	



Serial\_No:11092012:21

		Serial_No:11092012:21		
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640	
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20	
	SAMPLE RESULTS			
Lab ID:	L2047640-02	Date Collected:	10/28/20 16:35	
Client ID:	PARKING LOT CIU 4 20201028	Date Received:	10/30/20	
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified	
Sample Depth:				
Matrix:	Soil			
Analytical Method:	1,8260C			
Analytical Date:	11/05/20 13:17			
Analyst:	MKS			
Percent Solids:	86%			
TCLP/SPLP Ext. Da	ate: 11/04/20 13:22			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westbo	orough Lab					
Chloroform	ND			7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
			ug/l			
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	104		70-130	
Toluene-d8	96		70-130	
4-Bromofluorobenzene	99		70-130	
dibromofluoromethane	98		70-130	



		Serial_No	p:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-02	Date Collected:	10/28/20 16:35
Client ID:	PARKING LOT CIU 4 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	11/04/20 09:49		
Analyst:	MKS		

86%

Percent Solids:

Parameter	Result	Qualifier Un	its RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Lo	w - Westborough Lab				
Methylene chloride	ND	ug/	ka 4.0	1.8	1
1,1-Dichloroethane	ND	ug/		0.12	1
Chloroform	ND	ug/	-	0.11	1
Carbon tetrachloride	ND	ug/	8	0.19	1
1,2-Dichloropropane	ND	ug/		0.10	1
Dibromochloromethane	ND	ug/	0	0.11	1
1,1,2-Trichloroethane	ND	ug/	5	0.22	1
Tetrachloroethene	0.76	ug/	•	0.16	1
Chlorobenzene	ND	ug/	-	0.10	1
Trichlorofluoromethane	ND	ug/		0.56	1
1,2-Dichloroethane	ND	ug/		0.21	1
1,1,1-Trichloroethane	ND	ug/	-	0.14	1
Bromodichloromethane	ND	ug/		0.09	1
trans-1,3-Dichloropropene	ND	ug/		0.22	1
cis-1,3-Dichloropropene	ND	ug/	kg 0.40	0.13	1
Bromoform	ND	ug/	kg 3.2	0.20	1
1,1,2,2-Tetrachloroethane	ND	ug/	kg 0.40	0.13	1
Benzene	ND	ug/	kg 0.40	0.13	1
Toluene	ND	ug/	kg 0.81	0.44	1
Ethylbenzene	ND	ug/	kg 0.81	0.11	1
Chloromethane	ND	ug/	kg 3.2	0.76	1
Bromomethane	ND	ug/	kg 1.6	0.47	1
Vinyl chloride	ND	ug/	kg 0.81	0.27	1
Chloroethane	ND	ug/	kg 1.6	0.37	1
1,1-Dichloroethene	ND	ug/	kg 0.81	0.19	1
trans-1,2-Dichloroethene	ND	ug/	kg 1.2	0.11	1
Trichloroethene	ND	ug/	kg 0.40	0.11	1
1,2-Dichlorobenzene	ND	ug/	kg 1.6	0.12	1



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640				
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20				
	SAMPLE RESULTS						
Lab ID:	L2047640-02	Date Collected:	10/28/20 16:35				
Client ID:	PARKING LOT CIU 4 20201028	Date Received:	10/30/20				
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified				

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	/ - Westborough Lab					
1,3-Dichlorobenzene	ND		ug/kg	1.6	0.12	1
1,4-Dichlorobenzene	ND		ug/kg	1.6	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.6	0.16	1
p/m-Xylene	ND		ug/kg	1.6	0.45	1
o-Xylene	ND		ug/kg	0.81	0.24	1
cis-1,2-Dichloroethene	ND		ug/kg	0.81	0.14	1
Styrene	ND		ug/kg	0.81	0.16	1
Dichlorodifluoromethane	ND		ug/kg	8.1	0.74	1
Acetone	ND		ug/kg	8.1	3.9	1
Carbon disulfide	ND		ug/kg	8.1	3.7	1
2-Butanone	ND		ug/kg	8.1	1.8	1
4-Methyl-2-pentanone	ND		ug/kg	8.1	1.0	1
2-Hexanone	ND		ug/kg	8.1	0.96	1
Bromochloromethane	ND		ug/kg	1.6	0.17	1
1,2-Dibromoethane	ND		ug/kg	0.81	0.23	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.4	0.81	1
Isopropylbenzene	ND		ug/kg	0.81	0.09	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.6	0.26	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.6	0.22	1
Methyl Acetate	ND		ug/kg	3.2	0.77	1
Cyclohexane	ND		ug/kg	8.1	0.44	1
1,4-Dioxane	ND		ug/kg	65	28.	1
Freon-113	ND		ug/kg	3.2	0.56	1
Methyl cyclohexane	ND		ug/kg	3.2	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	96		70-130	
Toluene-d8	92		70-130	
4-Bromofluorobenzene	94		70-130	
Dibromofluoromethane	102		70-130	



Serial\_No:11092012:21

L2047640 11/09/20

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:
Project Number:	T20B-LARKIN DEV.	Report Date:

# Method Blank Analysis Batch Quality Control

Analytical Method:	1,8260C
Analytical Date:	11/04/20 07:39
Analyst:	MV

arameter	Result C	ualifier Units	RL	MDL
platile Organics by GC/MS	- Westborough Lab fo	or sample(s): 01-0	02 Batch:	WG1430441-5
Methylene chloride	ND	ug/kg	5.0	2.3
1,1-Dichloroethane	ND	ug/kg	1.0	0.14
Chloroform	ND	ug/kg	1.5	0.14
Carbon tetrachloride	ND	ug/kg	1.0	0.23
1,2-Dichloropropane	ND	ug/kg	1.0	0.12
Dibromochloromethane	ND	ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND	ug/kg	1.0	0.27
Tetrachloroethene	ND	ug/kg	0.50	0.20
Chlorobenzene	ND	ug/kg	0.50	0.13
Trichlorofluoromethane	ND	ug/kg	4.0	0.70
1,2-Dichloroethane	ND	ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND	ug/kg	0.50	0.17
Bromodichloromethane	ND	ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND	ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND	ug/kg	0.50	0.16
Bromoform	ND	ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.50	0.17
Benzene	ND	ug/kg	0.50	0.17
Toluene	ND	ug/kg	1.0	0.54
Ethylbenzene	ND	ug/kg	1.0	0.14
Chloromethane	ND	ug/kg	4.0	0.93
Bromomethane	0.58	J ug/kg	2.0	0.58
Vinyl chloride	ND	ug/kg	1.0	0.34
Chloroethane	ND	ug/kg	2.0	0.45
1,1-Dichloroethene	ND	ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND	ug/kg	1.5	0.14
Trichloroethene	ND	ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND	ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND	ug/kg	2.0	0.15



L2047640 11/09/20

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:
Project Number:	T20B-LARKIN DEV.	Report Date:

# Method Blank Analysis Batch Quality Control

Analytical Method:	1,8260C
Analytical Date:	11/04/20 07:39
Analyst:	MV

arameter	Result	Qualifier Units	s RL	MDL
olatile Organics by GC/MS - V	Vestborough Lab	o for sample(s):	01-02 Batch	: WG1430441-5
1,4-Dichlorobenzene	ND	ug/kợ	g 2.0	0.17
Methyl tert butyl ether	ND	ug/kợ	g 2.0	0.20
p/m-Xylene	ND	ug/kợ	g 2.0	0.56
o-Xylene	ND	ug/kợ	g 1.0	0.29
cis-1,2-Dichloroethene	ND	ug/kợ	g 1.0	0.18
Styrene	ND	ug/ko	g 1.0	0.20
Dichlorodifluoromethane	ND	ug/ko	g 10	0.92
Acetone	ND	ug/ko	g 10	4.8
Carbon disulfide	ND	ug/ko	g 10	4.6
2-Butanone	ND	ug/ko	g 10	2.2
4-Methyl-2-pentanone	ND	ug/ko	g 10	1.3
2-Hexanone	ND	ug/ko	g 10	1.2
Bromochloromethane	ND	ug/ko	g 2.0	0.20
1,2-Dibromoethane	ND	ug/ko	g 1.0	0.28
1,2-Dibromo-3-chloropropane	ND	ug/ko	g 3.0	1.0
Isopropylbenzene	ND	ug/ko	g 1.0	0.11
1,2,3-Trichlorobenzene	0.38	J ug/ko	g 2.0	0.32
1,2,4-Trichlorobenzene	0.29	J ug/ko	g 2.0	0.27
Methyl Acetate	ND	ug/ko	g 4.0	0.95
Cyclohexane	ND	ug/ko	g 10	0.54
1,4-Dioxane	ND	ug/ko	g 80	35.
Freon-113	ND	ug/ko	g 4.0	0.69
Methyl cyclohexane	ND	ug/ko	g 4.0	0.60



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

# Method Blank Analysis Batch Quality Control

Analytical Method:1,8260CAnalytical Date:11/04/20 07:39Analyst:MV

Parameter	Result	Qualifier	Units	RL	MDL	
Volatile Organics by GC/MS - V	/estborough La	b for sample	e(s): 01-02	Batch:	WG1430441-5	

	_	Acceptance		
Surrogate	%Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	93		70-130	
Toluene-d8	93		70-130	
4-Bromofluorobenzene	95		70-130	
Dibromofluoromethane	104		70-130	



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

### Method Blank Analysis Batch Quality Control

Analytical Method:	1,8260C
Analytical Date:	11/05/20 07:13
Amplust	N 4 N 4
Analyst:	MM

Extraction Date: 11/04/20 13:22

arameter	Result	Qualifier Units	RL	MDL
CLP Volatiles by EPA 1311 - We	stborough Lab	for sample(s):	01-02 Batch:	WG1430721-5
Chloroform	ND	ug/l	7.5	2.2
Carbon tetrachloride	ND	ug/l	5.0	1.3
Tetrachloroethene	ND	ug/l	5.0	1.8
Chlorobenzene	ND	ug/l	5.0	1.8
1,2-Dichloroethane	ND	ug/l	5.0	1.3
Benzene	ND	ug/l	5.0	1.6
Vinyl chloride	ND	ug/l	10	0.71
1,1-Dichloroethene	ND	ug/l	5.0	1.7
Trichloroethene	ND	ug/l	5.0	1.8
1,4-Dichlorobenzene	ND	ug/l	25	1.9
2-Butanone	ND	ug/l	50	19.

	Acc			
Surrogate	%Recovery	Qualifier	Criteria	
				_
1,2-Dichloroethane-d4	100		70-130	
Toluene-d8	96		70-130	
4-Bromofluorobenzene	102		70-130	
dibromofluoromethane	100		70-130	



# Lab Control Sample Analysis Batch Quality Control

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP
---------------	--------------------------------

 Lab Number:
 L2047640

 Report Date:
 11/09/20

Project Number: T20B-LARKIN DEV.

arameter	LCS %Recovery	Qual	LCSD %Recovery	/ Qual	%Recovery Limits	RPD	RPD Qual Limits	
/olatile Organics by GC/MS - Westborough	Lab Associated	sample(s):	01-02 Batch:	WG1430441-3	8 WG1430441-4			
Methylene chloride	103		100		70-130	3	30	
1,1-Dichloroethane	107		100		70-130	7	30	
Chloroform	114		109		70-130	4	30	
Carbon tetrachloride	117		110		70-130	6	30	
1,2-Dichloropropane	105		101		70-130	4	30	
Dibromochloromethane	94		95		70-130	1	30	
1,1,2-Trichloroethane	91		90		70-130	1	30	
Tetrachloroethene	106		98		70-130	8	30	
Chlorobenzene	102		97		70-130	5	30	
Trichlorofluoromethane	149	Q	133		70-139	11	30	
1,2-Dichloroethane	109		108		70-130	1	30	
1,1,1-Trichloroethane	113		105		70-130	7	30	
Bromodichloromethane	101		100		70-130	1	30	
trans-1,3-Dichloropropene	93		91		70-130	2	30	
cis-1,3-Dichloropropene	108		104		70-130	4	30	
Bromoform	84		85		70-130	1	30	
1,1,2,2-Tetrachloroethane	85		86		70-130	1	30	
Benzene	112		105		70-130	6	30	
Toluene	99		93		70-130	6	30	
Ethylbenzene	99		93		70-130	6	30	
Chloromethane	88		77		52-130	13	30	
Bromomethane	213	Q	179	Q	57-147	17	30	
Vinyl chloride	118		104		67-130	13	30	



### Lab Control Sample Analysis Batch Quality Control

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP
---------------	--------------------------------

 Lab Number:
 L2047640

 Report Date:
 11/09/20

Project Number: T20B-LARKIN DEV.

arameter	LCS %Recovery	Qual		CSD covery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by GC/MS - Westborough	Lab Associated	sample(s):	01-02	Batch:	WG1430441-3	WG1430441-4			
Chloroethane	136			123		50-151	10		30
1,1-Dichloroethene	109			100		65-135	9		30
trans-1,2-Dichloroethene	114			106		70-130	7		30
Trichloroethene	112			108		70-130	4		30
1,2-Dichlorobenzene	98			96		70-130	2		30
1,3-Dichlorobenzene	99			96		70-130	3		30
1,4-Dichlorobenzene	98			95		70-130	3		30
Methyl tert butyl ether	104			104		66-130	0		30
p/m-Xylene	102			96		70-130	6		30
o-Xylene	101			96		70-130	5		30
cis-1,2-Dichloroethene	114			108		70-130	5		30
Styrene	99			95		70-130	4		30
Dichlorodifluoromethane	98			89		30-146	10		30
Acetone	95			95		54-140	0		30
Carbon disulfide	100			91		59-130	9		30
2-Butanone	82			86		70-130	5		30
4-Methyl-2-pentanone	76			75		70-130	1		30
2-Hexanone	62	Q		64	Q	70-130	3		30
Bromochloromethane	120			119		70-130	1		30
1,2-Dibromoethane	100			101		70-130	1		30
1,2-Dibromo-3-chloropropane	81			89		68-130	9		30
Isopropylbenzene	95			89		70-130	7		30
1,2,3-Trichlorobenzene	96			96		70-130	0		30



L2047640 11/09/20

# Lab Control Sample Analysis

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Batch Quality Control	Lab Number:
Project Number:	T20B-LARKIN DEV.		Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	' Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	01-02 Batch:	WG1430441-3	WG1430441-4				
1,2,4-Trichlorobenzene	98		95		70-130	3		30	
Methyl Acetate	88		90		51-146	2		30	
Cyclohexane	97		90		59-142	7		30	
1,4-Dioxane	104		108		65-136	4		30	
Freon-113	116		108		50-139	7		30	
Methyl cyclohexane	110		100		70-130	10		30	

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria	
1,2-Dichloroethane-d4	92	93	70-130	
Toluene-d8	91	91	70-130	
4-Bromofluorobenzene	91	93	70-130	
Dibromofluoromethane	100	103	70-130	



Project Name: T20B-LARKIN DEVELOPMENT AMERIP

 Lab Number:
 L2047640

 Report Date:
 11/09/20

Parameter	LCS %Recovery	Qual		CSD covery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough	_ab Associated	d sample(s):	01-02	Batch:	WG1430721-3	WG1430721-4			
Chloroform	96			93		70-130	3		20
Carbon tetrachloride	98			96		63-132	2		20
Tetrachloroethene	110			110		70-130	0		20
Chlorobenzene	98			94		75-130	4		25
1,2-Dichloroethane	92			87		70-130	6		20
Benzene	92			88		70-130	4		25
Vinyl chloride	83			78		55-140	6		20
1,1-Dichloroethene	93			90		61-145	3		25
Trichloroethene	93			90		70-130	3		25
1,4-Dichlorobenzene	100			100		70-130	0		20
2-Butanone	67			63		63-138	6		20

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103	101	70-130
Toluene-d8	98	96	70-130
4-Bromofluorobenzene	95	90	70-130
dibromofluoromethane	100	98	70-130



# SEMIVOLATILES



		Serial_No	0:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-01	Date Collected:	10/28/20 16:30
Client ID:	PARKING LOT CIU 3 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method	1: EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	11/02/20 21:09
Analytical Date:	11/04/20 17:13		
Analyst:	EK		
Percent Solids:	84%		
TCLP/SPLP Ext. Da	ate: 11/01/20 14:20		

Result	Qualifier	Units	RL	MDL	Dilution Factor			
ICLP Semivolatiles by EPA 1311 - Westborough Lab								
ND			10	2.4	1			
					Ι			
ND		ug/l	25	1.9	1			
ND		ug/l	10	3.0	1			
ND		ug/l	10	2.2	1			
ND		ug/l	10	3.3	1			
ND		ug/l	25	2.5	1			
ND		ug/l	50	9.8	1			
ND		ug/l	25	5.5	1			
ND		ug/l	25	2.8	1			
ND		ug/l	25	1.9	1			
ND		ug/l	18	4.5	1			
	rough Lab ND ND ND ND ND ND ND ND ND ND ND ND ND	rough Lab ND	NDug/lNDug/lNDug/lNDug/lNDug/lNDug/lNDug/lNDug/lNDug/lNDug/lNDug/lNDug/lNDug/lNDug/lNDug/lNDug/lNDug/l	ND         ug/l         10           ND         ug/l         25           ND         ug/l         10           ND         ug/l         50           ND         ug/l         50           ND         ug/l         25           ND         ug/l         25	ND         ug/l         10         3.4           ND         ug/l         25         1.9           ND         ug/l         10         3.0           ND         ug/l         10         3.0           ND         ug/l         10         2.2           ND         ug/l         10         2.2           ND         ug/l         10         3.3           ND         ug/l         50         9.8           ND         ug/l         50         9.8           ND         ug/l         25         5.5           ND         ug/l         25         2.8           ND         ug/l         25         1.9			

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	62	21-120	
Phenol-d6	72	10-120	
Nitrobenzene-d5	86	23-120	
2-Fluorobiphenyl	79	15-120	
2,4,6-Tribromophenol	90	10-120	
4-Terphenyl-d14	73	33-120	



		Serial_No	0:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-01	Date Collected:	10/28/20 16:30
Client ID:	PARKING LOT CIU 3 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method	1: EPA 3546
Analytical Method:	1,8270D	Extraction Date:	11/01/20 18:50
Analytical Date:	11/02/20 19:11		
Analyst:	IM		
Percent Solids:	84%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	estborough Lab					
Acenaphthene	ND		ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	8490		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	3670		ug/kg	120	22.	1
Benzo(a)pyrene	3710		ug/kg	150	47.	1



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-01	Date Collected:	10/28/20 16:30
Client ID:	PARKING LOT CIU 3 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - V	Vestborough Lab					
Benzo(b)fluoranthene	3120		ug/kg	120	32.	1
Benzo(k)fluoranthene	2510		ug/kg	120	32.	1
Chrysene	3510		ug/kg	120	20.	1
			ug/kg			
Acenaphthylene	ND		ug/kg	150	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	63	J	ug/kg	150	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	88	J	ug/kg	120	23.	1
Dibenzo(a,h)anthracene	737		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	53	J	ug/kg	150	27.	1
Pyrene	120		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	ND		ug/kg	190	19.	1
Atrazine	ND		ug/kg ug/kg	150	67.	1
	ND					
Benzaldehyde	NU		ug/kg	250	52.	1



Serial\_No:11092012:21

				Se	rial_No	p:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT	AMERIP		Lab Num	ber:	L2047640
Project Number:	T20B-LARKIN DEV.			Report D	ate:	11/09/20
	SAI	MPLE RESULT	S			
Lab ID:	L2047640-01			Date Colle	cted:	10/28/20 16:30
Client ID:	PARKING LOT CIU 3 2020102	28		Date Recei	ved:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO N	IY		Field Prep:		Not Specified
Sample Depth:						
Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>
Semivolatile Orgar	nics by GC/MS - Westborough Lab	)				
Caprolactam	ND		ug/kg	190	58.	1
2,3,4,6-Tetrachlorophenc	I ND		ug/kg	190	39.	1
Surrogate			% Recovery	Qualifier		ceptance Criteria
2-Fluorophenol			86			25-120
Phenol-d6			81			10-120
Filenoi-uo			01			10-120
Nitrobenzene-d5			81			23-120

101

4-Terphenyl-d14 64 18-120



10-136

2,4,6-Tribromophenol

		Serial_No	0:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-02	Date Collected:	10/28/20 16:35
Client ID:	PARKING LOT CIU 4 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method	1: EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	11/02/20 21:09
Analytical Date:	11/04/20 14:43		
Analyst:	EK		
Percent Solids:	86%		
TCLP/SPLP Ext. Da	ate: 11/01/20 14:20		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
TCLP Semivolatiles by EPA 1311 - Westborough Lab								
Hexachlorobenzene	ND		ug/l	10	3.4	1		
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1		
Hexachlorobutadiene	ND		ug/l	10	3.0	1		
Hexachloroethane	ND		ug/l	10	2.2	1		
Nitrobenzene	ND		ug/l	10	3.3	1		
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1		
Pentachlorophenol	ND		ug/l	50	9.8	1		
2-Methylphenol	ND		ug/l	25	5.5	1		
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1		
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1		
Pyridine	ND		ug/l	18	4.5	1		

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	76	21-120	
Phenol-d6	71	10-120	
Nitrobenzene-d5	83	23-120	
2-Fluorobiphenyl	70	15-120	
2,4,6-Tribromophenol	71	10-120	
4-Terphenyl-d14	74	33-120	



		Serial_No	p:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-02	Date Collected:	10/28/20 16:35
Client ID:	PARKING LOT CIU 4 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method	d: EPA 3546
Analytical Method:	1,8270D	Extraction Date:	11/01/20 18:50
Analytical Date:	11/02/20 19:34		
Analyst:	IM		
Percent Solids:	86%		

Parameter	Result	Qualifier Units	s RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - V	Vestborough Lab				
Acenaphthene	ND	ug/kg	j 150	20.	1
Hexachlorobenzene	ND	ug/kg		21.	1
Bis(2-chloroethyl)ether	ND	ug/kg	170	26.	1
2-Chloronaphthalene	ND	ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND	ug/kg	<b>j</b> 190	50.	1
2,4-Dinitrotoluene	ND	ug/kg	<b>j</b> 190	38.	1
2,6-Dinitrotoluene	ND	ug/kg	<b>1</b> 90	32.	1
Fluoranthene	7670	ug/kg	<b>j</b> 110	22.	1
4-Chlorophenyl phenyl ether	ND	ug/kg	<b>j</b> 190	20.	1
4-Bromophenyl phenyl ether	ND	ug/kg	<b>j</b> 190	29.	1
Bis(2-chloroisopropyl)ether	ND	ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND	ug/kg	200	19.	1
Hexachlorobutadiene	ND	ug/kg	<b>j</b> 190	28.	1
Hexachlorocyclopentadiene	ND	ug/kg	540	170	1
Hexachloroethane	ND	ug/kg	150	31.	1
Isophorone	ND	ug/kg	170	25.	1
Naphthalene	ND	ug/kg	<b>j</b> 190	23.	1
Nitrobenzene	ND	ug/kg	<b>j</b> 170	28.	1
NDPA/DPA	ND	ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND	ug/kg	<b>j</b> 190	29.	1
Bis(2-ethylhexyl)phthalate	ND	ug/kg	<b>j</b> 190	66.	1
Butyl benzyl phthalate	ND	ug/kg	<b>j</b> 190	48.	1
Di-n-butylphthalate	ND	ug/kg	<b>j</b> 190	36.	1
Di-n-octylphthalate	ND	ug/kg	<b>j</b> 190	64.	1
Diethyl phthalate	ND	ug/kg	<b>j</b> 190	18.	1
Dimethyl phthalate	ND	ug/kg	<b>j</b> 190	40.	1
Benzo(a)anthracene	3140	ug/kg	j 110	21.	1
Benzo(a)pyrene	2930	ug/kg	150	46.	1



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-02	Date Collected:	10/28/20 16:35
Client ID:	PARKING LOT CIU 4 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	estborough Lab					
Benzo(b)fluoranthene	2910		ug/kg	110	32.	1
Benzo(k)fluoranthene	1970		ug/kg	110	30.	1
Chrysene	2960		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	83	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	120		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	68	J	ug/kg	150	26.	1
Pyrene	170		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	910	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Carbazole	21	J	ug/kg	190	18.	1
Atrazine	ND		ug/kg	150	66.	1
Benzaldehyde	ND		ug/kg	250	51.	1
·			- 3- 3			



Serial\_No:11092012:21

				Se	rial_No	p:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AM	1ERIP		Lab Num	ber:	L2047640
Project Number:	T20B-LARKIN DEV.			Report D	ate:	11/09/20
	SAMPI	LE RESULT	S			
Lab ID:	L2047640-02			Date Colle	cted:	10/28/20 16:35
Client ID:	PARKING LOT CIU 4 20201028			Date Rece	ived:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY			Field Prep:		Not Specified
Sample Depth:						
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Orgar	nics by GC/MS - Westborough Lab					
Caprolactam	ND		ug/kg	190	58.	1
2,3,4,6-Tetrachloropheno	I ND		ug/kg	190	38.	1
Surrogate			% Recovery	Qualifier		ceptance Criteria
2-Fluorophenol			91			25-120
Phenol-d6			88			10-120

84

88

114

77

23-120

30-120

10-136

18-120

Nitrobenzene-d5

2-Fluorobiphenyl

4-Terphenyl-d14

2,4,6-Tribromophenol

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

Analytical Method:	1,827
Analytical Date:	11/02
Analyst:	IM

1,8270D 11/02/20 09:15 IM Extraction Method: EPA 3546 Extraction Date: 10/31/20 20:07

arameter	Result	Qualifier Units	RL		MDL
emivolatile Organics by GC/MS -	Westborough	Lab for sample(s):	01-02	Batch:	WG1428968-1
Acenaphthene	ND	ug/kg	130		17.
Hexachlorobenzene	ND	ug/kg	99		18.
Bis(2-chloroethyl)ether	ND	ug/kg	150		22.
2-Chloronaphthalene	ND	ug/kg	160		16.
3,3'-Dichlorobenzidine	ND	ug/kg	160		44.
2,4-Dinitrotoluene	ND	ug/kg	160		33.
2,6-Dinitrotoluene	ND	ug/kg	160		28.
Fluoranthene	ND	ug/kg	99		19.
4-Chlorophenyl phenyl ether	ND	ug/kg	160		18.
4-Bromophenyl phenyl ether	ND	ug/kg	160		25.
Bis(2-chloroisopropyl)ether	ND	ug/kg	200		28.
Bis(2-chloroethoxy)methane	ND	ug/kg	180		16.
Hexachlorobutadiene	ND	ug/kg	160		24.
Hexachlorocyclopentadiene	ND	ug/kg	470		150
Hexachloroethane	ND	ug/kg	130		27.
Isophorone	ND	ug/kg	150		21.
Naphthalene	ND	ug/kg	160		20.
Nitrobenzene	ND	ug/kg	150		24.
NDPA/DPA	ND	ug/kg	130		19.
n-Nitrosodi-n-propylamine	ND	ug/kg	160		25.
Bis(2-ethylhexyl)phthalate	ND	ug/kg	160		57.
Butyl benzyl phthalate	ND	ug/kg	160		42.
Di-n-butylphthalate	ND	ug/kg	160		31.
Di-n-octylphthalate	ND	ug/kg	160		56.
Diethyl phthalate	ND	ug/kg	160		15.
Dimethyl phthalate	ND	ug/kg	160		35.
Benzo(a)anthracene	ND	ug/kg	99		18.
Benzo(a)pyrene	ND	ug/kg	130		40.
Benzo(b)fluoranthene	ND	ug/kg	99		28.



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

Analytical Method:	1,8270D
Analytical Date:	11/02/20 09:15
Analyst:	IM

Extraction Method: EPA 3546 Extraction Date: 10/31/20 20:07

ND         ug/kg         99         17.           Acenaphthylene         ND         ug/kg         130         25.           Anthracene         ND         ug/kg         99         32.           Benzo(ghi)perylene         ND         ug/kg         130         19.           Fluorene         ND         ug/kg         99         32.           Dibenzo(a,h)anthracene         ND         ug/kg         99         20.           Dibenzo(a,h)anthracene         ND         ug/kg         99         19.           Indeno(1,2,3-cd)pyrene         ND         ug/kg         99         16.           Biphenyl         ND         ug/kg         99         16.           Biphenyl         ND         ug/kg         160         30.           2-Nitroaniline         ND         ug/kg         160         31.           4-Nitroaniline         ND         ug/kg         160         68.           Dibenzofuran         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         160         17.           Acetophenone <th>arameter</th> <th>Result</th> <th>Qualifier Units</th> <th>s RL</th> <th></th> <th>MDL</th>	arameter	Result	Qualifier Units	s RL		MDL
ND         ug/kg         99         17.           Acenaphthylene         ND         ug/kg         130         25.           Anthracene         ND         ug/kg         99         32.           Benzo(ghi)perylene         ND         ug/kg         130         19.           Fluorene         ND         ug/kg         99         20.           Dibenzo(a,h)anthracene         ND         ug/kg         99         20.           Dibenzo(a,h)anthracene         ND         ug/kg         99         16.           Biphenyl         ND         ug/kg         99         16.           Biphenyl         ND         ug/kg         130         23.           Pyrene         ND         ug/kg         160         30.           2-Nitroaniline         ND         ug/kg         160         32.           3-Nitroaniline         ND         ug/kg         160         31.           4-Nitroaniline         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         16.           2-Actophenone         ND         ug/kg         160         17.           2-Al-Dichlorophenol	emivolatile Organics by GC/MS -	Westborough	Lab for sample	e(s): 01-02	Batch:	WG1428968-1
Acenaphthylene         ND         ug/kg         130         25.           Anthracene         ND         ug/kg         99         32.           Benzo(ghi)perylene         ND         ug/kg         130         19.           Fluorene         ND         ug/kg         99         20.           Dibenzo(a,h)anthracene         ND         ug/kg         99         20.           Dibenzo(a,h)anthracene         ND         ug/kg         99         19.           Indeno(1,2,3-cd)pyrene         ND         ug/kg         99         16.           Biphenyl         ND         ug/kg         160         30.           2-Nitroaniline         ND         ug/kg         160         30.           2-Nitroaniline         ND         ug/kg         160         31.           4-Nitroaniline         ND         ug/kg         160         31.           2-Methylnaphthalene         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         24.	Benzo(k)fluoranthene	ND	ug/k	g 99		26.
ND         Ug/kg         99         32.           Benzo(ghi)perylene         ND         Ug/kg         130         19.           Fluorene         ND         Ug/kg         160         16.           Phenanthrene         ND         Ug/kg         99         20.           Dibenzo(a,h)anthracene         ND         Ug/kg         99         19.           Indeno(1,2,3-cd)pyrene         ND         Ug/kg         99         16.           Biphenyl         ND         Ug/kg         380         38.           4-Chloroaniline         ND         Ug/kg         160         30.           2-Nitroaniline         ND         Ug/kg         160         31.           4-Nitroaniline         ND         Ug/kg         160         32.           3-Nitroaniline         ND         Ug/kg         160         31.           4-Nitroaniline         ND         Ug/kg         160         68.           Dibenzofuran         ND         Ug/kg         160         16.           2-Methylnaphthalene         ND         Ug/kg         160         17.           Acetophenone         ND         Ug/kg         160         24.           2-Chlorophe	Chrysene	ND	ug/k	g 99		17.
Benzo(ghi)perylene         ND         ug/kg         130         19.           Fluorene         ND         ug/kg         160         16.           Phenanthrene         ND         ug/kg         99         20.           Dibenzo(a,h)anthracene         ND         ug/kg         99         19.           Indeno(1,2,3-cd)pyrene         ND         ug/kg         99         16.           Biphenyl         ND         ug/kg         160         30.           2-Nitroaniline         ND         ug/kg         160         32.           3-Nitroaniline         ND         ug/kg         160         32.           3-Nitroaniline         ND         ug/kg         160         31.           4-Nitroaniline         ND         ug/kg         160         68.           Dibenzofuran         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         16.           2-Atertophenone         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         24.	Acenaphthylene	ND	ug/k	g 130		25.
Fluorene         ND         ug/kg         160         16.           Phenanthrene         ND         ug/kg         99         20.           Dibenzo(a,h)anthracene         ND         ug/kg         99         19.           Indeno(1,2,3-cd)pyrene         ND         ug/kg         99         16.           Biphenyl         ND         ug/kg         380         38.           4-Chloroaniline         ND         ug/kg         160         30.           2-Nitroaniline         ND         ug/kg         160         32.           3-Nitroaniline         ND         ug/kg         160         32.           3-Nitroaniline         ND         ug/kg         160         32.           4-Nitroaniline         ND         ug/kg         160         68.           Dibenzofuran         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         160         20.           2,4,6-Trichlorophenol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         24. </td <td>Anthracene</td> <td>ND</td> <td>ug/k</td> <td>g 99</td> <td></td> <td>32.</td>	Anthracene	ND	ug/k	g 99		32.
Phenanthrene         ND         ug/kg         99         20.           Dibenzo(a,h)anthracene         ND         ug/kg         99         19.           Indeno(1,2,3-cd)pyrene         ND         ug/kg         99         16.           Biphenyl         ND         ug/kg         99         16.           Biphenyl         ND         ug/kg         380         38.           4-Chloroaniline         ND         ug/kg         160         30.           2-Nitroaniline         ND         ug/kg         160         31.           4-Nitroaniline         ND         ug/kg         160         68.           Dibenzofuran         ND         ug/kg         160         68.           Dibenzofuran         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         160         20.           2,4,6-Trichlorophenol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         19.           2,4-Dirthorophenol         ND         ug/kg         160         54.     <	Benzo(ghi)perylene	ND	ug/k	g 130		19.
Dibenzo(a,h)anthracene         ND         ug/kg         99         19.           Indeno(1,2,3-cd)pyrene         ND         ug/kg         130         23.           Pyrene         ND         ug/kg         99         16.           Biphenyl         ND         ug/kg         380         38.           4-Chloroaniline         ND         ug/kg         160         30.           2-Nitroaniline         ND         ug/kg         160         31.           3-Nitroaniline         ND         ug/kg         160         31.           4-Nitroaniline         ND         ug/kg         160         68.           Dibenzofuran         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         160         24.           2-Al-Dirichlorophenol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         54.           2-Al-Dirichlorophenol         ND         ug/kg         160         54	Fluorene	ND	ug/k	g 160		16.
Indeno(1,2,3-cd)pyrene         ND         ug/kg         130         23.           Pyrene         ND         ug/kg         99         16.           Biphenyl         ND         ug/kg         380         38.           4-Chloroaniline         ND         ug/kg         160         30.           2-Nitroaniline         ND         ug/kg         160         32.           3-Nitroaniline         ND         ug/kg         160         32.           3-Nitroaniline         ND         ug/kg         160         32.           3-Nitroaniline         ND         ug/kg         160         68.           Dibenzofuran         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         160         20.           2,4,6-Trichlorophenol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         54.           2,4-Dinchlorophenol         ND         ug/kg         360         62.	Phenanthrene	ND	ug/k	g 99		20.
Pyrene         ND         ug/kg         99         16.           Biphenyl         ND         ug/kg         380         38.           4-Chloroaniline         ND         ug/kg         160         30.           2-Nitroaniline         ND         ug/kg         160         32.           3-Nitroaniline         ND         ug/kg         160         31.           4-Nitroaniline         ND         ug/kg         160         68.           Dibenzofuran         ND         ug/kg         160         68.           2-Methylnaphthalene         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         160         20.           2,4,6-Trichlorophenol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         24.           2,4-Dirichlorophenol         ND         ug/kg         160         54.           2,4-Dinethylphenol         ND         ug/kg         360         62.           2,4-Dinethylphenol         ND         ug/kg         230         67.	Dibenzo(a,h)anthracene	ND	ug/k	g 99		19.
Biphenyl         ND         ug/kg         380         38.           4-Chloroaniline         ND         ug/kg         160         30.           2-Nitroaniline         ND         ug/kg         160         32.           3-Nitroaniline         ND         ug/kg         160         31.           4-Nitroaniline         ND         ug/kg         160         68.           Dibenzofuran         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         160         20.           2,4,6-Trichlorophenol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         19.           2,4-Dichlorophenol         ND         ug/kg         160         54.           2-Nitrophenol         ND         ug/kg         360         62.           2,4-Diniethylphenol         ND         ug/kg         230         67	Indeno(1,2,3-cd)pyrene	ND	ug/k	g 130		23.
4-Chloroaniline       ND       ug/kg       160       30.         2-Nitroaniline       ND       ug/kg       160       32.         3-Nitroaniline       ND       ug/kg       160       31.         4-Nitroaniline       ND       ug/kg       160       31.         4-Nitroaniline       ND       ug/kg       160       68.         Dibenzofuran       ND       ug/kg       160       16.         2-Methylnaphthalene       ND       ug/kg       160       17.         Acetophenone       ND       ug/kg       160       20.         2,4,6-Trichlorophenol       ND       ug/kg       160       24.         2-Chlorophenol       ND       ug/kg       160       24.         2-Chlorophenol       ND       ug/kg       160       24.         2-Chlorophenol       ND       ug/kg       160       19.         2,4-Dirichlorophenol       ND       ug/kg       160       54.         2-Loinorphenol       ND       ug/kg       360       62.         2,4-Dirictophenol       ND       ug/kg       230       67.         2,4-Dirictophenol       ND       ug/kg       790       77. <td>Pyrene</td> <td>ND</td> <td>ug/k</td> <td>g 99</td> <td></td> <td>16.</td>	Pyrene	ND	ug/k	g 99		16.
Production         Product	Biphenyl	ND	ug/k	g 380		38.
3-Nitroaniline         ND         ug/kg         160         31.           4-Nitroaniline         ND         ug/kg         160         68.           Dibenzofuran         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         200         20.           1,2,4,5-Tetrachlorobenzene         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         99         31.           2,4,6-Trichlorophenol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         54.           2,4-Dichlorophenol         ND         ug/kg         160         54.           2,4-Dimethylphenol         ND         ug/kg         360         62.           4-Nitrophenol         ND         ug/kg         790         77.           4,6-Dinitrophenol         ND         ug/kg         790         77.	4-Chloroaniline	ND	ug/k	g 160		30.
4-Nitroaniline         ND         ug/kg         160         68.           Dibenzofuran         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         200         20.           1,2,4,5-Tetrachlorobenzene         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         99         31.           2,4,6-Trichlorophenol         ND         ug/kg         160         24.           2-Chloro-m-cresol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         54.           2,4-Dichlorophenol         ND         ug/kg         160         54.           2,4-Dimethylphenol         ND         ug/kg         360         62.           4-Nitrophenol         ND         ug/kg         790         77.           2,4-Dinitrophenol         ND         ug/kg         790         77.           4,6-Dinitro-o-cresol         ND         ug/kg         430 <td>2-Nitroaniline</td> <td>ND</td> <td>ug/k</td> <td>g 160</td> <td></td> <td>32.</td>	2-Nitroaniline	ND	ug/k	g 160		32.
Dibenzofuran         ND         ug/kg         160         16.           2-Methylnaphthalene         ND         ug/kg         200         20.           1,2,4,5-Tetrachlorobenzene         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         160         20.           2,4,6-Trichlorophenol         ND         ug/kg         99         31.           p-Chloro-m-cresol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         19.           2,4-Dichlorophenol         ND         ug/kg         160         54.           2,4-Dinethylphenol         ND         ug/kg         360         62.           2,4-Dinethylphenol         ND         ug/kg         230         67.           2,4-Dinethylphenol         ND         ug/kg         790         77.           4,6-Dinitro-o-cresol         ND         ug/kg         430         79.	3-Nitroaniline	ND	ug/k	g 160		31.
2-Methylnaphthalene         ND         ug/kg         200         20.           1,2,4,5-Tetrachlorobenzene         ND         ug/kg         160         17.           Acetophenone         ND         ug/kg         160         20.           2,4,6-Trichlorophenol         ND         ug/kg         99         31.           p-Chloro-m-cresol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         19.           2,4-Dichlorophenol         ND         ug/kg         160         54.           2,4-Dinethylphenol         ND         ug/kg         360         62.           2,4-Nitrophenol         ND         ug/kg         360         62.           4,6-Dinitrophenol         ND         ug/kg         790         77.	4-Nitroaniline	ND	ug/k	g 160		68.
1,2,4,5-Tetrachlorobenzene       ND       ug/kg       160       17.         Acetophenone       ND       ug/kg       160       20.         2,4,6-Trichlorophenol       ND       ug/kg       99       31.         p-Chloro-m-cresol       ND       ug/kg       160       24.         2-Chlorophenol       ND       ug/kg       160       19.         2,4-Dichlorophenol       ND       ug/kg       150       26.         2,4-Dinethylphenol       ND       ug/kg       160       54.         2-Nitrophenol       ND       ug/kg       360       62.         4-Nitrophenol       ND       ug/kg       790       77.         4,6-Dinitro-o-cresol       ND       ug/kg       430       79.	Dibenzofuran	ND	ug/k	g 160		16.
Acetophenone         ND         ug/kg         160         20.           2,4,6-Trichlorophenol         ND         ug/kg         99         31.           p-Chloro-m-cresol         ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         19.           2,4-Dichlorophenol         ND         ug/kg         160         19.           2,4-Dichlorophenol         ND         ug/kg         160         54.           2,4-Dimethylphenol         ND         ug/kg         360         62.           2-Nitrophenol         ND         ug/kg         360         62.           4-Nitrophenol         ND         ug/kg         790         77.           4,6-Dinitro-o-cresol         ND         ug/kg         430         79.	2-Methylnaphthalene	ND	ug/k	g 200		20.
2,4,6-Trichlorophenol       ND       ug/kg       99       31.         p-Chloro-m-cresol       ND       ug/kg       160       24.         2-Chlorophenol       ND       ug/kg       160       19.         2,4-Dichlorophenol       ND       ug/kg       150       26.         2,4-Dinethylphenol       ND       ug/kg       160       54.         2-Nitrophenol       ND       ug/kg       360       62.         4-Nitrophenol       ND       ug/kg       230       67.         2,4-Dinitrophenol       ND       ug/kg       790       77.         4,6-Dinitro-o-cresol       ND       ug/kg       430       79.	1,2,4,5-Tetrachlorobenzene	ND	ug/k	g 160		17.
ND         ug/kg         160         24.           2-Chlorophenol         ND         ug/kg         160         19.           2,4-Dichlorophenol         ND         ug/kg         150         26.           2,4-Dimethylphenol         ND         ug/kg         160         54.           2-Nitrophenol         ND         ug/kg         360         62.           4-Nitrophenol         ND         ug/kg         230         67.           2,4-Dinitrophenol         ND         ug/kg         790         77.           4,6-Dinitro-o-cresol         ND         ug/kg         430         79.	Acetophenone	ND	ug/k	g 160		20.
2-Chlorophenol       ND       ug/kg       160       19.         2,4-Dichlorophenol       ND       ug/kg       150       26.         2,4-Dimethylphenol       ND       ug/kg       160       54.         2-Nitrophenol       ND       ug/kg       360       62.         4-Nitrophenol       ND       ug/kg       230       67.         2,4-Dinitrophenol       ND       ug/kg       790       77.         4,6-Dinitro-o-cresol       ND       ug/kg       430       79.	2,4,6-Trichlorophenol	ND	ug/k	g 99		31.
2,4-Dichlorophenol       ND       ug/kg       150       26.         2,4-Dimethylphenol       ND       ug/kg       160       54.         2-Nitrophenol       ND       ug/kg       360       62.         4-Nitrophenol       ND       ug/kg       230       67.         2,4-Dinitrophenol       ND       ug/kg       790       77.         4,6-Dinitro-o-cresol       ND       ug/kg       430       79.	p-Chloro-m-cresol	ND	ug/k	g 160		24.
ND         ug/kg         160         54.           2-Nitrophenol         ND         ug/kg         360         62.           4-Nitrophenol         ND         ug/kg         230         67.           2,4-Dinitrophenol         ND         ug/kg         790         77.           4,6-Dinitro-o-cresol         ND         ug/kg         430         79.	2-Chlorophenol	ND	ug/k	g 160		19.
2-Nitrophenol         ND         ug/kg         360         62.           4-Nitrophenol         ND         ug/kg         230         67.           2,4-Dinitrophenol         ND         ug/kg         790         77.           4,6-Dinitro-o-cresol         ND         ug/kg         430         79.	2,4-Dichlorophenol	ND	ug/k	g 150		26.
4-Nitrophenol         ND         ug/kg         230         67.           2,4-Dinitrophenol         ND         ug/kg         790         77.           4,6-Dinitro-o-cresol         ND         ug/kg         430         79.	2,4-Dimethylphenol	ND	ug/k	g 160		54.
2,4-Dinitrophenol         ND         ug/kg         790         77.           4,6-Dinitro-o-cresol         ND         ug/kg         430         79.	2-Nitrophenol	ND	ug/k	g 360		62.
4,6-Dinitro-o-cresol ND ug/kg 430 79.	4-Nitrophenol	ND	ug/k	g 230		67.
	2,4-Dinitrophenol	ND	ug/k	g 790		77.
Pentachlorophenol ND ug/kg 130 36.	4,6-Dinitro-o-cresol	ND	ug/k	g 430		79.
	Pentachlorophenol	ND	ug/k	g 130		36.



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

Analytical Method:	1,8270D	Extraction Method:	EPA 3546
Analytical Date:	11/02/20 09:15	Extraction Date:	10/31/20 20:07
Analyst:	IM		

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS	- Westborough	h Lab for s	ample(s):	01-02	Batch:	WG1428968-1
Phenol	ND		ug/kg	160		25.
2-Methylphenol	ND		ug/kg	160		26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240		26.
2,4,5-Trichlorophenol	ND		ug/kg	160		32.
Carbazole	ND		ug/kg	160		16.
Atrazine	ND		ug/kg	130		58.
Benzaldehyde	ND		ug/kg	220		44.
Caprolactam	ND		ug/kg	160		50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160		33.

Surrogate	%Recovery Qu	Acceptance alifier Criteria
2-Fluorophenol	71	25-120
Phenol-d6	72	10-120
Nitrobenzene-d5	69	23-120
2-Fluorobiphenyl	68	30-120
2,4,6-Tribromophenol	71	10-136
4-Terphenyl-d14	81	18-120



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

Analytical Method:	1,8270D	Extrac
Analytical Date:	11/04/20 07:04	Extrac
Analyst:	WR	
TCLP/SPLP Extraction Date:	11/01/20 14:20	

Extraction Method:	EPA 3510C
Extraction Date:	11/02/20 21:09

arameter	Result	Qualifier	Units	RL	MDL
CLP Semivolatiles by EPA 1311	- Westboroug	gh Lab for s	sample(s):	01-02	Batch: WG1429522-1
Hexachlorobenzene	ND		ug/l	10	3.4
2,4-Dinitrotoluene	ND		ug/l	25	1.9
Hexachlorobutadiene	ND		ug/l	10	3.0
Hexachloroethane	ND		ug/l	10	2.2
Nitrobenzene	ND		ug/l	10	3.3
2,4,6-Trichlorophenol	ND		ug/l	25	2.5
Pentachlorophenol	ND		ug/l	50	9.8
2-Methylphenol	ND		ug/l	25	5.5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8
2,4,5-Trichlorophenol	ND		ug/l	25	1.9
Pyridine	ND		ug/l	18	4.5

	Acceptance
%Recovery	Qualifier Criteria
74	21-120
69	10-120
76	23-120
67	15-120
65	10-120
69	33-120
	69 76 67 65



 Lab Number:
 L2047640

 Report Date:
 11/09/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
	•						
Semivolatile Organics by GC/MS - Westbord	ough Lab Associ	ated sample(s):	01-02 Batch	n: WG14289	68-2 WG142896	58-3	
Acenaphthene	72		72		31-137	0	50
Hexachlorobenzene	63		64		40-140	2	50
Bis(2-chloroethyl)ether	64		65		40-140	2	50
2-Chloronaphthalene	66		68		40-140	3	50
3,3'-Dichlorobenzidine	63		65		40-140	3	50
2,4-Dinitrotoluene	75		76		40-132	1	50
2,6-Dinitrotoluene	72		72		40-140	0	50
Fluoranthene	71		72		40-140	1	50
4-Chlorophenyl phenyl ether	65		68		40-140	5	50
4-Bromophenyl phenyl ether	64		66		40-140	3	50
Bis(2-chloroisopropyl)ether	57		58		40-140	2	50
Bis(2-chloroethoxy)methane	67		68		40-117	1	50
Hexachlorobutadiene	55		57		40-140	4	50
Hexachlorocyclopentadiene	52		54		40-140	4	50
Hexachloroethane	59		60		40-140	2	50
Isophorone	64		65		40-140	2	50
Naphthalene	62		64		40-140	3	50
Nitrobenzene	64		66		40-140	3	50
NDPA/DPA	69		70		36-157	1	50
n-Nitrosodi-n-propylamine	66		67		32-121	2	50
Bis(2-ethylhexyl)phthalate	86		88		40-140	2	50
Butyl benzyl phthalate	78		81		40-140	4	50
Di-n-butylphthalate	79		81		40-140	3	50



Project Name: T20B-LARKIN DEVELOPMENT AMERIP

 Lab Number:
 L2047640

 Report Date:
 11/09/20

	LCS	_	LCSD	_	%Recovery		RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual Limits	
Semivolatile Organics by GC/MS - Westboro	ugh Lab Assoc	iated sample(s):	01-02 Bate	h: WG142	8968-2 WG142896	68-3		
Di-n-octylphthalate	87		90		40-140	3	50	
Diethyl phthalate	71		73		40-140	3	50	
Dimethyl phthalate	69		70		40-140	1	50	
Benzo(a)anthracene	75		76		40-140	1	50	
Benzo(a)pyrene	86		86		40-140	0	50	
Benzo(b)fluoranthene	80		80		40-140	0	50	
Benzo(k)fluoranthene	76		78		40-140	3	50	
Chrysene	74		75		40-140	1	50	
Acenaphthylene	70		71		40-140	1	50	
Anthracene	76		77		40-140	1	50	
Benzo(ghi)perylene	80		80		40-140	0	50	
Fluorene	70		71		40-140	1	50	
Phenanthrene	73		75		40-140	3	50	
Dibenzo(a,h)anthracene	79		80		40-140	1	50	
Indeno(1,2,3-cd)pyrene	80		81		40-140	1	50	
Pyrene	72		73		35-142	1	50	
Biphenyl	72		73		37-127	1	50	
4-Chloroaniline	51		52		40-140	2	50	
2-Nitroaniline	77		79		47-134	3	50	
3-Nitroaniline	59		62		26-129	5	50	
4-Nitroaniline	78		80		41-125	3	50	
Dibenzofuran	70		72		40-140	3	50	
2-Methylnaphthalene	68		70		40-140	3	50	



Project Name: T20B-LARKIN DEVELOPMENT AMERIP

 Lab Number:
 L2047640

 Report Date:
 11/09/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits	
Semivolatile Organics by GC/MS - Westb	orough Lab Associate	ed sample(s):	01-02 Batch	: WG1428968-2 WG14289	68-3		
1,2,4,5-Tetrachlorobenzene	61		62	40-117	2	50	
Acetophenone	70		70	14-144	0	50	
2,4,6-Trichlorophenol	68		67	30-130	1	50	
p-Chloro-m-cresol	73		75	26-103	3	50	
2-Chlorophenol	68		68	25-102	0	50	
2,4-Dichlorophenol	75		76	30-130	1	50	
2,4-Dimethylphenol	76		78	30-130	3	50	
2-Nitrophenol	71		72	30-130	1	50	
4-Nitrophenol	78		80	11-114	3	50	
2,4-Dinitrophenol	63		68	4-130	8	50	
4,6-Dinitro-o-cresol	66		67	10-130	2	50	
Pentachlorophenol	66		66	17-109	0	50	
Phenol	64		65	26-90	2	50	
2-Methylphenol	70		73	30-130.	4	50	
3-Methylphenol/4-Methylphenol	70		73	30-130	4	50	
2,4,5-Trichlorophenol	68		69	30-130	1	50	
Carbazole	78		80	54-128	3	50	
Atrazine	77		79	40-140	3	50	
Benzaldehyde	65		65	40-140	0	50	
Caprolactam	71		74	15-130	4	50	
2,3,4,6-Tetrachlorophenol	64		67	40-140	5	50	



### Lab Control Sample Analysis

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Batch Quality Control	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.		Report Date:	11/09/20

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	
Semivolatile Organics by GC/MS - Westbo	rough Lab Associa	ated sample(s	): 01-02 Batch	: WG1428	3968-2 WG14289	68-3			

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
2-Fluorophenol	72	72	25-120
Phenol-d6	73	74	10-120
Nitrobenzene-d5	69	70	23-120
2-Fluorobiphenyl	69	71	30-120
2,4,6-Tribromophenol	70	71	10-136
4-Terphenyl-d14	75	76	18-120



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP
---------------	--------------------------------

 Lab Number:
 L2047640

 Report Date:
 11/09/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westbord	ough Lab Assoc	iated sample(s)	): 01-02 Batcl	h: WG14295	22-2 WG14295	22-3		
Hexachlorobenzene	52		56		40-140	7		30
2,4-Dinitrotoluene	65		70		40-132	7		30
Hexachlorobutadiene	48		51		28-111	6		30
Hexachloroethane	56		58		21-105	4		30
Nitrobenzene	65		70		40-140	7		30
2,4,6-Trichlorophenol	56		60		30-130	7		30
Pentachlorophenol	53		57		9-103	7		30
2-Methylphenol	64		70		30-130	9		30
3-Methylphenol/4-Methylphenol	66		72		30-130	9		30
2,4,5-Trichlorophenol	58		61		30-130	5		30
Pyridine	16		20		10-66	22		30

Surrogate	LCS %Recovery Qua	LCSD I %Recovery Qual	Acceptance Criteria	
2 Elementaria	20	74	04.400	•
2-Fluorophenol	66	71	21-120	
Phenol-d6	62	68	10-120	
Nitrobenzene-d5	69	75	23-120	
2-Fluorobiphenyl	60	64	15-120	
2,4,6-Tribromophenol	60	64	10-120	
4-Terphenyl-d14	62	65	33-120	



## PCBS



		Serial_No	:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-01	Date Collected:	10/28/20 16:30
Client ID:	PARKING LOT CIU 3 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method	I: EPA 3546
Analytical Method:	1,8082A	Extraction Date:	10/31/20 23:53
Analytical Date:	11/02/20 11:55	Cleanup Method:	EPA 3665A
Analyst:	AD	Cleanup Date:	11/01/20
Percent Solids:	84%	Cleanup Method:	EPA 3660B
		Cleanup Date:	11/01/20

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>	Column
Polychlorinated Biphenyls by GC - V	/estborough Lab						
Aroclor 1016	ND		ug/kg	38.6	3.43	1	A
Aroclor 1221	ND		ug/kg	38.6	3.87	1	А
Aroclor 1232	ND		ug/kg	38.6	8.18	1	А
Aroclor 1242	ND		ug/kg	38.6	5.20	1	А
Aroclor 1248	ND		ug/kg	38.6	5.79	1	А
Aroclor 1254	ND		ug/kg	38.6	4.22	1	А
Aroclor 1260	ND		ug/kg	38.6	7.13	1	А
Aroclor 1262	ND		ug/kg	38.6	4.90	1	А
Aroclor 1268	ND		ug/kg	38.6	4.00	1	А
PCBs, Total	ND		ug/kg	38.6	3.43	1	А

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	А
Decachlorobiphenyl	54		30-150	А
2,4,5,6-Tetrachloro-m-xylene	68		30-150	В
Decachlorobiphenyl	53		30-150	В



		Serial_No	:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-02	Date Collected:	10/28/20 16:35
Client ID:	PARKING LOT CIU 4 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method	: EPA 3546
Analytical Method:	1,8082A	Extraction Date:	10/31/20 23:53
Analytical Date:	11/02/20 12:02	Cleanup Method:	EPA 3665A
Analyst:	AD	Cleanup Date:	11/01/20
Percent Solids:	86%	Cleanup Method:	EPA 3660B
		Cleanup Date:	11/01/20

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>	Column
Polychlorinated Biphenyls by GC - We	stborough Lab						
Aroclor 1016	ND			37.2	3.30	1	А
			ug/kg			1	
Aroclor 1221	ND		ug/kg	37.2	3.73	1	A
Aroclor 1232	ND		ug/kg	37.2	7.89	1	A
Aroclor 1242	ND		ug/kg	37.2	5.02	1	А
Aroclor 1248	ND		ug/kg	37.2	5.58	1	В
Aroclor 1254	5.74	J	ug/kg	37.2	4.07	1	А
Aroclor 1260	ND		ug/kg	37.2	6.88	1	А
Aroclor 1262	ND		ug/kg	37.2	4.72	1	А
Aroclor 1268	ND		ug/kg	37.2	3.85	1	А
PCBs, Total	5.74	J	ug/kg	37.2	3.30	1	В

Surrogate	% Recovery	Qualifier	Acceptance Qualifier Criteria Cc		
Surroyate	% Recovery	Quaimer	Criteria	Column	
2,4,5,6-Tetrachloro-m-xylene	68		30-150	А	
Decachlorobiphenyl	53		30-150	А	
2,4,5,6-Tetrachloro-m-xylene	70		30-150	В	
Decachlorobiphenyl	51		30-150	В	



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

Analytical Method:	
Analytical Date:	
Analyst:	

1,8082A 11/02/20 10:06 JM Extraction Method:EPA 3546Extraction Date:10/31/20 23:51Cleanup Method:EPA 3665ACleanup Date:11/01/20Cleanup Method:EPA 3660BCleanup Date:11/01/20

Parameter	Result	Qualifier	Units	RL		MDL	Column
Polychlorinated Biphenyls by GC -	Westborough	n Lab for	sample(s):	01-02	Batch:	WG142	28986-1
Aroclor 1016	ND		ug/kg	32.5		2.88	А
Aroclor 1221	ND		ug/kg	32.5		3.25	А
Aroclor 1232	ND		ug/kg	32.5		6.88	А
Aroclor 1242	ND		ug/kg	32.5		4.38	А
Aroclor 1248	ND		ug/kg	32.5		4.87	А
Aroclor 1254	ND		ug/kg	32.5		3.55	А
Aroclor 1260	ND		ug/kg	32.5		6.00	А
Aroclor 1262	ND		ug/kg	32.5		4.12	А
Aroclor 1268	ND		ug/kg	32.5		3.36	А
PCBs, Total	ND		ug/kg	32.5		2.88	А

		Acceptance			
Surrogate	%Recovery	Qualifier	Criteria	Column	
2,4,5,6-Tetrachloro-m-xylene	88		30-150	А	
Decachlorobiphenyl	75		30-150	А	
2,4,5,6-Tetrachloro-m-xylene	83		30-150	В	
Decachlorobiphenyl	67		30-150	В	



### Lab Control Sample Analysis

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Batch Quality Control	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.		Report Date:	11/09/20

	LCS		LCSD	9	%Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	Column
Polychlorinated Biphenyls by GC - Wes	tborough Lab Associa	ted sample(s):	: 01-02 Batch	: WG142898	36-2 WG142898	6-3			
Aroclor 1016	99		100		40-140	1		50	А
Aroclor 1260	97		99		40-140	2		50	А

	LCS	LCSD	Acceptance
Surrogate	%Recovery	Qual %Recovery Qu	al Criteria Column
2,4,5,6-Tetrachloro-m-xylene	77	77	30-150 A
Decachlorobiphenyl	65	64	30-150 A
2,4,5,6-Tetrachloro-m-xylene	74	74	30-150 B
Decachlorobiphenyl	58	58	30-150 B



## PESTICIDES



		Serial_No	0:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID: Client ID: Sample Location:	L2047640-01 PARKING LOT CIU 3 20201028 822 SENECA ST. BUFFALO NY	Date Collected: Date Received: Field Prep:	10/28/20 16:30 10/30/20 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst: Percent Solids: TCLP/SPLP Ext. Da	Soil 1,8081B 11/03/20 13:25 JMC 84% ate: 11/01/20 14:20	Extraction Method Extraction Date:	I: EPA 3510C 11/02/20 20:48

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>	Column			
TCLP Pesticides by EPA 1311 - Westborough Lab										
Lindane	ND		ug/l	0.100	0.022	1	А			
Heptachlor	ND		ug/l	0.100	0.016	1	А			
Heptachlor epoxide	ND		ug/l	0.100	0.021	1	А			
Endrin	ND		ug/l	0.200	0.021	1	А			
Methoxychlor	ND		ug/l	1.00	0.034	1	А			
Toxaphene	ND		ug/l	1.00	0.314	1	А			
Chlordane	ND		ug/l	1.00	0.232	1	А			

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	118		30-150	А
Decachlorobiphenyl	134		30-150	А
2,4,5,6-Tetrachloro-m-xylene	102		30-150	В
Decachlorobiphenyl	135		30-150	В



		Serial_No	0:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-01	Date Collected:	10/28/20 16:30
Client ID:	PARKING LOT CIU 3 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method	l: EPA 8151A
Analytical Method:	1,8151A	Extraction Date:	11/03/20 08:56
Analytical Date:	11/04/20 09:59		
Analyst:	SM		
Percent Solids:	84%		
TCLP/SPLP Ext. Da	ate: 11/01/20 14:20		
Methylation Date:	11/03/20 21:04		

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>	Column
TCLP Herbicides by EPA 1311	I - Westborough Lab						
2,4-D	ND		mg/l	0.025	0.001	1	А
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	А
Surrogate			% Recovery	Qualifier		eptance iteria Co	olumn
DCAA			53		3	30-150	A

44



30-150

В

		Serial_No	:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID: Client ID: Sample Location:	L2047640-02 PARKING LOT CIU 4 20201028 822 SENECA ST. BUFFALO NY	Date Collected: Date Received: Field Prep:	10/28/20 16:35 10/30/20 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst: Percent Solids: TCLP/SPLP Ext. Da	Soil 1,8081B 11/03/20 13:37 JMC 86% ate: 11/01/20 14:20	Extraction Method Extraction Date:	I: EPA 3510C 11/02/20 20:48

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>	Column
TCLP Pesticides by EPA 1311 - Wes	tborough Lab						
Lindane	ND		ug/l	0.100	0.022	1	А
Heptachlor	ND		ug/l	0.100	0.016	1	А
Heptachlor epoxide	ND		ug/l	0.100	0.021	1	А
Endrin	ND		ug/l	0.200	0.021	1	А
Methoxychlor	ND		ug/l	1.00	0.034	1	А
Toxaphene	ND		ug/l	1.00	0.314	1	А
Chlordane	ND		ug/l	1.00	0.232	1	А

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	106		30-150	А
Decachlorobiphenyl	127		30-150	А
2,4,5,6-Tetrachloro-m-xylene	92		30-150	В
Decachlorobiphenyl	126		30-150	В



		Serial_No	:11092012:21
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-02	Date Collected:	10/28/20 16:35
Client ID:	PARKING LOT CIU 4 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst: Percent Solids: TCLP/SPLP Ext. Da Methylation Date:	Soil 1,8151A 11/04/20 10:17 SM 86% ate: 11/01/20 14:20 11/03/20 21:04	Extraction Method Extraction Date:	I: EPA 8151A 11/03/20 08:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
TCLP Herbicides by EPA 1311	- Westborough Lab						
2,4-D	ND		mg/l	0.025	0.001	1	A
2,4,5-TP (Silvex)	ND		mg/l	0.005	0.001	1	А
Surrogate			% Recovery	Qualifier		eptance iteria Co	lumn
DCAA			49		3	30-150	A

42

DCAA



30-150

В

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

Analytical Method:	1,8081B	Extraction Method:	EPA 3510C
Analytical Date:	11/03/20 12:51	Extraction Date:	11/02/20 20:48
Analyst:	JMC		
TCLP/SPLP Extraction Date:	11/01/20 14:20		

Parameter	Result	Qualifier	Units	RL	MDL	Column
CLP Pesticides by EPA 131	1 - Westborough I	_ab for san	nple(s):	01-02 Batch:	WG142951	1-1
Lindane	ND		ug/l	0.100	0.022	А
Heptachlor	ND		ug/l	0.100	0.016	А
Heptachlor epoxide	ND		ug/l	0.100	0.021	А
Endrin	ND		ug/l	0.200	0.021	А
Methoxychlor	ND		ug/l	1.00	0.034	А
Toxaphene	ND		ug/l	1.00	0.314	А
Chlordane	ND		ug/l	1.00	0.232	А

		Acceptance		
Surrogate	%Recovery			Column
			00.450	
2,4,5,6-Tetrachloro-m-xylene	119		30-150	A
Decachlorobiphenyl	140		30-150	А
2,4,5,6-Tetrachloro-m-xylene	102		30-150	В
Decachlorobiphenyl	132		30-150	В



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

Analytical Method:	1,8151A	Extraction Method:	EPA 8151A
Analytical Date:	11/04/20 09:04	Extraction Date:	11/03/20 08:56
Analyst:	SM		
TCLP/SPLP Extraction Date:	11/01/20 14:20		
Methylation Date:	11/03/20 21:04		

Parameter	Result	Qualifier	Units	R	L	MDL	Column
TCLP Herbicides by EPA 131	I - Westborough	Lab for san	nple(s):	01-02	Batch:	WG142971	3-1
2,4-D	ND		mg/l	0.0	25	0.001	А
2,4,5-TP (Silvex)	ND		mg/l	0.0	05	0.001	А

Surrogate	%Recovery	Qualifier	Criteria	Column	
	65		20.450	•	
DCAA	65		30-150	A	
DCAA	60		30-150	В	



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP
---------------	--------------------------------

 Lab Number:
 L2047640

 Report Date:
 11/09/20

	LCS		LCSD		%	%Recovery		RPD		
arameter	%Recovery	Qual	%Rec	overy	Qual	Limits	RPD	Qual	Limits	Column
CLP Pesticides by EPA 1311 - Westborough	Lab Associate	d sample(s):	01-02	Batch:	WG1429511-2	WG1429511-3	3			
Lindane	99		1	11		30-150	12		20	А
Heptachlor	104		1	17		30-150	12		20	А
Heptachlor epoxide	102		1	15		30-150	12		20	А
Endrin	105		1	21		30-150	14		20	А
Methoxychlor	115		1	34		30-150	15		20	А

	LCS	LCSD	A	Acceptance	
Surrogate	%Recovery Qu	ual %Recovery	Qual	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	103	111		30-150	А
Decachlorobiphenyl	121	133		30-150	А
2,4,5,6-Tetrachloro-m-xylene	92	98		30-150	В
Decachlorobiphenyl	121	134		30-150	В



### Lab Control Sample Analysis

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Batch Quality Control	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.		Report Date:	11/09/20

	LCS	LCS		0	%Recovery				
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	Column
TCLP Herbicides by EPA 1311 - Westboroug	h Lab Associat	ed sample(s):	01-02 Batch:	WG1429713-	2 WG1429713-3	3			
2,4-D	113		94		30-150	18		25	А
2,4,5-TP (Silvex)	61		42		30-150	37	Q	25	А

Surrogate	LCS	LCSD	Acceptance
	%Recovery Qu	ual %Recovery Qual	Criteria Column
DCAA	65	44	30-150 A
DCAA	69	50	30-150 B



## METALS



Serial\_No:11092012:21

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-01	Date Collected:	10/28/20 16:30
Client ID:	PARKING LOT CIU 3 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth:		TCLP/SPLP Ext. Date:	11/01/20 14:20
Matrix:	Soil		

Matrix:	Soil										
Percent Solids:	84%					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analys
TCLP Metals by EF	PA 1311 -	Mansfield L	_ab								
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	11/04/20 14:54	11/06/20 15:54	EPA 3015	1,6010D	BV
Barium, TCLP	0.509		mg/l	0.500	0.021	1	11/04/20 14:54	11/06/20 15:54	EPA 3015	1,6010D	BV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	11/04/20 14:54	11/06/20 15:54	EPA 3015	1,6010D	BV
Chromium, TCLP	0.021	J	mg/l	0.200	0.021	1	11/04/20 14:54	11/06/20 15:54	EPA 3015	1,6010D	BV
Lead, TCLP	ND		mg/l	0.500	0.027	1	11/04/20 14:54	11/06/20 15:54	EPA 3015	1,6010D	BV
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	11/04/20 15:10	) 11/05/20 13:19	EPA 7470A	1,7470A	EW
Selenium, TCLP	ND		mg/l	0.500	0.035	1	11/04/20 14:54	11/06/20 15:54	EPA 3015	1,6010D	BV
Silver, TCLP	ND		mg/l	0.100	0.028	1	11/04/20 14:54	11/06/20 15:54	EPA 3015	1,6010D	BV



Serial\_No:11092012:21

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-01	Date Collected:	10/28/20 16:30
Client ID:	PARKING LOT CIU 3 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified

#### Sample Depth:

Matrix: Soil Percent Solids: 84%

Percent Solids:	84%					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analys
Total Metals - Man	sfield Lab										
Arsenic, Total	3.86		mg/kg	0.445	0.093	1	11/04/20 05:30	11/05/20 23:54	EPA 3050B	1,6010D	BV
Barium, Total	36.6		mg/kg	0.445	0.078	1	11/04/20 05:30	11/05/20 23:54	EPA 3050B	1,6010D	BV
Cadmium, Total	0.392	J	mg/kg	0.445	0.044	1	11/04/20 05:30	11/05/20 23:54	EPA 3050B	1,6010D	BV
Chromium, Total	9.64		mg/kg	0.445	0.043	1	11/04/20 05:30	11/05/20 23:54	EPA 3050B	1,6010D	BV
Lead, Total	98.4		mg/kg	2.23	0.119	1	11/04/20 05:30	11/05/20 23:54	EPA 3050B	1,6010D	BV
Mercury, Total	0.050	J	mg/kg	0.076	0.049	1	11/04/20 08:40	11/04/20 20:01	EPA 7471B	1,7471B	AL
Selenium, Total	0.860	J	mg/kg	0.891	0.115	1	11/04/20 05:30	11/05/20 23:54	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.445	0.126	1	11/04/20 05:30	11/05/20 23:54	EPA 3050B	1,6010D	BV



Serial\_No:11092012:21

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-02	Date Collected:	10/28/20 16:35
Client ID:	PARKING LOT CIU 4 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified
Sample Depth:		TCLP/SPLP Ext. Date	: 11/01/20 14:20
Matrix:	Soil		

86%					Dilution	Date	Date	Prep	Analytical	
Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analys
PA 1311 -	Mansfield L	_ab								
ND		mg/l	1.00	0.019	1	11/04/20 14:54	11/06/20 16:27	EPA 3015	1,6010D	BV
0.589		mg/l	0.500	0.021	1	11/04/20 14:54	11/06/20 16:27	EPA 3015	1,6010D	BV
ND		mg/l	0.100	0.010	1	11/04/20 14:54	11/06/20 16:27	EPA 3015	1,6010D	BV
ND		mg/l	0.200	0.021	1	11/04/20 14:54	11/06/20 16:27	EPA 3015	1,6010D	BV
ND		mg/l	0.500	0.027	1	11/04/20 14:54	11/06/20 16:27	EPA 3015	1,6010D	BV
ND		mg/l	0.0010	0.0005	1	11/04/20 15:10	) 11/05/20 13:26	EPA 7470A	1,7470A	EW
ND		mg/l	0.500	0.035	1	11/04/20 14:54	11/06/20 16:27	EPA 3015	1,6010D	BV
ND		mg/l	0.100	0.028	1	11/04/20 14:54	11/06/20 16:27	EPA 3015	1,6010D	BV
	Result           PA 1311 -           ND           0.589           ND           ND	ResultQualifierPA 1311 - Mansfield IND0.589NDNDNDNDNDNDNDNDNDNDNDND	ResultQualifierUnitsPA 1311 - Mansfield LabNDmg/l0.589mg/lNDmg/lNDmg/lNDmg/lNDmg/lNDmg/lNDmg/lNDmg/lNDmg/lNDmg/l	Result         Qualifier         Units         RL           PA 1311 - Mansfield Lab         mg/l         1.00           ND         mg/l         0.500           ND         mg/l         0.500           ND         mg/l         0.100           ND         mg/l         0.200           ND         mg/l         0.500           ND         mg/l         0.500           ND         mg/l         0.500           ND         mg/l         0.500           ND         mg/l         0.500	Result         Qualifier         Units         RL         MDL           PA 1311 - Mansfield Lab         mg/l         1.00         0.019           ND         mg/l         0.500         0.021           ND         mg/l         0.100         0.010           ND         mg/l         0.200         0.021           ND         mg/l         0.500         0.027           ND         mg/l         0.0010         0.0005           ND         mg/l         0.500         0.035	Result         Qualifier         Units         RL         MDL         Dilution Factor           PA 1311 - Mansfield Lab         mg/l         1.00         0.019         1           ND         mg/l         0.500         0.021         1           ND         mg/l         0.100         0.010         1           ND         mg/l         0.200         0.021         1           ND         mg/l         0.200         0.021         1           ND         mg/l         0.500         0.025         1           ND         mg/l         0.500         0.035         1	Result         Qualifier         Units         RL         MDL         Dilution Factor         Date Prepared           PA 1311 - Mansfield Lab         mg/l         1.00         0.019         1         11/04/20 14:54           ND         mg/l         0.500         0.021         1         11/04/20 14:54           ND         mg/l         0.100         0.010         1         11/04/20 14:54           ND         mg/l         0.200         0.021         1         11/04/20 14:54           ND         mg/l         0.200         0.021         1         11/04/20 14:54           ND         mg/l         0.200         0.027         1         11/04/20 14:54           ND         mg/l         0.0010         0.0005         1         11/04/20 14:54           ND         mg/l         0.0010         0.0027         1         11/04/20 14:54           ND         mg/l         0.0010         0.0005         1         11/04/20 14:54           ND         mg/l         0.500         0.035         1         11/04/20 14:54	Result         Qualifier         Units         RL         MDL         Dilution Factor         Date Prepared         Date Analyzed           PA 1311 - Mansfield Lab           ND         mg/l         1.00         0.019         1         11/04/20 14:54 11/06/20 16:27           0.589         mg/l         0.500         0.021         1         11/04/20 14:54 11/06/20 16:27           ND         mg/l         0.100         0.010         1         11/04/20 14:54 11/06/20 16:27           ND         mg/l         0.200         0.021         1         11/04/20 14:54 11/06/20 16:27           ND         mg/l         0.200         0.021         1         11/04/20 14:54 11/06/20 16:27           ND         mg/l         0.200         0.021         1         11/04/20 14:54 11/06/20 16:27           ND         mg/l         0.500         0.027         1         11/04/20 14:54 11/06/20 16:27           ND         mg/l         0.0010         0.0005         1         11/04/20 14:54 11/06/20 16:27           ND         mg/l         0.0010         0.0035         1         11/04/20 14:54 11/06/20 16:27           ND         mg/l         0.500         0.035         1         11/04/20 14:54 11/06/20 16:27	Result         Qualifier         Units         RL         MDL         Date Factor         Date Prepared         Date Analyzed         Prep Method           PA 1311 - Mansfield Lab	Result         Qualifier         Units         RL         MDL         Dilution Factor         Date Prepared         Date Analyzed         Prep Method         Analytical Method           PA 1311 - Mansfield Lab



Serial\_No:11092012:21

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20
	SAMPLE RESULTS		
Lab ID:	L2047640-02	Date Collected:	10/28/20 16:35
Client ID:	PARKING LOT CIU 4 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified

## Sample Depth:

Matrix: Soil Percent Solids: 86%

Percent Solids:	86%					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	sfield Lab										
Arsenic, Total	4.23		mg/kg	0.446	0.093	1	11/04/20 05:30	11/05/20 23:59	EPA 3050B	1,6010D	BV
Barium, Total	66.8		mg/kg	0.446	0.078	1	11/04/20 05:30	11/05/20 23:59	EPA 3050B	1,6010D	BV
Cadmium, Total	0.344	J	mg/kg	0.446	0.044	1	11/04/20 05:30	11/05/20 23:59	EPA 3050B	1,6010D	BV
Chromium, Total	6.94		mg/kg	0.446	0.043	1	11/04/20 05:30	11/05/20 23:59	EPA 3050B	1,6010D	BV
Lead, Total	142.0		mg/kg	2.23	0.120	1	11/04/20 05:30	11/05/20 23:59	EPA 3050B	1,6010D	BV
Mercury, Total	0.072	J	mg/kg	0.074	0.048	1	11/04/20 08:40	11/04/20 20:05	EPA 7471B	1,7471B	AL
Selenium, Total	1.05		mg/kg	0.892	0.115	1	11/04/20 05:30	11/05/20 23:59	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.446	0.126	1	11/04/20 05:30	11/05/20 23:59	EPA 3050B	1,6010D	BV



Project Name:T20B-LARKIN DEVELOPMENT AMERIPProject Number:T20B-LARKIN DEV.

 Lab Number:
 L2047640

 Report Date:
 11/09/20

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfie	ld Lab for sample(s):	01-02 B	atch: Wo	G14297	69-1				
Arsenic, Total	ND	mg/kg	0.400	0.083	1	11/04/20 05:30	11/05/20 20:53	1,6010D	BV
Barium, Total	ND	mg/kg	0.400	0.070	1	11/04/20 05:30	11/05/20 20:53	1,6010D	BV
Cadmium, Total	ND	mg/kg	0.400	0.039	1	11/04/20 05:30	11/05/20 20:53	1,6010D	BV
Chromium, Total	ND	mg/kg	0.400	0.038	1	11/04/20 05:30	11/05/20 20:53	1,6010D	BV
Lead, Total	ND	mg/kg	2.00	0.107	1	11/04/20 05:30	11/05/20 20:53	1,6010D	BV
Selenium, Total	ND	mg/kg	0.800	0.103	1	11/04/20 05:30	11/05/20 20:53	1,6010D	BV
Silver, Total	ND	mg/kg	0.400	0.113	1	11/04/20 05:30	11/05/20 20:53	1,6010D	BV

### **Prep Information**

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	Analyst
Total Metals - Mansfiel	d Lab for sample(s):	01-02 Ba	atch: W0	G14297	71-1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	11/04/20 08:40	11/04/20 19:02	1,7471B	AL

#### **Prep Information**

Digestion Method: EPA 7471B

Parameter	Result (	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1	311 - Mans	field Lab	for sample	e(s): 01-	02 Bat	ch: WG14	30312-1			
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	11/04/20 14:54	11/06/20 15:45	1,6010D	BV
Barium, TCLP	0.047	J	mg/l	0.500	0.021	1	11/04/20 14:54	11/06/20 15:45	1,6010D	BV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	11/04/20 14:54	11/06/20 15:45	1,6010D	BV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	11/04/20 14:54	11/06/20 15:45	1,6010D	BV
Lead, TCLP	ND		mg/l	0.500	0.027	1	11/04/20 14:54	11/06/20 15:45	1,6010D	BV
Selenium, TCLP	ND		mg/l	0.500	0.035	1	11/04/20 14:54	11/06/20 15:45	1,6010D	BV
Silver, TCLP	ND		mg/l	0.100	0.028	1	11/04/20 14:54	11/06/20 15:45	1,6010D	BV



Project Name:T20B-LARKIN DEVELOPMENT AMERIPProject Number:T20B-LARKIN DEV.

 Lab Number:
 L2047640

 Report Date:
 11/09/20

## Method Blank Analysis Batch Quality Control

		Prep Information							
		Digestion	Method:	EPA	3015				
	TCLP/SP	PLP Extract	ion Date:	11/0 <sup>-</sup>	1/20 14:20				
Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 13	11 - Mansfield Lab	for sampl	e(s): 01-0	02 Bat	ch: WG143	80313-1			
Mercury, TCLP	ND	mg/l	0.0010	0.0005	1	11/04/20 15:10	11/05/20 13:07	1,7470A	EW

### **Prep Information**

Digestion Method: EPA 7470A TCLP/SPLP Extraction Date: 11/01/20 14:20

## Lab Control Sample Analysis Batch Quality Control

Project Name: T20B-LARKIN DEVELOPMENT AMERIP

 Lab Number:
 L2047640

 Report Date:
 11/09/20

Project Number: T20B-LARKIN DEV.

arameter	LCS %Recovery	/ Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
otal Metals - Mansfield Lab Associated sample	e(s): 01-02 B	atch: WG142	29769-2 SRM L	ot Number:	D109-540			
Arsenic, Total	90		-		70-130	-		
Barium, Total	84		-		75-125	-		
Cadmium, Total	97		-		75-125	-		
Chromium, Total	88		-		70-130	-		
Lead, Total	85		-		72-128	-		
Selenium, Total	90		-		68-132	-		
Silver, Total	84		-		68-131	-		
otal Metals - Mansfield Lab Associated sample	e(s): 01-02 B	atch: WG142	29771-2 SRM L	ot Number:	D109-540			
Mercury, Total	103		-		60-140	-		

## TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-02 Batch: WG1430312-2

Arsenic, TCLP	107		75-125	-	20
Barium, TCLP	104	-	75-125	-	20
Cadmium, TCLP	104	-	75-125	-	20
Chromium, TCLP	102	-	75-125	-	20
Lead, TCLP	104	-	75-125	-	20
Selenium, TCLP	93	-	75-125	-	20
Silver, TCLP	97	-	75-125	-	20



## Lab Control Sample Analysis

Project Number: T20B-LARKIN DEV.			Report Date:	11/09/20
LCS Parameter %Recovery %F	LCSD Recovery	%Recovery Limits	RPD	RPD Limits

Mercury, TCLP	101	-	80-120	-	



## Matrix Spike Analysis

		Batch Quality Control		
Project Name:	T20B-LARKIN DEVELOPMENT AMERIP		Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.		Report Date:	11/09/20

arameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery Qu	Recovery al Limits	RPD Q	RPD ual Limits
Total Metals - Mansfield I	_ab Associated sar	nple(s): 01-02	QC Bat	tch ID: WG142	9769-3	QC Samp	ole: L2047642-05	Client ID: MS	S Sample	
Arsenic, Total	2.69	10.4	12.2	92		-	-	75-125	-	20
Barium, Total	110	173	283	100		-	-	75-125	-	20
Cadmium, Total	0.375J	4.41	4.56	103		-	-	75-125	-	20
Chromium, Total	24.7	17.3	40.4	91		-	-	75-125	-	20
Lead, Total	26.4	44.1	61.6	80		-	-	75-125	-	20
Selenium, Total	0.392J	10.4	9.75	94		-	-	75-125	-	20
Silver, Total	ND	26	23.1	89		-	-	75-125	-	20
Total Metals - Mansfield I	_ab Associated sar	nple(s): 01-02	QC Bat	tch ID: WG142	9771-3	QC Samp	ole: L2047642-05	Client ID: MS	S Sample	
Mercury, Total	0.056J	0.147	0.194	132	Q	-	-	80-120	-	20
TCLP Metals by EPA 131	11 - Mansfield I ah	Accordated ac	$mole(a) \cdot (c)$		ah 10, 1/	NIC1 120210		1 00 470 40 04		DADIZINO
LOT CIU 3 20201028			• • • •		ch id. v	VG1430312		L2047640-01		
Arsenic, TCLP	ND	1.2	1.31	109	ch id. v	-	-3 QC Sample:	75-125		20
Arsenic, TCLP Barium, TCLP	ND 0.509	1.2 20	1.31 21.3	109 104	ch id. v	- - -		75-125 75-125		20 20
Arsenic, TCLP Barium, TCLP Cadmium, TCLP	ND 0.509 ND	1.2 20 0.51	1.31 21.3 0.529	109 104 104	CHID. V	- - - -		75-125 75-125 75-125		20 20 20
Arsenic, TCLP Barium, TCLP Cadmium, TCLP Chromium, TCLP	ND 0.509	1.2 20	1.31 21.3	109 104		- - - - - -		75-125 75-125		20 20
Arsenic, TCLP Barium, TCLP Cadmium, TCLP Chromium, TCLP Lead, TCLP	ND 0.509 ND 0.021J	1.2 20 0.51 2	1.31 21.3 0.529 2.02	109 104 104 101		- - - - - - - - -		75-125 75-125 75-125 75-125		20 20 20 20
Arsenic, TCLP Barium, TCLP Cadmium, TCLP Chromium, TCLP	ND 0.509 ND 0.021J ND	1.2 20 0.51 2 5.1	1.31 21.3 0.529 2.02 5.14	109 104 104 101 101		- - - - - - - - - - - - -		75-125 75-125 75-125 75-125 75-125 75-125		20 20 20 20 20 20
Arsenic, TCLP Barium, TCLP Cadmium, TCLP Chromium, TCLP Lead, TCLP Selenium, TCLP	ND 0.509 ND 0.021J ND ND ND	1.2 20 0.51 2 5.1 1.2 0.5	1.31 21.3 0.529 2.02 5.14 1.19 0.494	109 104 104 101 101 99 99		- - - - - - - - - - - - - VG1430313	· · · · · · · · · · · · · · · · · · ·	75-125 75-125 75-125 75-125 75-125 75-125	- - - - - -	20 20 20 20 20 20 20



## Lab Duplicate Analysis Batch Quality Control

Lab Number: L2047640 Report Date: 11/09/20

Project Name: T20B-LARKIN DEVELOPMENT AMERIP Project Number: T20B-LARKIN DEV.

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual R	PD Limits
otal Metals - Mansfield Lab Associated sample(s): 01-	02 QC Batch ID:	WG1429769-4 QC Sample:	L2047642-05	Client ID:	DUP Sample	
Arsenic, Total	2.69	3.05	mg/kg	13		20
Barium, Total	110	109	mg/kg	1		20
Cadmium, Total	0.375J	0.401J	mg/kg	NC		20
Chromium, Total	24.7	23.2	mg/kg	6		20
Lead, Total	26.4	35.1	mg/kg	28	Q	20
Selenium, Total	0.392J	0.374J	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
otal Metals - Mansfield Lab Associated sample(s): 01-	02 QC Batch ID:	WG1429771-4 QC Sample:	L2047642-05	Client ID:	DUP Sample	
Mercury, Total	0.056J	0.061J	mg/kg	NC		20
CLP Metals by EPA 1311 - Mansfield Lab Associated s IU 3 20201028	sample(s): 01-02	QC Batch ID: WG1430312-4	QC Sample:	L2047640	0-01 Client ID:	PARKING LO
Arsenic, TCLP	ND	0.026J	mg/l	NC		20
Barium, TCLP	0.509	0.521	mg/l	2		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	0.021J	ND	mg/l	NC		20
Lead, TCLP	ND	0.028J	mg/l	NC		20
Selenium, TCLP	ND	0.043J	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20



20

Project Name: Project Number:	T20B-LARKIN DE T20B-LARKIN DE	EVELOPMENT AMERIP EV.	Lab Duplicate Analy Batch Quality Control	sis		umber: t Date:	L2047640 11/09/20
Parameter		Native Sample	Duplicate Sample	Units	RPD	R	PD Limits
TCLP Metals by EPA 13 <sup>-</sup> CIU 3 20201028	11 - Mansfield Lab	Associated sample(s): 01-02	QC Batch ID: WG1430313-4	QC Sample:	L2047640-01	Client ID:	PARKING LOT

Mercury, TCLP ND ND mg/l NC



# INORGANICS & MISCELLANEOUS



Project Name:	T20B-LARKIN DEVELOPMENT AMERI	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

Lab ID:	L2047640-01	Date Collected:	10/28/20 16:30
Client ID:	PARKING LOT CIU 3 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified

Sample Depth: Matrix:

Soil

## **Test Material Information**

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Clay
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solid	ls - Westborough Lab			
Ignitability	NI	11/03/20 08:00	1,1030	MV



Project Name:	T20B-LARKIN DEVELOPMENT AMERI	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

Lab ID:	L2047640-02	Date Collected:	10/28/20 16:35
Client ID:	PARKING LOT CIU 4 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified

Sample Depth: Matrix:

Soil

## **Test Material Information**

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Clay
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solid	ds - Westborough Lab			
Ignitability	NI	11/03/20 08:00	1,1030	MV



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

Lab ID:	L2047640-01	Date Collected:	10/28/20 16:30
Client ID:	PARKING LOT CIU 3 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified

Sample Depth: Matrix:

Soil

Parameter	Result	Qualifier Units	s RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	/estborough Lab								
Solids, Total	84.4	%	0.100	NA	1	-	10/31/20 13:21	121,2540G	RI
рН (Н)	8.3	SU	-	NA	1	-	11/02/20 18:23	1,9045D	AS
Cyanide, Reactive	ND	mg/kg	g 10	10.	1	11/05/20 07:38	11/05/20 09:59	125,7.3	JA
Sulfide, Reactive	ND	mg/kę	g 10	10.	1	11/05/20 07:38	11/05/20 09:48	125,7.3	JA



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.	Report Date:	11/09/20

Lab ID:	L2047640-02	Date Collected:	10/28/20 16:35
Client ID:	PARKING LOT CIU 4 20201028	Date Received:	10/30/20
Sample Location:	822 SENECA ST. BUFFALO NY	Field Prep:	Not Specified

Sample Depth: Matrix:

Soil

Parameter	Result Q	ualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	/estborough Lab								
Solids, Total	86.2	%	0.100	NA	1	-	10/31/20 13:21	121,2540G	RI
рН (Н)	8.1	SU	-	NA	1	-	11/02/20 18:23	1,9045D	AS
Cyanide, Reactive	ND	mg/kg	10	10.	1	11/05/20 07:38	11/05/20 09:59	125,7.3	JA
Sulfide, Reactive	ND	mg/kg	10	10.	1	11/05/20 07:38	11/05/20 09:49	125,7.3	JA



Project Name:T20B-LARKIN DEVELOPMENT AMERIProject Number:T20B-LARKIN DEV.

 Lab Number:
 L2047640

 Report Date:
 11/09/20

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifie	r Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab for sa	mple(s): 01	-02 Ba	tch: WO	G1430636-´	1			
Sulfide, Reactive	ND	mg/kg	10	10.	1	11/05/20 07:38	11/05/20 09:47	125,7.3	JA
General Chemistry - W	estborough Lab for sa	mple(s): 01	-02 Ba	tch: WO	G1430638-′	1			
Cyanide, Reactive	ND	mg/kg	10	10.	1	11/05/20 07:38	11/05/20 09:57	125,7.3	JA



## Lab Control Sample Analysis

Project Name:	T20B-LARKIN DEVELOPMENT AMERIP	Batch Quality Control	Lab Number:	L2047640
Project Number:	T20B-LARKIN DEV.		Report Date:	11/09/20

Parameter	LCS %Recovery Qual	LCSD %Recovery Qu	%Recovery al Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01-02	Batch: WG1429461-1				
рН	100	-	99-101	-		
General Chemistry - Westborough Lab	Associated sample(s): 01-02	Batch: WG1430636-2				
Sulfide, Reactive	95	-	60-125	-		40
General Chemistry - Westborough Lab	Associated sample(s): 01-02	Batch: WG1430638-2				
Cyanide, Reactive	32	-	30-125	-		40



## Lab Duplicate Analysis Batch Quality Control

Project Name:T20B-LARKIN DEVELOPMENT AMERIPProject Number:T20B-LARKIN DEV.

 Lab Number:
 L2047640

 Report Date:
 11/09/20

Parameter	Native Sam	nple D	uplicate Sample	Units	RPD	Qual	<b>RPD</b> Limits
General Chemistry - Westborough Lab	Associated sample(s): 01-02	QC Batch ID:	WG1428834-1	QC Sample:	L2047577-02	Client ID:	DUP Sample
Solids, Total	82.6		82.6	%	0		20
General Chemistry - Westborough Lab	Associated sample(s): 01-02	QC Batch ID:	WG1429461-2	QC Sample:	L2047607-01	Client ID:	DUP Sample
рН	6.7		8.0	SU	18	Q	5
General Chemistry - Westborough Lab	Associated sample(s): 01-02	QC Batch ID:	WG1430636-3	QC Sample:	L2047622-01	Client ID:	DUP Sample
Sulfide, Reactive	ND		ND	mg/kg	NC		40
General Chemistry - Westborough Lab	Associated sample(s): 01-02	QC Batch ID:	WG1430638-3	QC Sample:	L2047622-01	Client ID:	DUP Sample
Cyanide, Reactive	ND		ND	mg/kg	NC		40



#### Sample Receipt and Container Information

Were project specific reporting limits specified?

- op o onio an

YES

#### **Cooler Information**

Cooler	Custody Seal
A	Absent

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2047640-01A	Vial MeOH preserved	А	NA		2.4	Y	Absent		NYTCL-8260HLW-R2(14)
L2047640-01B	Vial water preserved	А	NA		2.4	Y	Absent	31-OCT-20 06:13	NYTCL-8260HLW-R2(14)
L2047640-01C	Vial water preserved	А	NA		2.4	Y	Absent	31-OCT-20 06:13	NYTCL-8260HLW-R2(14)
L2047640-01D	Plastic 2oz unpreserved for TS	А	NA		2.4	Υ	Absent		TS(7)
L2047640-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR- TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD- TI(180)
L2047640-01F	Glass 60mL/2oz unpreserved	А	NA		2.4	Y	Absent		TCLP-EXT-ZHE(14)
L2047640-01G	Glass 250ml/8oz unpreserved	A	NA		2.4	Y	Absent		IGNIT-1030(14),NYTCL- 8270(14),REACTS(14),PH-9045(1),NYTCL- 8082(14),REACTCN(14)
L2047640-01H	Glass 250ml/8oz unpreserved	A	NA		2.4	Y	Absent		IGNIT-1030(14),NYTCL- 8270(14),REACTS(14),PH-9045(1),NYTCL- 8082(14),REACTCN(14)
L2047640-01W	Amber 1000ml unpreserved Extracts	А	NA		2.4	Y	Absent		TCLP-8270(14),PEST-TCLP*(14),HERB- TCLP*(14)
L2047640-01X	Plastic 120ml HNO3 preserved Extracts	A	NA		2.4	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG- C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG- CI(180)
L2047640-01X9	Tumble Vessel	А	NA		2.4	Y	Absent		-
L2047640-01Y	Vial unpreserved Extracts	А	NA		2.4	Y	Absent		TCLP-VOA(14)
L2047640-01Z	Vial unpreserved Extracts	А	NA		2.4	Y	Absent		TCLP-VOA(14)
L2047640-02A	Vial MeOH preserved	А	NA		2.4	Y	Absent		NYTCL-8260HLW-R2(14)
L2047640-02B	Vial water preserved	А	NA		2.4	Y	Absent	31-OCT-20 06:13	NYTCL-8260HLW-R2(14)
L2047640-02C	Vial water preserved	А	NA		2.4	Y	Absent	31-OCT-20 06:13	NYTCL-8260HLW-R2(14)
L2047640-02D	Plastic 2oz unpreserved for TS	А	NA		2.4	Y	Absent		TS(7)
L2047640-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.4	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR- TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD- TI(180)



## Project Name:T20B-LARKIN DEVELOPMENT AMERIPProject Number:T20B-LARKIN DEV.

Serial\_No:11092012:21 *Lab Number:* L2047640 *Report Date:* 11/09/20

Container Information			Initial	Final	Temp			Frozen		
	Container ID	Container Type	Cooler	pН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
	L2047640-02F	Glass 60mL/2oz unpreserved	А	NA		2.4	Y	Absent		TCLP-EXT-ZHE(14)
	L2047640-02G	Glass 250ml/8oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),IGNIT- 1030(14),REACTS(14),PH-9045(1),NYTCL- 8082(14),REACTCN(14)
	L2047640-02H	Glass 250ml/8oz unpreserved	A	NA		2.4	Y	Absent		NYTCL-8270(14),IGNIT- 1030(14),REACTS(14),PH-9045(1),NYTCL- 8082(14),REACTCN(14)
	L2047640-02W	Amber 1000ml unpreserved Extracts	A	NA		2.4	Y	Absent		TCLP-8270(14),PEST-TCLP*(14),HERB- TCLP*(14)
	L2047640-02X	Plastic 120ml HNO3 preserved Extracts	A	NA		2.4	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG- C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG- CI(180)
	L2047640-02X9	Tumble Vessel	А	NA		2.4	Y	Absent		-
	L2047640-02Y	Vial unpreserved Extracts	А	NA		2.4	Y	Absent		TCLP-VOA(14)
	L2047640-02Z	Vial unpreserved Extracts	А	NA		2.4	Y	Absent		TCLP-VOA(14)



## Project Name: T20B-LARKIN DEVELOPMENT AMERIP

Project Number: T20B-LARKIN DEV.

## Lab Number: L2047640

### **Report Date:** 11/09/20

#### GLOSSARY

DL       - Detection Limit: This value represents the level to which target analyte concentrations are those target analyte concentrations are quantified below the limit of quantitation (LOQ). from dilutions, concentrations or moisture content, where applicable. (DoD report formated)         EDL       - Estimated Detection Limit: This value represents the level to which target analyte concentrations are quantified below the reporting limit adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formated)         EDL       - Estimated Detection Limit: This value represents the level to which target analyte concent values, when those target analyte concentrations are quantified below the reporting limit adjustments from dilutions, concentrations or moisture content, where applicable. The use of PAHs using Solid-Phase Microextraction (SPME).         EMPC       - Estimated Maximum Possible Concentration: The concentration that results from the sig analyte when the ions meet all of the identification criteria except the ion abundance ratiestimate of the concentration.         EPA       - Environmental Protection Agency.         LCS       - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked vanalytes or a material containing known and verified amounts of analytes.         LFB       - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked vanalytes or a material containing known and verified amounts of analytes.         LOD       - Limit of Detection: This value represents the level to which a target analyte can reliably specific matrix by a specific method. The LOD includes any adjustments from dilutions where applicable. (DoD repor	The DL includes any adjustments ats only.) ntrations are reported as estimated (RL). The EDL includes any se of EDLs is specific to the analysis anal present at the retention time of an o criteria. An EMPC is a worst-case with verified known amounts of be detected for a specific analyte in a c, concentrations or moisture content, yte at a specific concentration. The
<ul> <li>from dilutions, concentrations or moisture content, where applicable. (DoD report formated by the provided by the second by the secon</li></ul>	ats only.) ntrations are reported as estimated (RL). The EDL includes any se of EDLs is specific to the analysis anal present at the retention time of an o criteria. An EMPC is a worst-case with verified known amounts of be detected for a specific analyte in a c, concentrations or moisture content, yte at a specific concentration. The
<ul> <li>values, when those target analyte concentrations are quantified below the reporting limit adjustments from dilutions, concentrations or moisture content, where applicable. The us of PAHs using Solid-Phase Microextraction (SPME).</li> <li>EMPC - Estimated Maximum Possible Concentration: The concentration that results from the sig analyte when the ions meet all of the identification criteria except the ion abundance ratiestimate of the concentration.</li> <li>EPA - Environmental Protection Agency.</li> <li>LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked vanalytes or a material containing known and verified amounts of analytes.</li> <li>LCSD - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked vanalytes or a material containing known and verified amounts of analytes.</li> <li>LCDD - Limit of Detection: This value represents the level to which a target analyte can reliably specific matrix by a specific method. The LOD includes any adjustments from dilutions where applicable. (DoD report formats only.)</li> </ul>	(RL). The EDL includes any se of EDLs is specific to the analysis mal present at the retention time of an o criteria. An EMPC is a worst-case with verified known amounts of be detected for a specific analyte in a concentrations or moisture content, yte at a specific concentration. The
<ul> <li>analyte when the ions meet all of the identification criteria except the ion abundance ratiestimate of the concentration.</li> <li>EPA - Environmental Protection Agency.</li> <li>LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked vanalytes or a material containing known and verified amounts of analytes.</li> <li>LCSD - Laboratory Control Sample Duplicate: Refer to LCS.</li> <li>LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked vanalytes or a material containing known and verified amounts of analytes.</li> <li>LOD - Limit of Detection: This value represents the level to which a target analyte can reliably specific matrix by a specific method. The LOD includes any adjustments from dilutions where applicable. (DoD report formats only.)</li> </ul>	o criteria. An EMPC is a worst-case with verified known amounts of with verified known amounts of be detected for a specific analyte in a concentrations or moisture content, yte at a specific concentration. The
<ul> <li>LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked v analytes or a material containing known and verified amounts of analytes.</li> <li>LCSD - Laboratory Control Sample Duplicate: Refer to LCS.</li> <li>LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked v analytes or a material containing known and verified amounts of analytes.</li> <li>LOD - Limit of Detection: This value represents the level to which a target analyte can reliably specific matrix by a specific method. The LOD includes any adjustments from dilutions where applicable. (DoD report formats only.)</li> </ul>	vith verified known amounts of be detected for a specific analyte in a , concentrations or moisture content, yte at a specific concentration. The
<ul> <li>analytes or a material containing known and verified amounts of analytes.</li> <li>LCSD - Laboratory Control Sample Duplicate: Refer to LCS.</li> <li>LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked w analytes or a material containing known and verified amounts of analytes.</li> <li>LOD - Limit of Detection: This value represents the level to which a target analyte can reliably specific matrix by a specific method. The LOD includes any adjustments from dilutions where applicable. (DoD report formats only.)</li> </ul>	vith verified known amounts of be detected for a specific analyte in a , concentrations or moisture content, yte at a specific concentration. The
<ul> <li>LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked w analytes or a material containing known and verified amounts of analytes.</li> <li>LOD - Limit of Detection: This value represents the level to which a target analyte can reliably specific matrix by a specific method. The LOD includes any adjustments from dilutions where applicable. (DoD report formats only.)</li> </ul>	be detected for a specific analyte in a concentrations or moisture content, yte at a specific concentration. The
LOD - Limit of Detection: This value represents the level to which a target analyte can reliably specific matrix by a specific method. The LOD includes any adjustments from dilutions where applicable. (DoD report formats only.)	be detected for a specific analyte in a concentrations or moisture content, yte at a specific concentration. The
specific matrix by a specific method. The LOD includes any adjustments from dilutions where applicable. (DoD report formats only.)	, concentrations or moisture content, yte at a specific concentration. The
	yte at a specific concentration. The applicable. (DoD report formats
LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analy LOQ includes any adjustments from dilutions, concentrations or moisture content, where only.)	
Limit of Quantitation: The value at which an instrument can accurately measure an analy LOQ includes any adjustments from dilutions, concentrations or moisture content, where only.)	
MDL - Method Detection Limit: This value represents the level to which target analyte concentr values, when those target analyte concentrations are quantified below the reporting limit adjustments from dilutions, concentrations or moisture content, where applicable.	
MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a which an independent estimate of target analyte concentration is available. For Method 3 using the native concentration, including estimated values.	
MSD - Matrix Spike Sample Duplicate: Refer to MS.	
NA - Not Applicable.	
NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculati reporting unit.	on are non-detect at the parameter's
NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.	
NI - Not Ignitable.	
NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.	
NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the Organic TIC only requests.	
RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at includes any adjustments from dilutions, concentrations or moisture content, where applied the second seco	icable.
RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are precision of analytical results in a given matrix and are expressed as relative percent diff than five times the reporting limit for any individual parameter are evaluated by utilizing values; although the RPD value will be provided in the report.	erence (RPD). Values which are less g the absolute difference between the
SRM - Standard Reference Material: A reference sample of a known or certified value that is of associated field samples.	the same or similar matrix as the
STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.	
TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate the	•
TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxir and then summing the resulting values.	
TIC - Tentatively Identified Compound: A compound that has been identified to be present and list (TCL) for the method and/or program. All TICs are qualitatively identified and report	

Report Format: DU Report with 'J' Qualifiers



## Project Name: T20B-LARKIN DEVELOPMENT AMERIP

Project Number: T20B-LARKIN DEV.

## Lab Number: L2047640 Report Date: 11/09/20

#### Footnotes

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### Terms

1

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For NJ-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte and the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- **D** Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- **F** The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers



11/09/20

#### **Project Name: T20B-LARKIN DEVELOPMENT AMERIP**

**Project Number:** T20B-LARKIN DEV. Lab Number: L2047640 **Report Date:** 

#### Data Qualifiers

the identification is based on a mass spectral library search.

- Р - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R - Analytical results are from sample re-analysis.
- RE - Analytical results are from sample re-extraction.
- S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name:	T20B-LARKIN DEVELOPMENT AMERIP
Project Number:	T20B-LARKIN DEV.

 Lab Number:
 L2047640

 Report Date:
 11/09/20

#### REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

#### LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## **Certification Information**

#### The following analytes are not included in our Primary NELAP Scope of Accreditation:

#### Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.
Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 1-Methylnaphthalene.
EPA 3C Fixed gases
Biological Tissue Matrix: EPA 3050B

#### The following analytes are included in our Massachusetts DEP Scope of Accreditation

#### Westborough Facility:

#### Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP. Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

#### Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs **EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

#### Mansfield Facility:

#### Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn. **EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn. **EPA 245.1** Hg. **SM2340B** 

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Serial\_No:11092012:21

\_

MERHA Westborough, MA 01581	NEW YORK CHAIN OF CUSTODY Manafield, MA 02048	Service Centers Mahwah, NJ 07430: 35 Whitney Albany, NY 12205: 14 Walker V Tonawanda, NY 14150: 275 Co	Vay	6	Page of			_	ab		131	120	,		ALPHA Job # (204740	
8 Walkup Dr. TEL: 506-898-8220 FAX: 508-898-9193	320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3266	Project Information Project Name: 7200 Project Location: 822	3- Larkin 2 Seneca	Daxloon St. Bu	ment A	me <i>rî Prîde</i> 17		ASP- EQui	A	ile)		ASP	-B IS (4 Fi		Billing Information Same as Client Info Po #	
Client Information		Project #						Othe	ń	N	4500	2	SFIL			
Client: AFT EAVI	connental	(Use Project name as Pr	roject#)				Regu	latory	Requ	ireme	nt				Disposal Site Information	
Address: 8644 B	Uttalo Ave	Project Manager: Bra	ndon D	vin				NY TO	GS			NYP	art 375		Please identify below location of	
Niccara falls	NY 14304	ALPHAQuote #:		And the American				AWQ	Stand	ards		NYC	P-51		applicable disposal facilities.	
Phone: (116)283-	7645	Tum-Around Time						NY R	estricte	d Use		Othe	c		Disposal Facility.	
Fax:		Standard	X	Due Date	K			NY Ur	restric	and Us	8				NJ NY	
Email: D.V	File	Rush (only if pre approved	0	# of Days	c			NYC	Sewer	Discha	rge				Other:	
These samples have be		ed by Alpha					ANA	LYSIS	-		1				Sample Filtration	
Please specify Metals	or TAL						S	SUUCS, PCBS, Ignition Lity	PH malate	Reactive Tursdel	5100.	1. 1.	Stiabald		Lab to do Preservation Lab to do (Please Specify below)	
ALPHA Lab ID (Lab Usa Only)	Si	ample ID	Colle Date	Time	Sample Matrix	Sampler's Initials	VOC	Lawf	40	Peach	1010	12	Let Let		Sample Specific Comments	
47640 -01	Parking Lat C	FU 3 20101028	10/30/20	16:30	Sizil	BQ	X	X	1	4	Y F	東	(			
-01	Parking lot G	U 4 20201028	10/34/20 24	16:35	501	34	×	×	×	×	*	1	~			
C = HNO3 D = H <sub>7</sub> SO4 E = NaOH F = MeOH G = NaHSO4 H = Na-S5O4	Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube C = Cube O = Other E = Encore D = BOD Bottle	Westboro: Certification Mansfield: Certification Mansfield: Certification Mansfield: Certification Mansfield	No: MA015 By:	13(30)20	Time 14:05	1.0	and the second second	ved B		hL.	10/3	op	e/Time	03	Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES	
O = Olher Form No: 01-25 HC (rev. 30	)-Sept-2013)	Xphon	LAAL	10 30/20	IFA	19	4		uq.	8	10/	78.00	02:1	-	TO BE BOUND BY ALPHA' TERMS & CONDITIONS. (See reverse side.)	



### ANALYTICAL REPORT

Lab Number:	L2047700
Client:	AFI Environmental
	8644 Buffalo Avenue
	PO Box 4049
	Niagara Falls, NY 14304
ATTN:	Brandon Quinn
Phone:	(716) 283-7645
Project Name:	I20B-LARKIN DEVELOPMENT
Project Number:	Not Specified
Report Date:	11/05/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name:I20B-LARKIN DEVELOPMENTProject Number:Not Specified

 Lab Number:
 L2047700

 Report Date:
 11/05/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2047700-01	PARKING LOT CIU 5 20201028	SOIL	922 SENECA STREET	10/29/20 12:45	10/30/20
L2047700-02	PARKING LOT CIU 6 20201028	SOIL	922 SENECA STREET	10/29/20 12:45	10/30/20
L2047700-03	PARKING LOT CIU 7 20201028	SOIL	922 SENECA STREET	10/29/20 12:45	10/30/20
L2047700-04	PARKING LOT CIU 8 20201028	SOIL	922 SENECA STREET	10/29/20 12:45	10/30/20



## Project Name:I20B-LARKIN DEVELOPMENTProject Number:Not Specified

 Lab Number:
 L2047700

 Report Date:
 11/05/20

#### **Case Narrative**

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.



Project Name:I20B-LARKIN DEVELOPMENTProject Number:Not Specified

 Lab Number:
 L2047700

 Report Date:
 11/05/20

#### **Case Narrative (continued)**

**Report Submission** 

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Jufani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative

Date: 11/05/20



# ORGANICS



## VOLATILES



		Serial_No	o:11052017:52
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2047700
Project Number:	Not Specified	Report Date:	11/05/20
	SAMPLE RESULTS		
Lab ID: Client ID: Sample Location:	L2047700-01 PARKING LOT CIU 5 20201028 922 SENECA STREET	Date Collected: Date Received: Field Prep:	10/29/20 12:45 10/30/20 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst:	Soil 1,8260C 11/04/20 18:56 JC		

87%

Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor			
Volatile Organics by EPA 5035 Low - Westborough Lab									
Methylene chloride	ND		ug/kg	4.9	2.3	1			
1,1-Dichloroethane	ND		ug/kg	0.99	0.14	1			
Chloroform	ND		ug/kg	1.5	0.14	1			
Carbon tetrachloride	ND		ug/kg	0.99	0.23	1			
1,2-Dichloropropane	ND		ug/kg	0.99	0.12	1			
Dibromochloromethane	ND		ug/kg	0.99	0.14	1			
1,1,2-Trichloroethane	ND		ug/kg	0.99	0.26	1			
Tetrachloroethene	0.26	J	ug/kg	0.49	0.19	1			
Chlorobenzene	ND		ug/kg	0.49	0.12	1			
Trichlorofluoromethane	ND		ug/kg	4.0	0.69	1			
1,2-Dichloroethane	ND		ug/kg	0.99	0.25	1			
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1			
Bromodichloromethane	ND		ug/kg	0.49	0.11	1			
trans-1,3-Dichloropropene	ND		ug/kg	0.99	0.27	1			
cis-1,3-Dichloropropene	ND		ug/kg	0.49	0.16	1			
Bromoform	ND		ug/kg	4.0	0.24	1			
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	0.16	1			
Benzene	ND		ug/kg	0.49	0.16	1			
Toluene	ND		ug/kg	0.99	0.54	1			
Ethylbenzene	ND		ug/kg	0.99	0.14	1			
Chloromethane	ND		ug/kg	4.0	0.92	1			
Bromomethane	ND		ug/kg	2.0	0.57	1			
Vinyl chloride	ND		ug/kg	0.99	0.33	1			
Chloroethane	ND		ug/kg	2.0	0.45	1			
1,1-Dichloroethene	ND		ug/kg	0.99	0.24	1			
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1			
Trichloroethene	ND		ug/kg	0.49	0.14	1			
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1			



		Serial_No	o:11052017:52
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2047700
Project Number:	Not Specified	Report Date:	11/05/20
	SAMPLE RESULTS		
Lab ID:	L2047700-01	Date Collected:	10/29/20 12:45
Client ID:	PARKING LOT CIU 5 20201028	Date Received:	10/30/20
Sample Location:	922 SENECA STREET	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Lov	v - Westborough Lab					
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.13	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg ug/kg	0.99	0.33	1
cis-1,2-Dichloroethene	ND			0.99	0.29	1
Styrene	ND		ug/kg	0.99	0.17	1
Dichlorodifluoromethane	ND		ug/kg	9.9	0.19	1
Acetone	ND		ug/kg			1
			ug/kg	9.9	4.8	
Carbon disulfide	ND		ug/kg	9.9	4.5	1
2-Butanone	ND		ug/kg	9.9	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	9.9	1.3	1
2-Hexanone	ND		ug/kg	9.9	1.2	1
1,2-Dibromoethane	ND		ug/kg	0.99	0.28	1
n-Butylbenzene	ND		ug/kg	0.99	0.16	1
sec-Butylbenzene	ND		ug/kg	0.99	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	0.99	1
Isopropylbenzene	ND		ug/kg	0.99	0.11	1
p-Isopropyltoluene	ND		ug/kg	0.99	0.11	1
Naphthalene	ND		ug/kg	4.0	0.64	1
n-Propylbenzene	ND		ug/kg	0.99	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
Methyl Acetate	ND		ug/kg	4.0	0.94	1
Cyclohexane	ND		ug/kg	9.9	0.54	1
Freon-113	ND		ug/kg	4.0	0.68	1
Methyl cyclohexane	ND		ug/kg	4.0	0.60	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	105		70-130	
Toluene-d8	107		70-130	
4-Bromofluorobenzene	109		70-130	
Dibromofluoromethane	98		70-130	

		Serial_No	o:11052017:52
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2047700
Project Number:	Not Specified	Report Date:	11/05/20
	SAMPLE RESULTS		
Lab ID: Client ID: Sample Location:	L2047700-02 PARKING LOT CIU 6 20201028 922 SENECA STREET	Date Collected: Date Received: Field Prep:	10/29/20 12:45 10/30/20 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst:	Soil 1,8260C 11/04/20 19:22 JC		

89%

Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.96	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.96	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.96	0.12	1
Dibromochloromethane	ND		ug/kg	0.96	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.96	0.26	1
Tetrachloroethene	0.42	J	ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.67	1
1,2-Dichloroethane	ND		ug/kg	0.96	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.96	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.96	0.52	1
Ethylbenzene	ND		ug/kg	0.96	0.14	1
Chloromethane	ND		ug/kg	3.8	0.89	1
Bromomethane	ND		ug/kg	1.9	0.56	1
Vinyl chloride	ND		ug/kg	0.96	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.96	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1



		Serial_No:11052017:52		
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2047700	
Project Number:	Not Specified	Report Date:	11/05/20	
	SAMPLE RESULTS			
Lab ID:	L2047700-02	Date Collected:	10/29/20 12:45	
Client ID:	PARKING LOT CIU 6 20201028	Date Received:	10/30/20	
Sample Location:	922 SENECA STREET	Field Prep:	Not Specified	

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Lov	v - Westborough Lab					
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.10	1
p/m-Xylene	ND		ug/kg	1.9	0.54	1
o-Xylene	ND		ug/kg	0.96	0.28	1
cis-1,2-Dichloroethene	ND			0.96	0.20	1
Styrene	ND		ug/kg	0.96	0.17	1
Dichlorodifluoromethane	ND		ug/kg		0.19	1
	ND		ug/kg	9.6		
Acetone			ug/kg	9.6	4.6	1
Carbon disulfide	ND		ug/kg	9.6	4.4	1
2-Butanone	ND		ug/kg	9.6	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.6	1.2	1
2-Hexanone	ND		ug/kg	9.6	1.1	1
1,2-Dibromoethane	ND		ug/kg	0.96	0.27	1
n-Butylbenzene	ND		ug/kg	0.96	0.16	1
sec-Butylbenzene	ND		ug/kg	0.96	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.96	1
Isopropylbenzene	ND		ug/kg	0.96	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.96	0.10	1
Naphthalene	ND		ug/kg	3.8	0.62	1
n-Propylbenzene	ND		ug/kg	0.96	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
Methyl Acetate	ND		ug/kg	3.8	0.91	1
Cyclohexane	ND		ug/kg	9.6	0.52	1
Freon-113	ND		ug/kg	3.8	0.66	1
Methyl cyclohexane	ND		ug/kg	3.8	0.58	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	106		70-130	
Toluene-d8	106		70-130	
4-Bromofluorobenzene	110		70-130	
Dibromofluoromethane	98		70-130	

		Serial_No	o:11052017:52
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2047700
Project Number:	Not Specified	Report Date:	11/05/20
	SAMPLE RESULTS		
Lab ID: Client ID: Sample Location:	L2047700-03 PARKING LOT CIU 7 20201028 922 SENECA STREET	Date Collected: Date Received: Field Prep:	10/29/20 12:45 10/30/20 Not Specified
Sample Depth: Matrix: Analytical Method:	Soil 1,8260C		
Analytical Date: Analyst:	11/05/20 09:37 MV		

85%

Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	- Westborough Lab					
Methylene chloride	ND		ug/kg	4.6	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.92	0.13	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.92	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.92	0.11	1
Dibromochloromethane	ND		ug/kg	0.92	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.92	0.24	1
Tetrachloroethene	ND		ug/kg	0.46	0.18	1
Chlorobenzene	ND		ug/kg	0.46	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.7	0.64	1
1,2-Dichloroethane	ND		ug/kg	0.92	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.46	0.15	1
Bromodichloromethane	ND		ug/kg	0.46	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.92	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.46	0.14	1
Bromoform	ND		ug/kg	3.7	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.46	0.15	1
Benzene	ND		ug/kg	0.46	0.15	1
Toluene	ND		ug/kg	0.92	0.50	1
Ethylbenzene	ND		ug/kg	0.92	0.13	1
Chloromethane	ND		ug/kg	3.7	0.85	1
Bromomethane	ND		ug/kg	1.8	0.53	1
Vinyl chloride	ND		ug/kg	0.92	0.31	1
Chloroethane	ND		ug/kg	1.8	0.41	1
1,1-Dichloroethene	ND		ug/kg	0.92	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.12	1
Trichloroethene	ND		ug/kg	0.46	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1



		Serial_No	o:11052017:52
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2047700
Project Number:	Not Specified	Report Date:	11/05/20
	SAMPLE RESULTS		
Lab ID:	L2047700-03	Date Collected:	10/29/20 12:45
Client ID:	PARKING LOT CIU 7 20201028	Date Received:	10/30/20
Sample Location:	922 SENECA STREET	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Lov	v - Westborough Lab					
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.51	1
o-Xylene	ND		ug/kg	0.92	0.27	1
cis-1,2-Dichloroethene	ND			0.92	0.16	1
Styrene	ND		ug/kg	0.92	0.18	1
			ug/kg			
Dichlorodifluoromethane	ND		ug/kg	9.2	0.84	1
Acetone	ND		ug/kg	9.2	4.4	1
Carbon disulfide	ND		ug/kg	9.2	4.2	1
2-Butanone	ND		ug/kg	9.2	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.2	1.2	1
2-Hexanone	ND		ug/kg	9.2	1.1	1
1,2-Dibromoethane	ND		ug/kg	0.92	0.26	1
n-Butylbenzene	ND		ug/kg	0.92	0.15	1
sec-Butylbenzene	ND		ug/kg	0.92	0.13	1
tert-Butylbenzene	ND		ug/kg	1.8	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.7	0.91	1
Isopropylbenzene	ND		ug/kg	0.92	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.92	0.10	1
Naphthalene	ND		ug/kg	3.7	0.59	1
n-Propylbenzene	ND		ug/kg	0.92	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.8	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.8	0.30	1
Methyl Acetate	ND		ug/kg	3.7	0.87	1
Cyclohexane	ND		ug/kg	9.2	0.50	1
Freon-113	ND		ug/kg	3.7	0.63	1
Methyl cyclohexane	ND		ug/kg	3.7	0.55	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	100	70-130	
Toluene-d8	105	70-130	
4-Bromofluorobenzene	110	70-130	
Dibromofluoromethane	97	70-130	

		Serial_No	o:11052017:52
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2047700
Project Number:	Not Specified	Report Date:	11/05/20
	SAMPLE RESULTS		
Lab ID: Client ID: Sample Location:	L2047700-04 PARKING LOT CIU 8 20201028 922 SENECA STREET	Date Collected: Date Received: Field Prep:	10/29/20 12:45 10/30/20 Not Specified
Sample Depth: Matrix: Analytical Method: Analytical Date: Analyst:	Soil 1,8260C 11/05/20 10:02 MV		

89%

Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low -	Westborough Lab					
Methylene chloride	ND		ug/kg	4.7	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.93	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.93	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.93	0.12	1
Dibromochloromethane	ND		ug/kg	0.93	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.93	0.25	1
Tetrachloroethene	0.32	J	ug/kg	0.47	0.18	1
Chlorobenzene	ND		ug/kg	0.47	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.7	0.65	1
1,2-Dichloroethane	ND		ug/kg	0.93	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.47	0.16	1
Bromodichloromethane	ND		ug/kg	0.47	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.93	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.47	0.15	1
Bromoform	ND		ug/kg	3.7	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.47	0.16	1
Benzene	ND		ug/kg	0.47	0.16	1
Toluene	ND		ug/kg	0.93	0.51	1
Ethylbenzene	ND		ug/kg	0.93	0.13	1
Chloromethane	ND		ug/kg	3.7	0.87	1
Bromomethane	ND		ug/kg	1.9	0.54	1
Vinyl chloride	ND		ug/kg	0.93	0.31	1
Chloroethane	ND		ug/kg	1.9	0.42	1
1,1-Dichloroethene	ND		ug/kg	0.93	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1
Trichloroethene	ND		ug/kg	0.47	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.13	1



		Serial_No	o:11052017:52
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2047700
Project Number:	Not Specified	Report Date:	11/05/20
	SAMPLE RESULTS		
Lab ID:	L2047700-04	Date Collected:	10/29/20 12:45
Client ID:	PARKING LOT CIU 8 20201028	Date Received:	10/30/20
Sample Location:	922 SENECA STREET	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	- Westborough Lab					
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.52	1
o-Xylene	ND		ug/kg	0.93	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.93	0.16	1
Styrene	ND		ug/kg	0.93	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.3	0.86	1
Acetone	5.6	J	ug/kg	9.3	4.5	1
Carbon disulfide	ND		ug/kg	9.3	4.2	1
2-Butanone	ND		ug/kg	9.3	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.3	1.2	1
2-Hexanone	ND		ug/kg	9.3	1.1	1
1,2-Dibromoethane	ND		ug/kg	0.93	0.26	1
n-Butylbenzene	ND		ug/kg	0.93	0.16	1
sec-Butylbenzene	ND		ug/kg	0.93	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.93	1
Isopropylbenzene	ND		ug/kg	0.93	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.93	0.10	1
Naphthalene	ND		ug/kg	3.7	0.61	1
n-Propylbenzene	ND		ug/kg	0.93	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.31	1
Methyl Acetate	ND		ug/kg	3.7	0.89	1
Cyclohexane	ND		ug/kg	9.3	0.51	1
Freon-113	ND		ug/kg	3.7	0.65	1
Methyl cyclohexane	ND		ug/kg	3.7	0.56	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	100	70-130	
Toluene-d8	107	70-130	
4-Bromofluorobenzene	109	70-130	
Dibromofluoromethane	96	70-130	

Project Number: Not Specified

 Lab Number:
 L2047700

 Report Date:
 11/05/20

# Method Blank Analysis Batch Quality Control

Analytical Method:1,8260CAnalytical Date:11/04/20 16:54Analyst:AD

arameter	Result Qu	alifier Units	RL	MDL
platile Organics by GC/MS	- Westborough Lab for	sample(s): 01-02	Batch:	WG1430699-5
Methylene chloride	ND	ug/kg	5.0	2.3
1,1-Dichloroethane	ND	ug/kg	1.0	0.14
Chloroform	ND	ug/kg	1.5	0.14
Carbon tetrachloride	ND	ug/kg	1.0	0.23
1,2-Dichloropropane	ND	ug/kg	1.0	0.12
Dibromochloromethane	ND	ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND	ug/kg	1.0	0.27
Tetrachloroethene	ND	ug/kg	0.50	0.20
Chlorobenzene	ND	ug/kg	0.50	0.13
Trichlorofluoromethane	ND	ug/kg	4.0	0.70
1,2-Dichloroethane	ND	ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND	ug/kg	0.50	0.17
Bromodichloromethane	ND	ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND	ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND	ug/kg	0.50	0.16
Bromoform	ND	ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.50	0.17
Benzene	ND	ug/kg	0.50	0.17
Toluene	ND	ug/kg	1.0	0.54
Ethylbenzene	ND	ug/kg	1.0	0.14
Chloromethane	ND	ug/kg	4.0	0.93
Bromomethane	ND	ug/kg	2.0	0.58
Vinyl chloride	ND	ug/kg	1.0	0.34
Chloroethane	ND	ug/kg	2.0	0.45
1,1-Dichloroethene	ND	ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND	ug/kg	1.5	0.14
Trichloroethene	ND	ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND	ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND	ug/kg	2.0	0.15



Project Number: Not Specified

# cified

 Lab Number:
 L2047700

 Report Date:
 11/05/20

# Method Blank Analysis Batch Quality Control

Analytical Method:1,8260CAnalytical Date:11/04/20 16:54Analyst:AD

arameter	Result	Qualifier Units	s RL	MDL
olatile Organics by GC/MS - V	Vestborough Lab	for sample(s):	01-02 Batch:	WG1430699-5
1,4-Dichlorobenzene	ND	ug/k	g 2.0	0.17
Methyl tert butyl ether	ND	ug/k	g 2.0	0.20
p/m-Xylene	ND	ug/k	g 2.0	0.56
o-Xylene	ND	ug/k	g 1.0	0.29
cis-1,2-Dichloroethene	ND	ug/k	g 1.0	0.18
Styrene	ND	ug/k	g 1.0	0.20
Dichlorodifluoromethane	ND	ug/k	g 10	0.92
Acetone	ND	ug/kg	g 10	4.8
Carbon disulfide	ND	ug/k	g 10	4.6
2-Butanone	ND	ug/k	g 10	2.2
4-Methyl-2-pentanone	ND	ug/k	g 10	1.3
2-Hexanone	ND	ug/kg	g 10	1.2
1,2-Dibromoethane	ND	ug/kg	g 1.0	0.28
n-Butylbenzene	ND	ug/kg	g 1.0	0.17
sec-Butylbenzene	ND	ug/kg	g 1.0	0.15
tert-Butylbenzene	ND	ug/kg	g 2.0	0.12
1,2-Dibromo-3-chloropropane	ND	ug/k	g 3.0	1.0
Isopropylbenzene	ND	ug/kg	g 1.0	0.11
p-Isopropyltoluene	ND	ug/k	g 1.0	0.11
Naphthalene	ND	ug/k	g 4.0	0.65
n-Propylbenzene	ND	ug/k	g 1.0	0.17
1,2,4-Trichlorobenzene	ND	ug/kg	g 2.0	0.27
1,3,5-Trimethylbenzene	ND	ug/kg	g 2.0	0.19
1,2,4-Trimethylbenzene	ND	ug/kg	g 2.0	0.33
Methyl Acetate	ND	ug/kg	g 4.0	0.95
Cyclohexane	ND	ug/kg	g 10	0.54
Freon-113	ND	ug/kg	g 4.0	0.69
Methyl cyclohexane	ND	ug/k	g 4.0	0.60



Project Number: Not Specified

# Lab Number: L2047700 Report Date: 11/05/20

# Method Blank Analysis Batch Quality Control

Analytical Method:1,8260CAnalytical Date:11/04/20 16:54Analyst:AD

Parameter	Result	Qualifier	Units		RL	MDL	
Volatile Organics by GC/MS -	Westborough La	b for sampl	e(s):	01-02	Batch:	WG1430699-5	

			Acceptance
Surrogate	%Recovery	Qualifier	Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	97		70-130



Project Number: Not Specified

Lab Number: L2047700 **Report Date:** 11/05/20

# Method Blank Analysis Batch Quality Control

#### Analytical Method: 1,8260C Analytical Date: 11/05/20 06:37 Analyst: ΜV

arameter	Result	Qualifier	Units	RL	М	DL
olatile Organics by EPA 5035	Low - Westboro	ugh Lab fo	r sample(s):	03-04	Batch:	WG1430747-5
Methylene chloride	ND		ug/kg	5.0	:	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	C	0.14
Chloroform	ND		ug/kg	1.5	C	0.14
Carbon tetrachloride	ND		ug/kg	1.0	C	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	C	0.12
Dibromochloromethane	ND		ug/kg	1.0	C	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	C	0.27
Tetrachloroethene	ND		ug/kg	0.50	C	0.20
Chlorobenzene	ND		ug/kg	0.50	C	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	C	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	C	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	C	0.17
Bromodichloromethane	ND		ug/kg	0.50	C	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	C	.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	C	0.16
Bromoform	ND		ug/kg	4.0	C	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	C	0.17
Benzene	ND		ug/kg	0.50	C	0.17
Toluene	ND		ug/kg	1.0	C	0.54
Ethylbenzene	ND		ug/kg	1.0	C	0.14
Chloromethane	ND		ug/kg	4.0	C	0.93
Bromomethane	ND		ug/kg	2.0	C	0.58
Vinyl chloride	ND		ug/kg	1.0	C	0.34
Chloroethane	ND		ug/kg	2.0	C	.45
1,1-Dichloroethene	ND		ug/kg	1.0	C	.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	C	0.14
Trichloroethene	ND		ug/kg	0.50	C	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	C	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	C	0.15



Project Number: Not Specified

Lab Number: L2047700 **Report Date:** 11/05/20

# Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 11/05/20 06:37 Analyst: ΜV

arameter	Result	Qualifier	Units	RL	MDL
olatile Organics by EPA 5035	Low - Westboro	ough Lab fo	or sample(s):	03-04	Batch: WG1430747-5
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	0.89	J	ug/kg	4.0	0.65
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60



Project Number: Not Specified

# Lab Number: L2047700 Report Date: 11/05/20

# Method Blank Analysis Batch Quality Control

Analytical Method:1,8260CAnalytical Date:11/05/20 06:37Analyst:MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low	- Westboro	ough Lab fo	or sample(s):	03-04	Batch: WG1430747-5

		Acceptance		
Surrogate	%Recovery	Qualifier	Criteria	
1.2-Dichloroethane-d4	100		70-130	
Toluene-d8	106		70-130	
4-Bromofluorobenzene	107		70-130	
Dibromofluoromethane	95		70-130	



# Lab Control Sample Analysis

Batch Quality Control

Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

Lab Number: L2047700 Report Date: 11/05/20

LCSD LCS %Recovery RPD %Recovery RPD %Recovery Limits Limits Parameter Qual Qual Qual Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1430699-3 WG1430699-4 Methylene chloride 84 70-130 87 4 30 1,1-Dichloroethane 94 91 70-130 3 30 Chloroform 88 85 70-130 3 30 Carbon tetrachloride 79 80 70-130 30 1 93 92 70-130 30 1,2-Dichloropropane 1 Dibromochloromethane 85 84 70-130 1 30 1.1.2-Trichloroethane 94 91 70-130 3 30 Tetrachloroethene 83 82 70-130 30 1 Chlorobenzene 85 85 70-130 0 30 Q Q Trichlorofluoromethane 66 70-139 4 30 69 1.2-Dichloroethane 91 89 70-130 2 30 1,1,1-Trichloroethane 82 82 70-130 0 30 Bromodichloromethane 85 84 70-130 1 30 70-130 30 trans-1,3-Dichloropropene 96 94 2 cis-1,3-Dichloropropene 90 90 70-130 0 30 Bromoform 93 90 70-130 3 30 1,1,2,2-Tetrachloroethane 98 94 70-130 30 4 70-130 30 Benzene 88 88 0 Toluene 70-130 91 91 0 30 Ethylbenzene 89 90 70-130 1 30 Chloromethane 69 65 52-130 6 30 Bromomethane 57-147 102 96 6 30 Vinyl chloride 74 71 67-130 4 30



# Lab Control Sample Analysis

Batch Quality Control

Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

Lab Number: L2047700 Report Date: 11/05/20

LCSD LCS %Recovery RPD %Recovery RPD %Recovery Limits Limits Parameter Qual Qual Qual Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1430699-3 WG1430699-4 Chloroethane 79 50-151 84 6 30 1.1-Dichloroethene 82 77 65-135 6 30 trans-1.2-Dichloroethene 88 85 70-130 3 30 Trichloroethene 86 84 70-130 2 30 1,2-Dichlorobenzene 88 70-130 30 89 1 1.3-Dichlorobenzene 91 90 70-130 1 30 90 90 70-130 30 1.4-Dichlorobenzene 0 Methyl tert butyl ether 90 87 66-130 3 30 p/m-Xylene 87 88 70-130 1 30 87 o-Xylene 86 70-130 30 1 cis-1,2-Dichloroethene 87 86 70-130 1 30 Styrene 87 88 70-130 1 30 Dichlorodifluoromethane 46 43 30-146 7 30 54-140 30 87 79 10 Acetone Carbon disulfide 77 73 59-130 5 30 2-Butanone 81 74 70-130 9 30 4-Methyl-2-pentanone 91 88 70-130 3 30 82 70-130 30 2-Hexanone 88 7 1,2-Dibromoethane 70-130 90 88 2 30 n-Butylbenzene 99 98 70-130 1 30 sec-Butylbenzene 95 94 70-130 30 1 tert-Butylbenzene 93 92 70-130 30 1 1,2-Dibromo-3-chloropropane 84 82 68-130 2 30



Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

 Lab Number:
 L2047700

 Report Date:
 11/05/20

LCSD LCS %Recovery RPD %Recovery Parameter %Recovery Limits RPD Limits Qual Qual Qual Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1430699-3 WG1430699-4 Isopropylbenzene 97 96 70-130 30 1 p-Isopropyltoluene 93 93 70-130 0 30 Naphthalene 85 85 70-130 0 30 n-Propylbenzene 99 98 70-130 30 1 1,2,4-Trichlorobenzene 92 91 70-130 30 1 1,3,5-Trimethylbenzene 95 94 70-130 30 1 1,2,4-Trimethylbenzene 95 94 70-130 30 1 Methyl Acetate 74 30 79 51-146 7 74 Cyclohexane 75 59-142 1 30 Freon-113 72 69 50-139 30 4 Methyl cyclohexane 71 72 70-130 30 1

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qual	%Recovery Qual	Criteria
1,2-Dichloroethane-d4	106	104	70-130
Toluene-d8	108	106	70-130
4-Bromofluorobenzene	113	109	70-130
Dibromofluoromethane	100	102	70-130



Project Number: Not Specified Lab Number: L2047700 Report Date: 11/05/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westb	•		-		0747-3 WG1430			
Methylene chloride	88		85		70-130	3		30
1,1-Dichloroethane	95		91		70-130	4		30
Chloroform	90		87		70-130	3		30
Carbon tetrachloride	88		86		70-130	2		30
1,2-Dichloropropane	94		92		70-130	2		30
Dibromochloromethane	87		85		70-130	2		30
1,1,2-Trichloroethane	94		93		70-130	1		30
Tetrachloroethene	90		88		70-130	2		30
Chlorobenzene	89		88		70-130	1		30
Trichlorofluoromethane	86		81		70-139	6		30
1,2-Dichloroethane	92		90		70-130	2		30
1,1,1-Trichloroethane	87		86		70-130	1		30
Bromodichloromethane	86		86		70-130	0		30
trans-1,3-Dichloropropene	96		94		70-130	2		30
cis-1,3-Dichloropropene	91		91		70-130	0		30
Bromoform	93		91		70-130	2		30
1,1,2,2-Tetrachloroethane	97		96		70-130	1		30
Benzene	92		90		70-130	2		30
Toluene	94		92		70-130	2		30
Ethylbenzene	93		92		70-130	1		30
Chloromethane	68		63		52-130	8		30
Bromomethane	109		106		57-147	3		30
Vinyl chloride	80		75		67-130	6		30



Project Number: Not Specified Lab Number: L2047700 Report Date: 11/05/20

Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s):         03-04         Batch:         WG1430747-3         WG1430747-3	RPD	RPD Qual Limits
1.1-Dichloroethene         90         85         65-135           trans-1.2-Dichloroethene         93         89         70-130         1           Trichloroethene         89         87         70-130         1           1.2-Dichloroethene         92         91         70-130         1           1.2-Dichloroethene         92         91         70-130         1           1.2-Dichloroethene         92         91         70-130         1           1.3-Dichloroethene         92         91         70-130         1           1.4-Dichloroethene         92         93         70-130         1           1.4-Dichlorobenzene         94         92         70-130         1           1.4-Dichloroethene         92         88         66-130         1           p/m-Xylene         90         90         70-130         1           o-Xylene         90         90         70-130         1           Styrene         91         90         70-130         1           Dichloroethene         59         55         30-146         1           Carbon disulfide         81         76         70-130         1           2-B	747-4	
trans-1,2-Dichloroethene         93         89         70-130         <	6	30
Trichloroethene         89         87         70-130           1,2-Dichlorobenzene         92         91         70-130         1           1,3-Dichlorobenzene         95         93         70-130         1           1,4-Dichlorobenzene         94         92         70-130         1           1,4-Dichlorobenzene         94         92         70-130         1           Methyl tert butyl ether         92         88         66-130         1           p/m-Xylene         92         91         70-130         1           o-Xylene         90         90         70-130         1           o-Xylene         90         90         70-130         1           o-Xylene         91         90         70-130         1           o-Xylene         91         90         70-130         1           Dichlorodifluoromethane         59         55         30-146         1           Acetone         84         84         54-140         1           Carbon disulfide         81         76         70-130         1           2-Butanone         81         76         70-130         1           4-Methyl-2-pentanone	6	30
1,2-Dichlorobenzene         92         91         70-130         1           1,3-Dichlorobenzene         95         93         70-130         1           1,4-Dichlorobenzene         94         92         70-130         1           Methyl tert butyl ether         92         88         66-130         1           p/m-Xylene         92         91         70-130         1           o-Xylene         90         90         70-130         1           o-Xylene         90         90         70-130         1           o-Xylene         91         90         70-130         1           o-Xylene         92         89         70-130         1           bichlorodifluoromethane         59         89         70-130         1           Dichlorodifluoromethane         59         55         30-146         1           Carbon disulfide         81         76         70-130         1           2-Butanone         81         76         70-130         1           4-Methyl-2-pentanone         91         87         70-130         1           2-Hexanone         84         82         70-130         1 <td< td=""><td>4</td><td>30</td></td<>	4	30
1,3-Dichlorobenzene       95       93       70-130       1         1,4-Dichlorobenzene       94       92       70-130       1         Methyl tert butyl ether       92       88       66-130       1         p/m-Xylene       92       91       70-130       1         o-Xylene       90       90       70-130       1         o-Xylene       90       90       70-130       1         cis-1,2-Dichloroethene       92       89       70-130       1         Styrene       91       90       70-130       1         Dichlorodifluoromethane       59       55       30-146       1         Acetone       84       84       54-140       1         Carbon disulfide       81       76       70-130       1         2-Butanone       81       76       70-130       1         4-Methyl-2-pentanone       91       87       70-130       1         1,2-Dibromoethane       93       91       70-130       1         1,2-Dibromethane       93       91       70-130       1	2	30
A-Dichlorobenzene         94         92         70-130         1           1,4-Dichlorobenzene         94         92         70-130         1           Methyl tert butyl ether         92         88         66-130         1           p/m-Xylene         92         91         70-130         1           o-Xylene         90         90         70-130         1           o-Xylene         90         90         70-130         1           cis-1,2-Dichloroethene         92         89         70-130         1           Styrene         91         90         70-130         1           Dichlorodifluoromethane         59         55         30-146         1           Acetone         84         84         54-140         1           Carbon disulfide         81         76         70-130         1           2-Butanone         81         76         70-130         1           4-Methyl-2-pentanone         91         87         70-130         1           1,2-Dibromoethane         93         91         70-130         1           1,2-Dibromoethane         103         102         70-130         1	1	30
Methyl tert butyl ether         92         88         66-130           p/m-Xylene         92         91         70-130         91         70-130         90         70-130         90         70-130         90         70-130         90         70-130         90         70-130         90         70-130         91         53         70-130         91         90         70-130         91         90         70-130         91	2	30
p/m-Xylene         92         91         70-130         91           o-Xylene         90         90         70-130         91         70-130 <t< td=""><td>2</td><td>30</td></t<>	2	30
o-Xylene         90         90         70-130         90           cis-1,2-Dichloroethene         92         89         70-130         90         70-130         90         5130         90         70-130         90         70-130         90         70-130         90         70-130         90         70-130         90         70-130         90         70-130         90         70-130         90         70-130         90         70-130         91         70-130	4	30
cis-1,2-Dichloroethene         92         89         70-130           Styrene         91         90         70-130           Dichlorodifluoromethane         59         55         30-146           Acetone         84         84         54-140           Carbon disulfide         81         78         59-130           2-Butanone         81         76         70-130           4-Methyl-2-pentanone         91         87         70-130           1,2-Dibromoethane         93         91         70-130           n-Butylbenzene         103         102         70-130	1	30
Styrene         91         90         70-130         91           Dichlorodifluoromethane         59         55         30-146         91           Acetone         84         84         54-140         91           Carbon disulfide         81         78         59-130         91           2-Butanone         81         76         70-130         91           4-Methyl-2-pentanone         91         87         70-130         91           2-Hexanone         84         82         70-130         91           1,2-Dibromoethane         93         91         91         70-130         91           n-Butylbenzene         103         102         70-130         91         70-130         91	0	30
Dichlorodifluoromethane         59         55         30-146           Acetone         84         84         54-140           Carbon disulfide         81         78         59-130           2-Butanone         81         76         70-130           4-Methyl-2-pentanone         91         87         70-130           2-Hexanone         84         82         70-130           1,2-Dibromoethane         93         91         70-130           n-Butylbenzene         103         102         70-130	3	30
Acetone         84         84         54-140         1           Carbon disulfide         81         78         59-130         1           2-Butanone         81         76         70-130         1           4-Methyl-2-pentanone         91         87         70-130         1           2-Hexanone         84         82         70-130         1           1,2-Dibromoethane         93         91         70-130         1           n-Butylbenzene         103         102         70-130         1	1	30
Carbon disulfide         81         78         59-130         70           2-Butanone         81         76         70-130         70           4-Methyl-2-pentanone         91         87         70-130         70           2-Hexanone         84         82         70-130         70           1,2-Dibromoethane         93         91         70-130         70           n-Butylbenzene         103         102         70-130         70	7	30
2-Butanone         81         76         70-130           4-Methyl-2-pentanone         91         87         70-130           2-Hexanone         84         82         70-130           1,2-Dibromoethane         93         91         70-130           n-Butylbenzene         103         102         70-130	0	30
4-Methyl-2-pentanone         91         87         70-130           2-Hexanone         84         82         70-130           1,2-Dibromoethane         93         91         70-130           n-Butylbenzene         103         102         70-130	4	30
2-Hexanone         84         82         70-130           1,2-Dibromoethane         93         91         70-130           n-Butylbenzene         103         102         70-130	6	30
1,2-Dibromoethane     93     91     70-130       n-Butylbenzene     103     102     70-130	4	30
n-Butylbenzene 103 102 70-130	2	30
	2	30
sec-Buty/benzene 100 99 70-130	1	30
	1	30
tert-Butylbenzene 96 95 70-130	1	30
1,2-Dibromo-3-chloropropane 87 88 68-130	1	30



**Project Name: I20B-LARKIN DEVELOPMENT** 

Project Number: Not Specified Lab Number: L2047700 Report Date: 11/05/20

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by EPA 5035 Low - Westb	orough Lab Ass	ociated sample(	s): 03-04 B	atch: WG1	430747-3 WG143	0747-4		
Isopropylbenzene	100		99		70-130	1		30
p-Isopropyltoluene	98		97		70-130	1		30
Naphthalene	90		90		70-130	0		30
n-Propylbenzene	102		100		70-130	2		30
1,2,4-Trichlorobenzene	97		97		70-130	0		30
1,3,5-Trimethylbenzene	97		96		70-130	1		30
1,2,4-Trimethylbenzene	98		96		70-130	2		30
Methyl Acetate	77		75		51-146	3		30
Cyclohexane	91		89		59-142	2		30
Freon-113	93		88		50-139	6		30
Methyl cyclohexane	93		92		70-130	1		30

Surromata	LCS	LCSD	Acceptance Criteria
Surrogate	%Recovery Qual	%Recovery Qual	Omena
1,2-Dichloroethane-d4	103	102	70-130
Toluene-d8	106	105	70-130
4-Bromofluorobenzene	109	109	70-130
Dibromofluoromethane	98	100	70-130



# INORGANICS & MISCELLANEOUS



								Serial_No:11052017:52				
Project Name:	120B-LARKIN	DEVEL	OPMEN	т			Lab N	lumber:	L2047700			
Project Number:	Not Specified						Repo	rt Date:	11/05/20			
			:	SAMPLE	RESUL	ГS						
Lab ID:	L2047700-01						Date (	Collected:	10/29/20 12:45	5		
Client ID:	PARKING LO	T CIU 5	202010	28	Date Received: 10/30/20							
Sample Location:	922 SENECA STREET						Field	Prep:	Not Specified			
Sample Depth: Matrix:	Soil											
Parameter		Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analys		
eneral Chemistry - We	stborough Lab											
olids, Total	87.1		%	0.100	NA	1	-	10/31/20 12:1	19 121,2540G	RI		



					Serial_No:11	0:11052017:52			
Project Name:	120B-LARKIN DE		т			Lab N	lumber:	L2047700	
Project Number:	Not Specified					Repo	rt Date:	11/05/20	
		:	SAMPLE	RESUL	TS				
Lab ID:	L2047700-02					Date (	Collected:	10/29/20 12:45	5
Client ID:	PARKING LOT C	IU 6 202010	28	Date Received: 10/30/20					
Sample Location:	922 SENECA ST	Field	Prep:	Not Specified					
Sample Depth: Matrix:	Soil								
Parameter	Result Qua	lifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analys
eneral Chemistry - Wes	stborough Lab								
olids, Total	89.2	%	0.100	NA	1	-	10/31/20 12:1	9 121,2540G	RI



				Serial_No:11052017:52						
Project Name:	120B-LARKIN DE	VELOPMEN	т			Lab N	lumber:	L2047700		
Project Number:	Not Specified					Repo	rt Date:	11/05/20		
			SAMPLE	RESUL	TS					
Lab ID:	L2047700-03					Date (	Collected:	10/29/20 12:45	5	
Client ID:	PARKING LOT C	PARKING LOT CIU 7 20201028						Date Received: 10/30/20		
Sample Location:	922 SENECA STREET					Field	Prep:	Not Specified		
Sample Depth: Matrix:	Soil									
Parameter	Result Qual	ifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analys	
eneral Chemistry - We	stborough Lab									
olids, Total	85.1	%	0.100	NA	1	-	10/31/20 12:1	9 121,2540G	RI	



							Serial_No:11052017:52						
Project Name:	I20B-LARKIN DEV	20B-LARKIN DEVELOPMENT						L2047700	_2047700				
Project Number:	Not Specified	Not Specified					rt Date:	11/05/20					
			SAMPLE	RESUL	TS								
Lab ID:	L2047700-04					Date (	Collected:	10/29/20 12:45	5				
Client ID:	PARKING LOT CIL	PARKING LOT CIU 8 20201028					Received:	10/30/20					
Sample Location:	922 SENECA STREET					Field I	Prep:	Not Specified					
Sample Depth: Matrix:	Soil												
Parameter	Result Qualifi	er Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analys				
eneral Chemistry - We	stborough Lab												
olids, Total	89.0	%	0.100	NA	1	-	10/31/20 12:1	9 121,2540G	RI				



Project Name: Project Number:	I20B-LARKIN DEVELOPMENT Not Specified		Lab Duplicate Ana Batch Quality Contr			ab Number eport Date	E2047700
Parameter		Native Sample	e Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Wes CIU 5 20201028	stborough Lab Associated sampl	le(s): 01-04 Q	QC Batch ID: WG1428828-1	QC Sample:	L2047700-01	Client ID:	PARKING LOT
Solids, Total		87.1	87.2	%	0		20



# Project Name:I20B-LARKIN DEVELOPMENTProject Number:Not Specified

Serial\_No:11052017:52 *Lab Number:* L2047700 *Report Date:* 11/05/20

#### Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

#### **Cooler Information**

Cooler	Custody Seal
A	Absent

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2047700-01A	Vial MeOH preserved	А	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2047700-01B	Vial water preserved	А	NA		2.3	Y	Absent	31-OCT-20 05:15	NYTCL-8260HLW-R2(14)
L2047700-01C	Vial water preserved	А	NA		2.3	Y	Absent	31-OCT-20 05:15	NYTCL-8260HLW-R2(14)
L2047700-01D	Plastic 2oz unpreserved for TS	А	NA		2.3	Y	Absent		TS(7)
L2047700-02A	Vial MeOH preserved	А	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2047700-02B	Vial water preserved	А	NA		2.3	Y	Absent	31-OCT-20 05:15	NYTCL-8260HLW-R2(14)
L2047700-02C	Vial water preserved	А	NA		2.3	Y	Absent	31-OCT-20 05:15	NYTCL-8260HLW-R2(14)
L2047700-02D	Plastic 2oz unpreserved for TS	А	NA		2.3	Y	Absent		TS(7)
L2047700-03A	Vial MeOH preserved	А	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2047700-03B	Vial water preserved	А	NA		2.3	Y	Absent	31-OCT-20 05:15	NYTCL-8260HLW-R2(14)
L2047700-03C	Vial water preserved	А	NA		2.3	Y	Absent	31-OCT-20 05:15	NYTCL-8260HLW-R2(14)
L2047700-03D	Plastic 2oz unpreserved for TS	А	NA		2.3	Y	Absent		TS(7)
L2047700-04A	Vial MeOH preserved	А	NA		2.3	Y	Absent		NYTCL-8260HLW-R2(14)
L2047700-04B	Vial water preserved	А	NA		2.3	Y	Absent	31-OCT-20 05:15	NYTCL-8260HLW-R2(14)
L2047700-04C	Vial water preserved	А	NA		2.3	Y	Absent	31-OCT-20 05:15	NYTCL-8260HLW-R2(14)
L2047700-04D	Plastic 2oz unpreserved for TS	А	NA		2.3	Y	Absent		TS(7)



# Serial\_No:11052017:52

# Project Name: I20B-LARKIN DEVELOPMENT

### Project Number: Not Specified

# Lab Number: L2047700

### **Report Date:** 11/05/20

#### GLOSSARY

#### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	<ul> <li>Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).</li> </ul>
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	<ul> <li>Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.</li> </ul>
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	<ul> <li>No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.</li> </ul>
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Number: Not Specified

### Lab Number: L2047700

Report Date: 11/05/20

#### Footnotes

1

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- **D** Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- **F** The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers



### Serial\_No:11052017:52

# Project Name: I20B-LARKIN DEVELOPMENT

### Project Number: Not Specified

Lab Number: L2047700

#### **Report Date:** 11/05/20

#### Data Qualifiers

the identification is based on a mass spectral library search.

- **P** The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- **S** Analytical results are from modified screening analysis.





Project Name:I20B-LARKIN DEVELOPMENTProject Number:Not Specified

 Lab Number:
 L2047700

 Report Date:
 11/05/20

#### REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

#### LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



# **Certification Information**

#### The following analytes are not included in our Primary NELAP Scope of Accreditation:

#### Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.
Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 1-Methylnaphthalene.
EPA 3C Fixed gases
Biological Tissue Matrix: EPA 3050B

#### The following analytes are included in our Massachusetts DEP Scope of Accreditation

#### Westborough Facility:

#### Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP. Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

#### Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs **EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

#### Mansfield Facility:

#### Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn. **EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn. **EPA 245.1** Hg. **SM2340B** 

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

# Serial\_No:11052017:52

	NEW YORK CHAIN OF CUSTODY	Service Centers Mabwah, NJ 07430: 35 Whitney F Albany, NY 12205: 14 Walker Wa Tonawanda, NY 14150: 275 Coop	У	5	Page { of	(	THE REAL PROPERTY AND INCOME.				0/31/20		the second se	14 7 70	0
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 505-822-3258	Project Information Project Name: I20B- Project Location: \$22			ment		Deliverables           ASP-A         ASP-B           EQuIS (1 File)         EQUIS (4 File)				Billing Information				
Client Information		Project #					Conter NYSDEC 3618					Discoursed Sile	Disposal Site Information		
Client: AFT CAU		(Use Project name as Pro					1000	-		ment	_		Disposal Site	a Intormation	
Address: 3644 1 Niagara Fall	Suffala Aur	Project Manager: Brz	ndon a	quin		-	AWQ Standards NY Part 375						Please identify below location of applicable disposal facilities		t -
Phone: (7/67 28	S NT PTEL	Turn-Around Time	-					NY Re	stricted U	se	Othe	ir.	Disposal Facil	ity:	
Fax: Standard 🕅 Due Date:								restricted		-		Other:	NY IN		
							ANAI	_		anarge			Sample Filt	ration	T
These samples have be			-				ANAI	LTOIO		-		TT	1-2	ration	a
Other project specific Please specify Metals		nents:					Vocs	att and	r				Done Lab to c Preservatio Lab to c (Please Spe	n	- B
ALPHA Lab ID (Lab Use Only)	S	ample ID		ection	Sample Matrix	Sampler's Initials	>	(F	3	1			Sample Sper	ific Comments	- į
		10.1	Date	Time			-	1	~/	+			Sample Spec	ine comments	e 4
47700-01		5 20201028	10/29/20		SOIL	BQ	×	11	X	+	-		-		
-02	Parking lot C	TO 6 20201078	10/25/20		12:45		×	79	X	+	-				11
-03	Parking lot C	EU 7 2020102.9	10/29/20		1245	d'	×	-	×	-	-				1000
-04	Parking lot CI	2 8 2020/028	10/29/20	Soil 6	1245	4	X	-	~	-	-	-			4
	p the second second			-		-	-	_		-		-	-		-
	-			-	-		-	-		-	-	-	-		+
2				1	-	-	-	-	-	-	-	-	-		+
	h		- C				1	-		-	-	-			+
			1.00	11.1.	1	C - 111	-	-		_			-		+ +
1			1. Sec. 1.	1.0		-		-		-	-		-		1
Preservative Code: A = None B = HCI	Container Code P = Plastic A = Amber Glass	Westboro: Certification No: MA935 Mansfield: Certification No: MA015			Con	tainer Type	$\checkmark$		ρ				and comp	Please print clearly, legibly and completely, Samples ca	
C = HNO <sub>3</sub>	V = Vial G = Glass B = Bacteria Cup					Preservative		D					turnarour	gged in and nd time clock wil I any ambiguities	
D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH	C = Cube	Relinquished E	3v:	Date	/Time	0	Recei	ved B	VE		Da	ite/Time	resolved.	BY EXECUTIN	IG
$F = MeOH$ $G = Dabe$ $G = NaHSO_4$ $O = Other$ $H = Na_2S_2O_3$ $E = Encore$ $K/E = Zn Ac/NaOH$ $D = BOD Bottle$ $O = Other$ $O = Other$		mar		10/30/2	25 16.20	111	Received By:			3	10/31/20 62210		HAS RE/ TO BE B TERMS	THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.	
Form No: 01-25 HC (rev. 3	0-Sept-2013)								V	1	1 mm		(See rev	erse side.)	

Contained-in Determinations

## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Materials Management, Bureau of Hazardous Waste and Radiation Management 625 Broadway, 9th Floor, Albany, New York 12233-7256 P: (518) 402-8651 | F: (518) 402-9024 www.dec.ny.gov

September 3, 2020

Mr. Brandon Quinn Geologist/Project Manager AFI Environmental PO Box 4049 Niagara Falls, NY 14304

RE: **REVISED** - AmeriPride Site #C915241 "Contained-in" Determination Request NYSDEC Site No. C915241

Dear Mr. Quinn:

The New York State Department of Environmental Conservation has reviewed the analytical soil data (Lab Sample ID: 203531-01, 203531-01A, 203531-02, 203531-02A, 200731027-001, 200731027-002 and 200731027-004) submitted with your letters dated August 20, 2020 and September 2, 2020 requesting a "contained-in" determination for contaminated soils from which were encountered during the redevelopment of the above project.

Concentrations detected for individual VOCs, SVOCs, metals and PCBs were all significantly less than their current "contained-in" soil action levels, and Land Disposal Restriction concentrations. No hazardous constituents exhibited a hazardous waste characteristic by exceeding their TCLP regulatory level.

Concentrations (Lab Sample ID: 203531-01 and 203531-02) for tetrachloroethene, cis-1,2-dichloroethene and trichloroethene were below the soil "contained-in" action level and the Land Disposal Restriction concentration. Excavated soils, approximately 150 cubic yards of material, from the redevelopment activities conducted at the site, do not have to be managed as hazardous waste and can be transported off-site to Waste Management of NY Landfill in Chaffee New York, for disposal as a solid waste.

Should you have any questions regarding the content of this letter, please do not hesitate to contact me at (518) 402-9611 or email me at henry.wilkie@dec.ny.gov.

Sincerely,

Henry Wilkie Assistant Environmental Engineer RCRA Permitting Section



ec: J. Walia, DER Region 9 M. Kuczka, DER Region 9

### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Materials Management, Bureau of Hazardous Waste and Radiation Management 625 Broadway, 9th Floor, Albany, New York 12233-7256 P: (518) 402-8651 I F: (518) 402-9024 www.dec.ny.gov

December 8, 2020

### Sent via e-mail, no hard copy to follow

Mr. Brandon Quinn Senior Project Manager AFI Environmental PO Box 4049 Niagara Falls, NY 14304

RE: Former American Linen Supply Company Facility Site "Contained-in" Determination Request NYSDEC Site No. C915241

Dear Mr. Quinn:

The New York State Department of Environmental Conservation (NYSDEC or the Department) has reviewed your letter dated December 3, 2020, requesting a "contained-in" determination for a stockpile of excavated soil as part of remedial activities at Former American Linen Supply Company Facility Site.

### **Soil Media Evaluation**

Concentrations (Sampling ID: L2047640-01, L2047640-02, L2047700-01, L2047700-02, L2047700-03 and L2047700-04) detected for individual volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and pesticides were all less than their current NYSDEC "contained in" soil action levels and Land Disposal Restriction concentrations. Most of the individual VOCs, SVOCs and pesticides were not detected above the reporting limit. No hazardous constituents exhibited a hazardous waste characteristic by exceeding their TCLP regulatory level.

Concentrations for tetrachloroethene detected in the soil samples (Sampling ID: L2047640-01, L2047640-02, L2047700-01, L2047700-02, L2047700-03 and L2047700-04) were below the soil "contained-in" action levels and Land Disposal Restriction concentrations. Therefore, the Stockpile (Sampling ID: L2047640-01, L2047640-02, L2047700-01, L2047700-02, L2047700-03 and L2047700-04), the volume of excavated soil estimated to be 350-400 cubic yards, does not have to be managed as a hazardous waste and may be transported off-site to Waste Management of NY Landfill in Chaffee New York or another permitted 360 solid waste facility able to accept this material, for disposal as non-hazardous waste.



Should you have any questions regarding the content of this letter, please do not hesitate to contact me at (518) 402-9611 or email me at henry.wilkie@dec.ny.gov.

Sincerely, mente

Assistant Environmental Engineer RCRA Permitting Section

ec: J. Walia, DEC M. Kuczka, DEC Disposal Documentation

WASTE MANAGEMENT	Waste Management C 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000			Reprint Ticket# 65	50975
Customer Name AFIEN Ticket Date 09/04, Payment Type Credit Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 969348 Destination PO	Account	Vehicle# 1 Container Driver Check# Billing # 00	SNOWPLOW 04874 T REQUIRED	Volume	
	NY (NH SOIL) LLRACECOMMONS822SENEC	A MILL RACE COMMO	NS LLC		
Time In 09/04/2020 08:2 Out 09/04/2020 08:4 Comments		Operator mbaker13 mbaker13	Inbound	Gross Tare Net Tons	59820 lb 26760 lb 33060 lb 16.53

Product		LD%	Qty	UOM	Rate	Fee	Amount	Origin
2 EVF- 3 RCR-	Soil RCG-Tons P10-Environmen P-Regulatory C LANDFILL FIXE	100 100	16.53	Tons % % %				ERI ERI ERI ERI

Total Fees Total Ticket

Driver`s Signature \_\_\_\_\_\_3E5-1580

WASTE MANAGEMENT	Waste Management Cha 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000	affee LF	Reprint Ticket# 65	0977
Ticket Date 09/04/2 Payment Type Credit Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 969349 Destination PO	Account	- Carrier DANS SNOWPLOW Vehicle# 22 Container Driver Check# Billing # 0004874 Gen EPA ID NOT REQUIRED	Volume	
	IY (NH SOIL) LLRACECOMMONS822SENECA	MILL RACE COMMONS LLC		
Time In 09/04/2020 08:3 Out 09/04/2020 08:5	):31 INBOUND mk	Dperator Inbound Daker13 Daker13	Gross Tare Net Tons	51920 lb 26700 lb 25220 lb 12.61

#### Comments

Pro	duct	LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	12.61	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

Driver`s Signature \_\_\_\_\_\_3E5-1580

	Waste Management C 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000			Reprint Ticket# 6	50976
Customer Name AFIENVII Ticket Date 09/04/2 Payment Type Credit 1 Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 9693486 Destination PO	020	Vehicle# 2 Container Driver Check# Billing # 0	IS SNOWPLOW 0004874 NOT REQUIRED	Volume	
	Y (NH SOIL) LRACECOMMONS822SENEC	A MILL RACE COMM	IONS LLC		
Time In 09/04/2020 08:27 Out 09/04/2020 09:00 Comments		Operator mbaker13 mbaker13	Inbound	Gross Tare Net Tons	66540 lb 35800 lb 30740 lb 15.37

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil RCG-Tons 2 EVF-P10-Environmer 3 RCR-P-Regulatory C 4 LFS4-LANDFILL FIXE	100 100	15.37	Tons % % %				ERI ERI ERI ERI

WASTE MANAGE	108 MENT Cha	ste Management 360 Olean Rd affee, NY, 1403 : (716) 496-500	0		Reprint Ticket# 6	51013
Ticket Date	09/04/2020 Credit Accou t# et#	ENTALNIAGARAFAL	Vehicle# 1 Container Driver Check#	0004874	Volume	
Profile Generator	122748NY (NH 190-MILLRACH	,	CA MILL RACE CC	MMONS LLC		
	020 10:50:43 020 11:15:05	Scale INBOUND OUTBOUND	Operator mbaker13 mbaker13	Inbound	Gross Tare Net Tons	71080 lb 26720 lb 44360 lb 22.18

Proc	luct	LD%	Qty	UOM	Rate	Fee	Amount	Origin	_
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmer RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	22.18	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

WASTE MANAGEMENT	Waste Management C 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000			Reprint Ticket# 69	51012
Customer Name AFIENV Ticket Date 09/04/ Payment Type Credit Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 969349 Destination PO	2020 Account	Vehicle# 2 Container Driver Check# Billing # 00	SNOWPLOW 04874 T REQUIRED	Volume	
	NY (NH SOIL) LLRACECOMMONS822SENEC	A MILL RACE COMMO	ONS LLC		
Time In 09/04/2020 10:4 Out 09/04/2020 11:2 Comments		Operator mbaker13 mbaker13	Inbound	Gross Tare Net Tons	78400 lb 36000 lb 42400 lb 21.20

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 Cont Soil RCG-Ton 2 EVF-P10-Environme 3 RCR-P-Regulatory 4 LFS4-LANDFILL FIX	en 100 C 100	21.20	Tons % % %				ERI ERI ERI ERI	

WASTE MANAGEN	a ent	Waste Management 10860 Olean Rd Chaffee, NY, 140 Ph: (716) 496-50	)30		Reprint Ticket# 6	51015
Customer Name Ticket Date Payment Type Manual Ticket Hauling Ticke Route State Waste C Manifest Destination PO Profile Generator	09/04/202 Credit Aco # t# ode 9493491 122748NY	count (NH SOIL)		2	Volume	
	20 10:55:4 20 11:17:4		Operator mbaker13 mbaker13	Inbound	Gross Tare Net Tons	63640 lb 26640 lb 37000 lb 18.50

Pro	luct	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	18.50	Tons % % %				ERI

WASTE MANAGEMENT	Waste Management C 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000			Reprint Ticket# 65	51048
Customer Name AFIENVI Ticket Date 09/04/2 Payment Type Credit Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 9693495 Destination PO	2020 Account	Vehicle# 1 Container Driver Check# Billing # (	NS SNOWPLOW 0004874 NOT REQUIRED	Volume	
	IY (NH SOIL) LLRACECOMMONS822SENEC	A MILL RACE COMM	MONS LLC		
Time In 09/04/2020 13:08 Out 09/04/2020 13:22 Comments		Operator mbaker13 mbaker13	Inbound	Gross Tare Net Tons	68900 lb 26560 lb 42340 lb 21.17

Prod	luct	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	21.17	Tons % % %				ERI ERI ERI ERI

WASTE MANAG	EMENT C	aste Management 0860 Olean Rd haffee, NY, 1403 h: (716) 496-500	0		Reprint Ticket# 6	51047
Ticket Date	09/04/2020 e Credit Acc et# cet#				Volume	
Profile Generator	122748NY ( 190-MILLRA	NH SOIL) CECOMMONS822SENE	CA MILL RACE C	OMMONS LLC		
	2020 13:07:50 2020 13:32:03		Operator mbaker13 mbaker13	Inbound	Gross Tare Net Tons	60720 lb 26540 lb 34180 lb 17.09

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin	_
1 Cont Soil RCG-Ton 2 EVF-P10-Environme 3 RCR-P-Regulatory 4 LFS4-LANDFILL FI	en 100 C 100	17.09	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

WASTE MANAGEMENT	Waste Management C 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000			Reprint Ticket# 65	1056
Customer Name AFIENVI Ticket Date 09/04/2 Payment Type Credit Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 9693487 Destination PO	2020 Account	Vehicle# 2 Container Driver Check# Billing # 00	S SNOWPLOW 004874 DT REQUIRED	Volume	
	IY (NH SOIL) LLRACECOMMONS822SENEC	A MILL RACE COMMC	ONS LLC		
Time In 09/04/2020 13:33 Out 09/04/2020 14:02 Comments		Operator mbaker13 mbaker13		Gross Tare Net Tons	82220 lb 35420 lb 46800 lb 23.40

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil RCG-Tons 2 EVF-P10-Environmer 3 RCR-P-Regulatory ( 4 LFS4-LANDFILL FIXE	n 100 C 100	23.40	Tons % % %				ERI ERI ERI ERI

WAS		• IT	Waste Ma 10860 Ol Chaffee, Ph: (716	ean Rd NY, 140	30	e LF		Reprint Ticket#	
Customer Name AFIENVIRONMENTALNIAGARAFALLS- Ticket Date 09/08/2020 Payment Type Credit Account Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 9693488 Destination PO Profile 122748NY (NH SOIL) Generator 190-MILLRACECOMMONS822SENECA				Ve Cc Dr Ch Bi Ge	chicle# 2 ontainer river heck# .lling # en EPA ID	0004874 NOT REQUIRED	Volume		
Out	Time 09/08/2020 09/08/2020 ments			UND	Oper JChap JChap		Inbound	Gross Tare Net Tons	75140 lb 35500 lb 39640 lb 19.82
Proc	luct		LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 2 3 4	Cont Soil EVF-P10-En RCR-P-Regu LFS4-LANDF	vironmen latory C	100 100	19.82	Tons % % %				ERI

	ENT Ch	aste Management ( )860 Olean Rd haffee, NY, 1403( h: (716) 496-500(	0		Reprint Ticket# 65	51168
		MENTALNIAGARAFAL		ANS SNOWPLOW		
	09/08/2020		Vehicle# 2		Volume	
Payment Type		ount	Container			
Manual Ticket#	:		Driver			
Hauling Ticket	#		Check#			
Route			Billing #	0004874		
State Waste Co			Gen EPA ID	NOT REQUIRED		
	9693496					
Destination						
PO						
	122748NY (1					
Generator	190-MILLRAC	CECOMMONS822SENE	CA MILL RACE CON	MONS LLC		
Time		Scale	Operator	Inbound	Gross	73000 lb
	0 11:04:12	INBOUND	JChapma7		Tare	35720 lb
Out 09/08/202	0 11:57:30	OUTBOUND	JChapma7		Net	37280 lb
					Tons	18.64
Comments						

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil RCG-Tons 2 EVF-P10-Environmer 3 RCR-P-Regulatory ( 4 LFS4-LANDFILL FIXE	n 100 C 100	18.64	Tons % % %				ERI ERI ERI ERI

WASTE MANAGEMENT	Waste Management Ch 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000	affee LF		Reprint Ticket# 69	51216
Ticket Date 09/08 Payment Type Credi Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 96934 Destination PO	t Account	Vehicle# 2 Container Driver Check# Billing # 000	SNOWPLOW 04874 F REQUIRED	Volume	
	8NY (NH SOIL) ILLRACECOMMONS822SENECA	MILL RACE COMMON	NS LLC		
Time In 09/08/2020 14: Out 09/08/2020 14: Comments	18:38 INBOUND J	Operator Chapma7 Chapma7		Gross Tare Net Tons	69860 lb 35460 lb 34400 lb 17.20

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 Cont Soil RCG-Tons 2 EVF-P10-Environmer 3 RCR-P-Regulatory ( 4 LFS4-LANDFILL FIXE	n 100 C 100	17.20	Tons % % %				ERI ERI ERI ERI	

	108 Cha	te Management Ch 60 Olean Rd ffee, NY, 14030 (716) 496-5000	affee LF		Reprint Ticket# (	561891
Payment Type Cr Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 99 Destination PO Profile 12	2/11/2020 redit Accou 963928 22748NY (NH	nt	Vehicle# Container Driver Check# Billing # Gen EPA II	~ ~ ~	TRUCKING Volume	
Time In 12/11/2020 Out 12/11/2020 Comments		INBOUND J	Operator Chapma7 Chapma7	Inbound	Gross Tare Net Tons	62260 lb 26680 lb 35580 lb 17.79

Proc	luct	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	17.79	Tons % % %				ERI

WAST		ENT	Waste Management ( 10860 Olean Rd Chaffee, NY, 1403( Ph: (716) 496-500(	)		Reprint Ticket#	661893
Ticke Payme Manua Hauli Route	et Date ent Type al Ticket# ing Ticket	12/11/20 Credit A		LS- Carrier Vehicle# Container Driver Check# Billing # Gen EPA II	0004874	TRUCKING Volume	
Manif Desti PO Profi	Test ination	9963929 122748NY	(NH SOIL) RACECOMMONS822SENEC				
In Out Comme	Time 12/11/202 12/11/202 ents			Operator JChapma7 JChapma7	Inbound	Gross Tare Net Tons	71900 lb 26860 lb 45040 lb 22.52

Prod	uct	LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	22.52	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

WASTE MANAGEMENT	Waste Management Cha 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000	affee LF	Reprint Ticket#	661895
Customer Name AFIENVIR Ticket Date 12/11/20 Payment Type Credit A Manual Ticket# Hauling Ticket# Route	20	- Carrier MALLARE MALLARE Vehicle# 111 Container Driver Check# Billing # 0004874	TRUCKING Volume	
State Waste Code		Gen EPA ID NOT REQUIRED		
Manifest 9963930 Destination PO				
Profile 122748NY	(NH SOIL)			
Generator 190-MILL	RACECOMMONS822SENECA	MILL RACE COMMONS LLC		
Time In 12/11/2020 08:39: Out 12/11/2020 08:57:	21 INBOUND JC	Operator Inbound Chapma7 Chapma7	Gross Tare Net Tons	71880 lb 28080 lb 43800 lb 21.90

Pro	duct	LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	21.90	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

WASTE MANAGEMENT	Waste Management Cha 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000	affee LF		Reprint Ticket#	661899
Customer Name AFIENVIR Ticket Date 12/11/20 Payment Type Credit A Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 9963931 Destination PO Profile 122748NY	20	- Carrier M Vehicle# 1 Container Driver Check# Billing # Gen EPA ID	.13 0004874	TRUCKING Volume	
Generator 190-MILL					
Time In 12/11/2020 08:52: Out 12/11/2020 09:09:	08 INBOUND JO	Operator Chapma7 Chapma7	Inbound	Gross Tare Net Tons	66680 lb 27960 lb 38720 lb 19.36

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin	_
1 Cont Soil RCG-T 2 EVF-P10-Environ 3 RCR-P-Regulator 4 LFS4-LANDFILL F	men 100 y C 100	19.36	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

	108 NT Cha	ste Management Ch 660 Olean Rd ffee, NY, 14030 (716) 496-5000	affee LF		Reprint Ticket#	661928
Customer Name A Ticket Date T Payment Type ( Manual Ticket# Hauling Ticket Route State Waste Coo	l2/11/2020 Credit Accou ‡	NTALNIAGARAFALLS	- Carrier Vehicle# Container Driver Check# Billing # Gen EPA II	0004874	TRUCKING Volume	
Destination PO Profile	9963932 122748NY (NH 190-MILLRACH	I SOIL) COMMONS822SENECA	MILL RACE	COMMONS LLC		
	) 10:21:07 ) 10:48:40	INBOUND J	Operator Chapma7 Chapma7	Inbound	Gross Tare Net Tons	76400 lb 26700 lb 49700 lb 24.85

Product		LD%	Qty	UOM	Rate	Fee	Amount	Origin	_
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	24.85	Tons % % %				ERI ERI ERI ERI	_

Total Fees Total Ticket

WAST		Waste Management C 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000			Reprint Ticket#	661929
Ticke Payme Manua Hauli Route State Manif	et Date 12/11/2 ent Type Credit al Ticket# .ng Ticket# e Waste Code	Account	S- Carrier Mi Vehicle# 1 Container Driver Check# Billing # Gen EPA ID		TRUCKING Volume	
PO Profi Gener	rator 190-MII Time	NY (NH SOIL) LRACECOMMONS822SENEC Scale	Operator	MMONS LLC Inbound	Gross	74820 lb
In Out	12/11/2020 10:20 12/11/2020 10:50		JChapma7 JChapma7		Tare Net Tons	26840 lb 47980 lb 23.99

Product		LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	23.99	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

WASTE MANAGEMENT	Waste Management Ch 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000	affee LF		Reprint Ticket#	661931
Customer Name AFIENV Ticket Date 12/11/2 Payment Type Credit Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 9963934 Destination PO	Account	Vehicle# 11 Container Driver Check#		TRUCKING Volume	
Profile 1227481	IY (NH SOIL) LLRACECOMMONS822SENECA	MILL RACE COM	MONS LLC		
Time In 12/11/2020 10:30 Out 12/11/2020 10:53	):42 INBOUND J	Operator Chapma7 Chapma7	Inbound	Gross Tare Net Tons	75540 lb 28040 lb 47500 lb 23.75

Product		LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	23.75	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

	108 T Cha	ste Management Ch 60 Olean Rd 1ffee, NY, 14030 (716) 496-5000	affee LF		Reprint Ticket#	661936
Ticket Date 1 Payment Type C Manual Ticket# Hauling Ticket# Route State Waste Cod	2/11/2020 redit Accou	NTALNIAGARAFALLS	G- Carrier Vehicle# Container Driver Check# Billing # Gen EPA II	0004874	TRUCKING Volume	
Profile 1	22748NY (NH 90-MILLRACE	I SOIL) COMMONS822SENECA	MILL RACE (	COMMONS LLC		
Time In 12/11/2020 Out 12/11/2020		INBOUND J	Operator Chapma7 Chapma7	Inbound	Gross Tare Net Tons	74080 lb 27900 lb 46180 lb 23.09

Product		LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	23.09	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

WASTE MANAGE		Waste Management 10860 Olean Rd Chaffee, NY, 1403 Ph: (716) 496-500	30		Reprint Ticket#	661951
Ticket Date Payment Type Manual Ticke Hauling Ticke Route State Waste Manifest Destination PO	12/11/202 Credit Ac t# et# Code 9963936	ecount	LLS- Carrier Vehicle# Container Driver Check# Billing # Gen EPA II	0004874	TRUCKING Volume	
Profile Generator		(NH SOIL) ACECOMMONS822SENI	ECA MILL RACE (	COMMONS LLC		
, ,	020 11:31:4 020 11:31:4		Operator JChapma7 JChapma7	Inbound	Gross Tare Net Tons	80040 lb 27080 lb 52960 lb 26.48

Pro	luct	LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	26.48	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

WAST		Waste Management C 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000			Reprint Ticket#	661968
Ticke Payme Manua Hauli Route State Manif	et Date 12/11/2 ent Type Credit 1 Ticket# .ng Ticket# e Waste Code	Account	S- Carrier M Vehicle# 1 Container Driver Check# Billing # Gen EPA ID	0004874	TRUCKING Volume	
PO Profi Gener	le 122748N ator 190-MIL	Y (NH SOIL) LRACECOMMONS822SENEC			Guerra	71440 15
In Out	Time 12/11/2020 12:48 12/11/2020 13:05		Operator JChapma7 JChapma7	Inbound	Gross Tare Net Tons	71440 lb 27880 lb 43560 lb 21.78

Pro	duct	LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmer RCR-P-Regulatory ( LFS4-LANDFILL FIXE	100 100	21.78	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

WASTE MA	NAGEMENT	Waste Management 10860 Olean Rd Chaffee, NY, 1403 Ph: (716) 496-500	30		Reprint Ticket#	661967
Ticket Da	ate 12/11/20 Type Credit A icket# Ticket#		LLS- Carrier Vehicle# Container Driver Check# Billing # Gen EPA ID	0004874	TRUCKING Volume	
Manifest Destinat: PO Profile Generato:	ion 122748NY	(NH SOIL) RACECOMMONS822SENI	ECA MILL RACE C	OMMONS LLC		
	ne 11/2020 12:47: 11/2020 13:08:		Operator JChapma7 JChapma7	Inbound	Gross Tare Net Tons	64760 lb 26640 lb 38120 lb 19.06

Product		LD%	Qty	UOM	Rate	Fee	Amount	Origin	
2 EVF-P1 3 RCR-P-	oil RCG-Tons 0-Environmen Regulatory C ANDFILL FIXE	100 100	19.06	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

WASTE MANAGEMENT	Waste Management Cha 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000	ffee LF	Reprint Ticket#	661969
Ticket Date 12/ Payment Type Cre Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 996 Destination PO Profile 122	ENVIRONMENTALNIAGARAFALLS- 11/2020 edit Account 3938 2748NY (NH SOIL) -MILLRACECOMMONS822SENECA	Vehicle# 118 Container Driver Check# Billing # 0004874 Gen EPA ID NOT REQUIRED	TRUCKING Volume	
Time In 12/11/2020 1 Out 12/11/2020 1	2:49:01 INBOUND JC	Operator Inbound Chapma7 Chapma7	Gross Tare Net Tons	67200 lb 26740 lb 40460 lb 20.23

Pro	luct	LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	20.23	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

WASTE MANAGEMENT	Waste Management Ch 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000	affee LF		Reprint Ticket#	661972
Customer Name AFIENVIE Ticket Date 12/11/20 Payment Type Credit A Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 9963941 Destination PO	)20	Vehicle# 113 Container Driver Check# Billing # 00	LARE MALLARE 004874 DT REQUIRED	TRUCKING Volume	
	Y (NH SOIL) LRACECOMMONS822SENEC	A MILL RACE COMMO	ONS LLC		
Time In 12/11/2020 12:51: Out 12/11/2020 13:14:		Operator IChapma7 IChapma7		Gross Tare Net Tons	69560 lb 27700 lb 41860 lb 20.93

Pro	luct	LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	20.93	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

WASTE MANAGEMENT	Waste Management Ch 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000	affee LF		Reprint Ticket#	662060
Customer Name AFIENVIE Ticket Date 12/14/20 Payment Type Credit A Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 9963942 Destination PO Profile 122748N	)20	Vehicle# 10 Container Driver Check# Billing #	LLARE MALLARE 95 0004874 NOT REQUIRED	TRUCKING Volume	
	LRACECOMMONS822SENECA	MILL RACE COM	IMONS LLC		
Time In 12/14/2020 08:21: Out 12/14/2020 08:44: Comments	13 INBOUND J	Operator Chapma7 Chapma7	Inbound	Gross Tare Net Tons	59520 lb 26800 lb 32720 lb 16.36

Prod	luct	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	16.36	Tons % % %				ERI

WASTE MANAGEMENT	Waste Management Ch 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000	naffee LF		Reprint Ticket#	662061
Ticket Date 12/14 Payment Type Cred: Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 99639 Destination PO Profile 12274	976 48NY (NH SOIL)	Vehicle# 1 Container Driver Check# Billing # Gen EPA ID	0004874 NOT REQUIRED	TRUCKING Volume	
Generator 190-M	MILLRACECOMMONS822SENECA	A MILL RACE CO	MMONS LLC		
Time In 12/14/2020 08 Out 12/14/2020 08 Comments	:28:23 INBOUND J	Operator JChapma7 JChapma7	Inbound	Gross Tare Net Tons	55920 lb 25500 lb 30420 lb 15.21

Prod	uct	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	15.21	Tons % % %				ERI

WASTE	e MANAGEM	®	Waste Management C 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000			Reprint Ticket#	662084
		AFIENVIRC	ONMENTALNIAGARAFALL	S- Carrier Vehicle#		TRUCKING Volume	
				Container		vorullie	
	l Ticket‡	Credit Ac	count	Driver			
	ng Ticket			Check#			
Route	ing inchet	-π		Billing #	0004874		
	Waste Co	de		Gen EPA I			
Manife		9963977					
	nation	11000					
PO	nacion						
Profi	le	122748NY	(NH SOIL)				
Genera			RACECOMMONS822SENEC	A MILL RACE	COMMONS LLC		
0011010							
	Time		Scale	Operator	Inbound	Gross	58440 lb
In 1		20 10:19:0		JChapma7	21100 4114	Tare	26760 lb
		10:47:0		JChapma7		Net	31680 lb
	,,,,			<u>-</u>		Tons	15.84
Common	nta						20101

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 Cont Soil RCG-TC 2 EVF-P10-Environm 3 RCR-P-Regulatory 4 LFS4-LANDFILL FI	nen 100 7 C 100	15.84	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

	EMENT	Waste Management Cl 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000	haffee LF		Reprint Ticket#	662092
Ticket Date Payment Type Manual Ticke Hauling Tick Route State Waste Manifest Destination PO	12/14/202 e Credit Ac et# cet# Code 9963943	count	S- Carrier Vehicle# Container Driver Check# Billing # Gen EPA I	0004874	TRUCKING Volume	
Profile Generator		(NH SOIL) RACECOMMONS822SENEC	A MILL RACE	COMMONS LLC		
	2020 10:40:1 2020 11:12:5		Operator JChapma7 JChapma7	Inbound	Gross Tare Net Tons	63020 lb 25360 lb 37660 lb 18.83

Pro	duct	LD%	Qty	UOM	Rate	Fee	Amount	Origin	
1 2 3 4	Cont Soil RCG-Tons EVF-P10-Environmen RCR-P-Regulatory C LFS4-LANDFILL FIXE	100 100	18.83	Tons % % %				ERI ERI ERI ERI	

Total Fees Total Ticket

WASTE MANAGEMENT	Waste Management Ch 10860 Olean Rd Chaffee, NY, 14030 Ph: (716) 496-5000	naffee LF		Reprint Ticket# 6	562120
Customer Name AFIENV Ticket Date 12/14/ Payment Type Credit Manual Ticket# Hauling Ticket# Route State Waste Code Manifest 996394 Destination PO	Account	Vehicle# 105 Container Driver Check# Billing # 000	RE MALLARE ( 4874 REQUIRED	FRUCKING Volume	
	NY (NH SOIL) LLRACECOMMONS822SENECA	A MILL RACE COMMON	IS LLC		
Time In 12/14/2020 12:4 Out 12/14/2020 13:0 Comments		Operator JChapma7 JChapma7	1	Gross Tare Net Tons	38660 lb 26660 lb 12000 lb 6.00

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Cont Soil RCG-To 2 EVF-P10-Environ 3 RCR-P-Regulatory 4 LFS4-LANDFILL F	men 100 7 C 100	6.00	Tons % % %				ERI ERI ERI ERI

## Appendix E

Remaining Contamination Laboratory Reports



#### ANALYTICAL REPORT

Lab Number:	L2058202
Client:	AFI Environmental
	8644 Buffalo Avenue
	PO Box 4049
	Niagara Falls, NY 14304
ATTN:	Brandon Quinn
Phone:	(716) 283-7645
Project Name:	I20B-LARKIN DEVELOPMENT
Project Number:	Not Specified
Report Date:	01/11/21
Report Date:	01/11/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name:I20B-LARKIN DEVELOPMENTProject Number:Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2058202-01	FLOOR 1 20201229	SOIL	822 SENECA STREET	12/29/20 14:20	12/30/20
L2058202-02	FLOOR 2 20201229	SOIL	822 SENECA STREET	12/29/20 14:30	12/30/20
L2058202-03	FLOOR 3 20201229	SOIL	822 SENECA STREET	12/29/20 14:40	12/30/20

### Project Name:I20B-LARKIN DEVELOPMENTProject Number:Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

#### **Case Narrative**

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.



Project Name:I20B-LARKIN DEVELOPMENTProject Number:Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

#### **Case Narrative (continued)**

#### **Report Submission**

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### **Total Metals**

L2058202-01 through -03: The samples have elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Cattlin Wallehr Caitlin Walukevich

Title: Technical Director/Representative

Date: 01/11/21



# ORGANICS



## VOLATILES



		Serial_N	o:01112117:29
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2058202
Project Number:	Not Specified	Report Date:	01/11/21
	SAMPLE RESULTS		
Lab ID:	L2058202-01	Date Collected:	12/29/20 14:20
Client ID:	FLOOR 1 20201229	Date Received:	12/30/20
Sample Location:	822 SENECA STREET	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	01/08/21 13:51		
Analyst:	MV		
Percent Solids:	82%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Lo	w - Westborough Lab					
Methylene chloride	ND		ug/kg	7.2	3.3	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.21	1
Chloroform	ND		ug/kg	2.2	0.20	1
Carbon tetrachloride	ND		ug/kg	1.4	0.33	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.18	1
Dibromochloromethane	ND		ug/kg	1.4	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.39	1
Tetrachloroethene	0.42	J	ug/kg	0.72	0.28	1
Chlorobenzene	ND		ug/kg	0.72	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.8	1.0	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.37	1
1,1,1-Trichloroethane	ND		ug/kg	0.72	0.24	1
Bromodichloromethane	ND		ug/kg	0.72	0.16	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.39	1
cis-1,3-Dichloropropene	ND		ug/kg	0.72	0.23	1
Bromoform	ND		ug/kg	5.8	0.36	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.72	0.24	1
Benzene	ND		ug/kg	0.72	0.24	1
Toluene	ND		ug/kg	1.4	0.78	1
Ethylbenzene	ND		ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.8	1.3	1
Bromomethane	ND		ug/kg	2.9	0.84	1
Vinyl chloride	ND		ug/kg	1.4	0.48	1
Chloroethane	ND		ug/kg	2.9	0.65	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	0.20	1
Trichloroethene	ND		ug/kg	0.72	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	2.9	0.21	1



					Serial_N	o:01112117:29
Project Name:	120B-LARKIN DEVELOP	MENT			Lab Number:	L2058202
Project Number:	Not Specified				Report Date:	01/11/21
		SAMP		6		
Lab ID:	L2058202-01				Date Collected:	12/29/20 14:20
Client ID:	FLOOR 1 20201229				Date Received:	12/30/20
Sample Location:	822 SENECA STREET				Field Prep:	Not Specified
Sample Depth:						
Parameter		Result	Qualifier	Units	RL MDL	Dilution Factor

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	- Westborough Lab					
1,3-Dichlorobenzene	ND		ug/kg	2.9	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	2.9	0.25	1
Methyl tert butyl ether	ND		ug/kg	2.9	0.29	1
p/m-Xylene	ND		ug/kg	2.9	0.81	1
o-Xylene	ND		ug/kg	1.4	0.42	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.25	1
Styrene	ND		ug/kg	1.4	0.28	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	ND		ug/kg	14	7.0	1
Carbon disulfide	ND		ug/kg	14	6.6	1
2-Butanone	ND		ug/kg	14	3.2	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
2-Hexanone	ND		ug/kg	14	1.7	1
Bromochloromethane	ND		ug/kg	2.9	0.30	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.40	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.3	1.4	1
Isopropylbenzene	ND		ug/kg	1.4	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.9	0.46	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.9	0.39	1
Methyl Acetate	ND		ug/kg	5.8	1.4	1
Cyclohexane	ND		ug/kg	14	0.79	1
1,4-Dioxane	ND		ug/kg	120	51.	1
Freon-113	ND		ug/kg	5.8	1.0	1
Methyl cyclohexane	ND		ug/kg	5.8	0.87	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	105	70-130	
Toluene-d8	95	70-130	
4-Bromofluorobenzene	100	70-130	
Dibromofluoromethane	108	70-130	



		Serial_N	p:01112117:29
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2058202
Project Number:	Not Specified	Report Date:	01/11/21
	SAMPLE RESULTS		
Lab ID:	L2058202-02	Date Collected:	12/29/20 14:30
Client ID:	FLOOR 2 20201229	Date Received:	12/30/20
Sample Location:	822 SENECA STREET	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	01/08/21 14:17		
Analyst:	MV		
Percent Solids:	82%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	v - Westborough Lab					
Methylene chloride	ND		ug/kg	5.8	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.14	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	0.44	J	ug/kg	0.58	0.22	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.80	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.19	1
Bromodichloromethane	ND		ug/kg	0.58	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.58	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.58	0.19	1
Benzene	ND		ug/kg	0.58	0.19	1
Toluene	ND		ug/kg	1.2	0.62	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.67	1
Vinyl chloride	ND		ug/kg	1.2	0.38	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1
Trichloroethene	ND		ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1



					Serial_N	lo:01112117:29
Project Name:	I20B-LARKIN DEVELOP	MENT			Lab Number:	L2058202
Project Number:	Not Specified				Report Date:	01/11/21
		SAMP		6		
Lab ID:	L2058202-02				Date Collected:	12/29/20 14:30
Client ID:	FLOOR 2 20201229				Date Received:	12/30/20
Sample Location:	822 SENECA STREET				Field Prep:	Not Specified
Sample Depth:						
Parameter		Result	Qualifier	Units	RL MDL	Dilution Factor

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	· - Westborough Lab					
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.64	1
o-Xylene	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
Styrene	ND		ug/kg	1.2	0.22	1
Dichlorodifluoromethane	ND		ug/kg	12	1.0	1
Acetone	ND		ug/kg	12	5.5	1
Carbon disulfide	ND		ug/kg	12	5.2	1
2-Butanone	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.32	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
Methyl Acetate	ND		ug/kg	4.6	1.1	1
Cyclohexane	ND		ug/kg	12	0.63	1
1,4-Dioxane	ND		ug/kg	92	40.	1
Freon-113	ND		ug/kg	4.6	0.80	1
Methyl cyclohexane	ND		ug/kg	4.6	0.69	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	93	70-130
4-Bromofluorobenzene	100	70-130
Dibromofluoromethane	102	70-130



		Serial_No:01112117:29
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number: L2058202
Project Number:	Not Specified	<b>Report Date:</b> 01/11/21
	SAMPLE RESULTS	
Lab ID:	L2058202-03	Date Collected: 12/29/20 14:40
Client ID:	FLOOR 3 20201229	Date Received: 12/30/20
Sample Location:	822 SENECA STREET	Field Prep: Not Specified
Sample Depth:		
Matrix:	Soil	
Analytical Method:	1,8260C	
Analytical Date:	01/11/21 11:14	
Analyst:	NLK	
Percent Solids:	81%	

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	- Westborough Lab					
Methylene chloride	ND		ug/kg	3.1	1.4	1
1,1-Dichloroethane	ND		ug/kg	0.63	0.09	1
Chloroform	0.09	J	ug/kg	0.94	0.09	1
Carbon tetrachloride	ND		ug/kg	0.63	0.14	1
1,2-Dichloropropane	ND		ug/kg	0.63	0.08	1
Dibromochloromethane	ND		ug/kg	0.63	0.09	1
1,1,2-Trichloroethane	ND		ug/kg	0.63	0.17	1
Tetrachloroethene	0.22	J	ug/kg	0.31	0.12	1
Chlorobenzene	ND		ug/kg	0.31	0.08	1
Trichlorofluoromethane	ND		ug/kg	2.5	0.44	1
1,2-Dichloroethane	ND		ug/kg	0.63	0.16	1
1,1,1-Trichloroethane	ND		ug/kg	0.31	0.10	1
Bromodichloromethane	ND		ug/kg	0.31	0.07	1
trans-1,3-Dichloropropene	ND		ug/kg	0.63	0.17	1
cis-1,3-Dichloropropene	ND		ug/kg	0.31	0.10	1
Bromoform	ND		ug/kg	2.5	0.15	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.31	0.10	1
Benzene	ND		ug/kg	0.31	0.10	1
Toluene	ND		ug/kg	0.63	0.34	1
Ethylbenzene	ND		ug/kg	0.63	0.09	1
Chloromethane	ND		ug/kg	2.5	0.58	1
Bromomethane	ND		ug/kg	1.2	0.36	1
Vinyl chloride	ND		ug/kg	0.63	0.21	1
Chloroethane	ND		ug/kg	1.2	0.28	1
1,1-Dichloroethene	ND		ug/kg	0.63	0.15	1
trans-1,2-Dichloroethene	ND		ug/kg	0.94	0.09	1
Trichloroethene	ND		ug/kg	0.31	0.09	1
1,2-Dichlorobenzene	ND		ug/kg	1.2	0.09	1



					Serial_N	0:01112117:29
Project Name:	Project Name: I20B-LARKIN DEVELOPMENT			Lab Number:	L2058202	
Project Number:	Not Specified				Report Date:	01/11/21
		SAMP		5		
Lab ID:	L2058202-03				Date Collected:	12/29/20 14:40
Client ID:	FLOOR 3 20201229				Date Received:	12/30/20
Sample Location:	822 SENECA STREET				Field Prep:	Not Specified
Sample Depth:						
Deremeter		Pocult	Qualifier	Unite		Dilution Easter

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low	- Westborough Lab					
1,3-Dichlorobenzene	ND		ug/kg	1.2	0.09	1
1,4-Dichlorobenzene	ND		ug/kg	1.2	0.11	1
Methyl tert butyl ether	ND		ug/kg	1.2	0.12	1
p/m-Xylene	ND		ug/kg	1.2	0.35	1
o-Xylene	ND		ug/kg	0.63	0.18	1
cis-1,2-Dichloroethene	ND		ug/kg	0.63	0.11	1
Styrene	ND		ug/kg	0.63	0.12	1
Dichlorodifluoromethane	ND		ug/kg	6.3	0.57	1
Acetone	ND		ug/kg	6.3	3.0	1
Carbon disulfide	ND		ug/kg	6.3	2.8	1
2-Butanone	ND		ug/kg	6.3	1.4	1
4-Methyl-2-pentanone	ND		ug/kg	6.3	0.80	1
2-Hexanone	ND		ug/kg	6.3	0.74	1
Bromochloromethane	ND		ug/kg	1.2	0.13	1
1,2-Dibromoethane	ND		ug/kg	0.63	0.17	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	1.9	0.62	1
Isopropylbenzene	ND		ug/kg	0.63	0.07	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.2	0.20	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.2	0.17	1
Methyl Acetate	ND		ug/kg	2.5	0.60	1
Cyclohexane	ND		ug/kg	6.3	0.34	1
1,4-Dioxane	ND		ug/kg	50	22.	1
Freon-113	ND		ug/kg	2.5	0.43	1
Methyl cyclohexane	ND		ug/kg	2.5	0.38	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	104		70-130	
Toluene-d8	94		70-130	
4-Bromofluorobenzene	100		70-130	
Dibromofluoromethane	104		70-130	



Project Name: **I20B-LARKIN DEVELOPMENT** 

Project Number: Not Specified

Lab Number: L2058202 **Report Date:** 01/11/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/08/21 08:13 Analyst: ΜV

arameter	Result	Qualifier	Units	RL	М	DL
olatile Organics by EPA 5035	5 Low - Westboro	ugh Lab fo	or sample(s):	01-02	Batch:	WG1453513-5
Methylene chloride	ND		ug/kg	5.0	2	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	C	0.14
Chloroform	0.17	J	ug/kg	1.5	C	0.14
Carbon tetrachloride	ND		ug/kg	1.0	C	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	C	.12
Dibromochloromethane	ND		ug/kg	1.0	C	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	C	0.27
Tetrachloroethene	ND		ug/kg	0.50	C	0.20
Chlorobenzene	ND		ug/kg	0.50	C	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	C	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	C	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	C	0.17
Bromodichloromethane	ND		ug/kg	0.50	C	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	C	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	C	0.16
Bromoform	ND		ug/kg	4.0	C	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	C	.17
Benzene	ND		ug/kg	0.50	C	0.17
Toluene	ND		ug/kg	1.0	C	0.54
Ethylbenzene	ND		ug/kg	1.0	C	0.14
Chloromethane	ND		ug/kg	4.0	C	0.93
Bromomethane	0.81	J	ug/kg	2.0	C	0.58
Vinyl chloride	ND		ug/kg	1.0	C	0.34
Chloroethane	ND		ug/kg	2.0	C	.45
1,1-Dichloroethene	ND		ug/kg	1.0	C	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	C	0.14
Trichloroethene	ND		ug/kg	0.50	C	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	C	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	C	0.15



Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

#### Method Blank Analysis Batch Quality Control

Analytical Method:1,8260CAnalytical Date:01/08/21 08:13Analyst:MV

arameter	Result	Qualifier	Units	RL	M	DL
olatile Organics by EPA 5035	Low - Westboro	ugh Lab fo	or sample(s):	01-02	Batch:	WG1453513-5
1,4-Dichlorobenzene	ND		ug/kg	2.0	0	.17
Methyl tert butyl ether	ND		ug/kg	2.0	0	.20
p/m-Xylene	ND		ug/kg	2.0	0	.56
o-Xylene	ND		ug/kg	1.0	0	.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0	.18
Styrene	ND		ug/kg	1.0	0	.20
Dichlorodifluoromethane	ND		ug/kg	10	0	.92
Acetone	ND		ug/kg	10	4	1.8
Carbon disulfide	ND		ug/kg	10	2	1.6
2-Butanone	ND		ug/kg	10	2	2.2
4-Methyl-2-pentanone	ND		ug/kg	10		1.3
2-Hexanone	ND		ug/kg	10		1.2
Bromochloromethane	ND		ug/kg	2.0	0	.20
1,2-Dibromoethane	ND		ug/kg	1.0	0	.28
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0		1.0
Isopropylbenzene	ND		ug/kg	1.0	0	.11
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0	.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0	.27
Methyl Acetate	ND		ug/kg	4.0	0	.95
Cyclohexane	ND		ug/kg	10	0	.54
1,4-Dioxane	ND		ug/kg	80	:	35.
Freon-113	ND		ug/kg	4.0	0	.69
Methyl cyclohexane	ND		ug/kg	4.0	0	.60



Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

### Mothed Plank Analy

 Lab Number:
 L2058202

 Report Date:
 01/11/21

#### Method Blank Analysis Batch Quality Control

Analytical Method:1,8260CAnalytical Date:01/08/21 08:13Analyst:MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low	- Westboro	ough Lab fo	or sample(s):	01-02	Batch: WG1453513-5

		Acceptance			
Surrogate	%Recovery	Qualifier	Criteria		
1,2-Dichloroethane-d4	96		70-130		
Toluene-d8	94		70-130		
4-Bromofluorobenzene	101		70-130		
Dibromofluoromethane	98		70-130		



Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

Lab Number: L2058202 **Report Date:** 01/11/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/11/21 08:12 Analyst: ΜV

arameter	Result	Qualifier	Units	RL	MDL
olatile Organics by GC/MS -	Westborough Lab	for samp	le(s): 03	Batch:	WG1453666-5
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	0.19	J	ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.83	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15



Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

#### Method Blank Analysis Batch Quality Control

Analytical Method:1,8260CAnalytical Date:01/11/21 08:12Analyst:MV

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS - V	Vestborough Lab	o for sample(s):	03 Batch:	WG1453666-5
1,4-Dichlorobenzene	ND	ug/k	g 2.0	0.17
Methyl tert butyl ether	ND	ug/kợ	g 2.0	0.20
p/m-Xylene	ND	ug/kợ	g 2.0	0.56
o-Xylene	ND	ug/kợ	g 1.0	0.29
cis-1,2-Dichloroethene	ND	ug/kợ	g 1.0	0.18
Styrene	ND	ug/ko	g 1.0	0.20
Dichlorodifluoromethane	ND	ug/ko	g 10	0.92
Acetone	ND	ug/ko	g 10	4.8
Carbon disulfide	ND	ug/ko	g 10	4.6
2-Butanone	ND	ug/ko	g 10	2.2
4-Methyl-2-pentanone	ND	ug/ko	g 10	1.3
2-Hexanone	ND	ug/ko	g 10	1.2
Bromochloromethane	ND	ug/ko	g 2.0	0.20
1,2-Dibromoethane	ND	ug/ko	g 1.0	0.28
1,2-Dibromo-3-chloropropane	ND	ug/ko	3.0	1.0
Isopropylbenzene	ND	ug/ko	g 1.0	0.11
1,2,3-Trichlorobenzene	ND	ug/kợ	2.0	0.32
1,2,4-Trichlorobenzene	ND	ug/kợ	g 2.0	0.27
Methyl Acetate	ND	ug/kợ	g 4.0	0.95
Cyclohexane	ND	ug/ko	g 10	0.54
1,4-Dioxane	ND	ug/ko	g 80	35.
Freon-113	ND	ug/ko	g 4.0	0.69
Methyl cyclohexane	ND	ug/ko	g 4.0	0.60



Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

# Lab Number: L2058202 Report Date: 01/11/21

#### Method Blank Analysis Batch Quality Control

Analytical Method:1,8260CAnalytical Date:01/11/21 08:12Analyst:MV

Parameter	Result	Qualifier	Units		RL	MDL	
Volatile Organics by GC/MS -	Westborough La	ab for sampl	e(s):	03	Batch:	WG1453666-5	

	A	cceptance
%Recovery	Qualifier	Criteria
90		70-130
		70-130
98		70-130
97		70-130
	90 95 98	%Recovery Qualifier 90 95 98



L2058202

## Lab Control Sample Analysis Batch Quality Control

Project Number: Not Specified

**I20B-LARKIN DEVELOPMENT** 

**Project Name:** 

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
olatile Organics by EPA 5035 Low -	Westborough Lab Ass	ociated sample	e(s): 01-02 Ba	atch: WG14	453513-3 WG145	3513-4		
Methylene chloride	104		101		70-130	3	30	
1,1-Dichloroethane	109		105		70-130	4	30	
Chloroform	108		104		70-130	4	30	
Carbon tetrachloride	107		106		70-130	1	30	
1,2-Dichloropropane	103		102		70-130	1	30	
Dibromochloromethane	103		101		70-130	2	30	
1,1,2-Trichloroethane	98		94		70-130	4	30	
Tetrachloroethene	108		106		70-130	2	30	
Chlorobenzene	104		101		70-130	3	30	
Trichlorofluoromethane	59	Q	57	Q	70-139	3	30	
1,2-Dichloroethane	105		101		70-130	4	30	
1,1,1-Trichloroethane	103		100		70-130	3	30	
Bromodichloromethane	95		94		70-130	1	30	
trans-1,3-Dichloropropene	104		101		70-130	3	30	
cis-1,3-Dichloropropene	104		101		70-130	3	30	
Bromoform	94		97		70-130	3	30	
1,1,2,2-Tetrachloroethane	97		97		70-130	0	30	
Benzene	105		102		70-130	3	30	
Toluene	104		102		70-130	2	30	
Ethylbenzene	103		101		70-130	2	30	
Chloromethane	90		87		52-130	3	30	
Bromomethane	76		73		57-147	4	30	
Vinyl chloride	59	Q	56	Q	67-130	5	30	



### Lab Control Sample Analysis

Batch Quality Control

Project Number: Not Specified

Lab Number: L2058202 Report Date: 01/11/21

LCSD LCS RPD %Recovery %Recovery %Recovery Limits RPD Limits Parameter Qual Qual Qual Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-02 Batch: WG1453513-3 WG1453513-4 Chloroethane Q Q 47 49 50-151 4 30 1.1-Dichloroethene 111 108 65-135 3 30 trans-1.2-Dichloroethene 110 107 70-130 30 3 Trichloroethene 103 101 70-130 2 30 70-130 30 1,2-Dichlorobenzene 104 99 5 1.3-Dichlorobenzene 104 103 70-130 1 30 102 70-130 3 30 1.4-Dichlorobenzene 105 Methyl tert butyl ether 109 104 66-130 5 30 p/m-Xylene 101 99 70-130 2 30 o-Xylene 94 98 70-130 4 30 cis-1,2-Dichloroethene 107 104 70-130 3 30 Styrene 93 94 70-130 1 30 Dichlorodifluoromethane 73 71 30-146 3 30 97 54-140 30 109 12 Acetone Carbon disulfide 106 102 59-130 4 30 2-Butanone 100 89 70-130 12 30 4-Methyl-2-pentanone 92 88 70-130 30 4 70-130 30 2-Hexanone 76 82 8 Bromochloromethane 110 107 70-130 3 30 1,2-Dibromoethane 104 101 70-130 3 30 1,2-Dibromo-3-chloropropane 100 96 68-130 4 30 Isopropylbenzene 102 104 70-130 2 30 107 1,2,3-Trichlorobenzene 104 70-130 3 30



Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westbor	rough Lab Asso		(s): 01-02 Ba	atch: WG14	53513-3 WG145	3513-4		
1,2,4-Trichlorobenzene	106		105		70-130	1		30
Methyl Acetate	106		96		51-146	10		30
Cyclohexane	100		98		59-142	2		30
1,4-Dioxane	117		110		65-136	6		30
Freon-113	114		110		50-139	4		30
Methyl cyclohexane	99		96		70-130	3		30

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95	94	70-130
Toluene-d8	97	97	70-130
4-Bromofluorobenzene	101	106	70-130
Dibromofluoromethane	98	97	70-130



### Lab Control Sample Analysis

Batch Quality Control

Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

Lab Number: L2058202 Report Date: 01/11/21

LCSD LCS %Recovery RPD %Recovery RPD %Recovery Limits Limits Parameter Qual Qual Qual Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1453666-3 WG1453666-4 Methylene chloride 97 95 70-130 2 30 97 1,1-Dichloroethane 99 70-130 2 30 Chloroform 100 102 70-130 2 30 Carbon tetrachloride 101 99 70-130 2 30 70-130 30 1,2-Dichloropropane 95 94 1 Dibromochloromethane 94 94 70-130 0 30 1.1.2-Trichloroethane 87 70-130 30 86 1 Tetrachloroethene 102 100 70-130 2 30 Chlorobenzene 96 95 70-130 1 30 Q Q Trichlorofluoromethane 57 56 70-139 2 30 1.2-Dichloroethane 94 92 70-130 2 30 1,1,1-Trichloroethane 95 94 70-130 1 30 Bromodichloromethane 88 87 70-130 1 30 95 70-130 30 trans-1,3-Dichloropropene 95 0 cis-1,3-Dichloropropene 96 96 70-130 0 30 Bromoform 89 86 70-130 3 30 1,1,2,2-Tetrachloroethane 84 82 70-130 2 30 95 70-130 30 Benzene 96 1 Toluene 70-130 96 95 1 30 Ethylbenzene 94 93 70-130 1 30 Chloromethane 74 71 52-130 4 30 Bromomethane 72 76 57-147 5 30 Q Q Vinyl chloride 55 53 67-130 4 30



Project Number: Not Specified

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s): 03	Batch: WG	1453666-3	WG1453666-4			
Chloroethane	49	Q	48	Q	50-151	2	30	
1,1-Dichloroethene	106		103		65-135	3	30	
trans-1,2-Dichloroethene	103		101		70-130	2	30	
Trichloroethene	96		95		70-130	1	30	
1,2-Dichlorobenzene	96		93		70-130	3	30	
1,3-Dichlorobenzene	96		94		70-130	2	30	
1,4-Dichlorobenzene	96		94		70-130	2	30	
Methyl tert butyl ether	100		99		66-130	1	30	
p/m-Xylene	93		92		70-130	1	30	
o-Xylene	92		91		70-130	1	30	
cis-1,2-Dichloroethene	100		98		70-130	2	30	
Styrene	88		88		70-130	0	30	
Dichlorodifluoromethane	58		56		30-146	4	30	
Acetone	94		90		54-140	4	30	
Carbon disulfide	98		96		59-130	2	30	
2-Butanone	84		84		70-130	0	30	
4-Methyl-2-pentanone	79		77		70-130	3	30	
2-Hexanone	69	Q	68	Q	70-130	1	30	
Bromochloromethane	104		101		70-130	3	30	
1,2-Dibromoethane	94		93		70-130	1	30	
1,2-Dibromo-3-chloropropane	88		90		68-130	2	30	
Isopropylbenzene	94		92		70-130	2	30	
1,2,3-Trichlorobenzene	100		96		70-130	4	30	



Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

LCS LCSD RPD %Recovery %Recovery Parameter %Recovery Qual Qual Limits RPD Qual Limits Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1453666-3 WG1453666-4 102 1,2,4-Trichlorobenzene 98 70-130 4 30 88 88 Methyl Acetate 51-146 0 30 Cyclohexane 90 90 59-142 0 30 1,4-Dioxane 102 96 65-136 6 30 Freon-113 108 105 50-139 3 30 30 Methyl cyclohexane 92 90 70-130 2

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92	90	70-130
Toluene-d8	97	97	70-130
4-Bromofluorobenzene	103	100	70-130
Dibromofluoromethane	98	98	70-130



## SEMIVOLATILES



		Serial_No	:01112117:29
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2058202
Project Number:	Not Specified	Report Date:	01/11/21
	SAMPLE RESULTS		
Lab ID:	L2058202-01	Date Collected:	12/29/20 14:20
Client ID:	FLOOR 1 20201229	Date Received:	12/30/20
Sample Location:	822 SENECA STREET	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method	: EPA 3546
Analytical Method:	1,8270D	Extraction Date:	01/03/21 15:21
Analytical Date:	01/04/21 17:15		
Analyst:	EK		
Percent Solids:	82%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - We	estborough Lab					
Acenaphthene	490		ug/kg	160	21.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	6500		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	120	J	ug/kg	200	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	69.	1
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	2900		ug/kg	120	23.	1
Benzo(a)pyrene	2100		ug/kg	160	49.	1



Serial_No:01112117:29							0:01112117:29
Project Name:	120B-LARKIN DEVELOPI	MENT			Lab Nu	mber:	L2058202
Project Number:	Not Specified				Report	Date:	01/11/21
··· <b>,</b> ·····		SAMPL	E RESULTS	S			01/11/21
Lab ID: Client ID: Sample Location:	L2058202-01 FLOOR 1 20201229 822 SENECA STREET				Date Col Date Red Field Pre	ceived:	12/29/20 14:20 12/30/20 Not Specified
Sample Depth: Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
	cs by GC/MS - Westborou		quaintoi	Unito			
		gri Lab					
Benzo(b)fluoranthene		2800		ug/kg	120	34.	1
Benzo(k)fluoranthene		900		ug/kg	120	32.	1
Chrysene		2400		ug/kg	120	21.	1
Acenaphthylene		140	J	ug/kg	160	31.	1
Anthracene		1000		ug/kg	120	39.	1
Benzo(ghi)perylene		1200		ug/kg	160	24.	1
Fluorene		550		ug/kg	200	20.	1
Phenanthrene		4500		ug/kg	120	24.	1
Dibenzo(a,h)anthracene		310		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene		1500		ug/kg	160	28.	1
Pyrene		5200		ug/kg	120	20.	1
Biphenyl		ND		ug/kg	460	47.	1
4-Chloroaniline		ND		ug/kg	200	37.	1
2-Nitroaniline		ND		ug/kg	200	39.	1
3-Nitroaniline		ND		ug/kg	200	38.	1
4-Nitroaniline		ND		ug/kg	200	84.	1
Dibenzofuran		270		ug/kg	200	19.	1
2-Methylnaphthalene		120	J	ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzen	e	ND		ug/kg	200	21.	1
Acetophenone		ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol		ND		ug/kg	120	38.	1
p-Chloro-m-cresol		ND		ug/kg	200	30.	1
2-Chlorophenol		ND		ug/kg	200	24.	1
2,4-Dichlorophenol		ND		ug/kg	180	32.	1
2,4-Dimethylphenol		ND		ug/kg	200	67.	1
2-Nitrophenol		ND		ug/kg	440	76.	1
4-Nitrophenol		ND		ug/kg	280	82.	1
2,4-Dinitrophenol		ND		ug/kg	970	94.	1
4,6-Dinitro-o-cresol		ND		ug/kg	520	97.	1
Pentachlorophenol		ND		ug/kg	160	44.	1
Phenol		ND		ug/kg	200	30.	1
2-Methylphenol		ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylpl	nenol	ND		ug/kg	290	32.	1
2,4,5-Trichlorophenol		ND		ug/kg	200	39.	1
Carbazole		600		ug/kg	200	20.	1
Atrazine		ND		ug/kg	160	71.	1

58

J

ug/kg

270

54.



1

Benzaldehyde

				Serial_No:01112117:29				
Project Name:	120B-LARKIN DEVELOP	MENT			Lab Num	ber:	L2058202	
Project Number:	Not Specified				Report D	ate:	01/11/21	
		SAMP	LE RESULT	S				
Lab ID:	L2058202-01				Date Colle	cted:	12/29/20 14:20	
Client ID:	FLOOR 1 20201229				Date Rece	ived:	12/30/20	
Sample Location:	822 SENECA STREET				Field Prep:		Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Orgar	nics by GC/MS - Westborou	igh Lab						
Caprolactam		ND		ug/kg	200	61.	1	
2,3,4,6-Tetrachlorophenc	l	ND		ug/kg	200	41.	1	
Surrogate				% Recovery	Qualifier		ceptance Criteria	
2-Fluorophenol				66			25-120	
Phenol-d6				75			10-120	
Nitrobenzene-d5				92			23-120	
2-Fluorobiphenyl				83			30-120	
2,4,6-Tribromophe	nol			78			10-136	
4-Terphenyl-d14				70			18-120	

		Serial_No	01112117:29
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2058202
Project Number:	Not Specified	Report Date:	01/11/21
	SAMPLE RESULTS		
Lab ID:	L2058202-02	Date Collected:	12/29/20 14:30
Client ID:	FLOOR 2 20201229	Date Received:	12/30/20
Sample Location:	822 SENECA STREET	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method	l: EPA 3546
Analytical Method:	1,8270D	Extraction Date:	01/03/21 15:21
Analytical Date:	01/04/21 17:40		
Analyst:	EK		
Percent Solids:	82%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Semivolatile Organics by GC/MS - Westborough Lab								
Acenaphthene	420		ug/kg	160	21.	1		
Hexachlorobenzene	ND		ug/kg	120	23.	1		
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1		
2-Chloronaphthalene	ND		ug/kg	200	20.	1		
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1		
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1		
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1		
Fluoranthene	6800		ug/kg	120	23.	1		
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1		
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1		
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	35.	1		
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1		
Hexachlorobutadiene	ND		ug/kg	200	30.	1		
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1		
Hexachloroethane	ND		ug/kg	160	33.	1		
Isophorone	ND		ug/kg	180	26.	1		
Naphthalene	150	J	ug/kg	200	25.	1		
Nitrobenzene	ND		ug/kg	180	30.	1		
NDPA/DPA	ND		ug/kg	160	23.	1		
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1		
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1		
Butyl benzyl phthalate	ND		ug/kg	200	51.	1		
Di-n-butylphthalate	ND		ug/kg	200	38.	1		
Di-n-octylphthalate	ND		ug/kg	200	69.	1		
Diethyl phthalate	ND		ug/kg	200	19.	1		
Dimethyl phthalate	ND		ug/kg	200	42.	1		
Benzo(a)anthracene	2800		ug/kg	120	23.	1		
Benzo(a)pyrene	2200		ug/kg	160	49.	1		



Project Number:       Not Specified       SAMPLE RESULTS       Report Date:       D1/1/21         Lab ID:       L2058202-02       FLOOR 2 20201229       Sample Location:       Bate Collected:       Sugssssssssssssssssssssssssssssssssssss		Serial_No:01112117:29						
SAMPLE RESULTS         Date Collected: 12/29/20 14:30         Date Collected: 12/29/20 14:30         Date Received: 12/30/20         Sample Location: 822 SENECA STREET         Sample Location: 822 SENECA STREET         Bana Collected: 12/29/20 14:30         Date Collected: 12/30/20         Sample Location: 822 SENECA STREET         Bana Collected: 12/20/20         Sample Location: 822 SENECA STREET         Bana Collected: 12/20/20         Sample Location: 822 SENECA STREET         Sample Location: 822 SENECA STREET         Bana Collected: 12/20/20         Sample Location: 822 SENECA STREET         Sample Location: 822 SENECA STREET         Bana Collected: 12/30/20         Sample Location: 822 SENECA STREET         Sample Location: 822 SENECA STREET         Bana Collected: 12/20/20         Sample Location: 926 C/MS - Westborough Lab         Bana Collected: 9360       19/20         Colspan= 200       19/20       10         Parameter       10         Paramet	Project Name:	120B-LARKIN DEVELOP	MENT			Lab Nu	mber:	L2058202
SAMPLE RESULTS         Date Collected: 12/29/20 14:30         Date Collected: 12/29/20 14:30         Date Received: 12/30/20         Sample Location: 822 SENECA STREET         Sample Location: 822 SENECA STREET         Bana Collected: 12/29/20 14:30         Date Collected: 12/30/20         Sample Location: 822 SENECA STREET         Bana Collected: 12/20/20         Sample Location: 822 SENECA STREET         Bana Collected: 12/20/20         Sample Location: 822 SENECA STREET         Sample Location: 822 SENECA STREET         Bana Collected: 12/20/20         Sample Location: 822 SENECA STREET         Sample Location: 822 SENECA STREET         Bana Collected: 12/30/20         Sample Location: 822 SENECA STREET         Sample Location: 822 SENECA STREET         Bana Collected: 12/20/20         Sample Location: 926 C/MS - Westborough Lab         Bana Collected: 9360       19/20         Colspan= 200       19/20       10         Parameter       10         Paramet	Project Number:	Not Specified				Report	Date:	01/11/21
Client ID: Sample Location:FLOOR 2 20201229 822 SENECA STREETDate Receiver Field Prep:1/2/30/2 Not SpecifiedSample Dept:ParameterReautQualifierNtMLMDLDiution FactorSemivolatile Organics by GC/MS - Westboroutug/kg120341Benzo(h)fluoranthene3100ug/kg120321Benzo(h)fluoranthene100ug/kg120321Admaphilylene160ug/kg160311Admaphilylene1400ug/kg160241Rutorene490ug/kg120251Fluorene490ug/kg120251Phenanthrane4400ug/kg120261Fluorene130ug/kg120251Phenanthrane1400ug/kg120261Phenanthrane1400ug/kg120261Phenanthrane1400ug/kg120261Phenanthrane140ug/kg120261Phenanthrane140ug/kg120261Phenanthrane160ug/kg200381Phenanthrane100ug/kg200381Phenanthrane100ug/kg200381Phenanthrane100ug/kg200381Phenanthrane100ug/kg200381<	•		SAMP	LE RESULT	S	•		01/11/21
Result         Qualifier         Units         RL         MDL         Dilution Factor           Benzo(b)fluoranthene         3100         ug/kg         120         34.         1           Benzo(b)fluoranthene         810         ug/kg         120         34.         1           Benzo(b)fluoranthene         810         ug/kg         120         32.         1           Chrysene         2300         ug/kg         160         31.0         1           Acenaphthylene         160         ug/kg         160         31.0         1           Anthracene         910         ug/kg         160         31.0         1           Fluorene         4400         ug/kg         160         24.         1           Fluorene         4400         ug/kg         160         28.         1           Phenanthrone         4400         ug/kg         160         28.         1           Phenanthrone         1700         ug/kg         120         23.         1           Phenanthrone         1700         ug/kg         200         37.         1           Shirtoaniline         ND         ug/kg         200         38.         1 <tr< td=""><td>Lab ID: Client ID:</td><td>FLOOR 2 20201229</td><td></td><td></td><td></td><td>Date Re</td><td>ceived:</td><td></td></tr<>	Lab ID: Client ID:	FLOOR 2 20201229				Date Re	ceived:	
ParameterResultQualifierUnitsRLMDLDilution FactorSemivolatile Organics by CC/MS - Westborout3100ug/kg12034.1Benzo(h)fluoranthene3100ug/kg12032.1Benzo(h)fluoranthene810ug/kg12032.1Chrysene2300ug/kg12021.1Acenaphthylene160ug/kg16031.1Anthracene910ug/kg16024.1Benzo(h)hperylene1400ug/kg12025.1Fluorene4400ug/kg12023.1Dibenzo(k,h)anthracene340ug/kg12023.1Prene1400ug/kg12023.1Dibenzo(k,h)anthracene340ug/kg12023.1Prene100ug/kg12023.1Dibenzo(k,h)anthraceneNDug/kg20037.1StittoanilineNDug/kg20038.1AthroanilineNDug/kg20038.1AthroanilineNDug/kg20038.1AthroanilineNDug/kg20024.1AthroanilineNDug/kg20024.1AthroanilineNDug/kg20038.1AthroanilineNDug/kg20024.1AthroanilineNDug/kg200<	Sample Location:	822 SENECA STREET				Field Pre	ep:	Not Specified
Semivolatile Organics by GC/MS - Westborough Lab         ug/kg         120         34.         1           Benzo(h)fluoranthene         3100         ug/kg         120         32.         1           Chrysene         2300         ug/kg         120         32.         1           Acenaphthylene         160         ug/kg         120         31.         1           Acenaphthylene         160         ug/kg         160         31.         1           Acenaphthylene         160         ug/kg         160         31.         1           Anthracene         910         ug/kg         160         24.         1           Fluorene         490         ug/kg         120         25.         1           Dibenzo(a,h)anthracene         340         ug/kg         120         23.         1           Indeno(1,2,3-cd)pyrene         1700         ug/kg         120         20.         1           Biphenyl         ND         ug/kg         200         37.         1           - Vitroaniline         ND         ug/kg         200         38.         1           - Vitroaniline         ND         ug/kg         200         38.         1	Sample Depth:							
Benzo(b)/luoranthene         3100         ug/kg         120         34.         1           Benzo(b/luoranthene         810         ug/kg         120         32.         1           Chrysene         2300         ug/kg         120         32.         1           Acenaphthylene         160         ug/kg         160         31.         1           Acenaphthylene         1400         ug/kg         160         24.         1           Benzo(g/h)perylene         1400         ug/kg         120         20.         1           Fluorene         490         ug/kg         120         20.         1           Phenanthrene         4400         ug/kg         120         25.         1           Dibenzo(a,h)anthracene         340         ug/kg         120         20.         1           Pyrene         5100         ug/kg         120         20.         1           Biphenyl         ND         ug/kg         200         37.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           <	Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Benzo(b)/luoranthene         3100         ug/kg         120         34.         1           Benzo(b/luoranthene         810         ug/kg         120         32.         1           Chrysene         2300         ug/kg         120         32.         1           Acenaphthylene         160         ug/kg         160         31.         1           Acenaphthylene         1400         ug/kg         160         24.         1           Benzo(g/h)perylene         1400         ug/kg         120         20.         1           Fluorene         490         ug/kg         120         20.         1           Phenanthrene         4400         ug/kg         120         25.         1           Dibenzo(a,h)anthracene         340         ug/kg         120         20.         1           Pyrene         5100         ug/kg         120         20.         1           Biphenyl         ND         ug/kg         200         37.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           <	Semivolatile Organ	nics by GC/MS - Westborou	igh Lab					
Benzok(k)fluoranthene         810         ug/kg         120         32.         1           Chrysene         2300         ug/kg         120         21.         1           Acenaphthylene         160         ug/kg         160         31.         1           Anthracene         910         ug/kg         160         24.         1           Benzo(k)ilperylene         1400         ug/kg         120         24.         1           Fluorene         490         ug/kg         120         25.         1           Dibenzo(a,h)anthracene         340         ug/kg         120         28.         1           Pyrene         5100         ug/kg         120         28.         1           Pyrene         5100         ug/kg         200         37.         1           4-Chloroaniline         ND         ug/kg         200         37.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           4-Nitroaniline         ND         ug/kg         200         84.         1           2-Nitroaniline         ND         ug/kg         200         84.         1           2-Nitro	Benzo(b)fluoranthene		3100		ua/ka	120	3/	1
Chrysen         2300         ug/kg         120         21.         1           Acenaphthylene         160         ug/kg         160         31.         1           Antracene         910         ug/kg         120         40.         1           Benzo(ghi)perylene         1400         ug/kg         160         24.         1           Fluorene         490         ug/kg         120         25.         1           Dibenzo(a,h)anthracene         340         ug/kg         120         23.         1           Indeno(1,2,3-cd)pyrene         1700         ug/kg         160         28.         1           Pyrene         5100         ug/kg         200         37.         1           Achoraniline         ND         ug/kg         200         37.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           2-Me								
Acenaphthylene         160         ug/kg         160         31.         1           Anthracene         910         ug/kg         120         40.         1           Benzo(ghi)perylene         1400         ug/kg         160         24.         1           Fluorene         490         ug/kg         120         20.         1           Phenanthrene         4400         ug/kg         120         25.         1           Dibenzo(g1,h)anthracene         340         ug/kg         160         28.         1           Pyrene         5100         ug/kg         120         20.         1           Biphenyl         ND         ug/kg         200         37.         1           4-Chloroaniline         ND         ug/kg         200         38.         1           3-Nitroaniline         ND         ug/kg         200         38.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           2-Nethylnaphthalene         130         J         ug/kg         200         1         1           2-Aftriknorobenzene         ND         ug/kg         200         21.         1								
Athracene       910       ug/kg       120       40.       1         Benzo(ghi)perylene       1400       ug/kg       160       24.       1         Fluorene       490       ug/kg       200       20.       1         Phenanthrene       4400       ug/kg       120       25.       1         Dibenzo(a,h)anthracene       340       ug/kg       120       23.       1         Indeno(1,2,3-cd)pyrene       1700       ug/kg       160       28.       1         Pyrene       5100       ug/kg       200       37.       1         Biphenyl       ND       ug/kg       200       37.       1         4-Chioraniline       ND       ug/kg       200       37.       1         2-Nitroaniline       ND       ug/kg       200       38.       1         3-Nitroaniline       ND       ug/kg       200       38.       1         2-Nitroaniline       ND       ug/kg       200       84.       1         Dibenzo(uran       270       ug/kg       200       84.       1         2-Mitroaniline       130       J       ug/kg       200       24.       1								
Isolation         Isolation           Benzo(ghi)perylene         1400         ug/kg         160         24.         1           Fluorene         490         ug/kg         200         20.         1           Phenanthrene         4400         ug/kg         120         25.         1           Dibenzo(a,h)anthracene         340         ug/kg         160         28.         1           Indeno(1,2,3-cd)pyrene         1700         ug/kg         160         28.         1           Pyrene         5100         ug/kg         20.         1         1           Biphenyl         ND         ug/kg         200         37.         1           4-Chioroaniline         ND         ug/kg         200         38.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           3-Nitroaniline         ND         ug/kg         200         38.         1           2-Nitroaniline         ND         ug/kg         200         16.         1           2-Nitroaniline         ND         ug/kg         200         16.         1           2-Nitroaniline         ND         ug/kg         200								
Hourene       490       ug/kg       200       20.       1         Phenanthrene       4400       ug/kg       120       25.       1         Dibenzo(a,h)anthracene       340       ug/kg       120       23.       1         Indeno(1,2,3-cd)pyrene       1700       ug/kg       160       28.       1         Pyrene       5100       ug/kg       460       47.       1         Biphenyl       ND       ug/kg       200       37.       1         4-Chloroaniline       ND       ug/kg       200       37.       1         2-Nitroaniline       ND       ug/kg       200       38.       1         3-Nitroaniline       ND       ug/kg       200       38.       1         2-Nitroaniline       ND       ug/kg       200       38.       1         2-Nitroaniline       ND       ug/kg       200       84.       1         Dibenzofuran       270       ug/kg       200       18.       1         2-Nethylnaphthalene       130       J       ug/kg       200       21.       1         1,2,4,5-Tetrachlorobenzene       ND       ug/kg       200       25.       1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Phenanthrene         4400         ug/kg         120         25.         1           Dibenzo(a,h)anthracene         340         ug/kg         120         23.         1           Indeno(1,2,3-od)pyrene         1700         ug/kg         160         28.         1           Pyrene         5100         ug/kg         120         20.         1           Biphenyl         ND         ug/kg         460         47.         1           4-Chloroaniline         ND         ug/kg         200         37.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           3-Nitroaniline         ND         ug/kg         200         38.         1           4-Nitroaniline         ND         ug/kg         200         38.         1           2-Nitroaniline         ND         ug/kg         200         84.         1           Dibenzofuran         270         ug/kg         200         84.         1           2-Methylnaphthalene         130         J         ug/kg         240         24.         1           1,2,4,5-Tetrachlorobenzene         ND         ug/kg         200         25.         1<								
Dibenzo(a,h)anthracene         340         ug/kg         120         23.         1           Indeno(1,2,3-cd)pyrene         1700         ug/kg         160         28.         1           Pyrene         5100         ug/kg         120         20.         1           Biphenyl         ND         ug/kg         460         47.         1           4-Chloroaniline         ND         ug/kg         200         37.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           3-Nitroaniline         ND         ug/kg         200         38.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           2-Nitroaniline         ND         ug/kg         200         84.         1           2-Nethylnaphthalene         130         J         ug/kg         200         1         1           2,4,6-Trichlorobenzene         ND         ug/kg         200         21.         1           2,4,6-Trichlorophenol         ND         ug/kg         120         38.         1	Phenanthrene							
Indeno(1,2,3-cd)pyrene         1700         ug/kg         160         28.         1           Pyrene         5100         ug/kg         120         20.         1           Biphenyl         ND         ug/kg         460         47.         1           4-Chloroaniline         ND         ug/kg         200         37.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           3-Nitroaniline         ND         ug/kg         200         38.         1           4-Nitroaniline         ND         ug/kg         200         38.         1           2-Nitroaniline         ND         ug/kg         200         38.         1           2-Nitroaniline         ND         ug/kg         200         84.         1           2-Nitroaniline         ND         ug/kg         200         19.         1           2-Methylnaphthalene         130         J         ug/kg         200         21.         1           1,2,4,5-Tetrachlorobenzene         ND         ug/kg         200         25.         1           2,4,6-Trichlorophenol         ND         ug/kg         120         38.         1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Pyrene         5100         ug/kg         120         20.         1           Biphenyl         ND         ug/kg         460         47.         1           4-Chloroaniline         ND         ug/kg         200         37.         1           2-Nitroaniline         ND         ug/kg         200         39.         1           3-Nitroaniline         ND         ug/kg         200         38.         1           4-Nitroaniline         ND         ug/kg         200         38.         1           4-Nitroaniline         ND         ug/kg         200         84.         1           10benzofuran         270         ug/kg         200         84.         1           2-Methylnaphthalene         130         J         ug/kg         200         21.         1           1.2,4,5-Tetrachlorobenzene         ND         ug/kg         200         21.         1           Acetophenone         ND         ug/kg         200         25.         1           2,4,6-Trichlorophenol         ND         ug/kg         200         38.         1           2,4,6-Trichlorophenol         ND         ug/kg         200         30.         1								
Biphenyl         ND         ug/kg         460         47.         1           4-Chloroaniline         ND         ug/kg         200         37.         1           2-Nitroaniline         ND         ug/kg         200         39.         1           3-Nitroaniline         ND         ug/kg         200         38.         1           3-Nitroaniline         ND         ug/kg         200         38.         1           4-Nitroaniline         ND         ug/kg         200         84.         1           Dibenzofuran         270         ug/kg         200         19.         1           2-Methylnaphthalene         130         J         ug/kg         200         21.         1           1,2,4,5-Tetrachlorobenzene         ND         ug/kg         200         21.         1           2,4,6-Trichlorophenol         ND         ug/kg         200         25.         1           2,4,6-Trichlorophenol         ND         ug/kg         120         38.         1	Pyrene							
4-Chloroaniline       ND       ug/kg       200       37.       1         2-Nitroaniline       ND       ug/kg       200       39.       1         3-Nitroaniline       ND       ug/kg       200       38.       1         4-Nitroaniline       ND       ug/kg       200       38.       1         4-Nitroaniline       ND       ug/kg       200       84.       1         Dibenzofuran       270       ug/kg       200       19.       1         2-Methylnaphthalene       130       J       ug/kg       240       24.       1         1,2,4,5-Tetrachlorobenzene       ND       ug/kg       200       25.       1         2,4,6-Trichlorophenol       ND       ug/kg       120       38.       1         2,4,6-Trichlorophenol       ND       ug/kg       200       25.       1         2,4,6-Trichlorophenol       ND       ug/kg       120       38.       1         2,4,6-Trichlorophenol       ND       ug/kg       200       30.       1	Biphenyl							
2-Nitroaniline       ND       ug/kg       200       39.       1         3-Nitroaniline       ND       ug/kg       200       38.       1         4-Nitroaniline       ND       ug/kg       200       84.       1         Dibenzofuran       270       ug/kg       200       19.       1         2-Methylnaphthalene       130       J       ug/kg       240       24.       1         1,2,4,5-Tetrachlorobenzene       ND       ug/kg       200       21.       1         2,4,6-Trichlorophenol       ND       ug/kg       200       25.       1         2,4,6-Trichlorophenol       ND       ug/kg       120       38.       1         2,4,6-Trichlorophenol       ND       ug/kg       200       25.       1         2,4,6-Trichlorophenol       ND       ug/kg       120       38.       1	4-Chloroaniline		ND			200	37.	1
3-Nitroaniline       ND       ug/kg       200       38.       1         4-Nitroaniline       ND       ug/kg       200       84.       1         Dibenzofuran       270       ug/kg       200       19.       1         2-Methylnaphthalene       130       J       ug/kg       240       24.       1         1,2,4,5-Tetrachlorobenzene       ND       ug/kg       200       21.       1         Acetophenone       ND       ug/kg       200       25.       1         2,4,6-Trichlorophenol       ND       ug/kg       120       38.       1         p-Chloro-m-cresol       ND       ug/kg       200       30.       1	2-Nitroaniline		ND			200	39.	1
4-Nitroaniline       ND       ug/kg       200       84.       1         Dibenzofuran       270       ug/kg       200       19.       1         2-Methylnaphthalene       130       J       ug/kg       240       24.       1         1,2,4,5-Tetrachlorobenzene       ND       ug/kg       200       21.       1         Acetophenone       ND       ug/kg       200       25.       1         2,4,6-Trichlorophenol       ND       ug/kg       120       38.       1         p-Chloro-m-cresol       ND       ug/kg       200       30.       1	3-Nitroaniline		ND			200	38.	1
Dibenzofuran         270         ug/kg         200         19.         1           2-Methylnaphthalene         130         J         ug/kg         240         24.         1           1,2,4,5-Tetrachlorobenzene         ND         ug/kg         200         21.         1           Acetophenone         ND         ug/kg         200         25.         1           2,4,6-Trichlorophenol         ND         ug/kg         120         38.         1           p-Chloro-m-cresol         ND         ug/kg         200         30.         1	4-Nitroaniline		ND			200	84.	1
2-Methylnaphthalene       130       J       ug/kg       240       24.       1         1,2,4,5-Tetrachlorobenzene       ND       ug/kg       200       21.       1         Acetophenone       ND       ug/kg       200       25.       1         2,4,6-Trichlorophenol       ND       ug/kg       120       38.       1         p-Chloro-m-cresol       ND       ug/kg       200       30.       1	Dibenzofuran		270			200	19.	1
Acetophenone         ND         ug/kg         200         25.         1           2,4,6-Trichlorophenol         ND         ug/kg         120         38.         1           p-Chloro-m-cresol         ND         ug/kg         200         30.         1	2-Methylnaphthalene		130	J		240	24.	1
Acetophenone         ND         ug/kg         200         25.         1           2,4,6-Trichlorophenol         ND         ug/kg         120         38.         1           p-Chloro-m-cresol         ND         ug/kg         200         30.         1	1,2,4,5-Tetrachlorobenze	ne	ND		ug/kg	200	21.	1
p-Chloro-m-cresol ND ug/kg 200 30. 1	Acetophenone		ND			200	25.	1
	2,4,6-Trichlorophenol		ND		ug/kg	120	38.	1
2-Chlorophenol ND ug/kg 200 24. 1	p-Chloro-m-cresol		ND		ug/kg	200	30.	1
	2-Chlorophenol		ND		ug/kg	200	24.	1

2-Nitrophenol	ND	ug/kg	440	76.	1	
4-Nitrophenol	ND	ug/kg	280	83.	1	
2,4-Dinitrophenol	ND	ug/kg	970	94.	1	
4,6-Dinitro-o-cresol	ND	ug/kg	530	97.	1	
Pentachlorophenol	ND	ug/kg	160	45.	1	
Phenol	ND	ug/kg	200	31.	1	
2-Methylphenol	ND	ug/kg	200	31.	1	
3-Methylphenol/4-Methylphenol	ND	ug/kg	290	32.	1	
2,4,5-Trichlorophenol	ND	ug/kg	200	39.	1	
Carbazole	570	ug/kg	200	20.	1	
Atrazine	ND	ug/kg	160	71.	1	
Benzaldehyde	ND	ug/kg	270	55.	1	

180

200

33.

67.

ug/kg

ug/kg

ND

ND



1

1

2,4-Dichlorophenol

2,4-Dimethylphenol

				Serial_No:01112117:29				
Project Name:	120B-LARKIN DEVELOP	MENT			Lab Num	ber:	L2058202	
Project Number:	Not Specified				Report D	ate:	01/11/21	
		SAMF	PLE RESULT	S				
Lab ID:	L2058202-02				Date Colle	cted:	12/29/20 14:30	
Client ID:	FLOOR 2 20201229				Date Rece	ived:	12/30/20	
Sample Location:	822 SENECA STREET				Field Prep:		Not Specified	
Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Orgar	nics by GC/MS - Westborou	igh Lab						
Caprolactam		120	J	ug/kg	200	62.	1	
2,3,4,6-Tetrachlorophenc	bl	ND		ug/kg	200	41.	1	
Surrogate				% Recovery	Qualifier		ceptance Criteria	
2-Fluorophenol				62			25-120	
Phenol-d6				71			10-120	
Nitrobenzene-d5				88			23-120	
2-Fluorobiphenyl				78			30-120	
2,4,6-Tribromophe	enol			76			10-136	
4-Terphenyl-d14				63			18-120	



		Serial_No	:01112117:29
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:	L2058202
Project Number:	Not Specified	Report Date:	01/11/21
	SAMPLE RESULTS		
Lab ID:	L2058202-03	Date Collected:	12/29/20 14:40
Client ID:	FLOOR 3 20201229	Date Received:	12/30/20
Sample Location:	822 SENECA STREET	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method	: EPA 3546
Analytical Method:	1,8270D	Extraction Date:	01/03/21 15:21
Analytical Date:	01/04/21 18:06		
Analyst:	EK		
Percent Solids:	81%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - We	estborough Lab					
Acenaphthene	290		ug/kg	160	21.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	28.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	41.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	4000		ug/kg	120	24.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	250	35.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	590	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	27.	1
Naphthalene	84	J	ug/kg	200	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	32.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	71.	1
Butyl benzyl phthalate	ND		ug/kg	200	52.	1
Di-n-butylphthalate	ND		ug/kg	200	39.	1
Di-n-octylphthalate	ND		ug/kg	200	70.	1
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	43.	1
Benzo(a)anthracene	1900		ug/kg	120	23.	1
Benzo(a)pyrene	1500		ug/kg	160	50.	1



				Serial_No:01112117:29					
Project Name:	120B-LARKIN DEVELOP	MENT			Lab Nu		L2058202		
Project Number:	Not Specified				Report	Date:	01/11/21		
		SAMP		S	roport	Duit	01/11/21		
Lab ID:	L2058202-03				Date Col	llected:	12/29/20 14:40		
Client ID:	FLOOR 3 20201229				Date Re		12/30/20		
Sample Location:	822 SENECA STREET				Field Pre		Not Specified		
Sample Depth:	Sample Depth:								
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor		
Semivolatile Orgar	nics by GC/MS - Westborou	igh Lab							
Benzo(b)fluoranthene		2100		ug/kg	120	34.	1		
Benzo(k)fluoranthene		560		ug/kg	120	33.	1		
Chrysene		1600		ug/kg	120	21.	1		
Acenaphthylene		100	J	ug/kg	160	32.	1		
Anthracene		640		ug/kg	120	40.	1		
Benzo(ghi)perylene		770		ug/kg	160	24.	1		
Fluorene		350		ug/kg	200	20.	1		
Phenanthrene		2900		ug/kg	120	25.	1		
Dibenzo(a,h)anthracene		240		ug/kg	120	24.	1		
Indeno(1,2,3-cd)pyrene		1200		ug/kg	160	29.	1		
Pyrene		3200		ug/kg	120	20.	1		
Biphenyl		ND		ug/kg	470	48.	1		
4-Chloroaniline		ND		ug/kg	200	37.	1		
2-Nitroaniline		ND		ug/kg	200	40.	1		
3-Nitroaniline		ND		ug/kg	200	39.	1		
4-Nitroaniline		ND		ug/kg	200	85.	1		
Dibenzofuran		180	J	ug/kg	200	19.	1		
2-Methylnaphthalene		76	J	ug/kg	250	25.	1		
1,2,4,5-Tetrachlorobenze	ene	ND		ug/kg	200	21.	1		
Acetophenone		ND		ug/kg	200	25.	1		
2,4,6-Trichlorophenol		ND		ug/kg	120	39.	1		
p-Chloro-m-cresol		ND		ug/kg	200	30.	1		
2-Chlorophenol		ND		ug/kg	200	24.	1		
2,4-Dichlorophenol		ND		ug/kg	180	33.	1		
2,4-Dimethylphenol		ND		ug/kg	200	68.	1		
2-Nitrophenol		ND		ug/kg	440	77.	1		
4-Nitrophenol		ND		ug/kg	290	84.	1		
2,4-Dinitrophenol		ND		ug/kg	980	96.	1		
4,6-Dinitro-o-cresol		ND		ug/kg	530	98.	1		
Pentachlorophenol Phenol		ND		ug/kg	160	45.	1		
		ND ND		ug/kg	200	31. 32.	1		
2-Methylphenol	nhanal	ND		ug/kg			1		
3-Methylphenol/4-Methyl	prierioi	ND		ug/kg	300	32.	1		





			Serial_No:01112117:29				
Project Name:	120B-LARKIN DEVELOP	MENT			Lab Num	ber:	L2058202
Project Number:	Not Specified				Report D	ate:	01/11/21
		SAMP	LE RESULT	S			
Lab ID:	L2058202-03				Date Colle	cted:	12/29/20 14:40
Client ID:	FLOOR 3 20201229				Date Rece	ived:	12/30/20
Sample Location:	822 SENECA STREET				Field Prep:		Not Specified
Sample Depth:							
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Orgar	nics by GC/MS - Westborou	igh Lab					
Caprolactam		ND		ug/kg	200	62.	1
2,3,4,6-Tetrachloropheno	bl	ND		ug/kg	200	41.	1
Surrogate				% Recovery	Qualifier		ceptance Criteria
2-Fluorophenol				66			25-120
Phenol-d6				75			10-120
Nitrobenzene-d5				88			23-120
2-Fluorobiphenyl				79			30-120
2,4,6-Tribromophe	enol			79			10-136
4-Terphenyl-d14				56			18-120



L2058202

01/11/21

Lab Number:

**Report Date:** 

Project Name: I20B-LARKIN DEVELOPMENT	
---------------------------------------	--

Project Number: Not Specified

### Method Blank Analysis Batch Quality Control

Analytical Method:	1,8270D	Extraction Method:	EPA 3546
Analytical Date:	01/04/21 11:39	Extraction Date:	01/03/21 15:21
Analyst:	JG		

arameter	Result	Qualifier	Units	RL		MDL
emivolatile Organics by GC/MS -	Westborough	Lab for s	ample(s):	01-03	Batch:	WG1451098-1
Acenaphthene	ND		ug/kg	130		17.
Hexachlorobenzene	ND		ug/kg	100		18.
Bis(2-chloroethyl)ether	ND		ug/kg	150		22.
2-Chloronaphthalene	ND		ug/kg	160		16.
3,3'-Dichlorobenzidine	ND		ug/kg	160		44.
2,4-Dinitrotoluene	ND		ug/kg	160		33.
2,6-Dinitrotoluene	ND		ug/kg	160		28.
Fluoranthene	ND		ug/kg	100		19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160		18.
4-Bromophenyl phenyl ether	ND		ug/kg	160		25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200		28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180		17.
Hexachlorobutadiene	ND		ug/kg	160		24.
Hexachlorocyclopentadiene	ND		ug/kg	470		150
Hexachloroethane	ND		ug/kg	130		27.
Isophorone	ND		ug/kg	150		22.
Naphthalene	ND		ug/kg	160		20.
Nitrobenzene	ND		ug/kg	150		24.
NDPA/DPA	ND		ug/kg	130		19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160		26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160		57.
Butyl benzyl phthalate	ND		ug/kg	160		42.
Di-n-butylphthalate	ND		ug/kg	160		31.
Di-n-octylphthalate	ND		ug/kg	160		56.
Diethyl phthalate	ND		ug/kg	160		15.
Dimethyl phthalate	ND		ug/kg	160		35.
Benzo(a)anthracene	ND		ug/kg	100		19.
Benzo(a)pyrene	ND		ug/kg	130		40.
Benzo(b)fluoranthene	ND		ug/kg	100		28.



L2058202

01/11/21

Lab Number:

**Report Date:** 

Project Name:	120B-LARKIN DEVELOPMENT
---------------	-------------------------

Project Number: Not Specified

### Method Blank Analysis Batch Quality Control

Analytical Method:	1,8270D	Extraction Method:	EPA 3546
Analytical Date:	01/04/21 11:39	Extraction Date:	01/03/21 15:21
Analyst:	JG		

irameter	Result 0	Qualifier Units	RL		MDL
emivolatile Organics by GC/N	IS - Westborough I	Lab for sample(s):	01-03	Batch:	WG1451098-1
Benzo(k)fluoranthene	ND	ug/kg	100		26.
Chrysene	ND	ug/kg	100		17.
Acenaphthylene	ND	ug/kg	130		26.
Anthracene	ND	ug/kg	100		32.
Benzo(ghi)perylene	ND	ug/kg	130		20.
Fluorene	ND	ug/kg	160		16.
Phenanthrene	ND	ug/kg	100		20.
Dibenzo(a,h)anthracene	ND	ug/kg	100		19.
Indeno(1,2,3-cd)pyrene	ND	ug/kg	130		23.
Pyrene	ND	ug/kg	100		16.
Biphenyl	ND	ug/kg	380		38.
4-Chloroaniline	ND	ug/kg	160		30.
2-Nitroaniline	ND	ug/kg	160		32.
3-Nitroaniline	ND	ug/kg	160		31.
4-Nitroaniline	ND	ug/kg	160		69.
Dibenzofuran	ND	ug/kg	160		16.
2-Methylnaphthalene	ND	ug/kg	200		20.
1,2,4,5-Tetrachlorobenzene	ND	ug/kg	160		17.
Acetophenone	ND	ug/kg	160		20.
2,4,6-Trichlorophenol	ND	ug/kg	100		31.
p-Chloro-m-cresol	ND	ug/kg	160		25.
2-Chlorophenol	ND	ug/kg	160		20.
2,4-Dichlorophenol	ND	ug/kg	150		27.
2,4-Dimethylphenol	ND	ug/kg	160		55.
2-Nitrophenol	ND	ug/kg	360		62.
4-Nitrophenol	ND	ug/kg	230		68.
2,4-Dinitrophenol	ND	ug/kg	800		77.
4,6-Dinitro-o-cresol	ND	ug/kg	430		80.
Pentachlorophenol	ND	ug/kg	130		36.



Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number:
Project Number:	Not Specified	Report Date:

L2058202 Report Date: 01/11/21

## Method Blank Analysis Batch Quality Control

Analytical Method:	1,8270D	Extraction Method:	EPA 3546
Analytical Date:	01/04/21 11:39	Extraction Date:	01/03/21 15:21
Analyst:	JG		

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS -	Westborough	n Lab for s	ample(s):	01-03	Batch:	WG1451098-1
Phenol	ND		ug/kg	160		25.
2-Methylphenol	ND		ug/kg	160		26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240		26.
2,4,5-Trichlorophenol	ND		ug/kg	160		32.
Carbazole	ND		ug/kg	160		16.
Atrazine	ND		ug/kg	130		58.
Benzaldehyde	ND		ug/kg	220		45.
Caprolactam	ND		ug/kg	160		50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160		34.

Surrogate	%Recovery G	Acceptance Qualifier Criteria
2-Fluorophenol	66	25-120
Phenol-d6	68	10-120
Nitrobenzene-d5	63	23-120
2-Fluorobiphenyl	68	30-120
2,4,6-Tribromophenol	74	10-136
4-Terphenyl-d14	74	18-120



Project Number: Not Specified

Parameter	%Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
Semivolatile Organics by GC/MS - Westbor	ough Lab Assoc	iated sample(s):	: 01-03 Bato	ch: WG14510	98-2 WG145109	8-3		
Acenaphthene	66		70		31-137	6	50	
Hexachlorobenzene	68		73		40-140	7	50	
Bis(2-chloroethyl)ether	58		62		40-140	7	50	
2-Chloronaphthalene	66		72		40-140	9	50	
3,3'-Dichlorobenzidine	55		57		40-140	4	50	
2,4-Dinitrotoluene	72		78		40-132	8	50	
2,6-Dinitrotoluene	74		80		40-140	8	50	
Fluoranthene	70		76		40-140	8	50	
4-Chlorophenyl phenyl ether	67		72		40-140	7	50	
4-Bromophenyl phenyl ether	67		73		40-140	9	50	
Bis(2-chloroisopropyl)ether	55		61		40-140	10	50	
Bis(2-chloroethoxy)methane	63		69		40-117	9	50	
Hexachlorobutadiene	60		65		40-140	8	50	
Hexachlorocyclopentadiene	56		63		40-140	12	50	
Hexachloroethane	58		62		40-140	7	50	
Isophorone	62		67		40-140	8	50	
Naphthalene	61		67		40-140	9	50	
Nitrobenzene	60		66		40-140	10	50	
NDPA/DPA	68		73		36-157	7	50	
n-Nitrosodi-n-propylamine	60		67		32-121	11	50	
Bis(2-ethylhexyl)phthalate	69		74		40-140	7	50	
Butyl benzyl phthalate	75		79		40-140	5	50	
Di-n-butylphthalate	69		74		40-140	7	50	



**Project Name: I20B-LARKIN DEVELOPMENT** 

Project Number: Not Specified

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Semivolatile Organics by GC/MS - Westboro	ugh Lab Assoc	ated sample(s)	01-03 Batc	h: WG1451098-2 WG145	1098-3	
Di-n-octylphthalate	74		78	40-140	5	50
Diethyl phthalate	68		73	40-140	7	50
Dimethyl phthalate	71		77	40-140	8	50
Benzo(a)anthracene	67		72	40-140	7	50
Benzo(a)pyrene	71		75	40-140	5	50
Benzo(b)fluoranthene	70		75	40-140	7	50
Benzo(k)fluoranthene	70		73	40-140	4	50
Chrysene	67		71	40-140	6	50
Acenaphthylene	70		75	40-140	7	50
Anthracene	68		72	40-140	6	50
Benzo(ghi)perylene	70		75	40-140	7	50
Fluorene	69		72	40-140	4	50
Phenanthrene	70		74	40-140	6	50
Dibenzo(a,h)anthracene	68		74	40-140	8	50
Indeno(1,2,3-cd)pyrene	70		74	40-140	6	50
Pyrene	70		75	35-142	7	50
Biphenyl	70		77	37-127	10	50
4-Chloroaniline	52		57	40-140	9	50
2-Nitroaniline	76		85	47-134	11	50
3-Nitroaniline	62		63	26-129	2	50
4-Nitroaniline	67		72	41-125	7	50
Dibenzofuran	66		72	40-140	9	50
2-Methylnaphthalene	65		70	40-140	7	50



Project Number: Not Specified

Parameter	LCS %Recovery	LCSD Qual %Recove	,		RPD Qual Limits
Semivolatile Organics by GC/MS - Wes	stborough Lab Associat	ted sample(s): 01-03	Batch: WG1451098-2 W	G1451098-3	
1,2,4,5-Tetrachlorobenzene	70	76	40-117	8	50
Acetophenone	65	72	14-144	10	50
2,4,6-Trichlorophenol	72	78	30-130	8	50
p-Chloro-m-cresol	72	78	26-103	8	50
2-Chlorophenol	64	71	25-102	10	50
2,4-Dichlorophenol	70	78	30-130	11	50
2,4-Dimethylphenol	69	76	30-130	10	50
2-Nitrophenol	69	73	30-130	6	50
4-Nitrophenol	78	81	11-114	4	50
2,4-Dinitrophenol	76	85	4-130	11	50
4,6-Dinitro-o-cresol	82	91	10-130	10	50
Pentachlorophenol	74	80	17-109	8	50
Phenol	60	65	26-90	8	50
2-Methylphenol	67	74	30-130	. 10	50
3-Methylphenol/4-Methylphenol	67	73	30-130	9	50
2,4,5-Trichlorophenol	76	81	30-130	6	50
Carbazole	70	74	54-128	6	50
Atrazine	84	91	40-140	8	50
Benzaldehyde	58	63	40-140	8	50
Caprolactam	79	85	15-130	7	50
2,3,4,6-Tetrachlorophenol	74	78	40-140	5	50



Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	
Semivolatile Organics by GC/MS - Westb	orough Lab Associa	ated sample(s	s): 01-03 Batch	: WG145	1098-2 WG14510	98-3			

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria	
2-Fluorophenol	62	71	25-120	
Phenol-d6	67	74	10-120	
Nitrobenzene-d5	62	68	23-120	
2-Fluorobiphenyl	69	73	30-120	
2,4,6-Tribromophenol	70	75	10-136	
4-Terphenyl-d14	71	74	18-120	



## PCBS



		Serial_No:01112117:29
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number: L2058202
Project Number:	Not Specified	<b>Report Date:</b> 01/11/21
	SAMPLE RESULTS	
Lab ID:	L2058202-01	Date Collected: 12/29/20 14:20
Client ID:	FLOOR 1 20201229	Date Received: 12/30/20
Sample Location:	822 SENECA STREET	Field Prep: Not Specified
Sample Depth:		
Matrix:	Soil	Extraction Method: EPA 3546
Analytical Method:	1,8082A	Extraction Date: 01/03/21 17:01
Analytical Date:	01/05/21 00:01	Cleanup Method: EPA 3665A
Analyst:	AD	Cleanup Date: 01/04/21
Percent Solids:	82%	Cleanup Method: EPA 3660B
		Cleanup Date: 01/04/21

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>	Column	
Polychlorinated Biphenyls by GC - Westborough Lab								
Aroclor 1016	ND		ug/kg	39.6	3.52	1	А	
Aroclor 1221	ND		ug/kg	39.6	3.97	1	А	
Aroclor 1232	ND		ug/kg	39.6	8.40	1	А	
Aroclor 1242	ND		ug/kg	39.6	5.34	1	А	
Aroclor 1248	ND		ug/kg	39.6	5.95	1	А	
Aroclor 1254	191		ug/kg	39.6	4.34	1	В	
Aroclor 1260	ND		ug/kg	39.6	7.33	1	А	
Aroclor 1262	ND		ug/kg	39.6	5.03	1	А	
Aroclor 1268	ND		ug/kg	39.6	4.11	1	А	
PCBs, Total	191		ug/kg	39.6	3.52	1	В	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	45		30-150	А
Decachlorobiphenyl	40		30-150	А
2,4,5,6-Tetrachloro-m-xylene	53		30-150	В
Decachlorobiphenyl	58		30-150	В



		Serial_No:01112117:29
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number: L2058202
Project Number:	Not Specified	<b>Report Date:</b> 01/11/21
	SAMPLE RESULTS	
Lab ID:	L2058202-02	Date Collected: 12/29/20 14:30
Client ID:	FLOOR 2 20201229	Date Received: 12/30/20
Sample Location:	822 SENECA STREET	Field Prep: Not Specified
Sample Depth:		
Matrix:	Soil	Extraction Method: EPA 3546
Analytical Method:	1,8082A	Extraction Date: 01/03/21 17:01
Analytical Date:	01/05/21 00:08	Cleanup Method: EPA 3665A
Analyst:	AD	Cleanup Date: 01/04/21
Percent Solids:	82%	Cleanup Method: EPA 3660B
		Cleanup Date: 01/04/21

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>	Column
Polychlorinated Biphenyls by GC - W	estborough Lab						
Aroclor 1016	ND		ug/kg	39.8	3.54	1	A
Aroclor 1221	ND		ug/kg	39.8	3.99	1	А
Aroclor 1232	ND		ug/kg	39.8	8.45	1	А
Aroclor 1242	ND		ug/kg	39.8	5.37	1	А
Aroclor 1248	ND		ug/kg	39.8	5.98	1	А
Aroclor 1254	106		ug/kg	39.8	4.36	1	В
Aroclor 1260	ND		ug/kg	39.8	7.36	1	А
Aroclor 1262	ND		ug/kg	39.8	5.06	1	А
Aroclor 1268	ND		ug/kg	39.8	4.13	1	А
PCBs, Total	106		ug/kg	39.8	3.54	1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	45		30-150	А
Decachlorobiphenyl	42		30-150	А
2,4,5,6-Tetrachloro-m-xylene	54		30-150	В
Decachlorobiphenyl	54		30-150	В



		Serial_No:01112117:29
Project Name:	I20B-LARKIN DEVELOPMENT	Lab Number: L2058202
Project Number:	Not Specified	Report Date: 01/11/21
	SAMPLE RESULTS	
Lab ID:	L2058202-03	Date Collected: 12/29/20 14:40
Client ID:	FLOOR 3 20201229	Date Received: 12/30/20
Sample Location:	822 SENECA STREET	Field Prep: Not Specified
Sample Depth:		
Matrix:	Soil	Extraction Method: EPA 3546
Analytical Method:	1,8082A	Extraction Date: 01/03/21 17:01
Analytical Date:	01/05/21 00:14	Cleanup Method: EPA 3665A
Analyst:	AD	Cleanup Date: 01/04/21
Percent Solids:	81%	Cleanup Method: EPA 3660B
		Cleanup Date: 01/04/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - W	/estborough Lab						
Aroclor 1016	ND		ug/kg	41.3	3.66	1	А
Aroclor 1221	ND		ug/kg	41.3	4.14	1	А
Aroclor 1232	ND		ug/kg	41.3	8.75	1	А
Aroclor 1242	ND		ug/kg	41.3	5.56	1	А
Aroclor 1248	ND		ug/kg	41.3	6.19	1	А
Aroclor 1254	127		ug/kg	41.3	4.51	1	В
Aroclor 1260	ND		ug/kg	41.3	7.63	1	А
Aroclor 1262	ND		ug/kg	41.3	5.24	1	А
Aroclor 1268	ND		ug/kg	41.3	4.28	1	А
PCBs, Total	127		ug/kg	41.3	3.66	1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	42		30-150	А
Decachlorobiphenyl	40		30-150	А
2,4,5,6-Tetrachloro-m-xylene	50		30-150	В
Decachlorobiphenyl	49		30-150	В



L2058202

01/11/21

Lab Number:

**Report Date:** 

Project Name:	120B-LARKIN DEVELOPMENT
---------------	-------------------------

Project Number: Not Specified

## Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date: Analyst: 1,8082A 01/04/21 22:37 JM Extraction Method:EPA 3546Extraction Date:01/03/21 17:01Cleanup Method:EPA 3665ACleanup Date:01/04/21Cleanup Method:EPA 3660BCleanup Date:01/04/21

Parameter	Result	Qualifier	Units	RL		MDL	Column
Polychlorinated Biphenyls by GC -	Westborough	Lab for s	sample(s):	01-03	Batch:	WG145	1103-1
Aroclor 1016	ND		ug/kg	32.2		2.86	А
Aroclor 1221	ND		ug/kg	32.2		3.23	А
Aroclor 1232	ND		ug/kg	32.2		6.82	А
Aroclor 1242	ND		ug/kg	32.2		4.34	А
Aroclor 1248	ND		ug/kg	32.2		4.83	А
Aroclor 1254	ND		ug/kg	32.2		3.52	А
Aroclor 1260	ND		ug/kg	32.2		5.95	А
Aroclor 1262	ND		ug/kg	32.2		4.09	А
Aroclor 1268	ND		ug/kg	32.2		3.34	А
PCBs, Total	ND		ug/kg	32.2		2.86	А

			Acceptanc	e
Surrogate	%Recovery	Qualifier	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	А
Decachlorobiphenyl	51		30-150	А
2,4,5,6-Tetrachloro-m-xylene	71		30-150	В
Decachlorobiphenyl	54		30-150	В



## Lab Control Sample Analysis Batch Quality Control

Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

	LCS		LCSD		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1451103-2 WG1451103-3									
Aroclor 1016	56		70		40-140	22		50	А
Aroclor 1260	54		69		40-140	24		50	А

	LCS	LCSD	Acceptan	се
Surrogate	%Recovery	Qual %Recovery	Qual Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	49	54	30-150	А
Decachlorobiphenyl	47	52	30-150	А
2,4,5,6-Tetrachloro-m-xylene	60	65	30-150	В
Decachlorobiphenyl	46	51	30-150	В



# METALS



Project Name: Project Number:		ARKIN DE	EVELOP	MENT SAMPL			Lab Nun Report I		L20582 01/11/2	-	
Lab ID: Client ID: Sample Location:	FLOO	202-01 R 1 20201 ENECA ST		SAMPL	ERES	ULIS	Date Col Date Ree Field Pre	ceived:	12/29/20 12/30/20 Not Spec		
Sample Depth: Matrix: Percent Solids: Parameter	Soil 82% Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mans	field Lab										
Aluminum, Total	6630		mg/kg	9.45	2.55	2	01/06/21 00:50	01/11/21 13:34	EPA 3050B	1,6010D	PS
Antimony, Total	1.27	J	mg/kg	4.72	0.359	2	01/06/21 00:50	01/11/21 13:34	EPA 3050B	1,6010D	PS
Arsenic, Total	10.3		mg/kg	0.945	0.196	2	01/06/21 00:50	01/11/21 13:34	EPA 3050B	1,6010D	PS
Barium, Total	208		mg/kg	0.945	0.164	2	01/06/21 00:50	01/11/21 13:34	EPA 3050B	1,6010D	PS

10.5		mg/kg	0.545	0.150	-	01/00/21 00:30 01/11/21 13:34 ETA 3030B	10
208		mg/kg	0.945	0.164	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
0.539		mg/kg	0.472	0.031	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
1.10		mg/kg	0.945	0.093	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
16700		mg/kg	9.45	3.31	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
14.5		mg/kg	0.945	0.091	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
7.98		mg/kg	1.89	0.157	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
43.4		mg/kg	0.945	0.244	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
26800		mg/kg	4.72	0.853	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
264		mg/kg	4.72	0.253	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
2360		mg/kg	9.45	1.46	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
279		mg/kg	0.945	0.150	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
2.56		mg/kg	0.092	0.060	1	01/06/21 01:00 01/06/21 23:20 EPA 7471B 1,7471B	EW
18.2		mg/kg	2.36	0.229	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
842		mg/kg	236	13.6	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
1.06	J	mg/kg	1.89	0.244	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
ND		mg/kg	0.945	0.267	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
92.6	J	mg/kg	189	2.98	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
ND		mg/kg	1.89	0.298	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
17.5		mg/kg	0.945	0.192	2	01/06/21 00:50 01/11/21 13:34 EPA 3050B 1,6010D	PS
	0.539 1.10 16700 14.5 7.98 43.4 26800 264 2360 279 2.56 18.2 842 1.06 ND 92.6 ND	0.539 1.10 16700 14.5 7.98 43.4 26800 264 2360 279 2.56 18.2 842 1.06 J ND 92.6 J ND	208       mg/kg         0.539       mg/kg         1.10       mg/kg         16700       mg/kg         14.5       mg/kg         7.98       mg/kg         43.4       mg/kg         26800       mg/kg         264       mg/kg         2360       mg/kg         2.56       mg/kg         18.2       mg/kg         1.06       J       mg/kg         92.6       J       mg/kg	208       mg/kg       0.945         0.539       mg/kg       0.472         1.10       mg/kg       0.945         16700       mg/kg       9.45         14.5       mg/kg       0.945         7.98       mg/kg       0.945         43.4       mg/kg       0.945         26800       mg/kg       4.72         264       mg/kg       9.45         279       mg/kg       0.945         2.56       mg/kg       0.945         18.2       mg/kg       0.945         18.2       mg/kg       0.945         92.6       J       mg/kg       1.89         ND       mg/kg       1.89	208         mg/kg         0.945         0.164           0.539         mg/kg         0.472         0.031           1.10         mg/kg         0.945         0.093           16700         mg/kg         9.45         3.31           14.5         mg/kg         0.945         0.091           7.98         mg/kg         1.89         0.157           43.4         mg/kg         0.945         0.244           26800         mg/kg         4.72         0.853           264         mg/kg         9.45         1.46           279         mg/kg         0.945         0.150           2.56         mg/kg         0.92         0.060           18.2         mg/kg         2.36         0.229           842         mg/kg         1.89         0.244           ND         mg/kg         0.945         0.150           2.56         mg/kg         0.945         0.229           842         mg/kg         2.36         0.229           842         mg/kg         0.945         0.267           92.6         J         mg/kg         1.89         0.244      ND         mg/kg         1.89	208       mg/kg       0.945       0.164       2         0.539       mg/kg       0.472       0.031       2         1.10       mg/kg       0.945       0.093       2         16700       mg/kg       9.45       3.31       2         14.5       mg/kg       0.945       0.091       2         7.98       mg/kg       1.89       0.157       2         43.4       mg/kg       0.945       0.244       2         26800       mg/kg       4.72       0.853       2         264       mg/kg       9.45       1.46       2         279       mg/kg       0.945       0.150       2         256       mg/kg       0.945       0.150       2         256       mg/kg       0.945       0.150       2         2106       J       mg/kg       0.945       0.150       2         256       mg/kg       0.36       13.6       2         18.2       mg/kg       2.36       0.229       2         842       mg/kg       1.89       0.244       2         ND       mg/kg       1.89       0.267       2	208mg/kg0.9450.164201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D0.539mg/kg0.4720.031201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D1.10mg/kg0.9450.093201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D16700mg/kg9.453.31201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D14.5mg/kg0.9450.091201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D7.98mg/kg1.890.157201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D43.4mg/kg0.9450.244201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D26800mg/kg4.720.253201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D264mg/kg4.720.253201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D2360mg/kg9.451.46201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D279mg/kg0.9450.150201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D2.56mg/kg2.360.229201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D842mg/kg2.360.229201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D1.06mg/kg1.890.244201/06/21 00:50 01/11/21 13:34EPA 3050B1.6010D<



Project Name:	120B-L	ARKIN DE	VELOP	MENT			Lab Nur	nber:	L205820	02	
Project Number:	Not Sp	pecified					Report I	Date:	01/11/2	1	
				SAMPL	E RES	JLTS					
Lab ID:	L2058	202-02					Date Co	llected:	12/29/20	14:30	
Client ID:	FLOO	R 2 202012	229				Date Re	ceived:	12/30/20		
Sample Location:	822 SI	ENECA ST	REET				Field Pre	ep:	Not Spec	ified	
Sample Depth:											
Matrix:	Soil										
Percent Solids:	82%					Dilation	Data	Dete	<b>D</b>	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfi	eld Lab										
Aluminum, Total	5800		mg/kg	9.26	2.50	2	01/06/21 00:50	01/11/21 13:38	EPA 3050B	1,6010D	PS
Antimony, Total	1.74	J	mg/kg	4.63	0.352	2	01/06/21 00:50	01/11/21 13:38	EPA 3050B	1,6010D	PS
Arsenic, Total	9.24		mg/kg	0.926	0.192	2	01/06/21 00:50	01/11/21 13:38	EPA 3050B	1,6010D	PS
Barium, Total	145		mg/kg	0.926	0.161	2	01/06/21 00:50	01/11/21 13:38	EPA 3050B	1,6010D	PS
Beryllium, Total	0.444	J	mg/kg	0.463	0.031	2	01/06/21 00:50	01/11/21 13:38	EPA 3050B	1,6010D	PS
Cadmium, Total	1.01		mg/kg	0.926	0.091	2	01/06/21 00:50	01/11/21 13:38	EPA 3050B	1,6010D	PS
Calcium, Total	50300		mg/kg	9.26	3.24	2	01/06/21 00:50	01/11/21 13:38	EPA 3050B	1,6010D	PS
Chromium, Total	12.4		mg/kg	0.926	0.089	2	01/06/21 00:50	01/11/21 13:38	EPA 3050B	1,6010D	PS
Cobalt, Total	5.74		mg/kg	1.85	0.154	2	01/06/21 00:50	01/11/21 13:38	EPA 3050B	1,6010D	PS
Copper, Total	40.2		mg/kg	0.926	0.239	2	01/06/21 00:50	01/11/21 13:38	EPA 3050B	1,6010D	PS
Iron, Total	20800		mg/kg	4.63	0.836	2	01/06/21 00:50	01/11/21 13:38	EPA 3050B	1,6010D	PS
Lead, Total	232		mg/kg	4.63	0.248	2	01/06/21 00:50	01/11/21 13:38	EPA 3050B	1,6010D	PS

1,6010D

1,6010D

1,7471B

1,6010D

1,6010D

1,6010D

1,6010D

1,6010D

1,6010D

1,6010D

1,6010D

PS

PS

ΕW

PS

PS

PS

PS

PS

PS

PS

PS

Magnesium, Total

Manganese, Total

Mercury, Total

Potassium, Total

Selenium, Total

Silver, Total

Sodium, Total

Thallium, Total

Vanadium, Total

Zinc, Total

Nickel, Total

6450

273

1.56

12.8

721

1.42

ND

105

ND

14.8

162

mg/kg

J

J

9.26

0.926

0.085

2.31

231

1.85

0.926

185

1.85

0.926

4.63

1.42

0.147

0.056

0.224

13.3

0.239

0.262

2.92

0.292

0.188

0.271

2

2

1

2

2

2

2

2

2

2

2

01/06/21 00:50 01/11/21 13:38 EPA 3050B

01/06/21 00:50 01/11/21 13:38 EPA 3050B

01/06/21 01:00 01/06/21 23:23 EPA 7471B

01/06/21 00:50 01/11/21 13:38 EPA 3050B

Project Name:	120B-L	ARKIN DE	EVELOP	MENT			Lab Nun	nber:	L205820	02	
Project Number:	Not Sp	pecified					Report I	Date:	01/11/2 <sup>-</sup>	1	
				SAMPL	E RESI	ULTS					
Lab ID:		202-03					Date Col	lected:	12/29/20	14:40	
Client ID:		R 3 202012					Date Red		12/30/20		
Sample Location:	822 SI	ENECA ST	REET				Field Pre	ep:	Not Spec	ified	
Sample Depth:											
Matrix:	Soil										
Percent Solids:	81%										
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mans	field Lab										
Aluminum, Total	9120		mg/kg	9.48	2.56	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Antimony, Total	0.986	J	mg/kg	4.74	0.360	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Arsenic, Total	7.36		mg/kg	0.948	0.197	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Barium, Total	114		mg/kg	0.948	0.165	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Beryllium, Total	0.531		mg/kg	0.474	0.031	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Cadmium, Total	0.825	J	mg/kg	0.948	0.093	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Calcium, Total	33500		mg/kg	9.48	3.32	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Chromium, Total	19.7		mg/kg	0.948	0.091	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Cobalt, Total	6.07		mg/kg	1.90	0.157	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Copper, Total	51.1		mg/kg	0.948	0.245	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Iron, Total	18100		mg/kg	4.74	0.856	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Lead, Total	139		mg/kg	4.74	0.254	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Magnesium, Total	6840		mg/kg	9.48	1.46	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Manganese, Total	340		mg/kg	0.948	0.151	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Mercury, Total	0.294		mg/kg	0.10	0.065	1	01/06/21 01:00	01/06/21 23:26	EPA 7471B	1,7471B	EW
Nickel, Total	15.1		mg/kg	2.37	0.229	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Potassium, Total	896		mg/kg	237	13.6	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Selenium, Total	0.977	J	mg/kg	1.90	0.245	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Silver, Total	ND		mg/kg	0.948	0.268	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS
Sodium, Total	91.2	J	mg/kg	190	2.99	2	01/06/21 00:50	01/11/21 13:43	EPA 3050B	1,6010D	PS



1,6010D

1,6010D

1,6010D

PS

PS

PS

Thallium, Total

Vanadium, Total

Zinc, Total

ND

18.8

145

mg/kg

mg/kg

mg/kg

1.90

0.948

4.74

0.299

0.192

0.278

2

2

2

01/06/21 00:50 01/11/21 13:43 EPA 3050B

01/06/21 00:50 01/11/21 13:43 EPA 3050B

01/06/21 00:50 01/11/21 13:43 EPA 3050B

# Project Name:I20B-LARKIN DEVELOPMENTProject Number:Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

# Method Blank Analysis Batch Quality Control

Parameter	Result Qu	alifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield	Lab for sam	nple(s):	01-03 B	atch: W	G145192	25-1				
Aluminum, Total	ND		mg/kg	4.00	1.08	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Antimony, Total	ND		mg/kg	2.00	0.152	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Arsenic, Total	ND		mg/kg	0.400	0.083	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Barium, Total	ND		mg/kg	0.400	0.070	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Beryllium, Total	ND		mg/kg	0.200	0.013	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Cadmium, Total	ND		mg/kg	0.400	0.039	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Calcium, Total	ND		mg/kg	4.00	1.40	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Chromium, Total	0.124	J	mg/kg	0.400	0.038	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Cobalt, Total	ND		mg/kg	0.800	0.066	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Copper, Total	ND		mg/kg	0.400	0.103	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Iron, Total	0.680	J	mg/kg	2.00	0.361	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Lead, Total	ND		mg/kg	2.00	0.107	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Magnesium, Total	ND		mg/kg	4.00	0.616	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Manganese, Total	ND		mg/kg	0.400	0.064	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Nickel, Total	ND		mg/kg	1.00	0.097	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Potassium, Total	ND		mg/kg	100	5.76	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Selenium, Total	ND		mg/kg	0.800	0.103	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Silver, Total	ND		mg/kg	0.400	0.113	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Sodium, Total	ND		mg/kg	80.0	1.26	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Thallium, Total	ND		mg/kg	0.800	0.126	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Vanadium, Total	ND		mg/kg	0.400	0.081	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS
Zinc, Total	ND		mg/kg	2.00	0.117	1	01/06/21 00:50	01/11/21 12:20	1,6010D	PS

### **Prep Information**

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfi	eld Lab for sample(s):	01-03 B	atch: WO	G14519	26-1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	01/06/21 01:00	01/06/21 22:30	1,7471B	EW



Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

# Method Blank Analysis Batch Quality Control

## **Prep Information**

Digestion Method: EPA 7471B



## Lab Control Sample Analysis

Batch Quality Control

Project Number: Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

LCS LCSD %Recovery %Recovery Qual %Recovery Limits RPD **RPD Limits** Parameter Qual Qual Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1451925-2 SRM Lot Number: D109-540 Aluminum, Total 82 50-150 --Antimony, Total 132 19-250 --Arsenic, Total 108 70-130 --75-125 Barium, Total 105 --Beryllium, Total 112 75-125 --Cadmium, Total 97 75-125 --Calcium, Total 109 73-128 --Chromium, Total 70-130 105 --Cobalt, Total 75-125 99 --Copper, Total 100 75-125 --Iron, Total 120 35-165 -100 72-128 Lead. Total --Magnesium, Total 95 62-138 --Manganese, Total 74-126 108 -Nickel, Total 102 70-130 --Potassium, Total 98 59-141 --Selenium, Total 68-132 106 --Silver, Total 111 68-131 --Sodium, Total 94 35-165 --Thallium, Total 101 68-131 --Vanadium, Total 110 59-141 -



## Lab Control Sample Analysis Batch Quality Control

Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

Parameter	LCS %Recover	LC: ry %Rec		%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sa	mple(s): 01-03	Batch: WG1451925-2	SRM Lot Numbe	r: D109-540		
Zinc, Total	101			70-130	-	
Total Metals - Mansfield Lab Associated sa	imple(s): 01-03 I	Batch: WG1451926-2	SRM Lot Numbe	r: D109-540		
Mercury, Total	94			60-140	-	



## Matrix Spike Analysis

Batch Quality Control

Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

MS MSD RPD Native MS MS MSD Recovery Sample %Recovery Limits Added Found Found Qual %Recovery Qual Limits **RPD** Qual Parameter Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1451925-3 QC Sample: L2058192-01 Client ID: MS Sample 1910 401 2590 Q 75-125 20 Aluminum, Total 170 -ND 100 95.7 96 75-125 20 Antimony, Total ---Arsenic, Total 1.31J 24 27.0 112 75-125 20 \_ --Barium, Total 63.7 401 456 98 75-125 20 ---Beryllium, Total 0.156J 10 10.7 107 -75-125 20 --Cadmium, Total 0.507J 10.2 10.2 100 75-125 20 ---Calcium, Total 43100 2000 55800 Q 75-125 20 634 ---Chromium, Total 4.06 40.1 40.8 92 75-125 20 ---Cobalt, Total 1.77J 100 93.4 93 75-125 20 ---Copper, Total 14.9 50.1 62.7 95 -75-125 20 --Iron, Total 4950 200 5420 Q 75-125 20 234 ---Lead, Total 8.71J 102 106 104 -75-125 20 --Q 14000 75-125 Magnesium, Total 7950 2000 302 --\_ 20 Manganese, Total 284 100 365 81 -75-125 20 --Nickel, Total 4.27J 100 91.7 92 -75-125 20 --4870 Potassium, Total 2720 2000 107 -75-125 \_ 20 \_ 1.72J 27.6 115 75-125 Selenium, Total 24 -\_ 20 -75-125 ND 60.1 65.1 Silver, Total 108 ---20 254J 2000 2640 Q 20 Sodium, Total 132 --75-125 -Thallium, Total ND 24 20.6 86 -75-125 \_ 20 \_ Vanadium, Total 3.92 100 100 96 75-125 20 \_ --



# Matrix Spike Analysis

Project Name:	I20B-LARKIN DEVELOPMENT	Batch Quality Control	Lab Number:	L2058202
Project Number:	Not Specified		Report Date:	01/11/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield L	_ab Associated sam	nple(s): 01-03	QC Bat	tch ID: WG1451925-3	QC Sam	ple: L2058192-01	Client ID: MS	Sample	
Zinc, Total	47.3	100	140	92	-	-	75-125	-	20
Total Metals - Mansfield L	_ab Associated sam	nple(s): 01-03	QC Bat	tch ID: WG1451926-3	QC Sam	ple: L2058192-01	Client ID: MS	Sample	
Mercury, Total	ND	0.34	0.343	101	-	-	80-120	-	20



## Lab Duplicate Analysis Batch Quality Control

I20B-LARKIN DEVELOPMENT

Lab Number: Report Date:

L2058202

Project Number: Not Specified

Project Name:

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	<b>RPD</b> Limits
otal Metals - Mansfield Lab Associated sample(s): 01-03	QC Batch ID:	WG1451925-4 QC Sample:	L2058192-01	Client ID:	DUP San	nple
Aluminum, Total	1910	1860	mg/kg	3		20
Antimony, Total	ND	ND	mg/kg	NC		20
Arsenic, Total	1.31J	1.52J	mg/kg	NC		20
Barium, Total	63.7	52.4	mg/kg	19		20
Beryllium, Total	0.156J	0.142J	mg/kg	NC		20
Cadmium, Total	0.507J	0.486J	mg/kg	NC		20
Calcium, Total	43100	61700	mg/kg	35	Q	20
Chromium, Total	4.06	4.02	mg/kg	1		20
Cobalt, Total	1.77J	1.82J	mg/kg	NC		20
Copper, Total	14.9	12.8	mg/kg	15		20
Iron, Total	4950	4990	mg/kg	1		20
Lead, Total	8.71J	8.56J	mg/kg	NC		20
Magnesium, Total	7950	12300	mg/kg	43	Q	20
Manganese, Total	284	260	mg/kg	9		20
Nickel, Total	4.27J	4.25J	mg/kg	NC		20
Potassium, Total	2720	2550	mg/kg	6		20
Selenium, Total	1.72J	1.82J	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Sodium, Total	254J	240J	mg/kg	NC		20



## Lab Duplicate Analysis Batch Quality Control

Project Name: I20B-LARKIN DEVELOPMENT

 Lab Number:
 L2058202

 Report Date:
 01/11/21

Project Number: Not Specified

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-0	3 QC Batch ID:	WG1451925-4 QC Sample:	L2058192-01	Client ID:	DUP Sample
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	3.92	4.05	mg/kg	3	20
Zinc, Total	47.3	41.2	mg/kg	14	20
Total Metals - Mansfield Lab Associated sample(s): 01-0	3 QC Batch ID:	WG1451926-4 QC Sample:	L2058192-01	Client ID:	DUP Sample
Mercury, Total	ND	ND	mg/kg	NC	20



# INORGANICS & MISCELLANEOUS



Serial No:01112117:29
-----------------------

Project Name: Project Number:	I20B-LARKI Not Specifie		OPME	NT					L2058202 01/11/21	
				SAMPLE	RESUL	rs				
Lab ID:	L2058202-0	1					Date	Collected:	12/29/20 14:20	)
Client ID:	FLOOR 1 20	0201229					Date I	Received:	12/30/20	
Sample Location:	822 SENEC	A STREE	Т				Field	Prep:	Not Specified	
Sample Depth:										
Matrix:	Soil									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analys
neral Chemistry - We	stborough Lat	)								
lids, Total	81.9		%	0.100	NA	1	-	12/31/20 10:3	1 121,2540G	RI



Serial No:01112117:29
-----------------------

Project Name: Project Number:	I20B-LARKI Not Specifie		OPMEN	NT					L2058202 01/11/21	
				SAMPLE	RESUL	rs				
Lab ID:	L2058202-0	2					Date (	Collected:	12/29/20 14:30	)
Client ID:	FLOOR 2 20	0201229					Date I	Received:	12/30/20	
Sample Location:	822 SENEC	A STREE	Т				Field I	Prep:	Not Specified	
Sample Depth:										
Matrix:	Soil									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analys
eneral Chemistry - Wes	stborough Lat	)								
lids, Total	81.9		%	0.100	NA	1	-	12/31/20 10:3	1 121,2540G	RI



Serial No:01112117:29
-----------------------

Project Name: Project Number:	I20B-LARKI		OPME	NT					L2058202 01/11/21	
	·			SAMPLE	RESUL	TS				
Lab ID:	L2058202-0	3					Date	Collected:	12/29/20 14:40	)
Client ID:	FLOOR 3 20	0201229					Date	Received:	12/30/20	
Sample Location:	822 SENEC	A STREE	Т				Field	Prep:	Not Specified	
Sample Depth:										
Matrix:	Soil									
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analys
neral Chemistry - We	stborough Lat	)								
lids, Total	80.5		%	0.100	NA	1	-	12/31/20 10:3	1 121,2540G	RI



20

Project Name: Project Number:	I20B-LARKIN DEVELOPMENT Not Specified		Lab Duplicate Ana Batch Quality Contro		b Numbei port Date		
Parameter		Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Wes	stborough Lab Associated sampl	le(s): 01-03 QC I	Batch ID: WG1450641-1	QC Sample:	L2058190-01	Client ID:	DUP Sample

79.9

%

0

80.1



Solids, Total

# Project Name:I20B-LARKIN DEVELOPMENTProject Number:Not Specified

### Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

### **Cooler Information**

Cooler	Custody Seal
С	Absent

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2058202-01A	Vial MeOH preserved	С	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2058202-01B	Vial water preserved	С	NA		2.1	Y	Absent	31-DEC-20 05:27	NYTCL-8260HLW-R2(14)
L2058202-01C	Vial water preserved	С	NA		2.1	Y	Absent	31-DEC-20 05:27	NYTCL-8260HLW-R2(14)
L2058202-01D	Plastic 2oz unpreserved for TS	С	NA		2.1	Y	Absent		TS(7)
L2058202-01E	Metals Only-Glass 60mL/2oz unpreserved	С	NA		2.1	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG- TI(180),TL-TI(180),CR-TI(180),NI-TI(180),AL- TI(180),CU-TI(180),SE-TI(180),SB-TI(180),ZN- TI(180),PB-TI(180),CO-TI(180),V-TI(180),FE- TI(180),HG-T(28),MG-TI(180),MN-TI(180),NA- TI(180),CA-TI(180),K-TI(180),CD-TI(180)
L2058202-01F	Glass 250ml/8oz unpreserved	С	NA		2.1	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L2058202-02A	Vial MeOH preserved	С	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2058202-02B	Vial water preserved	С	NA		2.1	Y	Absent	31-DEC-20 05:27	NYTCL-8260HLW-R2(14)
L2058202-02C	Vial water preserved	С	NA		2.1	Y	Absent	31-DEC-20 05:27	NYTCL-8260HLW-R2(14)
L2058202-02D	Plastic 2oz unpreserved for TS	С	NA		2.1	Y	Absent		TS(7)
L2058202-02E	Metals Only-Glass 60mL/2oz unpreserved	С	NA		2.1	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG- TI(180),TL-TI(180),CR-TI(180),AL-TI(180),NI- TI(180),SE-TI(180),CU-TI(180),PB-TI(180),SB- TI(180),ZN-TI(180),CO-TI(180),V-TI(180),HG- T(28),MN-TI(180),FE-TI(180),MG-TI(180),CA- TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2058202-02F	Glass 250ml/8oz unpreserved	С	NA		2.1	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L2058202-03A	Vial MeOH preserved	С	NA		2.1	Y	Absent		NYTCL-8260HLW-R2(14)
L2058202-03B	Vial water preserved	С	NA		2.1	Y	Absent	31-DEC-20 05:27	NYTCL-8260HLW-R2(14)
L2058202-03C	Vial water preserved	С	NA		2.1	Y	Absent	31-DEC-20 05:27	NYTCL-8260HLW-R2(14)
L2058202-03D	Plastic 2oz unpreserved for TS	С	NA		2.1	Y	Absent		TS(7)



# Project Name:I20B-LARKIN DEVELOPMENTProject Number:Not Specified

Container Info	rmation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2058202-03E	Metals Only-Glass 60mL/2oz unpreserved	С	NA		2.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG- TI(180),AL-TI(180),NI-TI(180),CR-TI(180),TL- TI(180),ZN-TI(180),SB-TI(180),CU-TI(180),PB- TI(180),SE-TI(180),V-TI(180),CO-TI(180),MG- TI(180),MN-TI(180),FE-TI(180),HG-T(28),NA- TI(180),CA-TI(180),K-TI(180),CD-TI(180)
L2058202-03F	Glass 250ml/8oz unpreserved	С	NA		2.1	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)



## Project Name: I20B-LARKIN DEVELOPMENT

### Project Number: Not Specified

Lab Number:	L2058202
-------------	----------

## **Report Date:** 01/11/21

### GLOSSARY

### Acronyms

Acronyins	
DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	<ul> <li>Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.</li> </ul>
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



## Project Name: I20B-LARKIN DEVELOPMENT

Project Number: Not Specified

## Lab Number: L2058202

**Report Date:** 01/11/21

#### Footnotes

1

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of	f the
original method.	

#### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- **D** Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- **F** The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- J Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



### Project Name: I20B-LARKIN DEVELOPMENT

### Project Number: Not Specified

Lab Number: L2058202 Report Date: 01/11/21

Data Qualifiers

- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name:I20B-LARKIN DEVELOPMENTProject Number:Not Specified

 Lab Number:
 L2058202

 Report Date:
 01/11/21

#### REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

### LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## **Certification Information**

#### The following analytes are not included in our Primary NELAP Scope of Accreditation:

#### Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.
Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
EPA 3C Fixed gases
Biological Tissue Matrix: EPA 3050B

#### The following analytes are included in our Massachusetts DEP Scope of Accreditation

#### Westborough Facility:

#### Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP. Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

#### Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. EPA 624.1: Volatile Halocarbons & Aromatics,

**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs **EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

#### Mansfield Facility:

#### Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn. **EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn. **EPA 245.1** Hg. **SM2340B** 

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 Whitne Albany, NY 12205: 14 Walker Tonawanda, NY 14150: 275 Co	Way	95	Page 1 o		-	Dale In	Rec's	121	13	1/2	20	ALPHA JOB # L 2058202	
Westborough, MA 01581 8 Walkup Dr.	Manafield, MA 02048 320 Forbes Blvd	Project Information					Deliv	erable	s				100	Billing Information	
TEL: 508-898-9220 FAX: 508-898-9193	TEL: 508-822-9300 FAX: 508-822-3268	Project Name: TZO	3-Lalkin	Develop	ment			ASP-	A		18	ASP-E	3	Same as Client Info	
7704, 500-000-0 (85)	170. 300-022-3288	Project Location: 822	SULLEG	Street			EQUIS (1 File) EQUIS (4 File) PO#						PO#		
Client Information		Project #				_		Othe	r A	JYS	DEC	36	ic		
Client: AFT FA	Vironmental	(Use Project name as P	roject#)				Regu	latory	Requ					Disposal Site Information	
Address: 8644 B	Uffalo Aur		candon c	Junn				NY TO	OGS			NY Par	1 375	Please identify below location of	
Niagura Fall	5 1 4 14 304	ALPHAQuote #:	-advarts	eum			AWQ Standards NY CP-51						-51	applicable disposal facilities.	
Phone: 716 283		Turn-Around Time		-			NY Restricted Use Other							Disposal Facility:	
Fax:		Standar	dX	Due Date:	-		NY Unrestricted Use							D NJ D NY	
Email: DN File	è	Rush (only if pre approved		# of Days:			In	NYC	Sewerl	Dischar	oe .			Other	
These samples have b		red by Alpha					ANA	LYSIS			-	_	-	Sample Filtration	
Other project specific		the second se					-	T		-	r - 1		1		
Please specify Metals	or TAL.		Colle	nation			Vacs	SUDCS	Metals	PC65	5			Done Lab to do Preservation Lab to do (Please Specify below)	
(Lab Use Only)	S	ample ID	Collection		Sample Matrix	Sampler's			-	-	F				
	C. I	A	Date	Time		Initials	-	-						Sample Specific Comments	
58202-01	Floorl	20201229	12/29/20	14:20	Soil	BQ	X	X	X	×	X				
- 02	FloorZ	20201229	12/25/20	14:20	1	-6-	×	-	×	×	×		-	1	
03	HODE 3	20201229	12/29/20	14:40	P			×	×	x	X				
A = None P = Plastic		Westboro: Certification No: MA935 Mansfield: Certification No: MA015			Container Type Preservative		V P P P		AA				Please print clearly, legibly and completely. Samples can not be logged in and		
		Relinquished	Preservative Date/Time R 12/30 16:00 R APPL D/30 16:00 P				10	FAAA Received By:			A- pate/Time 20/20/20/600 13/31/00 00:50			turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	



Community Air Monitoring Plan Data

Instrument		Data Prope	ties
Model	DustTrak II	Start Date	07/07/2020
Instrument S/N	8530102707	Start Time	09:20:34
		Stop Date	07/07/2020
		Stop Time	09:35:34
		Total Time	0:00:15:00
		Logging Interval	60 seconds

	Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>	
1	07/07/2020	09:21:34	0.094	
2	07/07/2020	09:22:34	0.087	
3	07/07/2020	09:23:34	0.089	
4	07/07/2020	09:24:34	0.088	
5	07/07/2020	09:25:34	0.099	
6	07/07/2020	09:26:34	0.088	
7	07/07/2020	09:27:34	0.085	
8	07/07/2020	09:28:34	0.086	
9	07/07/2020	09:29:34	0.085	
10	07/07/2020	09:30:34	0.089	
11	07/07/2020	09:31:34	0.087	
12	07/07/2020	09:32:34	0.086	
13	07/07/2020	09:33:34	0.085	
14	07/07/2020	09:34:34	0.085	
15	07/07/2020	09:35:34	0.087	

Instrument		Data Properties	
Model	DustTrak II	Start Date 07/07/2020	
Instrument S/N	8530102707	Start Time	09:42:07
		Stop Date	07/07/2020
		Stop Time	13:12:07
		Total Time	0:03:30:00
		Logging Interval	900 seconds

	Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>	
1	07/07/2020	09:57:07	0.091	
2	07/07/2020	10:12:07	0.083	
3	07/07/2020	10:27:07	0.080	
4	07/07/2020	10:42:07	0.082	
5	07/07/2020	10:57:07	0.093	
6	07/07/2020	11:12:07	0.111	
7	07/07/2020	11:27:07	0.077	
8	07/07/2020	11:42:07	0.078	
9	07/07/2020	11:57:07	0.079	
10	07/07/2020	12:12:07	0.084	
11	07/07/2020	12:27:07	0.091	
12	07/07/2020	12:42:07	0.089	
13	07/07/2020	12:57:07	0.088	
14	07/07/2020	13:12:07	0.084	

Instrument		Data Properties	
Model	DustTrak II	Start Date	07/28/2020
Instrument S/N	8530102707	Start Time	08:29:21
		Stop Date	07/28/2020
		Stop Time	08:44:21
		Total Time	0:00:15:00
		Logging Interval	60 seconds

	Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>	
1	07/28/2020	08:30:21	0.358	
2	07/28/2020	08:31:21	0.058	
3	07/28/2020	08:32:21	0.063	
4	07/28/2020	08:33:21	0.058	
5	07/28/2020	08:34:21	0.055	
6	07/28/2020	08:35:21	0.057	
7	07/28/2020	08:36:21	0.057	
8	07/28/2020	08:37:21	0.056	
9	07/28/2020	08:38:21	0.056	
10	07/28/2020	08:39:21	0.055	
11	07/28/2020	08:40:21	0.056	
12	07/28/2020	08:41:21	0.055	
13	07/28/2020	08:42:21	0.055	
14	07/28/2020	08:43:21	0.056	
15	07/28/2020	08:44:21	0.056	

Instrument		Data Properties	
Model	DustTrak II	Start Date 12/09/2020	
Instrument S/N	8530102707	Start Time	08:51:51
		Stop Date	12/09/2020
		Stop Time	16:36:51
		Total Time	0:07:45:00
		Logging Interval	900 seconds

	Test Data			
Data Point	Date	Time	AEROSOL mg/m^3	
1	12/09/2020	09:06:51	0.143	
2	12/09/2020	09:21:51	0.138	
3	12/09/2020	09:36:51	0.135	
4	12/09/2020	09:51:51	0.133	
5	12/09/2020	10:06:51	0.137	
6	12/09/2020	10:21:51	0.131	
7	12/09/2020	10:36:51	0.131	
8	12/09/2020	10:51:51	0.130	
9	12/09/2020	11:06:51	0.132	
10	12/09/2020	11:21:51	0.136	
11	12/09/2020	11:36:51	0.142	
12	12/09/2020	11:51:51	0.141	
13	12/09/2020	12:06:51	0.143	
14	12/09/2020	12:21:51	0.142	
15	12/09/2020	12:36:51	0.139	
16	12/09/2020	12:51:51	0.139	
17	12/09/2020	13:06:51	0.144	
18	12/09/2020	13:21:51	0.148	
19	12/09/2020	13:36:51	0.150	
20	12/09/2020	13:51:51	0.151	
21	12/09/2020	14:06:51	0.152	
22	12/09/2020	14:21:51	0.151	
23	12/09/2020	14:36:51	0.150	
24	12/09/2020	14:51:51	0.149	
25	12/09/2020	15:06:51	0.143	
26	12/09/2020	15:21:51	0.142	
27	12/09/2020	15:36:51	0.145	

28	12/09/2020	15:51:51	0.145
29	12/09/2020	16:06:51	0.139
30	12/09/2020	16:21:51	0.139
31	12/09/2020	16:36:51	0.140

Instrument		Data Properties	
Model	DustTrak II	Start Date	12/10/2020
Instrument S/N	8530102707	Start Time	08:36:10
		Stop Date	12/10/2020
		Stop Time	08:51:10
		Total Time	0:00:15:00
		Logging Interval	60 seconds

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
1	12/10/2020	08:37:10	0.123
2	12/10/2020	08:38:10	0.110
3	12/10/2020	08:39:10	0.105
4	12/10/2020	08:40:10	0.104
5	12/10/2020	08:41:10	0.103
6	12/10/2020	08:42:10	0.103
7	12/10/2020	08:43:10	0.103
8	12/10/2020	08:44:10	0.103
9	12/10/2020	08:45:10	0.103
10	12/10/2020	08:46:10	0.103
11	12/10/2020	08:47:10	0.104
12	12/10/2020	08:48:10	0.103
13	12/10/2020	08:49:10	0.104
14	12/10/2020	08:50:10	0.103
15	12/10/2020	08:51:10	0.103

Instrument		Data Properties	
Model	DustTrak II	Start Date 12/10/2020	
Instrument S/N	8530102707	Start Time	09:01:10
		Stop Date 12/10/2020	
		Stop Time	16:46:10
		Total Time	0:07:45:00
		Logging Interval	900 seconds

	Test Data			
Data Point	Date	Time	AEROSOL mg/m^3	
1	12/10/2020	09:16:10	0.112	
2	12/10/2020	09:31:10	0.114	
3	12/10/2020	09:46:10	0.112	
4	12/10/2020	10:01:10	0.112	
5	12/10/2020	10:16:10	0.114	
6	12/10/2020	10:31:10	0.111	
7	12/10/2020	10:46:10	0.112	
8	12/10/2020	11:01:10	0.113	
9	12/10/2020	11:16:10	0.114	
10	12/10/2020	11:31:10	0.111	
11	12/10/2020	11:46:10	0.111	
12	12/10/2020	12:01:10	0.110	
13	12/10/2020	12:16:10	0.108	
14	12/10/2020	12:31:10	0.112	
15	12/10/2020	12:46:10	0.118	
16	12/10/2020	13:01:10	0.109	
17	12/10/2020	13:16:10	0.108	
18	12/10/2020	13:31:10	0.109	
19	12/10/2020	13:46:10	0.110	
20	12/10/2020	14:01:10	0.108	
21	12/10/2020	14:16:10	0.109	
22	12/10/2020	14:31:10	0.116	
23	12/10/2020	14:46:10	0.112	
24	12/10/2020	15:01:10	0.119	
25	12/10/2020	15:16:10	0.112	
26	12/10/2020	15:31:10	0.111	
27	12/10/2020	15:46:10	0.110	

28	12/10/2020	16:01:10	0.110
29	12/10/2020	16:16:10	0.111
30	12/10/2020	16:31:10	0.114
31	12/10/2020	16:46:10	0.115

Instrument		Data Properties	
Model	DustTrak II	Start Date 12/11/2020	
Instrument S/N	8530102707	Start Time	07:47:01
		Stop Date 12/11/2020	
		Stop Time	09:47:01
		Total Time	0:02:00:00
		Logging Interval	900 seconds

	Test Data				
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>		
1	12/11/2020	08:02:01	0.121		
2	12/11/2020	08:17:01	0.120		
3	12/11/2020	08:32:01	0.121		
4	12/11/2020	08:47:01	0.121		
5	12/11/2020	09:02:01	0.122		
6	12/11/2020	09:17:01	0.122		
7	12/11/2020	09:32:01	0.122		
8	12/11/2020	09:47:01	0.121		

Instrument		Data Proper	rties
Model	DustTrak II	Start Date	07/21/2020
Instrument S/N	8530183909	Start Time	08:10:32
		Stop Date	07/21/2020
		Stop Time	08:25:32
		Total Time	0:00:15:00
		Logging Interval	60 seconds

	Test Data				
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>		
1	07/21/2019	08:11:32	0.008		
2	07/21/2019	08:12:32	0.002		
3	07/21/2019	08:13:32	0.001		
4	07/21/2019	08:14:32	0.001		
5	07/21/2019	08:15:32	0.010		
6	07/21/2019	08:16:32	0.012		
7	07/21/2019	08:17:32	0.031		
8	07/21/2019	08:18:32	0.019		
9	07/21/2019	08:19:32	0.017		
10	07/21/2019	08:20:32	0.014		
11	07/21/2019	08:21:32	0.013		
12	07/21/2019	08:22:32	0.013		
13	07/21/2019	08:23:32	0.010		
14	07/21/2019	08:24:32	0.022		
15	07/21/2019	08:25:32	0.027		

Instrument		Data Properties	
Model	DustTrak II	Start Date 07/21/2020	
Instrument S/N	8530183909	Start Time	08:28:22
		Stop Date 07/21/2020	
		Stop Time	09:58:22
		Total Time	0:01:30:00
		Logging Interval	900 seconds

	Test Data				
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>		
1	07/21/2019	08:43:22	0.014		
2	07/21/2019	08:58:22	0.003		
3	07/21/2019	09:13:22	0.001		
4	07/21/2019	09:28:22	0.003		
5	07/21/2019	09:43:22	0.001		
6	07/21/2019	09:58:22	0.000		

Instrument		Data Proper	rties
Model	DustTrak II	Start Date	10/27/2020
Instrument S/N	8530183909	Start Time	07:16:15
		Stop Date	10/27/2020
		Stop Time	07:31:15
		Total Time	0:00:15:00
		Logging Interval	60 seconds

	Test Data				
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>		
1	10/27/2020	07:17:15	0.000		
2	10/27/2020	07:18:15	0.000		
3	10/27/2020	07:19:15	0.000		
4	10/27/2020	07:20:15	0.003		
5	10/27/2020	07:21:15	0.014		
6	10/27/2020	07:22:15	0.013		
7	10/27/2020	07:23:15	0.010		
8	10/27/2020	07:24:15	0.005		
9	10/27/2020	07:25:15	0.006		
10	10/27/2020	07:26:15	0.004		
11	10/27/2020	07:27:15	0.004		
12	10/27/2020	07:28:15	0.018		
13	10/27/2020	07:29:15	0.023		
14	10/27/2020	07:30:15	0.009		
15	10/27/2020	07:31:15	0.005		

Instrument		Data Properties	
Model	DustTrak II	Start Date 10/27/2020	
Instrument S/N	8530183909	Start Time	07:31:56
		Stop Date 10/27/202	
		Stop Time	15:31:56
		Total Time	0:08:00:00
		Logging Interval	900 seconds

	Test Data				
Data Point	Date	Time	AEROSOL mg/m^3		
1	10/27/2020	07:46:56	0.002		
2	10/27/2020	08:01:56	0.000		
3	10/27/2020	08:16:56	0.000		
4	10/27/2020	08:31:56	0.000		
5	10/27/2020	08:46:56	0.000		
6	10/27/2020	09:01:56	0.000		
7	10/27/2020	09:16:56	0.000		
8	10/27/2020	09:31:56	0.000		
9	10/27/2020	09:46:56	0.000		
10	10/27/2020	10:01:56	0.000		
11	10/27/2020	10:16:56	0.000		
12	10/27/2020	10:31:56	0.000		
13	10/27/2020	10:46:56	0.000		
14	10/27/2020	11:01:56	0.000		
15	10/27/2020	11:16:56	0.000		
16	10/27/2020	11:31:56	0.000		
17	10/27/2020	11:46:56	0.000		
18	10/27/2020	12:01:56	0.000		
19	10/27/2020	12:16:56	0.000		
20	10/27/2020	12:31:56	0.000		
21	10/27/2020	12:46:56	0.000		
22	10/27/2020	13:01:56	0.000		
23	10/27/2020	13:16:56	0.000		
24	10/27/2020	13:31:56	0.000		
25	10/27/2020	13:46:56	0.000		
26	10/27/2020	14:01:56	0.000		
27	10/27/2020	14:16:56	0.000		

28	10/27/2020	14:31:56	0.000
29	10/27/2020	14:46:56	0.000
30	10/27/2020	15:01:56	0.000
31	10/27/2020	15:16:56	0.000
32	10/27/2020	15:31:56	0.000

Instru	Instrument		ties
Model	DustTrak II	Start Date	12/14/2020
Instrument S/N	8530102707	Start Time	08:00:00
		Stop Date	12/14/2020
		Stop Time	08:15:00
		Total Time	0:00:15:00
		Logging Interval	60 seconds

	Test Data				
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>		
1	12/14/2020	08:01:00	0.110		
2	12/14/2020	08:02:00	0.110		
3	12/14/2020	08:03:00	0.110		
4	12/14/2020	08:04:00	0.109		
5	12/14/2020	08:05:00	0.109		
6	12/14/2020	08:06:00	0.109		
7	12/14/2020	08:07:00	0.109		
8	12/14/2020	08:08:00	0.109		
9	12/14/2020	08:09:00	0.108		
10	12/14/2020	08:10:00	0.108		
11	12/14/2020	08:11:00	0.108		
12	12/14/2020	08:12:00	0.108		
13	12/14/2020	08:13:00	0.107		
14	12/14/2020	08:14:00	0.107		
15	12/14/2020	08:15:00	0.107		

Instru	Instrument		erties
Model	DustTrak II	Start Date 12/14/2020	
Instrument S/N	8530102707	Start Time	08:22:38
		Stop Date	12/14/2020
		Stop Time	12:37:38
		Total Time	0:04:15:00
		Logging Interval	900 seconds

Test Data				
Data Point	Date	Time	AEROSOL mg/m^3	
1	12/14/2020	08:37:38	0.114	
2	12/14/2020	08:52:38	0.108	
3	12/14/2020	09:07:38	0.105	
4	12/14/2020	09:22:38	0.108	
5	12/14/2020	09:37:38	0.115	
6	12/14/2020	09:52:38	0.114	
7	12/14/2020	10:07:38	0.111	
8	12/14/2020	10:22:38	0.112	
9	12/14/2020	10:37:38	0.107	
10	12/14/2020	10:52:38	0.107	
11	12/14/2020	11:07:38	0.106	
12	12/14/2020	11:22:38	0.106	
13	12/14/2020	11:37:38	0.107	
14	12/14/2020	11:52:38	0.107	
15	12/14/2020	12:07:38	0.107	
16	12/14/2020	12:22:38	0.108	
17	12/14/2020	12:37:38	0.107	

Instrument		Data Prope	ties
Model	DustTrak II	Start Date	12/15/2020
Instrument S/N	8530102707	Start Time	08:51:56
		Stop Date	12/15/2020
		Stop Time	09:06:56
		Total Time	0:00:15:00
		Logging Interval	60 seconds

	Test Data				
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>		
1	12/15/2020	08:52:56	0.118		
2	12/15/2020	08:53:56	0.115		
3	12/15/2020	08:54:56	0.115		
4	12/15/2020	08:55:56	0.114		
5	12/15/2020	08:56:56	0.115		
6	12/15/2020	08:57:56	0.113		
7	12/15/2020	08:58:56	0.113		
8	12/15/2020	08:59:56	0.113		
9	12/15/2020	09:00:56	0.113		
10	12/15/2020	09:01:56	0.112		
11	12/15/2020	09:02:56	0.112		
12	12/15/2020	09:03:56	0.112		
13	12/15/2020	09:04:56	0.114		
14	12/15/2020	09:05:56	0.115		
15	12/15/2020	09:06:56	0.115		

Instrument		Data Properties	
Model	DustTrak II	Start Date 12/15/2020	
Instrument S/N	8530102707	Start Time	09:07:15
		Stop Date	12/15/2020
		Stop Time	17:52:15
		Total Time	0:08:45:00
		Logging Interval	900 seconds

	Test Data			
Data Point	Date	Time	AEROSOL mg/m^3	
1	12/15/2020	09:22:15	0.111	
2	12/15/2020	09:37:15	0.109	
3	12/15/2020	09:52:15	0.108	
4	12/15/2020	10:07:15	0.108	
5	12/15/2020	10:22:15	0.108	
6	12/15/2020	10:37:15	0.109	
7	12/15/2020	10:52:15	0.109	
8	12/15/2020	11:07:15	0.109	
9	12/15/2020	11:22:15	0.108	
10	12/15/2020	11:37:15	0.109	
11	12/15/2020	11:52:15	0.110	
12	12/15/2020	12:07:15	0.110	
13	12/15/2020	12:22:15	0.110	
14	12/15/2020	12:37:15	0.110	
15	12/15/2020	12:52:15	0.110	
16	12/15/2020	13:07:15	0.110	
17	12/15/2020	13:22:15	0.110	
18	12/15/2020	13:37:15	0.110	
19	12/15/2020	13:52:15	0.110	
20	12/15/2020	14:07:15	0.110	
21	12/15/2020	14:22:15	0.109	
22	12/15/2020	14:37:15	0.109	
23	12/15/2020	14:52:15	0.109	
24	12/15/2020	15:07:15	0.109	
25	12/15/2020	15:22:15	0.109	
26	12/15/2020	15:37:15	0.109	
27	12/15/2020	15:52:15	0.109	

28	12/15/2020	16:07:15	0.109
29	12/15/2020	16:22:15	0.109
30	12/15/2020	16:37:15	0.109
31	12/15/2020	16:52:15	0.109
32	12/15/2020	17:07:15	0.108
33	12/15/2020	17:22:15	0.108
34	12/15/2020	17:37:15	0.108
35	12/15/2020	17:52:15	0.108

Instru	Instrument		ties
Model	DustTrak II	Start Date	12/16/2020
Instrument S/N	8530102707	Start Time	07:41:34
		Stop Date	12/16/2020
		Stop Time	07:56:34
		Total Time	0:00:15:00
		Logging Interval	60 seconds

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
1	12/16/2020	07:42:34	0.106
2	12/16/2020	07:43:34	0.107
3	12/16/2020	07:44:34	0.108
4	12/16/2020	07:45:34	0.107
5	12/16/2020	07:46:34	0.106
6	12/16/2020	07:47:34	0.107
7	12/16/2020	07:48:34	0.107
8	12/16/2020	07:49:34	0.119
9	12/16/2020	07:50:34	0.107
10	12/16/2020	07:51:34	0.108
11	12/16/2020	07:52:34	0.108
12	12/16/2020	07:53:34	0.107
13	12/16/2020	07:54:34	0.110
14	12/16/2020	07:55:34	0.107
15	12/16/2020	07:56:34	0.107

Instrument		Data Properties	
Model	DustTrak II	Start Date	12/16/2020
Instrument S/N	8530102707	Start Time	07:56:57
		Stop Date	12/16/2020
		Stop Time	11:26:57
		Total Time	0:03:30:00
		Logging Interval	900 seconds

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
1	12/16/2020	08:11:57	0.106
2	12/16/2020	08:26:57	0.106
3	12/16/2020	08:41:57	0.108
4	12/16/2020	08:56:57	0.108
5	12/16/2020	09:11:57	0.107
6	12/16/2020	09:26:57	0.106
7	12/16/2020	09:41:57	0.107
8	12/16/2020	09:56:57	0.109
9	12/16/2020	10:11:57	0.108
10	12/16/2020	10:26:57	0.107
11	12/16/2020	10:41:57	0.106
12	12/16/2020	10:56:57	0.107
13	12/16/2020	11:11:57	0.107
14	12/16/2020	11:26:57	0.107

#### **APPENDIX J**

#### **DECOMMISSIONING OF MW 101 REPORT**



June 14<sup>h</sup>, 2020

Ms. Megan Kuczka NYSDEC 270 Michigan Avenue Buffalo, New York 14203

Re: Decommissioning Notification for Monitoring Well MW-101 Former American Linen Supply Company Site 822 Seneca Street, Buffalo, NY BCP Site No. C915241

Dear Ms. Kuczka:

Benchmark Environmental Engineering & Science, PLLC (Benchmark) has prepared this correspondence to transmit well decommissioning records for monitoring well MW-101, located at 822 Seneca St. in Buffalo, NY (i.e., Former American Linen Supply Company Site).

The monitoring well was decommissioned on June 8<sup>th</sup>, 2020 by Earth Dimensions Inc. via tremie grouting in place. The flush mount protective casing was removed following grouting and the surface was restored with asphalt patch material. A NY State licensed professional geologist was onsite to observe the work on behalf of Benchmark. The attached decommissioning and photos document the work.

Please contact us if you have any questions or require additional information.

Sincerely, Benchmark Environmental Engineering & Science, PLLC

Thomas H. Forbes, P.E. Principal Engineer

File: 0126-020-001

C: G. Kriner (Mill Race Commons) D. Chadsey (Kavinoky Cook)

Strong Advocates, Effective Solutions, Integrated Implementation

www.benchmarkturnkey.com

2558 Hamburg Turnpike, Suite 300 | Buffalo, NY 14218 phone: (716) 856-0599 | fax: (716) 856-0583 MONITORING WELL DECOMMISSIONING NOTIFICATION FORMER AMERICAN LINEN SUPPLY COMPANY SITE 822 SENECA STREET BCP SITE NO. C915241

#### **ATTACHMENT 1**

DRILLERS DECOMMISSIONING LOG AND PHOTO DOCUMENTATION



# WELL DECOMMISSIONING RECORD



E02 # 2F20			
Site Name: 822 SENECA STR	elt	Well I.D. MW-101	
Site Location: CITY OF BUFFALO, 1		Driller: PHILIA BLACE	
Drilling Co: EDT.	······································	Inspector:	
		Date: 6/8/20	
DECOMMISSIONING	DATA	WELL SCHEMATIC*	
(fill in all that app			
OVERDRILLING Interval drilled Drilling Method(s) Borehole Dia. (in) Temporary Casing Installed? (y/n)		$ \begin{array}{c c}     Depth \\     (feet) \\     \hline       \hline     \hline     \hline      \hline     \hline       \hline           $	
Depth temporary casing installed Casing type/dia. (in.) Method of installing			
CASING PULLING Method employed Casing retrieved (feet) Casing type/dia. (in)	N/A		
Casing perforating Equipment used Number of perforations/foot Size of perforations Interval perforated			
GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.)	0.0 - 18.0 1		
Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.)	92-417- PORTILATIO TYPE2 2 ×		
Volume of grout prepared (gal.) Volume of grout used (gal.) 	1N ACCORDARVE	BUTTOM OF WILL	
N/ CP43 Hom 18.0 FUT FLUSH MOUNT CASING AND CO.	TO G.S. REMOVED	* Sketch in all relevant decommissioning data	

Drilling Contractor

Dept Representative

- -- -- -

Form\_WellDecommissioningRecord.xls

+1

	) <b>*</b>	Site Location:	Project No.:
Client Name: Kavinoky Cook, LLC.		822 Seneca St. Buffalo , NY	B0126-020-002
Photo No.	Date		
1	06/08/20		
Direction Phot	o Taken:		
Vest			
			gan and a second se
Description: Vell prepped M	W-101 for		
pplication of gr	out through tremie		
ipe.			
Photo No.	Date		
	06/08/20		
2		dam. T	
2 irection Photo ast.	Taken:		

BENCHN ENVIRONM ENGINEERI Science, F	ENTAL Ng <b>8</b>	PH	IOTOGRAPHIC LC	
Client Name: Kavinoky Cook, LLC.		Site Location: 822 Seneca St. Buffalo , NY	Project No.: B0126-020-002	
Photo No.	Date			
3	06/08/20			
Direction Photo West	o Taken:			
Description:				
Removal of Con				
Photo No.	Date			
4	06/08/20			
Direction Photo West	Taken:			
Description: Adding black top match exisitng gr	cold patch to ade.			

Page 1 of 1

ega 1 - Eric

Prepared By: \_\_\_\_\_\_TAB

